



D5.1 Readiness of European Regions for Integrated Care

WP5 Maturity Assessment for Integrated Care



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Executive Summary

This deliverable, D5.1 “Readiness of European Regions for Integrated Care”, outlines the results of the Work Package (WP5) “Maturity Assessment for Integrated Care” in the nine European regions taking part in the SCIROCCO Exchange (SE) project. These are, namely: the Basque Country, Spain; Flanders, Belgium; Germany; Lithuania; Poland; Puglia Region, Italy; Scotland, UK; Slovakia and Slovenia. The Deliverable is based on the real-life use of the SCIROCCO Exchange Tool in the process of assessing the maturity for integrated care.

Specifically, this report describes the process of applying a rigorous [methodology for the maturity assessment for integrated care](#) developed and validated in the EU Health Programme funded project SCIROCCO (Scaling Integrated Care in the Context)¹.

The refined version of the online [SCIROCCO Exchange Tool](#)² for the assessment of maturity for integrated care is the core of this methodology. The Tool was first developed under the European Innovation Partnership on Active and Healthy Ageing (EIPonAHA), B3 Action Group on Integrated Care³ and then further validated and refined during the SCIROCCO project. Since then, the online Tool has been further enhanced with new functionalities in order to capture the perspectives of larger number of stakeholders (i.e. up to 100) and, as such, also to allow a wide range of valuable comparisons and analysis at different levels. In addition, the Tool was translated into additional languages; Flemish, German, Lithuanian, Polish, Slovak and Slovenian languages. As a result, the outputs from the Tool provide an extremely interesting snapshot of the European integrated care landscape.

The deliverable presents the [integrated care profile of nine SCIROCCO Exchange Regions](#) and the results of their integrated care assessments in their respective localities. The nine regions taking part in the SE project successfully carried out the assessment of maturity of integrated care choosing different assessment levels (i.e. national, regional or local), reflecting their local plans and strategies and organisation of their healthcare systems, including integrated care.

With this aim, the document provides an accurate [analysis of](#):

- local key success factors and barriers in relation to the implementation of integrated care;
- local needs and priorities (maturity gaps) in nine European regions;
- strengths and weaknesses in integrated care informing areas for future improvement and capacity-building;
- stakeholders’ perspectives on the progress of integrated care in nine European regions;
- stakeholders’ experience in using the SE Tool for the assessment of integrated care.

¹ For more information about SCIROCCO project <https://www.scirocco-project.eu>

² To access SCIROCCO Exchange Tool https://scirocco-exchange-tool.inf.ed.ac.uk/en_gb/login/?redirect_to=https%3A%2F%2Fscirocco-exchange-tool.inf.ed.ac.uk%2Fen_gb%2F

³ For more information about the EIPonAHA https://ec.europa.eu/eip/ageing/actiongroup/index/b3_en

Abbreviations

B3	Action Group B3 on Integrated Care
CAO	Chief Administrative Officer
CCC	Community Care Centre
CEO	Chief Executive Officer
CH	Community Hospital
CMO	Chief Medical Officer
COPD	Chronic Obstructive Pulmonary Disease
EHR	Electronic Health Record
EIP-AHA	European Innovation Partnership on Active and Healthy Ageing
ERDF	European Regional Development Fund
H&SC	Health and Social Care
HP	Health Professional
HTA	Health Technology Assessment
ICT	Information and Communication Technology
IT	Information Technology
LHA	Local Health Authority
MD	Medical Doctor
MM	Maturity Model
PbR	Payment by Results
PHCC	Primary Health Care Centres
PR	Patients' Representative
PPP	Public Private Partnership
SCP	Social Care Professional
SE	SCIROCCO Exchange
TM	Top Management
UVM	Multidisciplinary Evaluation Unit
WP	Work Package

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1 Introduction

1.1 Purpose of the document

The overall aim of this Deliverable is to inform about the readiness for integrated care in the nine European Regions⁴ involved in SCIROCCO Exchange (SE) project, including strengths, weaknesses and current maturity gaps. This process was informed by the real-life use of SCIROCCO Exchange Tool for Integrated Care⁵.

The outcomes of this Deliverable will feed directly into other stages of the project; personalised knowledge transfer and capacity-building activities with an objective to address the maturity gaps in nine European regions. This reflects the overarching objective of the SE project which is to support health and social care authorities to improve their capacity to successfully implement and scale-up integrated care.

The document is based on the assessments carried out by the SE Partners in their own local contexts. The outcomes of the assessments were analysed in order to highlight existing strengths and weaknesses, peculiarities, as well as cross-cutting topics in integrated care across a diversity of European regions and countries.

To this end, this report describes the:

- SCIROCCO Exchange methodology for the assessment of integrated care;
- Integrated care profiles of nine European Regions;
- Maturity assessment in nine SCIROCCO Exchange Regions;
- Strengths and weaknesses in integrated care of nine European Regions;
- Maturity gaps in integrated care in SCIROCCO Exchange Regions;
- Local needs and priorities;
- Experience of SCIROCCO Exchange Regions with the SCIROCCO Exchange Tool;
- Conclusion and recommendations; and
- Limitations occurred.

1.2 Structure of the document

This document is organised in ten main sections:

Section 1 - Introduction

Section 2 - Objectives of WP5 which is to conduct the maturity assessment of integrated care in the nine SCIROCCO Exchange regions in order to better understand the current needs and priorities for the successful implementation and scaling-up of integrated care.

Section 3 - Outline of methodology for the maturity assessment of integrated care

Section 4 - Maturity assessment at national level

⁴The term “Regions” reflects the nine European regions participating in SE Project. These are namely, Basque Country in Spain, Flanders in Belgium, Germany, Lithuania, Poland, Puglia Region in Italy, Scotland, Slovakia and Slovenia.

⁵ To learn more about SCIROCCO Tool please see <https://www.scirocco-project.eu/scirocco-tool/>

Section 5 - Maturity assessment at regional level

Section 6 - Maturity assessment at local level

Section 7 - Experience from SCIROCCO Exchange Regions

Section 8 - Maturity of integrated care in the SCIROCCO Exchange Regions

Section 9 - Conclusions

Section 10 - Recommendations and limitations

2 Objectives

The SCIROCCO Exchange project aims to support health and social care authorities in the adoption and scaling-up of integrated care. Co-designed improvement plans, based on the outcomes of knowledge transfer and learning gleaned from existing evidence and capacity-building assets, are foreseen by the project to enable virtuous progress and developments in integrated care in Europe. In order to achieve these results, it is first necessary to better understand the local context and to learn about the current strengths and gaps in integrated care in order to facilitate a more effective and tailored knowledge transfer process. In addition, recognising the level of maturity of European regions in the adoption of integrated care facilitates invaluable learning and sharing of knowledge, experience and expertise on how to improve the delivery of integrated care in Europe.

The acquisition of this valuable knowledge has been made possible due to the SE methodology and further development of the SE Tool for the assessment of maturity for integrated care at local, regional and/or national levels.

Within the framework of the SE project, Work Package 5 (WP5) intends to:

- present the integrated care profiles of the nine SE regions;
- outline the results of their assessment of integrated care process; and
- analyse the strengths and weaknesses emerging in integrated care, as well as the detected maturity gaps.

In addition, the experience of the different stakeholders using the SE Tool has been analysed in order to achieve continual improvements of the instrument, including its functionalities and performance.

3 Methodology

The methodology designed to achieve the objectives of WP5 consists of seven subsequent steps as described below in [Figure 1](#).

Step 1: Defining the objectives of the maturity assessment process.

Step 2: Scoping the maturity assessment process in the nine European regions.

Step 3: Selection of the stakeholders participating in the assessment process.

Step 4: Conducting the individual assessments in the nine regions.

Step 5: Building consensus among the involved stakeholders.

Step 6: Conducting focus group meetings in order to explore stakeholders' experience with the SE Tool.

Step 7: Defining the analysis criteria and analysing the assessment results.

The following figure illustrates this step-based methodology:

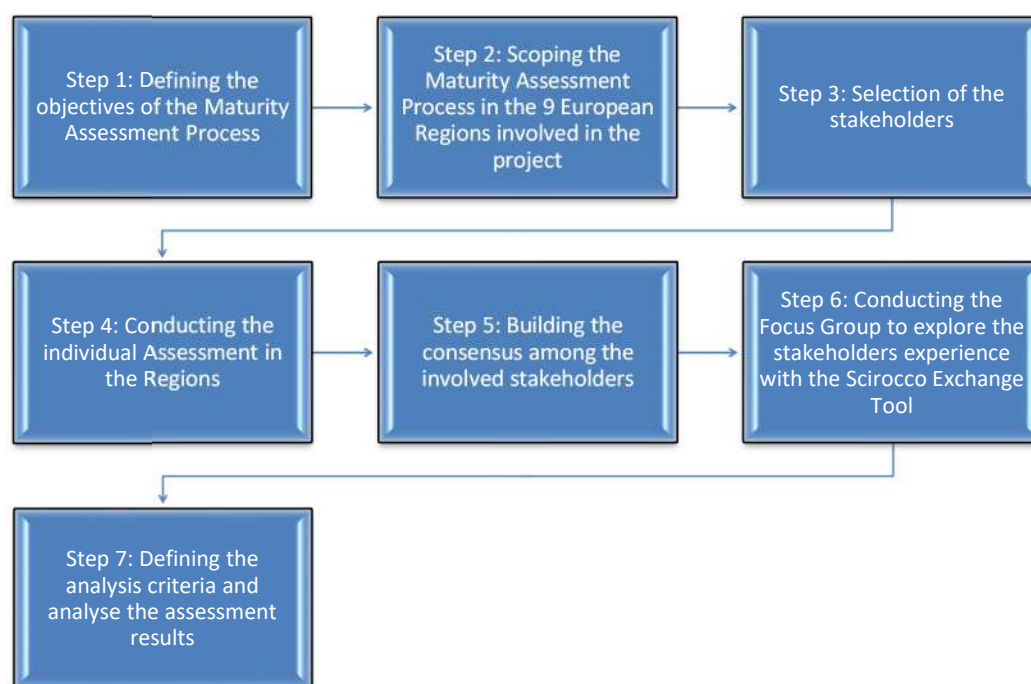


Figure 1: Step-based methodology

The core element of this methodology is the [SCIROCCO Exchange Tool](#) and its [Maturity Model](#) which is one of the preliminary achievements of the B3 Action Group on Integrated Care (of the European Innovation Partnership on Active and Healthy Ageing). The Group first developed the concept of the B3 Maturity Model (B3-MM)⁶. The B3-MM was further validated through a Delphi Study, the outcomes of which informed the development of the first online

⁶ For more information about the B3 Maturity Model please see <https://www.scirocco-project.eu/maturitymodel/>

version of the Model and SCIROCCO Exchange (SE) Tool. This was achieved through the activities of the EU Health Programme funded project SCIROCCO⁷.

The first version of the validated online self-assessment Tool for integrated care has been further refined through the activities of the SCIROCCO Exchange project. Two dimensions of the original SCIROCCO Maturity Model were modified to reflect the feedback and experience of stakeholders using the Tool. The modifications to its domains included:

- eHealth Services was redefined as Digital Infrastructure
- Standardisation was redefined as Process Coordination.

The main rationale for redefining the domain name eHealth Services was to reflect the current maturity of the provision of digital services rather than focusing only on ICT infrastructure. The domain of Standardisation was perceived by stakeholders to be a very “technical domain” focusing on the maturity of standards to better support the integration of care rather than capturing the level of standardisation of processes and care pathways, which they felt was more relevant for the assessment of maturity of integrated care.

The SCIROCCO Exchange Tool is structured as an online survey consisting of 12 questions, each of which aligns a particular “dimension” of the Tool as illustrated in Figure 2.

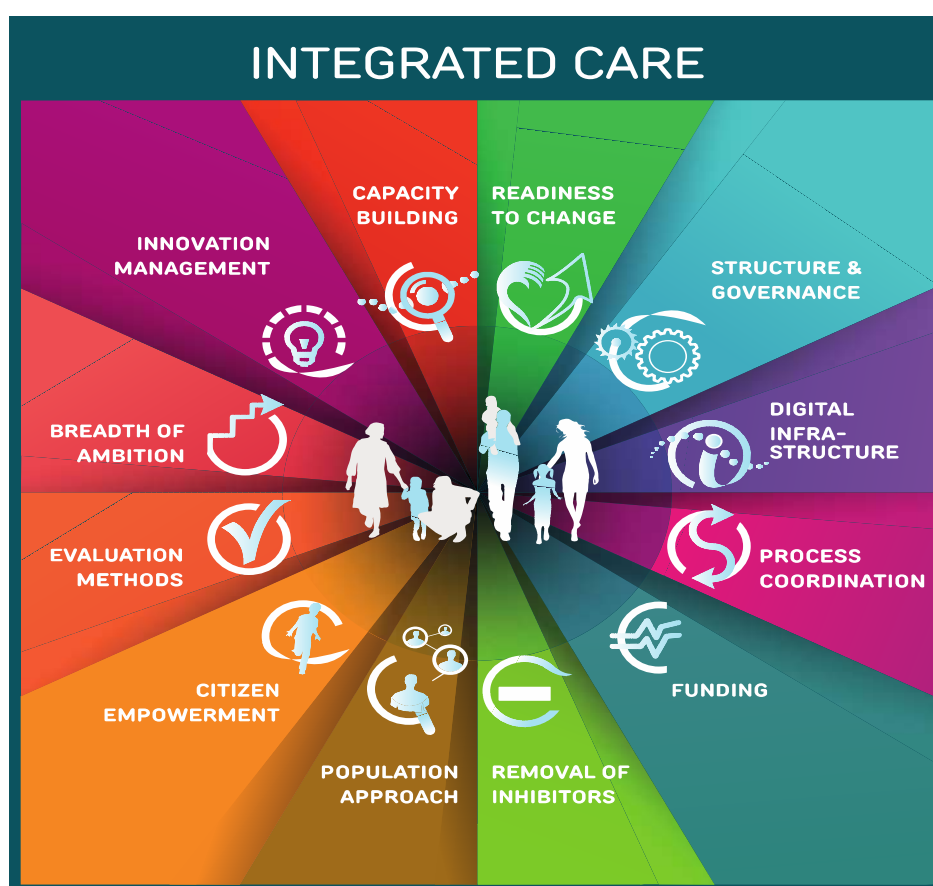


Figure 2: SCIROCCO Exchange Maturity Model

⁷ <https://www.ijic.org/article/10.5334/ijic.3063/>

Each dimension is then associated with an assessment scale ranging from a minimum rating of “0” to a maximum rating of “5”. In addition, each respondent is also asked to provide free text justifications for their preferred rating, in order to capture their rationale for selecting a particular scoring. This also allows the gathering of invaluable qualitative data (Figure 3).

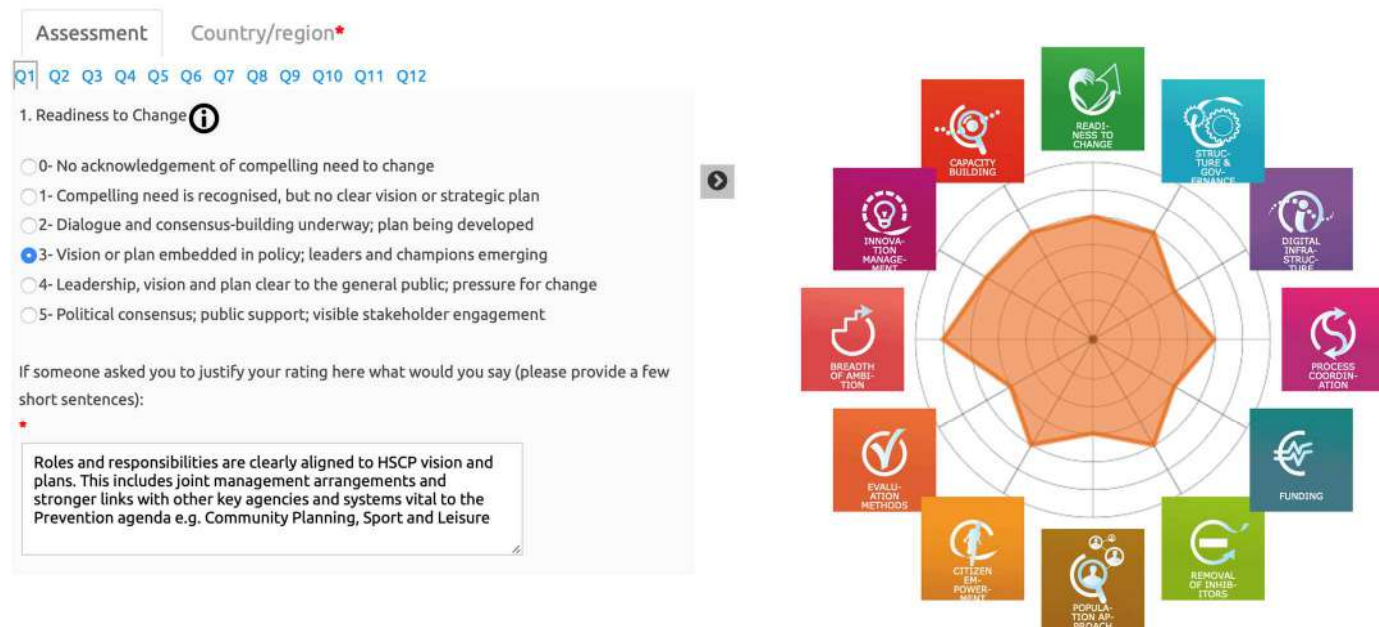


Figure 3: SCIROCCO Exchange Maturity Model

Further refinement of the SE Tool was conducted to improve the existing functionalities of the Tool in order to support the maturity assessment process with larger groups of respondents, as well as the addition of assessment sharing and visualisation functionalities.

As a result of the further refinement and subsequent high uptake of the SCIROCCO Exchange Tool, all existing translations of the SE Tool were updated (Czech, Hebrew, English, Italian and Spanish). An additional six adaptations and translations were also provided (Flemish, German, Lithuanian, Polish, Slovak and Slovenian). In addition, the main home page of the Knowledge Management Hub was also made available in all of these languages.



Figure 4: SCIROCCO Exchange Maturity Model - Flemish translation



Figure 5: SCIROCCO Exchange Maturity Model - German translation

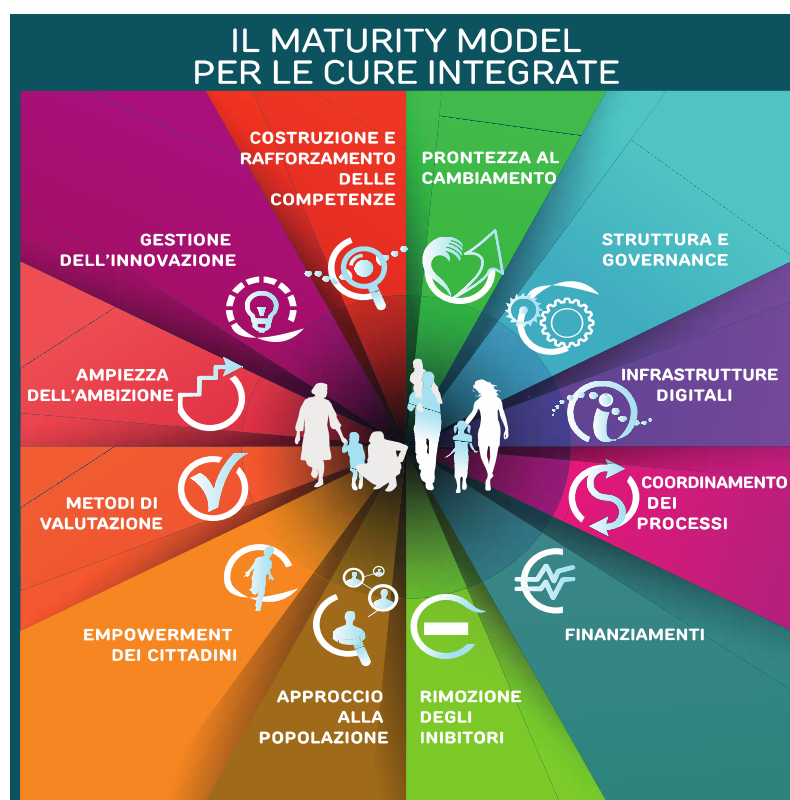


Figure 6: SCIROCCO Exchange Maturity Model - Italian translation



Figure 7: SCIROCCO Exchange Maturity Model - Lithuanian translation



Figure 8: SCIROCCO Exchange Maturity Model - Polish translation



Figure 9: SCIROCCO Exchange Maturity Model - Slovak translation



Figure 10: SCIROCCO Exchange Maturity Model - Slovenian translation



Figure 11: SCIROCCO Exchange Maturity Model - Spanish translation

3.1 Objectives of the maturity assessment process

The aim of the assessment process is to understand the maturity of regions/organisations' local environment and readiness for the adoption and scaling-up of integrated care. The intention is to better identify the needs and priorities of national and regional health and social care authorities in relation to the delivery of integrated care. In particular, the objectives of the assessment are to:

- Capture the perceptions of stakeholders on the maturity and readiness of their health and care systems for the adoption of integrated care;
- Identify the strengths and weaknesses of regions/organisations in the adoption of integrated care;
- Facilitate multi-disciplinary discussions and dialogue between stakeholders, including reaching consensus on their region's current progress towards integrated care and future actions to address any identified gaps;
- Provide the basis for further improvement of specific domains of integrated care through knowledge transfer and improvement planning activities.

The outcomes of the assessment process (Step 1 in Figure 12 below) have informed regions' local needs and priorities for knowledge transfer and improvement actions (Steps 2 & 3). For the SCIROCCO Exchange project, these outcomes will inform the design of the SCIROCCO Exchange Knowledge Transfer Programme (WP7) (Step 3) and Improvement Planning (WP8) (Step 4) activities.

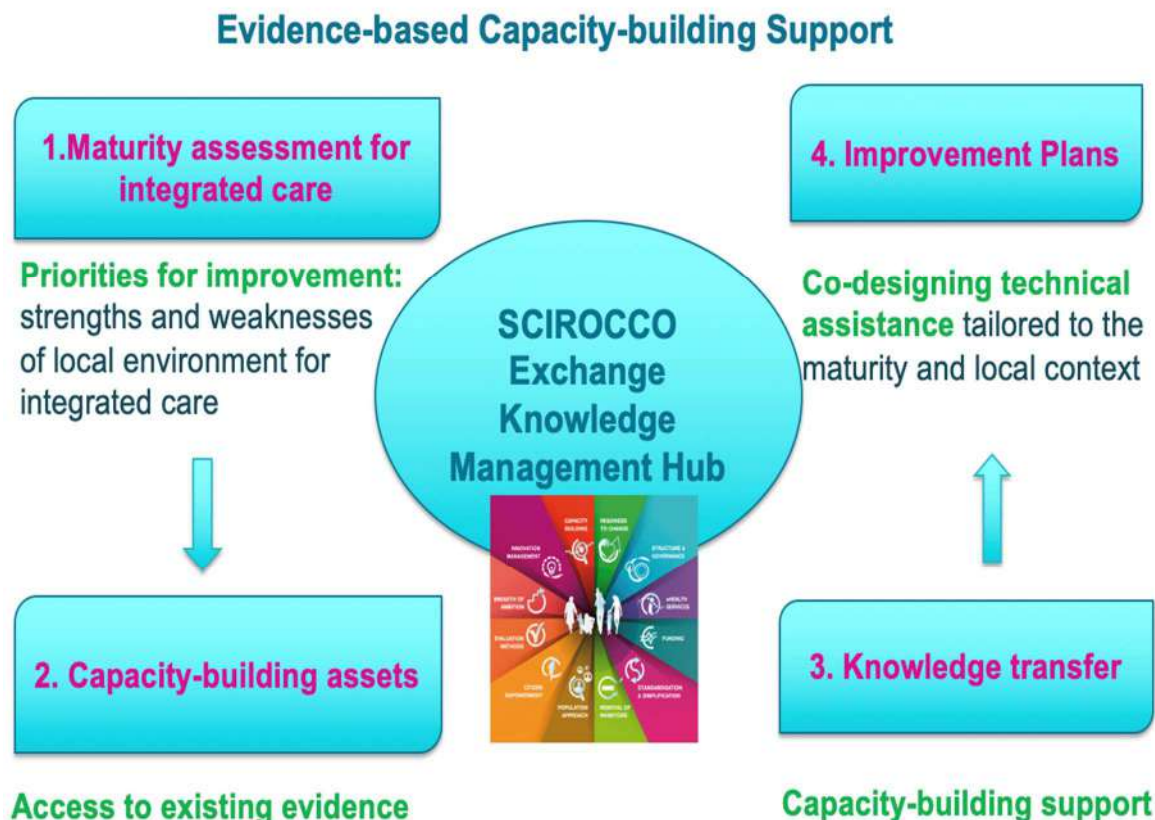


Figure 12: SCIROCCO Exchange Knowledge Management Hub

The Table below summarises the organisation of the maturity assessment process in 9 SCIROCCO Exchange regions and countries, including the scope and level of assessment, number of stakeholders involved and language in which the assessment was conducted.

Table 1: Overview of the SCIROCCO Exchange Maturity Assessment Process in SE regions

Region	Scope of the assessment	Level	Stakeholders involved/size	Date of workshop	Language
Basque Country	Assessing the maturity of healthcare system, including coordination with social care services	Regional	Multi-level group of 9 stakeholders	18 October 2019	Spanish
Flanders	Assessing the maturity of integrated care services by VIVEL or Primary Care Institute	Regional	15-20 stakeholders	16 January 2020	Flemish
Germany	Assessing the maturity of a newly implemented integrated care system with a focus on digital health technologies.	Regional	9 stakeholders	24 January 2020	German
Lithuania	Assessing the maturity of primary care providers in delivering integrated care, involving specialists, patients and government stakeholders,	Regional/ National	65 stakeholders	5 December 2019	Lithuanian
Poland	Assessing the maturity of primary care zones in delivering integrated care	National	93 responses from 39 primary care centres	No workshop	Polish
Puglia	Assessing the maturity of the six local healthcare authorities in delivering integrated care	Local	6 LHAs with the total of 38 stakeholders	24 Sept 2019 26 Sept 2019 09 Oct 2019 30 Oct 2019 14 Nov 2019 21 Nov 2019	Italian
Scotland	Assessing the maturity of implementing integrated care in one selected Joint Integration Board	Local	10 stakeholders	14 January 2020	English
Slovakia	Assessing the maturity of health and social care services in Kosice self-governing region.	Regional	4 stakeholders	26 March 2020	Slovak
Slovenia	Assessing the maturity of health and social care integration in one municipality.	Local	9 stakeholders	27 November 2019	Slovenian

3.2 Scope of the maturity assessment process

The assessment of the integrated care process is initiated by the selection of the scope of the assessment conducted by each partner. The strategic priority/scope for the assessment can differ in each locality, depending on the local context, priorities and ambitions.

The following [Figure 13](#) outlines the different approaches and scope of the assessments undertaken in the nine SCIROCCO Exchange regions:

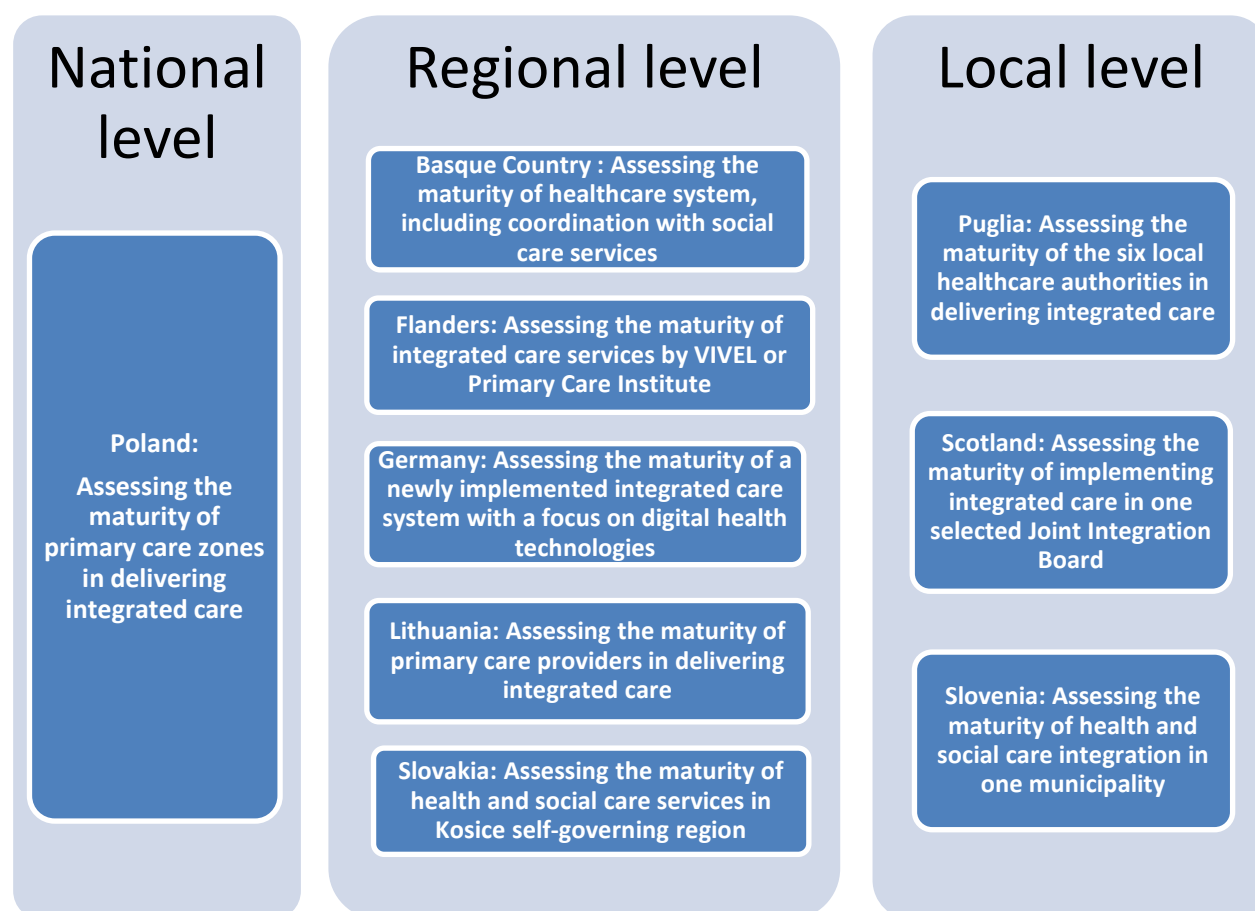


Figure 13: Scope of the maturity assessment process in the regions

3.3 Selection of the stakeholders

To capture a comprehensive representation of integrated care at any level (i.e. national, regional or local), it is necessary to select a range of stakeholders that best represents the multiple perspectives, levels of health and care systems and different roles that each requires in their respective organisations.

Examples of stakeholders involved in the maturity assessment process include:

- **Macro level:** national or regional decision makers, political representatives, top management representatives;

- Meso level: top and middle management representatives of health and social care institutions, representatives of professionals' patients and citizens associations; representatives of voluntary and housing sectors;
- Micro level: local representatives of citizens, professionals, patients.

In short, multidisciplinary and multilevel groups of experts in health and social care integration were invited to participate in the self-assessment process, reflecting the local scope and objectives of the assessment process.

In general, the selection of the stakeholders entailed the following steps:

- Mapping of the stakeholders' roles in the planning and delivering integrated care;
- Identification of the stakeholders (according to the mapped roles) by the organisation(s)/health and social care authorities involved in the assessment process;
- Communication with the stakeholder groups, in order to explain the objectives of the project and the assessment process (via emails/phone/online meetings and webinars)
- Provision of supporting documents (translated into the respective languages) for the assessment process;
- Introduction to the SE project (set of a PowerPoint slides/webinars);
- Introduction to the SE maturity assessment methodology (set of PowerPoint slides/webinars);
- The refinement of the online version of the SE Tool;
- Development of a User Manual on how to use the SE Tool, including a tutorial video.
- Set up of a helpline to provide day-to-day support for stakeholders during the self-assessment phase.

3.4 Conducting individual assessments

After the identification of stakeholders and briefing about the SCIROCCO Exchange maturity assessment process, the Assessment Team was invited to use the online version of the SE Tool to conduct the individual assessments in one of the nine available languages.

The individual assessment process required the following steps:

- Registration on the SE platform and choice of language; a username and password were provided;
- Conducting a new individual assessment: each stakeholder was required to provide their scoring, as well as justifications for their decision, for all 12 dimensions of the SE Tool;
- Sharing of the outcomes (in the form of a radar diagram) with the assessment manager/co-ordinator of the process, in order to provide data for the next phase.

The outcomes of the individual assessments were saved on the online Tool in different formats; pdf and excel files, radar diagrams, as shown in [Figure 14](#).



Figure 14: Puglia Bari LHA Chief Medical Officer's individual radar diagram

All of the invited stakeholders responded to the online survey between July 2019 to March 2020.

3.5 Building consensus

The next step of the SCIROCCO Exchange methodology consisted of [consensus-building](#), usually via a multi-stakeholder face-to-face discussion with the objective of negotiating and agreeing a final maturity scoring (for their organisation / region), captured in the form of a radar diagram.

All stakeholders who performed the individual self-assessments were invited to join the consensus meeting, through an invitation letter which included the meeting agenda. The objective of the meeting was to discuss the preliminary findings of the individual self-assessment surveys and seek a multi-stakeholder understanding of the maturity of integrated care in their health and care system.

The meeting was conducted by the local SE project team who presented the findings of the previous individual assessment phase and facilitated the debate.

The facilitated discussion led to a consensus on the rating for each of the 12 dimensions, which were then plotted and originated a final radar diagram, as in the example depicted in [Figure 15](#) below.



Figure 15: Puglia Bari LHA final radar diagram

In the radar diagram visualisation, the size of the orange circle or “bubble” represents the number of respondents giving that particular score, which varied from region to region. The position of the bubble corresponds to the score given, that is to say 0 to 5, where 0 corresponds to the most inner circle while 5 is on the outset circle.

Individual assessments, as well as consensus-building workshops, were conducted using the local languages, which resulted to radar diagrams in local languages as well.

At the end of the process, a descriptive analysis of both individual and final consensus assessments was performed, looking at the scores and variations of each of the dimensions of SE Tool.

3.6 Focus Groups

Focus groups are one of the most common methods used for gathering information on collective views, and the meanings that lie behind those views (Gill et al., 2008⁸). In the frame of the SCIROCCO Exchange project, focus groups were conducted with stakeholders from eight of the nine regions participating in the project (Basque Country, Spain; Flanders, Belgium; Germany; Puglia, Italy; Scotland, United Kingdom, Slovakia and Slovenia), with the

⁸ Gill, P., Stewart, K., Treasure, E. & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British Dental Journal*, 204(6), 291-295.

exception of Poland, where interviews with stakeholders were conducted. These focus groups and interviews enabled the capture of experiences from the SCIROCCO Exchange regions on their use of the SCIROCCO Exchange Tool for the maturity assessment of local context for integrated care.

Guidelines were designed in order to capture the experience of nine European regions on the self-assessment process. To this end, a total of 13 focus groups were organised with the regional stakeholders involved in the self-assessment process. In particular, the Basque Country, Flanders, Germany, Lithuania, Scotland, Slovakia and Slovenia organised one focus group with their selected stakeholders and Puglia organised six focus groups - one in each of the local healthcare authorities participating in the SE Project. In Poland, 93 stakeholders were interviewed.

The focus groups took place directly following the consensus-building meeting and lasted between 45 mins to one hour.

Each session followed a classic focus group approach in which a facilitator posed questions to the focus group attendees about their experience with the self-assessment process. The key issues covered in the focus groups included questions related to:

- Experience with self-assessment process using the SE Tool
- Insights and outcomes of the self-assessment process
- Potential factors influencing the self-assessment process.

Following the focus group sessions in each of the nine regions, the outcomes of the discussions were analysed using a matrix that was designed to enable the analysis of focus group outcomes. From the analysis of each focus group matrix, several general findings were extracted about the experience of the regions with the self-assessment process using the SE Tool. These general findings are presented in [Section 7: Experience of SCIROCCO Exchange Regions](#).

3.7 Data Analysis

Criteria for the maturity assessments' analysis were defined and agreed by the Consortium. In particular, the following criteria were highlighted:

- Highlight of the dimensions with the highest score among the 12 SE Tool dimensions (perceived strengths);
- Highlight of the dimensions with the lowest score among the 12 SE Tool dimensions (perceived weaknesses);
- Overview of the perspectives of multiple stakeholders (i.e. Top Management - TM, Medical Doctors - MD, Health Professionals - HP, Social Care Professionals - SCP, ICT Specialists - ICTS, Patients' Representative - PR); and
- Overview of the three levels of the analysis (i.e. national, regional, and local) conducted by the SE partners.

4 Maturity assessment at National level

This section presents the analysis of the maturity of integrated care in the regions that have undertaken the maturity assessment at a national level: in this case, Poland.

4.1 Poland - Summary of key facts

<i>Self-assessment level</i>
The self-assessment process was conducted at a national level and, specifically, within 39 Primary Health Care Centres (PHCCs), in which two or three stakeholders were selected by the Senior Management to be interviewed, resulting in a total of 93 telephone interviews conducted between January and April 2019.
<i>Stakeholders</i>
During the consensus building process, the 93 stakeholders were grouped according to the size of the PHCC of affiliation: 29 stakeholders belonged to a small size PHCC (i.e. <5,000 patients); 46 stakeholders belonged to a medium size PHCC (i.e. 5,000 < patients < 10,000); and 18 stakeholders belonged to a large size PHCC (i.e. > 10,000 patients). As a result, three different final consensus diagrams were generated, with diverse key messages.
<i>Summary of outcomes</i>
<ol style="list-style-type: none"> 1. The assessment of PHCCs in Poland reflected the actual state in healthcare system, rating “3” or “4” in all dimensions, with the exception of the large size PHCCs which rated “2” in two dimensions (i.e. Q4 - Process Coordination and Q12 - Capacity Building). 2. The Pilot Project “Primary Care PLUS model” proved to be a key enabler for the transformation of care processes and the implementation of co-operation between primary and specialised care. 3. The dimensions with room for improvement, as perceived by all the stakeholders, were: Q3 - Digital Infrastructure; Q4 - Process Coordination; and Q8 - Citizen Empowerment. 4. The factors that affected the self-assessment outcomes were: <ol style="list-style-type: none"> a) transformation towards integrated care was initially promoted by a pilot project at the primary care level; b) assessment was only made by those healthcare providers that were willing to: make necessary changes; adopt new roles of PHC and coordination; adopt new ways of working within a team; and face new challenges; c) digital infrastructure to support integrated care was being piloted; and d) the late introduction of Electronic Health Records (EHRs) for patients.

4.2 Analysis of dimensions

The matrix presented in Table 2 below provides a visual representation of the ratings agreed by all of the stakeholders during the consensus meeting, following the discussion on the individual self-assessments.

There is only one dimension that was rated in the highest (in green) end of the scale, Q5 - Finance & Funding. Seventeen stakeholders out of 39 (i.e. 43.6 %) rated this dimension 5 to 4, with a predominance of 4 - *Regional/national funding and/or reimbursement schemes for on-going operations is available*.

Table 2: Final consensus dimensions at National level

Region	size	Final Consensus Dimensions											
		Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
01_01	M	2	3	3	3	3	2	3	3	3	2	3	3
01_03	M	1	3	3	2	2	2	2	3	3	3	1	1
02_01	M	3	3	3	3	4	3	3	4	3	3	4	4
03_01	S	3	3	3	3	4	3	4	3	3	3	3	3
03_02	S	3	3	4	3	4	4	4	3	3	3	3	3
04_01	M	2	2	1	1	1	1	1	0	0	2	0	1
05_01	M	3	3	3	2	4	2	3	3	4	2	3	2
05_02	M	1	3	3	2	3	2	2	2	1	2	3	2
05_03	M	2	3	1	2	4	2	3	2	3	3	2	4
06_01	L	3	3	3	2	5	3	4	2	3	3	3	3
06_02	M	3	3	3	2	5	3	4	2	3	3	3	3
06_03	L	2	1	1	0	1	2	2	0	3	2	0	1
06_04	M	2	3	2	2	3	2	3	3	2	3	4	3
07_01	L	3	3	3	3	5	4	4	4	3	3	4	3
07_02	L	3	4	1	2	4	2	2	2	4	3	2	2
07_03	L	2	1	2	2	1	2	3	2	3	3	2	2
07_04	M	3	3	4	4	4	3	4	3	3	3	4	4
07_05	M	4	3	4	3	4	2	4	4	3	3	4	4
07_06	L	4	4	4	3	4	4	4	2	3	3	3	2
08_01	S	2	3	2	3	4	3	3	3	3	3	3	2
08_02	S	1	3	2	3	4	3	3	3	3	3	3	1
09_01	S	4	3	2	2	0	3	3	1	1	3	1	2
09_02	S	4	3	2	2	0	3	3	1	1	3	1	2
10_01	S	3	3	4	2	3	2	1	0	3	4	2	2
10_02	M	3	3	4	2	3	2	1	0	3	4	2	2
11_01	M	3	3	3	3	4	4	3	3	3	3	4	3
11_02	M	4	4	2	3	4	3	2	2	4	4	3	3
11_03	M	3	3	3	3	3	3	3	3	3	3	3	3
12_01	M	4	4	4	2	4	3	3	4	3	3	2	3
12_02	M	4	3	3	3	4	3	3	3	3	3	3	3
12_03	M	3	3	3	3	3	4	3	3	3	2	3	3
12_04	M	4	3	3	3	4	3	3	3	3	3	3	3
13_01	S	3	3	4	3	3	3	2	2	2	1	3	2
14_01	S	2	3	3	3	5	1	2	2	2	2	1	3
15_01	M	1	2	2	1	1	2	2	2	1	2	1	1
15_02	S	1	0	1	1	3	1	1	2	1	3	1	1
15_03	S	3	3	3	3	3	2	2	1	1	3	3	3
15_04	M	4	4	3	3	4	4	2	3	3	3	2	3
16_02	S	4	3	3	3	3	3	3	3	3	3	3	3

Dimensions			
Q1	Readiness to Change	Q7	Population Approach
Q2	Structure & Governance	Q8	Citizen Empowerment
Q3	Digital Infrastructure	Q9	Evaluation Methods
Q4	Process Coordination	Q10	Breadth of Ambition
Q5	Funding	Q11	Innovation Management
Q6	Removal of Inhibitors	Q12	Capacity Building

Ratings		
5 to 4	3 to 2	1 to 0

4.2.1 Homogeneous and heterogeneous dimensions

The most homogeneous dimensions across all the primary care centres (i.e. PHC) that took part in the self-assessment process in Poland Region, as summarised in Table 2, are Q4 - Process Coordination; and Q10 - Breadth of Ambition.

The following variations should be noted:

- in dimension Q4 - Process Coordination: 5 out of the 39 self-assessments completed are distributed as follows: three in medium size primary care centres (i.e. PHC), one in small PHC, and one in large PHC.
- In dimension Q 10 - Breadth of Ambition: 4 out of the 39 self-assessments completed are distributed as follows: two in small PHC and two in medium PHC.

These variations may be justified by the sample size, as the large PHC group is numerically smaller than the other two groups: it is 0.5 times the small PHC group and 0.28 times the medium PHC group.

The final consensus radar diagram and analysis are not present in Poland's final report. The self-assessment completed by Poland region predominantly resulted in a heterogeneous description of the 12 dimensions, for which a higher number of variations (i.e. ratings varied from "0" to "4" on the 0 to 5 points scale) are depicted in the matrix presented in Table 2. Despite the overall rating is between "2" and "3" on the scale, there are organisations (i.e. stakeholders) who have provided elements of variations throughout the entire process.

4.2.2 Strengths and weaknesses

Table 2 provides an overview of strengths and weaknesses of the regions that have conducted the assessment at a national level. It summarises which dimensions are more likely to be the drivers of integrated care and which, in contrast, may still present obstacles that need to be addressed at this particular level.

The dimension that clearly stands out with the highest level of maturity (in green) is the dimension Q 5 - Funding. The assessment of the financial situation by the PHC is generally "good", with external funding (e.g. pilot programme "Preparation, testing and implementation of coordinated care in the healthcare system, Stage II. Pilot phase - Primary Care PLUS model" co-financed from the European Social Fund under the Operational Program Knowledge Education Development financed under the European Commission Priority Axis 4 and 5), and different external funded programmes.

On the other hand, there is no one dimension that particularly stands out as having the lowest level of maturity (in red). There are several dimensions with lower ratings, for example: Q 8 - Citizen Empowerment, Q 9 - Evaluation Methods, and Q 11 - Innovation Management.

A reason behind this may be identified in the pilot projects: transformational changes need to be implemented at a systematic level, across the country (i.e. at national level), before producing measurable outputs. The process of change has been initiated, but it is necessary to act on some other elements that are still at an early stage: for example, citizen empowerment and digitalisation can play a crucial role in driving the change in a region

where digital infrastructure and its use by citizens (i.e. EHR for patients) were reported as a positive growing trend. The late start of these solutions has undoubtedly delayed the scaling up of integrated care.

Figure 16 below provides a visual representation of the maturity level of Poland as the only country that has undertaken the self-assessment at a national level. Among the 39 participating stakeholders (PHC groups identified with codes 01_01 etc.) only a few dimensions have reached the rating of full maturity; Q5 - Funding.

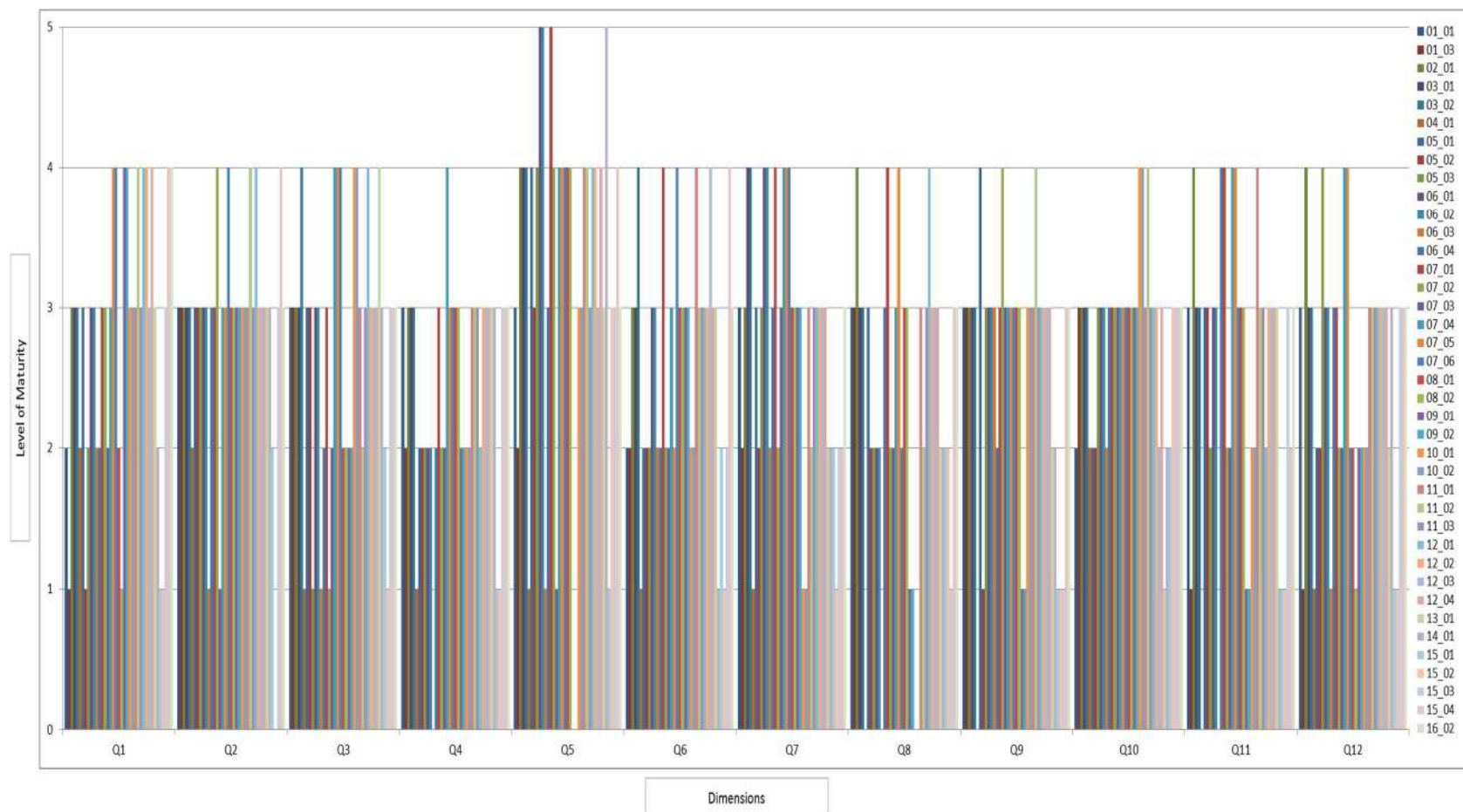


Figure 16: Level of maturity in integrated care in Poland

4.3 Analysis of stakeholders

The three tables below present the summary of the profiles of the stakeholders that have completed the maturity assessment process in Poland, using the identification codes provided by the local project coordinator.

As described in the individual report ([Annex F](#)), the stakeholders were grouped based on the number of patients of the Primary Healthcare Centre:

- PHC small-size: < 5 000 patients;
- PHC medium-size: 5 000 - 10 000 patients; and
- PHC large-size: > 10 000 patients.

Stakeholders who belonged to a small size PHC ([Table 3.a](#)) cover number of roles: 11 managers (i.e. Top Management), 1 nurse and 15 coordinators of care (Health Professional), 1 GP (i.e. Medical Doctor), and 1 IT specialist (i.e. ICT Specialist).

From the data analysis, the stakeholders who belonged to a medium size PHC ([Table 3.b](#)), include the same roles but in differing numbers: 18 managers (i.e. Top Management), 2 GPs (i.e. Medical Doctor), 1 nurse and 19 coordinators of care (i.e. Health Professional) and 6 IT specialists (i.e. ICT Specialist). The increase in ICT specialists who participated in the process may be directly related to the size of the PHC organisations.

The stakeholders who belonged to the large size PHC ([Table 3.c](#)), offer a more balanced distribution across the different roles: 4 managers (i.e. Top Management), 3 GPs (i.e. Medical Doctor), 2 nurses, 4 coordinators of care (Health Professional), and 6 IT specialists.

This representation of stakeholders and their roles across all involved PHCs reflects the current situation in Poland, where the main objective of the Pilot Programme Primary Care PLUS⁹ is to enhance care access to the entire population, based on a targeted cooperation between the family doctor and the core health care team.

Also, the consistent presence of the Top Management has certainly provided a more comprehensive assessment of maturity for integrated care.

The lack of patients' representatives and social care professionals may influence the perceptions gathered about dimension Q8 - Citizen Empowerment: the ratings and justifications were provided by stakeholders other than citizens or patients.

⁹ More info available <https://akademia.nfz.gov.pl/poz-plus/>

Table 3.a: Stakeholders matrix at national level for small size PHCs

		Regional identification codes											
		03.01	03.02	08.01	08.02	09.01	09.02	10.01	13.01	14.01	15.02	15.03	16.02
Stakeholders roles	TM ¹⁰	1	1	1	1	1	1	-	1	1	1	1	1
	MD	-	-	-	-	-	-	1	-	-	-	-	-
	HP	1	1	2	2	1	1	1	2	1	2	1	1
	SCP	-	-	-	-	-	-	-	-	-	-	-	-
	ICTS	-	-	-	-	-	-	1	-	-	-	-	-
	PR	-	-	-	-	-	-	-	-	-	-	-	-

Table 4.b: Stakeholders matrix at National level for medium size PHCs

		Regional identification codes - continues in next table										
		01.01	01.03	02.01	04.01	05.01	05.02	05.03	06.02	06.04	07.04	07.05
Stakeholders roles	TM	1	-	1	1	1	1	1	1	1	1	1
	MD	-	-	-	-	1	-	-	1	-	-	-
	HP	1	1	1	1	-	1	1	1	1	1	1
	SCP	-	-	-	-	-	-	-	-	-	-	-
	ICTS	-	1	-	1	1	-	1	1	-	-	-
	PR	-	-	-	-	-	-	-	-	-	-	-

		Regional identification codes									
		10.02	11.01	11.02	11.03	12.01	12.02	12.03	12.04	15.01	15.04
Stakeholders roles	TM	1	1	-	1	1	-	1	1	1	-
	MD	-	-	-	-	-	-	-	-	-	-
	HP	-	1	1	1	1	1	2	1	1	1
	SCP	-	-	-	-	-	-	-	-	-	-
	ICTS	-	-	-	-	1	-	-	-	-	-
	PR	-	-	-	-	-	-	-	-	-	-

¹⁰ TM (Top Management); MD (Medical Doctor); HP (Healthcare Professional); SCP (Social Care Professional); ICTs (Information and Communication Technologies); PR (Patient Representative).

Table 5.c: Stakeholders matrix at National level for large size PHCs

		Regional identification codes					
		06.01	06.03	07.01	07.02	07.03	07.06
Stakeholders roles	TM	1	-	1	1	1	-
	MD	1	1	-	-	1	-
	HP	1	1	1	1	-	2
	SCP	-	-	-	-	-	-
	ICTS	1	1	1	1	1	1
	PR	-	-	-	-	-	-

5 Maturity assessment at regional level

This section presents the analysis of the maturity of integrated care in the regions and countries that have undertaken the assessment at a regional level: Basque Country, Flanders, Germany, Lithuania, and Slovakia.

5.1 Basque Country - Summary of key facts

<i>Self-assessment level</i>
The self-assessment process was conducted at a regional level with the objective to assess the maturity of the region for the adoption of integrated care. It follows a first assessment conducted, with the same level, in the SCIROCCO project.
<i>Stakeholders</i>
The stakeholders were identified with the support of the Integration and Chronicity Service of Osakidetza. A multidisciplinary and multilevel group of nine experts in healthcare integration was selected. As a result of the self-assessment process, one final consensus diagram was generated.
<i>Summary of outcomes</i>
<ol style="list-style-type: none"> 1. The self-assessment outcomes reflect the actual maturity of the Basque healthcare system, showing progress towards integrated care in all dimensions. The outcomes provide a harmonized approach, scoring or “3” or “4” in all dimensions. From the previous self-assessment carried out in 2017, the scores have improved in six of the 12 dimensions. 2. The inclusion of a citizen not professionally related to the healthcare system in the process introduced significant discrepancies between this stakeholder and the healthcare professionals ratings across all dimensions. The group reflected that citizens are unaware of the advances in integrated care that are being made in the Basque healthcare system. It was agreed that it is necessary to work more with the citizens in the same process of change, and there is a lot to improve in this aspect. 3. The greatest strengths were observed in a number of dimensions: Q2 - Structure and Governance, Q3 - Digital Infrastructure, and Q7 - Population Approach. 4. Room for improvement was recorded for the dimensions: Q4 - Process Coordination, Q6 - Removal of inhibitors, and Q8 - Citizen Empowerment. 5. Among the specific factors that justified the scoring and influenced the outcomes of the maturity assessment process, political factors were reported. The Ministry of Health of the Basque Government has promoted the need for transformation towards integrated care, highlighting the need to guarantee its quality and sustainability. To this end, a series of structures and tools have been developed to make change possible and a process of awareness-raising and training has been provided for the management teams and front-line professionals. All this work has facilitated a cultural change for Osakidetza’s professionals, who have had to: adopt new roles and ways of working and face new challenges and changes across the system.

5.2 Flanders - Summary of key facts

Self-assessment level

The self-assessment process was conducted at a regional level, assessing the maturity for integrated care from the perspective of the Flanders Institute for Primary Care (VIVEL), an institution established in May 2019 with the role to support, facilitate and coach the Regional Care Platforms and 60 Primary Care (PC) Boards to deliver jointly health and social care services.

Stakeholders

Twelve of the 15 members of the VIVEL Governing Board of Directors participated in the self-assessment. Among them, some participated as individuals, others with their teams.

Summary of outcomes

1. The outcomes of the assessment reflected the actual maturity of Flanders' healthcare system. It should be noted that some organisations only depend on the Flanders region, while others depend on Brussels and the Flanders region and the remainder are also dependent on policy making at the Federal level. The more local the stakeholder, the less confidence there was about structural arrangements, whilst at the regional level, confidence was higher.
2. There are some connections/grouping of specific dimensions which can be observed namely: Q3 - Digital Infrastructure and Q2 - Structure and Governance; Q4 - Process Coordination and Q7 - Population Approach.
3. The overall consensus diagram shows that the number of dimensions that could be considered as strengths is limited - none of the dimensions scored very highly. The dimensions Q1 - Readiness to Change and Q11 - Innovation Management both scored 2. The scoring underlines that plans for integrated care are being developed and consensus-building is underway; innovations are captured and knowledge transfer is encouraged. Q2 - Structure and Governance reached the highest score after the consensus and this suggests that governance at a regional or national level is well established.
4. The dimension of Q2 - Structure and Governance reached the highest score, after the consensus-building. There are no dimensions where the maturity was already reached (scoring 5) and there was a recognised need for further improvement across all dimensions of the SCIROCCO Exchange Maturity Model.
5. There is a number of other specific factors that may have affected the assessment outcomes. These include:
 - change management is hard to comply with and to change from working in silos to integration of care; health care system is still oriented to disease approaches.
 - Belgian state structure: two levels (regional and federal) have competences in the way integrated care is organised. The policy on integrated care for Flanders also needs to be adopted in the Brussels region.

5.3 Germany - Summary of key facts

<i>Self-assessment level</i>
The self-assessment process was conducted at a regional level and, specifically, with the members of the Gesunder Werra-Meißner-Kreis (GWMK) GmbH and other local stakeholders of the regional healthcare sector.
<i>Stakeholders</i>
The search for local stakeholders was divided into two parts. First, the 12 members of the interdisciplinary quality circle of GWMK GmbH were requested to take part in the process. Second, in a separate analysis, 64 stakeholders were identified, including, regional hospital management and physicians; a health insurance manager of regional health insurance; a lawyer (medical law); pharmacies; the regional government health department; 'Kassenärztliche Vereinigung Hessen' - a representative organisation for ambulatory GPs and specialists; and representatives of regional physician networks. Six of them completed the online self-assessment, of which five results were saved correctly, and nine of them took part in the consensus-building meeting.
<i>Summary of outcomes</i>
<ol style="list-style-type: none"> 1. The assessment outcomes reflect the maturity level of the region in integrated care. The most interesting and challenging was the assessment of dimension Q3 - Digital Infrastructure. This dimension scored 2; reflecting the fact that there is a mandate and plan(s) to deploy regional/national digital infrastructure, but it is not yet implemented. In fact, it scored too high, according to some stakeholders who pointed out that if this dimension was asking for one standardised region with hard-/software platforms that integrates the digital information flow between different professions and health care areas then the answer is: no, this platform does not exist. Therefore, GWMK would score Q3 with a 0. 2. The Digital Infrastructure was a focal point of the discussion, particularly the issue that the Government contracts with telecommunication providers who did not urge digital infrastructure provision in the countryside (e.g. digital infrastructure is prevalent where on-line trading is higher). Moreover, there does not exist a single communication system where all regional health care providers could communicate to each other. 3. The workshop identified four dimensions with the higher scoring of "2". Amongst those, good work has been recognised in case of the dimension Q8 - Citizen Empowerment; however, this dimension can be further improved with more support for deployment of self-developed solutions. 4. Digital Infrastructure, aside from interpersonal problems that would hinder integrated care, was perceived as the main obstacle to progress in integrated health care in the region. As such, this dimension was identified as a key priority for GWMK, along with the dimensions of Q4 - Process Coordination and Q8 - Citizen Empowerment.

5.4 Lithuania - Summary of key facts

Self-assessment level

The self-assessment process was conducted at a regional level and, specifically, within four stakeholder groups: Primary Health Care Centres (PHCC) from different cities within three regions of Lithuania; Medical Doctors from different fields; representative of the Ministry of Health; and patients.

Stakeholders

In total, 65 stakeholders participated in the self-assessment process, of which: 30 stakeholders were from the PHHC group; 20 Medical Doctors from different fields; 1 stakeholder from the Ministry of Health; and 14 patients. The results of the self-assessment survey were first analysed according to the stakeholder groups and, later on, the final radar diagram was produced.

Summary of outcomes

1. The outcomes of the self-assessment reflect the overall maturity in the country, even though the results varied considerably between the groups.
2. It is recognised that each of the 12 dimensions depend upon each other, however the dimensions Q5 - Funding, Q10 - Breadth of Ambition, Q11 - Innovation Management, and Q6 - Removal of Inhibitors appeared to have stronger connections due to funding - more specifically, due to the lack of funding.
3. Looking at the overall outcomes of the maturity assessment process, the Q3 - Digital Infrastructure dimension could be considered as the current strength in the region. Q7 - Population Approach and Q8 - Citizen Empowerment were also dimensions with strong maturity, but there was no dimension where maturity of "5" was reached. All 12 dimensions need further improvements in the region.
4. The dimension Q6 - Removal of Inhibitors was observed as the main weakness. In addition, Q4 - Process Coordination and Q12 - Capacity Building, were also highlighted as priority dimensions for change and improvement in the region.
5. From a cultural point of view, the lack of willingness to drill into complex issues related to implementation and scaling-up of integrated care can be considered as one of the factors which restricted the assessment process.

5.5 Slovakia - Summary of key facts

<i>Self-assessment level</i>
The self-assessment process was conducted at a regional level in Kosice region, in Slovakia.
<i>Stakeholders</i>
<p>Seven out of the 23 invited stakeholders participated in the self-assessment process. They included: General Manager of Health and Social Care Facilities; Manager of Social Insurance Agency in Slovakia - Kosice; Vice-Director of Regional Public Health Authority in Kosice; Regional Expert for Physiotherapy and Medical Rehabilitation; Social Worker of Kosice district - North (Unit of Social Affairs); Director of Association for Mental Health - INTEGRA, o.z., Michalovce; Head of Dept on Social Care Facilities Administration, the Kosice Self-Governing Region.</p> <p>Three stakeholders attended the consensus building workshop held online on 26th March 2020. The low level of participation was due to the Coronavirus outbreak.</p>
<i>Summary of outcomes</i>
<ol style="list-style-type: none"> 1. The self-assessment outcomes reflect the current situation and the most significant problems related to integrated care implementation, at a regional as well as a national level in Slovakia. 2. Common factors among all the dimensions appeared to be the absence of clear and effective state governance, together with a lack of measures adopted by national and regional governments to facilitate the integration process between health and social care systems. Also, an absence of community-based services, person-centred care approaches in care provision and the view that changes are usually driven only by bottom-up initiatives and non-governmental organizations were considered to be other important weaknesses of the integrated care implementation process in Slovakia at both national and regional levels. 3. The overall dimension scores were very low and the maturity levels in the final consensus varied mostly between 0 and 1. There was no single dimension that had reached an appropriate maturity level. Only dimension Q4 - Process Coordination was rated higher, but considered still not satisfactory, because some standardised coordinated care processes were underway; guidelines were used, some initiatives and pathways were formally described, but there was no plans for a systematic approach. 4. The lowest maturity level was found in the following dimensions: Q2 - Structure & Governance (there is a fragmented structure and governance in place); a population health approach is not applied to the provision of integrated care services and no evaluation of integrated care services is in place or in development and so Q7 - Population Approach and Q9 - Evaluation Methods scored 0. Co-ordination activities do occur but not as a result of planning or the implementation of a strategy (Q10- Breadth of Ambition scores 0). Of the aforementioned dimensions, the Structure & Governance

dimension seems to be the most important starting point that may help to facilitate the process of adoption of all other inevitable changes.

5. Lack of communication and coordination between The Ministry of Health and The Ministry of Labour, Social Affairs and Family was identified as one of the key problems. Despite Government awareness of the lack of integration between health and social care, no efficient policy or systematic actions have been taken. Also, despite the levels of EU funding available, these are primarily used for the (re)construction of integrated care centres.
6. Change is usually driven only by bottom-up initiatives and non-governmental organizations. Social (e.g. age of care professionals, and individual values) and cultural (e.g. excessive conservatism, and resistance to change) characteristics, together with lack of feasible vision or planning, were perceived to be barriers to change.

5.6 Analysis of dimensions

The matrix (Table 6) below provides a visual representation of the maturity scorings agreed during the consensus meetings by all the stakeholders in the 5 regions conducting the maturity assessment process at the regional level.

Table 6: Final consensus dimensions at regional level

Region	Final Consensus Dimensions											
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Basque Country	4	4	4	3	4	3	4	3	3	4	3	3
Flanders	2	3	2	1	1	1	2	2	1	2	2	2
Germany	1	2	2	2	1	1	1	2	1	1	1	1
Lithuania	2	2	3	2	2	1	3	3	2	2	2	2
Slovakia	1	0	1	2	1	1	0	1	0	0	1	1

Dimensions			
Q1	Readiness to Change	Q7	Population Approach
Q2	Structure & Governance	Q8	Citizen Empowerment
Q3	Digital Infrastructure	Q9	Evaluation Methods
Q4	Process Coordination	Q10	Breadth of Ambition
Q5	Funding	Q11	Innovation Management
Q6	Removal of Inhibitors	Q12	Capacity Building

Ratings		
5 to 4	3 to 2	1 to 0

5.6.1 Homogeneous dimensions

The assessment of each dimension has recorded some variations, despite the differences in the organisation of healthcare systems in these regions. Four regions follow the Beveridge model, while Germany provides care under the Bismarck Model. The other main difference can be found in the healthcare spending of each region which varies from 5.3% of GDP of the

Basque Country to approximately 10.9% of GDP (including state and county percentages) of Germany. Further details are included in individual the self-assessment reports in the Annexes to this report.

The most homogeneous dimensions across the five regions, as summarised in [Table 6](#), are: Q6 - Removal of Inhibitors; Q4 - Process Coordination; and Q8 - Citizen Empowerment.

Q6 - Removal of Inhibitors is the dimension in which four out of five regions have assessed the maturity level *1 - Awareness of inhibitors but no systematic approach to their management is in place*, highlighting how the awareness-raising has not yet led to action.

Germany has reported how cultural change still needs to happen, as currently healthcare professions are mostly perceived as being profitable careers (due to high salaries), rather than caring professions, which is a key inhibitor to the need to change and transform the way care is delivered. In addition, other inhibitors include lack of political support, no dedicated funding for integrated care, and a weak digital infrastructure.

In **Lithuania**, the activities to remove inhibitors are inadequate and there is a lack of systematic approach.

Slovakia has also reported that there is no initiative in place to remove inhibitors. There are no stakeholders/organisations ready to take the actions and necessary responsibility; it is always assumed that the adoption of some effective measures would lead to financial loss of some other involved stakeholders, organisations and sectors.

In the **Basque Country**, from a legal and structural point of view, removal of inhibitors is already underway, but from a cultural point of view, it still needs to be put into practice. There is a lack of knowledge among healthcare professionals about the inhibitors of integrated care, of the degree of their influence and the way how to approach them. Their elimination would require a real cultural change.

Q4 - Process Coordination has been mostly been rated maturity level *2 - An ICT infrastructure to support integrated care has been agreed together with a recommended set of technical standards - there may still be local variations or some systems in place are not yet standardised* by three out of five Regions.

Germany has pointed out the lack of standardisation of guidelines between healthcare professions, while **Flanders** has reported that coordination only happens at clinical level, hence during the process of health care, and does not embrace social care (e.g. GP level).

As a result of the Structural Reform 2017-2020, **Lithuania** has put in place guidelines and recommendations for multidisciplinary approach for horizontal and vertical integration of service delivery (e.g. transition from paediatric to adult services, cooperation between professionals from different areas).

Slovakia has adopted some basic norms and developed some standard procedures to coordinate processes, however, it is not possible to integrate health and social care, as these standards are not uniform, interdisciplinary nor suitable for use by a wide range of existing diagnoses.

The **Basque Country** rated this dimension “3”, slightly above all the other regions which conducted the analysis at regional level, describing that a systematic approach to integrated and coordinated care with standardised processes are deployed. There are working groups and facilitating stakeholders that have developed recommendations, standards, pathways at the corporate level with local adaptations (for chronic patients, multi-morbid, palliative, etc.). Nevertheless, there are still not enough solutions and initiatives to fully coordinate the processes of the social and healthcare sectors.

Q8 - Citizen Empowerment is the only dimension that has been rated the maturity level of “3” or “2” among most of the regions, which means that *citizens are consulted on integrated care services and have access to healthcare information and healthcare data, equally that citizen empowerment is recognised as important part of integrated care provision and effective policies to support their empowerment are in place.*

The **Basque** healthcare system recognises the empowerment of patients and families as an essential element of integrated care. There are corporate policies that have allowed the development of a series of tools for the empowerment of citizens (e.g. the School of Health “Osasun Eskola” and the Personal Health Folder). Also, Basque patients with high burden disease(s) are highly empowered through bespoke initiatives (e.g. “Paciente Activo” or “KronikOn”).

Flanders’ assessment recognised the increasing health literacy of people but brings to attention the lack of policy making, fragmented initiatives, and lack of efforts by care providers.

Germany identified issues partly related to demographics (i.e. age and use of the internet) and partly related to not structured easy access to healthcare data by citizens (i.e. personal data records). Health insurances appear to provide support with on-line courses.

In **Lithuania**, although hospitals work closely with patient organisations, patients’ associations and associations that coordinate patient integration could be more involved in this process. Besides, all the drafts of the legal acts are coordinated with the public by publishing them in the Legal Research System (LRS). The Ministry of Health of the Republic of Lithuania invites representatives of relevant patient organisations to participate in working groups on the amendment of legislation.

In **Slovakia**, citizens are not considered to be at the centre of the integrated care agenda and are not involved in planning. The government does not provide adequate assistance and support to encourage citizen empowerment. It is mostly patient organisations that stand in for the role of the government and its responsibility.

5.6.2 Heterogeneous dimensions

The most heterogeneous dimensions in which a higher number of variations (i.e. ratings varied from “0” to “4” on the 0 to 5 points scale) have been captured in the matrix presented in **Table 4**, are: Q2 - Structure & Governance; Q7 - Population Approach; and Q10 - Breadth of Ambition.

Q2 - Structure & Governance has been rated very poorly by **Slovakia**, with maturity rating of 0 - *Fragmented structure and governance is in place*. Slovakia has provided the lowest assessment of this dimension, highlighting the evidence of the lack of systematic guidelines provided by the national or regional government. Rare incentives exist, accompanied by non-systematic, individual bottom up approach to change. There is a potential for cooperation between professionals, but there is no clear vision, planning, or management at regional level.

Germany and **Lithuania** perceptions were in the middle range (maturity level 2) and this entails that formation of task forces, alliances and other informal ways of collaborating are perceived as growing.

Germany has reported the aspiration of health care professionals to work cross-professions, and specifically by those professions who are not physicians. Structure and governance should be given in the hand of physicians, who should collaborate with other professions. **Lithuania** has in place healthcare policies and programs that recognise the need for population health. In particular the “National Development Strategy: Lithuania 2030” incorporates a horizontal dimension “Health for all”.

The maturity scorings of Flanders and the Basque Country were higher, but with some differences. While **Flanders** acknowledged still an on-going process which can be further developed and improved to improve communication between different stakeholders and organisations involved in the planning and delivery of integrated care, the **Basque Country** depicted a unified structure and governance aligned with the objective of integrated care approach which is to face increased chronicity of its population. The Healthcare Integration Plan was developed in 2010 and completed in January 2016, with the creation of 13 Integrated Healthcare Organisations (IHOs).

While **Flanders** called upon the need to ensure continuity in the change management process, the **Basque Country** acknowledged the mandate from the Parliament, Government and Ministry of Health of the Basque Government, aligned with the objectives of its integrated care approach. Overall, work still needs to be done by all the regions, even though they currently stand at different steps of their individual journeys.

Q7 - Population Approach is the most uneven dimension in which each of the five regions provided a completely different maturity scoring. The highest scoring was given by the **Basque Country**, where the healthcare system is strongly based on a population approach; the entire population has been stratified according to its morbidity risk. Also, care programmes have not been implemented for all groups, only for the most complex ones, while some frailties conditions are not yet been considered in the current risk stratification.

Lithuania has described a positive path towards an integrated population approach, where healthcare outcomes, healthcare behaviours and lifestyles of adults and children are monitored. The information is provided to EU networks and information systems (e.g. EU-funded InfAct Project). Nonetheless, skills shortage, cultural barriers, and individual resistance have been reported.

Flanders have reported a population approach only in terms of pilot projects (e.g. the Primary care Zones focus on specific groups, the Care Atlas), which are not yet supported

by a sustainable structured policy. A key obstacle may be in the fragmentation of competences in Belgium.

In **Germany** there is not a consistently applied population approach. In fact, risk groups exist in theory, but they are not used to develop professional overarching regional care concepts.

In **Slovakia**, a population approach is very much needed, as it is limited to very few conditions. There is no screening tool to identify vulnerable (i.e. at high-risk) population groups in Slovakia. There is also a lack of available community services, which results in increased hospitalisation rates for people with conditions who do not need to be hospitalised.

Q10 - Breadth of Ambition - The long-term goal in the deployment of integrated care is to fully integrate health and social care services in order to provide a complete set of seamless interactions for the citizen, leading to better care and improved outcomes. Unfortunately, ratings in this dimension suggest that different levels/no levels of integration exist in the assessed regions.

The highest rating has been provided by the **Basque Country**, even though there is not a joint Ministry of Health and Social Care. Each province is responsible for social care. The social sector has access to health information of the Basque population, but the health system does not have access to the data generated by the social care sector.

Flanders and Lithuania have given the same maturity scoring of 2 on this dimension which shows that integration within the same level of care is almost achieved. In **Flanders**, there is no structured integration between secondary and tertiary care, hence there is a need for a vision on a common ambition to work together. The Government should enhance this ambition of horizontal integration (i.e. between and amongst organisations) and vertical integration).

Lithuania has described how ICT and vertical integration (i.e. data transfer between primary and secondary care institutions) contribute to the delivery of horizontal integration. However, this is mostly present at university hospital level and is not implemented at social services and counselling levels.

In **Slovakia**, there were several pilot projects ongoing at the moment, however, integration of health and social care services can be observed to some extent only between hospital and outpatient services.

Q5 - Funding is one of those dimensions with major variations, even though three out of five regions (60%) assessed this dimension as *1 - Funding is available but mainly for the pilot projects and testing*. On the lower side of the scale, **Slovakia** has acknowledged levels of funding within the EU, however these financial resources are primarily used for the construction and refurbishment of integrated care centres rather than real integration of health care services; and the integration of social care services is still optional.

In **Lithuania**, funding is mostly project-based, with the initiative coming from the medical community, and not from healthcare policy makers: the lack of any sustainable funding and the lack of solutions in national systems are critical issues for further development of integrated care in hospitals.

At the higher end of the scale, the **Basque Country** reported adequate levels of funding and efforts in support of integration: funding is aligned with integrated care; development of the IHOs; corporate funding for the development of bottom-up projects and EU funding for the development of projects (mainly through Kronikgune). The Basque Country did not assess this dimension at the maximum level of the scale because there is still insufficient support for social care and health coordination, due to the lack of agreement with the stakeholders outside of the health system.

5.6.3 Strengths and weaknesses

As summarised in [Table 4](#), there were no dimensions with the highest maturity scoring (in green), compared to dimensions with lower maturity scorings (in red).

At the regional level, **four dimensions emerged as strengths amongst the five Regions: Q2 - Structure & Governance, Q3 - Digital Infrastructure, Q4 - Process Coordination, and Q8 - Citizen Empowerment**. In particular, the assessment of Structure & Governance and Digital Infrastructure dimensions show the strong political commitment towards structured governance at multiple levels in all of the regions, with the exception of Slovakia.

The same implies for Digital Infrastructure even though Slovakia and Germany assessed this dimension quite low.

The dimension Process Coordination appears to be on an emerging positive trajectory; however, further improvement is needed in all assessed regions. Citizen Empowerment appears to be on a more positive track overall, with different strategies, measures and initiatives in place, despite some constraints which are mostly linked to the digital divide.

In contrast, the weaknesses describe a more homogeneous situation across SE regions. One of the dimensions rated as “1” by four of the five regions (80%) is **Q6 - Removal of Inhibitors**. In general, there is a good level of awareness about the existing inhibitors and the need to address them, but there are no systematic actions in place.

Two dimensions were rated as “1” by three out of the five regions (60%); **Q5 - Funding and Q9 - Evaluation Methods**. Lack of systematic and dedicated funding is perceived as one of the top weaknesses in SE regions. This is also closely linked to evaluation, as very often funding is limited by the outcomes of delivered services and their impact.

Figure 17 below provides a visual representation of the maturity level of the five EU regions and countries that have undertaken the self-assessment at a regional level. None of the regions have reached the full maturity (“5” on the y-axis) on any of the 12 dimensions of SCIROCCO Exchange Tool (x-axis). On average, the maturity scoring for these regions and countries varies between “1 and 2” rating, with some higher scoring for the Basque Country and Lithuania.

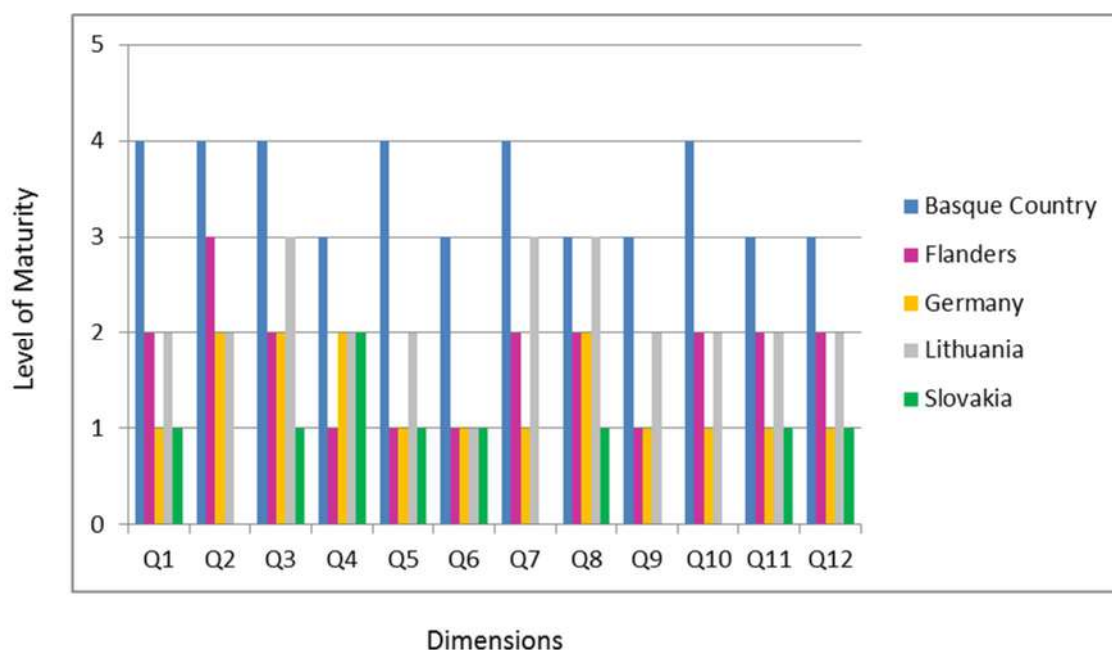


Figure17: Level of Maturity at Regional level

5.7 Analysis of stakeholders

This section describes the analysis of the stakeholders' that participated in the maturity assessment process and their potential impact on the outcomes of this process. The stakeholders were grouped under seven categories, according to their job role; "Top Management" (TP), "Medical Doctor" (MD), "Health Professional" (HP), "Social Care Professional" (SCP), "ICT Specialist" (ICTS), "Patients' Representative" (PR), and "Other" where no alike characteristics were identified.

Table 7 below illustrates the numbers and roles of stakeholders who completed the on-line self-assessment and participated in the consensus-building workshops. The role that was least well represented across the whole spectrum was the ICT Specialist - only the Basque Country reported one stakeholder with this profile. The other roles appear to be equally represented, despite variations between the regions. In general, where a larger number of stakeholders participated in the maturity assessment process, a more equal distribution can be observed.

Table 7: Stakeholders matrix at regional level

		Region				
		Basque Country	Flanders	Germany	Lithuania	Slovakia
Stakeholders roles	TM	3	5	2	12	-
	MD	-	4	2	29	-
	HP	3	3	3	8	1
	SCP	-	6	2	2	2
	ICTS	1	-	-	-	-
	PR	1	2	-	14	-
	Other	1	3	-	-	-

In terms of the impact of the profile of stakeholders on the outcomes of the maturity assessment, some trends can be recognised within the same stakeholder group. For example, as [Figure 18](#) shows, the stakeholders in the “Patients’ Representative” category, in both the Basque Country and Flanders regions, assessed the dimension Q8 - Citizen Empowerment quite low (maturity scoring “1”).



Basque Country - Patients’ Representative

Flanders - Patients’ Representative

Figure 18: Stakeholders’ Perceptions of Q8 - Citizen Empowerment

In the case of Flanders, it was noted that although citizen empowerment is the main focus of the region's integrated care policies and strategies, in reality its citizens are usually stakeholders who are still less informed and less capable of taking responsibility for their own care. In the Basque Country, the rationale for relatively low scoring was the involvement of a random patients' representative (rather than a professional representative of patients' organisations) who was less informed about existing strategies or services in integrated care. This uninformed opinion generated differences in perceptions in almost all dimensions of the SCIROCCO Exchange Tool.

Figure 19 goes on to capture an example of the perceptions of different stakeholders of the same dimension: in this case, a Health Professional representative from the Basque Country and a Top Management representative from Lithuania both rating Q8 - Citizens' Empowerment. Both stakeholders' ratings were high, giving maturity levels of "4" and "5". These individual assessments were strongly influenced by the local context.



Basque Country - H&SC Coordinator

Lithuania - Top Management

Figure 19: Stakeholders' Perceptions of Q8 - Citizens' Empowerment

For some dimensions, however, the stakeholders appeared to be more aligned as illustrated in Figure 20.



Slovakia - H&SC CEO

Slovakia - Social Care Professional

Figure 20: Stakeholders' Perception of Q6 - Removal of Inhibitors

The dimension Q6 - Removal of Inhibitors did not show any variations across the entire spectrum of stakeholders in Slovakia. The Health and Social Care CEO and a Social Care Professional both rated this dimension with the maturity "1", as no initiatives are in place to remove inhibitors in the region and this has also impact on the care delivery.

6 Maturity assessment at local level

This section presents the analysis of the maturity of integrated care in the regions that have undertaken the assessment at a local level: Puglia Bari Local Healthcare Authority (LHA), Puglia Brindisi LHA, Puglia Barletta LHA, Puglia Foggia LHA, Puglia Lecce LHA, Puglia Taranto LHA; Scotland and Slovenia.

6.1 Puglia Bari LHA - Summary of key facts

<i>Self-assessment level</i>
The self-assessment process was conducted at local level. Bari LHA is one of the six Puglia LHAs involved in the integrated care maturity level assessment in the region.
<i>Stakeholders</i>
Seven stakeholders participated in the assessment process: two representatives of the Top Management (Chief Medical Officer; and Health and Social Care Services Director); a representative of the Health and Social Care District; a representative with medical background (Nurse Coordinator); a representative of the ICT Team (IT Services Director); and two patients' group representatives (President of Patients' Association; Sick Patient Court Coordinator).
<i>Summary of outcomes</i>
<ol style="list-style-type: none"> 1. None of the outcomes of the maturity assessment process were particularly surprising; they reflect the actual situation in the region. 2. The dimensions Q8 - Citizen Empowerment and Q10 - Breadth of Ambition appeared to be stronger than others. Tools exist to motivate and support citizens to co-create healthcare services; and the coordination of social care service and health care service needs has been introduced. Also, Q4 - Process Coordination plays an important role within this LHA, as it has a population catchment greater than all the other five LHAs in Puglia. In fact, the consensus process showed that systematic approach to the standardisation of services, pathways and care processes is perceived as planned, even though it is not yet deployed. 3. The final consensus diagram offers a balanced range of maturity for integrated care across the 12 dimensions - a medium-high level of maturity (between "3" and "4"). Nevertheless, there is a noticeable variation in dimensions Q5 - Funding, Q3 - Digital Infrastructure and Q6 - Removal of Inhibitors. These dimensions have been respectively rated between "1" and "2" on the assessment scale. The common factors for lower rating are the inability to capture the available funding; access to and management of available data; and existing resistance of some members of clinical staff. 4. Specific factors in Bari LHA which affected the outcomes of the maturity assessment are the size of this LHA (over 1m inhabitants); organisation of this LHA (which is the result of different municipalities coming together in 2007); and the lack of homogeneous management of processes within the LHA.

6.2 Puglia Brindisi LHA - Summary of key facts

<i>Self-assessment level</i>
The self-assessment process was conducted at a local level. Brindisi LHA is one of the six Puglia LHAs involved in the integrated care maturity level assessment in the region.
<i>Stakeholders</i>
Five stakeholders participated in the assessment process: a representative of the Top Management (Chief Medical Officer); a representative of the Health and Social Care District (Francavilla Fontana Health and Social Care District Director); a representative with a medical background (Nurse Coordinator); a representative of the ICT Team (IT Services Manager); and a patients' group representative (President of Voluntary Association -Protezione Civile).
<i>Summary of outcomes</i>
<ol style="list-style-type: none"> 1. The consensus diagram offers a balanced range of maturity of Brindisi LHA in integrated care across the 12 dimensions (between “3” and “4”), with no dimension scoring below the maturity level of “3”. It is a harmonised picture from a system-perspective and it does reflect the actual situation of the LHA, at this given time. There is vision or plan embedded in policy and “champions” are emerging; a roadmap for change programme is defined and accepted by the stakeholders involved; and improved coordination of social care and health care services is introduced. This shines through other relevant dimensions linked to each other. In particular, Q1 - Readiness to Change is linked to Q2 - Structure & Governance and Q10 - Breadth of Ambition. 2. Looking at the consensus diagram, dimensions Q2 - Structure & Governance together with Q10 - Breadth of Ambition appear to be more significant than others for progressing integrated care in Brindisi LHA. This is because the approach/policies towards the integrated care model are enforced from the top management of the organisation, i.e. a top-down approach. This is implemented alongside the bottom-up initiatives. 3. Some specific factors influenced the outcomes of the maturity assessment process. The relatively small size of the Brindisi LHA is not a limiting factor; in fact, quite the opposite - the size of this LHA has facilitated the achievement of integrated care and effectively impacting local and regional strategies. The most common factor that is behind the perceived weaknesses is the lack of cross-level exchange of information and communication.

6.3 Puglia Barletta Andria Trani LHA - Summary of key facts

<i>Self-assessment level</i>
The self-assessment process was conducted at a local level. Barletta Andria Trani LHA is one of the six Puglia LHAs involved in the integrated care maturity level assessment in the Region.
<i>Stakeholders</i>
Five stakeholders participated in the assessment process: a representative of the Top Management (Chief Executive Officer); the representative of the Andria Health and Social Care District; a representative with a medical background (Nurse Coordinator); a representative of the ICT Team (IT Services Manager); and a patients' group representative (Sick Patient Court Coordinator).
<i>Summary of outcomes</i>
<ol style="list-style-type: none"> 1. The consensus diagram showed a mixture of maturity scoring, ranging from "1" to "4" on the assessment scale. Multiple efforts are in place to deliver integrated care services, with coordinated processes, population risk approach, and a strong ambition. Nevertheless, the availability of funding and removal of inhibitors still pose obstacles to achieve the fully integrated care service delivery. 2. Three dimensions appear to be more significant for the implementation and scaling-up of integrated care in the Barletta Andria Trani LHA; Q4 - Process Coordination - there is a systematic approach to care processes, which are standardised and deployed throughout the LHA; Q7- Population Approach - the population risk approach is applied to integrated care services, even not yet systematically or to the full population; and Q10 - Breadth of Ambition - care coordination of social and health care services is in place. A connection appeared between dimensions Q6 - Removal of Inhibitors and Q8 - Citizen Empowerment, as the effects of inhibitors are not always perceived at all levels, by all stakeholders. This difference in perception of the inhibitors directly affects how citizens are empowered. 3. A common factor that affected the maturity across multiple dimensions is the complexity of management processes, which requires a degree of literacy and dedicated effort in order to be effective. Training is not yet a routine management process and it requires extra effort to be delivered. Structure & Governance is mostly provided in an informal way, which poses limitations in implementation processes. 4. One of the factors that may have influenced the outcomes of the maturity assessment is the complexity of promoting and maintaining a systematic approach to integration between the different levels of care and stakeholders. This is a recognised issue, which already provides the basis to promote this approach and guarantee proper levels of integration for the whole care system. This factor is mostly dependent upon organisational aspects. The Barletta Andria Trani LHA is extremely innovative in its approach; nonetheless it is highly linked to the Regional (Puglia Region) structured approach.

6.4 Puglia Foggia LHA - Summary of key facts

<i>Self-assessment level</i>
The self-assessment process was conducted at a local level. Foggia LHA is one of the six Puglia LHAs involved in the integrated care maturity level assessment in the Region.
<i>Stakeholders</i>
Six stakeholders participated in the assessment process: two representatives of the Top Management (Chief Executive Officer; Social Services Coordinator); the representative of the San Marco in Lamis Health and Social Care District Director; a representative with medical background (Nurse Coordinator); a representative of the ICT Team (ICT Services Manager); and a patients' group representative (President of Patient's Association).
<i>Summary of outcomes</i>
<ol style="list-style-type: none"> 1. Foggia LHA's consensus diagram highlights some strengths, but also some elements that still need to be implemented and improved throughout the province and the health and social care districts. From a system perspective, the outcomes of the maturity assessment underline the actual fragmentation in the delivery of integrated care in Foggia LHA which is, inevitably, influenced by the territory of this LHA. 2. Looking at the final consensus diagram, there are some dimensions that appear to be more significant than others for the implementation of integrated care in Foggia LHA - particularly, Q10 Readiness to Change has a high maturity scoring of 4 which is reflected by existing leadership, vision and plan, as well as existing pressure for change. Another important dimension is Q7 - Population Approach (with a maturity level of 4). A population risk approach is applied to integrated care services but not yet systematically or to the full population in Foggia LHA. 3. Some specific factors in Foggia LHA influenced the outcomes of the maturity assessment. The uneven distribution of the population across the territory gives real potential for the application of the population approach. A key factor that significantly affects the low level of maturity is the lack of training across the organisation, as well as the morphology of the LHA. The scattered distribution of 61 municipalities across the LHA creates a strong barrier to the change, however, the deployment of digital infrastructure network could help to mitigate this barrier.

6.5 Puglia Lecce LHA - Summary of key facts

<i>Self-assessment level</i>
The self-assessment process was conducted at a local level. Lecce LHA is one of the six Puglia LHAs involved in the integrated care maturity level assessment in the region.
<i>Stakeholders</i>
Six stakeholders participated in the assessment process: a representative of the Top Management (Chief Executive Officer); the representative of the Galatina Health and Social Care District; a representative with a medical background (Nurse Coordinator - Care Manager); a representative of the ICT Team (IT Services Manager); and two patients' group representatives (President of Patients' Association and Sick Patient Court Coordinator).
<i>Summary of outcomes</i>
<ol style="list-style-type: none"> 1. The outcomes of the maturity assessment reflect the actual situation of integrated care in Lecce. On average, the maturity in integrated care was assessed between the levels 2 and 4 on the assessment scale. The reported perception on the maturity level of integrated care emerges as medium-high. In particular, Digital Infrastructure (maturity level of 4) exists to support integrated care and is widely deployed even if not used by all stakeholders involved. Another dimension with high maturity is Q5 - Funding (maturity level of 4) which reflects the good access of Lecce LHA to regional/national funding supported by the existence of reimbursement schemes for ongoing operations. 2. Looking at the overall consensus diagram, the dimensions Q3 - Digital Infrastructure and Q5 - Funding appear to be more significant than others for the implementation of integrated care in Lecce LHA. This is because the policies and strategies, including dedicated funding for the integrated care model, are enforced at the management level of Lecce LHA, supported by a solid digital infrastructure. All staff are trained and capable of using the existing infrastructure, as intended. 3. A common factor among multiple dimensions is the limited Structure & Governance in place which can be explained by the undergoing change management process. Nevertheless, a bottom-up approach was the positive counterpart observed: multiple informal collaborations and task forces are in place, although not in a systematic way. 4. Some specific factors may have influenced the outcomes of the maturity assessment process in the Lecce LHA. The breadth of ambition of Lecce LHA in integrated care and the wide range of existing informal collaboration have positively influenced the higher scoring of a number of dimensions. In contrast, the factor that influenced the lower maturity rating is the very poor communication between the Lecce LHA and the citizens in the catchment area. This element needs to be monitored and improved, as communication platforms are in place in order to achieve a higher maturity in integrated care delivery.

6.6 Puglia Taranto LHA - Summary of key facts

<i>Self-assessment level</i>
The self-assessment process was conducted at a local level. Taranto LHA is one of the six Puglia LHAs involved in the integrated care maturity level assessment in the Region.
<i>Stakeholders</i>
Five stakeholders took part in the assessment process: a representative of the Top Management (Medical Doctor); a representative of the H&SC District; a representative with a medical background (CCC Coordinator); two representatives of the ICT Team (IT Services Manager, and EHR manager); and a patients' group representative (President of Patients' Association).
<i>Summary of outcomes</i>
<ol style="list-style-type: none"> 1. The consensus diagram for Taranto LHA shows an interesting and heterogeneous situation across the 12 dimensions of the SCIROCCO Exchange Tool, with average assessment levels between 0 and 3 points on the assessment scale. These outcomes seem to show much lower maturity in integrated care compared to other LHAs in Puglia region. From a system-perspective, the maturity outcomes do reflect the actual situation in Taranto LHA. 2. Looking at the consensus diagram, dimension Q5 - Funding, together with Q6 - Removal of Inhibitors and Q10 - Breadth of Ambition appear to be more significant than others for the implementation of integrated care in Taranto LHA. The perceived lack of funding to support deployment of integrated care significantly affects the management and delivery of the healthcare services. The perceived lack of funding is a consequence of the limited positive impact of investments in integrated care, if compared to the investments in place for ICT infrastructure and medical devices equipment in hospital care settings. 3. A common factor among multiple dimensions is the limited consistent knowledge on a number of dimensions (e.g. Q10 - Breadth of Ambition), which then influenced the overall consensus diagram. 4. Some specific factors may have influenced the outcomes of the maturity assessment process. One specific factor influencing the higher maturity in Taranto LHA is the strong desire to change at management level which plays an important role in having positive perceptions in a number of dimensions of the SCIROCCO Exchange Tool. In contrast, lack of joined up efforts and mutual collaboration influenced the lower ratings in a number of dimensions.

6.7 Scotland - Summary of key facts

<i>Self-assessment level</i>
Self-assessment process was conducted at local level, in Midlothian Health and Social Care Partnership (HSCP).
<i>Stakeholders</i>
19 stakeholders participated in the maturity assessment process; 8 representatives of the Top Management; 9 representatives of clinical care; a representative of Patients' organisations; one representative of the ICT Team.
<i>Summary of outcomes</i>
<ol style="list-style-type: none"> 1. The self-assessment outcomes reflect the actual maturity of Midlothian HSCP, showing progress towards integrated care in a number of dimensions. The outcomes provide a diverse picture of maturity, ranging between "1" to "4" in all dimensions. No results were particularly surprising. 2. There are some connections/grouping of specific dimensions which can be observed namely: Q2 - Structure and Governance; Q3 Digital Infrastructure and Q6 - Removal of Inhibitors. This is particularly the case when it comes to the deployment and use of digital services. The competences for the digital infrastructure are mostly at a national level which not always meet the local needs and requirements. This often discourages the use of digital services or requires more effort at the local level to deliver these services. 3. The greatest strengths were observed in the number of dimensions: Q1 - Readiness to Change, Q7 - Population Approach, Q10 - Breadth of Ambition, Q11 - Innovation Management and Q12 - Capacity-building. 4. Room for improvement has been recorded for the dimensions: Q2 - Structure & Governance, Q3 - Digital Infrastructure, and Q6 - Removal of inhibitors. 5. Among the specific factors that justified the scoring and influenced the outcomes of the maturity assessment process, are mostly organisational. Most of the competences when it comes to e.g. Digital Infrastructure are at national level with no ability to influence it from the local level. The size of the HCSP is also an important factor, relatively smaller size of Midlothian HCSP enables quicker establishment of new governance, service redesign or innovation management. Cultural factors also still play the role and more efforts need to be invested in change management.

6.8 Slovenia - Summary of key facts

<i>Self-assessment level</i>
The self-assessment process was conducted at local level. The Municipality of Trbovlje was selected according to existing factors that showed poorly developed home care in this municipality.
<i>Stakeholders</i>
Stakeholders were selected on the basis of their knowledge and awareness about the issues of long-term care in the municipality. Eight representatives were selected from: Health centre of Trbovlje; Centre for Social Work; Zagorjeob Savi Occupational Activity Centre; Retirement home of France Salamon Trbovlje; Association of people with disabilities Trbovlje; Municipality of Trbovlje; Youth centre of Trbovlje; Adult education centre of Zasavje; Seniors Association Trbovlje; Intergenerational association Upanje, Trbovlje.
<i>Summary of outcomes</i>
<ol style="list-style-type: none"> 1. The stakeholders assessed that the maturity for integrated care in Municipality of Trbovlje as low, providing some important insights about the current state of long-term care. No results were specifically surprising. 2. There is some interlinkage between the dimension Q6 - Removal of Inhibitors and dimension Q12 - Capacity building. The stakeholders pointed out that lack of trained staff presents an important obstacle for the implementation of integrated care. 3. Q3 - Digital Infrastructure is seen as the strongest dimension (highest score), but there is still room for improvement (e.g. better and more systematic organisation of digital capacities). 4. Three dimensions were perceived as particularly weak: dimension Q9 - Evaluation Methods - except from informal actions (i.e. talking, sharing reflections and experiences) no standards or methods are in place, also as a result of absence of long-term care legislation; Q4 - Process Coordination - lack of a unified database and efficient transfer of data between different stakeholders; and Q7 - Population Approach - there is no strategy and clear distinction between social and healthcare services. 5. Stakeholders pointed out that the National authorities are fully aware of the needs in the field of long-term care, but they do not take enough action to change the current state. Besides this, health and social sector are divided and do not collaborate effectively enough.

6.9 Analysis of dimensions

The matrix below Table 8 provides a visual representation of the final outcomes of the maturity assessment in 8 localities of the SCIROCCO Exchange regions.

Table 8: Final consensus dimensions at Local level

Region	Final Consensus Dimensions											
	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Puglia_BA LHA	3	3	2	3	1	2	3	4	3	4	3	3
Puglia_BR LHA	3	4	4	3	3	3	3	4	3	4	3	3
Puglia_BT LHA	3	2	3	4	1	1	4	2	2	4	3	3
Puglia_FG LHA	4	2	3	2	3	1	4	3	1	1	2	2
Puglia_LE LHA	2	2	4	3	4	3	3	3	3	3	2	3
Puglia_TA LHA	2	2	3	3	0	1	3	3	2	1	2	3
Scotland	3	2	1	2	2	1	3	2	3	4	3	3
Slovenia	1	1	3	0	1	1	0	1	0	2	1	1

Dimensions			
Q1	Readiness to Change	Q7	Population Approach
Q2	Structure & Governance	Q8	Citizen Empowerment
Q3	Digital Infrastructure	Q9	Evaluation Methods
Q4	Process Coordination	Q10	Breadth of Ambition
Q5	Funding	Q11	Innovation Management
Q6	Removal of Inhibitors	Q12	Capacity Building

Ratings		
5 to 4	3 to 2	1 to 0

6.9.1 Homogeneous dimensions

The most homogeneous dimensions across the three Regions, as summarised in Table 6, are: Q6 - Removal of Inhibitors; Q11 - Innovation Management; and Q12 - Capacity Building.

Q6 - Removal of Inhibitors is the dimension where the majority of regions scored 1 “Awareness of inhibitors exists but no systematic approach to their management is in place”. In Scotland, it was acknowledged that lot of effort has been dedicated to remove the inhibitors, as reflected in a number of operational and business plans, but there is no real strategy and systematic approach in place. There is still a lot of silo thinking despite some good examples in place.

In Slovenia, stakeholders advised that more collaboration is needed between sectors and organisations. More would be achieved if municipalities were committed to collaboration. In the case of healthcare authorities in Puglia region, the lack of strategies and systematic approach to the removal of inhibitors was observed. Also, in many cases, stakeholders were not aware of the existing inhibitors.

Q11 - Innovation Management is the dimension where the majority of regions scored 3 “Formalised innovation management process is planned and partially implemented”. In

Scotland, this is demonstrated by existing strategic plans, new governance and budget management to support the uptake of innovative solutions. The difficulty still remains in how this innovation is captured; what is actually innovative compared to existing services or other Health and Social Care Partnerships.

In the case of local healthcare authorities in Puglia region, a formalised innovation management process has been implemented, supported by existing ICT infrastructure. However, some cultural resistance to innovation remains in place. Innovation management processes also vary across different organisations (e.g. hospital and ambulatory settings). Interestingly, it was also observed that the assessment of this dimension is directly linked and dependent upon the experience of individual stakeholders and the years they spent in their specific roles.

In Slovenia, this dimension was scored much lower 1 *“Innovation is encouraged but there is no overall plan”*, although it was argued that innovation is always welcomed and encouraged through various awards and competitions. However, in contrast, this does not motivate others to innovate but, rather there is “envy” at a local level. Another perceived barrier to improved innovation management is the fear of change.

Q12 - Capacity Building is the dimension where the majority of regions scored 3 *“Learning about integrated care and change management is in place but not widely implemented”*. In Scotland, it was acknowledged that although a lot of effort has been dedicated to supporting capacity-building, there has been a lack of capacity and time invested in actual change management. Building resilience for capacity building has been a consistent problem.

In contrast, in Slovenia this dimension scored quite low 1 *“Some approaches to capacity-building are in place”*. Some organisations run human resource management but, generally, there is lack of specialised professionals (e.g. psychology specialist, speech and language specialist, etc). The profession of a home care worker is deemed to be of low value. There should be systematic planning of personnel development, starting at education level. Also, it is important to define the key competences of people working in the field of long-term care.

In the case of local healthcare authorities in Puglia region, it was acknowledged that much effort was dedicated to continuous learning and building the capacities and skills of healthcare professionals for integrated care. However, in the case of some authorities, it was also noted that very often there is also lack of interest from stakeholders to participate in these learning activities, or they are simply not aware of these opportunities.

6.9.2 Heterogeneous dimensions

The majority of the dimensions appear to be heterogeneous, with ratings varied from “0” to “4”, as captured in Table 6. Among all of the dimensions, Q3 - Digital Infrastructure, Q5 - Funding, and Q10 - Breadth of Ambition were those that reflected a higher degree of variation.

Q3 - Digital Infrastructure is the dimension where the scoring varied from maturity level 1 in Scotland to in Slovenia and Puglia’s local health and social care authorities.

In Scotland, the rationale for the low maturity scoring is still the existence of very complex and fragmented ICT infrastructure; with different systems used in health and social care. The infrastructure needs to reflect the needs and requirements of the users, including

citizens but very often the users are not heard. It should also be built to support anticipated outcomes which is currently not the case. There are some good examples, but they are not widely embedded as part of the service re-design; it is rather ad hoc. There is also an issue with trust in sharing the data, so more work needs to be done in raising the awareness about the benefits of accessing and sharing data across the systems. In general, there is a high level of political commitment and dedicated funding to address these issues.

In Slovenia, the rationale for this relatively high scoring was the existence of flexible infrastructure supporting information sharing. That said, more promotion of the benefits of existing infrastructure and its use among wider public is still required.

In the case of Puglia's local health and social care authorities, a high maturity scoring (4) was observed in Lecce and Brindisi, where stakeholders agreed that there is a solid digital infrastructure in place and staff are trained on how to use it. However, further improvement is needed in terms of its actual use, which is very often due to lack of awareness of the existing digital services. In other authorities, it was noted that the use of digital infrastructure and its services depends on the age groups of staff. In general, a very high level of commitment and mandate to deploy digital services is in place, which are deemed to be important success factors.

Q5 - Funding is the dimension where the scoring varied from maturity level 2 in Scotland to 1 in Slovenia and 0 to 4 in Puglia.

In Scotland, it was acknowledged that there is a diversity of funding in place but not really to support large scale deployment; most of the funding is used for the core services. There is also lack of long-term funding available.

In Slovenia, funding is mostly available at national rather than local level, with the exceptions of some telecare services (e.g. SOS button) and funding is mostly available for pilot projects, rather than mainstream services.

In the case of local health and social care authorities in Puglia, a great diversity of maturity can be observed. For example, in Lecce authority, the scoring was very high (4) due to the availability of local and EU funding to support the deployment of integrated care at scale. Also, in other authorities, good availability of regional and national funding was reported. In contrast, stakeholders in Taranto local health authority assessed this dimension as 0, stating that there is no funding in place to support the change towards integrated care and most of the funding was available only for pilot projects. Another identified barrier was the timing of available resources as very often their access is limited by bureaucracy.

Q10 - Breadth of Ambition is the dimension where scoring varied from maturity level 4 in Scotland to

In Scotland, the high level of maturity reflects the high ambitions of the Scottish Government in integrated care, supported by existing legislation and strategies. However, further work is needed to raise awareness of the wider public about the benefits of integrated care so that this vision is shared more widely. Carers are still perceived as the integrators of care in Scotland.

In Slovenia, good coordination of care services is reported at a local level. However, there is a lack of coordination with NGOs and public hospitals. Integration and coordination of formal and informal care is needed.

In case of local health and social care authorities in Puglia, the majority of them reported a very high level of maturity in this dimension (4). Integration between health and social care is achieved across different areas and levels of care. In contrast, two authorities reported a low maturity level (1) where only individual efforts can be observed and there is lack of coordination and integration in place.

6.9.3 Strengths and weaknesses

Table 8 indicates that there is no single dimension with the highest maturity scoring (in green), as opposed to the dimensions with lowest level of maturity (in red). This shows how policies and strategies in integrated care, in many ways, are still at the initial stages of implementation and have not yet reached full maturity, as described by each region in the individual reports in the Annexes to this report.

At a local level, the only dimension that predominantly emerged as a strength amongst the selected regions is Q10 - Breadth of Ambition. This finding reflects the level at which the regions conducted their assessments: the lower the level, the higher the ambition appeared to be. This was also particularly evident in terms of the engagement and participation of stakeholders in these regions. In addition, the dimensions Q3 - Digital Infrastructure, Q7 - Population Approach, and Q8 - Citizen Empowerment, also scored quite high, with two out of eight local authorities rating this dimension as “4”.

In contrast, there are at least two dimensions that regions perceived as their weaknesses; Q5 - Funding and Q6 - Removal of Inhibitors. In particular, dimension Q5 “Funding” was rated as a maturity level “0” and “1” by four out of the eight local authorities, whilst dimension Q6 “Removal of inhibitors” was rated as maturity level “1” by five out of eight local authorities (62.5%). Hence, it can be concluded that funding is still a big barrier for the integration of care delivery, and existing inhibitors are difficult to remove at a local level. For more information about these weaknesses, please refer to individual reports of the healthcare authorities in the Annexes.

Figure 21 below provides a visual representation of the maturity level of the eight health and social care authorities which conducted the maturity assessment at a local level. None of these authorities reached the full maturity (“5” on the y-axis) on any of the 12 dimensions of the SCIROCCO Exchange Tool (x-axis).

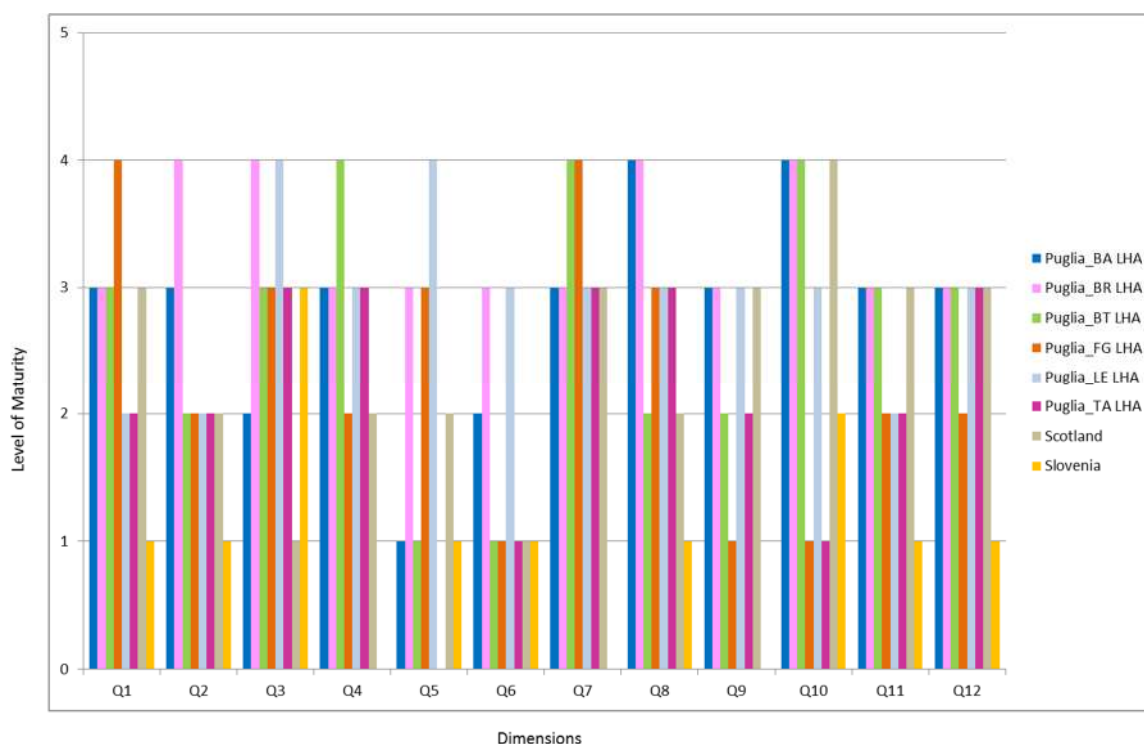


Figure 21: Level of Maturity at Local Level

6.10 Analysis of stakeholders

This section presents an analysis of how the different profiles of stakeholders and their roles may have influenced the maturity assessment process and its outcomes. Stakeholders were grouped into seven categories, namely “Top Management” (TM), “Medical Doctor” (MD), “Health Professional” (HP), “Social Care Professional” (SCP), “ICT Specialist” (ICTS), “Patient’s Representative” (PR), and “Other” where no alike characteristics were identified.

Table 7 below illustrates the roles and numbers of stakeholders who completed the online self-assessment and participated in a consensus-building workshop, for each of the three regions that conducted the maturity assessment at a local level.

The profiles and roles of stakeholders are all very well represented across the three Regions. In particular, 16 stakeholders were from the category Top Management, 7 stakeholders were Medical Doctors, 13 stakeholders were Health Professionals, 10 stakeholders were Patients’ Representatives, 7 belonged to the category ICT Specialist, 5 stakeholders were from the category Social Care Professional, and 1 stakeholder fell out with the provided categories.

Table 9: Stakeholders matrix at Local level

		Region							
		PUG BA LHA	PUG BR LHA	PUG BT LHA	PUG FG LHA	PUG LE LHA	PUG TA LHA	Scotland	Slovenia
Stakeholders roles	TM	1	1	1	1	1	-	10	1
	MD	1	1	1	1	1	2	-	-
	HP	1	1	1	1	1	1	7	1
	SCP	1	-	-	-	-	-	1	3
	ICTS	1	1	1	1	1	1	1	-
	PR	2	1	1	1	2	1	2	-
	Other	-	-	-	-	-	-	-	1

Based on the analysis of stakeholders' roles, their individual online self-assessments and the outcomes of the regional consensus workshops, information asymmetry evidently emerged in the case of health and social care authorities in Puglia. The reason for this asymmetry is the level of information and awareness of the local situation at the point of assessment. When stakeholders had the opportunity to come together and discuss the outcomes of individual assessments, very often their perceptions during the consensus meeting were quite similar - just because information was distributed more equally amongst them.

Figure 22 below illustrates the perception of the CEO and the IT Specialist of Barletta-Andria-Trani LHA in Puglia Region of the dimension Q11 - Innovation Management. The CEO rated 4 on the 5-points assessment scale, whilst the IT Specialist rated 1 on the same scale, during the online self-assessment.

Figure 23 below describes the perception of the CEO and the Patients' Representative of Bari LHA in Puglia Region of dimension Q3 - Digital Infrastructure. The CEO rated 1 on the 5-points assessment scale, while one patient's representative rated 5 on the same scale, during the online self-assessment. The two patients' representatives are the stakeholders who have provided the highest ratings ("4" and "5") also on the dimension Q8 - Citizen Empowerment, thus demonstrating how the citizens' perspective differs from the Top Management, as they actually feel empowered to take responsibility of their own care.

In both circumstances, during the consensus meetings, the dimensions were discussed among all stakeholders and the individual justifications were shared and discussed, thus highlighting the different perceptions of the same dimension by stakeholders with different roles.

Figure22: Perception of Q11 - Innovation Management



BT LHA CEO



BT LHA IT Specialist

Figure23: Perception of Q3 - Information & Digital Services



BA LHA CMO



BA LHA patients' Representative

Another example can be dimension Q5 - Funding, in which three out of six stakeholders, (Health Professional, ICT Specialist, and Patients' Representative categories), rated this dimension as "1" on the 5-point scale. Two justifications were provided: 1) the lack of funding other than funding for pilot projects; and 2) the lack of information on this dimension (as found by at least two of the six stakeholders).

Figure 24 below outlines the perception of the H&SC District Director, as opposed to the perception of the Health Professional, on dimension 5 - Funding. The discussion during the consensus meeting highlighted that access to information about funding opportunities is key in affecting the perception of stakeholders. This was clearly proven by the increased maturity rating in the same dimension after the consensus-building meeting when stakeholders agreed that the final maturity rating should be 4 out of 5 points.

Furthermore, Top managers, Medical Doctors and Health Professionals tend to score higher than Patients' Representatives. This can be explained by the fact that some services (e.g. provision of information on care) are not easily accessible for the patients.

Figure 24: Perception of Q5 - Funding



LE LHA H&SC District Director



LE LHA Health Professional

7 Experience of SCIROCCO Exchange Regions

The following results were gathered about the experience of the SCIROCCO Exchange regions and countries in using the online self-assessment Tool for integrated care. These outcomes were gathered throughout the focus group meetings and are structured in three key areas:

7.1 Experience with the self-assessment process

POSITIVE ASPECTS

- The SCIROCCO Tool facilitates reflection on integrated care; it supports both creative and critical thinking about integrated care.
- Individual assessments, followed by a consensus meeting, were rated as the most positive aspect of the Tool.
- The consensus meeting and the final results were perceived as very beneficial for further planning and development of integrated care policies and strategies.
- The self-assessment process facilitated discussion among different levels of stakeholder groups; these discussions help to align the planning and implementation of integrated care processes.
- The Tool was perceived as being a very powerful instrument to facilitate interdisciplinary discussion and to synthesise different visions and opinions.

IMPROVEMENT ASPECTS

- Some language issues were reported in the Basque Country, Poland, Slovenia and Germany as the maturity assessment section was not fully available in local languages; a better translation, taking into consideration the local context, was suggested.
- The online Tool is not easy to use for everyone (support is needed).
- Better description of the Tool's dimensions and assessment scales were recommended; some difficulties in distinguishing the different assessment levels were observed.
- The Tool can be seen for some stakeholders as very complex, in terms of the language, hence support and explanations of the dimensions need to be provided during the self-assessment process.
- Implementation of a FAQ system was suggested.

7.2 Insights and outcomes of the self-assessment process

- The self-assessment provides useful information; it highlights “blind spots”.
- The final matrix generally reflects the current situation in the local health and social care authorities; it presents a clear picture of health and care systems for integrated care.
- The self-assessment is a very interesting process on how to collect and analyse different sources of information, knowledge and perceptions and translate them into

corrective/improvement actions in a faster and tailored way. The process helps to navigate stakeholders to prioritise dimensions for improvement.

- It is recommended to promote and share the outcomes of the self-assessment process with a wider audience and stakeholders at decision-making and policy levels.
- Even though it is a subjective tool, it allows comparison between different organisations, health and social care systems, as well as multidisciplinary teams.

IMPROVEMENT ASPECTS

- A lack of clear constructive communication and dissemination of knowledge between all the groups of stakeholders was highlighted as an issue for the effective implementation of integrated care.
- The need to include all relevant stakeholders in the planning and delivery of integrated care, and not only people who are involved in the day-to-day management of services, was emphasised.
- The maturity assessment outcomes showed a continuous lack of political support and dedicated funding to finance products and services beyond pilot projects.
- Working together across organisational boundaries to progress complex issues and co-ordination of plans in relation to specific areas is highly recommended.
- Consistent and sustainable action plans (strategies) and a simpler pathway of information on integrated care in health and care systems were underlined as needed.

7.3 Potential factors influencing the self-assessment process

Some structural factors were identified which may have influenced the outcomes of the maturity assessment process, including

- A lack of integration of health and care competences between regional and federal levels.
- Inadequate intersectional cooperation between health and social care systems.
- Insufficient flow of information between health and social care sectors.
- Insufficient level of interdisciplinary communication.
- Lack of opportunities for face-to-face meetings.
- Internet connectivity.

Another critical factor is culture and the need for cultural change. This is visible, for instance, through the existence of a strong “cure” orientation (medical model) of health and social care delivery in the 9 SCIROCCO Exchange regions and countries. In addition, not all employers can accept and understand the need for change, not to mention their contribution to change. There is a continuous need to work on overcoming this resistance to change and sense of ownership. To make it successful, stronger leadership engagement is needed as stakeholders still perceive a lack of political will, supported by dedicated funding. Other barriers include:

- lack of time of healthcare professionals, especially in delivery of primary care;
- technology issues in the provision of care;
- low level of awareness of the need for integrated care in different population groups;
- lack of citizens involvement in the planning and provision of integrated care.
- lack of awareness of the importance of implementing a process of mandatory monitoring of integrated care provision.

8 Maturity of integrated care in the SCIROCCO Exchange Regions

This section brings together the results of the analysis of the outcomes of the maturity assessment process conducted at national, regional and local levels as described in the earlier sections of this report. The analysis of the 12 dimensions of the SCIROCCO Exchange Tool is essential to identify strengths and weaknesses and recognise the early adopters and followers among the nine SCIROCCO Exchange regions, to inform upcoming knowledge transfer and improvement planning activities in the project.

8.1 Heterogeneous and homogeneous dimensions

Considerable variations in the maturity of integrated care were observed among the nine SCIROCCO Exchange regions and countries which conducted the maturity assessment. This section captures these variations at each of the three levels of health and care systems; national, regional and local. In particular, the analysis provides a comprehensive overview of the differences in approach, scope and participation in the assessments in these regions and countries.

Homogeneous dimensions are different at all three levels of analysis. At a [national level](#) ([Figure 16](#)), the dimensions Q4 - Process Coordination and Q10 - Breadth of Ambition were assessed very similarly by all participating stakeholders ¹¹.

At a [regional level](#) ([Figure 17](#)), the most homogeneous dimensions across the five regions were: Q6 - Removal of Inhibitors; Q4 - Process Coordination; and Q8 - Citizen Empowerment¹².

At a [local level](#) ([Figure 18](#)), the most homogeneous dimensions across the three regions were: Q1 - Readiness to Change; Q2 - Structure & Governance; Q11 - Innovation Management; and Q12 - Capacity Building¹³.

At different levels of integrated care delivery, different dimensions were perceived in similar ways by different stakeholders within the same region. These perceptions took into consideration the “scale of action” of the different stakeholders and their roles within the system: in a “progression” on the scale from a higher level (e.g. Top Management) towards a lower (e.g. Patients’ Representative), from the overall coordination to the individual empowerment within a precise structure.

At a [national level](#), the wider consensus on the dimensions of Q4 - Process Coordination and Q10 - Breadth of Ambition demonstrates how essential they are for the delivery of integrated care, hence calling for a top-down approach.

¹¹ At this level ratings varied from 3 to 2.

¹² At this level, the ratings presented a high degree of variation: dimension Q6 was rated 1, dimension Q4 was rated 2 and dimension Q8 was rated from 3 to 2.

¹³ Also for these the ratings varied from 3 to 2 on the 5-points scale.

At a **regional level**, there was more consensus on dimensions that refer to the individual stakeholder, including the citizen, Q6 - Removal of inhibitors and Q8 - Citizen Empowerment.

At a **local level**, the approach towards integrated care delivery called for consistent structure and innovation to build the capacity to deliver the change. The analysis thus showed that the maturity of integrated care emerged as associated to more structured and coordinated overall processes in the regions that have conducted the self-assessment at national and local level, whilst at regional level self-awareness and individual actions appeared to be of high relevance in driving integration across the system.

Heterogeneous dimensions were also different among the three levels of analysis (Figure 16, 17 and 21) with the exception of dimension Q10 - Breadth of Ambition. This dimension showed a high degree of variation both among the regions that conducted the maturity assessment at regional level and also in case of the regions that conducted the analysis at local level.

At a **regional level**, the most heterogeneous dimensions across the five regions were: Q2 - Structure & Governance; Q7 - Population Approach; and Q10 - Breadth of Ambition.

At a **local level**, the most heterogeneous dimensions across the three regions were: Q3 - Digital Infrastructure, Q5 - Funding, and Q10 - Breadth of Ambition.

Besides the aforementioned variations, some other common elements were captured during the maturity assessment process in the nine SE regions and countries, regardless of their health and social care system and the level at which they conducted this process.

During the process, lack of consistent information emerged as a common issue. The different degree of stakeholders' knowledge about the integration of health and social care, which appeared not yet systematically in place across the nine SE Regions, impacted on the outcomes of the maturity assessment process. In such cases, when information is equally and readily provided to all stakeholders and knowledge systematically shared (i.e. within the organisation, and with the population who access the care services), the perception of the maturity of integrated care dramatically changes as explained in earlier sections,

In order to overcome this issue, effective communication is particularly important, both inside the organisations (e.g. change management process, innovation management) and outside the organisations (e.g. population health literacy, citizen empowerment).

Another element that has emerged consistently is ICT literacy and the barriers that this poses to integrated health and social care, confirming that the digital divide plays a key role in the deployment of policies and strategies to support integrated care service delivery. This element is also cross-dimensional, as clearly addressed in the dimension Q3 - Digital Infrastructure, but inherent to multiple stakeholders (i.e. inside and outside the organisations). The lack of information and training creates barriers to the implementation of care systems that should provide a smoother pathway to: the population accessing; the professionals delivering; and the top management planning the integrated care services. A systematic approach to care delivery can only be progressed when all the parties are enabled to access the system in a coordinated way.

Furthermore, actions based on a population approach are in place in a limited number of regions - but with a number of limitations (i.e. limited to pilot projects and specific conditions), which does not cover the whole spectrum of health and social care, nor the entire population. This appears to be related to the lack of funding, limited digital infrastructure and poor structure and governance.

8.2 Maturity assessment

8.2.1 Readiness to change

All regions have experienced the implementation of pilot projects and strategic reforms to foster integrated care and to integrate different levels of care -

- Basque Strategy of Active Ageing 2015-2020;
- Primary Care PLUS model in Poland;
- Puglia Care 3.0 in Puglia;
- Belgian State Reform in 2014;
- Slovak new strategic planning framework of 2014;
- Poland pilot project “Preparation, testing and implementation of coordinated care in the healthcare system, Stage II. Pilot phase - Primary Care PLUS model”;
- Slovenia 2017 Reform;
- Lithuanian Health Strategy for 2014-2025 and “Health for All” National Development Strategy: Lithuania 2030;
- Public Bodies (Joint Working) (Scotland) Act 2014;
- Healthy and Active Ageing in Germany).

Leaders and champions are emerging in the regions and countries, however bespoke task forces and informal alliances are still the predominant ways of collaboration. The greatest challenge is to make systematic change and make it available to the greater part of the population.

8.2.2 Structure and governance

What emerged from the conducted integrated care assessment in the nine SE Regions is the need for a new kind of leadership. Governance is in place, but integrated care needs to be implemented by leaders who able to manage transformational change in order to: create organisational readiness; develop a shared vision based on the needs of patients and communities; support the creation of collaborative mindsets and developing partnership to support integrated care delivery. This new kind of leadership needs to be inclusive and able to work on the engagement of communities and building their resilience. Also, the need for a strong collaboration among governance levels emerged as being important for the establishment of strong governance mechanisms at national, regional and local levels.

8.2.3 Digital infrastructure

In the nine SE Regions, digital solutions are increasingly emerging to support the monitoring, diagnosis and treatment of patients, especially those living with long-term conditions and

multi-morbidity. Digital transformation is supported by reforms and legislative frameworks - e.g.

- Health Plan for the Basque Country 2013-202;
- Digital Care and Support Plan DZOP in Flanders;
- IT infrastructure in Poland;
- Lithuania E-Health System Development Programme for 2009-2015;
- National Guidance for Telemedicine in Italy¹⁴;
- Scotland's Digital Health and Care Strategy¹⁵

Many good practices have been implemented locally and they need to be scaled up to achieve greater benefits for citizens. Even if the arguments for greater use and investment have become increasingly compelling (especially in Germany and Slovakia according to the outcomes of conducted maturity assessments), the rate of adoption is still below expectations. Furthermore, even if most health and care organisations have a comprehensive ICT infrastructure and electronic care record systems to effectively enable data and information collection, storage and sharing, a lack of integration amongst the care levels can be observed, along with a lack of population awareness and literacy. The digital divide emerged as a relevant inhibitor for healthcare workers and for a considerable part of the population.

8.2.4 Funding

The nine SE Regions shared the common view that moving towards integrated care requires initial investment and a degree of operational funding during the transition to the new models of care, as well as ongoing financial support and incentives until the new services become embedded operationally and the older ones are de-commissioned. The capability of identifying funds and accessing well-established incentives, financing and reimbursement schemes appears higher at a national level (e.g. Poland regional/national funding and/or reimbursement schemes for on-going operations is available¹⁶) and increasingly lowers as we progress down the levels (i.e. from national to local), apart from specific pilot projects. Indeed, the results of the assessment offered a snapshot of the challenging health and social care system conditions. Diverse priorities to master the funding mechanisms are put in place by different regions at different scales, in an effort to overcome the lack of dedicated and specialised human resources and of bespoke and structured methodologies.

¹⁴ National Guidance for telemedicine in Italy -

http://www.salute.gov.it/imgs/C_17_pubblicazioni_2129_allegato.pdf

¹⁵ <https://www.gov.scot/publications/scotlands-digital-health-care-strategy-enabling-connecting-empowering/>

¹⁶ e.g. pilot programme "Preparation, testing and implementation of coordinated care in the healthcare system, Stage II. Pilot phase - Primary Care PLUS model" co-financed from the European Social Fund under the Operational Program Knowledge Education Development financed under the European Commission Priority Axis 4 and 5.

8.2.5 Process coordination

Despite the existence of some good practices¹⁷, Process Coordination appears to be the dimension that is most connected and dependent on a number of other dimensions of the SCIROCCO Exchange Tool. Many regions have launched structural reforms in the recent years but the changes are still in their early phases. Contextual factors influencing Process Coordination are: Structure and Governance; Digital Infrastructure; and Removal of Inhibitors. Strong leadership sets clear goals and establishes an organisational culture in support of the integration programme, along with joint governance structures. Digital infrastructure brings together fragmented services, providers and information in a way that facilitates data sharing, communication and collaboration among stakeholders. Coordinated actions are required to overcome resistance to new IC models, new stakeholders' roles and out-of-the-box work approaches.

8.2.6 Removal of Inhibitors

Stakeholders who participated in the maturity assessment process have a great awareness of inhibitors. Namely, these are: lack of ICT systems integration; planning and funding for integrated care are separated between health and social care; staffing systems are obsolescent and do not take into account the rapid changes in care pathways; and existing resistance to organisational changes (e.g. as ICT literacy, change schedules, and workflow processes). However, good awareness of inhibitors is not accompanied by a systematic approach to their management in any of the nine SE Regions and the solutions are still not considered to be the priority for the managers and policy makers.

8.2.7 Population approach

In the nine SE Regions, a population risk approach is being applied but not yet systematically or to the entire population. In the main, there has been small-scale implementation projects related to the stratification of primary care in order to contain costs of delivering care to chronically ill patients; and, above all, programmes targeted at patients with specific conditions (e.g. diabetes and cancer). Exceptions can be found in Lithuania (i.e. the EU-funded InfAct project focuses on systematic health information system evaluation); and the Basque Country (the health system is based on a population approach, stratified according to morbidity risk). Even so, care programmes have not yet been deployed for all patient groups - they are available only for the most complex patients. Patients with frailty conditions are not yet considered in the current risk stratification. That being said, Population Approach is among those dimensions that require to be scaled up in a systematic way and enlarged from pilot projects to an at-scale roll-out.

8.2.8 Citizen Empowerment

There is a clear vision shared by the nine SE regions and countries; the design of health and care systems needs to be a process that is shared with citizens and patients. Despite some

¹⁷ Basque Country "InterRAI CA" initiative that seek to ensure the interoperability of health and social information systems.

good practices¹⁸ and growing evidence that empowering local communities is essential for citizens' wellbeing and for the care system to function effectively, the outcomes of the maturity assessment proved that this domain remains a challenge. Above all, not all of the assessed regions and countries enable their citizens to have access to health information and health data. The assessment results highlight the need to engage citizens / patients and involve them more in the co-design of integrated care services. This is particularly important for people with multiple health conditions who need to receive support and care from different providers. To achieve this goal, the nine SE regions and countries are likely to require investment in multiple actions (e.g. more adequate information towards different stakeholders, higher levels of health literacy among citizens, etc) to enable the population to understand their conditions and how to manage them.

8.2.9 Evaluation methods

The maturity assessment showed that integrated care is still not systematically implemented across the nine SE regions and countries, including its evaluation. There is a clear need to ensure that the changes have the desired effect on the quality of care, cost of care, accessibility and citizen experience. The main challenge is to complement the scaling up of integrated care services with independent, effective and explicit evaluation methods that can provide evidence to determine its real value. The results of a formal, systematic and transparent assessment process can be used by managers to implement and sustain integrated care over the medium-to-long term. A wide application of Health Technology Assessment strategy (very strong in some regions such as Poland, Puglia and Lithuania) to integrated care is also needed.

8.2.10 Breadth of ambition

Breadth of ambition is the dimension of the SCIROCCO Exchange Tool that showed a significant variation between the SE regions and countries. There are Regions (e.g. Basque Country and Puglia) implementing clinical pathways to support IC with pilot projects at various (i.e. national, regional and local) levels but the lack of integration among the different care levels remains the challenge that all of the Regions have to address as a priority.

8.2.11 Innovation management

Despite the potential benefits of integrated care, challenges in embedding new solutions into existing healthcare systems and organisations exist in all of the nine regions and countries. With the exception of several good practices, a lack of organisational integration emerged from the analysis, as well as the development of appropriate organisational models

¹⁸ In Basque Country there are corporate policies that have allowed the development of a series of tools for the empowerment of citizens, such as the School of Health "OsasunEskola" and the Personal Health Folder, available to all citizens. Patients with high burden disease(s) are highly empowered through initiatives such as "PacienteActivo" or "KronikOn"; Patients Engagement emerged as strength in Germany where: "Health information is present on the internet, Germans can search for health information (Dr. google, health portals, gesundheitsinformationen.de, ...), people have subjective concepts of what constitutes a healthy lifestyle, Health insurances offer online courses.

that, once recognised, need to be assessed, monitored, sustained and scaled up to provide benefits across the system. Future visioning is in place but without an effective capacity to build shared and orienting visions that allow a constructive exploration of innovation solutions. Stakeholders stressed that interventions to facilitate shared understanding and integrating knowledge from multiple actors in innovation processes are required. At a lower level of the decision-making chain, individual and professional resistance to change can be attributed to the difficulty in reconfiguring the roles of different stakeholders; interactions and collaboration of actors at different level of care are not fluid (e.g. difficult collaboration between GPs and specialists). It is necessary to improve the cooperation and active engagement of stakeholders, fostering the creation of networks to promote and support knowledge transfer, dissemination of findings, reflections and feedback on the implementation of integrated care services. The challenge is to integrate change processes for new organisational models as part of the solution.

8.2.12 Capacity building

Capacity building is the dimension that stakeholders emphasised as the solution to foster progress in the other dimensions of the SCIROCCO Exchange Tool and address the existing gaps in implementation of integrated care. In particular, the dimension of Capacity Building is very much linked to the dimension of Removal of Inhibitions; a barrier to change existing professional culture and practice, but also fundamental to enhance the ability of the population to act as pivotal in the care pathways. Availability of grants and funding for capacity building is also crucial to enhance the implementation of integrated care.

8.3 Strengths and weaknesses

The outcomes of the maturity assessment process conducted in the 9 SE regions and countries also revealed evidence on their strengths and weaknesses in integrated care. Undoubtedly there are variations in the achieved maturity level, however the objective of this section is to identify some common strengths and weaknesses in these regions and countries.

Across the SE regions and countries, one dimension clearly emerged as a **strength**: Q3 - **Digital Infrastructure**. The majority of the assessed regions and countries have digital infrastructure strategies in place, which are very often also a result of the influence of EU policies, among which is the Digital Agenda for Europe¹⁹ (DAE), as part of the Europe 2020 strategy. The only exceptions can be found in Slovakia and Scotland²⁰ where stakeholders assessed this dimension with score 1²¹. The remaining seven regions and countries have IT systems and

¹⁹More info available at <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A52010DC0245>

²⁰ In Scotland, despite some progress in deployment of digital services, there is no single infrastructure enabling effective exchange of information between health and social care sectors. From users' point of view the IT system is not integrated and connected; there are multiple information systems on the ground. The digital infrastructure is not supporting the envisaged outcomes in care delivery. There is also an issue with trust in sharing healthcare data. There are some good examples in place but not scaled up yet. Connectivity remains an issue in some areas. However, there is a commitment and leadership emerging to address the existing gaps. The issue remains that national solutions and strategy in this area do not often meet the local needs.

²¹ In Slovakia, health and social care systems have on their own separate digital infrastructure. Hence, despite a good level of data availability and sharing by means of e-Health, there is no digital infrastructure with a potential

infrastructure in place to guarantee interoperability between health and social care professionals, and between professionals and citizens, who can directly access this infrastructure (e.g. online appointments in Puglia region with digital health-ID). Lithuania described a solid digital infrastructure, however its positive impact on integrated care delivery is limited by a skills shortage and cultural barriers, in addition to individual resistance to change. Health monitoring methodologies are in place (e.g. health indicators for health and lifestyle are used to produce strategic documents) and updated regularly to assure data quality.

Two dimensions, despite not being regarded as strengths, were on a positive trajectory in the majority of the regions and countries: **Q7 - Population Approach** and **Q8 - Citizen Empowerment**. They have recognised the pivotal importance of these two dimensions for integrated care, with policies and actions in place at all levels.

Population approach was regarded as a strength by many stakeholders, albeit with a degree of variation of scoring. It was interesting to learn that stronger population approach was observed at national and local levels, as opposed to the regions and countries who have conducted the analysis at a regional level. This may be due to different levels of responsibility for the health of the entire population in a given geographical area, which involves coordination with health and social care agencies.

Citizen empowerment depends on the culture in the assessed regions and countries and on digital literacy, but it is also affected by age and social factors. Citizen empowerment is not a straightforward process, even if the steps can be clearly defined and promoted. In some regions and countries, there is great awareness and desire to take an active part in the health and social care provision (e.g. Puglia good practice²²). Nevertheless, this does not apply everywhere: in some SE partners, there are clear strategies that have not yet been developed into policies; whilst in others, policies are in place, but they still need to be implemented. The maturity level of the Citizen Empowerment dimension demonstrates the strong efforts by the majority of the SE regions and countries to achieve integrated care for all and to put the citizen and patient at the centre of the care delivery system.

On the other hand, two dimensions emerged as particular **weaknesses: Q5 - Funding and Q6 - Removal of Inhibitors**.

As previously highlighted, **funding** is mostly available for pilot projects but not for large scale implementation of integrated care. In some regions, this is often the result of separated organisation of health and social care delivery. Access to funding is also limited by the knowledge and awareness of existing funding sources and its effective use. During the consensus-building meetings, stakeholders described many circumstances in which access to funding and lack of bespoke staff to deal with the application process is a major barrier. Funding is about a set of elements (availability, accessibility and exploitability) that should

to interlink health and social care systems, with no foreseeable plan to change this situation. Besides, no legislative support for the integration of health and social care makes integration between the two extremely difficult.

²² More info at <https://partecipazione.regione.puglia.it/pages/legge-partecipazione?format=html&locale=it>

all be inter-connected, but they are still disjointed at an operational level, resulting in major losses or inappropriate / lack of use of available resources.

Removal of inhibitors emerged as one of the greatest weaknesses in eight out of the nine SE regions and countries. Despite a high level of awareness of the existing inhibitors at multiple levels, there is a lack of systematic approach of how to address them. Despite many actions in place to extend services to the population and to transfer good practices to new areas of services, cultural resistance is still very persistent. Individual culture and corporate culture are both contrasting the desire to overcome resistance to change.

8.4 Early adopters and followers

The analysis of the 12 dimensions of the SCIROCCO Exchange Tool was essential to start identifying the early adopters and followers in the implementation of integrated care.

Overall, the **Basque Country** qualifies as an “early adopter”, followed by **Poland**, **Puglia**, and **Scotland**.

The Basque Country has assessed 6 out of 12 dimensions with a maturity level of score 4, while the other six dimensions are progressing to reach a higher maturity level (score 3). The dimensions that can be offered to other regions and countries for potential coaching are; Q1 - Readiness to Change; Q2 - Structure & Governance; Q3 - Digital Infrastructure; Q5 - Funding; Q7 - Population Approach; and Q10 - Breadth of Ambition.

Poland’s assessment has described a positive situation in the involved organisations at a national level, with an average maturity scoring of 3. Dimension Q5 - Funding was identified as the dimension for potential coaching.

Puglia has emerged as an early adopter for the dimensions; Q3 - Digital Infrastructure; Q4 - Process Coordination; Q7 - Population Approach; and Q8 - Evaluation Methods. Many efforts have been made to establish a solid digital infrastructure as the main driver of the systematic population approach and more tailored care provision to the entire population.

Scotland has emerged as an early adopter for the following dimensions; Q1 - Readiness to Change; Q10 - Breadth of Ambition; Q3 Innovation Management; and Q12 Capacity Building. The region is characteristic of the existence of strong policies and strategies, supported by dedicated funding and support for change management.

In contrast, Slovakia and Slovenia can be regarded as “followers”, followed by Flanders and Germany.

Slovakia’s final consensus showed that only one dimension, Q4 - Process Coordination, was able to reach a higher, but still not satisfactory, level of maturity (score 2). The overall scores across all 12 dimensions was very poor and the maturity level in the final consensus varied mostly between 0 (in four dimensions) and 1 (in seven dimensions). Thus, further improvement in all assessed dimensions is necessary.

Slovenia’s assessment also showed the need for improvement - specifically, for the dimensions of Q9 - Evaluation Methods (where no standards or evaluation methods are in place as a result of absence of long-term integrated care policy); Q4 - Process Coordination

(where no shared database exists between different stakeholders); and Q7 - Population Approach (where the absence of distinction between health and social care services generates confusion).

Flanders emerged as a follower on four dimensions with a maturity rating of “1”: Q4 - Process Coordination; Q5 - Funding; Q6- Removal of Inhibitors; and Q9 - Evaluation Methods. The assessment revealed how initiatives for integrated care are increasing, but mostly at individual organisational level, with an overall lack of coordination.

Germany’s assessment depicted a weak integrated care situation, for which work is still needed; eight out of the 12 dimensions scored a maturity score of “1”. Historically, ambulatory and hospital care are on different paths (in terms of the financing and staffing systems) and this creates a barrier against the integration of care. Furthermore, the digital infrastructure in Germany is below an acceptable level due to the government subscribing to contracts that do not incentivise telecommunication companies to service the countryside efficiently.

In case of the Lithuania, we can see a mixed picture with a number of dimensions where this country can be seen as early adopter but also a follower. It has emerged as an early adopter for the dimensions Q3 - Digital Infrastructure, Q7- Population Approach and Q8 - Citizen Empowerment, with a maturity scoring of 3. However, it was acknowledged that all of these dimensions need further improvements, so they are not mature enough to be considered for the upcoming knowledge transfer activities. For example, in the case of Digital Infrastructure, there are a number of national and regional projects in place to design their ICT systems, but these are not integrated into a universal national system. As a result, data sharing and its use is limited so Digital Infrastructure is, in principal, still under development. In contrast, dimension Q6 - Removal of Inhibitors reached the lowest maturity and should be considered as a main weakness and barrier to move forward with the integration agenda. There is a lack of systematic approach to address the weaknesses in the legal framework and organisation of services which actually also influence two other dimensions with low maturity scoring; Q4 - Process Coordination and Q-12 Capacity Building, in terms of lack of cooperation and communication of the healthcare professionals in different fields.

9 Conclusions

Is Europe ready for integrated care? This section provides conclusive remarks on the readiness for integrated care in the nine regions and countries involved in SE project.

9.1 Conclusions

The outcomes of the maturity assessment in the nine SCIROCCO Exchange regions reveal that there is still further development and improvement needed to better integrate health and social care services in Europe; none of the regions has already reached the stage of the full integration. However, the collected data clearly revealed that there is a great awareness of the importance and value of integrated care in these regions and countries. Stakeholders with different profiles and roles stated that there has been an increase in understanding of the benefits of integrated care in recent years, which has resulted in considerable mobilisation for its implementation.

Many variations were observed across the SE regions and countries. The different outcomes are the result of different policies to implement integrated care at an operational level. European strategies are in place; however, lack of policies exacerbate the national, regional and local actions to fulfil these strategies, resulting in proliferation or restrictions, according to specific and temporary circumstances. This report envisions more shared policies to implement integrated care throughout Europe.

Communication appears particularly relevant, both inside the organisations (e.g. change management process, innovation management) and outside the organisations (e.g. population health literacy, citizen empowerment) in order to achieve symmetric knowledge sharing. Asymmetric information and different levels of knowledge among the stakeholders involved in the integration of health and social care impacts on multiple elements of care planning and delivery across the nine SE regions and countries.

Culture has emerged as crucial factor for an effective change and modernisation of the organisations' integrated care models. As more information devices and digital services will be available for citizens in the future, it is important to work on the resistance to change. The involved stakeholders identified training and information as levers of change, besides the “sense of belonging of employees” for health and social care organisations. The presence of an older and unmotivated workforce also emerged as a substantial issue in need for change.

ICT literacy has consistently been identified as the barrier to the integration of health and social care. This element is also cross-dimensional, as clearly addressed in the dimension Q3 - Digital Infrastructure, but is inherent to multiple stakeholders (i.e. inside and outside the organisations). The lack of information and training creates barriers to the implementation of care systems that should provide a smoother pathway to; the population accessing; the professionals delivering; and the top management planning integrated care services. A systematic approach can only be progressed when all the parties are enabled to access the system in a coordinated way.

Citizen empowerment is interlinked with asymmetric information, culture and ICT literacy. All these elements play a role in how citizens manage their own care in order to release pressure from the care system. The outcomes of individual online assessments and the consensus meetings showed that citizens are very much willing to take responsibility for their own care (e.g. online appointment booking, self-monitoring of health condition, online consultations under particular circumstances e.g. in response to COVID-19 related restrictions). Regrettably, disinformation, cultural barriers and lack of ICT knowledge do not ease this process.

Furthermore, actions based on a population approach (also linked to citizen empowerment) are in place in a limited number of regions, but these are mostly limited to pilot projects (e.g. Puglia Care Project) and / or specific conditions, which does not cover the whole spectrum of health and social care conditions, nor the entire population. This element is both related to lack of funding but also limited digital infrastructure and poor structure and governance.

9.2 Key Messages from SCIROCCO Exchange Regions

This section collates the key messages from the SE regions and countries on the maturity assessment process and its outcomes.

1. **Stakeholder engagement.** All involved stakeholders valued their participation in the maturity assessment process as very positive. The process was successfully carried out and was performed as planned in most of the regions that completed the assessment activities before COVID-19. The experience allowed stakeholders to reflect on: the integrated care approach carried out in their regions and countries, the current level of development and the main gaps that still need to be addressed.
2. **Individual self-assessment.** The outcomes of the individual self-assessments reflected the local situations and corresponded quite closely to reality, despite some dimensions requiring further explanations at the consensus meetings to be fully grasped by all stakeholders at each level. The individual and subjective evaluations at the beginning of the process received a positive feedback, as personal reflection is key to the successful completion of the final consensus, when each of the stakeholders received the opportunity to share and discuss justifications.
3. **Stakeholders' stage-related approach.** Different stages of the process gained different reactions from the stakeholders. During the individual self-assessments, the stakeholders focused on the wording of the score description; whereas during the consensus meetings this became less important, leaving space for interaction between the stakeholders. In some meetings, the discussion among the participants highlighted other relevant elements, possibly not included in the score description.
4. **Consensus meetings.** The consensus building meetings, as a part of the assessment process, had a positive influence on stakeholders and offered them incentives to progress forward together and collaborate in the future.
5. **Face-to-face meeting facilitators.** The use of a staged assessment process provided a clear path for all involved stakeholders. Nevertheless, the presence of expert

facilitators during the face-to-face consensus meetings was invaluable to guide and channel stakeholders' knowledge and experience into fruitful interaction/discussion.

6. **Use of digital technology.** Despite the opportunity provided by the use of digital technology during the SE project (e.g. online self-assessment, telephone helpline, video-conference consensus meetings), on some occasions its use hindered the engagement and facilitation process.
7. **Stakeholders' background.** The dialogue among different stakeholders was among the most appreciated factors. Different stakeholders' involvement allowed reflecting on the situation from different angles, providing very different results when comparing, for example, patients and policymakers' perspectives. Stakeholders' debates were fruitful to agree on the priorities and/or reflect on the actual situation when considering these different perspectives.
8. **Value of the SE Maturity Assessment Tool.** All participants stated that they had a very positive experience using the SCIROCCO Exchange Tool as a key facilitator of the self-assessment process. When accompanied by the outcomes of the consensus meeting, the SE Tool was perceived as great help in the process of the adoption of necessary changes as it may facilitate the process of further development of integrated care. In terms of the total quality management (TQM) methodology, this Tool can be considered as an important part of the Plan-Do-Check-Act (PDCA) cycle that needs to be completed. This is particularly the case in the stage "Plan" where the SCIROCCO Exchange Tool can help to better understand the conditions enabling integrated care. It can inform about the existing drivers and also gaps which need to be addressed when planning the delivery of integrated care services and necessary actions. After the implementation of suggested improvements, the Tool can be used again in the stage of "Check", when additional assessment can be done to monitor progress by comparing it with the outcomes of the assessment undertaken in the initial stage "Plan". The SCIROCCO Exchange Tool is also valued as a means to facilitate interdisciplinary discussion. The fact that it requires all stakeholders to come together and reach consensus on future actions can help to move to the last stage of PCDA - "Act" .

9.3 Key enablers of integrated care in Europe

Stakeholders involved in the maturity assessment process in the nine SE regions and countries provided a rich picture of the "takeaway tips" useful for the development and deployment of integrated care. Their proposed solutions have led to the identification of three key enablers of integrated care, namely:

1. Data gathering and analysis: the SE Tool

Measuring all the different dimensions shaping integrated care is complex process and it is further complicated because integration is ongoing and part of a continuous process to deliver innovative and transformed health and social care services.

The outcomes of the SE maturity assessment emphasised how important measuring and reporting on progress is to ensure cross-organisational actions and initiatives of integrated care. There is widespread awareness about the importance of defining and understanding

what success will look like for each integrated care initiative, for the different stakeholders involved, over the medium to long-term period.

The SE Tool was highly valued by all the stakeholders who participated in the assessment process. They also expressed the need to extend the analysis to other institutional parties in order to deliver a more systematic assessment to allow comparing and measuring achievements and progress in integrated care. The SE Tool also emphasised its powerful influence in improving communication among multiple stakeholders and in filling existing informative gaps. Furthermore, it helped stakeholders to:

- understand if integrated care is designed and implemented to fit the local context and needs;
- to collect relevant data and information from health and social care to support organisations' care delivery;
- improve care outcomes;
- ensure workforce wellbeing and satisfaction; and
- promote patients' and citizens' outcomes and experiences; as part of a comprehensive innovation approach.

2. Information sharing: communication strategies

Information sharing was perceived as a valuable way for clinical, administrative, and organisational processes to improve coordinated and integrated care. However, the technologies and existing organisational models make it difficult for health and social care organisations to easily capture, share and retrieve relevant information. The emerging challenge is to design the right solutions that can enable multiple stakeholders to retrieve and access the information at the moment of need in a systematic way.

Information sharing with citizens corresponds to their right to be informed and with the duty of public services and institutions to inform. Furthermore, effective communication strategies establish trust, confidence, good collaboration and involvement of all stakeholders. It is also necessary to overcome any communication barriers and increase awareness among participant organisations. All stakeholders need to be equally and regularly engaged in policy formulation (empowered), technology assessment, budget spending design and development of solution specifications. Their engagement is critical to successfully put in place new integrated care services and encourage acceptance of organisational changes in the delivery of care.

The assessment results demonstrated the need for a novel communication platform for stakeholders to discuss, compare and create a shared vision to foster interdisciplinary communication.

3. Knowledge sharing: training strategies and continuous professional development

A continuous plan to carry out knowledge exchange activities and multi-stakeholder education and training for integrated care is highly needed. As the systems of care are transformed, many new roles need to be created and new skills developed. As demands continue to change, skills, talent and experience must be retained, and the systems of care

need to become “learning systems” that are constantly striving to improve productivity and increase success.

The assessments’ results revealed that core competencies for integrated care are relational: patient involvement, communication, interdisciplinary working, people-centred care and continuous professional development (CPD) are critical skills for strong, trusting relationships between care practitioners across sectors, but also with volunteers and third sector partners.

The CPD of health and care professionals on new organisational changes and technological devices in the provision of integrated care services is key in filling the gap of workers required and to increase their job satisfaction. The rationale is to start with an accurate and continuous analysis that provides an improvement plan and develops a skills framework, particularly for the health and social care professionals involved in the delivery of digital services; and for citizens and communities, in order to enable them to be able to access new services in the most appropriate way. Relevant and continuous training also plays a major role in preparing health and social care professionals in the use of ICT devices and new platforms, in order to keep their knowledge updated in an ever-changing environment.

10 Recommendations and Limitations

This section outlines some recommendations and limitations that emerged in the self-assessment process conducted in the SE regions and countries.

10.1 Recommendations

The lessons learned are summarised in a series of recommendations that should be taken into account when conducting the maturity assessment process:

1. The identification of at least one contact point/local assessment co-ordinator is fundamental to facilitate the process.
2. The self-assessment process should be guided and facilitated by an expert and bespoke team of specialists to assist stakeholders with any ICT issues (with using and sharing the Tool, etc), to brief and support stakeholders at the start and for the duration of the process; and to facilitate the face-to-face meetings during the consensus building stage.
3. The stakeholders' selection should be aligned with the objectives and scope of the assessment process and alternative representatives should be identified in case of unavailability of the designated stakeholder.
4. A preliminary meeting (face-to-face or online) should be organised for all stakeholders to introduce the process and brief participants on their roles and tasks. Alternatively, a PowerPoint presentation with clear instructions can be shared with stakeholders to give them all the necessary information.
5. The online Tool and any supportive documents and videos should be readily available to the stakeholders in their national language to avoid misunderstanding of the Tool's dimensions and assessment scales.
6. The methodology for the maturity assessment process should be fully shared and thoroughly applied throughout the entire process by each of the participant stakeholders (regions, local health and social care authorities, multidisciplinary teams, etc.). If there is the need to deviate from it, this need should be stated and the variations from the shared methodology should be precisely described and justified.
7. There should be a minimum of 3 facilitators for the consensus-building workshop: one to facilitate the discussion and guide the consensus-building; one person to input the results into the online Tool and one person to take additional notes during the discussion (which can be used to inform the final report of the outcomes of the assessment process).

10.2 Limitations

The maturity assessment process conducted in the SCIROCCO Exchange project provided a better understanding of the level of maturity of integrated care in relation to the specific context (e.g. health system, geography, scale) and chosen level of analysis (national, regional, and local) undertaken in the nine regions and countries.

Some cultural factors restricted the smooth completion of the online self-assessment in some cases and a lack of willingness to delve into complex issues caused some difficulties in cooperating with the stakeholders (e.g. in Lithuania).

The SE online Tool implied that the invited stakeholders were familiar with using online questionnaires but this was not always the case (e.g. in Germany).

The SE maturity assessment process does not aim to be exhaustive but intends to raise self-awareness in each of the dimensions analysed throughout the project, and to provide a strong basis upon which to further pursue the integration of health and care through knowledge sharing.

10.3 COVID-19: six lessons to speed up Integrated Care in EU

At the time of completing this D5.1 deliverable, the World Health Organisation (WHO) first declared the novel coronavirus outbreak (2019-nCoV) a Public Health Emergency of International Concern (PHEIC), and subsequently COVID-19 as a global pandemic.

The COVID-19 pandemic rapidly impacted on the SE project's activities and the WP5 "Maturity Assessment for Integrated Care". Fortunately, the main part of the research in the SE Regions was already completed by the beginning of the lockdown. Notwithstanding, one workshop had to be organised online and, for some regions, the number of stakeholders' responses were lower than they would be in "normal" times. This is likely to be because many of these stakeholders were involved in the delivery of health and care services, thus on the "front line" in the fight against the novel coronavirus.

Despite many difficulties and the loss of over 318,789²³ lives all over the world, COVID-19 represents an opportunity to reset our fragmented health and social care systems in the direction of full integration, fully recognising and utilising our resilient people and communities. Undeniably, the COVID-19 pandemic has resulted in a rapid drive to implement integrated care, and specifically through the six acceleration factors listed below.

1. **Effective governance is global governance.** After initial efforts to apply national strategies, it has become clear how each country and their populations, is connected to the other, hence the need for a global coordination, data sharing and global actions. The pandemic has driven considerations on the nature and effectiveness of governance systems, well beyond health and care. Global research and trials for therapies and vaccines had a rapid and collaborative start, with scientists and institutions all over the world working together to share information and data.
2. **Care work shall be recognised and valued at all time.** Governments and citizens recognised the vital and unique role of doctors, nurses and health and social care professionals. This was also evident among the diverse and underserved groups of population within the health and social care system. The pandemic has exacerbated the social, economic and health inequities, entrenched in the past decades through austerity measures.
3. **Home care services shall be integrated in the overall care system.** Due to the unprecedented drive to keep people out of hospital on a global scale, there is a new sense of urgency to find the right balance between keeping people at home and in the community as much as possible, without adversely deferring necessary health services

²³ Data source WHO COVID-19 Dashboard as per 20 May 2020.

for those who need it. This implies shifting the focus from hospital-centric and disease-specific approaches to territorially and population targeted approaches, building on people and communities' strengths. New home care services have been designed all over Europe in response to the emerging needs²⁴.

4. **Telemedicine is care delivered to all and everywhere.** The rapid implementation of digital solutions has been supporting alternative options for health and care delivery. Telemedicine allowed and changed the doctor-patient relationships: tele-conferencing, tele-consultations and home monitoring have been widely adopted in the place of physical consultations to avoid exposure to crowded and potentially infectious clinical areas. The evidence of how digital solutions can help to deliver care at a greater and more flexible scale is available, so actions are needed to ensure these benefits will continue to be realised.
5. **ICT literacy can support the change in multiple sectors.** Since the outbreak of COVID-19, countries have seen a rapid citizen-led proliferation of digital solutions being used for remote working, education, sports training and social activities. Exchange of information has been mirrored by national and local governments and public health through the use of social media to effectively reach individuals to provide guidance and support.
6. **Big data can save lives and support preparedness.** Wellbeing and COVID-19 data have been collected and traced through applications all over the world. People understood the strategic importance of data collection for researchers and policy makers in order to guarantee the best health plan and solution, to fight ongoing health crises but also to be prepared for new potential future health crises. The gathered data offers an opportunity to do things differently and be better prepared for the future, creating more global, collective and coordinated governance mechanisms (e.g. a global health security system, to learn how to communicate and to inform about scientific topics and to fight “fake news”).

²⁴ [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)31254-X/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31254-X/fulltext)
[https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-\(ncov\)-infection-presenting-with-mild-symptoms-and-management-of-contacts](https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-(ncov)-infection-presenting-with-mild-symptoms-and-management-of-contacts)



D5.1 Readiness of European Regions for Integrated Care

Annex A: SCIROCCO Exchange Maturity Model for Integrated Care

WP5 Maturity Assessment for Integrated Care

Background to the project

SCIROCCO Exchange is the EU Health Programme Funded Project aiming to improve the capacity of healthcare authorities to adopt and scale up integrated care. The main objective is to develop, validate and test the Knowledge Management Hub as a main integrator and facilitator of the evidence-based capacity-building support tailored to the local needs and priorities for improvement.

For more information about the project <https://www.sciroccoexchange.com>

Maturity assessment for integrated care

The central component of the Knowledge Management Hub is the SCIROCCO Exchange Tool which is an online participatory self-assessment tool that helps stakeholders to understand:

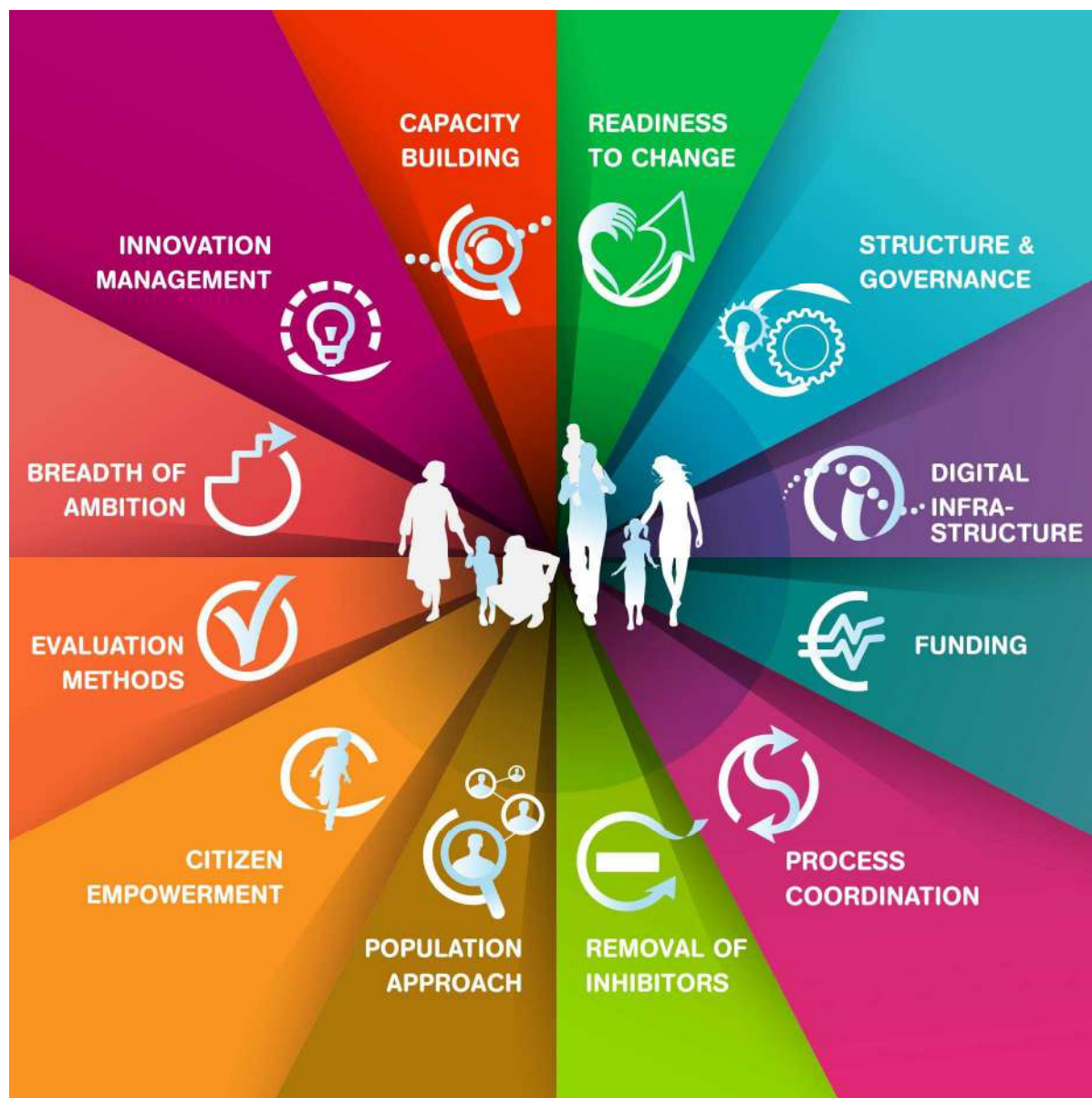
- the local context and conditions for delivering integrated care in health and social care, including its strengths and weaknesses;
- the readiness level of a country, region regional to adopt and scale-up integrated care;
- the actions that more progressive regions have taken to be successful and enable information sharing, twinning and coaching to overcome barriers and accelerate results in demand-driven innovation.

Instructions

The objective of the assessment process is to capture stakeholders' perceptions and experience in designing and delivering demand-drive innovation. It is not an objective or evaluation measure.

When choosing the assessment scale, please consider the SCIROCCO dimensions from a local context's perspective.

SCIROCCO Exchange Maturity Model for Integrated Care



1. Readiness to Change

Objectives

If the existing systems of care²⁵ need to be re-designed to provide a more integrated set of services, this will require change across many levels, the creation of new roles, processes and working practices, and new systems to support information sharing and collaboration across care teams. This will be disruptive and may be viewed negatively by workers, press and public, so a clear case needs to be made for those changes, including a justification, a strategic plan, and a vision of better care.

- Creating a compelling vision, with a real sense of urgency, and enlisting stakeholder support including political leadership, management, care professionals, public and press.
- Accepting the reality that care systems are unsustainable and need to change.
- Considering the need to address the risk of health and social inequalities.
- Publishing a clear description of the issues, the choices that need to be made, and the desired future state of the care systems, stating what will be the future experience of care.
- Creating a sense of urgency to ensure sustained focus and building a 'guiding coalition' for change.

Assessment scale

- 0 - No acknowledgement of compelling need to change
- 1 - Compelling need is recognised, but no clear vision or strategic plan
- 2 - Dialogue and consensus-building underway; plan being developed
- 3 - Vision or plan embedded in policy; leaders and champions emerging
- 4 - Leadership, vision and plan clear to the general public; pressure for change
- 5 - Political consensus; public support; visible stakeholder engagement.

²⁵ The term care refers to both health and social care.

2. Structure & Governance

Objectives

The broad set of changes needed to deliver integrated care at a regional or national level presents a significant challenge. It needs multi-year programmes with efficient change management, funding and communications, and the power to influence and (sometimes) mandate new working practices. This means alignment of purpose across diverse organisations and professions, and the willingness to collaborate and put the interest of the overall care system above individual incentives. It also means managing the introduction of technology enabled care services in a way that makes them easy to use, reliable, secure, and acceptable to care professionals and citizens alike.

- Enabling properly funded programmes, including a strong programme, project management and change management; establishing digital competence centres to support roll-out; distributed leadership, to reduce dependency on a single heroic leader; excellent communication of goals, progress and successes.
- Managing successful digital innovation within a properly funded, multi-year transformation programme.
- Considering the need to address the risk of health and social inequalities.
- Establishing organisations with the mandate to select, develop and deliver digital services.

Assessment scale

0 - Fragmented structure and governance in place

1 - Recognition of the need for structural and governance change

2 - Formation of task forces, alliances and other informal ways of collaborating

3 - Governance established at a regional or national level

4 - Roadmap for a change programme defined and accepted by stakeholders involved

5 - Full, integrated programme established, with funding and a clear mandate.

3. Digital Infrastructure

Objectives

Integrated care requires data-sharing across diverse care teams. It leads progressively to systems that enable continuous collaboration, and the measurement and management of outcomes. This means building on existing digital care infrastructure in new ways to support integration and augmenting them with new capabilities such as enhanced security and mobility. The task can be made easier if the number of different systems in use, and the formats in which they exchange and store data, can be simplified.

Important elements of digital care infrastructure include:

- ‘Digital first’ policy (i.e. move face-to-face communication to digital services to reduce dependence on staff and promote self-service).
- Availability of essential components (ICT infrastructure) to enable data-sharing.
- Consolidation and standardisation of ICT infrastructure and solutions; fewer technical integration points to manage; interoperability and procurement.
- Data protection and security designed into patient records, registries and online services.
- Enabling of new channels for healthcare delivery and new services based on advanced communication and data processing technologies.

Assessment scale

0 - There is no digital infrastructure to support integrated care.

1 - There is a recognition of need but there is no strategy and/or plan on how to deploy and standardise digital infrastructure to support integrated care.

2 - There is a mandate and plan(s) to deploy regional/national digital infrastructure, including a set of agreed technical standards, across the health and social care system, but it is not yet implemented.

3 - Digital infrastructure to support integrated care are piloted but there is not yet region-wide coverage. A set of agreed technical standards exists to enable shared procurement of new systems; some large-scale consolidations of ICT are underway.

4 - Digital infrastructure to support integrated care is deployed widely at large scale but is not used by all stakeholders involved. A unified set of agreed standards is published; many shared procurements of new systems have been performed; shared services are widely deployed.

5 - Universal, at-scale regional/national digital infrastructure used by all stakeholders involved exists. A unified and mandated set of agreed standards is fully incorporated into procurement processes; the systems are fully interoperable; and use of shared services (including the cloud) is normal practice.

4 Process coordination

Objectives

Health and social care delivery is a complex series of processes that are linked and interact together to achieve specified outcomes. Care coordination of these processes demands new pathways and services to improve the quality and efficiency of care and avoid unnecessary variation. The need for coordination increases when patient care requires the intervention of different professionals. Care pathways are widely used for a structured and detailed planning of the care process, including care standards. Standards' setting, and use varies among process components. Professionals and organisations can adhere to the standards voluntarily, or they can comply with legal regulation.

Process coordination enables effective deployment and scaling up of integrated care by:

- Developing new processes and pathways that are replicable, funded and/or reimbursed, and agreed by pertinent stakeholders.
- Including an explicit statement of the goals and key elements of care;
- Defining evidence-based guidelines and agreeing on plans for formal introduction and scaling-up new services into practice.
- Negotiating with a broad range of experts and authorities the introduction and deployment of measurable care standards.
- Safeguarding sustainability of new services and pathways.

Assessment scale

0 - No formal guidelines, description, agreements or standards on innovative coordinated care processes in integrated care services are in place or in development.

1 - The stakeholders produce some guidelines and recognise the need for the standardisation of coordinated care processes, but there are no formal plans to develop it.

2 - Some standardised coordinated care processes are underway; guidelines are used, some initiatives and pathways are formally described, but no systematic approach is planned.

3 - Services, pathways and care processes are formally described in a standardised way by the stakeholders. A systematic approach to their standardisation is planned but not deployed.

4 - Most coordinated care processes, including care pathways, are subject to a systematic approach, and are standardised and deployed throughout the whole region/country.

5 - A systematic approach to standardisation of coordinated care processes is in place across the region/country. The processes are scaled up, maintained and redesigned according to standards.

5. Funding

Objectives

Changing systems of care so that they can offer better integration requires initial investment and funding; a degree of operational funding during transition to the new models of care; and on-going financial support until the new services are fully operational and the older ones are de-commissioned. Ensuring that initial and on-going costs can be financed is an essential activity that uses the full range of mechanisms from regional/national budgets to ‘stimulus’ funds, European Union investment funds, public-private partnerships (PPP) and risk-sharing mechanisms.

Assessment scale

- 0 - No additional funding is available to support the move towards integrated care
- 1 - Funding is available but mainly for the pilot projects and testing
- 2 - Consolidated innovation funding available through competitions/grants for individual care providers and small-scale implementation
- 3 - Regional/national (or European) funding or PPP for scaling-up is available
- 4 - Regional/national funding and/or reimbursement schemes for on-going operations is available
- 5 - Secure multi-year budget and/or reimbursement schemes, accessible to all stakeholders, to enable further service development.

6. Removal of Inhibitors

Objectives

Even with political support, funded programmes and good eHealth infrastructure, many factors can still make integrated care difficult to deliver, by delaying change or limiting how far change can go. These include legal issues with data governance, resistance to change from individuals or professional bodies, cultural barriers to the use of technology, perverse financial incentives, and lack of skills. These factors need to be recognised early, and a plan developed to deal with them, so as to minimise their impact.

- Actions to remove barriers: legal, organisational, financial, skills considering the need to address the risk of health and social inequalities.
- Changes to the law concerning e.g., medical acts, information governance, data sharing -factors which may hold up innovation.
- Creation of new organisations or collaborations to encourage cross-boundary working ('normative integration').
- Changes to reimbursement to support behavioural change and process change.
- Education and training to increase understanding of innovations and technology enabled care solutions in order to speed up solution delivery.

Assessment scale

- 0 - No awareness of the effects of inhibitors on integrated care
- 1 - Awareness of inhibitors but no systematic approach to their management is in place
- 2 - Strategy for removing inhibitors agreed at a high level
- 3 - Implementation Plan and process for removing inhibitors have started being implemented locally
- 4 - Solutions for removal of inhibitors developed and commonly used
- 5 - High completion rate of projects & programmes; inhibitors no longer an issue for service development.

7. Population Approach

Objectives

Integrated care can be developed to benefit those citizens who are not thriving under existing systems of care, in order to help them manage their health and care needs in a better way, and to avoid emergency calls and hospital admissions and reduce hospital stays. This is a practical response to meeting today's demands. Population health goes beyond this and uses methods to understand where future health risk (and so, demand) will come from. It offers ways to act ahead of time, to predict and anticipate, so that citizens can maintain their health for longer and be less dependent on care services as they age.

- Understanding and anticipating demand; meeting needs better and addressing health and social inequalities.
- Improving the resilience of care systems by using existing data on public health, health risks, and service utilisation.
- Taking steps to divert citizens into more appropriate and convenient care pathways based on user preferences.
- Predicting future demand and taking steps to reduce health risks through technology-enabled public health interventions.

Assessment scale

- 0 - Population health approach is not applied to the provision of integrated care services
- 1 - Population-wide risk stratification considered but not started
- 2 - Risk stratification approach is used in certain projects on an experimental basis
- 3 - Risk stratification used for specific groups i.e. those who are at risk of becoming frequent service users
- 4 - A population risk approach is applied to integrated care services but not yet systematically or to the full population
- 5 - Whole population stratification deployed and fully implemented.

8. Citizen Empowerment

Objectives

Health and social care systems are under increasing pressure to respond to demands that could otherwise be handled by citizens and carers themselves. The evidence suggests that many individuals would be willing to do more to participate in their own care if easy-to-use services, such as appointment booking, self-monitoring of health status, and alternatives to medical appointments, were available to them. This means providing services and tools that enable convenience, offer choice, and encourage self-service and engagement in health management, considering the need to address the risk of health and social inequalities.

Assessment scale

- 0 - Citizen empowerment is not considered as part of integrated care provision
- 1 - Citizen empowerment is recognised as important part of integrated care provision but effective policies to support citizen empowerment are still in development
- 2 - Citizen empowerment is recognised as important part of integrated care provision, effective policies to support citizen empowerment are in place but citizens do not have access to health information and health data
- 3 - Citizens are consulted on integrated care services and have access to health information and health data
- 4 - Incentives and tools exist to motivate and support citizens to co-create healthcare services and use these services to participate in decision-making process about their own health
- 5 - Citizens are fully engaged in decision-making processes about their health and are included in decision-making on service delivery and policy-making.

9. Evaluation Methods

Objectives

As new care pathways and services are introduced to support integrated care, there is a clear need to ensure that the changes are having the desired effect on quality of care, cost of care, access and citizen experience. This supports the concept of evidence-based investment, where the impact of each change is evaluated, e.g. by health economists working in universities or in special agencies. Health technology assessment (HTA) is an important method here and can be used to justify the cost of scaling up of integrated care to regional or national level.

- Establishing baselines (on cost, quality, access etc.) in advance of new service introduction.
- Systematically measuring the impact of new services and pathways using appropriate methods (e.g., observational studies, incremental improvement, clinical trials).
- Generating evidence that leads to faster adoption of good practice.

Assessment scale

0 - No evaluation of integrated care services is in place or in development

1 - Evaluation of integrated care services is planned to take place and be established as part of a systematic approach

2 - Evaluation of integrated care services exists, but not as a part of a systematic approach

3 - Some integrated care initiatives and services are evaluated as part of a systematic approach

4 - Most integrated care initiatives are subject to a systematic approach to evaluation; published results

5 - A systematic approach to evaluation, responsiveness to the evaluation outcomes, and evaluation of the desired impact on service redesign (i.e., a closed loop process).

10. Breadth of Ambition

Objectives

Integrated care includes many levels of integration, such as integration between primary and secondary care, of all stakeholders involved in the care process, or across many organisations. It may be developed simply for healthcare needs (i.e., vertical integration) or it may include social workers, the voluntary sector, and informal care (i.e., horizontal integration). The broader the ambition, the more numerous and diverse the stakeholders who have to be engaged. Similarly, integration may include all levels of the system or may be limited to clinical information sharing. The long-term goal should be fully integrated care services which provide a complete set of seamless interactions for the citizen, leading to better care and improved outcomes.

- Integration supported at all levels within the healthcare system - at the macro (policy, structure), meso (organisational, professional) and micro (clinical) levels.
- Integration between the healthcare system and other care services (including social, voluntary, informal, family services).
- Seamless transition for the patient between and within care services.

Assessment scale

0 - Coordination activities arise but not as a result of planning or the implementation of a strategy

1 - The citizen or their family may need to act as the integrator of service in an unpredictable way

2 - Integration within the same level of care (e.g., primary care) is achieved

3 - Integration between care levels (e.g., between primary and secondary care) is achieved

4 - Improved coordination of social care service and health care service needs is introduced

5 - Fully integrated health & social care services are in place and functional.

11. Innovation Management

Objectives

Many of the best ideas are likely to come from clinicians, nurses and social workers who understand where improvements can be made to existing processes. These innovations need to be recognised, assessed and, where possible, scaled up to provide benefit across the system. At the same time, universities and private sector companies are increasingly willing to engage in open innovation, and innovative procurement, in order to develop new technologies, test process improvements and deliver new services that meet the needs of citizens. There is also value in looking outside the system to other regions and countries that are dealing with the same set of challenges, to learn from their experiences. Overall, this means managing the innovation process to get the best results for the systems of care and ensuring that good ideas are encouraged and rewarded.

- Adopting proven ideas faster
- Enabling an atmosphere of innovation from top to bottom, with collection and diffusion of best practice
- Learning from inside the system, as well as from other regions, to expand thinking and speed up change
- Involving regional health and social care authorities, universities and private sector companies and other sectors in the innovation process (i.e., ‘open innovation’).
- Using innovative procurement approaches (Pre-Commercial Procurement, Public Procurement of Innovation, Public Private Partnerships, Shared Risk, Outcome-Based Payment)
- Using European projects and partnerships (e.g., Horizon 2020, European Regional Development Funds, European Social Investment Funds and other).

Assessment scale

0 - No innovation management in place

1 - Innovation is encouraged but there is no overall plan

2 - Innovations are captured and there are some mechanisms in place to encourage knowledge transfer

3 - Formalised innovation management process is planned and partially implemented

4 - Formalised innovation management process is in place and widely implemented

5 - Extensive open innovation combined with supporting procurement and the diffusion of good practice is in place

12. Capacity Building

Objectives

Capacity building is the process by which individual and organisations obtain, improve and retain the skills and knowledge needed to do their jobs competently. As the systems of care are transformed, many new roles will need to be created and new skills developed. These will range from technological expertise and project management, to successful change management. The systems of care need to become ‘learning systems’ that are constantly striving to improve quality, cost and access. They must build their capacity so as to become more adaptable and resilient. As demands continue to change, skills, talent and experience must be retained. This means ensuring that knowledge is captured and used to improve the next set of projects, leading to greater productivity and increasing success.

- Increasing skills; continuous improvement.
- Building a skill base that can bridge the gap and ensure that the capacity needs are understood and addressed by digital solutions where appropriate.
- Providing tools, processes and platforms to allow organisations to assess themselves and build their own capacity to deliver successful change.
- Creating an environment where service improvements are continuously evaluated and delivered for the benefit of the entire care system.

Assessment scale

0 - Integrated care services are not considered for capacity building

1 - Some approaches to capacity building for integrated care services are in place

2 - Cooperation on capacity building for integrated care is growing across the region

3 - Learning about integrated care and change management is in place but not widely implemented

4 - Systematic learning about integrated care and change management is widely implemented; knowledge is shared, skills retained and there is a lower turnover of experienced staff



D5.1 Readiness of European Regions for Integrated Care

Annex B: Self-assessment process in the Basque Country

WP5 Maturity Assessment for Integrated Care

Document information

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1 Introduction

Euskadi, the Basque Country, is an autonomous region in Northern Spain configured by three constituent provinces; Araba, Biscay and Gipuzkoa. It is bounded by the Bay of Biscay and France to the north, the Autonomous Communities of Navarra to the east, La Rioja and Castilla León to the south, and Cantabria to the west. Vitoria-Gasteiz, located in the province of Araba, holds the Basque Parliament, the headquarters of the Basque Government and the Basque Autonomous Community's President's residency (Ajuria Enea Palace). The autonomous government is based on the Statute of Autonomy of the Basque Country (1979), a foundational legal document providing the framework for the development of the Basque people on Spanish soil. The regional Parliament has wide legislative power. The Basque Government is headed by the “Lehendakari” or President, with holds the executive power. The Basque Ministry for Health of the Basque Government controls policy-planning, financing and contracting of health services; the Ministry for Employment and Social Affairs of the Basque Government defines the social policies, whilst the contracting of social services is done by the Provincial Councils and municipalities.

1.1 Characteristics of healthcare system

Table 1 - Characteristics of the Basque Healthcare System

Item	Description
Region	Basque Country
Geographical scale	Regional
Geographical size and dispersion (km²)	7,234km ²
Population size (thousands)	2,180,449
Population density (inhabitants/km²)	301.416 inhabitants/km ²
Life expectancy (years)	Women 86.3 Men 80.4
Fertility rate (births/woman)	16090/1122505= 0.014
Mortality rate (deaths/1,000 people)	21745/1000= 21.745
Top three causes of death	Tumours (6360), Circulatory System Diseases (5776) and Respiratory Diseases (2330)
Organisation and governance of healthcare services	The Public Basque Health System ensures a public quality health care placing the population in the center of the system. It governs and funds the Basque Healthcare Public

Item	Description
	<p>provider -Osakidetza, and the institutes in charge of biomedical and health service research and innovation, such as the Basque Foundation for Health Innovation and Research BIOEF, Biodonostia, Biocruces Bizkaia, Bioaraba and the Institute for Health Services Research Kronikgune. The Public Basque Health System is funded by taxes on the basis of a Beveridge model (National Health Service) and ruled by the principles of universality, equity, solidarity, quality and participation. Free access to the system for all residents in the Basque Country is guaranteed and healthcare professionals are public employees.</p> <p>The process of commissioning and funding of the Ministry of Health of the Basque Government (Framework Contract) defines the type and volume of activity to be performed and budget allocated to care providers. A minor part of the activity (elective surgery mainly) is outsourced to private providers.</p> <p>The Basque Health System is made up of 13 Integrated Healthcare Organisations (IHOs), which were established to integrate primary and hospitalised care into one single organisation to create synergies between the different levels of care. The system includes 320 primary care centres, 12 acute hospitals (4,106 beds), 4 sub-acute hospitals (448 beds), 4 psychiatric hospitals (505 beds) and 2 contracted long term mental health hospitals. Activity indicators (2018) are: 9,690,801 primary care and 4,834,642 specialized care consultations; 274,000 hospital admissions, and 154,504 surgical interventions.</p>
Healthcare spending (% of GDP)	5.3% of GDP (3,800€*100/71,743M€)
Healthcare expenditure (thousands)	The total Public Health budget in 2019 is 3,800M€ with a public health expenditure of 1,730€ per person, the 32.2% of the Basque Government's total budget (11,784M€).
Distribution of spending	<p>Osakidetza: 2,875M€ (personnel costs: 65.7%)</p> <p>Investments: 69.7M€</p> <p>Pharmacy: 522.8M€</p> <p>Public Health expenditure (2019): 1,730 per person</p>
Size of the workforce (thousands) and its distribution (%)	<p>Structural workforce: 26,591</p> <p>Temporary workforce: about 7,000</p>
Healthcare policies	The Health Plan for the Basque Country 2013-2020 (http://bit.ly/2LK6YbU) defines actions for active ageing,

Item	Description
	<p>coordination of health and social care, healthcare for older people, promotion of independence, adherence to treatments, and new ICTs for improving quality of life.</p> <p>Basque Social, Health and Community organisations shape a highly complex ecosystem. Providing best care requires good coordination. The Basque Government launched Basque Strategy of Active Ageing 2015-2020 (http://bit.ly/2LaqFKm), centered on people, their rights and responsibilities as an active society. The Strategy aims to achieve positive, healthy ageing and a holistic integrated approach. It has three main areas:</p> <p>Area I: Adaptation of society to ageing, a new governance model</p> <p>Area II: Anticipation and prevention to age better</p> <p>Area III: Welfare society: Friendliness and participation</p> <p>Challenges and strategic projects 2017-2020 of Osakidetza (http://bit.ly/2S3eK1T) reinforced and extended an integrated approach. Research and innovation become one of the six challenges established by the Ministry of Health of the Basque Government: People at the centre of the system and health inequalities; Prevention and health promotion; Ageing, chronicity and dependency; Sustainability and health system modernisation; and Professionals.</p> <p>Strategic Priorities for Socio-Health Care in the Basque Country 2017-2020 (http://bit.ly/2S2kAQY) aims to integrate and coordinate health, social and community care actors. It is focused on the social and health needs and people quality of life. Main priorities are: coordination; resources; prevention and citizen participation; evaluation; and innovation.</p>

1.2 Integrated care in the Basque Country

The Basque Government, aiming to address the challenges of ageing, chronicity and dependency in the Basque Country, has developed a clear strategic vision²⁶ to provide explicit support, leadership and capacities to transform the health and social care system towards integrated care. Osakidetza has reinforced and extended this integrated approach through a number of processes and tools that have been developed and implemented. These

²⁶ http://www.euskadi.eus/web01-s2osa/es/contenidos/plan_gubernamental/xleg_plangub_13/es_plang_13/index.shtml

are included in the challenges and strategic projects of Osakidetza for the period 2017-2020²⁷. These include:

- People at the centre and health inequalities
- Prevention and health promotion
- Ageing, chronicity and dependency
- Sustainability and modernisation of the health system
- Professionals
- Innovation and research.

A plan to achieve an integrated care was launched in 2010, and the concept of IHOs was introduced to address the consequences of fragmentation and lack of coordination between different levels of care²⁸. The objective has been to achieve less fragmented, more coordinated, efficient and higher quality care. Currently, 13 IHOs have been constituted.

The ultimate goal of IHOs is to achieve integration between healthcare settings so that patients receive care that is fully coordinated, delivers quality and tailored to their needs. Integrated care in the Basque Country is mainly based on three pillars:

- Integrated governance that establishes the agents that participate in the organisation and provision of integrated care services, including the way services and departments are organised to manage the care process.
- Population approach, assuming responsibility for the health of the entire population of a given geographical area, which involves coordination with social and public health agents; it includes not only the design of strategies and action plans for the patients served, but also the healthy population to develop health promotion and prevention activities. A lot of efforts have been made to extend the integrated Electronic Health Record "Osabide" to Basque Country's nursing homes through the "Osabide Integra" tool. Primary health and social care teams have been developed in all the IHOs, and initiatives such as "InterRAI CA"²⁹ that seek to ensure the interoperability of health and social information systems.

Culture and values that imply a change from the culture of fragmentation to a culture of integration, of belonging to the same organization that has common objectives for all the actors involved in the assistance process.

Given the unique government arrangements of the Basque Country, the social, health and community ecosystem is highly complex and requires extensive coordination of efforts to ensure the best care. In this sense, regional, provincial and municipal institutions have designed a framework that resolves the problems raised by citizens in relation to the space generated in the continuity of care for people with simultaneous needs in the health and social plans. It has been necessary to overcome competency and service design barriers,

²⁷https://www.osakidetza.euskadi.eus/contenidos/informacion/buen_gob_planes/es_def/adjuntos/PE_2017_2_020_web_ESP.pdf

²⁸<https://www.euskadi.eus/gobierno-vasco/-/eli/es-pv/d/2018/07/03/100/dof/spa/html/>

²⁹<http://www.euskadi.eus/gobierno-vasco/-/noticia/2017/innovando-en-el-modelo-de-atencion-sociosanitaria-en-euskadi-interrai-ca-como-embrion-de-la-h-sociosanitaria-vasca/>

reaching institutional consensus that guarantees social and health coordination. In order to respond to these realities, the Basque Council for Social and Health Care published the current Basque Strategic Priorities for Socio-health Care 2017-2020, which are based on the successive strategic proposals that have made possible building in the of socio-health care model³⁰. The Basque Strategy on Ageing 2015-2020³¹ has established an interdepartmental government body to guarantee the mainstream among the health and social providers in order to foster an integrated and coordinated care.

2 Self-assessment process in the Basque Country

2.1 Identification process of the local stakeholders

The local stakeholders were identified with the support of the Integration and Chronicity Service of Osakidetza. A multidisciplinary and multilevel group of experts in healthcare integration was selected, to assess the maturity of the region for the adoption of integrated care. The profiles of the local stakeholders are provided in the table below:

Table 2: Stakeholders' profile

Profile	Organisation
Insurance & Procurement unit's professional	Basque Department of Health
Health & social care Coordinator	Osakidetza
Deputy Director of Quality and Information Services of the General Directorate	Osakidetza
Integration and chronicity service's professional of the General Directorate	Osakidetza
Head of department of internal medicine	Osakidetza
Primary care nurse	Osakidetza
Hospital nurse	Osakidetza
Organisational innovation professional	Basque foundation for health innovation and research
Citizen	-

³⁰

https://www.euskadi.eus/contenidos/informacion/publicaciones_departamento/es_def/adjuntos/stp/lineas-estrategicas-sociosanitarias-2017-2020.pdf

³¹ http://www.ogasun.ejgv.euskadi.eus/r51-catpub/es/k75aWebPublicacionesWar/k75aObtenerPublicacionDigitalServlet?R01HNoPortal=true&N_LIBR=051715&N_EDIC=0001&C_IDIOM=es&FORMATO=.pdf

2.2 Self-assessment survey

In order to capture experts' individual perceptions and opinions on the maturity level of the Basque health system in integrated care, 12 stakeholders were invited to participate, and 9 accepted. The process was carried out between September and October 2019.

They were invited to:

- Register on the SCIROCCO Tool's web page in Spanish
- Perform the individual self-assessment
- Share their self-assessment outcomes with Kronikgune.

In this regard, the local stakeholders were given the following supporting documents:

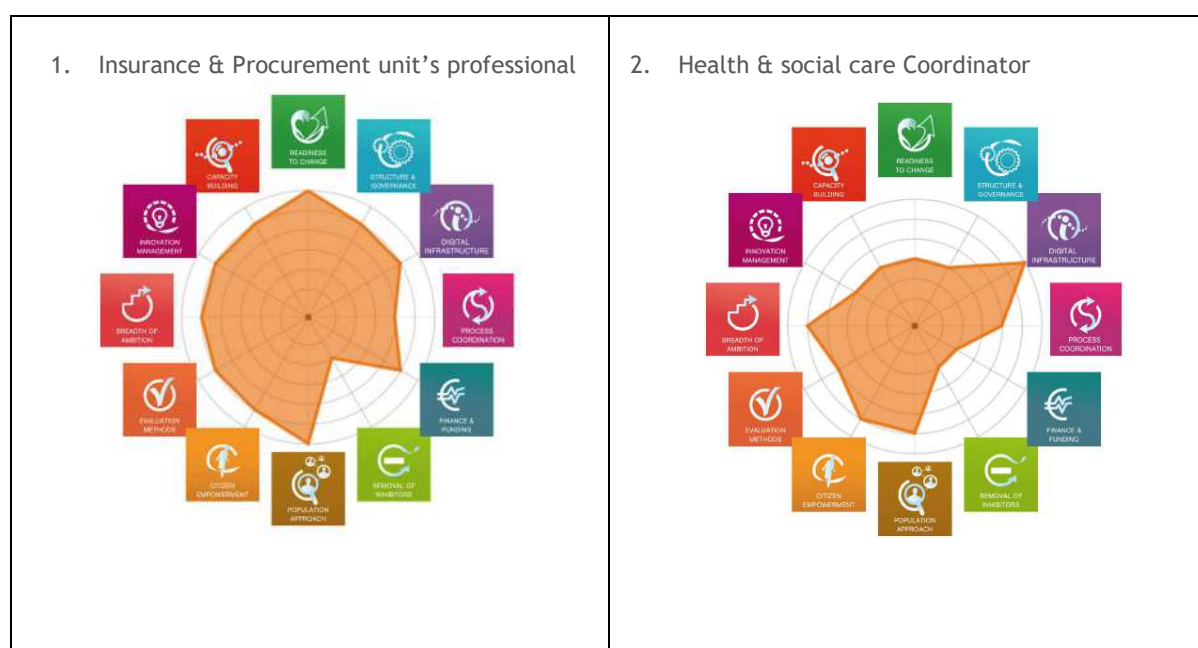
A PowerPoint presentation introducing the SCIROCCO Exchange project, the objectives and the process of the self-assessment in the Basque Country

- SCIROCCO Maturity Model in Spanish
- A user manual on how to use new version of the SCIROCCO Tool
- The agenda for the Consensus workshop.
- All stakeholders filled the online survey at the beginning of October 2019.

2.2.1 Outcomes of self-assessment survey

The 9 stakeholders filled the survey, and all of them provided justifications (features) of their ratings. The following spider diagrams reflect the diversity of the stakeholders' perceptions on the maturity of the Basque Health System for integrated care.

Figure 1- Outcomes of the individual self-assessments



3. Deputy Director of Quality and Information services, General Directorate of Osakidetza



4. Integration and chronicity service's technician, General Directorate of Osakidetza



5. Head of department of internal medicine



6. Primary care nurse



7. Hospital nurse



8. Organisational innovation professional





2.3 Stakeholder workshop

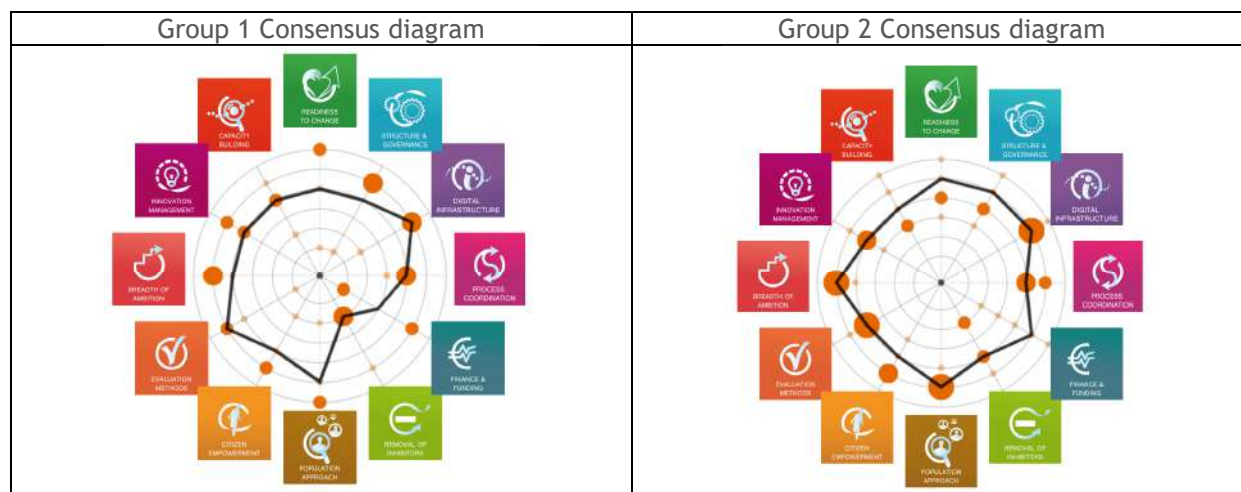
The consensus workshop was organised by Osakidetza and facilitated by Kronikune on 18 October 2019. The objective of the workshop was to discuss the preliminary findings of the self-assessment survey in the region and seek a multi-stakeholder understanding of the maturity of healthcare system for integrated care in the Basque Country. The outcomes of the self-assessment surveys served as the basis for the multi-stakeholder discussion, negotiation and consensus-building. The workshop was held in Spanish and the local project team translated the outcomes of the workshop into English afterwards.

2.3.1 Negotiation and consensus building

The local stakeholders were grouped into two teams to ensure discussions and sharing of opinions among all participants. The objective was to reach a consensus across all 12 dimensions of SCIROCCO tool and to create a final spider diagram in each of the two groups. A method to avoid disagreement was proposed to facilitate the discussions; if there was no agreement on the final score of a dimension, the scoring with the majority of the votes was chosen. Each stakeholder presented its spider diagram to their peers and shared the scores and justifications of each dimension. Both groups reached consensus in about one hour and half. Negotiation was straightforward, amiable and fast.

After a coffee break both groups came together to reach a final consensus and provide justifications for the final scoring. A spokesperson for each group presented the agreed small group diagrams and the differences in scoring were discussed by all participants. The mostly discussed dimensions were “Funding”, “Removal of Inhibitors” and “Evaluation Methods”. After an hour and a half, a consensus was reached in all dimensions and features were uploaded into the SCIROCCO Tool.

Figure 2- Group consensus diagrams



2.3.2 Final consensus

The consensus spider diagram shows the maturity of the Basque healthcare system for integrated care. The local stakeholders reached consensus across the twelve dimensions of SCIROCCO tool.

Figure 3- Basque Country's final consensus diagram



Six of the dimensions scored four; other six scored three. The details of the stakeholders' assessment including the justifications for the scoring are provided in the following table:

Table 3: Scores, Justifications and Reflections assigned to each of the dimensions

Dimension	Scoring	Justifications & Reflections
Readiness to Change	4	The support and corporate commitment of the Basque Health System to healthcare integration are clear and decisive. The integration policies are defined and the need for change and a plan for change for the Organisation and its workers. Health and Social coordination is planned at an institutional level but not yet fully implemented at a welfare level.
Structure & Governance	4	Unified structure and governance aligned with the objective of integrated care and to face chronicity. The Healthcare Integration Plan was developed in 2010 and completed in January 2016, with the creation of 13 IHOs. There is a clear mandate from the Parliament, Government and Ministry of Health of the Basque Government, aligned with this objective. The health system is driving change, but progress is hampered as the health and social departments are managed independently. There is still a work to do in the coordination of the social and health sectors.
Digital Infrastructure	4	There is an extensive development of digital infrastructures and tools in the Basque health system, both for professionals and for patients aimed at supporting integrated care. The Electronic Health Record "Osabide" is integrated in the whole structure of Osakidetza and is accessible by all the professionals of the organisation. In addition, it is implemented in the social sphere (nursing homes) through the tool "Osabide Integra". There is a project for the creation of a socio-health record. There is also a clinical record for nursing "Osanaia". Other examples are the tele-assistance "Beti ON" and telemonitoring of patients with Chronic Obstructive Pulmonary Diseases (COPD) and Cardiac Health Failure (CHF), the e-Health portfolio and the electronic pharmacological prescription, accessible to the entire population of the Basque Country, virtual consultations between professionals and between professionals and patients/informal careers.
Process Coordination	3	There is a systematic approach to integrated and coordinated care with standardised processes deployed throughout the organisation. There are working groups and facilitating agents that have developed recommendations, standards, pathways at the corporate level with local adaptations (for chronic patients, multimorbid, palliative...). Even so, there are still not enough solutions and initiatives to fully coordinate the processes of the social and health sectors.
Funding	4	There is funding aligned with integrated care and the development of the IHOs. There is corporate funding for the development of bottom-up projects and European funding for the development of projects (mainly through Kronikgune). There is still insufficient support for social and health coordination due to the lack of agreement of the actors outside the health system.
Removal of inhibitors	3	From a legal and structural point of view, it is already underway. From a cultural point of view, it needs to be put into practice. There is a lack of knowledge among health professionals in relation with the inhibitors of Integrated Care, of their degree of focus and the way of approach them. Their elimination will mean a cultural change and a different perception of the healthcare fabric for patients and professionals.

Dimension	Scoring	Justifications & Reflections
Population Approach	4	The Basque Health System has a strong population health approach. The entire population has been stratified according to its morbidity risk. Even so, care programs have not been deployed for all groups, only for the most complex ones. Frailty and health determinants are not considered in the current risk stratification.
Citizen Empowerment	3	The Basque health system recognises the empowerment of patients and families as an important element of integrated care. There are corporate policies that have allowed the development of a series of tools for the empowerment of citizens, such as the School of Health “Osasun Eskola” and the Personal Health Folder, available to all citizens. Patients with high burden disease(s) are highly empowered through initiatives such as “Paciente Activo” or “KronikOn”. Citizens do not systematically participate in the decision-making processes on service delivery and policymaking.
Evaluation Methods	3	The Framework Contract makes it possible to align financing, resources and services with health care priorities, being the main tool used for systematic evaluation of integrated care in the Basque health system. It uses questionnaires such as D'amour ³² and IEMAC ³³ . In the socio-health context, the lack of a balanced scorecard is an important handicap for evaluating fundamental aspects such as the impact of the policies implemented.
Breadth of Ambition	4	The Basque Country does not have a joint Ministry of Health and Social Care. Each province's deputations are responsible for social care. Once structural integration has been completed, functional integration and full social and health coordination are expected. The social sector has access to health information on the Basque population, but the health system does not have access to the data generated by the social sector.
Innovation Management	3	The health department has defined a research and innovation strategy (2020) ³⁴ . Bottom-up (regional), national and European projects promote innovation in health organisations. In some Integrated Care Organisations innovation units have been created. Ministry of Health of the Basque Government, BIOEF ³⁵ , Kronikgune ³⁶ , Biocruces Bizkaia ³⁷ , Biodonostia ³⁸ and Bioaraba ³⁹ and the Integration and Chronicity Service of Osakidetza support innovation, acting in many cases as change agents.
Capacity Building	3	It has been working for years with an organisational and healthcare model based on integrated care centered on patients and people. It shares knowledge and works together in numerous meetings, forums and working groups, both at the corporate level and at the level of microsystems and services. The Basque health system invests, works, designs, innovates, reflects, learns in an incremental cycle of continuous improvement. Even so, the new transversal and multidisciplinary capacities that integration demands, especially in a social and health context, are not yet perceived as an element of health care practice. The rotation of non-structural professionals is probably excessive in some cases.

³² Nuño-Solinís R, Berraondo Zabalegui I, Sauto Arce R, San Martín Rodríguez L, Toro Polanco N (2013), “Development of a questionnaire to assess interprofessional collaboration between two different care levels”, Int J Integr Care. 2013 Apr 12

³³ <http://www.iemac.es/>

³⁴ https://www.euskadi.eus/contenidos/plan_departamental/45_plandep_xileg/es_def/adjuntos/estrategia_es.pdf

³⁵ <https://www.bioef.org/es/>

³⁶ <https://www.kronikgune.org/>

³⁷ <https://biocrucesbizkaia.org/web/biocruces/inicio>

³⁸ <http://www.biodonostia.org/>

³⁹ <https://www.bioaraba.org/>

Figure 4: Some of the participants and facilitators of the stakeholders' workshop



3 Analysis of the outcomes

1. In the last decade, the Basque health system has moved towards a new organisational and management model aiming for an integrated care system. **The self-assessment outcomes reflect the actual maturity of the Basque health system, showing progress towards integrated care in all dimensions.** The features that justify the scores in each of the dimensions provide evidence and allow comparing the outcomes with previous assessments and measuring progress.
2. **The outcomes provide a harmonised approach**, scoring 3 or 4 in all dimensions. From the previous self-assessment, the one carried out in 2017, scores have improved by one level on 5 of the 12 dimensions: "Readiness to Change", "Structure and Governance", "Digital Infrastructure", "Funding" and "Innovation Management".
3. The inclusion of a citizen not professionally related to the health system in the process has introduced big discrepancies among this stakeholder and the healthcare professionals in all dimensions. The group reflected that citizens are unaware of the advances in integrated care that are being made in the Basque health system. It was agreed that it is necessary to work more with the citizens in the same process of change, and there is a lot to improve in this sense.
4. **The greatest strengths of the Basque health system in integrated care relate to the dimensions of "Structure and Governance", "Digital Infrastructure" and "Population Approach".** The healthcare structures have been unified and the governance aligned with the objective of integrated care through the creation of 13 IHOs, digital and information systems have been created and standardised. A Unified Healthcare Record accessible for all the healthcare professionals and the nursing homes has been created, and a risk stratification strategy has been carried out and improved stratifying the entire population of the Basque Country. These and other actions in these domains aimed at integrated care have been and are a priority for the health system.

5. The dimensions where the group has found more room for improvement are “Process Coordination”, “Removal of inhibitors”, and “Citizen Empowerment”. We would consider addressing the dimensions of “Process Coordination and “Citizen Empowerment” dimensions as a priority in relation to SCIROCCO Exchange project.
6. There are some specific factors in the region that justify the scores. The transformation towards integrated care of the Basque health system has been promoted at a political level by the Ministry of Health of the Basque Government, highlighting the need to guarantee its quality and sustainability. To this end, a series of structures and tools have been developed to make change possible and a process of awareness raising and training has been deployed for the management teams and front-line professionals. The embracement of tools for the assessment of continuity of care as IEXPAC, IEMAC, D`AMOUR, Framework contract has also helped to monitor the process and maintains the focus.
7. All this has facilitated a cultural change for Osakidetza’ professionals, however the professionals have had to adopt new roles, adopt new ways of working and face new challenges, that has imply important changes across all the twelve domains implying a tremendous challenge for the system.

4 Key messages

The stakeholders valued their maturity assessment process and experience as very positive. The process was carried out successfully and could be performed as planned. It has allowed stakeholders to reflect on the integrated care approach carried out in the Basque Country, the current level of development and the main gaps that still need to be covered.

Some testimonials from the participants were:

“The outcomes of this self-assessment reflect our situation quite well, especially with regard to the progress we have achieved in the last years. It corresponds quite closely to reality; it is quite realistic”.

“Conducting individual evaluations at the beginning of the process is very positive. The personal reflection is key to the successful completion of the final consensus exercise”

“Although it is a subjective self-evaluation, it allows us to see where we are, in which areas we have made the most progress and in which we still have much room for improvement”

5 Conclusions and next steps

The SCIROCCO Tool and the self-assessment process has allowed us to reflect on the actions that have been made during the last years regarding integrated care and to assess the improvements made in our healthcare system since 2017.

The stakeholders have enjoyed the process valuing it as a very positive exercise to reflect on the situation in which we find ourselves with regard to the implementation of integrated care in the Basque Country. The decision of involving a citizen in the self-assessment process

has allowed us to verify how informed the citizens are of the transformation and the interventions that are being carried out in the system.

The General Directorate of Osakidetza and the Ministry of Health of Basque Government have valued the usefulness of the Tool, presenting it at the 19th International Conference on Integrated Care celebrated in San Sebastian, Basque Country. The Basque team of the SCIROCCO Exchange project plans to propose to the Basque Ministry of Health the possibility of including the SCIROCCO Maturity Model as a self-evaluation tool for IHOs within the Framework Contract that is carried out annually.

Annex 1 Self-Assessment Workshop in the Basque Country- Agenda & List of Participants

Time	Session Title
09.30	Welcome, Meeting Objectives & Methodology <ul style="list-style-type: none"> • Presentation of the first individual spider diagram results. • Split stakeholders into two working groups, and selection of a representative for each one.
09.45	Negotiation & Consensus Building in the two working groups <ul style="list-style-type: none"> • Facilitated discussion on the outcomes of the self-assessment process for the region in the two groups, and reach an agreement resulting in a group-diagram.
11.15	Coffee break
11.30	Negotiation & Consensus Building. Final diagram for the Basque country <ul style="list-style-type: none"> • Presentation of the agreed group-diagrams to the whole group by the representatives of each group. • Agreement on the final diagram of the Basque Country. Consensus on the final scoring per each dimension, including the rationale for scoring.
13.00	Focus group on stakeholders' experience <ul style="list-style-type: none"> • Moderated discussion on the experience of local stakeholders with the self-assessment process.
13.25	Conclusion and next steps

Figure 4: Some of the participants and facilitators of the stakeholders' workshop

Name	Organisation
Eva Lamiquiz	Basque Department of Health
Jose Antonio de la Rica	Osakidetza
Mayte Bacigalupe	Osakidetza
Rosa Gonzalez	Osakidetza
Javier Zubizarreta	Osakidetza
Sonsoles San Martín García	Osakidetza
Iraide Sarduy	Osakidetza
Koldo Piñera	Basque foundation for health innovation and research
Angel Irastorza	Citizen



D5.1 Readiness of European Regions for Integrated Care

Annex C: Self-assessment process in Flanders, Belgium

WP5 Maturity Assessment for Integrated Care

Document information

Organisations responsible for conducting the self-assessment process in Flanders:

- Flanders Agency for Care and Health
- Flemish Institute of Primary Care

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With thanks to my colleagues from the Agency, VIVEL and all the organisations that participated.

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Dissemination level

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Statement of originality

This Report contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

Disclaimer

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1. Introduction

The Agency for Care and Health (Flanders) is an agency of the Flemish government for the improvement and protection of the health and wellbeing of all inhabitants of Flanders. The Agency for Care and Health makes sure there are sufficient and high-quality provisions in Flanders for the elderly care, home care, general care and mental care. They also recognise individual healthcare professionals. The Agency helps Flemish residents to live a healthy life and to avoid health risks. The Agency is a part of the Department of Welfare, Public Health and Family.

1.1 Characteristics of healthcare system

Table 1 - Characteristics of the Flanders's Healthcare System

Item	Description
Region	Flanders region in Belgium
Geographical scale	
Geographical size and dispersion (km ²)	13.625 km ²
Population size(thousands)	6.55 mil
Population density(inhabitants/km ²)	485/km ²
Life expectancy (years)	82.4
Fertility rate (births/woman)	1.62/woman
Mortality rate (deaths/1,000 people)	9.55 for BE
Top three causes of death	Lung cancer; suicide; cerebrovascular conditions
Organisation and governance of healthcare services	<p>The Belgian health care system is founded on the principles of</p> <ul style="list-style-type: none"> • equal access and freedom of choice; • a compulsory public health insurance system covering the whole population with a broad benefits package. The compulsory health care insurance covers almost 75% of all health care expenses. <p>The Belgium healthcare system covers public and private sectors, with fees payable in both, funded by a combination of social security contributions and health insurance funds. With mandatory health insurance, patients are free to choose their medical professionals and places of treatment.</p> <p>The healthcare system includes:</p> <ul style="list-style-type: none"> • a reimbursement system for ambulatory care (patient pays fee to provider and is then partly refunded).

Item	Description			
	<ul style="list-style-type: none"> a third-party payer system for inpatient care and pharmaceuticals (the health insurance fund directly pays the provider; the patient only pays the non-refundable part). <p>Flanders adds a Flemish Social Protection layer (FSP) organised separately from, and parallel to, the health insurance system, covering non-medical care expenses by providing material and/or financial support according to people's needs.</p> <p>2019 FSP budget was 923.937.000,00 €, covering care budgets for the severely care-dependent disabled and elderly as well as mobility aids. The budget will increase as Flanders moves towards a 'person-linked' funding including care in centres for mental health, homes for psychiatric care, sheltered accommodation schemes and physical rehabilitation centres. (FSP budget is 18,20 % of the total 2019 budget of the Flemish Agency for Care and Health, being 5.076.654.631 euro.)</p>			
Healthcare spending (% of GDP)	10%GDP			
Healthcare expenditure (thousands)	3.745€			
Distribution of spending	<p>Budgets are managed by different authorities (federal, regional). Health care reimbursement is managed by the federal - national level: 33% fees physicians; 23% hospital stay; 17% pharmaceuticals; 27% other.</p> <p>Flanders Agency for Care and Health budget for social services: 53.48% residential care; 5.77% rehabilitation; 14% home care; 18.20% Flemish Social Protection</p>			
Size of the workforce (thousands) and its distribution (%)	In practice	In training	Belgium	Density (per 1.000 inhabitants)
GP	8.982	661	15.989	14,6
Pediatricians	972		1.975	1,6
Gynecologists	835		1.703	1,3
Psychiatrists	269		977	0,4
Medical specialists	15.401	2.736	28.545	25
Professional carers	77.854		127.513	126,5
Pharmacists	12.028		20.238	19,5
Dentists	5.534	124	9.420	8,9

Item	Description			
Nurses & midwives	132.478		191.460	215,4
Physiotherapists	19.130		34.713	31,1
Paramedic professions	35.500		59.917	57,7
Healthcare policies in the country	Primary Care Reform - Integrated care; Hospital of the Future: hospital reform; Mental health care reform: patient centred and involvement of the surroundings of the patient			

1.2 Integrated care in Flanders region

Since the last Belgian State Reform in 2014, Flanders has been engaged in the reform of primary care (integrating health and social care), mental health care, hospital care (strategic care planning) and rehabilitation.

Flanders opts for a comprehensive approach to the reform of health and social care, characterised by a bottom-up approach and focus on multi-disciplinary cooperation and access (for the person with a care need) to specialised care according to his / her personal wishes and priorities. The Primary Care Boards are closest to citizens with care needs and are supported by their Regional Care Platform and the Flemish Institute of Primary Care, according to the needs of their primary care zones. Research and innovation are expected to bring novel digital and technological solutions. In this respect, a Digital Care and Support Plan (DZOP) for a person with a care need will be instrumental while partnering with industry. Other policy measures include: a Flemish Social Protection Plan covering the non-medical costs; an integration of primary, secondary and specialised care; home and informal care; and last but not least, a continued focus on prevention and public health.

2. Self-assessment process in the Region of Flanders

2.1 Identification process of the local stakeholders

The Flanders Institute for Primary Care, VIVEL, was established in May 2019. Its role is to support, facilitate and coach the Regional Care Platforms and the 60 Primary Care (PC) Boards, the latter representing 75.000 up to 125.000 inhabitants. It is expected to have the Boards' fully operational in the second half of 2021. Their role is to strengthen collaboration and coordination between local authorities, primary (health and wellbeing) care professionals, associations of people with a need of care and support, associations of informal carers and volunteers.

The goal is to implement, gradually and on a voluntary basis, the **SCIROCCO Maturity Assessment Tool within every PC Board**. The results of their self-assessments should give the different Boards a means to compare and learn from another Board. **VIVEL and the Agency**

for Care and Health can use the results for better policy development and planning. The international knowledge sharing will assist and enhance new opportunities.

The first step was to test the self-assessment within the Governing Board of Directors of VIVEL. The Board is composed of 15 members, 12 members participated in the self-assessment. Some participated as an individual, others with their team / other disciplines within their organisation. The organisations participating were:

- Domus Medica (GPs),
- Steunpunt Mantelzorg (Carers (family and friends),
- Ergotherapie Vlaanderen (Occupational Therapy),
- Huis voor Gezondheid (Brussels support for primary health care providers),
- VZW Zorggezind (Home care network for family services),
- Prof Emeritus - University of Ghent,
- Vlaams Patiëntenplatform (Patient Organisation),
- Centrum voor Algemeen Welzijnswerk (Centre for General Wellbeing),
- Zorgnet Icuuro (General Hospitals, mental health, elderly care),
- Vlaams Apothekersnetwerk (Pharmacists),
- Wit-Geel Kruis (Home care and nursing),
- Christelijke Mutualiteit (Insurance Company),
- VIVEL (Flanders Primary Care Institute).

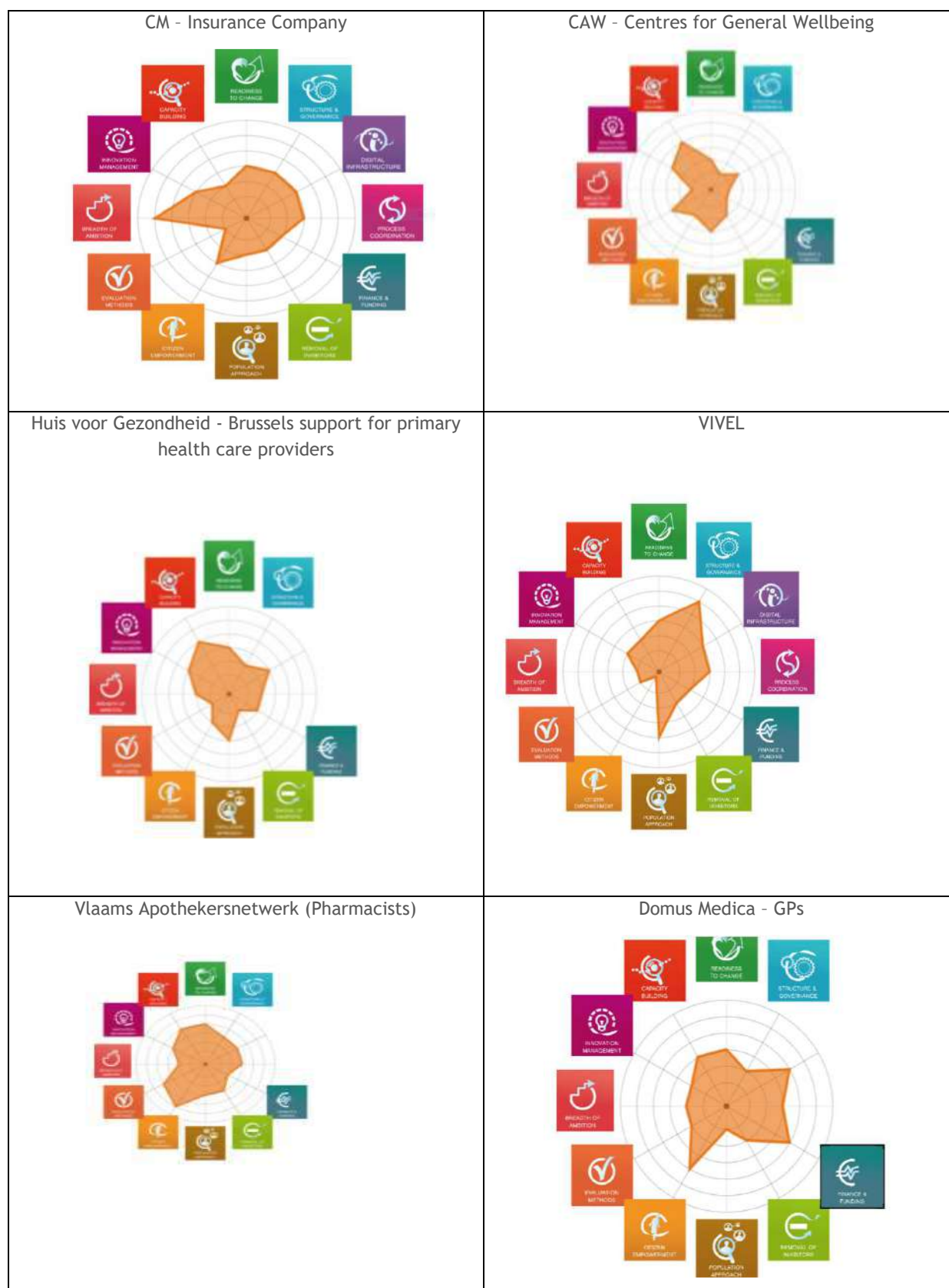
2.2 Self-assessment survey

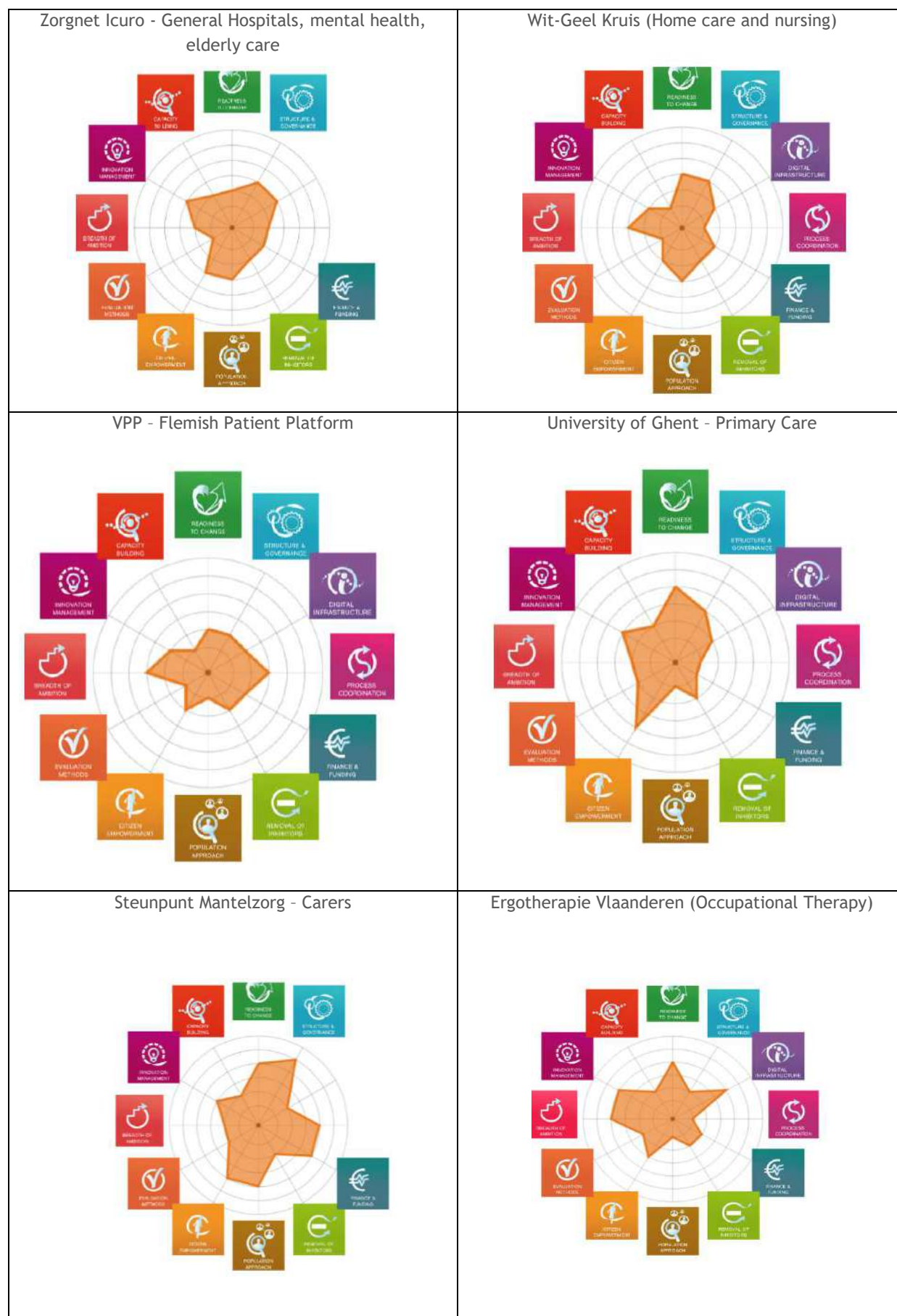
The Maturity Model and the SCIROCCO Exchange Tool were presented and discussed at the end of November 2019 in the Board of VIVEL. On 17 December 2019, the coordinating team (from the Agency and VIVEL) made a first overview. It was then decided to extend the deadline until after the Christmas break to give some respondents extra time. On January 10th 2020, a final overview was made from 12 respondents.

2.2.1 Outcomes of self-assessment survey

The 12 stakeholders filled the online survey, and all of them provided justifications for their ratings, using the Dutch version of the SCIROCCO Exchange online self-assessment tool. The following spider diagrams reflect the diversity of the stakeholders' perceptions on the maturity of integrated care in the Flanders region.

Figure 1- Outcomes of the individual self-assessments





All participants agreed that the individual assessment is more influenced by the context of the moment: e.g. some were concerned about the current savings of the Flanders Government. Due to the complicated state structure of Belgium, the assessments showed more positive or negative outcomes when an organisation only depends on Flanders; or if the organisation has a work field covering Flanders and Brussels; or if the organisation depends on both Flanders and Federal rules and financing.

The scores were often a point of concern, as not every description of the Tool's dimensions fitted the situation of the care professionals. Choices were often made for the score that is closest to the assessor's situation; maybe a score between 1 and 10 might give more room for nuance.

2.3 Stakeholder workshop

Twelve respondents participated in the workshop on 16 January 2020. It was decided to have the workshop from 9.30 till 12.30. The discussion was organised and facilitated around the 8 dimensions where the scores had the largest diversions. Since we aimed for a dynamic workshop in a maximum of 4 hours (half a day), we decided to discuss only 8 dimensions. The workshop agenda included discussion on:

- the use of the Tool and participants' experiences when using the Tool;
- if the assessment was conducted by one person / team or several different disciplines; levels in the organisation; and if the assessment was done from an individual's own perspective; and if the perspective of the organisation considered the Flanders or the Belgium context.
- the consensus building.
- finally, and rather importantly for Flanders, the local implementation by the Primary Care Boards.

2.3.1 Negotiation and consensus building

Figure 2 - Flanders's consensus diagram



The consensus workshop was an interactive and intensive discussion about 8 of the dimensions of the SCIROCCO Exchange Tool where the spread of participants' scores was the largest. We remained in one group and engaged in dialogue together. The respondents with the most divergent scores started by presenting and explaining their rationale for their scores. Together with the more 'moderate' opinions, a consensus was built on which path should/can be taken.

Two facilitators supported the discussion, and the discussion was highly interactive and intense in the sense that participants had to move physically according to their scores. After the introduction and the first discussion, the facilitators started the consensus as follows:

'How do we look today at integration of care in Flanders: only from the Flemish policy level? Is this possible or what conflict do we notice with federal level? What are our doubts looking at the description of the scores and why? All these nuances were part of the dialogue and of the consensus'.

It was good to have this discussion first before entering into the detail of the consensus because it gave people the opportunity to air some concerns about the description of the different dimensions. Whilst during the individual assessments, the participants were focused on the wording of the score description, but this became less important during the consensus discussion.

The two most divergent scores were observed in the dimensions of “Structure and Governance” and “Breadth of Ambition”:

Structure and Governance scored between 0 and 4:

Score 0: readiness to change exists, many projects, processes in the primary care reform are set. However, it is unclear what the vision of the new Flanders Government will be. And not only the vision but what the practical approach will be, such as a financial programme and plan.

Score 4: this has been a process of 20 years. Managing to bring the health and wellbeing professionals together is a merit. There is a Roadmap, a consensus, VIVEL - the Primary Care Institute exists, the Care boards are there and in development. Formal working groups have started. Parliamentary Decrees need to be amended and the financial plan should follow.

Breadth of ambition scored 0 and 4:

Score 0: score 0 is not less than 1. The citizen is left to his own devices. There are many initiatives to make integrated care a reality but the integration at local level, by the professional carers, is fragmented. The carer (informal) or the person with a care need are not well supported.

Score 4: there is a lot of ambition in the Primary Care Zones and their Boards. Ambition means the direction we want to move towards. The answers by the respondents were often about the current situation.

2.3.2 Final consensus

Figure 2 - Flanders’s final consensus diagram



Table 1: Scores, Justifications and Reflections assigned to each of the dimensions

Dimension	Scoring	Justifications & Reflections
Readiness to Change	Not discussed	Only 8 dimensions where the opinions were most divergent were discussed during the consensus-building.
Structure & Governance	3	<p>There is change on the field. Some were still in favor of score 2, because it is not so clear if the current governance is/can provide the right support. Communication between different levels of governance and between the Belgium' regions could improve. Local social governance needs to be better tuned. Keep on engaging in a dialogue with the work field and continue bottom-up participation.</p> <p>In conclusion: Ensure continuity of the governance and support change management.</p>
Digital Infrastructure	Not discussed	Only 8 dimensions where the opinions were most divergent were discussed during the consensus-building.
Process Coordination	1	<p>Here the influence of the divided competences in Belgium is high. Still the coordination remains medical / disease specific. Process coordination is largely based on care process and not on social processes. The latter was the reason to move the score towards 1. Agreements however exist between some organisations such as the guidelines on intra-family violence, for GPs and social carers.</p>
Funding	1	<p>For the primary care actors, elements like financing and exceptions on regulatory obligations are necessary in the testing phase.</p> <p>If in a later stage, financing cannot be optimal, at least the authorities should work towards additional incentives, such as recognition of the tasks of primary care actors who spend their time and energy in the Primary Care Boards in Flanders (interdisciplinary governance body - 60 boards). The level of financing should be high enough to avoid having to rely too much on volunteers. The Primary Care Boards are expecting a balanced choice and motivation of the financing decision. Informal care (family and friends) and patient participation remains crucial</p>
Removal of inhibitors	Not discussed	Only 8 dimensions where the opinions were most divergent were discussed during the consensus-building.
Population Approach	2	<p>Although we settle on score 2, this approach has still a too much experimental nature. Although the Primary care Zones focus on specific groups, it is not yet supported by a sustainable structured policy.</p> <p>A population-oriented approach is subject to the fragmentation of competences in Belgium.</p> <p>Once the approach involves the local level, it should be clear that it is not an administrative burden and should be patient outcome oriented rather than a financially driven result.</p> <p>Small listing: the Care Atlas is a start towards this approach; although it is true that the process runs less smoothly since various competent authorities are involved.</p>
Citizen Empowerment	2	<p>Until now, not enough policy making; fragmented initiatives; Increasing the health literacy of people is one part, but the same effort should exist for the care providers that there is a need for self-care and not only curative care.</p>

Dimension	Scoring	Justifications & Reflections
Evaluation Methods	1	Score 1, although the tools and procedures are not yet systematically planned. We look positively to the future with the Flemish Institute for Quality of Care. The Care Atlas (Agency for Care and Health) will provide as of half 2020 data to citizens and local authorities. The comment was made that there is a need to harmonise the threshold values. A good example in Flanders is the evaluation method used for Falls Prevention. Evaluation methods should be user friendly, practical and should be included from the start in projects on integrating care.
Breadth of Ambition	2	The integration between secondary and tertiary care is not structured. No real link exists between primary and secondary care. Some care organisations are linking up but that is on an individual basis. Need for a vision on a common ambition to work together. Should be the task of the authorities to enhance this ambition at every level of integration: horizontally (between and amongst organisations); vertically between the different levels of governance: local, regional, national (when required).
Innovation Management	Not discussed	Only 8 dimensions where the opinions were most divergent were discussed during the consensus-building.
Capacity Building	2	Coordination of integrated care needs to be done on the field. Different approaches are necessary: younger generation is more and more trained for multidisciplinary environments (although university curricula should include it); other generations of carers may have a need of other methods. Lifelong learning is important together with the creation of a 'learning network'. A discussion on capacity building requires the expertise of those involved in change trajectories.

3. Analysis of the outcomes

1. The extent to which the outcomes of the self-assessment reflect the actual maturity of Flanders' healthcare system very much depends on the organisation that performs the self-assessment. Moreover, some organisations are only depending on the Flanders region, others have to combine the Brussels and the Flanders region and some of them are also dependent on the policy making of the Federal level. Most of participants agreed that they were filling in the assessment in the context of that moment. It highlights, however, that the more local you go; the less confidence there is about structural arrangements, while at the regional level confidence is higher. Many organisations take individual initiatives to work together.
2. At the level of the organisations: many of them are moving into working together (health and social care). It definitely shows that ownership gradually comes from the field organisations. The level of enthusiasm of the participants in the discussion was surprising, as was their eagerness to combine both health and social care. What was less surprising was that the awareness of the local health and social care professionals still has a long way to go. The role of umbrella organisations, and the recently started Primary Care Boards, will be necessary to support this process.

3. There are some connections/grouping of specific dimensions which can be observed namely:
 - Digital infrastructure and Structure and Governance: digitalisation is strongly represented.
 - Process coordination and Population management into ‘Goal orientated care’?
 - The wellbeing component and social cohesion are less visible? (e.g. healthcare systems could be Care systems or Integrated Care systems)
4. Looking at the overall consensus diagram, there are not many dimensions which one would consider as strengths for the Flanders’ region. None of the dimensions scored very high. The dimensions of “Readiness to Change”, “Innovation Management” and “Structure and Governance” (after consensus) reached the best scores. There are no dimensions where the maturity was already reached and there is definitely a need for further improvement in them all.
5. There are a number of other specific factors which may have affected the assessment outcomes. These include:
 - Change management is hard to comply with and to change from working in silo’s to integration of care;
 - The health care system is still oriented to disease approaches.
 - The Belgian state structure - two levels (regional and federal) both have competences in the way integrated care can be organised. The policy on integrated care for Flanders also needs to be adopted in the Brussels region.

4. Key messages

Some lessons learned can be summarised on the basis of Flanders’ experience for those interested in organising the maturity assessments process:

- Consider that people will focus on the assessment scales, which may be subject to different interpretation at the stage of the individual assessments. However, the wording of the assessment scales became less important during the consensus discussion.
- Clarify at an early point in the process whether the self-assessment should consider the whole care system (Flanders) or should assess from the point of view of the area of expertise and the zone of the assessor.
- The online Tool was not for practical for everyone to use: be prepared to intercept and pro-actively assist. If not, people may get bored using the Tool.

On reflecting about the SCIROCCO Exchange Tool, the process and the continuation of the Tool: the question was will it be a Tool only for the regional level - meaning the Flanders Primary Care Institute or can it be used by the Primary Care Boards?

Feedback from the participants about the maturity assessment process:

The Tool and the process are inspiring to:

- learn to get to know each other;
- bring in the different contexts, disciplines;
- get out of the individual level or the familiar sector;
- note how during the consensus-building workshop the scores moved towards an average.

The Tool can be used as a means for a future task division or to unfold ‘blind spots’ to:

- get a comprehensive view of which elements of integrated care are still missing in Flanders’s region;
- provide an inspiration for the policy plan of VIVEL;
- provide a means for the different organisations to identify where they can improve the reform process towards person centered care;
- provide a basis for VIVEL to exchange good practices with other countries and regions, as well as internally within Flanders and Belgium;
- provide an opportunity to assist in capacity building at regional level to get people motivated.

5. Conclusions and next steps

In conclusion, Flanders will move on with the use of the Scirocco Exchange Maturity Assessment Tool towards the local level.

1. Within a year or so, VIVEL will use the Tool again;
2. On 31/01/2020, Flanders organised a small workshop with the research community which was very inspiring. Those that participated came from the VUB (University of Brussels), the Ugent (University of Ghent), the King Baudouin Foundation (KBS), the Flemish Institute on Quality in the Care - VIKZ - VIVEL - Chronic Care projects from the Federal level. We agreed to move on and to test (within the research communities and partner organisations) how to amend the SCIROCCO Exchange Tool for the Flanders Primary Care Boards. There was a strong voice to include the Patient Organisations in order to lower the threshold of the text of the dimensions.
3. Next step for the Scirocco Exchange Tool: the development of a business model to use the Tool after the project.

Conditions to make the local implementation successful:

1. A discussion with the partners about whether an extra Dimension on Goal Orientated Care is feasible and desirable to be added in the current structure of SCIROCCO Exchange tool.
2. The Consensus workshop agreed that it would be interesting to offer the SCIROCCO Exchange Tool to the Care Boards. It will help them to structure the dialogue in a uniform and standardised way which will allow them to discuss the results with other Care Boards. Before reaching this stage, the following should be checked / be allowed to modify:

- a. It remains an abstract exercise, so it should be linked to something practical/concrete; some ideas from Flanders:
 - i. Use the Tool as the basis of a ‘learning network for Primary Care Boards. The first five best Primary Care Boards share information with other Care Boards.
 - ii. Use the Tool within the context of a Knowledge Platform.
- b. Clarify the questions about the content and structure of the SCIROCCO Exchange Tool and discuss with the project partners if the following can be considered:
 - i. Social Cohesion and Welfare - wellbeing should be a clearer focus in the Scirocco Tool. Current focus is on the ‘Health Care Systems’.
 - ii. Carefully look at the description of the dimensions and see if digitalisation is not dominant. (e.g. Dimension 2)
 - iii. Although the 12 Dimensions were considered relevant, participants observed that the financial and regulatory elements were understandable from a regional point of view but less so from a local level. We are looking forward to hearing about the experience of the regions where the local levels have used the Tool.
- c. Tailor the text to the users in the Flanders Primary Care Zones (together with Research Community, Patient Organisations):
 - i. The translation of Population Based Approach is not “Public Health Approach” (Volksgezondheidsbenadering)
 - ii. The meaning of Risk Stratification is not adapted to the Flanders context.
 - iii. Use process facilitators and foresee them also facilitating the process for the local Care Boards.

Annex 1 - Self-Assessment Workshop in Flanders Region - Agenda

Donderdag 16 Januari 2020

Herman Teirlinck gebouw - 01.16 Rik Wouters, Havenlaan 88, 1000 Brussel.

8.30 - 9.00 Welkom
9.00 - 9.40
Inleiding en bespreking toepassing Assessment Tool door Caroline Verlinde - VIVEL
Vooraf een korte reflectie door iedereen die de Assessment invulde over de context en de invalshoek van zijn/haar 'individuele' assessment, zoals: eigen invalshoek ; invalshoek van de organisatie; rekening houdend met Vlaamse en / of Belgische context.
9.40 - 12.15:
Bespreking van de scores - dialoog - consensus
Thomas Boeckx en Anneleen Craps (Z&G) faciliteren de discussie. Sol Wallyn en Elke Verbesselt (Z&G) nemen nota. We proberen kort terug te koppelen na iedere bespreking.
De dimensies die worden voorgelegd:
<ol style="list-style-type: none"> 1. Dimensies waar de scores het verst uiteen liggen: <ol style="list-style-type: none"> a. Structuur en goed bestuur (0-4) b. Omvang van de ambitie (0-4) 2. Dimensies met een verschil van 0 - 3 of 1 -4: <ol style="list-style-type: none"> a. Mondig maken ('empowerment') van de burgers (1-4) b. Procescoördinatie c. Evaluatiemethoden d. Capaciteitsopbouw e. Volksgezondheidsbenadering f. Financiering
Hoe: We blijven in één groep en gaan met elkaar de dialoog aan. De dialoog gebeurt in de eerste plaats door de uitersten in de opinies voor te leggen en uit te leggen. De individuele assessments in pdf liggen geprint klaar voor hen die deze vergat.



D5.1 Readiness of European Regions for Integrated Care

Annex D: Self-assessment process in Werra-Meißner-Kreis, Hesse, Germany

WP5 Maturity Assessment for Integrated Care

Document information

Organisations responsible for conducting the self-assessment process:

- OptiMedis AG
- Gesunder Werra-Meißner-Kreis GmbH

Authors

Fritz Arndt, Sophie Wang, Dr. Oliver Gröne

Delivery date - 31 January 2020

Dissemination level

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Statement of originality

This Report contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

Disclaimer

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<u>4</u>	<u>Key messages</u>	Error! Bookmark not defined.
<u>5</u>	<u>Conclusions and next steps</u>	Error! Bookmark not defined.

1. Introduction

The goal of Gesunder Werra-Meißner Kreis Ltd. (GWMK) is to reduce the projected increase of costs of health insurances by improving health literacy, care coordination and offering guidance in the German healthcare system. To achieve its goal, GWMK is building a “health network” with insurance members as well as healthcare professionals of all kinds.

A core project is the establishment of “health guides” (“Gesundheitslotsen”). For example, physician/pharmacy assistants, therapists, midwives are trained and supported by GWMK to be low threshold points of contact for insurers. Health guides by means of motivational conversation and a special GWMK questionnaire nudge the insured to form their individual health target and to sign a target agreement. Moreover, health guides are provided an extensive map of (ideally) all prevention offers and health care services in the region by the GWMK back office. The health guides time to consult the insured is reimbursed by GWMK.

Another part of GWMK is the establishment and management of local sector-transcending treatment pathways with health professional network partners.

Third, GWMK is supporting its members contact to case management services e.g. by offering telemedicine services in conjunction with a partnering company.

Finally, GWMK offers self-management courses.

1.1 Characteristics of the healthcare system

Item	Description
Region	Country (“Land“) = Germany State („Bundesland“) = Hesse County („Landkreis“) = Werra-Meißner-Kreis
Geographical scale of the region	Regional (State, province, territory)
Geographical size and dispersion of the region (km²)	1,024.55 km ² ¹
Population size of the region (thousands)	100,965 ² (GWMK Target population ~21.000 based on health insurance contract)
Population density of region (inhabitants/km²)	99/km ² ²
Life expectancy of the region (years)	Germany (born 2015): Male = 77,7y; Female = 82,7y ³ (born 2015, p.98)
Fertility rate of the region (births/woman)	1,4 (year 2015) ³ (2019, p.98)
Mortality rate of the region (deaths/1,000 people)	5,7 / 1000 people (574 / 100.000 people) ³ (2013, p.190)
Top three causes of death of the region	Ischaemic heart disease, acute myocardial infarction, malignant neoplasm of the bronchi and lungs ³ (2013, S.189)

Item	Description
Organisation and governance of healthcare services	Germany has a Bismarck type of healthcare system based on individual insurances, e.g. health insurance. Up to a certain income threshold, every person living in Germany must have (or is provided with) a statutory health insurance. However, people are free to choose their own provider (2019: 109), all of whom are in competition. People with higher income than a certain threshold, as well as civil servants, have to take private insurances; 10,7% of Germans are privately insured. Ambulatory physicians, who want to treat statutory insured people, need to be member of a “Kassenärztliche Vereinigung” (KV) (1 per state). Health insurances pay a lump-sum to the KV based on their members residence and comorbidities. The KV is then responsible to budget and manage ambulatory health care delivery. Hospitals are paid in two ways: building maintenance and long-term investment are paid by the state government. The running costs are paid directly by the health insurances to the hospital’s management organisation.
Healthcare spending of the region (% of GDP)	Hesse: 28,3 billion € ^{4 (2017)} / 279,1 billion € ^{5 (2017)} = ~10,1% WMK: BIP 2,4 billion €
Healthcare expenditure of the region (thousands)	Hesse: 28,3 billion € ^{4 (2017)}
Distribution of spending in the region	No data. See description “Organisation and governance of healthcare services”. The overall German budget structure makes it difficult to source reliable data.
Size of the workforce (thousands) and its distribution (%) in the region	<ul style="list-style-type: none"> • 36 pharmacies • 67 general practitioners’ practices • 2 general hospitals • 7 specialist clinics (mainly orthopedic rehabilitations, historic cluster of five clinics in the town Bad Sooden-Allendorf) • 59 outpatient specialist practices (2 anesthesia, 6 ophthalmology, 1 surgery, 9 gynecology, 4 ear, nose and throat medicine, 2 skin-and venereal diseases, 22 inner medicine, 2 neurology, 9 orthopedics, 2 urology). • 66 dentist practices • 65 physiotherapists’ practices • 17 fitness centers • 13 ergo therapist practices • 14 logopedic practices • 21 psychological psychotherapist practices • 7 children & adolescent psychotherapist practices • 35 Ambulatory care service • 27 nursing homes
Healthcare policies in the region	Werra-Meißner-Kreis key policies ^{7,8} :

Item	Description
	<ol style="list-style-type: none"> 1. Keep and attract general practitioners (a large proportion of general practitioners are over 60 years of age and are looking for younger colleagues to take over) 2. Secure the existence of the two hospitals in the region. In Germany, there is a debate to reduce the number of hospitals in general. Especially, the clinic in Witzenhausen could be subject to closure, which was discussed in the past. However, the hospitals are owned by the county and represent a major employer. 3. Attract and secure more caregivers for ambulatory and stationary care; the population is aging, and young people are unable to find jobs, so they move away. The older population stay in the area and, on average, live longer. Currently, most of the caregivers are relatives themselves rather than other professionals. However, intergenerationally, family structures are changing and it is assumed, more and more people will need professional care sooner.

1.2 Integrated care in Werra-Meißner-Kreis

The outcomes of maturity assessment showed that, in Germany, there is a lot of debate and awareness of integrated health and care. However, historically developed structures (especially different financing of ambulatory and hospital care) gives little incentive for a professional to move forward individually. Moreover, ambulatory general practitioners in Germany are historically very independent and feedback averse. Furthermore, the digital infrastructure in Germany is below an acceptable level due to the government subscribing to contracts that do not incentivise telecommunication companies to service the countryside efficiently. Low incentives for professionals to cooperate together, coupled with a weak digital infrastructure, proves that there is significant room for improvement in delivering integrated care. In conclusion, Gesunder Werra-Meißner-Kreis GmbH gives an approach within the existing fundamental structural of the German health care system, building an incentive framework for professionals and advancing the digital transformation of the region.

2. Self-assessment process in the county Werra-Meißner-Kreis

2.1 Identification process of the local stakeholders

The search for local stakeholders was divided in two parts. First, Gesunder Werra-Meißner-Kreis GmbH organised and supported an interdisciplinary quality circle of 12 regular members. Thus, it was decided to integrate the SCIROCCO Exchange assessment into the work of the interdisciplinary quality circle. Second, in a separate analysis, a number of important local stakeholder were identified: regional hospital management and physicians, health insurance manager of regional health insurance, lawyer (medical law), pharmacies, regional government health department, 'Kassenärztliche Vereinigung Hessen' = representative organisation for ambulatory GP's and specialists, representative of regional physician networks.

Table 1: List of stakeholders conducting individual assessments

Gesunder Werra-Meißner-Kreis	1x Branch Manager, 1x Health Care Manager
Health insurance	Team lead for care services of BKK Werra Meißner
Pharmacy	1x Pharmacist
Physicians	1x GP
Lawyer	1x Lawyer (medical law); involved in planning of an ambulatory specialist physician center in the region

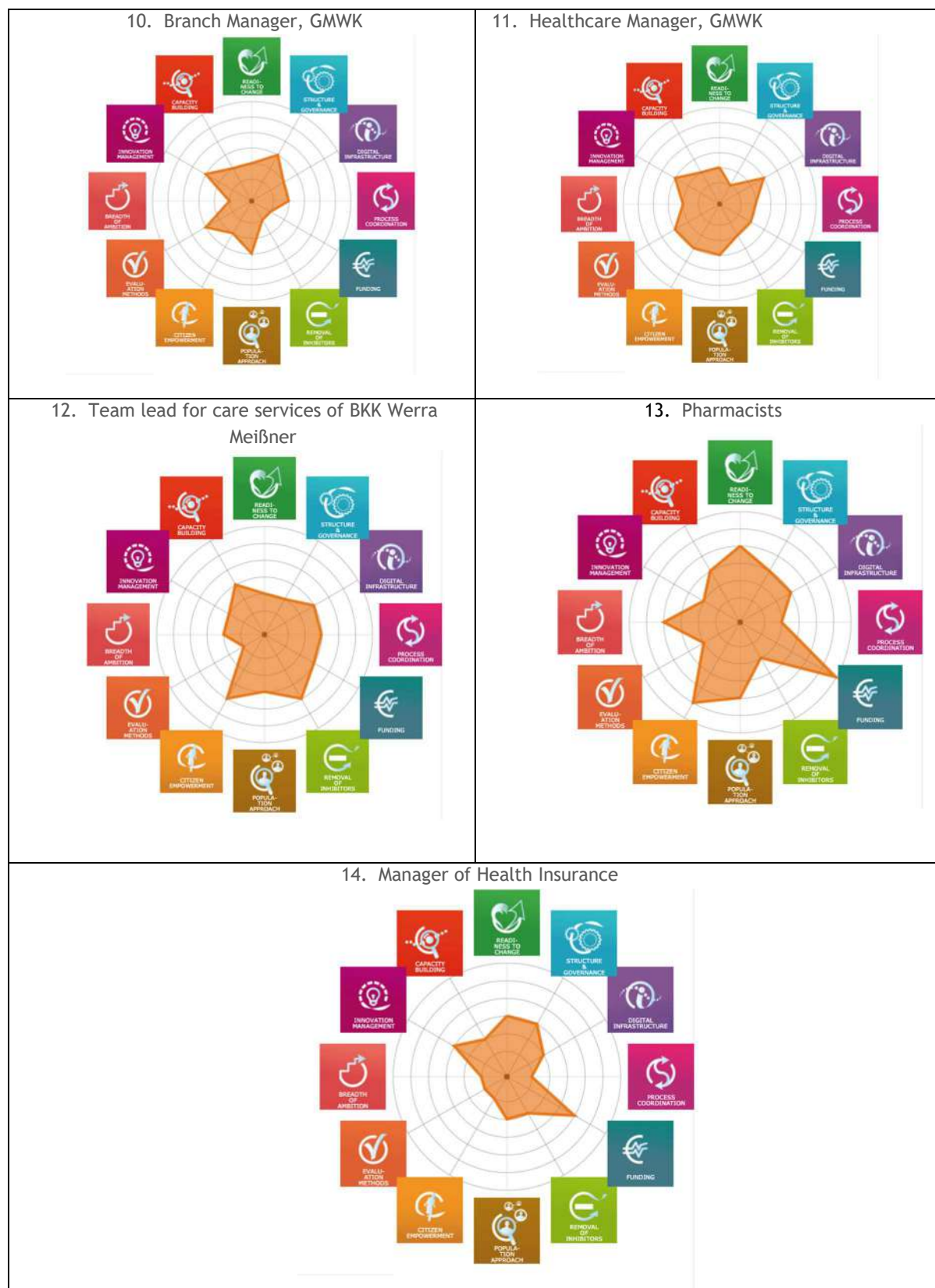
2.2 Self-assessment survey

First, in the beginning of October 2019, invitation emails to participate in the maturity assessment process were issued, including the link to the online self-assessment tool and a date for a local workshop at the end of November 2019. However, this approach was only partially successful due to a lack of interest and/or time constraints. Another reason was also the lack of instructions on how to complete the survey, hence 2-page instructions (translated into German) were provided. As a result, the consensus-building workshop was postponed to the end of January 2020. Six people filled the online questionnaire prior to the workshop. Other stakeholders were offered the opportunity to complete the assessment survey on the day of the workshop.

2.2.1 Outcomes of self-assessment survey

6 stakeholders filled in the survey and 5 of them successfully shared their assessments and provided justifications (features) of their ratings. The following spider diagrams reflect the diversity of the stakeholders' perceptions on the maturity of the GWMK for integrated care.

Figure 1- Outcomes of the individual self-assessments



2.3 Stakeholder workshop

The stakeholder workshop was organised on 24 January 2020 and 13 stakeholders made a commitment to participating in the workshop. In the end, 9 stakeholders participated at the meeting (Table 2).

Table 2: List of stakeholders participating in the consensus-building workshop

Self-employed	1x Nutritionist
Pharmacy	1x Pharmacist
Fitness studio	1x CEO
Medical supply store (Sanitätshaus)	1x Manager Care Management
Health insurance	(BKK Werra Meißner): 1x Team lead (care services: Remedies and aids) (online survey)
Therapy	1x Physiotherapist + Osteopathist
Association for mental health / Psychiatry	1x CEO
Physicians	1x GP + Internist (online survey), 1x GP + chairman regional physician network
Care	1x Care Consultant

As mentioned in section 2.2 above, there was a mixture of responses; some assessments were done online previously, and some stakeholders provided their individual assessments on paper on the day of the workshop (Table 3).

Table 3: Individual assessments grouped by profession

Assessment	Profession	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
1 Workshop, 1 online	Pharmacists (2)	2 & 3	0 & 0	1 & 2	1 & 1	1 & 5	1 & 1	1 & 3	2 & 4	0 & 1	1 & 3	0 & 1	0 & 2
2 Workshop, 1 online	General practitioner (2)	2 & 2	2 & 2	1 & 2	1 & 3	1 & 1	1 & 1	0 & 2	1 & 4	1 & 1	0 & 0	0 & 2	1 & 2
Workshop	Physiotherapist	3	2	1	1	1	0	0	3	0	1	1	1
Workshop	Nutritionist	1	2	1	4	1	1	2	1	2	1	1	0
Workshop	Manager Psychiatry	2	2	1	1	1	0	0	1	0	0	0	0
Workshop & online	Manager Health insurance	2	2	2	2	3	1	1	3	1	2	1	2
Workshop	Manager (old age) Care	1	1	0	1	1	1	1	1	1	1	0	1
Workshop	Manager fitness studio	2	1	1	1	1	1	/	1	/	1	1	/
Online	Health Care Manager (GWMK)	1	0	2	1	1	1	2	2	2	1	2	1
Online	Health Care (Branch Manager) (GWMK)	1	2	1	1	0	0	2	1	2	0	2	1

2.3.1 Negotiation and consensus building

The participants started the workshop by filling out the assessment and taking notes on a separate sheet. After everyone filled out the questionnaire, the results were collected by a show of hands and summarised on paper. These outcomes were then inputted into the SCIROCCO Exchange online self-assessment tool.



In general, the health insurance manager gave the highest maturity scorings while the manager for ambulatory psychiatric patients gave the overall lowest scores for the two dimensions that had the highest variances; Q4 - Process Coordination and Q8 - Citizen Empowerment. However, in the end, they did not heavily influence the overall groups' consensus score.

During the workshop, the physician leading a regional physician network became the informal discussion lead. Since she is very involved in the building of integrated health care processes for her practice, she offered a lot of insight and brought some arguments that other participants could elaborate on.

2.3.2 Final consensus

The spider diagram and the Table below illustrates the outcomes of the final consensus on the maturity for integrated care in Gesunder Werra-Meißner-Kreis GmbH.



Figure 2: Final spider diagram

Dimension	Scoring	Justifications & Reflections
Readiness to Change	1	Lots of professionals see the need to change, however, there is a lack of political will to fundamentally change the existing structures. Ideas and vision on integrated care are present, but requirements necessary for the implementation of change are unclear, and an overarching concept is missing.
Structure & Governance	2	Health care professionals are interested in working across the professions and disciplines; however, the existing structure does not support this collaborative working. Structure and governance should be put in the hands of physicians. Two physician networks in region are working internally and are not willing to structurally open up to outside professions
Digital Infrastructure	2	Broadband internet connection in Werra-Meißner-Kreis is only in deployment. County and local cities should support broadband installation. There exists a standardised hard- or software to connect ambulatory and stationary care as well as other parts in one closed information system.
Process Coordination	2	Individual professions possess good guidelines, however, there is no standardisation of guidelines between professions.
Funding	1	There is a lack of dedicated funding for integrated care; and mostly only for the pilot projects.

Dimension	Scoring	Justifications & Reflections
Removal of inhibitors	1	Cultural change needs to happen to redefine health as more than the ability to earn money for physicians; holistic patient centered care with a focus on prevention is needed. Lack of political support, dedicated funding and weak digital infrastructure are perceived as major inhibitors.
Population Approach	1	Risk groups exist in theoretical concepts; they are not used to develop professions' overarching regional care concepts.
Citizen Empowerment	2	Age-based demographic problems: unwillingness to deal with the internet where most of health information can be accessed (e.g. Dr. Google, health portals, gesundheitsinformationen.de). People are very subjective of what constitutes a healthy lifestyle. Health insurances offer online courses for empowerment. Finally, there is no structured and easy access to health data.
Evaluation Methods	1	This dimension was not discussed as individual assessments were quite consistent.
Breadth of Ambition	1	This dimension was not discussed as individual assessments were quite consistent.
Innovation Management	1	This dimension was not discussed as individual assessments were quite consistent.
Capacity Building	1	Capacity building is not incentivised (money for time); professionals are on their own to develop themselves.

3. Analysis of the outcomes

In general, the outcomes of the maturity assessment process reflect the actual situation in the region. However, dimension Q3 - Digital infrastructure scored quite high compared to the reality. There is no integrated digital platform allowing the flow of information between different professions and health care areas.

There are no results which would be particularly surprising. Surprising was rather the discussions held during the meeting. For example, discussion between physicians and the pharmacists; urging the pharmacists to take more action regarding medication management and the prevention of over-medication. This discussion was surprising, as the average German assumes that these professions work very close together already. On the other hand, this is a case where physicians seeking support could use digital services for the management of medication if it existed rather than relying on the human resources which are often very limited.

The dimension of Digital Infrastructure was a focal point of the discussion. It was agreed that this dimension is very much linked to other dimensions such as Q2 - Structure and Governance, Q4 - Process Coordination, Q6 Removal of Inhibitors as well as dimension Q8 - Citizen Empowerment. This lack of functional infrastructure is borne in decisions of previous German governments who signed contracts with telecommunication providers that do not compel those provider to cover the countryside (rural areas). Based on capitalistic thinking, the digital infrastructure is strongest where most people can buy stuff online, i.e. the cities, and not where distances need to be bridged, i.e. for telemedicine in rural areas. This leads

to a situation where it is not feasible for physicians to offer innovative applications for the management of patient appointments, due to too few people adopting the service. Moreover, there does not exist a single communication system where all regional health care providers could communicate with each other.

The workshop identified four dimensions with the highest score of 2. For GWMK the dimension Q8 - Citizen Empowerment is perceived as a strength, however further work is needed to increase the maturity of this dimension.

The dimension of Digital Infrastructure is the main problem and weakness of integrated health care in the region. Patients do not have their health and care information readily available, nor can be easily accessible by other health and social care professionals. In fact, data gets deleted after 7 years, when even health insurances anonymise personal data and the treating physician does not save the data individually. Moreover, neither a communication platform for patients with professionals, nor between professionals exists. Finally, even if there were digital solutions, people could not use them (i.e. running apps) since between population centres the internet connection is not strong enough to support the needs of modern health care apps (i.e. everything more than text). However, since the improvement of the internet connection is out of scope for health care professionals, we propose to focus attention on the other dimensions.

Modern Process Coordination fundamentally builds upon a reliable digital infrastructure. Now inter disciplinary working and coordination is mostly reduced to referrals. The extent of the coordination is determined by the individual health care providers. The interdisciplinary quality circle that GWMK is supporting is a first step to remedy this issue. However, there is great potential for improvement.

Finally, low citizen empowerment is also strongly connected to the lack of digital infrastructure. Access to personal health information is obstructed and good sources of health information generally unknown. For example, the German government took steps to build a repository of health information (www.gesundheitsinformationen.de) that is supposed to give all German citizens the opportunity to find scientifically researched answers to the most pressing health care needs and illnesses. However, the institute that provides the repository (Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen (IQWiG)) does not get funding to disseminate their services to the wider German population. The IQWiG was happy to receive a request from GWMK asking for flyer/information material in order to help with the advertisement for their services. Now GWMK is in negotiation to get a technical access to the repository in order to integrate the information in the daily business and keep it automatically up to date.

As a priority, GWMK is interested to strengthen the aspects of process coordination and citizen empowerment as well as improving the digital infrastructure.

Some specific factors may have influenced the outcomes of the maturity assessment process, in particular geographical ones. The county Werra-Meißner-Kreis is divided by a mountain ("Meißner"). The northern half and southern half were independent counties till 1974. This still creates an anecdotal rift between the populations who argue who lives on the front or

back of the mountain. In practice, this division is incorporated by the two existing physician networks, one north, one south of the Meißner, which do not cooperate on a broad scale.

4. Key messages

First, we observed that stakeholders in our region do not favour online questionnaires. The fundamental question needs to be asked: “Should we, just because we can?” In this sense, the digitalisation and insistence on the online use of the SCIROCCO Exchange Tool was perceived as a barrier in the maturity assessment process. Offering a face-to-face meeting (workshop) helped to motivate the selected stakeholders to fill in the assessment. As a result, we would like to recommend also using the SCIROCCO Exchange Maturity Model in a paper-based format, where more appropriate.

Secondly, stakeholders were often confused from which perspective they should provide the scoring e.g. if it is from a personal, professional or regional view. This needs to be emphasised more strongly in the SCIROCCO Exchange assessment methodology.

Finally, the online assessment is not easy to use, especially when there is a language barrier. This is particularly the case for healthcare professionals. To overcome this, a leaflet with instructions on how to use the SCIROCCO Exchange online self-assessment tool was created.

5. Conclusions and next steps

The assessment demonstrated that GWMK is at a low maturity level regarding the implementation of integrated care. While the overall rating is plausible and has face validity amongst participants, the majority of items are phrased in fairly generic terms and difficult to answer by healthcare professionals working on very concrete activities. In terms of next steps, we will contemplate specific improvement actions in line with our GWMK portfolio of actions in order to achieve the current maturity level.

Annex 1 Self-Assessment Workshop in Werra-Meißner-Kreis - Agenda



Agenda

24.01.2020 15:00-18:30 (left over time for interdisciplinary quality circle)

Planned time: 2,5h (Assumed time: 3h)

15 min: Welcome & Introduction

30min: Project description and individual survey

10min: Break

70min: Negotiation and consensus building

10min: Break

15min: Conclusion

Real time: 3,5h due to prolonged discussions in the negotiation and consensus building phase



D5.1 Readiness of European Regions for Integrated Care

Annex E: Self-assessment process in Lithuania

WP5 Maturity Assessment for Integrated Care

Document information

Organisation responsible for conducting the self-assessment process in Lithuania:

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1. Introduction

Vilnius University Hospital Santaros Klinikos (VULSK) is one of the major hospitals in Lithuania, encompassing the provision of medical care in almost all key areas.

Vilnius University and the Lithuanian Ministry of Health are the founders of Santaros Klinikos. The activities of the Hospital encompass practical and scientific medicine, education of students and residents, continuing professional training of medical specialists, modern management based on modern information technology solutions is applied.

1.1 Characteristics of the healthcare system

Table 1. Characteristics of healthcare system

Item	Description
Country	Lithuania
Geographical scale of the country	National (Country-wide)
Geographical size and dispersion of the country (km ²)	65 286 km ²
Population size of the country (thousands)	2 794 184
Population density of country (inhabitants/km ²)	42,8
Life expectancy of the country (years)	75,8
Fertility rate of the country (births/woman)	1,676
Mortality rate of the country (deaths/1,000 people)	14,2
Top three causes of death of the country	Ischemic heart disease, Stroke, Alzheimer's disease
Organisation and governance of healthcare services	The organisation and governance of the system in Lithuania are typical of many European countries and have been remarkably stable in the past 20 years. The Ministry of Health (MoH) and the National Health Insurance Fund (NHIF) are the main central institutions, with local administrations playing an important role in service delivery. The MoH, supported by a handful of specialised agencies, formulates health policy and regulations. Insurance coverage is provided to the population by the NHIF. In order to obtain coverage, the active population must contribute to the NHIF. The economically inactive, including

Item	Description
	<p>children and students, pensioners and the unemployed, constituting 54% of the population in 2016, are automatically covered. The NHIF purchases all personal health services, and contracts with public and private providers on equal terms. The 60 municipalities of Lithuania own a large share of the primary care centres, particularly the polyclinics, and small-to-medium sized hospitals. They are also responsible delivering public health activities.</p> <p>Service delivery continues to be dominated by a large and mostly public hospitals', but outpatient service delivery is increasingly mixed. Inpatient services remain mostly publicly provided and the total number of beds, 7 per 1000 population, is well above the OECD average of 4.7. Specialist outpatient care is delivered through the outpatient departments of hospitals or polyclinics, as well as by private providers. Private providers play an increasing role in the rapidly developing day care and day surgery segment as well as in diagnostic and interventional imaging services. In the Lithuanian system, primary care routinely acts as a first contact point with the health system for patients. It is delivered in public or private health care centres, where general practitioners (GPs) often practice alongside other primary care specialists such as paediatricians, gynaecologists and mental health practitioners.</p> <p>Primary care is provided in either municipality-owned facilities or typically smaller private practices.</p>
Healthcare spending of the country (% of GDP)	6,5
Healthcare expenditure of the country (thousands)	2,58 billion (2016)
Distribution of spending in the country/region	Approximate distribution: Primary care 20%, reimbursed medication 20%, Secondary and tertiary care 60%.
Size of the workforce (thousands) and its distribution (%) in the country.	Lithuania has more physicians and fewer nurses per capita than the OECD average and their geographic distribution is a concern. Despite emigration of health staff, Lithuania has retained a relatively high number of physicians: 4.3 per 1000 population versus 3.4 in the OECD. The ratio of nurses to population on the other hand is below

Item	Description
	<p>the OECD average. Specialists, in particular, are unequally distributed across the country. In order to attract staff in peripheral areas, GPs receive a higher capitation payment for patients living in rural areas, and hospitals/municipalities offer higher salaries. In conjunction with municipalities, the government has recently put in place grants for medical students willing to work in remote areas.</p> <p>In 21 municipalities, 70 mobile teams provide integrated services (nursing and social care) at home, including support to their informal care givers.</p>
Healthcare policies in the country/region	<p>Primary health care (an increase of the funding), prevention programs are being developed, and healthy lifestyle specialists are integrated into family health centers. Great attention is paid to e-health. Electronic disease historiography. Remote consultations. Image Database. Outpatient care is increasing (also in secondary and tertiary care).</p>

Sources: *OECD REVIEWS OF HEALTH SYSTEMS: LITHUANIA 2018*.

<https://www.oecd.org/countries/lithuania/lithuania-9789264300873-en.htm> Statistics Lithuania, 2019.

<https://www.stat.gov.lt>

1.2 Integrated care in Lithuania

One of the main priorities in Lithuania is to strengthen public health services at local level, including disease prevention healthy lifestyle promotion and raising population's health literacy, implementing integrated health services.

A functional integration of primary health care and public health surveillance activities started in 2015.

Teamwork in family medicine has been introduced and expanded. Presently, the family physician team consist of family physician (GP), nurse, midwife, nurse assistant, physiotherapist, lifestyle medicine specialist and social worker.

The Lithuanian government runs structural reform that focuses on the development of GPs for outpatient health care services. Special emphasis is on the implementation of innovative multimorbidity health service models at national level. Unfortunately, the ratio of nurses to population and the ratio of nurses to physicians are below the OECD average. Health care specialists are unequally distributed across the country.

Legislation to develop models on integrated care is approved by the government, but there are still many challenges to overcome in practice. We can conclude that integrated care in Lithuania is taking its first steps.

2. Self-assessment process in Lithuania

2.1 Identification process of the local stakeholders

The selection of the stakeholders was based on the idea to cover a more comprehensive overview of the situation to better expose the weaknesses of the local environment of integrated care in Lithuania. The scope of the assessment consisted of 4 stakeholders' groups:

- **The Primary Health Care Centres (PHCC) from different cities of Lithuania** were selected as the main stakeholders' group. This group consisted of the following stakeholders:
 - Public PHCC, Vilnius: administrator, chief, nurse, resident, a family physician.
 - Public Institution "Center for Integrated Health Services", Panevezys: a family physician, midwife, chief, lawyer, social worker.
 - Public PHCC: family physician, administrator, chief, nurse.
 - Private PHCC, Kaunas: family physician, chief, nurse.
 - Private PHCC, Vilnius: family physician, regional manager, administrator, chief, nurse.

All other groups were selected as stakeholders in the integrated care system. These groups were as follows:

- **Medical Doctors from different fields:** cardiologists, pulmonologists, allergist, endocrinologists, gastroenterologists, nephrologists, geneticists, pediatricians.
- **Government:** Ministry of Health.
- **Patients.**

2.2 Self-assessment survey

The assessment process was organised in several steps.

- The adaptive translation of the SCIROCCO Exchange Tool into Lithuanian language was provided on 15 July 2019.
- The pilot self-assessment process was performed on 20 July 2019. During this assessment, we learned that not all stakeholders are able and willing to understand the concept and the need for the assessment.
- To attract more stakeholders, a webinar was organised on 16 October 2019 to provide further insights on the process.
- After the webinar, other participants of the integrated care system were added to the self-assessment process.

Totally, 65 stakeholders took part in the self-assessment process of Lithuania, of which:

- 30 stakeholders were from PHHC group
- 20 Medical Doctors from different field
- 1 stakeholder from the Ministry of Health
- 14 patients.

Each stakeholder was given the presentation and the translated SCIROCCO Exchange tool. Some clarifications were needed most of the time, but we provided the support and explanations live or online. Stakeholders were not so willing to give feedback or some comments.

2.2.1 Outcomes of self-assessment survey

As the scope of the survey covers 65 stakeholders' opinions, the results of the self-assessment survey were analysed according to the stakeholders' groups, and finally, the spider diagram of the total results was done (Figure 1).

Figure 1: The results of the self-assessment process of PHCC and Specialist



The spider diagram of PHCC

The spider diagram of Medical Doctors

Comparing the results of PHCC and Medical Doctors, it can be concluded that some similarities exist. The most significant discrepancies were observed in the following domains: Evaluation Methods (PHCC - 2, Medical Doctors - 0) and Breadth of Ambitions (PHCC - 3, Medical Doctors - 0). Both dimensions were ranked much more positively by PHCC. Such results may have been influenced by the specialists' more practical point of view as they rely on practice.

Figure 2: The results of the self-assessment process of Patients and the Ministry of Health



The spider diagram of Patients

The spider diagram of the MOH

Comparing the results of Patients and the Ministry of Health, it can be concluded that there are no similarities at all. It highlights the problem of miscommunication between patients and the government.

There could be several assumptions about why this happened. The Ministry of Health works on a legal basis, they are well informed and are defining the priorities, while patients have a completely opposite view, very practical, usually very biased, based on their personal experience, with limited information on theoretical priorities or strategic plans. Doctors, including family physicians and medical doctors from different fields, do have not enough time during the consultation time to explain all the possibilities and present additional options related to the integrated care to the patient. In any case, there is a considerable difference in the information available and the situation perceived between all groups involved.

Figure 3: The spider diagram of the total results



The spider diagram of the total results is the representation of the opinions of 65 stakeholders (Figure 3). The maximum score of the self-assessment survey is 3 out of 5. Only two dimensions were ranked with a score of 3; “Digital Infrastructure” and “Population Approach”. Only one dimension: “Process Coordination” was ranked with a score of 2. The dimensions of “Finance and Funding”, “Evaluation Methods”, and “Breadth of Ambition” were ranked with the lowest score of 0. The other 6 dimensions were ranked with 1.

2.3 Stakeholder workshop

The stakeholder workshop for the consensus-building was organised on 4 December 2019, in VULSK. The meeting was planned for 1,5 hours, but due to negotiation and consensus-building process, it went a bit longer than we expected, but the meeting was very fruitful. All stakeholder groups participated in the discussion.

The overall outcomes of the self-assessment survey were presented, and each dimension out of 12 was discussed separately.

The agenda of the workshop, photos and the list of participants are attached as the Annex 1.

2.3.1 Negotiation and consensus building

In the table below (Table 2) the total results of the self-assessment survey before and after the consensus workshop are expressed.

Table 2. Total results of the self-assessment process before and after the workshop expressed (in values)

Dimension	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Results before workshop	1	1	3	2	0	1	3	1	0	0	1	1
Final consensus after workshop	2	2	3	2	2	1	3	3	2	2	2	2

The comparison of the total results of the self-assessment survey before the workshop and after the workshop is presented in Figure 4.

Figure 4: Total results of the self-assessment process before the workshop and after



The spider diagram of the total results before the workshop

The spider diagram of the total results after the workshop

During the negotiation and consensus-building process based on the total results of the self-assessment survey, all of the 12 dimensions were discussed thoroughly, especially those with the most significant differences in scoring and the consensus was built.

The following three dimensions were highlighted as priority dimensions for further improvement:

- Process Coordination
- Removal of inhibitors
- Capacity Building.

2.3.2 Final consensus

Figure 5: The final spider diagram of the results of the self-assessment process



Table 3: Scores, Justifications and Reflections assigned to each of the dimensions

Dimension	Scoring	Justifications & Reflections
Readiness to Change	2	There is lack of dissemination of information and of coherence between governance and practice. The need for change is strongly acknowledged. The vision and the form of change are clear enough, the consensus is achieved, actions and the plan for changes are being developed.
Structure & Governance	2	LITHUANIAN HEALTH STRATEGY FOR 2014-2025 was approved on 26 June 2014. National Development Strategy: Lithuania 2030, incorporates a horizontal dimension "Health for All" which describes the implications that state policies and programmes have on population health. The structure exists, but not everyone is familiar with it.
Digital Infrastructure	3	According to the Implementation Plan (The implementation of E-Health System Development Programme for 2009-2015), during the period of 2009 - 2015, 29 e-Health projects have been already implemented, including 16 national and 13 regional projects. Information systems of the national-level and university hospitals, an Online Booking System for outpatient consultation, registers of licenses of health care professionals and health care institutions (hereinafter - HCI), register of medicines ensuring the development of high-quality electronic services of HCI have been developed under the national projects. Regional projects are focused on information systems of regional medical institutions that provide data to the central e-health information system. However, the results of the maturity assessment highlighted that the digital infrastructure is designed, but is not integrated into a universal national system, data sharing is limited. Therefore, it should be stated that the digital infrastructure is under development.
Process Coordination	2	Lithuanian Ministry of Health runs structural reform 2017-2020 within 6 focus areas. One of them - PHCC. Health structural reform consists of 5 drivers with clear objectives, milestones and Key Performance Indicators (KPI). Some guidelines and recommendations for multidisciplinary approach are provided, including horizontal and vertical integration, patient transition (from pediatric to adult services structures) as the cooperation between professionals in different fields could be named more chaotic compared to "complex".
Funding	2	Funding is mostly project-based, with the initiative coming from the medical community, but not from healthcare policymakers.
Removal of inhibitors	1	There are several Supervisory Commissions which propose measures for integrated care implementation, identify weaknesses in the legal framework and organisation of services, and actively participate in the drafting of legal documents. However, the Commissions' activities are inadequate, and meetings are not regular enough.
Population Approach	3	Health monitoring methodologies are updated regularly to assure data quality. Lithuania participated in the EU-funded InfAct project ⁴⁰ where health information system evaluation was performed. Health monitoring information are shared with EU networks and information systems. Health indicators are also monitored to form strategic documents. Not only health outcomes but also lifestyle and health behaviour of adults and children is monitored. However, there are skills shortages and cultural barriers, and some individuals' resistance to accept or get ready for changes.
Citizen Empowerment	3	The drafts of the legal acts are consulted with the public by publishing them in the legal information system (LRS). The Ministry of Health

⁴⁰ <https://www.infactproject.eu>

Dimension	Scoring	Justifications & Reflections
		invites representatives of relevant patient organisations to participate in working groups on the amendment of legislation. Although hospitals work closely with patient organisations, patients' associations and associations that coordinate patient integration should be more involved in this process.
Evaluation Methods	2	The Law of the Republic of Lithuania on Health Systems sets the objective of Health Technology Assessment to ensure optimal use of material, financial and human resources of health care and to improve the quality of health care. However, there is currently no independent, standardised, regular evaluation of integrated care services. Evaluation takes place in fields directly related to finance, but no integrated, evidence-based assessment criteria are introduced.
Breadth of Ambition	2	University Hospitals deliver horizontal integration and multidisciplinary care for rare disease patients. A significant part of the services is based on the use of ICT and vertical integration, data transfer and communication with primary and secondary care institutions. Social services and counselling are provided, but there is a lack of integration of these services with local service structures closer to the patient's home. The lack of any sustainable funding and solutions in national systems are critical issues in providing the principles of integrated care.
Innovation Management	2	Representatives from University Hospitals participate in the Monitoring Committee of the National Plan for Rare Diseases, offering innovative tools for the implementation of integrated care for rare diseases, often based on international experience. However, there is currently no mechanism to systematically collect and use this experience to stimulate and implement innovation. Innovation is encouraged, but the necessary human and financial resources are not allocated.
Capacity Building	2	Individual approaches exist at the level of the Ministry of Health, but there is a lack of communication, collaboration with services. Sharing innovations with each other in small gatherings of office staff exist, but it is very little or no sharing of innovation between services.

3. Analysis of the outcomes

It could be stated that the outcomes of the self-assessment reflect the overall maturity, even though the results vary considerably between the stakeholder groups. With a considerable number of responders, it also reflects the actual situation of the region.

The results of stakeholders' groups, patients and the Ministry of Health, were extremely different. It highlights a possible miscommunication between patients and the policy makers, which might not help when debating on the priorities for the integration of the health services.

Many connections could be distinguished between all 12 dimensions, as each of the dimension more or less interacts with each other. Though the dimensions Funding, Breadth of Ambition, Innovation Management and Removal of Inhibitors could be distinguished as there are some connections via financing, more specifically, - the lack of funding.

In comparing with the overall consensus diagram, the Digital Infrastructure dimension could be considered as the current strength in terms of integrated care in the region. In addition, Population Approach and Citizen Empowerment could be named as having stronger maturity, but there is no dimension where enough maturity was reached. All 12 dimensions in the region require further improvements.

In comparing the overall consensus diagram, Removal of inhibitors has the lowest maturity and should be considered as our main area of weakness. Besides this, the other two dimensions, Process Coordination and Capacity Building, were highlighted as priority dimensions for changes / improvement in the region.

From the cultural perspective, the lack of willingness to deal into complex issues could be named as one of the factors which restricted the scope of the assessment process. The bigger scope of stakeholders participating in the assessment could have varied the assessment scores significantly, but it would not change the final consensus results.

4. Key messages

Some cultural factors restricted the smooth completion of the questionnaire, and the lack of willingness to delve into complex issues caused some difficulties in cooperating with the stakeholders.

Unfamiliar wording / terminology meant some clarifications were needed most of the time.

Different stakeholders' involvement allows reflection on the situation from different angles, providing very different results, when comparing patients and policy-makers, suggesting a lack of common views and communication between the groups. Stakeholder debates were fruitful to agree on the priorities and/or reflect on the actual situation when considering different perspectives.

Despite the obstacles, the assessment process was fruitful, generating 65 answers from 4 different stakeholders' groups. The assessment Tool, which is designed for an international purpose, is recognised as valuable and evaluated positively.

5. Conclusions and next steps

As the scope of the survey covers 65 stakeholders' opinions, the results of the self-assessment survey were analysed according to the stakeholders' groups (PHCC, Medical Doctors from different fields, Government, and Patients) and finally, the spider diagram of the total results was produced.

Comparing the results of PHCC and Medical Doctors, it can be concluded that some similarities exist. Such findings may have been influenced by the specialists' more practical point of view as they rely on practice.

Comparing the results of Patients and the Ministry of Health, it can be concluded that there are no similarities at all - thus highlighting the problem of miscommunication between patients and the government. The Ministry of Health works on a legal basis, while patients have low medical literacy, and they do not access the information.

The results of the self-assessment process before the consensus-building workshop and after varied quite strongly. The following three dimensions were highlighted as priority dimensions for changes / improvement:

- Process Coordination
- Removal of inhibitors
- Capacity Building.

Annex 1. Self-Assessment Workshop - Agenda

Agenda of the workshop at VULSK



VIEŠOJI ĮSTAIGA
VILNIAUS UNIVERSITETO LIGONINĖ
SANTAROS KLINIKOS



SCIROCCO integruotos priežiūros brandos modelio vertinimo rezultatų pristatymas ir irankio vertinimas

2019 m. gruodžio 4 d.

Vieta: Vilniaus universiteto ligoninės Santaros klinikos, 11 aukštas, A1157 auditorija,
Santariškių g. 2, Vilnius

PROGRAMA

14.05 – 14.05 **Dalyvių registracija. Seminaro tikslų ir darbotvarkės pristatymas.**

14.05 – 14.15 **SCIROCCO brandos modelio integruotai priežiūrai vertinimo rezultatų apžvalga.**

14.15 – 14.45 **Diskusija: vertinimo rezultatų išgryninimas ir bendro prioritetų sąrašo sudarymas.**

Klausimai diskusijai:

- ▶ **Didžiausi vertinimo skirtumai ir to priežastys.**
- ▶ **Faktoriai galintys lemti keletos dimensijų vertinimą.**
- ▶ **Galutinis kiekvienos dimensijos įvertis (priimtas bendru sutarimu).**
- ▶ **Kurios iš 12 dimensijų yra pasirengusios pakankamai.**
- ▶ **Kurias iš 12 dimensijų galime laikyti kaip barjerus integruotos priežiūros plėtrai.**
- ▶ **Kokie specifiniai regiono aspektai gali padėti/pakenkti integruotai priežiūrai.**

14.45 – 14.50 **SCIROCCO brandos modelio integruotai priežiūrai panaudojimo vertinimas.**

14.50 – 15.15 **Diskusija.**

Klausimai diskusijai:

- ▶ **Kokia jūsų patirtis naudojant iranki? Ar konsultavotės atlikdami vertinimą? Kas galėtų būti patobulinta?**
- ▶ **Konkrečios sveikatos ir socialinės sistemos išvalgos, į kurias būtina atkreipti dėmesį? Kokių pokyčių reikėtų jūsų regione siekiant labiau vystyti integruotą priežiūrą.**
- ▶ **Pagrindiniai faktoriai bei veiksmas lemiantys integruotos priežiūros plėtrą.**

15.15 – 15.30 **Seminaro išvados ir apibendrinimas.**

Santariškių g. 2,
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kodas 174364561, PVM mokesčio kodas LT243645610



Highlights from the workshop





D5.1 Readiness of European Regions for Integrated Care

Annex F: Self-assessment process in Poland

WP5 Maturity Assessment for Integrated Care

Document information

Organisation responsible for conducting the self-assessment process in Poland:

- National Health Fund, Poland

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Dissemination level

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Statement of originality

This Report contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

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1. Introduction

National Health Fund (NFZ), Poland is a state institution that finances healthcare benefits from contributions paid by people insured in the NFZ. Scope of the NFZ activity comprises of the management of: financial resources; determination of quality and accessibility; analysing health care costs; contracting and financing health care services; implementation of commissioned tasks, in particular those financed by the Minister of Health; monitoring of drug prescription; health promotion; and maintaining the Central Register of the Insured.

The payer function remains centralised within the NFZ, however contracting of services has been devolved to the voivodeship level - the 16 voivodeship branches of the NFZ are charged with purchasing services in their respective territories within the internal market open to public and private health care providers. Financing comes mainly from mandatory healthcare insurance contributions which are, in fact, a dedicated tax. Health care services for populations exempt from paying insurance contributions (such as children), as well as emergency medical services and certain highly specialized services, are financed from the state budget (i.e. from general tax revenues).

1.1 Characteristics of healthcare system

Table 1 - Characteristics of the Polish Healthcare System

Item	Description
Country	Poland
Geographical scale of the country	Country
Geographical size and dispersion of the country	312 679 km ²
Population size of the country	38 million
Population density of country	124,2/km ²
Life expectancy of the country	78
Fertility rate of the country (births/woman)	1,45
Mortality rate of the country (deaths/1,000 people)	1035,96
Top three causes of death of the country	Cardiovascular diseases, cancer and injuries

Item	Description
Organisation and governance of healthcare services	<p>Governance of the healthcare system is divided between the Minister of Health (and supporting institutions) and three levels of territorial self-government. The diversity of competencies, and the insufficient coordination among these levels, obstructs coordination of activities in the healthcare system. The National Health Fund (NFZ) remains the sole purchaser in the statutory health care insurance system, although there have been calls to abolish it and transfer the payer function to the Ministry of Health. The NFZ's influence over contracting has been weakened by the introduction, in late 2017, of the hospital network. Qualifying hospitals are automatically granted contracts for a period of 4 years without the need to participate in tenders. Purchasing and provision are strictly separated. The majority of hospitals are public and operate as "independent public health care units" (SPZOZs) and certain shortcomings of their legal form resulted in poor financial management. This led to attempts to transform them into companies under the Commercial Companies Code, but these efforts have recently been halted. Annually updated health needs maps were introduced in 2015 as medium- and long-term planning tools and are intended to improve contracting of services, planning of investments and health policy planning. The Polish state health technology assessment agency (AOTMiT) has an important role in determining the basket of benefits and since 2015 also has a role in setting tariffs for these services. However, NFZ continues to play an important role in setting tariffs, where tariffs have not yet been set by the AOTMiT. AOTMiT is also responsible for the appraisal of public health policy programmes. Overall, the role of HTA is strong in Poland compared with other countries in Europe. The pharmaceutical sector is extensively regulated. Recent regulations introduced, among others, are changes to pricing (to stimulate consumption of generics) and a claw-back on excessive reimbursement expenditures (to control NFZ's spending) (both introduced in 2012). The position of patients has been strengthened over the years. This includes better availability of patient information and improved protection of patient rights (e.g. the introduction, in 2012, of no-fault compensation for medical events in hospitals and special commissions to adjudicate them). In late 2014, Poland implemented the EU Directive on Patient Rights in Cross-border Health Care, but in practice access to care abroad under this Directive has been limited for Polish patients.</p>
Healthcare spending of the country (% of GDP)	6,7 %
Healthcare expenditure of the country	92,56 Billion PLN
Distribution of spending in the country/region (Please explain, if possible, what % of budget is allocated for	<p>In 2018 public spending for healthcare (excluding private healthcare and community services) were 95 million PLN, where 49,58% were allocated for hospital, 11,77% for primary healthcare and 4,92% for specialised outpatient care.</p>

Item	Description
hospital, family health (primary), community services and/or other services.)	
Size of the workforce (thousands)	567 000 health professionals - 146 000 physicians, 292 000 nurses, 41 300 dentists, 37 700 midwives, 34 800 pharmacists
Healthcare policies in the country/region	<p>Planning in the healthcare system is the responsibility of the central government administration, particularly of the Ministry of Health and the voivodes. The Ministry of Health and the voivodes are supported in this function by a variety of institutions, many of them created fairly recently. Key planning documents include: The Long-term National Development Strategy: Poland 2030. Third wave of modernity complemented by the Strategy for Responsible Development until 2020 (with perspective until 2030). These documents, developed by the Ministry of Regional Development, define the vision for the country's development in the medium and long-term. The National Strategic Framework: Policy paper for health protection for 2014-2020 (http://www.zdrowie.gov.pl/aktualnosc-2357-Krajowe_ramy_strategiczne_Policy_paper_dla_ochrony_zdrowia_na_lata_2014_2020.html), which sets out priorities for the healthcare system in connection with the planned measures that are to be financed with the support from EU structural funds allocated for the years 2014-2020. The National Health Programmes (NPZs - https://www.gov.pl/web/zdrowie/narodowy-program-zdrowia-ogloszenia) are the key medium term national health strategy documents in the area of public health. The current Programme was formulated for the 2016-2020 period. Annual Health needs maps, introduced in 2015, are the key medium to long-term health policy planning document.</p>

1.2 Integrated care in Poland in primary healthcare units

Coordinated care is planned to be implemented in Poland based on solutions developed in the pilot project "Preparation, testing and implementation of coordinated care in the healthcare system, Stage II. Pilot phase - Primary Care PLUS model" co-financed from the European Social Fund under the Operational Programme Knowledge Education Development under the European Commission Priority Axis 4 and 5 (<https://akademia.nfz.gov.pl/poz-plus/>). Project Primary Care PLUS is primary healthcare model which covers the scope of primary care (POZ), selected outpatient specialised care (AOS) and ambulatory physiotherapy (FIZ). In addition, it offers broader competences to the team of family doctors, nurses, midwives and physiotherapists (optional).

The main objective of this project is to expand and strengthen the implementation of health needs of the care population through high quality benefits, actively providing health care to

citizens regardless of their health status in a comprehensive way integrating preventive actions and corrective medicine. It is based on a targeted cooperation between the family doctor and the basic health care team (POZ), including physiotherapists and professionals. The tools to support implementation include the devolution of competences to the lowest effective level and the creation of an open communication between the entire medical staff and the patient and his/her family. Communication can improve the IT systems designed to facilitate the exchange of information on past and planned medical events and the electronic archiving of medical records between healthcare providers involved in the treatment process and the patient themselves.

The model of Primary Care PLUS covers all patients aged 18+ registered in selected 41 PHC clinic with population: ca. 300 000 patients. All patients are subjects to health check-ups and disease prevention programmes. Patients with 11 selected chronic diseases are assigned to the disease management programmes (DMP).

2. Self-assessment process in Poland

2.1 Identification process of the local stakeholders

The local stakeholders were identified from the group of Primary Healthcare Centres (PHC) in Poland that take part in Primary Care PLUS pilot project. To assess the maturity of Primary Healthcare Centres in Poland, a multilevel group of experts among the employees of the Centres was selected. There were 39 Centres which took part in the survey and 93 interviews were conducted with 2 or 3 respondents from each Centre.

2.2 Self-assessment survey

Prior to the interviews, the official invitations to participate in the maturity assessment process were sent to 41 Primary Healthcare Centres (PHC) in 16 voivodeships in Poland, 39 of which accepted the invitation.

The management of the Centres was asked to identify the key stakeholders to participate in the process. As a result, 2 or 3 stakeholders from each PHC were identified to respond the questionnaire and provide their perceptions on the maturity of the PHC for integrated care. These stakeholders included medical personnel, executives of the PHC and employee of IT department.

The local stakeholders were given the following supporting documents:

- Formal invitation to participate in the survey;
- PowerPoint presentation introducing the SCIROCCO Exchange project, including the objectives and rationale of the maturity assessment process;
- User manual how to prepare for the interview.

Phone interviews were carried out between January and April 2019. The surveys were then uploaded on the SCIROCCO Exchange Tool between April and September 2019. Outcomes of the assessment were shared with each respondent.

- PHC small-size: < 5 000 patients
- PHC medium-size: 5 000 - 10 000 patients
- PHC large-size: > 10 000 patients

Table 1 List of participants

Code	Name	Size of medical centre ⁴¹
01_01	NZOZ "PRZYCHODNIA RODZINNA" w Sobótce	medium
01_03	POWIATOWE CENTRUM ZDROWIA SP. Z O.O. w Lwówku Śląskim	medium
02_01	NZOZ CENTRUM MEDYCZNE "FARMA-MED" w Inowrocławiu	medium
03_01	NZOZ "ZDROWIE" S.C. w Batorzu	small
03_02	NZOZ "CENTRUM" ALEKSANDRÓW w Aleksandrowie	small
04_01	WSPL SPZOZ w Gorzowie Wielkopolskim	medium
05_01	"NEUCA MED." SP. Z O.O. w Zgierzu	medium
05_02	CM "MEDYCYNĄ GRABIENIEC" w Łodzi-Bałuty	medium
05_03	CM "SZPITAL ŚW. RODZINY" w Łodzi-Śródmieście	medium
06_01	"SCANMED" S.A. KROWODRZA w Krakowie-Krowodrza	large
06_02	"SCANMED" S.A. ŚRÓDMIEŚCIE w Krakowie-Śródmieście	medium
06_03	NZOZ KRAKÓW-POŁUDNIE SP. Z O.O. w Krakowie-Podgórze	large
06_04	NZOZ "KROMED" S.C. w Grybowie	medium
07_01	SPZZLO WARSZAWA-ŻOLIBÓRZ	large
07_02	SPZZLO WARSZAWA-WAWER	large
07_03	NZOZ "MEDIQ" w Legionowie	large
07_04	NZOZ "CENTRUM" MIŃSK w Mińsku Mazowieckim	medium
07_05	NZOZ "CENTRUM" SIEDLCE	medium
07_06	"ZDROWIE" S.C. PORADNIA RODZINNA w Płońsku	large
08_01	"OPTIMA MEDYCYNĄ" S.A. DYTMARÓW	small
08_02	"OPTIMA MEDYCYNĄ" S.A. RACŁAWICE ŚLĄSKIE	small
09_01	ZOZ NR 2 ŁĄKA	small
09_02	ZOZ NR 2 WYSOKA GŁOGOWSKA	small
10_01	SPZOZ MOŃKI w Krypno Kościelne	small
10_02	ŁOMŻYŃSKIE CENTRUM MEDYCZNE	medium
11_01	"COPERNICUS" SP. Z O.O. w Gdańsku	medium
11_02	"BALTIMED" w Gdańsku	medium
11_03	NADMORSKIE CENTRUM MEDYCZNE w Gdańsku	medium
12_01	"EPIONE" SP. Z O.O. PIOTROWICKA w Katowicach	medium
12_02	"EPIONE" SP. Z O.O. SZOPIENICKA w Katowicach	medium
12_03	NZOZ CENTRUM MEDYCZNE SP. Z O.O. w Katowicach	medium
12_04	CENTERMED SP. Z O.O. w Katowicach	medium
13_01	CENTERMED KIELCE	small

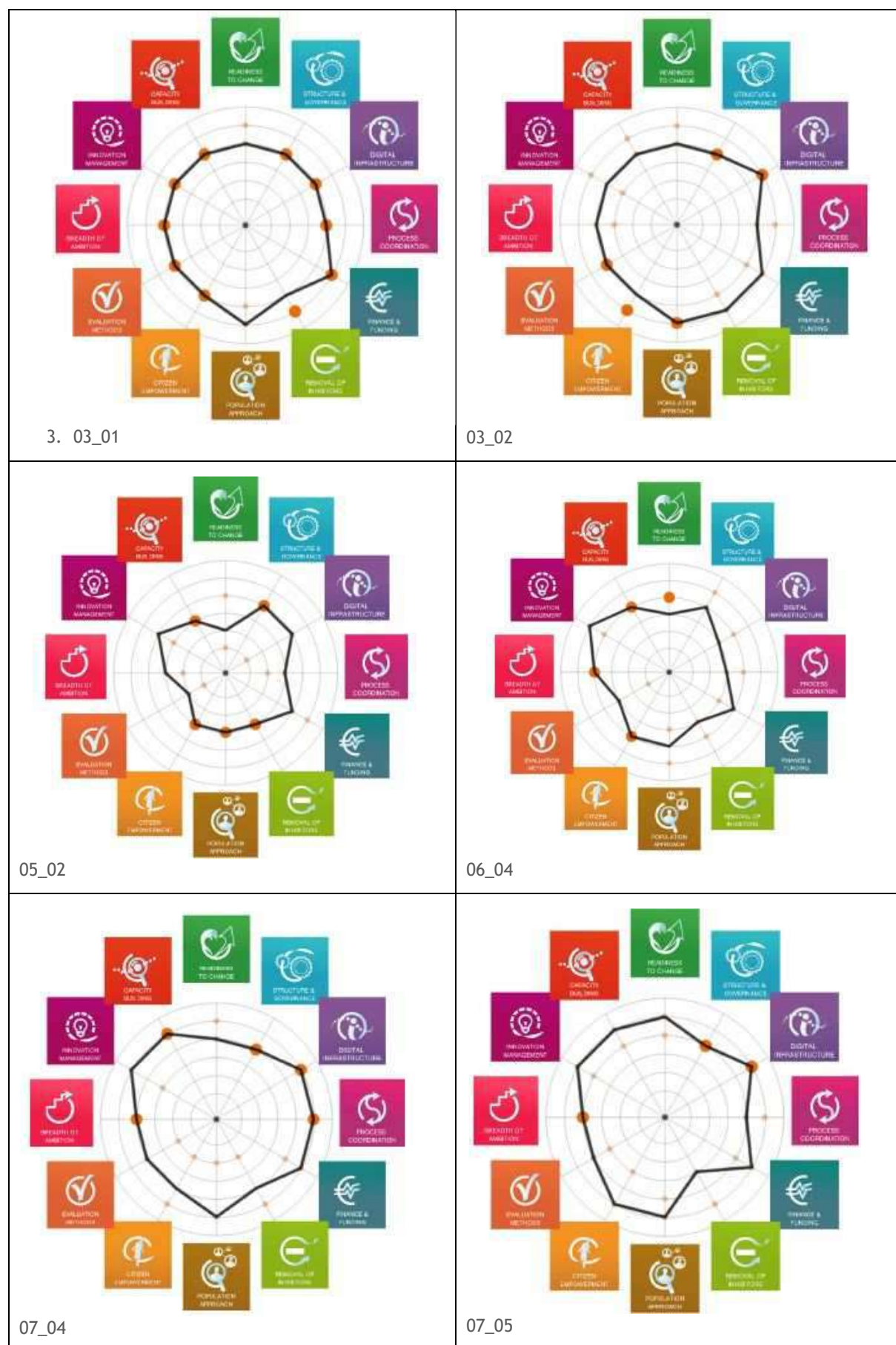
⁴¹ Each PHC is categorised based on the size of population covered: small-size: < 5 000 patients; medium-size: 5 000 - 10 000 patients; large-size: > 10 000 patients

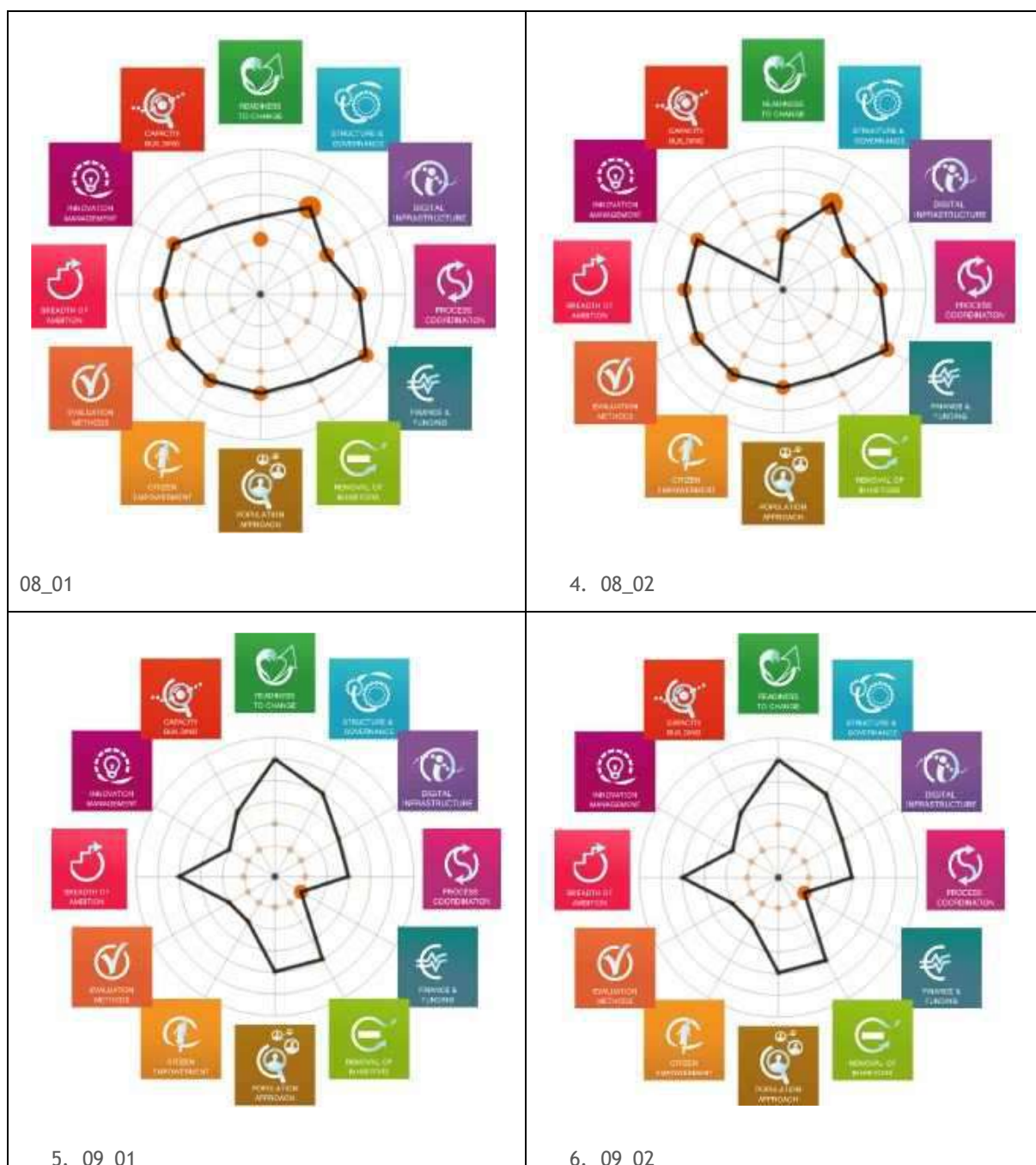
Code	Name	Size of medical centre ⁴¹
14_01	"ELMED"SP. Z O.O. w Orznych	small
15_01	ZPiSOZ "MEDIX" w Kaliszu	medium
15_02	"PRO-FAMILIA" w Czerwonak	small
15_03	"VITA" PRZYCHODNIA MEDYCYNY RODZINNEJ w Osiek nad Notecią	small
15_04	NZOZ "MULTIMEDIS" w Poznaniu- Wilda	medium
16_02	"SZAFERA" PRZYCHODNIA MEDYCYNY RODZINNEJ w Bezzreczu	Małe

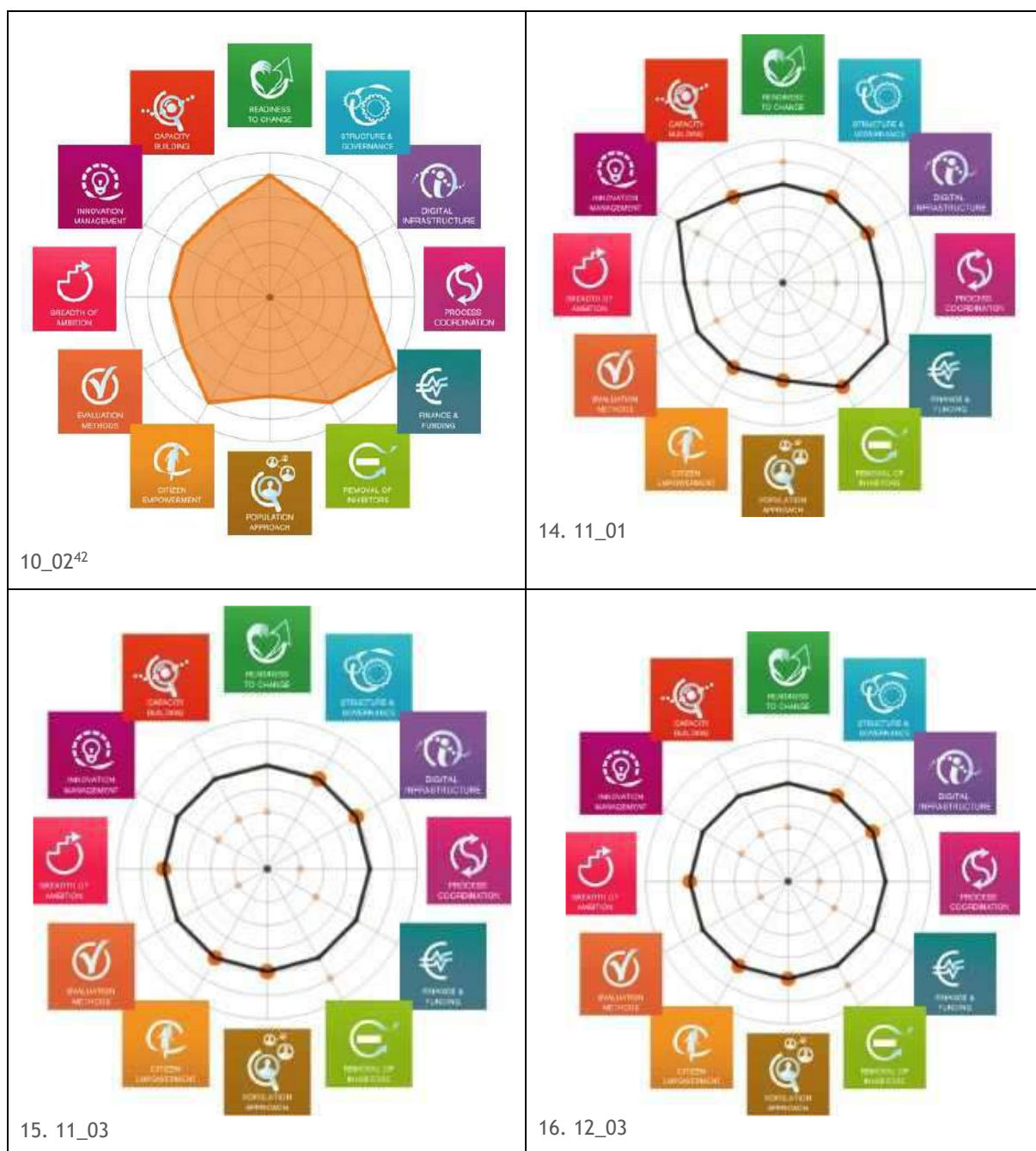
4. 2.2.1 Outcomes of self-assessment survey

The following spider diagrams reflect the perceptions of stakeholders from Primary Healthcare Centres on the maturity of their organisations for integrated care across Poland. Each spider diagram is linked to the codes provided in the Table 1.

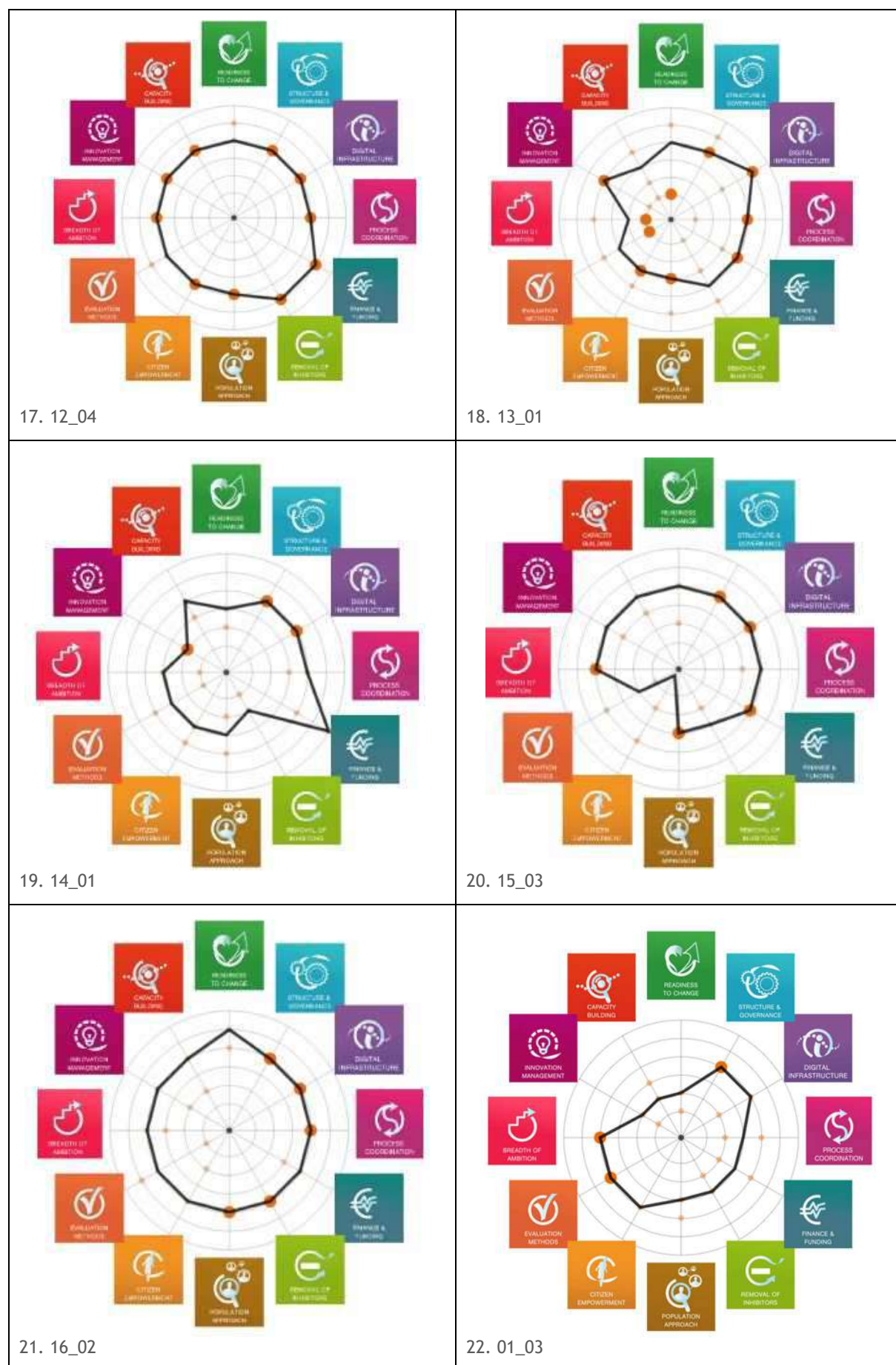


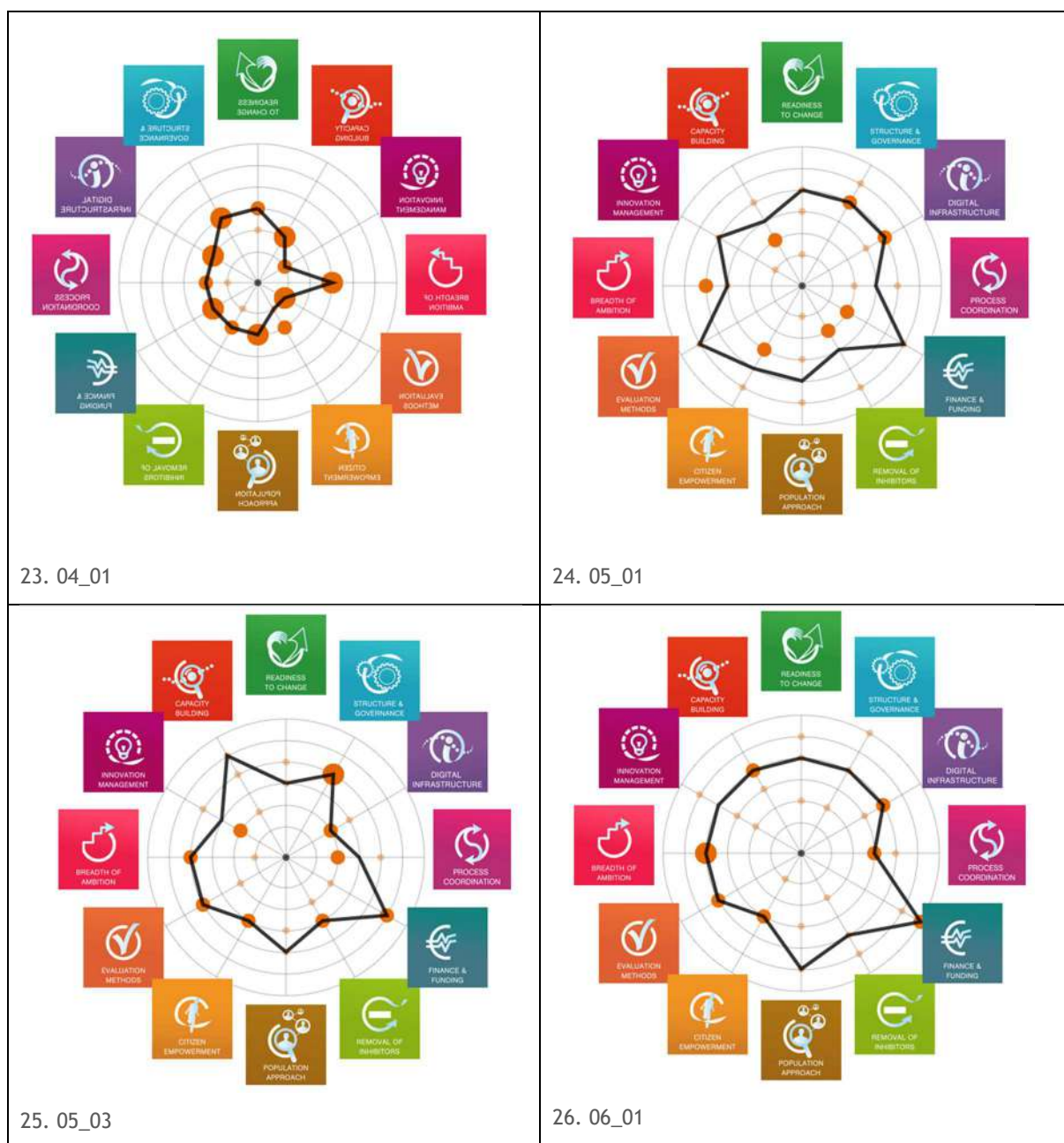


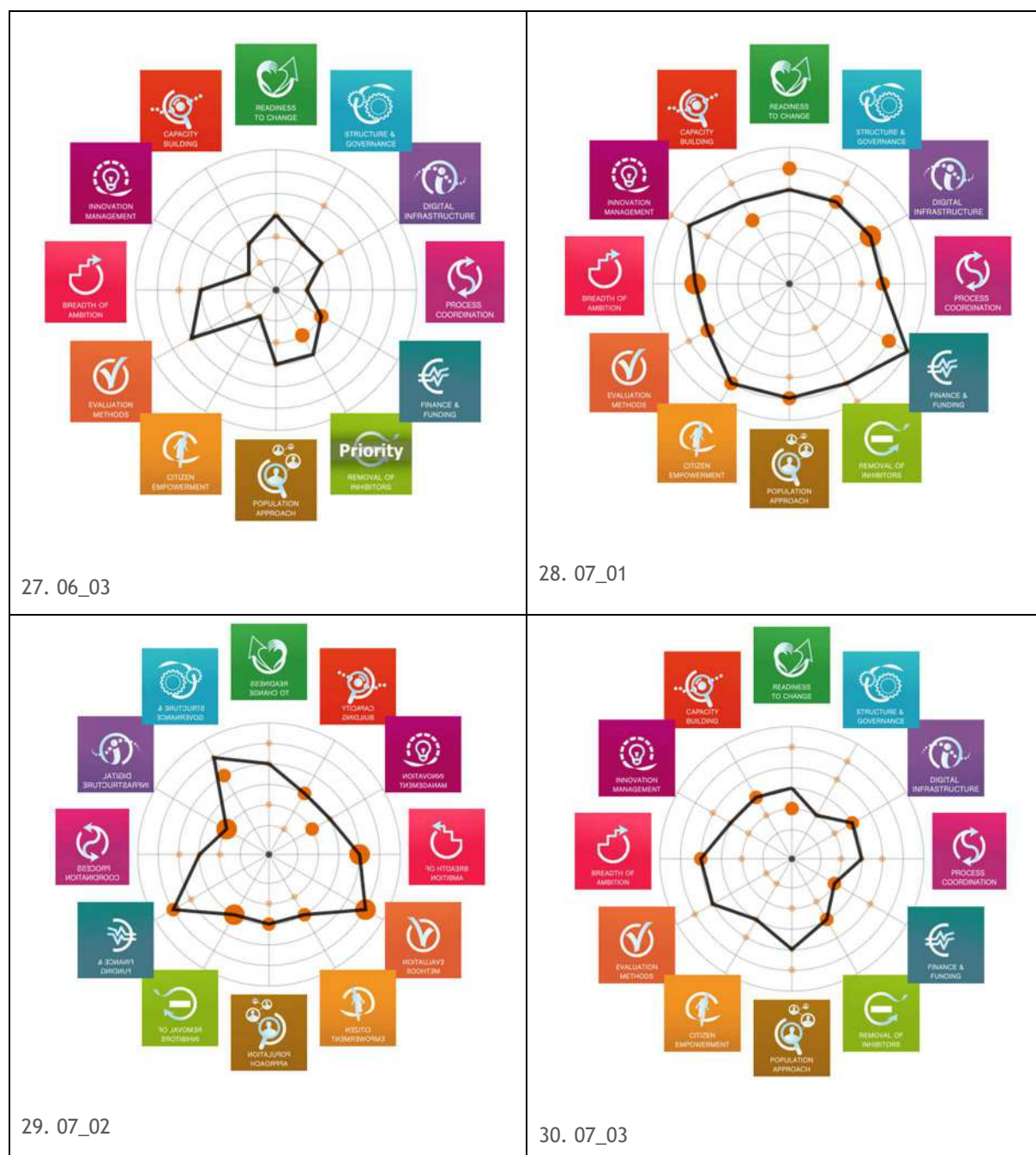


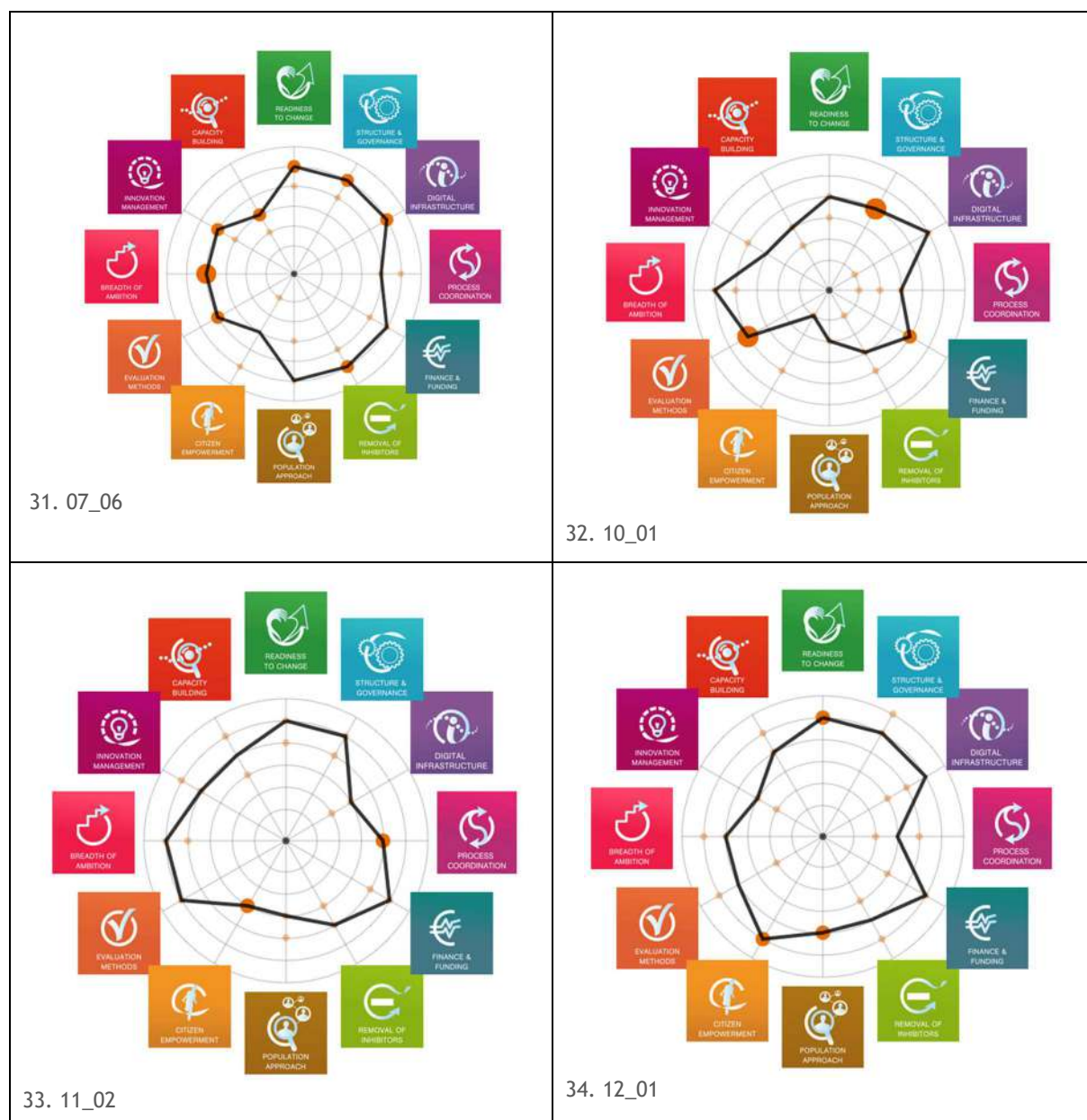


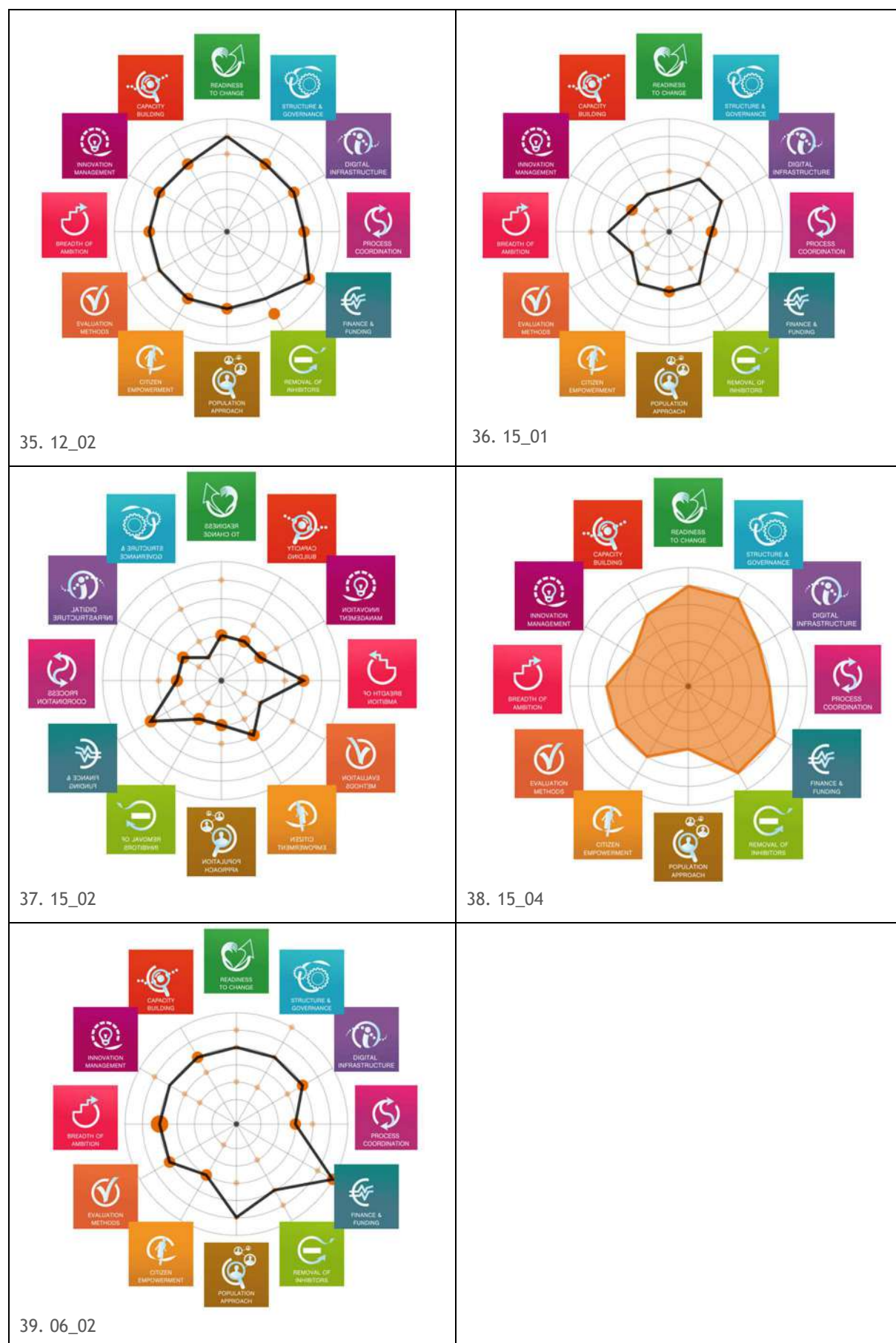
⁴² Only 1 respondent responded to the maturity assessment survey, hence there is different format of the spider diagram.











2.3 Stakeholder workshop

The consensus workshop was organised by NHF on 10 September 2019. The objective of the workshop was to discuss the preliminary findings of the survey of maturity assessment among primary healthcare centers. The outcomes of the surveys served as the basis for discussion, negotiation and consensus-building.

2.3.1 Negotiation and consensus building

All stakeholders were grouped into 3 teams to ensure discussions and sharing of opinions among all participants. The objective was to reach consensus across all 12 dimensions of the SCIROCCO Exchange Maturity Model and agree a final spider diagram in each of the groups. The stakeholders were grouped according to the size of their medical centers:

- PHC small-size: < 5 000 patients
- PHC medium-size: 5 000 - 10 000 patients
- PHC large-size: > 10 000 patients

Each group had its own moderator who presented the agreed group diagram.

Figure 1: Group consensus-diagram for small-size Primary Healthcare Centres



Figure 2: Group consensus-diagram for medium-size Primary Healthcare Centres



Figure 3: Group consensus-diagram for large-size Primary Healthcare Centres



2.3.2 Final consensus

The following table details the outcomes of the consensus-building process for the small-size Primary Healthcare Centres (PHC) (Table 2).

Table 2: Scores, Justifications and reflections assigned to each of the dimensions

Dimension	Scoring	Justifications & Reflections
Readiness to Change	3	The PHC usually have a strategic plan for their development, therefore they do not see any difficulties. However, it is not always known to the whole team.
Structure & Governance	3	The organisational structure is maintained in all locations. The Executive of PHC is open to the ideas of the workers. Meetings of staff with the Management Board are organised.
Digital Infrastructure	3	Infrastructure standards have been adapted to the national level. The majority of the facilities benefit from the possibility to issue electronic sick-leaves and prescriptions. There is an IT system in place, which allows an internal exchange of information.
Process Coordination	3	Having an advanced IT system facilitates effective coordination implementation. An IT system that operates within the facility allows for an internal exchange of information.
Funding	4	The assessment of the financial situation of the PHC is good, with additional external funding, e.g. additional funding for each PHC is being granted if they join POZ PLUS project of coordinated care.
Removal of Inhibitors	3	There are a number of factors, such as the uncertainty of contracts, the age of the workers, the reluctance of people to change. The PHC take actions to minimise or remove the inhibitory factors (e.g. internal, external training).
Population Approach	3	The patient population is known to the institution, so decisions are taken on the basis of demographic change. PHC encourage patients to

Dimension	Scoring	Justifications & Reflections
		use preventive research during their visits, when calling or using the information point for patients.
Citizen Empowerment	3	Attempts are made to improve the role of patient education. Key actions such as flyers with patients' rights, recommendations from doctors in the course of a visit, a survey and the possibility of lodging a complaint in various forms (oral, written).
Evaluation Methods	3	An assessment is made of selected initiatives and services. Assessment is being made as a part of POZ PLUS pilot project.
Breadth of Ambition	3	The pilot project has established cooperation between primary and specialised care. Previously, this cooperation was not formalised.
Innovation Management	3	Most of the institutions are open to innovation, development, innovation and modernisation. They take part in a number of regional programmes. The strategic direction of development is being developed. Workers in informal form are able to report ideas.
Capacity Building	3	The medical centres seek to improve quality, reduce costs and improve accessibility. They constantly increase the level of knowledge and most of them work with higher education institutions.

The following table details the outcomes of the consensus-building process for the middle-size Primary Healthcare Centres (PHC) (Table 3).

Table 3: Scores, Justifications and reflections assigned to each of the dimensions

Dimension	Scoring	Justifications & Reflections
Readiness to Change	3	The vision or plan is embedded in the internal policies of the PHCs. Most workers are positively affected by possible changes. In some, there is a company's development strategy and organisational rules in place.
Structure & Governance	3	Plan of developing integrated care had been embedded in policy.
Digital Infrastructure	3	Digital infrastructure to support integrated care are piloted. Poland has introduced lately e-prescription, e-referral, e-sick-leave. The need for changes to the infrastructure of certain facilities is recognised. The digital infrastructure enables information on the patient to be exchanged. The IT system is used by all employees. In most places it is possible to exchange information internally.
Process Coordination	3	Adapting the new systems to the national level. An IT system operates within the facility which allows for an internal exchange of information.
Funding	4	The assessment of the financial situation of the centres is good, with external funding, such as the pilot programme and different external funded programmes. Middle-size PHCs are usually more keen than small-sized PHCs to cooperate with local government and apply for external funding for preventive programmes.
Removal of Inhibitors	3	The main inhibitor is the human barrier (lack of human resources, long implementation period). Pathways are developed to eliminate inhibitory factors.
Population Approach	3	Both middle-sized PHCs and small-sized PHCs demonstrate unflinching commitment to the health of their population. The patient population is known to the institution, so decisions are taken on the basis of demographic change. Medical centres encourage patients to use preventive research during their visits, when calling or using the information point for patients.

Dimension	Scoring	Justifications & Reflections
Citizen Empowerment	3	Patients are generally informed about the rights in leaflets, posters. Patients have access to partial information however the range of available data is not comprehensive (history of visits).
Evaluation Methods	3	An assessment is made of selected initiatives and services. Assessment is being made as a part of POZ PLUS pilot project.
Breadth of Ambition	3	The pilot project has established cooperation between primary and specialised care. Previously, this cooperation was not formalised.
Innovation Management	3	Most of the institutions are open to innovation, development, innovation and modernisation. They take part in a number of regional programmes. The strategic direction of development is being developed. Workers are able to report ideas, on an informal basis.
Capacity Building	3	The medical centres seek to improve quality, reduce costs and improve accessibility. They constantly increase the level of knowledge and most of them work with higher education institutions.

The following table details the outcomes of the consensus-building process for the large-size Primary Healthcare Centres (PHC) (Table 4).

Table 4: Scores, Justifications and reflections assigned to each of the dimensions

Dimension	Scoring	Justifications & Reflections
Readiness to Change	3	The new implementation path for part of the action is developed/systematized. Therefore, they do not rise any difficulties. The PHC centres usually has a strategic plan for their development. However, it is not always known to the whole team.
Structure & Governance	4	The management structure is defined. A plan for change is usually developed. It is known to the wider group of staff – the management. Workers are aware of development.
Digital Infrastructure	3	Digital infrastructure supporting integrated care is piloted but not yet wide implemented. A set of technical standards for the joint acquisition of new systems has been agreed; ICT is in the process of being consolidated on a large scale.
Process Coordination	2	Standardised coordinated care processes are being developed; The guidelines are applied some initiatives and paths are formally described.
Funding	4	The assessment of the financial situation of the centres is good, with external funding, such as the pilot programme and different external funded programmes. Participation in the external project POZ PLUS makes all institutions have the same assessment - they have income from other sources than only a contract with a payer.
Removal of Inhibitors	3	The inhibitory factors are defined and known including: Frequent changes to legislation, difficulties in IT system, lack of personnel. No methods of elimination have been developed so far.
Population Approach	4	The patients were stratified in order to participate in the pilot project POZ PLUS and for the purposes of the invitation to preventive programmes. Patients visiting the facility shall be invited to the preventive programmes or health programmes.
Citizen Empowerment	2	Patients have access to knowledge, but the PHC facility is not focused on promoting this knowledge and strengthening this area.
Evaluation Methods	3	An assessment is made of selected initiatives and services. Assessment is being made as a part of POZ PLUS pilot project.

Dimension	Scoring	Justifications & Reflections
Breadth of Ambition	3	The pilot project has established cooperation between primary and specialised care. Previously, this cooperation was not formalised.
Innovation Management	3	Actions are being taken to capture innovation and reward them. However, these actions are not always formal.
Capacity Building	2	There are attempts to build capacity, for example, by sending staff on training, conferences, etc.

3. Analysis of the outcomes

The assessment of primary healthcare providers in Poland reflects the actual state in healthcare system, scoring 3 or 4 in all dimensions. The units that have been taking part in the maturity assessment are the selected primary healthcare units that have met all requirements of POZ PLUS programme such as implementation of electronic timetable of visits, electronic patient documentation, participation in preventive programmes. This may be the reason why, despite the differences in the size of the facility itself and the population it covers, the results do not differ significantly.

The overall outcomes show that primary care in Poland is making significant progress in all dimensions, but mostly due to the fact that they take part in a pilot project POZ PLUS that generates new pathways, adopts new solutions, and forces cooperation between primary and specialised care.

The dimensions where more room for improvement was found are “Process Coordination”, “Digital infrastructure” and “Citizen Empowerment”. However, during 2019, Poland introduced a national e-solution referring to every patient called IKP - Individual Patient Account, where every patient has access to historic data on healthcare services reimbursed by National health Fund, e-prescriptions ordered, e-referrals and planned visits to doctors, which strengthens patient empowerment.

There are some specific factors that justify the scores. The transformation towards integrated care has been promoted by the Ministry of Health via the first pilot project of integrated care at the primary level- POZ PLUS. The assessment was made only by those healthcare providers that were willing to make necessary changes, adopt new roles of PHCs and coordinator, adopt new ways of working within a team and face new challenges. Digital infrastructure to support integrated care is being piloted. Poland has introduced e-prescription, e-referral and e-sick-leave. Still missing is the electronic medical records of patients

4. Key messages

The stakeholders valued the maturity assessment process and agreed that the process should be performed once again after implementation of integrated care solutions achieved throughout the pilot project POZ PLUS.

5. Conclusions and next steps

The SCIROCCO Exchange Tool and self-assessment process has allowed to acknowledge the current level maturity of Primary Healthcare Centres in integrated care. The assessment among PHCs, that have joined the pilot of integrated care project in Poland, can become the foundation to the assessment of the progress achieved throughout the pilot project POZ PLUS. We plan to repeat the whole assessment at the end of the project to assess the progress of the individual PHCs, after 2-3 years of integration at the primary level.



D5.1 Readiness of European Regions for Integrated Care

Annex G: Self-assessment process in Puglia

WP5 Maturity Assessment for Integrated Care

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Acronyms

CAO	Chief Administrative Officer
CCC	Community Care Centre
CEO	Chief Executive Officer
CH	Community Hospital
CMO	Chief Medical Officer
COPD	Chronic Obstructive Pulmonary Disease
EHR	Electronic Health Record
ERDF	European Regional Development Fund
H&SC	Health and Social Care
HTA	Health Technology Assessment
ICT	Information and Communication Technology
IT	Information Technology
LHA	Local Health Authority
PbR	Payment by Results
PPP	Public Private Partnership
UVM	Multidisciplinary Evaluation Unit
WP	Work Package

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1 Introduction to Puglia Region

Puglia Region covers 19,541 Km² with a population of 4,029.053⁴³ inhabitants, with a population density of 201.2 inhabitants/km². Life expectancy in the Region is of 82.5 years, with fertility rate of 1.23 children per woman, and mortality rate of 252,572 per 100,000 inhabitants⁴⁴. The top four causes of death in the Region reflect the national trends with some minimum variations and are: diseases of the circulatory system (31.57); cancer (23.27); diseases of the respiratory system (7.16); metabolic diseases (5.16); and diabetes mellitus (4)⁴⁵.

1.1 Introduction to the regional healthcare system

The healthcare system in Puglia Region is mainly public. There are also some private structures that contribute to the delivery of care and formally cooperate with the public system so that citizens can access these services on the same rules as applied for the public services. In the recent two years, there is an undergoing major re-organisation of the healthcare system. At the moment the healthcare service delivery is organized in: 45 Health & Social Care (H&SC) Districts, gathered in six Local Health Authorities (LHAs), which include 31 Integrated Community Care Centres; five second level hospitals (average 825 beds), 16 first level hospitals (average 299 beds), and 12 basic hospitals (average 127 beds). The above-mentioned public Hospitals include two Hospital Trusts and two Research Hospitals.

In 2018 the Puglia Region healthcare expenditure reported was € 7,231 million⁴⁶. The healthcare expenditure per capita was € 1,798 with a GDP per capita of € 17,994 (10% incidence). In 2019 the National Government allocated about € 113,810 million to the National Health System in Italy; about € 111,490.270million were allocated to ensure Essential levels of care among Italian citizens, distributed in the following percentages: Prevention Level (5%); District Level (51%); and Hospital Level (44%). In 2019 the Apulian Regional Fund for Health was about €7,400 million to ensure the delivery of prevention activities in living and working places (5%), primary and secondary care by out of Hospital services (39%), pharmaceutical care (13%), hospital care (44%).

In Puglia Region hospitalisation rate standardised per age and sex is 109,92 per thousand inhabitants in the year 2017⁴⁷. In particular hospitalisation rates are: 256,38 per 100,000 residents aged 50-74 years for cardiac deficits; 51,56 per 100,000 residents aged 50-74 years for chronic obstructive pulmonary disease (COPD) 48; and 42,25 per 100,000 residents aged 35-74 years for diabetes⁴⁹.

⁴³Source ISTAT, 2018 <https://www.istat.it/it/dati-analisi-e-prodotti/contenuti-interattivi/popolazione-residente>

⁴⁴Source EDOTTO DISAR - elab MeS - 2017, 2013 - 2015 data

⁴⁵Source ISTAT, 2017 <http://dati.istat.it/>

⁴⁶Source 2018 State General Accounting Department MOD CE

⁴⁷Source EDOTTO DISAR - elab MeS - 2017, 2013 - 2017 data

⁴⁸Piano della Performance 2019-2021 <https://www.sanita.puglia.it/web/ospedaliriunitifoggia/piano-della-performance>

⁴⁹Source EDOTTO DISAR - elab MeS - 2017, 2013 - 2017 data

In the year 2018 a total of 465,808 hospitalisations occurred in the Region across the six LHAs⁵⁰.

1.2 Definition of integrated care

In Puglia, the prevalence of people with chronic care conditions was recorded as 40% of the population in the year 2015. The service provision to enable the delivery of care used up to 80% of the available resources for care delivery in the Region⁵¹. Since 2004, Puglia has started introducing the Integrated Care Model to improve the disease and care management of chronic patients. The Model is now at its 3.0 revision and it is based both on the vertical integration among different care settings (i.e. specialised care and primary care), and on the horizontal integration among professionals within the same care setting, which shall start in the GPs practices. This implies the definition of new specific healthcare pathways based on: pathology; promotion of patient empowerment; co-creation of digital systems to support the delivery of care to citizens and facilitate communications among professionals and a better control of resources and more appropriate setting for care delivery. This Model revolves around the patients, who are engaged in decisions about their personal care plans. The plan is tailored to patient needs as a result of teamwork between the GP, the Specialist, the Specialist nurse, and the care giver.



Fig.1 - Integrated care model in Puglia Region

The main components of the ongoing process of health and social care services integration in Puglia are:

⁵⁰Source EDOTTO 2018 data

⁵¹DELIBERAZIONE DELLA GIUNTA REGIONALE 30 ottobre 2018, n. 1935 - Modello di gestione del paziente cronico "Puglia Care". Governo della domanda e presa in carico dei pazienti cronici.

- selection and stratification of patients in risk classes or severity classes (choosing patients with no risk, or patient at low risk of chronic conditions);
- definition of an “Individual Care Plan”, adapted at the specific context, evidence-based, tailored to address specific social and care needs and based on professional coordination;
- development of an IT platform to support patients enrolment and management of their entire care paths, able to share information with the regional health IT system EDOTTO⁵² and with the patients electronic Health records;
- adoption of an additional payment of GPs by specific health goals;
- continuous training of health and social care professionals; and
- empowerment of patients and care givers.

2 Introduction to the self-assessment process in Puglia Region

In Puglia, the self-assessment process was conducted at local level, as the paramount regional health system at a “meso” level: the aim was to assess the maturity of the six Local Health Authorities (LHAs) in delivering integrated care. Figure Fig.2 depicts the geographical distribution of the six LHAs in the Region, in Italy.

The maturity of the six LHAs has then enabled cross-organisation analysis, leading to the assessment of the maturity of Puglia Region with the variations captured along the process, which provides a qualitative, multidimensional and multi-professional representation of the integrated care status in the Region from the stakeholders’ point of view.



Fig.2 - Local Health Authorities in Puglia Region

To capture a comprehensive representation starting from the “micro” level, in each LHA a diverse profile of stakeholders was invited to participate in the self-assessment process, ranging from the representatives of health and social care, citizen’s rights representative,

⁵²<https://www.sanita.puglia.it/documents/20182/156357/Brochure+Edotto+%28Edotto.pdf%29/d8f1e0f4-64fd-46b4-bea1-2d4ab0cb47c1>

General Practitioner, Regional Healthcare Manager and other. All stakeholders were invited to complete the online self-assessment survey to provide their individual perceptions on the progress of integrated care in Puglia, using the SCIROCCO Exchange Tool. The outcomes of these individual surveys were captured in the form of spider diagrams to highlight Puglia LHAs' strengths and weaknesses in integrated care provision. The spider diagrams presented in the following sections illustrate the perceptions of some stakeholders on the progress towards integrated care in the Puglia Region.

2.1 Methodology of the self-assessment process

The self-assessment process of adoption and scaling-up of integrated care in nine European Regions involved the use of the SCIROCCO Exchange Tool. This is structured as a 12 questions survey, each of which is associated to a particular “dimension”. The 12 dimensions are:

1. Readiness to Change;
2. Structure & Governance;
3. Digital Infrastructure;
4. Process Coordination;
5. Finance & Funding;
6. Removal of Inhibitors;
7. Population Approach;
8. Citizen Empowerment;
9. Evaluation Methods;
10. Breadth of Ambition;
11. Innovation Management; and
12. Capacity Building.

The maturity level in each dimension is evaluated by an assessment scale which goes from a minimum rating of “0” to a maximum rating of “5”. The scale is tailored and described in detail for each of the 12 dimensions to support the assessor (i.e. the selected stakeholders) in the score assignment.

Assessors were appointed from LHA Management Team after an official and specific AReSS request: five stakeholders per each LHA with diverse background and different roles within the organisation, to be identified comprising: a representative of the Top Management (e.g. CEO, CMO, CAO); a representative of the Health & Social Care District; a representative with medical background (e.g. Care Manager, Chief Nurse); a representative of the ICT Team; and a patients' group representative. This allowed to gain multiple perspectives, in which the experience in each role and the affiliation to the local organisation were recorded to support the data analysis.

Upon receiving the names and contact details of the appointed LHA stakeholders, AReSS Puglia formally invited each of them via e-mail to take part to the maturity assessment process. All stakeholders belonging to the same LHA were carbon-copied in the e-mails, so that they were all made aware of the fellow colleagues involved in the process.

In the e-mail the full process was described, the link to the SCIROCCO Exchange Tool was provided, together with a dedicated helpline. Supportive documents sent along with the

invitation to complete the on-line survey comprised completion guidance with steps to follow, with visuals and screenshots to guide the entire process from beginning to completion and submission.

In the assessment phase, together with the score, each participant stakeholder was invited to provide a brief justification for the score assigned.

The results were plotted on individual spider diagrams for each self-assessment completed, whose combination during the consensus stage originated a spider diagram over the scores individually provided and visualised with bubbles as depicted in figure Fig.3. The size of the bubble represents the number of respondents, which varied from five to seven per LHA, while the position of the bubble corresponds to the score given, that is to say 0 to 5, where 0 corresponds to the most inner circle while 5 is on the outset circle.

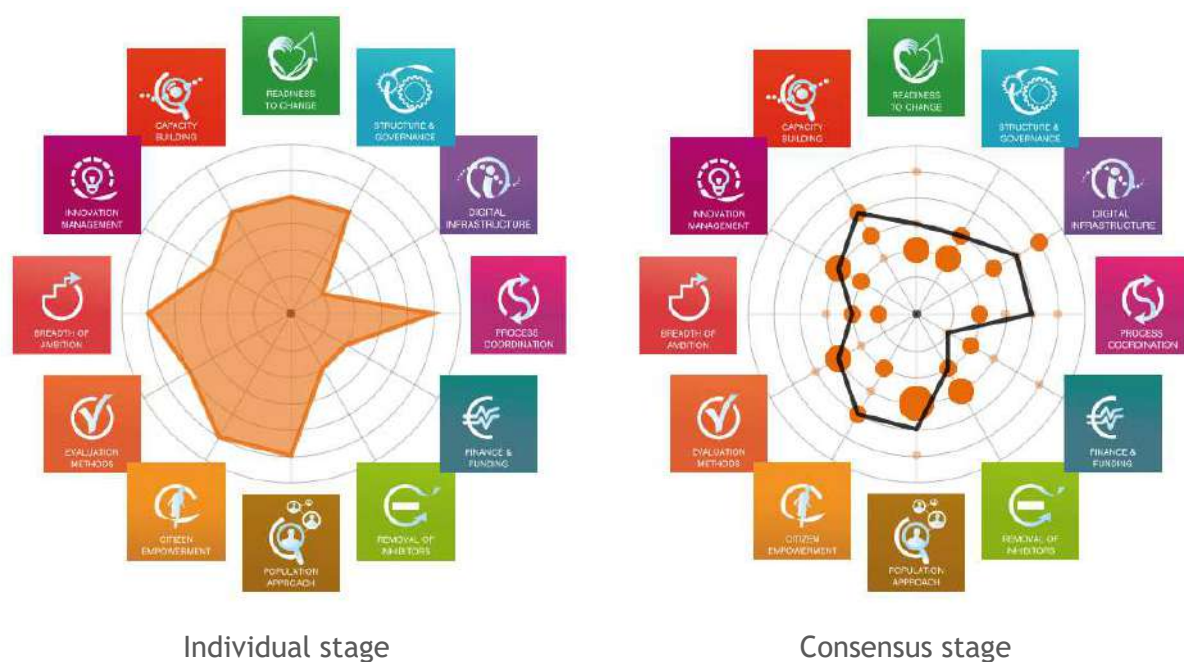


Fig.3 - Self-assessment tool visualisation

3 Self-assessment process - Bari Local Health Authority

3.1 Introduction to Bari Local Health

Bari LHA hosts the Regional county seat and is the result of the merge of four LHAs within the territory of Bari Province in the year 2006. Nowadays it operates on a territory of 3,862.88 Km², with 1,251,994 inhabitants⁵³, comprising a total of 41 municipalities, which are organised in 12 H&SC Districts.

There are 15 acute care infrastructures, of which eight are public (comprising one cancer research centre, and one university hospital), and seven are private with public access via NHS agreement (comprising one rehabilitation centre, and one religious institution)⁵⁴.

In BA LHA there is a total of 1,014 GPs (without considering Paediatricians), of which 795 (i.e. 78.4%) are structured in complex networks to ensure seamless care delivery to patients⁵⁵ (max 12 hh)⁵⁶.

The population distribution per age groups shows that 20.7% of the population is over 65 years old, of which only 10% is above 74 years old⁵⁷. The same data returned 41,941 foreigner residents in Bari metropolitan area, which corresponds to the 3.3% of the entire figure, with majority coming from Albania (i.e. 28.5% of the total number of foreigners).

Chronic diseases are among the elements of concern within Bari LHA, as they require demanding and continuous efforts to deliver care services. To be effective and efficient, it is crucial to identify the chronic patients and let them enter into the integrated care delivery pathway in the most appropriate way. This often requires excessive efforts. The EDOTTO Regional System is in place to allow the analysis of health data and identify the citizens that shall enter into the pathway.

The seven most frequent chronic diseases in Bari LHA are: diabetes, respiratory insufficiency (IRC), hypertension mediated organ damage, cancer, Hashimoto thyroid, cardiac diseases, and hypertension with no organ damage⁵⁸.

3.2 Identification process of the local stakeholders

AReSS Puglia asked Bari LHA Top Management to appoint a minimum of five stakeholders to gather different assessment perspectives concerning the 12 maturity matrix dimensions and to obtain a multi-stakeholder opinion on integrated care local initiatives. AReSS Puglia specified the different roles within which to identify the assessors comprising: a representative of the Top Management (e.g. CEO, CMO, CAO); a representative of the Health

⁵³Source ISTAT 2018 data <https://www.istat.it/it/dati-analisi-e-prodotti/contenuti-interattivi/popolazione-residente>

⁵⁴Source EDOTTO- regional health IT System

⁵⁵Source EDOTTO - regional health IT System

⁵⁶Source EDOTTO - regional health IT System

⁵⁷Source ISTAT 2017 data.

⁵⁸Piano della Performance 2018-2020

https://www.sanita.puglia.it/documents/25619/357655/Piano+della+Performance_2018-2020/fd0f07b3-9744-4514-9c77-bc53613ce2ed

& Social Care District; a representative with medical background (e.g. Care Manager, Chief Nurse); a representative of the ICT Team; and a patients' group representative. Experience in each role and the affiliation to the local organisation were recorded to support the data analysis.

Bari LHA identified five stakeholders as requested, to which other two were later added, one of which has previously taken part to the EU-funded SCIROCCO Project, while the other had a relevant role but is only present in Bari LHA (this is related to the scale of the LHA). The final list of the local stakeholders identified by Bari LHA who completed the self-assessment process is reported in table Tab. 1 below, with years spent in the role and years spent in the organisation to contextualise their individual responses during the analysis.

Role	Affiliation	Years in role	Years in organisation
Chief Medical Officer	Bari LHA	5	19
H&SC District Director	District 14	27	27
Nurse Coordinator	District 14	37	31
IT services Director	Bari LHA	3	3
President of Patients 'Association	APMAR Association	6	8
Sick Patient Court Coordinator	Bari LHA	3	20
H&SC Services Director	Bari LHA	2	20

Tab. 1-BA LHA stakeholders

3.3 Self-assessment survey

Upon receiving the names and contact details of the seven designated stakeholders by Bari LHA, AReSS Puglia formally invited each of them via e-mail to take part to the maturity assessment process. All stakeholders were carbon-copied in the e-mails, so that they were all made aware of the fellow colleagues involved in the process.

In the e-mail the full process was described, the link to the SCIROCCO Exchange Tool was provided, together with a dedicated helpline. Supportive documents were sent along with the invitation to complete the on-line survey comprised completion guidance with steps to follow, with visuals and screenshots to guide the entire process from beginning to completion and submission.

Two weeks' timeline was suggested for completion, which was eventually extended because of holiday season in Puglia. The SCIROCCO Exchange project team provided support to the stakeholders during the completion of the on-line survey.

3.4 Outcomes of self-assessment survey

Table Tab. 5 provides a summary of the 0 to 5 ratings provided by the seven stakeholders on each of the 12 dimensions of the SCIROCCO Exchange Tool. The ratings assigned by each stakeholder vary from 0 to 5 for the dimensions Q6 and Q8, from 0 to 4 for the dimension Q5, while for the dimension Q12 the ratings vary from 2 to 5.

The stakeholders, who have been working in Bari LHA for individual periods that vary from 3 to 31 years and who have been providing services in their roles for periods of time that vary from 2 to 37 years, have provided a heterogeneous perception of the 12 dimensions of the SCIROCCO Exchange Tool, as far as they are concerned.

The dimensions on which majority of the stakeholders appeared to have a similar perception are: Q11 “Innovation Management” and Q12 “Capacity Building”, on which respectively only one out of seven rated the dimension on the highest (in green) end of the scale, and two out of seven rated the dimension on the lowest (in red) end of the scale.

Figure Fig.4 depicts the outcomes of the on-line individual self-assessment, as completed by each BA LHA stakeholder.

	Tool Dimensions											
Stakeholder Role	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Chief Medical Officer	3	3	0	4	1	1	4	4	3	4	2	3
H&SC District Director	3	4	2	3	1	2	2	2	4	4	3	3
Nurse Coordinator	2	1	2	2	0	1	4	1	4	3	2	3
IT services Director	1	0	0	1	2	0	2	0	2	2	1	2
President of Patients' Association	2	4	4	4	3	2	4	4	4	4	3	3
Sick Patient Court Coordinator	4	2	4	4	4	5	3	5	3	3	3	5
H&SC Services Director	2	3	1	3	1	1	2	2	2	3	1	3

Dimensions			
Q1	Readiness to Change	Q7	Population Approach
Q2	Structure & Governance	Q8	Citizen Empowerment
Q3	Digital Infrastructure	Q9	Evaluation Methods
Q4	Process Coordination	Q10	Breadth of Ambition
Q5	Finance & Funding	Q11	Innovation Management
Q6	Removal of Inhibitors	Q12	Capacity Building

Ratings		
5 to 4	3 to 2	1 to 0

Tab.2 - BA LHA summary of self-assessment



Chief Medical Officer



H&SC District Director



Nurse Coordinator



IT services Director



President of Patients' Association



SP - Sick Patient Court Coordinator



H&SC Services Director

Fig.4 -BA LHA outcomes of the individual self-assessments

3.4.1 Stakeholder workshop

Upon completion of the self-assessment survey by all the seven designated stakeholders of BA LHA, an invitation letter was sent by AReSS Puglia to the LHA via e-mail, to request a feasible date to organise a half-day meeting, comprising a two-hours workshop, followed by a 30 to 45 minutes focus group with all the stakeholders on their experience with the SCIROCCO Exchange Tool.

The stakeholders identified Wednesday^{9th} October as the best option for attending the workshop, which was delivered to them on-site at the General Direction of Bari LHA, in Bari.

The purpose of the workshop, which was facilitated by Dr. Mingolla and Dr. Pantzartzis in Italian language, was to: present the assessment process in the Puglia Region; present the initial outcomes of the on-line self-assessment; discuss on the assessments of each dimension; and reach a consensus on the maturity of integrated care in BA LHA.



Fig.5 -BA LHA consensus workshop

3.4.2 Negotiation and consensus building

After the presentation, with the support of a PowerPoint presentation and hand-outs, of the summary of the on-line self-assessment survey, the invited stakeholders were guided through the negotiation process with a PowerPoint presentations and visuals. The purpose of the negotiation process was to: 1) share the multiple perceptions that guided each stakeholder during the self-assessment, including their experience in the LHA and in their specific roles; and 2) identify the chance to negotiate a shared ranking for each dimension, upon knowledge and information sharing during the workshop.

The negotiation and consensus building process was delivered through an in depth analysis of each dimension of the SCIROCCO Exchange Tool, presenting and discussing the justifications and reflections that each stakeholder has provided in their on-line self-assessment. Each dimension is reported below, in the order as discussed.

Q1 - Readiness to Change - The stakeholders have heterogeneous perceptions of this dimension. They agree on the lack of consistency in the management, as BA LHA is the result of the merging of multiple LHA in the year 2007. The CMO described the process of merging and the efforts made throughout the years to enable BA LHA to operate as one single entity. As the aspiration and desire to change is evident, but there are still constraints at cultural level, the stakeholders agree on assessing this dimension 3 - *Vision or plan embedded in policy; leaders and champions emerging*.

Q2 - Structure & Governance - This dimension brings to light the variations that exist at local level, which may operate in a positive way, thus providing organisational flexibility, but also results in negative processes if governance is not imposed from above. The most critical ratings were provided by the IT services Director and the Nurse Coordinator, who do recognise the lack of governance as uttermost issue towards process delivery, hence in a stronger need for its actual provision. The stakeholders agree on assessing this dimension 3 - *Governance established at a regional or national level*.

Q3 - Digital Infrastructure - Three out of seven stakeholders agree on rating this dimension on the lowest end of the scale (i.e. “0” and “1”). Nevertheless, the two patients’ representatives rated this dimension 4 - *eHealth services to support integrated care are deployed widely at large scale* (e.g. Edotto system), despite not all the users are fully enabled to access and operate with digital infrastructure. Different IT literature levels at different age groups may work as barrier towards a full implementation of digital infrastructure. After evaluating the current situation, the stakeholders agree on assessing this dimension 2 - *There is a mandate and plan(s) to deploy regional/national eHealth services across the healthcare system but not yet implemented*.

Q4 - Process Coordination - Three out of seven stakeholders agree on assessing this dimension 4 - *A unified set of agreed standards to be used for system implementations specified in procurement documents; many shared procurements of new systems; consolidated data centres and shared services widely deployed*, while other two out of seven assessed it “3”. The President of Patients’ Association describes that there is a standardised process through which the citizen accesses the system of integrated care, while the CMO confirms that this is actually in place. As a consequence, the stakeholders confirm the rating “4”.

Q5 - Finance & Funding - Four out of seven stakeholders agree on assessing this dimension very poorly (i.e. “0” and “1”), and as the overall understanding is that funding is available and the stakeholders are capable of identifying their availability and initiate the process where appropriate, nevertheless the policy system is quite complex and time-consuming, with often inefficient outcomes. The Nurse Coordinator offers examples related to the home-care delivery (e.g. use of tablet by the nurse; inappropriate waste disposal). The stakeholders reach consensus on 3 - *Regional/national (or European) funding or PPP for scaling-up is available*.

Q6 - Removal of Inhibitors - Also on this dimension, four out of seven stakeholders agree on a rating towards the lowest end of the scale (i.e. “0” and “1”), also due to the individual resistance that some professional categories are posing (e.g. GPs and nursing staff). One point of agreement among the stakeholders is the need to integrate across professional categories and to overcome the individual resistance. Consensus is reached on 2 - *Strategy for removing inhibitors agreed at a high level*, as efforts are still required at local level.

Q7 - Population Approach - The stakeholders have a positive perception of this dimension. Despite the population approach is mostly evident on experimental bases; three out of seven stakeholders rate this dimension “4”. After discussion and one example (i.e. Puglia Care Project⁵⁹), all the stakeholders unanimously agree on rating the dimension 3 - *Risk stratification used for specific groups i.e. those who are at risk of becoming frequent service users*.

Q8 - Citizen Empowerment - The stakeholders have heterogeneous perceptions of this dimension, with ratings ranging from “0” to “5”. This is the only dimension on which the full assessment scale has been used. The IT services Director explained that an integrated care delivery system should be focused not only on the clinical elements of care delivery. The Nurse Coordinator agrees with him on this element. The two patients’ representatives are the stakeholders who have provided the highest ratings (i.e. “4” and “5”) on this dimension, as they have the actual citizens’ perspective to reflect on. After the discussion, all stakeholders converge on 4 - *Incentives and tools exist to motivate and support citizens to co-create healthcare services and use these services to participate in decision-making process about their own health*.

Q9 - Evaluation Methods - This dimension is rated on the higher end of the assessment scale with “2”, “3”, and “4”. In particular, three out of seven stakeholders agree on assessing this dimension 4 - *Most integrated care initiatives are subject to a systematic approach to evaluation; published results*. Nevertheless, general consensus is reached on 3 - *Some integrated care initiatives and services are evaluated as part of a systematic approach*.

Q10 - Breadth of Ambition - This dimension is rated on the higher end of the assessment scale with “2”, “3”, and “4”, with three out of seven stakeholders agreeing on assessing this dimension 3 - *Integration between care levels (e.g. between primary and secondary care) is achieved*, while other three assessing it 4 - *Most integrated care initiatives are subject to a systematic approach to evaluation; published results*. Final consensus is reached on rating “4”, as a positive on-going evaluation.

Q11 - Innovation Management - All stakeholders have balanced perceptions on this dimension, other than two of them, who rate it 1 - *Innovation is encouraged but there is no overall plan*. The CMO links innovation to IT infrastructure, as sometimes the two may be related and posing barriers. The IT services Director and the H&SC services Director rate this dimension poorly, as Innovation Management is often seen as a mere “number of computer stations”, and not as a structured process between the innovators (i.e. those who design the

⁵⁹Puglia Care Project aims at improving coordinated care management for chronic patients. More info are available at <http://www.salute.gov.it/portale/temi/documenti/investimenti/4bBD.pdf>

innovation system) and the policy makers at regional level. The stakeholders agree on 3 - *Formalised innovation management process is planned and partially implemented.*

Q12 - Capacity Building - All the stakeholders assessed this dimension in a positive way. Five out of seven stakeholders assessed this dimension 3 - Learning about integrated care and change management is in place but not widely implemented. Only one stakeholder rated it 5 - A 'person-centred learning healthcare system' involving reflection and continuous improvement is in place. Strong consensus is achieved on this dimension as all stakeholders, from the management team, to the clinical team, and to the patients' representatives are well aware of the efforts in place to put the citizen at the centre of the care delivery system. The assessment is confirmed also by The Sick Patient Court Coordinator, so that overall consensus is reached.

3.4.3 Final consensus

Figure Fig.6 illustrates the final spider diagram with the final consensus of the seven BA LHA designated stakeholders. The negotiation process highlighted elements of similarities and difference among the stakeholders, which were discussed and led to reaching consensus on almost all dimensions, but not always as assessed by majority of the stakeholders. Dimensions Q1, Q6, Q7, and Q9 are those on which the consensus was reached on a lower scale than that on which the majority individually assessed.



Fig.6 - BA LHA final spider diagram

Table Tab. 6 contains the final scores reached through the consensus building process that were summarised earlier on. Justifications and reflections on each of the 12 dimensions have been also reported.

Dimension	Consensus	Justifications & Reflections
Q1 - Readiness to Change	3	There is a lack of agreed management on individual procedures. This is the direct consequence of the organisation being created out of the aggregation of multiple organisations in the year 2007. The organisation is ready to change from a mere technological perspective. The vision exists. Implementing the vision still needs some cultural changes.
Q2 - Structure & Governance	3	Governance is established at regional level, but it needs to be implemented at organisational level, and in particular it does need to consider the existing variations which require flexibility.
Q3 - Digital Infrastructure	2	The implementation raises issues on the accountability for the data checks. Also, e-health services are accessed differently accordingly to different age groups.
Q4 - Process coordination	3	Standardisation at organisational level does exist when referring to patient access to the system and Care Pathways and Chronic Care Model.
Q5 - Finance & Funding	1	Funding is available mainly for pilot projects. It is absolutely crucial to timely identify sources of funding, as the process of using them for integrated care is slowed down by bureaucracy.
Q6 - Removal of inhibitors	2	Despite the amount of available training courses, there is sometimes opposition in undertaking them. This has been acknowledged at nurse and GP level.
Q7 - Population Approach	3	Risk stratification is only used on experimental level, that is to say for same types of care pathways.
Q8 - Citizen Empowerment	4	There is limited consensus on this dimension.
Q9 - Evaluation Methods	3	Some integrated care services are evaluated as part of a systematic approach.
Q10 - Breadth of Ambition	4	Strong consensus on this dimension.
Q11 - Innovation Management	3	Innovation management process is formally implemented. However, there are differences across different settings (e.g. hospital setting and ambulatory care setting).
Q12 - Capacity Building	3	Strong consensus achieved on this dimension.

Tab. 3 - BA LHA summary of consensus meeting

3.5 Analysis of the outcomes - Bari Local Health Authority

Looking at the overall consensus diagram, dimension Q8- Citizen Empowerment, and Q10 - Breadth of Ambition appear more significant than others in regards to carrying out integrated care in BALHA. Also, Q4 - Process coordination plays an important role within this LHA that has a population catchment greater than all the other five LHAs in Puglia Region, also as a

result of the aggregation of multiple LAs in the year 2007. None of the results was particularly surprising to the stakeholders, and the preliminary contextualisation provided by the CMO provided a clear background for discussion to all the stakeholders.

The final consensus diagram offers a balanced range across the 12 dimensions about the maturity of integrated care in BA LHA, which is overall, assessed between the 3 and 4 points the reference scale 0 to 5. Nevertheless, there is a noticeable variation on dimension Q5 - Funding, then Q3 - Digital Infrastructure and Q6 - Removal of inhibitors. Those three dimensions have been respectively rated “1” and “2” on the assessment scale during the consensus workshop.

The common factor among those three dimensions and the low rating is the difficulty in: capturing the funding available to the LHAs; accessing and managing the data available on the digital infrastructure; and winning the resistance that some members among the clinical staff still have. This difficulty has been somehow related to the lack of planning and organisation throughout the entire LHA, also given the scale of it and its genesis.

Specific factors in the organisation BA LHA affect strengths and weaknesses. Among the specific factors that affect the weaknesses, there are: the size and how multiple LHAs belonging to different municipalities were joined together into BA LHA; and the lack of homogeneous management of each specific process within the LHA. The strengths are affected by the flexibility at operational level, as governance across the entire LHA enables it.

3.6 Key message - Bari Local Health Authority

All the participants stated that they had a very positive experience with the tool as a key facilitator of the self-assessment process. They appreciated the debate; they agreed that the tool is a powerful instrument to synthesize different visions; the self-assessment process should be applied at any level (local, regional, and local Districts). The LHA CMO: “The LHA assessment with the SCIROCCO Exchange Tool represents a positive experience that helps showing and understanding the citizen’s perception”.

3.7 Conclusions - Bari Local Health Authority

After the negotiation and consensus building process on each of the 12 dimensions and the justifications provided by the five designated stakeholders on each of the 12 dimensions, the facilitators have asked final comments on the strengths of BA LHA in relation to the maturity of the integrated care model. The stakeholders jointly agreed to suggest strengths and weaknesses as below reported.

The strengths are:

Q7 - Population Approach> This is an on-going process and it still needs to grow.

Q8 - Citizen Empowerment

Q10 - Breadth of Ambition

Q12 - Capacity Building>This is regarded as a strength as when competencies are acquired, then each stakeholder can deliver his/her specific task in a more appropriate way.

The weaknesses are:

Q1 - Readiness to Change>This is regarded as a weakness as it is fundamental that every stakeholder in the LHA gains a deep and full understanding of the need for change. Only after this need has been acquired by every stakeholder it is possible to deliver the change. It is an individual process that can only be led by the organization.

Q5 - Funding >This is a weakness as a result of the lack of capability to timely identify and capture available funding for integrated care.

The outcomes reflected the local situations and the expectations of the stakeholders. The emerged challenge is the size and scale of the organisation BA LHA, which affects every management process.

4 Self-assessment process -Brindisi Local Health Authority

4.1 Introduction to Brindisi Local Health

Brindisi LHA at the moment of writing covers a territory comprising a total of 20 municipalities, which are organised in four H&SC Districts, with five CC Centres, that put together a minimum of two up to a maximum of nine municipalities.

There are five acute care infrastructures, of which three are public, and two are private with public access via NHS agreement (comprising one cancer centre⁶⁰).

In BR LHA there is a total of 323 GPs (without considering Paediatricians), of which 227 (i.e. 70.3%) are structured in complex networks to ensure seamless care delivery to patients⁶¹.

The total population was 392,975 inhabitants⁶². It was mostly concentrated in Brindisi H&SC District, with a density of 273.86 inhabitants/Km², which is well above the average density of 217.84 inhabitants/Km² of Brindisi LHA⁶³. The population aged over 65 years was 21.36% according to ISTAT 2015 data, and 22.7% as recorded in 2018. It was not recorded any significant variations on the age groups moving from urban areas to more rural areas, nor from the coastal areas to the more inner areas. However, majority of the population (i.e. 39.98%) lives in municipalities that can count on a number of inhabitants between 10,000 and 30,000. The age group over 75 years has been increasing over time and more rapidly over the past five years, which has brought Brindisi LHA to pass the National indicator of longevity. Foreigner residents have increased of 2.36% from the years 2014 to the year 2015.

Mortality rate is approximately 1% of the population, and the first cause of death is related to circulatory diseases, and then followed by cancer, respiratory, endocrine, nutrition and metabolic diseases.

4.2 Identification process of the local stakeholders

AReSS Puglia asked to Brindisi LHA top management Team to appoint a minimum of five stakeholders to gather different assessment perspectives concerning the 12 maturity matrix dimensions and to obtain a multi-stakeholder opinion on integrated care local initiatives. AReSS Puglia specified the different roles within which to identify the assessors comprising: a representative of the Top Management (e.g. CEO, CMO, CAO); a representative of the Health & Social Care District; a representative with medical background (e.g. Care Manager, Chief Nurse); a representative of the ICT Team; and a patients' group representative. Experience in each role and the affiliation to the local organisation were recorded to support the data analysis.

⁶⁰Source EDOTTO - regional health IT System

⁶¹Source EDOTTO - regional health IT System

⁶²Source ISTAT 2018 data <https://www.istat.it/it/dati-analisi-e-prodotti/contenuti-interattivi/popolazione-residente>

⁶³Piano della Performance 2019-

2012 <http://www.comune.brindisi.it/zf/index.php/trasparenza/index/index/categoria/96>

The local stakeholders identified by BR LHA upon invitation are reported in table Tab. 4 below, with years spent in the role and years spent in the organisation to contextualise their individual responses during the analysis.

Role	Affiliation	Years in role	Years in organisation
Chief Medical Officer	Brindisi LHA	<1	<1
H&SC district Director	Francavilla Fontana H&SC District	>30	>30
Nurse Coordinator	Ceglie Messapica H&SC District	>30	>30
IT services Manager	Brindisi LHA	>20	>15
President of Voluntary Association	Protezione Civile Mesagne	>15	>15

Tab. 4-BR LHA stakeholders

4.3 Self-assessment survey

Upon receiving the names and contact details of the five designated stakeholders by Brindisi LHA, AReSS Puglia formally invited each of them via e-mail to take part to the individual self-assessment process. All stakeholders were carbon-copied in the e-mails, so that they were made aware of the fellow colleagues involved in the process.

In the e-mail the full process was described, the link to the SCIROCCO Exchange Tool was provided, together with a dedicated helpline. Supportive documents were sent along with the invitation to complete the on-line survey comprised completion guidance with steps to follow, with visuals and screenshots to guide the entire process from beginning to completion and submission.

Two weeks' timeline was allowed for completion, which was eventually extended because of holiday season in Puglia.

4.4 Outcomes of self-assessment survey

All five invited stakeholder completed the on-line self-assessment survey with the dedicated support. Table Tab. 5 provides a summary of the 0 to 5 ratings provided by the five stakeholders on each of the 12 dimension of the SCIROCCO Exchange Tool.

The ratings assigned by each stakeholder vary from 0 to 4, without ever reaching rating 5 in any of the dimensions. The stakeholders, who have been working in BR LHA for individual periods that vary from 1 to 30 years and who have been providing services in their roles for periods of time again that vary from 1 to 30 years, have provided a heterogeneous perception of the 12 dimensions of the SCIROCCO Exchange Tool, as far as they are concerned.

The perception, hence the returned rating, of the dimension Q12 "Capacity Building" is the same by all the five stakeholders, while it has some variations on the remaining. In relation to the dimensions Q1 "Readiness to Change" and Q7 "Population Approach" only two out of five stakeholders rated in a homogeneous way each of the two dimensions, that is to say: "3-Vision or plan embedded in policy; leaders and champions emerging" for "Readiness to

Change; and “2- Risk stratification approach is used in certain projects on an experimental basis” for “Population Approach”.

Figure Fig.7 depicts the outcomes of the on-line individual self-assessment, as completed by each BR LHA stakeholder.

	Tool Dimensions											
Stakeholder Role	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Chief Medical Officer	2	3	4	4	4	4	4	4	3	3	3	3
H&SC District Director	3	4	3	3	3	3	2	3	1	4	3	3
Nurse Coordinator	3	4	3	3	3	3	3	4	3	4	1	3
IT services Director	1	2	2	1	0	1	1	4	0	0	1	3
President of Voluntary Association	4	4	3	3	3	3	2	3	3	4	4	3

Dimensions			
Q1	Readiness to Change	Q7	Population Approach
Q2	Structure & Governance	Q8	Citizen Empowerment
Q3	Digital Infrastructure	Q9	Evaluation Methods
Q4	Process Coordination	Q10	Breadth of Ambition
Q5	Finance & Funding	Q11	Innovation Management
Q6	Removal of Inhibitors	Q12	Capacity Building

Ratings		
5 to 4	3 to 2	1 to 0

Tab. 5 - BRLHA summary of self-assessment





Nurse Coordinator



IT services Manager



President of Voluntary Association

Fig.7 - BR LHA outcomes of the individual self-assessments

4.4.1 Stakeholder workshop

Upon completion of the self-assessment survey by all the five designated stakeholders of BR LHA, a new invitation letter was sent by ARESS Puglia to the organisation via e-mail, to identify a feasible date to organise a half-day meeting, comprising a two-hours workshop, followed by a 30 to 45 minutes focus group with all the stakeholders.

The stakeholders identified Tuesday 24th September as the best option for attending the workshop, which was delivered to them on-site at the General Direction Office of BR LHA in Brindisi. The session required internet connection and projection facilities.

The purpose of the workshop, which was facilitated by Dr. Mingolla and Dr. Pantartzis in Italian language, was to: present the assessment process in the Puglia Region; present the initial outcomes of the on-line self-assessment; discuss on the assessments of each dimension; and reach a consensus on the maturity of integrated care in ASL BR.



Fig.8 -BR LHA consensus workshop

4.4.2 Negotiation and consensus building

After the presentation, with the support of a PowerPoint presentation and hand-outs, of the summary of the on-line self-assessment survey, the invited stakeholders were guided through the negotiation process with a PowerPoint presentations and visuals. The purpose of the negotiation process was to: 1) share the multiple perceptions that guided each stakeholder during the self-assessment, including their experience in the Local Health Authority and in their specific roles; and 2) identify the chance to negotiate a shared ranking for each dimension, upon knowledge and information sharing during the workshop.

The negotiation and consensus building process was delivered through an in depth analysis of each dimension of the SCIROCCO Exchange Tool, presenting and discussing the justifications and reflections that each stakeholder has provided in their on-line self-assessment. The process began starting from the only dimension that was unanimously shared among all the stakeholders (i.e. Q12) and moved on to the two more heterogeneous (i.e. Q1 and Q7), to which all the remaining followed. Each dimension is reported below.

Q12 - Capacity Building - All the stakeholders assessed this dimension 3 - *Learning about integrated care and change management is in place but not widely implemented*. The President of Voluntary Association agrees with the CEO. The H&SC District Director reports that planning actions exist at organisational level (i.e. ASL BR) but they still need to be translated into actions. The LHA CMO confirms that a strategy does exist at regional level as well as projects are already in place, hence a clear vision does exist. The H&SC Director and the CMO both refer to integrated care initiatives that have been recorded as best practices, hence reported in the submitted proposal as Reference Site of Puglia Region⁶⁴.

Q1 - Readiness to Change - The stakeholders have heterogeneous perceptions of this dimension. They agree on the existence of planning, nevertheless relevant strategies are still underway. There are pilot projects on management approaches that are trying to translate the vision into strategies. Lack of opportunities to translate vision in strategies and to bring the change to next level (i.e. sharing strategies across multiple stakeholders) is reported. The stakeholders agree on assessing this dimension 3 - *Vision or plan embedded in policy; leaders and champions emerging*.

Q2 - Structure & Governance - This dimension brings to light how different roles and different experiences within the organisation (i.e. ASL BR) have led to different scales in the assessment. The reason behind this is that the stakeholders who are more involved in taking action have different perceptions than those less involved. The President of Voluntary Association highlights the lack of training. The H&SC District Director confirms that the staff of the organisation has different perceptions from the users who access the services. The Nurse Coordinator confirms that her assessment exactly corresponds to the perceptions she has in her role. The stakeholders agree on assessing this dimension 4 - *Roadmap for a change programme defined and accepted stakeholders involved*.

Q3 - Digital Infrastructure - Three out of five stakeholders agree on assessing this dimension 3 - *eHealth services to support integrated care are piloted but there is not yet region wide coverage*. The LHA CMO reports that many unexploited opportunities exist because of lack of organisational (i.e. ASL BR) infrastructure. The President of Voluntary Association states that there is not a lack of IT at structural level, but at operational level: there is a lack of information on the existence of the IT network (e.g. patient records travel manually to the referral wards). The CMO confirms that more information and more training (e.g. Edotto system) are required. After discussion, the stakeholders reach consensus on 4 - *eHealth services to support integrated care are deployed widely at large scale*.

⁶⁴Source http://www.regione.puglia.it/web/pressregione/pressregione-rss/-/asset_publisher/V2vFLtqdAjTg/content/id/45109213

Q4 - Process Coordination - Three out of five stakeholders agree on assessing this dimension 3 - *A recommended set of agreed technical standards at regional/national level; some shared procurements of new systems at regional/national level; some large-scale consolidations of ICT underway*. The President of Voluntary Association explains that he is not fully informed to assess this dimension, as so he has assessed 1. The H&SC District Director confirms that processes are in place; however, the citizens should be informed and directed towards the existing and supportive processes. The stakeholders reach consensus on 3.

Q5 - Finance & Funding - Three out of five stakeholders agree on assessing this dimension 3 - *Regional/national (or European) funding or PPP⁶⁵ for scaling-up is available*. The President of Voluntary Association explains that he is not informed to assess this dimension, hence he has assessed as 0. The CMO Justifies assessing 4 this dimension with reference to the ERDF⁶⁶. The H&C District Director provides an example of funding for tele-monitoring for patients at home (i.e. Hospital@Home Project⁶⁷). Consensus on the assessment 3 is reached.

Q6 - Removal of Inhibitors - Three out of five stakeholders agree on assessing this dimension 3 - *Implementation Plan and process for removing inhibitors have started being implemented locally*. The Nurse Coordinator agrees with all the fellow stakeholders the existence of an active training plan, despite being unsuccessful. The President of Voluntary Association suggests a better distribution of the organisation as a useful tool to support the removal of inhibitors. The CMO confirms the strong desire and effort towards innovation that is bringing results even if on a longer term. The action is in progress. Consensus is confirmed on the assessment 3.

Q7 - Population Approach - The stakeholders have a heterogeneous perception of this dimension. At the basis of the differences there is a different background, a different level and different amount of information, also resulting from the different type and duration of their professional experiences. The President of Voluntary Association believes that the information provided is not enough; hence assessment is 1 for this dimension. The CMO confirms that there is a considerable amount of data available, but that still need to be accessed in an integrated and coordinated way. The H&SC District Director shares the existence of population stratification data in some projects (e.g. citizens stratified per levels of fragility; citizens stratified per level of cardiovascular risk; citizens stratified per Multidisciplinary Evaluation Unit (UVM⁶⁸)). However, population stratification for the entire BR LHA does not exist. The CMO provides the example of the Regional Project “PASSI”. He confirms the availability of population data, but not with a population stratification target.

⁶⁵ PPP stands for Public Private Partnership, as a management contract for public procurement, in which the building and operating stages are bundled.

⁶⁶ ERDF stands for European Regional Development Fund. More info are available at https://ec.europa.eu/regional_policy/en/funding/erdf/

⁶⁷ This project is currently under evaluation by the Regional HTA Centre to be scaled up. More info on Hospital@Home Project are available at <https://www.scirocco-project.eu/p6-puglia-italy-telehomecare-telemonitoring-teleconsultation-and-telecare-project-aimed-at-patients-with-heart-failure-chronic-obstructive-pulmonary-diseases-and-diabetes/>

⁶⁸ UVM stands for “Unità Valutazione Multidisciplinare” and it is a health and social care tool that allows multi-professional teams to assess patients in relation to individual complex health and social care needs. More info available at https://www.sanita.puglia.it/ricerca_det/-/journal_content/56/36057/uvm-unita-valutazione-multidisciplinare

FG confirms the existence of data, which are gathered and available to the BR LHA, unfortunately not with a stratification scope. After an animated discussion, all the stakeholders reach consensus on 3 - *Risk stratification used for specific groups i.e. those who are at risk of becoming frequent service users.*

Q8 - Citizen Empowerment - Three out of five stakeholders agree on assessing this dimension 4 - *Incentives and tools exist to motivate and support citizens to co-create healthcare services and use these services to participate in decision-making process about their own health.* This assessment is confirmed by the other two.

Q9 - Evaluation Methods - Three out of five stakeholders agree on assessing this dimension 3 - *Some integrated care initiatives and services are evaluated as part of a systematic approach.* This assessment is confirmed by the other two.

Q10 - Breadth of Ambition - Three out of five stakeholders agree on assessing this dimension 4 - *Improved coordination of social care service and health care service needs is introduced.* This assessment is confirmed by the other two.

Q11 - Innovation Management - All stakeholders have heterogeneous perceptions on this dimension. In particular, the dichotomy between infrastructure and knowledge on the infrastructure is brought to evidence. The IT services Manager confirms that from a technological perspective the organisation ASL BR is fully supported by all the necessary technologies for implementing the innovation process. IT infrastructure exists. However, there is lack of information. Besides, there are people who put up well with technology and also encourage its use, while there are other people who have more resistance in up-taking new technologies. As a result, it becomes absolutely necessary to implement new procedures while eliminating the obsolete ones.

4.4.3 Final consensus

Figure Fig.9 depicts the final spider diagram with the final consensus of the five ASL BR designated stakeholders. The negotiation process highlighted elements of difference among the stakeholders, which were discussed and led to reaching consensus on almost all dimensions as were assessed by majority of the stakeholders. Exceptions have been recorded on dimensions Q3 and Q7, as evidenced by the spider diagram in figure Fig.9.



Legend

Total of 5 responses selected. [See individual assessments](#)

- Voted by 1-25% respondents (1 respondent(s))
- Voted by 26-50% respondents (2 respondent(s))
- Voted by 51-75% respondents (3 respondent(s))
- Voted by 76-100% respondents (4-5 respondent(s))

Fig.9 - ASL BR final spider diagram

Table Tab. 6 summarises the final rating reached through the consensus building process that was presented earlier in this section. Justifications and reflections on each of the 12 dimensions have also been reported.

Dimension	Consensus	Justifications & Reflections
Q1 - Readiness to Change	3	Vision is clear to all stakeholders; however, planning is on the way. Still some limits exist at the operational level.
Q2 - Structure & Governance	4	The roadmap is organised, but different stakeholders have limited information on the various steps (e.g. stakeholders inside the organisation have different perception from stakeholders outside the organisation).
Q3 - Digital Infrastructure	4	e-Health services have been deployed, but there are limits to the use. This is due to the lack of/limited information that is circulated among the stakeholders at different levels.
Q4 - Process coordination	3	Information is very limited; hence the individual user does not take advantage of the existing standardised processes.
Q5 - Finance & Funding	3	Regional and National funding are available (e.g. ERDF ⁶⁹).
Q6 - Removal of inhibitors	3	Although existing, implementation processes are not yet evenly distributed.
Q7 - Population Approach	3	Risk stratification is used for specific groups, and in particular for those identified in the Chronic Care Model 3.0. Data are collected and available, but not always on stratification purpose.
Q8 - Citizen Empowerment	4	Strong consensus on this dimension.
Q9 - Evaluation Methods	3	Strong consensus on this dimension.
Q10 - Breadth of Ambition	4	Strong consensus on this dimension.
Q11 - Innovation Management	3	Formalised innovation management process is widely implemented: technological infrastructure is available, and up and running. However, there is some cultural resistance in place.
Q12 - Capacity Building	3	All stakeholders agreed on this dimension.

Tab. 6 -BR LHA summary of consensus meeting

4.5 Analysis of the outcomes - Brindisi Local Health Authority

Looking at the overall consensus diagram, dimension Q2 - Structure & Governance together with Q10 - Breadth of Ambition appear more significant than others in regards to carrying out integrated care in BR LHA, this because the approach towards the integrated care model is enforced from the management of the organisation BR LHA. All the participants found the results of the survey compliant with the LHA's current situation.

⁶⁹ERDF stands for European Regional Development Fund. More info are available at https://ec.europa.eu/regional_policy/en/funding/erdf/

None of the results were particularly surprising to the stakeholders.

The consensus diagram as a whole offers a balanced range across the 12th dimensions about the maturity of integrated care in the BR LHA, which is overall, assessed between the 3 and 4 points the reference scale 0 to 5. It is a harmonising image from a system-perspective and it does reflect the actual situation of the organisation at the time of the consensus workshop. Some dimensions are relevant to each other and they reinforce one the other. In particular, Q1 - Readiness to Change is supported by Q2 - Structure & Governance and Q10 - Breadth of Ambition.

A common factor among multiple dimensions is the strong Structure & Governance that is provide by the management team and transferred top-down. This works alongside with the bottom-up ambition to demonstrate to the other five Local Health Authorities (i.e. ASL) that the small size of BR LHA is not a limiting factor, quite the opposite is a facilitation element in achieving integrated care maturity.

Specific factors in the organisation BR LHA affect the recorded strengths and weaknesses. One specific factor in the organisation BR LHA positively impacts on the strengths: the small size of the organisation when compared to the other five in the Puglia Region. The factor that has negative impact on the weaknesses is the lack of cross-level information in the organisation. One of the above reported factors is dependent upon organisational aspects (i.e. size and information).

4.6 Key message - Brindisi Local Health Authority

Culture has emerged as relevant factor for an effective change and modernisation of the LHA integrated care model. As more information devises and e-health services will be available for citizens in the further months and years, is important to work on the resistance to change. The participants identified training and information as levers of change.

4.7 Conclusions - Brindisi Local Health Authority

After the negotiation and consensus building process on each of the 12th dimensions and the justifications provided by the five designated stakeholders on each of the 12th dimensions, the facilitators have asked final comments on the strengths of BR LHA in relation to the maturity of the integrated care model. The individual answers provided are below reported.

Chief Medical Officer> Q11 - Innovation Management. There is a strong desire to innovate as the scale of the organisation BR LHA is pretty small when compared to the other five organisations in Puglia Region.

President of Voluntary Association> Q1 - Readiness to Change. BR LHA is in a state of nearly continuous change as organisation, as this is demanded by the need, and particularly by the need to integrate between public and private to implement service provision.

H&SC District Director > Q2 - Structure & Governance and Q10 - Breadth of Ambition and Q11 - Innovation Management. Novel user needs have been acknowledged by the organisation management team. This has already led to a recognisable integration between professionals, and specifically between health and social care.

Nurse Coordinator > Q1 - Readiness to Change.

IT services Manager > Q11 - Innovation Management. Substantial investments have been also made.

Also, final comments on the weaknesses of BR LHA in relation to the maturity of the integrated care model have been invited. In this case, all the stakeholders agreed and unanimously confirmed that the greatest weakness of the organisation BR LHA was the lack of information and communication. The need for greater information access at all organisational levels is strongly envisaged.

As described in sections 4.3 and 4.4, the areas with highest differences are Q1 - Readiness to Change and Q7 - Population Approach. The strengths emerged across BR LHA, on which majority of the stakeholders agreed, are: Q1 - Readiness to Change; Q2 - Structure & Governance; Q10 - Breadth of Ambition; and Q11 - Innovation Management.

The outcomes reflected the local situations and the expectations of the stakeholders. The emerged challenge is the lack of information and how this poorly affects the integration of services across levels.

5 Self-assessment process - Barletta Andria Trani Local Health Authority

5.1 Introduction to Barletta Andria Trani Local Health

Barletta Andria Trani (BT) LHA comprises five Districts, three of which are closer to the coastline.

There are four acute care infrastructures, of which three are public, and one is private with public access via NHS agreement⁷⁰.

In BT LHA there is a total of 285 GPs (without considering Paediatricians), of which 238 (i.e. 83.5%) are structured in complex networks to ensure seamless care delivery to patients⁷¹.

The population is 390,011 inhabitants⁷², with no significant difference reported between male and female population. People aged over 65 years old are 19% of entire population, of which almost half (i.e. 9%) is made by people aged over 75 years old. The spread of these two age groups is almost equal across the five Districts, with the Districts Andria and Barletta recording approximately 0.5% reduction in the figures⁷³.

5.2 Identification process of the local stakeholders

AReSS Puglia requested to Barletta Andria Trani (BT from now on) LHA to identify five stakeholders with diverse background and different roles within the organisation, comprising: a representative of the Top Management (e.g. CEO, CMO, CAO); a representative of the Health & Social Care District; a representative with medical background (e.g. Care Manager, Chief Nurse); a patients' group representative; and a representative of the ICT Team. This allowed to gain multiple perspectives, in which the experience in each role and the affiliation to the local organisation were recorded to support the data analysis.

BT LHA identified five stakeholders as requested. The final list of the local stakeholders identified by BT LHA who completed the self-assessment process is reported in table Tab. 7 below, with years spent in the role and years spent in the organisation to contextualise their individual responses during the analysis.

⁷⁰Source EDOTTO - regional health IT System

⁷¹Source EDOTTO - regional health IT System

⁷²Source ISTAT 2018 data <https://www.istat.it/it/dati-analisi-e-prodotti/contenuti-interattivi/popolazione-residente>

⁷³Piano della Performance 2019-2021 <https://www.sanita.puglia.it/web/asl-barletta-andria-trani/piano-della-performance>

Role	Affiliation	Years in role	Years in organisation
Chief Executive Officer	BT LHA	1.8	16
H&SC District Director	Andria H&SC District	22	31
Nurse Coordinator	BT LHA	2	13
Sick Patient Court Coordinator	-	NA	NA
IT services Manager	BT LHA	1	6

Tab. 7-BT LHA stakeholders

5.3 Self-assessment survey

Upon receiving the names and contact details of the five designated stakeholders by BT LHA, AReSS Puglia formally invited each of them via e-mail to take part to the maturity assessment process. All stakeholders were carbon-copied in the e-mails, so that they were all made aware of the fellow colleagues involved in the process.

In the e-mail the full process was described, the link to the SCIROCCO Exchange Tool was provided, together with a dedicated helpline. Supportive documents sent along with the invitation to complete the on-line survey comprised completion guidance with steps to follow, with visuals and screenshots to guide the entire process from beginning to completion and submission.

Two weeks' timeline was recommended for completion.

5.3.1 Outcomes of self-assessment survey

All the five invited stakeholders completed the on-line self-assessment survey on time. Table 8 provides a summary of the 0 to 5 ratings provided by the stakeholders on each of the 12 dimensions of the SCIROCCO Exchange Tool. The ratings assigned by each stakeholder vary in all the dimensions. The degree of variation is from 1 to 3 for the dimensions: Q1, Q2, Q5, and Q12. It is from 2 to 4 for the dimensions: Q3, and Q7. It is higher than three points on the 0 to 5 scale for the dimensions: Q4, Q9, Q10, and Q11. It is lower than three points on the 0 to 5 scale for the dimensions Q6 and Q8, where the variation is only of two points on the scale (i.e. 0 to 1 and 1 to 2).

The stakeholders have been working in BT LHA for individual periods that vary from 6 to 31 years and have been providing services in their roles for periods of time that varies from 1 to 22 years. Their individual perceptions on each of the 12 dimensions of the SCIROCCO Exchange tool precisely reflect the knowledge that they individually have on the dimensions.

The dimensions on which majority of the stakeholders appeared to have a closer perception are: Q5 "Funding", Q6 "Removal of Inhibitors", and Q12 "Capacity Building". While for the dimensions Q5 and Q6 the perception is rated low (in red), the dimension Q12 is on the middle range (in yellow) of the scale.

Figure Fig.10 depicts the outcomes of the on-line individual self-assessment, as completed by each BR LHA stakeholder.

	Tool Dimensions											
Stakeholder Role	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Chief Executive Officer	3	3	2	3	1	1	4	1	2	2	4	3
H&SC District Director	3	2	4	4	1	0	4	1	4	4	3	3
Nurse Coordinator	3	1	2	3	1	1	4	2	4	4	3	3
Scik Patient Court Coordinator	1	1	4	0	1	1	2	2	2	0	3	3
IT services Manager	1	1	2	2	3	1	4	1	1	2	1	1

Dimensions			
Q1	Readiness to Change	Q7	Population Approach
Q2	Structure & Governance	Q8	Citizen Empowerment
Q3	Digital Infrastructure	Q9	Evaluation Methods
Q4	Process Coordination	Q10	Breadth of Ambition
Q5	Finance & Funding	Q11	Innovation Management
Q6	Removal of Inhibitors	Q12	Capacity Building

Ratings		
5 to 4	3 to 2	1 to 0

Tab. 8 - BT LHA summary of self-assessment





Fig.10 - BT LHA outcomes of the individual self-assessments

5.3.2 Stakeholder workshop

Upon completion of the self-assessment survey by all the five designated stakeholders of BT LHA, an invitation letter was sent by AReSS Puglia to the LHA via e-mail, to request a feasible date to organise a half-day meeting, comprising a two-hours workshop, followed by a 30 to 45 minutes focus group with all the stakeholders on their experience with the SCIROCCO Exchange Tool.

The stakeholders identified Thursday 26th September as the best option for attending the workshop, which was delivered to them on-site at the General Direction Office BT LHA in Andria. The session required internet connection and projection facilities.

The purpose of the workshop, which was facilitated by Dr. Mingolla and Dr. Pantzartzis in Italian language, was to: present the assessment process in the Puglia Region; present the initial outcomes of the on-line self-assessment; discuss on the assessments of each dimension; and reach a consensus on the maturity of integrated care in BT LHA.



Fig.11 -BT LHA consensus workshop

5.3.3 Negotiation and consensus building

After the presentation, with the support of a PowerPoint presentation and hand-outs, of the summary of the on-line self-assessment survey, the invited stakeholders were guided through the negotiation process with a PowerPoint presentations and visuals. The purpose of the negotiation process was to: 1) share the multiple perceptions that guided each stakeholder during the self-assessment, including their experience in the Local Health Authority and in their specific roles; and 2) identify the chance to negotiate a shared ranking for each dimension, upon knowledge and information sharing during the workshop.

The negotiation and consensus building process was delivered through an in depth analysis of each dimension of the SCIROCCO Exchange Tool, presenting and discussing the justifications and reflections that each stakeholder has provided in their on-line self-assessment. The process began starting from the three dimensions on which the smallest variations were captured. In particular, dimension Q6 on which all stakeholders unanimously agreed since the self-assessment; and dimensions Q5 and Q12 on which little rating variations were recorded. Each dimension is reported below.

Q6 - Removal of Inhibitors -Almost all stakeholders (i.e. four out of five) agree on assessing this dimension 1 - *Awareness of inhibitors but no systematic approach to their management is in place*, as inhibitors are perceived and identified. Nevertheless, there is not a systematic plan in place for removal, nor reduction. The H&SC District Director has no perception of the existence of inhibitors, hence the “0” rating reported. Consensus is confirmed on the assessment 1.

Q5 - Finance & Funding - Four out of five stakeholders agree on assessing this dimension 1 - *Funding is available but mainly for the pilot projects and testing*. The CEO explains how project funding exists and enables the delivery of projects. Nonetheless, it is absolutely crucial that the LHA Top Management leads the action. The CEO suggests that a bottom-up approach should be also exerted to enable optimum identification of funding availabilities, hence promotion across all levels and not only top-down. Currently there is an unmet condition between need and offer. Consensus is confirmed on 1.

Q12 - Capacity Building - Four out of five stakeholders agree on assessing this dimension 3 - *Learning about integrated care and change management is in place but not widely implemented*. All stakeholders agree on the lack of continuous training, which deeply impacts on capacity building. The IT services Manager who has rated “1” this dimension stated that most of the times continuous training is not identified among the needs of the organisation. The stakeholders agree on “3”.

Q1 - Readiness to Change -The stakeholders have split perceptions of this dimension. While three out of five rate 3 -*Vision or plan embedded in policy; leaders and champions emerging*, the remaining two stakeholders rate this dimension 1 -*Compelling need is recognised, but no clear vision or strategic plan*. Despite the different rating, all stakeholders converge on relating the relentless of strategies and directions at Regional level, which make it highly complex to deliver the change. After the discussion, all stakeholders agree to converge on 3.

Q2 - Structure & Governance - Three out of five stakeholders rated this dimension 1 - *Recognition of the need for structural and governance change*, as formal and structured action still needs to be taken towards the delivery of integrated care. After discussion, informal ways of collaboration are acknowledged, but there is a lack of awareness of the processes in place. The CEO suggests that once the issues are brought to evidence, half of the effort is already done. As a consequence, all the stakeholders agree on rating 2 - *Formation of task forces, alliances and other informal ways of collaborating*.

Q3 - Digital Infrastructure - The perception that all five stakeholders have on this dimension is positive, with ratings split between “2” and “4”. Digital infrastructure services have been implemented over the past years (e.g. Edotto), although work still needs to be completed towards a full e-health system of care delivery. After discussion, they all converge on 3 - *eHealth services to support integrated care are piloted but there is not yet region wide coverage*.

Q4 - Process Coordination - The stakeholders have a heterogeneous perception of this dimension. Ratings vary from “0” to “4”, with two out of five rating 3 - *A recommended set of agreed technical standards at regional/national level; some shared procurements of new systems at regional/national level; some large-scale consolidations of ICT underway*. In particular, the two stakeholders make reference to the Care pathway as being one of the enablers of integrated care. After discussion and sharing information, they converge on rating 4 - *A unified set of agreed standards to be used for system implementations specified in procurement documents; many shared procurements of new systems; consolidated data centres and shared services widely deployed*.

Q7 - Population Approach - The stakeholders have a homogeneous perception of this dimension, with four out of five rating 4 - *A population risk approach is applied to integrated care services but not yet systematically or to the full population*. The population risk approach is mostly applied to specific types of integrated care services, and uttermost to chronic patients. Consensus is confirmed on the assessment 4.

Q8 - Citizen Empowerment - The assessment of this dimension is towards the lower side of the scale (i.e. “1” and “2”). Issues on communication and knowledge sharing are brought to evidence during the discussion. Specific reference is made to the fragmentation of the available information and to the concentration of the available information (e.g. therapies, pathways) in the hands of a few trained stakeholders. Consensus is confirmed on the assessment 2, as on-site specific efforts are currently done.

Q9 - Evaluation Methods - The stakeholders have a heterogeneous perception of this dimension. Ratings vary from “1” to “4”, with two out of five rating 4 - *Most integrated care initiatives are subject to a systematic approach to evaluation; published results*. After discussion, stakeholders converge on rating 2 - *Evaluation of integrated care services exists, but not as a part of a systematic approach*, as there is no reporting on the amount and details of data collected.

Q10 - Breadth of Ambition - The stakeholders have a heterogeneous perception of this dimension. Ratings vary from “0” to “4”, with two out of five rating 4 - *Improved coordination*

of social care service and health care service needs is introduced. Consensus is confirmed on the assessment 4.

Q11 - Innovation Management - Three out of five stakeholders rate this dimension 3 - *Formalised innovation management process is planned and partially implemented*, with one stakeholder rating at the lowest end of the scale (i.e. “0”) and one another stakeholder rating towards the highest end (“4”). This variation is dependent upon the experience (i.e. the years within the organisation BT LHA, and the role that each stakeholder has (i.e. the CEO has rated “4”, while the IT Services Manager has rated “1”). After discussion, consensus is reached on 3.

5.3.4 Final consensus

Figure Fig.12 illustrates the final spider diagram with the final consensus of the five BT LHA designated stakeholders. The negotiation process highlighted elements of difference among the stakeholders, in contrast to the dimensions on which they initially have revealed alike perceptions, which were discussed in detail and led to reaching consensus on almost all dimensions as were assessed by majority of the stakeholders. The discussion led to the almost unanimous rating on the dimensions Q5, Q6, Q7, Q8, and Q11, as evidenced by the spider diagram in figure Fig.12.



Legend

Total of 5 responses selected. [See individual assessments](#)

- Voted by 1-25% respondents (1 respondent(s))
- Voted by 26-50% respondents (2 respondent(s))
- Voted by 51-75% respondents (3 respondent(s))
- Voted by 76-100% respondents (4-5 respondent(s))

Fig.12 - BT LHA final spider diagram

Table Tab. 9 contains the final scores reached through the consensus building process that were summarised earlier on. Justifications and reflections on each of the 12 dimensions are also reported.

Dimension	Consensus	Justifications & Reflections
Q1 - Readiness to Change	3	Plans are defined at organizational level. Nonetheless, there are processes and regulations at regional (i.e. Puglia) level that the organization needs to fulfill. This affects the readiness to change.
Q2 - Structure & Governance	2	Informal ways of collaboration are acknowledged, but there is a lack of awareness of the processes in place. This results in informal actions and alliances to deliver the best possible solution to the issues.
Q3 - Digital Infrastructure	3	There is only one regional (i.e. Puglia) system that is the electronic patient record (i.e. EHR). Other than this, e-health services to support integrated care do exist but lack comprehensive organisation.
Q4 - Process coordination	4	Care pathways will lead to simplification of processes for service deployment.
Q5 - Finance & Funding	1	Funding is only used for pilot projects, less for training and information. The outcome is the incapability to be ready to identify the available funding unless this action is led from above. Training and information at different levels is required, in order to enable a systematic process. There are multiple sets of evaluations of integrated care services, done through multiple ICT platforms. Training, information and integration are needed.
Q6 - Removal of inhibitors	1	The assessment is due to the lack of perception of inhibitors by some stakeholders, but not all of them.
Q7 - Population Approach	4	Population risk approach is applied to integrated care services but it has not yet been systematically implemented.
Q8 - Citizen Empowerment	2	Citizen empowerment is acknowledged as having a strong impact on successful delivery of integrated care. However, the process is strongly affected by the efforts done on-site (e.g. Chronic Care Model).
Q9 - Evaluation Methods	2	Evaluation actions related to integrated care services are currently higher than those that are actually fully used. Stakeholders underlined that there is no reporting on the amount and details of data collected.
Q10 - Breadth of Ambition	4	Integration between health and social care services is mostly done across different areas of care. This is envisaged across different levels of the same area or service.
Q11 - Innovation Management	3	The assessment of innovation management processes is directly linked to and dependent upon the experience of the individual stakeholder and the years spent in their specific role.
Q12 - Capacity Building	3	Training is perceived as not enough implemented and is not part of “continuous learning”.

Tab. 9 - BT LHA summary of consensus meeting

5.4 Analysis of the outcomes - Barletta Andria Trani Local Health Authority

Looking at the final consensus diagram, three dimensions appear more significant than others in regards to carrying out integrated care in BT LHA: Q4 - Process Coordination; Q7- Population Approach; and Q10 - Breadth of Ambition. None of the results were particularly surprising to the stakeholders. Multiple efforts are in place to deliver integrated care services, with coordinated processes, population risk approach, and a strong ambition. Nevertheless, funding availability and removal of inhibitors still pose a limit to the achievement of a fully integrated care service delivery in the organisation.

The consensus diagram as a whole describes BT LHA regional maturity in terms of integrated care as a complex balance of elements, ranging from “1” to “4” points rating on the reference scale 0 to of integrated care 5.

A connection emerged for the dimensions Q6 - Removal of Inhibitors and Q8 - Citizen Empowerment, as the effects of inhibitors are not always perceived at all levels, by all stakeholders. This difference in perception of the inhibitors directly impacts on how the citizens are empowered: if stakeholders do not perceive the existence of inhibitors, they will not act to empower the citizens. This process is positive affected by the efforts done on-site (e.g. Chronic Care Model).

A common factor that affects multiple dimensions is the complexity of the management processes, which require a degree of literacy and dedicated efforts to be effective. Training is not yet part of a routine management process, as so it requires extra efforts to be delivered. Structure & Governance is mostly provided in an informal way, which then poses some limits in the implementation processes.

Among the specific factors that affect strengths and weaknesses in the Integrated Care organisation in BT LHA, there is lack of integration amongst the different levels of care and the different stakeholders. Nevertheless, this is currently emerging as an issue, which already provides the basis to initiate the change. This factor is mostly dependent upon organisational aspects, rather than others. The LHA is extremely innovative in its approach; nonetheless it is highly linked to the Regional (i.e. Puglia Region) structured approach.

5.5 Key message - Barletta Andria Trani Local Health Authority

All the participants stated that the assessment with the tool is very important to analyse data and translate them in corrective action in a faster way. The dialog among different stakeholders was the most appreciated factor. The H&SC District Director: “it’s important that the assessment results lead to systemic management of chronicity pathways”.

5.6 Conclusions - Barletta Andria Trani Local Health Authority

After the negotiation and consensus building process on each of the 12th dimensions and the justifications provided by the five designated stakeholders on each of the 12th dimensions, the facilitators have asked final comments on the strengths of BT LHA in relation to the maturity of the integrated care model. The participants strongly agreed on the outcomes of the consensus building activity, and on the justifications provided during the self-assessment

stage. Undoubtedly BT LHA declared its strong determination in achieving full change at local level and to enable each stakeholder at the different staged of the process to deliver integrated care to Barletta Andria Trani citizens.

As described in sections 5.3 and 5.4, the dimensions with highest differences are: Q4 - Process coordination; Q9 - Evaluation Methods; Q10 - Breadth of Ambition; and Q11 - Innovation Management. Among those dimensions all the stakeholders provided ratings varying from “0” to “4”, with justifications mostly related to the lack of integration across different services but from each stakeholder’s perspective. Funding and Removal of inhibitors emerged as weaknesses, while Population approach emerged as major strength across the LHA at all levels.

The outcomes reflected the local situations and the expectations of the stakeholders. The emerged challenge is the lack of integration of services across levels.

6 Self-assessment process - Foggia Local Health Authority

6.1 Introduction to Foggia Local Health

Foggia LHA covers a fragmented territory comprising a total of 61 municipalities, which are organised in three dis-homogeneous areas due to geographical configurations and infrastructure networks. There are mountains (i.e. Dauni Mountains) and islands (i.e. Tremiti Islands) that provide physical constraints; as well as variations in the connection through seven railway lines, two motorways, and eight A roads. Tremiti Islands and at least 11 municipalities are located more than 60 minutes away from the nearest hospital. The LHA comprises eight H&SC Districts.

There are 10 acute care infrastructures, of which four are public (comprising one university hospital), and six are private with public access via NHS agreement (comprising one religious institution)⁷⁴.

In FG LHA there is a total of 323 GPs (without considering Paediatricians), of which 227 (i.e. 70.3%) are structured in complex networks to ensure seamless care delivery to patients⁷⁵.

The 622,183 inhabitants⁷⁶ are mostly concentrated in urban areas (60%), whereas the rural areas are in a state of isolation and low density. The 20% of the population is over 65 years old, where 6% is the amount of people aged 80 years and above. Only 15% of the population is between 0 and 14 years old. The concentration of the population aged over 65 years reflects the concentration of the population aged over 40 years, which is reported being in the urban areas rather than in rural areas. People aged over 65 years and over 75 years have been progressively increasing over time: the increment between 1982 and 2007 has respectively been reported at +32% and +135%⁷⁷.

Foggia Province currently has a population affected by chronic diseases 3.5% lower than the regional average (i.e. Puglia Region). Nevertheless, the rate of hospitalisation in Foggia LHA is much higher when compared to the regional average. Chronic diseases represent a strong limit to the sustainability of care services. The top four diseases are listed in relation to the highest number of patients with chronic diseases: diabetes; hypertension; cardiac deficiency; and chronic obstructive pulmonary disease (COPD)⁷⁸.

6.2 Identification process of the local stakeholders

AReSS Puglia asked Foggia LHA Top Management to appoint a minimum of five stakeholders to gather different assessment perspectives concerning the 12 maturity matrix dimensions

⁷⁴Source EDOTTO - regional health IT System

⁷⁵Source EDOTTO - regional health IT System

⁷⁶Source ISTAT 2018 data <https://www.istat.it/it/dati-analisi-e-prodotti/contenuti-interattivi/popolazione-residente>

⁷⁷Piano della Performance 2019-2021 <https://www.sanita.puglia.it/web/ospedaliriunitifoggia/piano-della-performance>

⁷⁸Piano della Performance 2019-2021 <https://www.sanita.puglia.it/web/ospedaliriunitifoggia/piano-della-performance>

and to obtain a multi-stakeholder opinion on integrated care local initiatives. AReSS Puglia specified the different roles within which to identify the assessors comprising: a representative of the Top Management (e.g. CEO, CMO, CAO); a representative of the Health & Social Care District; d; a representative with medical background (e.g. Care Manager, Chief Nurse); a patients' group representative; and a representative of the ICT Team. Experience in each role and the affiliation to the local organisation where recorded to support the data analysis.

Foggia LHA identified five stakeholders as requested, to which other one was later added as she had a role that could provide additional input to the identified stakeholders (i.e. Social Services Coordinator). The final list of the local stakeholders identified by Foggia LHA who completed the self-assessment process is reported in table Tab. 10 below, with years spent in the role and years spent in the organisation to contextualise their individual responses during the analysis.

Role	Affiliation	Years in role	Years in organisation
Chief Executive Officer	FG LHA	NA	NA
Social Services Coordinator	FG LHA	28	28
H&SC District Director	San Marco in Lamis H&SC District	14	29
Nurse Coordinator	San Marco in Lamis CCC	20	30
ICT services Manager	FG LHA	2	10
President of Patient's Association	Patient Advisory Committee	10	10

Tab. 10-FG LHA stakeholders

6.3 Self-assessment survey

Upon receiving the names and contact details of the six designated stakeholders by Foggia LHA, AReSS Puglia formally invited each of them via e-mail to take part to the maturity assessment process. All stakeholders were carbon-copied in the e-mails, so that they were all made aware of the fellow colleagues involved in the process.

In the e-mail the full process was described, the link to the SCIROCCO Exchange Tool was provided, together with a dedicated helpline. Supportive documents were sent along with the invitation to complete the on-line survey comprised completion guidance with steps to follow, with visuals and screenshots to guide the entire process from beginning to completion and submission.

Two weeks' timeline was allowed for completion, which was eventually extended because of holiday season in Puglia. The SCIROCCO Exchange project team supported the completion of the on-line survey

6.3.1 Outcomes of self-assessment survey

All the six invited stakeholders completed the on-line self-assessment survey on time. Table Tab. 11 provides a summary of the 0 to 5 ratings provided by the seven stakeholders on each of the 12 dimensions of the SCIROCCO Exchange Tool. The ratings assigned by each stakeholder vary from 1 to 4, with only two dimensions in which the ratings reached 5: Q1 and Q12.

The stakeholders, who have been working in Foggia LHA for individual periods that vary from 10 to 30 years and who have been providing services in their roles for periods of time that vary from 2 to 28 years, have provided a pretty homogeneous perception of the 12 dimensions of the SCIROCCO Exchange Tool, as far as they are concerned.

The dimensions on which majority of the stakeholders appeared to have different perception are: Q1 “Readiness to Change”, Q4 “Process Coordination”, and Q5 “Funding”. They all unanimously agree on dimension Q7 “Population Approach”, which returns a very positive rating (in green), quite in contrast with Q4 (in red and yellow).

Figure Fig.13 depicts the outcomes of the on-line individual self-assessment, as completed by each FG LHA stakeholder.

	Tool Dimensions											
Stakeholder Role	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Chief Executive Officer	3	2	3	2	3	1	4	2	1	3	3	3
H&SC District Director	3	1	3	1	3	2	4	2	2	2	3	2
Nurse Coordinator	3	1	3	1	3	2	4	2	2	2	3	2
ICT services Manager	4	2	3	1	1	1	4	3	2	2	1	2
President of Patient's Association	5	1	4	3	1	2	4	1	2	1	2	5

Dimensions			
Q1	Readiness to Change	Q7	Population Approach
Q2	Structure & Governance	Q8	Citizen Empowerment
Q3	Digital Infrastructure	Q9	Evaluation Methods
Q4	Process Coordination	Q10	Breadth of Ambition
Q5	Finance & Funding	Q11	Innovation Management
Q6	Removal of Inhibitors	Q12	Capacity Building

Ratings		
5 to 4	3 to 2	1 to 0

Tab. 11 - FG LHA summary of self-assessment



Chief Executive Officer



H&SC District Director



Nurse Coordinator



IT services Manager



President of Patient's Association

Fig.13 - FG LHA outcomes of the individual self-assessments

6.3.2 Stakeholder workshop

Upon completion of the self-assessment survey by all the six designated stakeholders of Foggia LHA, an invitation letter was sent by AReSS Puglia to the LHA via e-mail, to request a feasible date to organise a half-day meeting, comprising a two-hours workshop, followed by a 30 to 45 minutes focus group with all the stakeholders on their experience with the SCIROCCO Exchange Tool.

The stakeholders identified Thursday 14th November as the best option for attending the workshop, which was delivered to them on-site at the General Direction Office FG LHA in Foggia.

The purpose of the workshop, which was facilitated by Dr. Mingolla and Dr. Pantzartzis in Italian language, was to: present the assessment process in the Puglia Region; present the initial outcomes of the on-line self-assessment; discuss on the assessments of each dimension; and reach a consensus on the maturity of integrated care in Foggia LHA.



Fig.14 -FG LHA consensus workshop

6.3.3 Negotiation and consensus building

After the presentation, with the support of a PowerPoint presentation and hand-outs of the summary of the on-line self-assessment survey, the invited stakeholders were guided through the negotiation process with a PowerPoint presentations and visuals. The purpose of the negotiation process was to: 1) share the multiple perceptions that guided each stakeholder during the self-assessment, including their experience in the Local Health Authority and in their specific roles; and 2) identify the chance to negotiate a shared ranking for each dimension, upon knowledge and information sharing during the workshop.

The negotiation and consensus building process was delivered through an in depth analysis of each dimension of the SCIROCCO Exchange Tool, presenting and discussing the justifications and reflections that each stakeholder has provided in their on-line self-assessment. All the dimensions were discussed in numerical order, as below reported.

Q1 - Readiness to Change -The stakeholders have a positive perception on this dimension, whose ratings are towards the higher end of the scale (i.e. from “3” to “5”). The President of the Patient’s Association confirmed his 5 -Political consensus; public support; visible

stakeholder engagement, while the other stakeholders express less strong certainties on the political consensus and suggest that implementation to keep the momentum towards the change is still needed. After discussion, the stakeholders agree on assessing this dimension 4 - *Leadership, vision and plan clear to the general public; pressure for change.*

Q2 - Structure & Governance - Three out of five stakeholders rate this dimension 1 - *Recognition of the need for structural and governance change.* The other two rated 2- *Formation of task forces, alliances and other informal ways of collaborating.* Structure and governance are present at local level (i.e. organisation FG LHA); nevertheless, there is the perception that they are missing at national and regional level. Consensus is reached on “2”.

Q3 - Digital Infrastructure - The stakeholders have a homogeneous and positive perception of this dimension, as four out of five rated 3 - *eHealth services to support integrated care are piloted but there is not yet region wide coverage.* The President of the Patients’ Association is convinced that a supportive network and knowledge transfer is key, as not all the stakeholders nor the citizens may have access to the same infrastructure (i.e. Sub-Appennino and Gargano have no full infrastructure network) and have the same level of literacy. Consensus is reached on “3”.

Q4 - Process Coordination - Three out of five stakeholders rate this dimension 1 - *Discussion of the necessity of ICT to support integrated care and of any standards associated with that ICT is initiated,* while the other two rated “2” and “3”. The President of the Patients’ Association explains that there is no standardised approach, while the Nurse Coordinator finds this lack especially at the top of the organisational pyramid. There are efforts towards process coordination at local level, but these need to be reported at organisational (i.e. FG LHA) level. After evaluating the current situation, the stakeholders agree on assessing this dimension 2 - *An ICT infrastructure to support integrated care has been agreed together with a recommended set of technical standards - there may still be local variations or some systems in place are not yet standardised.*

Q5 - Finance & Funding - Three out of five stakeholders agree on assessing this dimension “3” while the other two “1”. The different roles of the stakeholders plays a crucial part in the rating of this dimension, as not all of them have knowledge on the different types of funding, that is accessed through different procedures. The stakeholders reach consensus on 3 - *Regional/national (or European) funding or PPP for scaling-up is available,* as they all acknowledge the existence of funding for scaling-up.

Q6 - Removal of Inhibitors - Also on this dimension, the stakeholders have split views. Two out of three have negative perception, while three have a more positive opinion, even if not fully positive. In particular, they all acknowledge different levels of literacy and cultural inhibitors. Consensus is reached on 1 - *Awareness of inhibitors but no systematic approach to their management is in place.*

Q7 - Population Approach - The stakeholders have a unanimous and positive perception of this dimension. They all agree on rating the dimension 4 - *A population risk approach is applied to integrated care services but not yet systematically or to the full population.*

Q8 - Citizen Empowerment - Three out of five stakeholders rated this dimension 2 - *Citizen empowerment is recognised as important part of integrated care provision, effective*

policies to support citizen empowerment are in place but citizens do not have access to health information and health data. The Nurse Coordinator stated that citizens are empowered at the point that the information is directly accessed by the citizens. However, after discussion, in which the ICT services Manager substantiated the relevance of the electronic patient's records (i.e. EHR), all stakeholders converged on rating 3 - *Citizens are consulted on integrated care services and have access to health information and health data.*

Q9 - Evaluation Methods - Four out of five stakeholders rated this dimension 2 - *Evaluation of integrated care services exists, but not as a part of a systematic approach.* Though, after discussion, the lack of integrated care services and the lack of evaluation methods within the integrated care service delivery were brought to the attention. Hence, they all agreed to converge on rating 1 - *Evaluation of integrated care services is planned to take place and be established as part of a systematic approach.*

Q10 - Breadth of Ambition - Three out of five stakeholders rated this dimension 2 - *Integration within the same level of care (e.g., primary care) is achieved,* while the other two rated it "1" and "3". The President of the Patient's Association is extremely critical on the inability to achieve a full coverage across the entire network so that to offer full integrated care services to the citizens. He identifies some gaps, among which the absence of a key stakeholder (i.e. GP) despite a wide and evident individual disposition to collaborate among professions. The discussion brings to evidence different perceptions, much wider than only one-point on the rating scale (and the definitions associated to them). Reaching full consensus requires higher effort than for the other dimensions and yet, the rating 1 - *The citizen or their family may need to act as the integrator of service in an unpredictable way* cannot be considered fully accepted by all the five stakeholders as representative of FG LHA.

Q11 - Innovation Management - Three out of five stakeholders rated this dimension 3 - *Formalised innovation management process is planned and partially implemented,* while the other two rated it "1" and "2". The ICT services Manager is highly critical on the lack of human and economic resources to enable innovation management, hence his rating 1 - *Innovation is encouraged but there is no overall plan.* This is the dimension on which the highest level of disagreement has been captured and recorded. The discussion brings to evidence different perceptions, much wider than only one-point on the rating scale (and the definitions associated to them). Reaching full consensus requires higher effort than for the other dimensions, hence the rating 2 - *Innovations are captured and there are some mechanisms in place to encourage knowledge transfer* is the most acceptable compromise among the stakeholders.

Q12 - Capacity Building - Three out of five stakeholders rated this dimension 2 - *Cooperation on capacity building for integrated care is growing across the region.* All stakeholders agree on recognising that there are multiple on-going efforts to implement capacity building, despite a lot still needs to be done. The rating 2 is confirmed.

6.3.4 Final consensus

Figure Fig.15 illustrates the final spider diagram with the final consensus of the six Foggia LHA designated stakeholders. The negotiation process highlighted elements of difference among the stakeholders, which were discussed and led to reaching consensus on almost all dimensions. The final consensus diagram as depicted in figure Fig.15 shows how the consensus has not always been reached on the score on which majority of the stakeholders individually assessed each specific dimension. This is particularly evident on the dimensions Q1, Q8, Q9, Q10, and Q11 and proves how the discussion led to a deeper understanding of each dimension and the elements that may be relevant to it.



Fig.15 - FG LHA final spider diagram

Table Tab. 12 contains the final scores reached through the consensus building process that were summarised earlier on. Justifications and reflections on each of the 12 dimensions have been reported.

Dimension	Consensus	Justifications & Reflections
Q1 - Readiness to Change	4	The organisation is ready, but implementation is needed to keep the momentum towards the change. There is a strong dialogue on-going and leaders, but more actions need to be undertaken. Dialogue and vision need to be implemented.
Q2 - Structure & Governance	2	The level of maturity is still growing, so that “3” is not yet an appropriate rating on the provided scale.
Q3 - Digital Infrastructure	3	All the digital infrastructure has been re-done. The software infrastructure needs still implementation.
Q4 - Process coordination	2	There are guidelines for some care processes, but they need to be implemented for multiple care pathways as they may be only defined for a few (e.g. diabetes and cardiac deficiency).
Q5 - Finance & Funding	3	The rating “1” were given only on the basis of funds dedicated to pilot projects. However, national funds have been identified to scale-up the integrated care.
Q6 - Removal of inhibitors	1	There are currently no strategies in place.
Q7 - Population Approach	4	All stakeholders strongly agree.
Q8 - Citizen Empowerment	3	Citizens have access to data and information on their health, but they are not always invited to participate and contribute in a systematic way to integrated care services.
Q9 - Evaluation Methods	1	The methodology and tools are under planning.
Q10 - Breadth of Ambition	1	Individual disposition to collaborate towards integration and systematic process. However, there is a strong difference between the overall organisation FG LHA and the San Marco in Lamis H&SC District (e.g. caregivers have access to patients’ digital records).
Q11 - Innovation Management	2	The innovation process has been initiated. The IT infrastructure, intranet and the training have been completed with selected groups of stakeholders. Nevertheless, some resistance is recorded.
Q12 - Capacity Building	2	There are multiple on-going efforts to implement capacity building.

Tab. 12 - FG LHA summary of consensus meeting

6.4 Analysis of the outcomes - Foggia Local Health Authority

Looking at the final consensus diagram, there are some dimensions that noticeably appear more significant than others in regards to carrying out integrated care in FG LHA, and this especially in comparison to others that have resulted in a much lower rating. Dimensions Q1

- Readiness to Change and Q7 - Population Approach are more dominant than others. None of the results were particularly surprising to the stakeholders.

The consensus diagram as a whole picture of the regional maturity in terms of integrated care in FG LHA highlights some elements of strength, but also some elements that still need to be implemented through Foggia province and all the H&SC districts, including those that are more secluded because of the geographical morphology of the territory. From a system-perspective the returned image is not fully harmonised, but the driving factor is related to the morphological configuration of the territory, as already stated at the beginning of this section, which determines inevitable fragmentation in the delivery of integrated care, which precisely reflects the actual situation of the organisation.

Furthermore, it needs to be acknowledged the evident variations in the scores provided at the individual on-line self-assessment from those agreed during the consensus workshop. This is a fair reflection of the changes happened throughout the two and a half-month period between the two activities, which were captured and reported during the consensus workshop.

A common factor among multiple dimensions is the strong participation from every stakeholder at each individual level, which then results in a domino effect. However, this can be noticed both on the highest (i.e. Q1 and Q7) and on the lowest (i.e. Q6, Q9, and Q10) sides of the scale. On a side there is a mutual collaboration, while on the other side there is a lack of methodology in delivering the results.

Specific factors in the organisation FG LHA affect the recorded strengths and weaknesses. One specific factor in the organisation FG LHA affects the strengths: the uneven distribution across the territory gives real power to population approach, sharing and participation of the vision is in place. The factor that deeply affects the weaknesses is the lack of training across the organisation, but somehow still related to the morphology of the territory. The scattered distribution of 61 municipalities across the territory creates a strong barrier to the change, but the digital infrastructure network implementation as above recorded shall mitigate it.

6.5 Key message - Foggia Local Health Authority

All the participants agreed that they have learned something thanks to the self-assessment process. The LHA should apply on a large scale its good practices and follow up with the citizens' participation in the process.

6.6 Conclusions - Foggia Local Health Authority

After the negotiation and consensus building process on each of the 12th dimensions and the justifications provided by the five designated stakeholders on each of the 12th dimensions, the facilitators have asked final comments on the strengths of FG LHA in relation to the maturity of the integrated care model. It was captured the evident variation between the moment of completion of the on-line self-assessment and the time of the consensus

workshop. Therefore, ratings have been amended accordingly and justified as reported in table Tab. 12.

The stakeholders jointly agreed to suggest strengths and weaknesses as below reported.

The main recorded strength is Q7 - Population Approach. This is also supported by sharing and collaboration at multiple levels, strongly driven by FG LHA Direction. Nevertheless, despite a strong vision, the plan is not yet implemented, hence a methodology needs to be shared among multiple levels to finalise the change.

The main recorded weakness is Training, which is key to dissolve the resistance to change that still exists in places. What emerged, both individually and jointly, is the morphological configuration, hence geographical distribution across the territory, hence much needed resources to reach the mountains and the islands within the integrated care service delivery system.

The outcomes precisely reflected the local situations and the expectations of the stakeholders. The emerged challenge is the uneven distribution across the territory and the physical constraints, which require stronger and diverse efforts to deliver integrated care services.

7 Self-assessment process - Lecce Local Health Authority

7.1 Introduction to Lecce Local Health

Lecce LHA covers a fragmented territory comprising a total of 97 municipalities, which are organised in 10 H&SC Districts, geographically spread in a non-homogeneous way.

The demographic distribution of the 795,134 inhabitants⁷⁹ brings to evidence the existence of small communities, in which majority of the population resides: almost 70% of the entire population lives in 88 municipalities that can count on less than 15,000 inhabitants.

There are 13 acute care infrastructures, of which six are public, and seven are private with public access via NHS agreement (comprising one religious institution)⁸⁰.

In LE LHA there is a total of 654 GPs (without considering Paediatricians), of which 415 (i.e. 63.4%) are structured in complex networks to ensure seamless care delivery to patients⁸¹.

People aged over 65 years old are 23.6% of the entire population at 2018 ISTAT data, of which 11.93% are people aged over 75 years old. The increase since the 1998 data is approximately of 5% for both age groups, with a reducing figure for the overall population. The increase of these age groups has led to an increase of the resources, and specifically 80% increase for a 40% incidence of citizens with chronic diseases⁸².

7.2 Identification process of the local stakeholders

AReSS Puglia asked Lecce LHA Top Management to appoint a minimum of five stakeholders to gather different assessment perspectives concerning the 12 maturity matrix dimensions and to obtain a multi-stakeholder opinion on integrated care local initiatives. AReSS Puglia specified the different roles within which to identify the assessors comprising: a representative of the Top Management (e.g. CEO, CMO, CAO); a representative of the Health & Social Care District; d; a representative with medical background (e.g. Care Manager, Chief Nurse); a representative of the ICT Team; and a patients' group representative. Experience in each role and the affiliation to the local organisation were recorded to support the data analysis.

Lecce LHA identified five stakeholders as requested, to which one additional was later added, as she had previously taken part to SCIROCCO Project, so to provide additional expertise within the role of "patients' group representative". The final list of the local stakeholders identified by Lecce LHA who completed the self-assessment process is reported in table Tab. 13 below, with years spent in the role and years spent in the organisation to contextualise their individual responses during the analysis.

⁷⁹Source ISTAT 2018 data <https://www.istat.it/it/dati-analisi-e-prodotti/contenuti-interattivi/popolazione-residente>

⁸⁰Source EDOTTO - regional health IT System

⁸¹Source EDOTTO - regional health IT System

⁸²Relazione sulla Performance 2018 <http://www.provincia.le.it/web/provincialecce/anno-2018>

Role	Affiliation	Years in role	Years in organisation
Chief Executive Officer	LE LHA	1	30
H&SC District Director	Galatina H&SC District	20	30
Nurse Coordinator - Care Manager	Galatina H&SC District	13	22
IT services Manager	LE LHA	30	30
President of Patients' Association	AEEOS ONLUS Association	25	25
Sick Patient Court Coordinator	-	30	30

Tab. 13-LE LHA stakeholders

7.3 Self-assessment survey

Upon receiving the names and contact details of the six designated stakeholders by Lecce LHA, AReSS Puglia formally invited each of them via e-mail to take part to the maturity assessment process. All stakeholders were carbon-copied in the e-mails, so that they were all made aware of the fellow colleagues involved in the process.

In the e-mail the full process was described, the link to the SCIROCCO Exchange Tool was provided, together with a dedicated helpline. Supportive documents were sent along with the invitation to complete the on-line survey comprised completion guidance with steps to follow, with visuals and screenshots to guide the entire process from beginning to completion and submission.

Two weeks' timeline was scheduled for completion, which was eventually extended because of holiday season in Puglia. The SCIROCCO Exchange project team supported the completion of the on-line survey.

7.3.1 Outcomes of self-assessment survey

All the six invited stakeholders completed the on-line self-assessment survey on time. Table Tab. 14Tab. 5 provides a summary of the 0 to 5 ratings provided by the seven stakeholders on each of the 12 dimensions of the SCIROCCO Exchange Tool. The ratings assigned by each stakeholder vary from 0 to 5, with a prevalence of "0" rather than "5".

The stakeholders, who have been working in Lecce LHA for individual periods that vary from 22 to 30 years and who have been providing services in their roles for periods of time that vary from 1 to 30 years, have returned a heterogeneous perception of the 12 dimensions of the SCIROCCO Exchange Tool, as far as they are informed.

The dimensions on which majority of the stakeholders appeared to have a similar perception are: Q7 "Population Approach" and Q12 "Capacity Building", on which four out of six (i.e. 66 per cent of the reference group) agreed on a score of middle of the scale (3 in yellow). For Q7 it corresponds to "*Risk stratification used for specific groups i.e. those who are at risk of becoming frequent service users*" while for Q12 it corresponds to "*Learning about integrated care and change management is in place but not widely implemented*". Majority

of the self-assessment evidenced a perception of maturity level towards the lower end of the scale (in red).

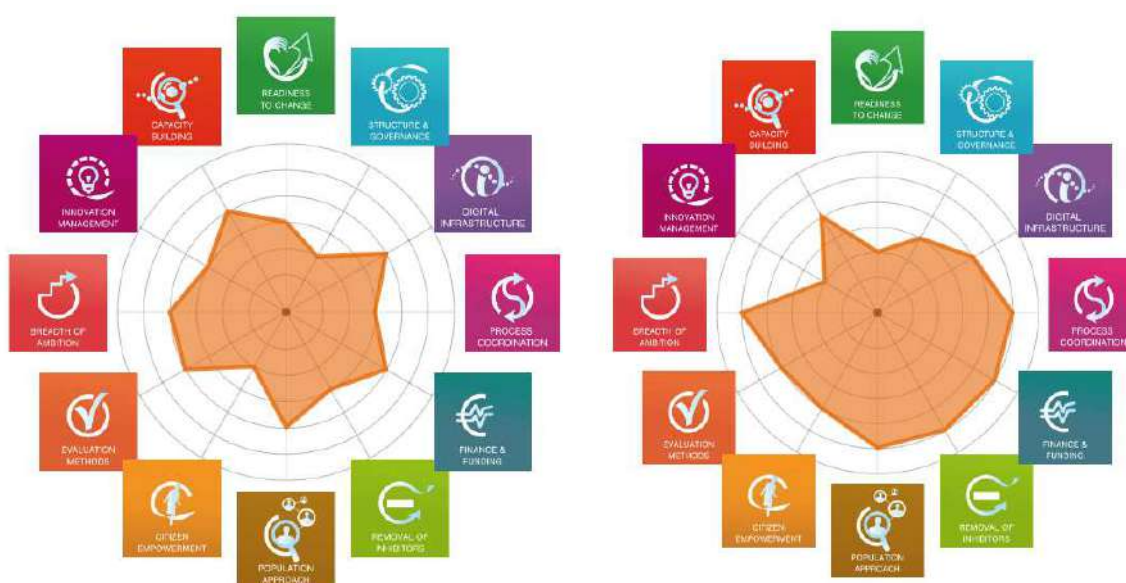
Figure Fig.16 depicts the outcomes of the on-line individual self-assessment, as completed by each LE LHA stakeholder.

	Tool Dimensions											
Stakeholder Role	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Chief Executive Officer	2	1	3	2	3	2	3	1	3	3	2	3
H&SC District Director	1	2	3	4	4	4	4	3	3	4	1	3
Nurse Coordinator - Care Manager	2	3	3	3	1	2	3	3	2	2	2	3
IT services Manager	2	1	4	4	1	1	3	3	3	3	3	3
President of Patients' Association	1	1	0	0	1	1	0	0	0	0	1	5
Sick Patient Court Coordinator	1	3	2	1	3	1	3	1	2	0	0	1

Dimensions			
Q1	Readiness to Change	Q7	Population Approach
Q2	Structure & Governance	Q8	Citizen Empowerment
Q3	Digital Infrastructure	Q9	Evaluation Methods
Q4	Process Coordination	Q10	Breadth of Ambition
Q5	Finance & Funding	Q11	Innovation Management
Q6	Removal of Inhibitors	Q12	Capacity Building

Ratings		
5 to 4	3 to 2	1 to 0

Tab. 14 - LE LHA summary of self-assessment



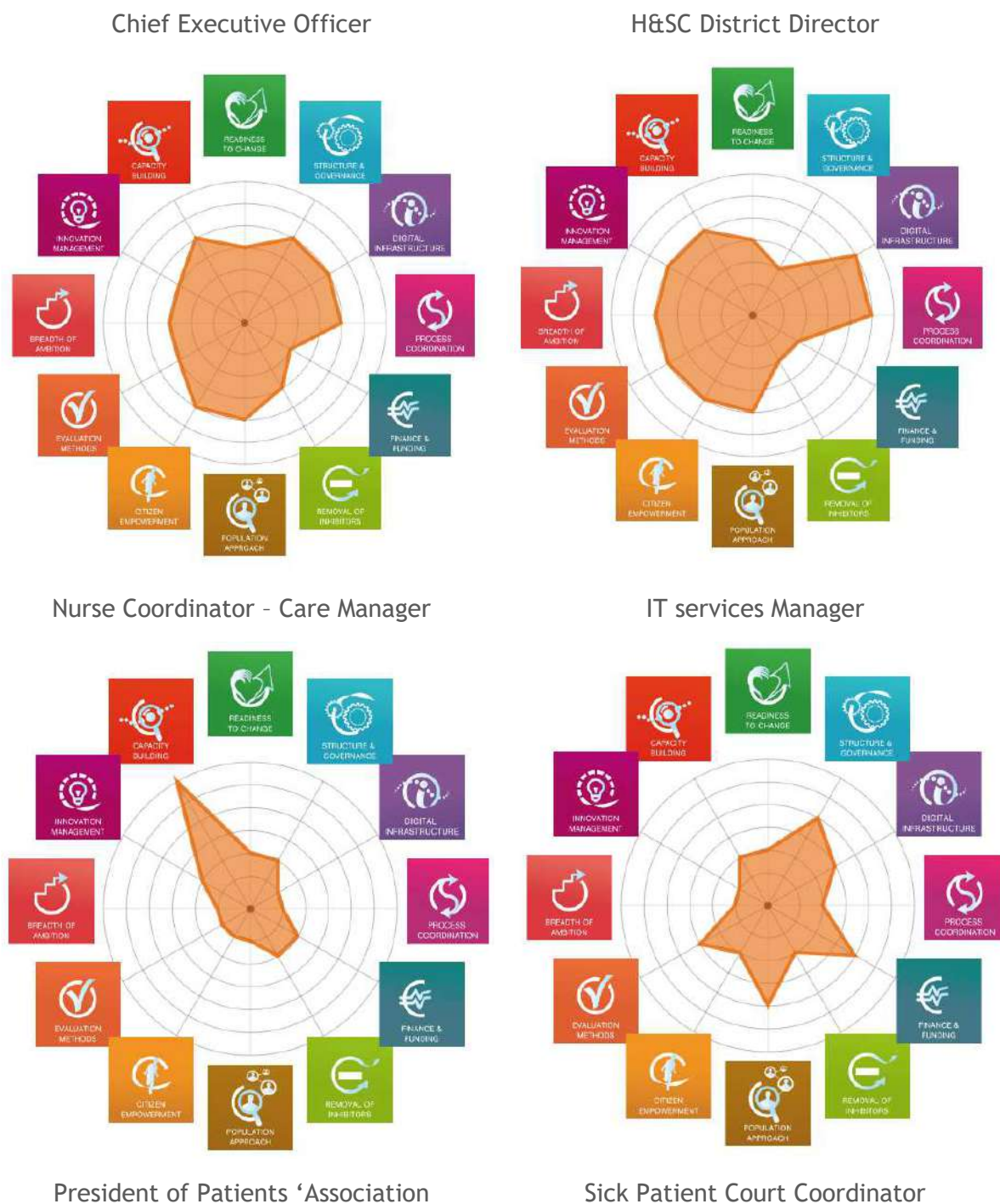


Fig.16 - LE LHA outcomes of the individual self-assessments

7.3.2 Stakeholder workshop

Upon completion of the self-assessment survey by all the seven designated stakeholders of Lecce LHA, an invitation letter was sent by AReSS Puglia to the LHA via e-mail, to request a feasible date to organise a half-day meeting, comprising a two-hours workshop, followed by a 30 to 45 minutes focus group with all the stakeholders on their experience with the SCIROCCO Exchange Tool.

The stakeholders identified Thursday 21st November as the best option for attending the workshop, which was delivered to them on-site at the Lecce LHA CEO Office in Lecce. The session required internet connection and projection facilities.

The purpose of the workshop, which was facilitated by Dr. Mingolla and Dr. Pantzartzis in Italian language, was to: present the assessment process in the Puglia Region; present the initial outcomes of the on-line self-assessment; discuss on the assessments of each dimension; and reach a consensus on the maturity of integrated care in Lecce LHA.



Fig.17 -LE LHA consensus workshop

7.3.3 Negotiation and consensus building

After the presentation, with the support of a PowerPoint presentation and hand-outs of the summary of the on-line self-assessment survey, the invited stakeholders were guided through the negotiation process with a PowerPoint presentations and visuals. The purpose of the negotiation process was to: 1) share the multiple perceptions that guided each stakeholder during the self-assessment, including their experience in the LHA and in their specific roles; and 2) identify the chance to negotiate a shared ranking for each dimension, upon knowledge and information sharing during the workshop.

The negotiation and consensus building process was delivered through an in-depth analysis of each dimension of the SCIROCCO Exchange Tool, presenting and discussing the justifications and reflections that each stakeholder has provided in their on-line self-assessment. None of the dimensions has been assessed in a homogeneous way in the on-line self-assessment. Each dimension is reported below, in the order as discussed.

Q1 - Readiness to Change - There is an equal split on the perception of this dimension, with three out of six stakeholders rating “1” and the other three rating “2”. Among the three lowest ratings, two of the three are by the patients’ representatives. The discussion brings to light the different perceptions between the organisation (i.e. LE LHA) and the citizens: LE LHA CEO confirms that change is underway and it is not slow, while the Sick Patient Court Coordinator replies that change is excessively slow and citizens do not have perception of the change, as they do not have access to all the relevant information. The CEO explains that in all categories, hence citizens included, there are those who are enthusiast of the change and those who are resistant to the change. As a result, consensus is reached on 2 - *Dialogue and consensus-building underway; plan being developed.*

Q2 - Structure & Governance - Also on this dimension, there is an almost equal split on the perception that the stakeholders have, with three out of five rating “1”, and the CEO among them. He calls for building up structured networks, but acknowledges the existence of informal networks already in place. The Nurse Coordinator and the Sick Patient Court Coordinator confirmed that structure and governance are very much subject to variations across the different bodies, almost as they are at regional and national level. All stakeholders agree on 2 - *Formation of task forces, alliances and other informal ways of collaborating.*

Q3 - Digital Infrastructure - The stakeholders have heterogeneous perceptions on this dimension, with returned ratings from “0” to “4”. The different roles play a relevant part, with the CEO making clear reference to the infrastructure, that does exist and it is fully linked into the national network. Nevertheless, the IT services Manager suggests that some processes require time to be embraced in a systematic way, despite training has been provided and procedures are already in place. After evaluating the current situation, the stakeholders agree on assessing this dimension 4 - *eHealth services to support integrated care are deployed widely at large scale.*

Q4 - Process Coordination - The stakeholders have heterogeneous perceptions on this dimension, with returned ratings from “0” to “4”. The discussion brings to evidence that standardisation processes are subject to the local dimension, as so they may be present for some integrated care pathways, but they are not available for the full range of integrated care service delivery. The two patients’ representatives have rated at the lowest end on the scale, demonstrating how citizens are not always aware of the care pathways. The CEO

highlighted the importance of the therapeutic organisation model (i.e. Percorsi Diagnostico Terapeutici Assistenziali⁸³) on rheumatic diseases as a means of simplification of the pathways. AC suggests the high number of citizens accessing the services may pose some limits to the Specific Clinical Pathways and other services. Consensus is reached on 3 - *A recommended set of agreed technical standards at regional/national level; some shared procurements of new systems at regional/national level; some large-scale consolidations of ICT underway.*

Q5 - Finance & Funding - Three out of six stakeholders rated 1 - *Funding is available but mainly for the pilot projects and testing*, with two main justifications: the actual lack of funding other than to be invested on pilot projects, but also the lack of information on this specific dimension by at least two out of the six stakeholders. After discussion, the stakeholders agree on 4 - *Regional/national funding and/or reimbursement schemes for on-going operations are available.*

Q6 - Removal of Inhibitors - Also on this dimension, three out of six stakeholders rated 1 - *Awareness of inhibitors but no systematic approach to their management is in place.* The CEO confirmed that at the managerial level there is clear knowledge and understanding of the inhibitors and that action needs to be taken. Nevertheless, as already stated at the very beginning of the consensus building process, there are those who are enthusiast of the change and those who are resistant to the change, hence, to taking action towards removing inhibitors. All stakeholders agree on a 3- *Implementation Plan and process for removing inhibitors have started being implemented locally.*

Q7 - Population Approach - Four out of six stakeholders have rated this dimension 3 - *Risk stratification used for specific groups i.e. those who are at risk of becoming frequent service users.* The other two stakeholders have rated it towards the higher (i.e. “4”) and lower (i.e. “0”) end of the scale. The population is stratified with a systematic approach (many projects or programs e.g. “Leonardo project”, “Nardino project”, “Puglia Care” are all attempts conducted to implement a population approach in a systematic way). All stakeholders agree on the need for a cultural change at all levels, hence including the GPs. As a consequence, the stakeholders confirm the rating “3”.

Q8 - Citizen Empowerment - Three out of six stakeholders have rated this dimension 3 - *Citizens are consulted on integrated care services and have access to health information and health data.* Nevertheless, it is brought to evidence that not all citizens are capable of independently accessing the system, that is up and running. There are elements (e.g. EHR) and programmes (e.g. Puglia Care 3.0) in place to enable wide citizen empowerment, but the Sick Patient Court Coordinator clearly explains that an empowered citizen may well result in more obstacles (e.g. delays) to the delivery of integrated care. The lowest rating (i.e. “0”) for this dimension has been provided by a patients’ representative, who do not always feel fully empowered on decisions linked to individual health care pathways. After discussion, all stakeholders converge on “3”.

⁸³Percorsi Diagnostico Terapeutici Assistenziali (PDTA) is a Clinical Governance tool that defines standard levels of assistance against guidelines. More info is available at <https://www.sanita.puglia.it/web/ircs/percorsi-diagnostici-terapeutici-assistenziali-pdta->

Q9 - Evaluation Methods - The stakeholders have a positive perception of this dimension, with three out of six rating “3” and two out of six rating it “2”. In particular, the uneven rating is due to the perception that they have on how evaluation of integrated care methods is part of a systematic approach. They all agree on efforts being made towards this. Hence, after discussion, and recording that the info does not get to the citizens at all times, general consensus is reached on 3 - *Some integrated care initiatives and services are evaluated as part of a systematic approach.*

Q10 - Breadth of Ambition - The stakeholders have heterogeneous perceptions on this dimension, with returned ratings from “0” to “4”. What is clearly emerging is that the two patients’ representatives rated the dimension 0 - *Coordination activities arise but not as a result of planning or the implementation of a strategy.* Their rating is partially subject to two elements: the citizens do not hold all the relevant information, and also detailed planning to deliver the ambitions that do exist is mostly missing. After discussion, and with some efforts, consensus is reached on 3 - *Integration between care levels (e.g., between primary and secondary care) is achieved.*

Q11 - Innovation Management - This dimension raised concerns by multiple stakeholders, with ratings ranging from “0” to “3”. In particular, the two patients’ representatives are bringing to light the lack of information on elements that should be acquired by this point (e.g. EHR). In response to their concerns, the CEO explains that structured processes (e.g. collaboration with MSc degrees at Uni Salento) are in place, but standardisation takes time to be delivered at full capacity. After discussion, the stakeholders agree on rating 2 - *Innovations are captured and there are some mechanisms in place to encourage knowledge transfer.*

Q12 - Capacity Building - Three out of six stakeholders assessed this dimension in a medium-to-positive way with a 3 - *Learning about integrated care and change management is in place but not widely implemented.* Learning about integrated care and change management is in place but not yet implemented. It is essential to involve all the different stakeholders in order to succeed and expressly the citizens and their representatives. The CEO explains how, at the moment of the consensus workshop, there is an organisational plan underway for LE LHA, which is expected to involve all the different stakeholders, as capacity building is fully recognised as one of the key dimensions to deliver integrated care pathways.

7.3.4 Final consensus

Figure Fig.16 illustrates the final spider diagram with the final consensus of the six Lecce LHA designated stakeholders. The negotiation process highlighted elements of difference among the stakeholders, which were discussed and led to reaching consensus on all dimensions as individually assessed by majority of the stakeholders, with the exception of dimensions Q2, Q4, Q5, and Q6, as it appears from the final spider diagram below reported in figure Fig.18.



Legend

Total of 6 responses selected. [See individual assessments](#)

- Voted by 1-25% respondents (1 respondent(s))
- Voted by 26-50% respondents (2 respondent(s))
- Voted by 51-75% respondents (3 respondent(s))
- Voted by 76-100% respondents (4-6 respondent(s))

Fig. 18 - LE LHA final spider diagram

Table Tab. 9 contains the final scores reached through the consensus building process that were summarised earlier on. Justifications and reflections on each of the 12 dimensions have also been reported.

Dimension	Consensus	Justifications & Reflections
Q1 - Readiness to Change	2	The vision exists. It is complex to address the change in every part of the Region (i.e. LE LHA), as it is a process that has just been initiated in the H&SC District (e.g. CC Centres, Community Hospitals). There is a clear strategy, but this is slowed down by those stakeholders who do not see the urgency to change. The system is ready. The content needs to be defined, either produced or bought in.
Q2 - Structure & Governance	2	It is not well established, as the organisation LE LHA is undergoing a change management process that will lead to the definition of more rigorous structures. It is crucial to identify new governance coherent with the new vision. Issues mostly related with resources (e.g. staff). At this moment there are informal collaborations and task forces although not in a systematic way.
Q3 - Digital Infrastructure	4	There is a solid digital infrastructure in the organisation LE LHA. The staff is trained and capable to use it as intended, despite the age group of the staff. The infrastructure is not always used as expected at its full potential. Nevertheless, there is a limit to apply them throughout the entire spectrum of integrated care services (e.g. need of paperwork as a back-up when travelling across the local system).
Q4 - Process coordination	3	There is coordination as processes are planned, but they are not implemented, resulting in scattered application across the territory (e.g. local level).
Q5 - Finance & Funding	4	EU fund opportunities are identified and accessed; nevertheless, it is necessary to use them as requested.
Q6 - Removal of inhibitors	3	There is a strategy to remove inhibitors shared at the management level. Nevertheless, there is a limited response from the bottom, which has started to be implemented.
Q7 - Population Approach	3	The population is stratified but not with a systematic approach (e.g. “Leonardo” project, “Nardino” project, Puglia Care are all attempts to implement a population approach).
Q8 - Citizen Empowerment	3	Empowerment is acknowledged and citizens have access to data on their health condition. In some case citizens do not access their data.
Q9 - Evaluation Methods	3	Evaluation methods are in place; nevertheless, the info does not get to the citizens at all times.
Q10 - Breadth of Ambition	3	The stakeholders converge on the score “3”.

Dimension	Consensus	Justifications & Reflections
Q11 - Innovation Management	2	Innovations are captured and some mechanisms are in place (e.g. scientific lab in partnership with Uni Salento, memorandum of understanding with Uni Salento). However, formalised process for innovation management has still to be implemented.
Q12 - Capacity Building	3	Learning about integrated care and change management is in place but not yet implemented. It is essential to involve all the different stakeholders in order to succeed.

Tab. 15 - LE LHA summary of consensus meeting

7.4 Analysis of the outcomes - Lecce Local Health Authority

Looking at the overall consensus diagram, dimension Q3 - Digital Infrastructure with Q5 - Funding appear more significant than others in regards to carrying out integrated care in LE LHA, this because the approach towards the integrated care model is enforced from the management of the organisation LE LHA and it is supported by a solid digital infrastructure. All the staff is trained and capable to use it as intended, despite differences in age groups of the staff. None of the results was particularly surprising to the stakeholder.

The consensus diagram as a whole offers a balanced range across the 12 dimensions about the maturity of integrated care in the LE LHA, which is overall assessed between the 2 and 4 points the reference scale 0 to 5. It is a harmonising image from a system-perspective and it does reflect the actual situation of the organisation at the time of the consensus workshop. Some dimensions are relevant to each other and they reinforce one the other. In particular, Q5 - Funding provides support to Q3 - Digital Infrastructure, besides other elements. No need to implement the process of identifying available funding was reported by LE LHA.

A common factor among multiple dimensions is the limited Structure & Governance at the time of the consensus workshop, as the organisation LE LHA is undergoing a change management process. Nevertheless, a bottom-up approach is the positive counterpart recorded: multiple informal collaborations and task forces are in place, although not in a systematic way.

Specific factors in the organisation LE LHA affect the recorded strengths and weaknesses. The Breadth of Ambition and informal collaboration across the organisation LE LHA affects the emerging strengths. The factor that deeply influences the weaknesses is the very poor communication between the organisation LE LHA (e.g. staff) and the citizens in the catchment area. This is an element that needs to be monitored and implemented, as technological systems are in place and funding is available, in order to achieve maturity in integrated care delivery.

7.5 Key message - Lecce Local Health Authority

All the stakeholders expressed positive opinions; they found the results of the survey compliant with the Health Authority's current situation. The importance of the self-

assessment tool has been highlighted. “Evaluation of the process is already in place” (the CEO) for this reason is undergoing a memorandum of understanding with the University of Lecce (i.e. Uni Salento), “Process Engineering”.

7.6 Conclusions - Lecce Local Health Authority

After the negotiation and consensus building process on each of the 12th dimensions and the justifications provided by the five designated stakeholders on each of the 12th dimensions, the facilitators have asked final comments on the strengths of LE LHA in relation to the maturity of the integrated care model. The individual answers provided are below reported.

President of Patients’ Association> There is a strong desire to deliver together with a vision shared among all stakeholders, including citizens.

Nurse Coordinator > There is a very precise perception and clear knowledge of the capabilities across LE LHA.

Also, final comments on the weaknesses of LE LHA in relation to the maturity of the integrated care model have been invited. In this case, all the stakeholders agreed with the CEO on the greatest weakness of the organisation LE LHA being communication among the stakeholders. The need for better communication between internal and external stakeholders is deeply envisaged.

The outcomes reflected the local situations and the expectations of the stakeholders. The emerged challenge is the communication.

8 Self-assessment process - Taranto Local Health Authority

8.1 Introduction to Taranto Local Health

Taranto LHA covers a territory of 2,436.67 Km², almost half of which is flat along a continuous coastline, while the other half consists in hills. It comprises a total of 29 municipalities, which are organised in six H&SC Districts.

There are 12 acute care infrastructures, of which four are public, and eight are private with public access via NHS agreement⁸⁴.

In TA LHA there is a total of 453 GPs (without considering Paediatricians), of which 330 (i.e. 72.7%) are structured in complex networks to ensure seamless care delivery to patients⁸⁵.

The resident population was 576,756 inhabitants⁸⁶, of which approximately 34% was concentrated in the municipality of Taranto. People aged over 65 years old are 21.9% of the entire population⁸⁷.

Mortality rate is approximately 10 per thousand inhabitants. The major causes of mortality are cardiovascular diseases 37.11 per 10,000 inhabitants, along the National lines, followed by cancer 26.12 per 10,000 inhabitants.⁸⁸ The most frequent cancer is trachea, bronchus and lung cancer for males while breast cancer for females. This may reflect the contextual issues of the territory, where large industrial production factories are still present⁸⁹.

8.2 Identification process of the local stakeholders

AReSS Puglia asked Taranto LHA Top Management to appoint a minimum of five stakeholders to gather different assessment perspectives concerning the 12 maturity matrix dimensions and to obtain a multi-stakeholder opinion on integrated care local initiatives. AReSS Puglia specified the different roles within which to identify the assessors comprising: a representative of the Top Management (e.g. CEO, CMO, CAO); a representative of the Health & Social Care District; a representative with medical background (e.g. Care Manager, Chief Nurse); a representative of the ICT Team; and a patients' group representative. Experience in each role and the affiliation to the local organisation were recorded to support the data analysis.

Taranto LHA identified five stakeholders as requested, to which one other was later added, as representative of IT specialist. The final list of the Tab. 16 local stakeholders identified by Taranto LHA who completed the self-assessment process is reported in table Tab. 1 below,

⁸⁴Source EDOTTO - regional health IT System

⁸⁵Source EDOTTO - regional health IT System

⁸⁶Source ISTAT 2018 data <https://www.istat.it/it/dati-analisi-e-prodotti/contenuti-interattivi/popolazione-residente>

⁸⁷Source ISTAT 2017 data

⁸⁸Piano della Performance 2019-2021 <https://www.sanita.puglia.it/web/asl-taranto/piano-della-performance>

⁸⁹Screenings for cardiovascular diseases are in place for residents in polluted areas and screenings for prevention are in place for healthy lifestyles. More info available at <https://www.sanita.puglia.it/web/csa/centro-salute-ambiente-taranto>

with years spent in the role and years spent in the organisation to contextualise their individual responses during the analysis.

Role	Affiliation	Years in role	Years in organisation
Medical Doctor	TA LHA	3	30
H&SC District Director	LHD 6	23	27
CCC Coordinator	CCC	8	15
President of Patients' Association	Patient Advisory Committee	NA	NA
EHR Manager	TA LHA	NA	NA
IT services Manager	TA LHA	4	10

Tab. 16-TA LHA stakeholders

8.3 Self-assessment survey

Upon receiving the names and contact details of the six designated stakeholders by Taranto LHA, AReSS Puglia formally invited each of them via e-mail to take part to the maturity assessment process. All stakeholders were carbon-copied in the e-mails, so that they were all made aware of the fellow colleagues involved in the process.

In the e-mail the full process was described, the link to the SCIROCCO Exchange Tool was provided, together with a dedicated helpline. Supportive documents sent along with the invitation to complete the on-line survey comprised completion guidance with steps to follow, with visuals and screenshots to guide the entire process from beginning to completion and submission.

Two weeks' timeline was allowed for completion, which was eventually extended because of holiday season in Puglia. The SCIROCCO Exchange project team supported the completion of the on-line survey.

8.3.1 Outcomes of self-assessment survey

All the six invited stakeholders completed the on-line self-assessment survey. Table

Dimensions			
Q1	Readiness to Change	Q7	Population Approach
Q2	Structure & Governance	Q8	Citizen Empowerment
Q3	Digital Infrastructure	Q9	Evaluation Methods
Q4	Process Coordination	Q10	Breadth of Ambition
Q5	Finance & Funding	Q11	Innovation Management
Q6	Removal of Inhibitors	Q12	Capacity Building

Ratings		
5 to 4	3 to 2	1 to 0

Tab. 17 provides a summary of the 0 to 5 ratings provided by the seven stakeholders on each of the 12 dimensions of the SCIROCCO Exchange Tool. The ratings assigned by each

stakeholder vary from 0 to 4, with no 5 recorded. The stakeholders, who have been working in Taranto LHA for individual periods that vary from 10 to 30 years and who have been providing services in their roles for periods of time that vary from 3 to 23 years, have provided a heterogeneous perception of the 12 dimensions of the SCIROCCO Exchange Tool, as their knowledge and relevance of each specific dimension matched their individual roles.

The dimensions on which majority of the stakeholders provided a homogeneous rating are: Q7 “Population Approach”, Q9 “Evaluation Methods”, and Q12 “Capacity Building”. The dimensions Q1 “Readiness to Change”, Q2 “Structure & Governance”, Q5 “Funding”, and Q10 “Breadth of Ambition” are rated on the lowest (in red) end of the scale, with Q10 being the most critical. The dimension Q3 “eHealth Services” is the only rated towards the higher (in green) end of the scale.

Figure Fig.19 depicts the outcomes of the on-line individual self-assessment, as completed by each TA LHA stakeholder.

	Tool Dimensions											
Stakeholder Role	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12
Medical Doctor	4	2	4	4	1	2	2	3	2	0	2	3
H&SC District Director	1	1	4	3	0	1	2	3	2	0	2	3
CCC Coordinator	1	1	2	2	4	1	4	1	3	2	1	1
President of Patients' Association	1	1	2	1	2	2	2	1	2	1	1	2
EHR Manager	2	2	3	1	1	2	2	2	1	1	2	2

Dimensions			
Q1	Readiness to Change	Q7	Population Approach
Q2	Structure & Governance	Q8	Citizen Empowerment
Q3	Digital Infrastructure	Q9	Evaluation Methods
Q4	Process Coordination	Q10	Breadth of Ambition
Q5	Finance & Funding	Q11	Innovation Management
Q6	Removal of Inhibitors	Q12	Capacity Building

Ratings		
5 to 4	3 to 2	1 to 0

Tab. 17 - TA LHA summary of self-assessment



Medical Doctor



H&SC District Director



CCC Coordinator



EHR Manager



President of Patients' Association

Fig.19 - TA LHA outcomes of the individual self-assessments

8.3.2 Stakeholder workshop

Upon completion of the self-assessment survey by all the seven designated stakeholders of Taranto LHA, an invitation letter was sent by AReSS Puglia to the LHA via e-mail, to request a feasible date to organise a half-day meeting, comprising a two-hours workshop, followed by a 30 to 45 minutes focus group with all the stakeholders on their experience with the SCIROCCO Exchange Tool.

The stakeholders identified Wednesday 30th October as the best option for attending the workshop, which was delivered to them on-site at the Taranto LHA CEO office, in Taranto.

The purpose of the workshop, which was facilitated by Dr. Mingolla and Dr. Pantzartzis in Italian language, was to: present the assessment process in the Puglia Region; present the initial outcomes of the on-line self-assessment; discuss on the assessments of each dimension; and reach a consensus on the maturity of integrated care in Taranto LHA.



Fig.20 - TA LHA consensus workshop

8.3.3 Negotiation and consensus building

After the presentation, with the support of a PowerPoint presentation and hand-outs, of the summary of the on-line self-assessment survey, the invited stakeholders were guided through the negotiation process with a PowerPoint presentations and visuals. The purpose of the negotiation process was to: 1) share the multiple perceptions that guided each stakeholder during the self-assessment, including their experience in the LHA and in their specific roles; and 2) identify the chance to negotiate a shared ranking for each dimension, upon knowledge and information sharing during the workshop.

The negotiation and consensus building process was delivered through an in-depth analysis of each dimension of the SCIROCCO Exchange Tool, presenting and discussing the justifications and reflections that each stakeholder has provided in their on-line self-assessment. None of the dimensions has been assessed in a homogeneous way in the on-line self-assessment. Minor variations (i.e. one out of five respondents) were recorded for dimensions Q7, Q9 and Q12. Each dimension is reported below, in the order as discussed.

Q1 - Readiness to Change - Three out of five stakeholders have a very poor perceptions of this dimension, rating 1 - *Compelling need is recognised, but no clear vision or strategic plan*. The change is currently on-going, despite there is no evidence of a delivery plan. Change is among the top priorities of the organisation TA LHA, but this is being delivered through means of informal actions. After discussion, the stakeholders agree on 2 - *Dialogue and consensus-building underway; plan being developed*.

Q2 - Structure & Governance - Also on this dimension, three out of five stakeholders have a very poor perception, rating 1 -*Recognition of the need for structural and governance change*. The Medical Doctor brings to evidence the lack of communication among the different task forces. It is absolutely crucial to organise the action to deliver structured processes for which accountability is clear to all the stakeholders. After discussion, the stakeholders reach consensus on rating 2 -*Formation of task forces, alliances and other informal ways of collaborating*, but only limited to the informal collaborations.

Q3 - Digital Infrastructure - This is one of the two dimensions on which all the stakeholders have a positive perception, with two rating “4”, one rating “3” and two others rating “2”. Nevertheless, the patients’ representative is particularly critical on this dimension and on the lack of efforts to allow all citizens make the best possible use of Digital Infrastructure services (e.g. EHR). In response the Medical Doctor reassured that the need for improving eHealth Services is within the organisation TALHA remit. All stakeholders agree on 3 -*eHealth services to support integrated care are piloted but there is not yet region wide coverage*.

Q4 - Process Coordination - The stakeholders all have heterogeneous perceptions of this dimension, with ratings from “1” to “4”. In particular, they all made reference to Regional regulations that are in place to guide process coordination (e.g. standardisation and simplification). The Medical Doctor confirms that TA LHA is part of wider regional networks that work on process coordination. After discussion, consensus is achieved on 3 - *A recommended set of agreed technical standards at regional/national level; some shared procurements of new systems at regional/national level; some large-scale consolidations of ICT underway*.

Q5 - Finance & Funding - Three out of five stakeholders have a negative perception of this dimension. Among all five participants, ratings vary from “0” to “4”, which returns a mixed perception at organisational level. In particular, the huge variations are determined by the background of the stakeholders, their role and knowledge on the funding subject. If the rating is only assigned in consideration of the local scale (i.e. TA LHA), then the rate should be towards the lower end of the scale, as there is no available funding. The CCC Coordinator reported the three to five years needed to complete any funded project. If pilot projects are put aside, and the focus is only on integrated care delivery, then all stakeholders agree on 0 -*No additional funding is available to support the move towards integrated care*.

Q6 - Removal of Inhibitors - Three out of five stakeholders rate this dimension 2 -*Strategy for removing inhibitors agreed at a high level*. Nevertheless, the other two stakeholders rate it 1 -*Awareness of inhibitors but no systematic approach to their management is in place*. During the discussion it is brought to evidence that inhibitors may well be in the process to be removed, but this situation is mostly limited to healthcare pathways, and not integrated care delivery pathways. As a result, all stakeholders converge on rating “1”.

Q7 - Population Approach - Also this dimension, as dimension Q3, has all stakeholders confirming a positive perception, with all rating 2 -*Risk stratification approach is used in certain projects on an experimental basis*, other than one only rating 4 -*A population risk approach is applied to integrated care services but not yet systematically or to the full*

population⁹⁰. Consensus is agreed on “2”, as a lack of understanding on how a systematic population approach may be beneficial to the integrated care delivery model.

Q8 - Citizen Empowerment - This dimension is a matter of debate among the stakeholders. Citizens can have access to health information and health data; however, this is not always the case. They are not always fully aware of what they can access and how. Majority of citizens acknowledges the electronic patient records (i.e. EHR). The stakeholders, after discussion, agree to assign 3 -*Citizens are consulted on integrated care services and have access to health information and health data.*

Q9 - Evaluation Methods - This dimension is rated on the mid-end of the assessment scale with “2” and “3”. Only one stakeholder rated 1 -*Evaluation of integrated care services is planned to take place and be established as part of a systematic approach*, making reference to the need still to develop customer satisfaction on HTA. From the discussion, it appears evident that only in some cases (e.g. specific integrated care settings, pilot projects) evaluation methods are in place through a systematic methodology. Hence, all stakeholders agree on 2 -*Evaluation of integrated care services exists, but not as a part of a systematic approach.*

Q10 - Breadth of Ambition - This dimension is rated on the lower end of the assessment scale with “0” and “1”. The H&SC District Director explains how unfortunately there is no homogeneous approach towards getting citizens into the integrated care system pathway. There may be some pilot projects; however, there is not a systematic approach towards a full integration of care services, unless within the same level of care. Only one stakeholder rated 2 -*Integration within the same level of care (e.g., primary care) is achieved.* Consensus is achieved on 1 -*The citizen or their family may need to act as the integrator of service in an unpredictable way.*

Q11 - Innovation Management - Three out of five stakeholders rated this dimension 2 -*Innovations are captured and there are some mechanisms in place to encourage knowledge transfer.* They all agree that innovation management is not yet fully at regime within TA LHA, despite multiple efforts are being made. Technological innovations appear much easier to be implemented, if compared to innovations on tendering systems (e.g. Pre-Commercial Procurement, Public Procurement of Innovation, Public-Private Partnership, Shared Risk, Payments by Results). Two out of the three stakeholders suggest using EU-funded projects and/or partnerships to implement innovation management (e.g. Horizon 2020, ERDF, EHR). Consensus is confirmed on “2”.

Q12 - Capacity Building - The perception of this dimension varies across the stakeholders, as four out of five stakeholders rated it “2” and “3”, with only one stakeholder rating “1”. What come to evidence on this dimension are the differences between different parts of the same LHA, as the areas closer to the centre more frequently have the citizens taking part to

⁹⁰ The risk assessment activities include risk evaluation in the area Jonico-Salentina and in the micro-areas affected by critical environmental issues (e.g. Tamburi, Borgo and Paolo V neighbourhoods) (LR 21/2012). More info available at <https://www.sanita.puglia.it/web/csa/sorveglianza-epidemiologica>. The Cardiovascular and Respiratory Prevention Programme is delivered to female and male residents of 45 (F) and 40 (M) years old in the neighborhoods above mentioned. Since November 2015 the screening Programme has been opened to female and male aged 50 and living in Taranto.

the process, while this is much less taking place in the peripheral areas. Also, it has to be reported that in some circumstances, capacity building is limited by the staff themselves (e.g. when staff is closer to retirement will not act at regime). After discussion, all stakeholders agree on 3 - *Learning about integrated care and change management is in place but not widely implemented.*

8.3.4 Final consensus

Figure Fig.21 illustrates the final spider diagram with the final consensus of the six Taranto LHA designated stakeholders. The negotiation process highlighted elements of difference and similarities among the stakeholders, which were discussed and led to reaching consensus on a rating as assessed by majority of the stakeholders in only five out of the 12 dimensions, while exceptions were recorded on the remaining.



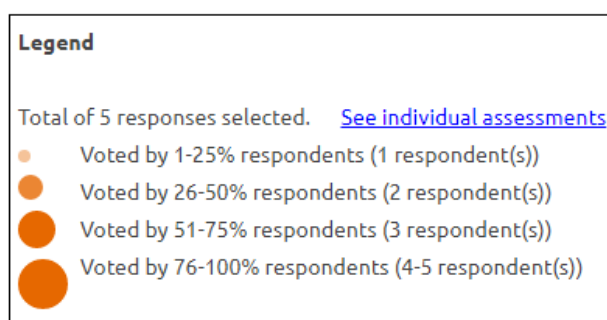


Fig.21 - TA LHA final spider diagram

Table Tab. 9 contains the final scores reached through the consensus building process that were summarised earlier on. Justifications and reflections on each of the 12 dimensions have been also summarised.

Dimension	Consensus	Justifications & Reflections
Q1 - Readiness to Change	2	At the moment of meeting there is no plan in place. Readiness to change is a priority of the organisation, thus dialogue is underway. It is essential to coordinate the individual efforts in a joint plan, as individual capabilities are currently leading the change.
Q2 - Structure & Governance	2	The assessment is based on the perception that governance is limited to informal collaborations only for TA LHA.
Q3 - Digital Infrastructure	3	There is a mandate to deploy e-Health services across the organisation, but this is not yet implemented at the time of the meeting.
Q4 - Process coordination	3	Regional regulations are in place to guide standardisation and simplification of the processes.
Q5 - Finance & Funding	0	There is no funding in place to support the move towards integrated care, other than funding for pilot projects only.
Q6 - Removal of inhibitors	1	This only relates to integrated care and regional scale.
Q7 - Population Approach	3	Population approach is only applied to specific groups (i.e. prevention) that not necessarily include integrated care delivery.
Q8 - Citizen Empowerment	3	Citizens can have access to health information and health data; however, this is not always the case. They are not always fully aware of what they can access and how. Majority of citizens acknowledges the electronic patient records (i.e. EHR).
Q9 - Evaluation Methods	2	It does exist but not as a systematic process, as highly linked to individual capabilities and knowledge.

Dimension	Consensus	Justifications & Reflections
Q10 - Breadth of Ambition	1	There is no homogenous approach on this dimension (ref to patient's representative score).
Q11 - Innovation Management	2	There is a degree of innovation, which is encouraged and supported. However, innovations are not yet at regime.
Q12 - Capacity Building	3	There is a lack of participation from the outer stakeholders (i.e. urban centre outskirts) due to their limited interest, which may be the result of lack of knowledge and information.

Tab. 18 - TA LHA summary of consensus meeting

8.4 Analysis of the outcomes - Taranto Local Health Authority

Looking at the consensus diagram, dimension Q5 - Funding, together with Q6 - Removal of Inhibitors and Q10 - Breadth of Ambition appear more significant than others in regards to limiting integrated care in TA LHA. The perceived lack of funding in place to support integrated care deeply affects the management. The perceived lack of funding is a consequence of the limited positive impact of investments for integrated care, if compared to the investments in place for ICT infrastructure and medical devices equipment in hospital care settings.

The consensus diagram, as a whole picture, shows an interesting and homogeneous situation across the 12 dimensions about the maturity of integrated care in TA LHA, which is overall, assessed between the 0 and 3 points the reference scale 0 to 5, which is overall one of the lowest recorded. It is not a fully harmonising image from a system-perspective, but it does reflect the actual situation of the organisation at the time of the consensus workshop. Some dimensions are relevant to each other and they reinforce one the other.

A common factor among multiple dimensions is the limited consistent knowledge on a number of dimensions (e.g. Q10 - Breadth of Ambition), which then influences the overall consensus diagram.

Specific factors in the organisation TA LHA affect the recorded strengths and weaknesses. One specific factor in the organisation TA LHA affects the strengths: the strong desire to change at management level plays an important role in having positive reflections on a number of dimensions. The factor that deeply affects the weaknesses is the limited coming together in the organisation on joint and efforts.

8.5 Key message - Taranto Local Health Authority

All the participants agreed that they have learned something thanks to the self-assessment process. Culture emerged as the most relevant factor for an effective change and modernization of the LHA's integrated care model. The CCC Coordinator: "it will be important to improve the sense of belonging of employee"; the presence of elderly and little motivating human resources emerged as a substantial element. "It would be necessary to implement a process of mandatory monitoring of integrated care".

8.6 Conclusions -Taranto Local Health Authority

After the negotiation and consensus building process on each of the 12 dimensions and the justifications provided by the five designated stakeholders on each of the 12 dimensions, the facilitators have asked final comments on the strengths of TA LHA in relation to the maturity of the integrated care model. The individual answers provided are below reported.

CCC Coordinator >Integration processes have been initiated and they have multiple stakeholders involved.

H&SC District Director>There is a very strong determination and desire for change from the top management, which is key in driving the change and delivering an effective integrated care system. All the Directors of TA LHA (i.e. Top management Team) are fully engaged and have the maturity of the integrated care model among their top priorities. The overall objectives are extremely ambitious. Nevertheless, there is an evident lack of resources that deeply affects the process.

Also, final comments on the weaknesses of TA LHA in relation to the maturity of the integrated care model have been invited. The individual answers provided are below reported.

H&SC District Director > There is a strong difficulty in converging on common objectives, and this particularly if considering multiple stakeholders belonging to different professional categories/ areas (e.g. medical, clinical, research, support, etc).

CCC Coordinator > One weakness that needs to be reported above all is the limited sense of belonging to TA LHA organisation, which makes it difficult to work positively together.

As described in sections 8.3 and 8.4, the areas with highest differences among the stakeholders are Q1 - Readiness to Change, Q4 - Process coordination, and Q5 - Funding. The areas on which all five stakeholders other than one agreed are: Q7 -Population Approach, Q9 -Evaluation Methods, and Q12 - Capacity Building. The outcomes reflected the expectations of the stakeholders. The emerged challenge is the lack of unity as one whole organisation, which consequently affects process and service management.

9 Conclusions and next steps in Puglia Region

This research has provided a qualitative multi-dimensional and multi-professional representation of the integrated care maturity level of the Puglia LHAs from the stakeholders' point of view. The level of maturity of each LHA health and social care system varies from medium to high.

Regional managers and clinicians tend to score higher on the maturity progress in relation to each LHA individual context more than citizens' representative. This can be explained by the fact that some services (e.g. provision of information on care) are not easily accessible to the citizens.

Looking at the overall consensus diagrams of the six LHAs, major strengths include Population Approach, Process Coordination, Citizen Empowerment, and Digital Infrastructure. In contrast, the areas of Removal of Inhibitors, Finance and Funding, and Evaluation Methods have still room for improvement in Puglia Region. Breadth of Ambition resulted as the most variable dimension across the six LHAs, and across the different stakeholders that have been involved during the process.

There are some specific factors in Puglia that need to be taken into account to understand its strengths and weaknesses in integrated care provision, particularly in relation to the domains with lower maturity. The Puglia region has invested considerable resources for chronic care provision in recent years. However, cultural and infrastructure gaps may sometimes result in barriers (e.g. telemedicine has not yet allowed services to be provided across the whole Region). These services are available only in some H&SC districts, mostly as result of trial initiatives, or as good practices with limited implementation as yet. Despite this, the emerging picture reveals a dynamic scenario in which several e-Health good practices are on the verge of being scaled up as a result of a positive assessment by the Regional HTA centre.

The outcomes of the six consensus workshops have brought to evidence space for improvement in the delivery of integrated care services to the citizens in Puglia Region, especially on a systematic basis, and particularly in the three dimensions where scores were lower.

1. Finance & Funding - Puglia region is among the regions in Italy with to access ERDF. The analysis highlights the efforts of specific LHAs that may struggle with the availability of in-house trained staff to manage this area, despite full awareness of the funding opportunities⁹¹.
2. Removal of Inhibitors - All six LHAs share similar perception of this dimension, as variations are reported in the approach depending upon the recognition of inhibitors (e.g. perception and identification) within the organisations (i.e. LHAs) and outside (e.g. citizens). Besides, both within and outside the LHAs there are those who are

⁹¹More info are available at http://www.regione.puglia.it/assets/-/asset_publisher/ci0Qi9xxHeH5/content/por-puglia-fesr-fse-raggiunto-e-superato-target-spesa/3728079?p_p_auth=9hFl1JxA&redirect=%2Frisultati-

“enthusiast” and those who are “resistant”, adding a further element to the overall picture.

3. Evaluation Methods - Data collection is mostly in place throughout the Region, however, not specifically to support integrated care delivery. Hence, some LHAs may consider the data collection effort excessive compared to their current use.

Puglia’s self-assessment outcomes and local context for integrated care are coherent with the peer-assessment conducted by the European Commission which awarded Puglia in 2019 as a 4-stars Reference Site⁹² in the European Innovation Partnership on Active and Healthy Ageing.

Pilot Projects have proven the validity of the process. Several e-Health good practices are still on the verge of being scaled up as a result of a positive assessment by the Regional HTA centre. Inhibitors are still present and require systematic and organised action to be removed. Besides, funding approaches need to support the delivery of integrated care in a smoother way so that the timeline is reduced, and investments can be more dynamically made within a structured delivery plan.

During the six workshops the stakeholders demonstrated their willingness to bring this process to a further level, with full awareness that knowledge sharing and information transfer to all participant stakeholders is among the key enablers of a full integrated care pathway.

After the conclusion of the self-assessment process, comprising the 33 on-line individual assessment surveys, the six LHAs workshops, and the data analysis that has informed this report, the next steps in Puglia Region include:

1. knowledge sharing of the main outcomes with the six LHAs participating to the process;
2. identify strengths and weaknesses of the LHAs with the aim to facilitate multi-disciplinary discussions and consensus-building about the Good Practice assessment;
3. identify strengths and weaknesses to take part to twinning and coaching activities; and
4. implement capacity building at regional level (i.e. Puglia).

AReSS Puglia will use the data gathered and the emerging elements to direct integrated care implementation policies and actions at local and regional scale (i.e. Puglia Region). In addition, AReSS Puglia may implement coordination and bespoke actions to standardise social care pathways by specific initiatives as “Pathlab” and “Netlab”, two of the “value labs” of The Strategic Social Care Agency for the setup of standardised clinical pathways and the creation of clinical networks. Moreover, AReSS will promote the governance of innovation and the scale up of efficient technologies through one of its “expert centres” the Regional HTA Centre⁹³, so as trial of Innovation Procurement initiatives, etc. etc.

⁹²Source http://www.regione.puglia.it/web/pressregione/pressregione-rss/-/asset_publisher/V2vFLtqdAjTg/content/id/45109213

⁹³More info on the Regional HTA Centre are available at <https://www.sanita.puglia.it/web/aress/hta-ricerca-e-innovazione>

Annex 1 Self-Assessment Workshop in Bari LHA Agenda

Time	Session Title
11,30	Saluti di benvenuto, obiettivi dell'incontro, presentazione dei partecipanti
11,40	Presentazione del progetto SCIROCCO Exchange Serena Mingolla, SCIROCCO Exchange Project Coordinator
11,50	Il processo di autovalutazione con il tool SCIROCCO Exchange <ul style="list-style-type: none"> Introduzione sul processo di autovalutazione nelle 6 ASL pugliesi Il processo di autovalutazione nella ASL BA Efthimia Pantzartzis, SCIROCCO Exchange Assessment Manager
12,00	Negoziazione e & Consensus Building <ul style="list-style-type: none"> L'Assessment Manager introdurrà i risultati per ogni dimensione del tool ricercando il consensus per quelle dimensioni che hanno riportato punteggi differenti (tenendo conto delle motivazioni riportate dai diversi Stakeholder) Efthimia Pantzartzis, SCIROCCO Exchange Assessment Manager
13,30	Conclusioni e riflessioni dei partecipanti sul processo di autovalutazione (compilazione del questionario finalizzato a migliorare lo strumento) Serena Mingolla, SCIROCCO Exchange Project Coordinator

Annex 2 Self-Assessment Workshop in Brindisi LHA Agenda

Time	Session Title
11,00	Saluti di benvenuto, obiettivi dell'incontro, presentazione dei partecipanti
11,10	Presentazione del progetto SCIROCCO Exchange Serena Mingolla, SCIROCCO Exchange Project Coordinator
11,20	Il processo di autovalutazione con il tool SCIROCCO <ul style="list-style-type: none"> • Introduzione sul processo di autovalutazione nelle 6 ASL pugliesi • Il processo di autovalutazione nella ASL BR EfthimiaPantzartzis, SCIROCCO Exchange Assessment Manager
11,30	Negoziazione e Consensus Building <ul style="list-style-type: none"> • L'Assessment Manager introdurrà i risultati per ogni dimensione del tool ricercando il consensus per quelle dimensioni che hanno riportato punteggi differenti (tenendo conto delle motivazioni riportate dai diversi Stakeholder) EfthimiaPantzartzis, SCIROCCO Exchange Assessment Manager
13,00	Conclusioni e riflessioni dei partecipanti sul processo di autovalutazione (compilazione del questionario finalizzato a migliorare lo strumento) Serena Mingolla, SCIROCCO Exchange Project Coordinator

Annex 3 Self-Assessment Workshop in Barletta Andria Trani LHA - Agenda

Time	Session Title
12,00	Saluti di benvenuto, obiettivi dell'incontro, presentazione dei partecipanti
12,10	Presentazione del progetto SCIROCCO Exchange Serena Mingolla, SCIROCCO Exchange Project Coordinator
12,20	Il processo di autovalutazione con il tool SCIROCCO <ul style="list-style-type: none"> Introduzione sul processo di autovalutazione nelle 6 ASL pugliesi Il processo di autovalutazione nella ASL BT EfthimiaPantzartzis, SCIROCCO Exchange Assessment Manager
12,30	Negoziazione e & Consensus Building <ul style="list-style-type: none"> L'Assessment Manager introdurrà i risultati per ogni dimensione del tool ricercando il consensus per quelle dimensioni che hanno riportato punteggi differenti (tenendo conto delle motivazioni riportate dai diversi Stakeholder) EfthimiaPantzartzis, SCIROCCO Exchange Assessment Manager
14,00	Conclusioni e riflessioni dei partecipanti sul processo di autovalutazione (compilazione del questionario finalizzato a migliorare lo strumento) Serena Mingolla, SCIROCCO Exchange Project Coordinator

Annex 4 Self-Assessment Workshop in Foggia LHA - Agenda

Time	Session Title
11,00	Saluti di benvenuto, obiettivi dell'incontro, presentazione dei partecipanti
11,10	Presentazione del progetto SCIROCCO Exchange Serena Mingolla, SCIROCCO Exchange Project Coordinator
11,20	Il processo di autovalutazione con il tool SCIROCCO <ul style="list-style-type: none"> Introduzione sul processo di autovalutazione nelle 6 ASL pugliesi Il processo di autovalutazione nella ASL FG EfthimiaPantzartzis, SCIROCCO Exchange Assessment Manager
11,30	Negoziazione e & Consensus Building <ul style="list-style-type: none"> L'Assessment Manager introdurrà i risultati per ogni dimensione del tool ricercando il consensus per quelle dimensioni che hanno riportato punteggi differenti (tenendo conto delle motivazioni riportate dai diversi Stakeholder) EfthimiaPantzartzis, SCIROCCO Exchange Assessment Manager
13,00	Conclusioni e riflessioni dei partecipanti sul processo di autovalutazione (compilazione del questionario finalizzato a migliorare lo strumento) Serena Mingolla, SCIROCCO Exchange Project Coordinator

Annex 5 Self-Assessment Workshop in Lecce LHA - Agenda

Time	Session Title
09,00	Saluti di benvenuto, obiettivi dell'incontro, presentazione dei partecipanti
09,10	Presentazione del progetto SCIROCCO Exchange Serena Mingolla, SCIROCCO Exchange Project Coordinator
09,20	Il processo di autovalutazione con il tool SCIROCCO <ul style="list-style-type: none"> • Introduzione sul processo di autovalutazione nelle 6 ASL pugliesi • Il processo di autovalutazione nella ASL LE EfthimiaPantzartzis, SCIROCCO Exchange Assessment Manager
09,30	Negoziazione e & Consensus Building <ul style="list-style-type: none"> • L'Assessment Manager introdurrà i risultati per ogni dimensione del tool ricercando il consensus per quelle dimensioni che hanno riportato punteggi differenti (tenendo conto delle motivazioni riportate dai diversi Stakeholder) EfthimiaPantzartzis, SCIROCCO Exchange Assessment Manager
11,00	Conclusioni e riflessioni dei partecipanti sul processo di autovalutazione (compilazione del questionario finalizzato a migliorare lo strumento) Serena Mingolla, SCIROCCO Exchange Project Coordinator

Annex 6 Self-Assessment Workshop in Taranto LHA - Agenda

Time	Session Title
10,30	Saluti di benvenuto, obiettivi dell'incontro, presentazione dei partecipanti
10,40	Presentazione del progetto SCIROCCO Exchange Serena Mingolla, SCIROCCO Exchange Project Coordinator
10,50	Il processo di autovalutazione con il tool SCIROCCO <ul style="list-style-type: none"> • Introduzione sul processo di autovalutazione nelle 6 ASL pugliesi • Il processo di autovalutazione nella ASL TA Efthimia Pantzartzis, SCIROCCO Exchange Assessment Manager
11,00	Negoziazione e & Consensus Building <ul style="list-style-type: none"> • L'Assessment Manager introdurrà i risultati per ogni dimensione del tool ricercando il consensus per quelle dimensioni che hanno riportato punteggi differenti (tenendo conto delle motivazioni riportate dai diversi Stakeholder) Efthimia Pantzartzis, SCIROCCO Exchange Assessment Manager
13,00	Conclusioni e riflessioni dei partecipanti sul processo di autovalutazione (compilazione del questionario finalizzato a migliorare lo strumento) Serena Mingolla, SCIROCCO Exchange Project Coordinator



D5.1 Readiness of European Regions for Integrated Care

Annex H: Self-assessment process in Midlothian, Scotland

WP5 Maturity Assessment for Integrated Care

Document information

Organisation responsible for conducting the self-assessment process in Scotland:

- Midlothian Health and Social Care Partnership

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1. Introduction

Scotland is a country that is part of the United Kingdom, with a population of 5,4 mil inhabitants. It constitutes a distinct jurisdiction in both public and private law. In 1997, a Scottish Parliament was re-established, in the form of a devolved unicameral legislature, having authority over many areas of domestic policy, including healthcare policy. Scotland's healthcare policy is currently administered through the Health and Social Care Directorates of the Scottish Government.

Health and social care are devolved issues in the United Kingdom. Healthcare in Scotland is mainly provided by Scotland's public health service, NHS Scotland. It provides healthcare to all permanent residents free at the point of care and paid from general taxation. Private care is usually paid for through private healthcare insurance schemes or by individuals.

NHS Scotland is managed by the Scottish Government, which sets national objectives and priorities for the NHS. Of approximately £34.7 billion controlled by the Scottish Government, around £11.9 billion is spent on health. The provision of healthcare has been the responsibility of 14 geographical, local NHS Boards and 7 National Special Health Boards⁹⁴ which collectively employ approximately 160,000 staff.

1.1 Characteristics of healthcare system

Item	Description
Region	Midlothian Health and Social Care Partnership, Scotland
Geographical scale of the region	Regional
Geographical size and dispersion of the region (km²)	354 km ²
Population size of the region (thousands)	91,000. Midlothian is the fifth smallest Scottish mainland council by population size and is the fastest growing by population according to 2026 estimates.
Population density of region (inhabitants/km²)	Ranked 25th of the 32 Scottish Local Authority Areas. 258 per Km ²
Life expectancy of the region (years)	Life expectancy for women in Midlothian in 2017 was 81.6 years for women and 77.9 years for men. Life expectancy for those born in Scotland in 2016-2018 was 77.0 years for males and 81.1 years for females (National Records of Scotland).
Fertility rate of the region (births/woman)	The total fertility rate in Midlothian was 1.83 in 2018. In 2018, there were 1,075 births in Midlothian. The rate was 12.2 per 1,000 population in 2018. In comparison, the rate in Scotland overall decreased from 9.7 to 9.4. In 2018, Midlothian was the council area with the joint highest standardised birth rate.

⁹⁴ These include NHS Health Scotland, Healthcare Improvement Scotland, Scottish Ambulance Service, the Golden Jubilee National Hospital, the State Hospital, NHS24, NHS Education for Scotland and NHS National Services Scotland.

Item	Description
Mortality rate of the region (deaths/1,000 people)	In Midlothian, the standardised death rate was 10.3 in 2018.
Top three causes of death of the region	<p>In Midlothian, the leading causes of death for males in 2018 were: Ischaemic heart diseases (12.6% of all male deaths), followed by lung cancer (7.9%) then Dementia and Alzheimer Disease (7.6%).</p> <p>The leading causes of death for women were Dementia and Alzheimer Disease (16.2%), Ischaemic heart Diseases (11.4%) then Cerebrovascular disease (8.2%).</p>
Organisation and governance of healthcare services	<p>Following the 2016 legislation in Scotland for the Integration of Adult Health and Social Care, health and care services in Midlothian are jointly provided by NHS Lothian and Midlothian Council in the new structure called an Integrated Joint Board (IJB). As members of the IJB, the Council and Health Service each agree how much to allocate to the IJB, and it then decides on local priorities and instructs the Council and Health Service how to use this joint funding.</p> <p>Adult Care Social Care may be provided by the local authority (local government) or is purchased from the voluntary or independent sector providers (67%).</p> <p>Community health services may be provided by primary care and service providers e.g. General Practice, Community Nursing, Pharmacy, Mental Health Services etc.</p>
Healthcare spending of the region (% of GDP)	<p>The Midlothian Health and Social Care Partnership (HSCP) 's integrated budget for health and care in 2018/19 was £142m. The breakdown for health and social care was:</p> <ul style="list-style-type: none"> • Midlothian Council: £43m • NHS Lothian: £88m
Distribution of spending in the region	<p>The total spent by Midlothian Council (local authority) in 2018/19 was £200.9million. The majority of Midlothian Council's budget for services (76.5%) comes as grant funding from the Scottish Government.</p> <p>Council Tax (local tax paid by citizens) provides a quarter (23.5%) of the Council's budget for local services. The Council funds Education, Communities, Development and Health and Social Care (25%).</p> <p>Approximately one quarter (25%) of expenditure by Midlothian HSCP is on services for older people. In 2018/19, the spend on adult social care and older people was £39.8m</p>
Size of the workforce (thousands) and its distribution (%) in the region.	<p>The population of Midlothian is 91,000. The working age population is 57,000. In 2018, there were 47,300 people economically active in Midlothian.</p> <p>NHS Lothian has a workforce of approximately 27,000 people.</p> <p>The Midlothian HSCP has approximately 1100 full-time staff and 691 of these work in adult social care.</p>

Item	Description
	<p>484 staff work in NHS Lothian (Midlothian only). In addition, there are 1400 part-time staff.</p> <p>Midlothian HSCP has contracts with 40 voluntary sector organisations - their staff numbers are not included here.</p> <p>Detailed figures for staff roles is difficult to obtain, however, according to the 2019 Joint Needs Assessment, there are 12 G.P. practices in Midlothian, with a compliment of 80 GPs and 41 nursing staff.</p> <p>Allied Health Professionals (AHPs) work in health and care settings (including patients' homes, hospitals, community-based teams and surgeries) alongside doctors, dentists and nurses. The HSCP directly employs Occupational Therapists (OTs) (in the Council and NHS) as well as Physiotherapists in the NHS.</p> <p>A total of 60 whole time equivalent OTs and Physios are employed across health and social care.</p> <p>Other Allied Health Professionals (AHPs) - Podiatrists, Speech and Language Therapists, Arts Therapists, Radiographers and Dietitians - work across NHS Lothian NHS services which includes providing care to Midlothian residents.</p> <p>Arts Therapy and Dietetics are hosted in Midlothian. The service employs 100 whole time equivalent Dietetic staff and 7 Arts Therapy staff who work all across NHS Lothian.</p>
Healthcare policies in the region	<p>Cancer - National/Local Guidance: Beating Cancer: Ambition and Action (2016) National Health and Care Delivery Plan (2017-18) Better Cancer Outcomes in Lothian - A Strategy for Cancer (2014 - 2020) Respiratory Disease: COPD & Asthma National/Local Guidance: NICE Guidance British Thoracic Society: Guidelines (Asthma & COPD) NHS Lothian: Guidelines Scottish Government: COPD best practice guide Social Care Support National/Local Guidance: Realistic Medicine Self-Directed Support Fair Access to Care</p>

1.2 Integrated care in Midlothian, Scotland

In April 2016, The Public Bodies (Joint Working) (Scotland) Act 2014 came into force and Scotland's healthcare system became an integrated service under the management of Health and Social Care Partnerships (HSCPs). The Act is the legislative framework for the integration of health and social care services which requires the integration of the governance, planning and resourcing of adult social care services, adult primary care and community health services and some hospital services. Other areas such as children's health and social care services, and criminal justice social work can also be integrated. The Act signified new joint working arrangements between Local Authorities and NHS Boards to improve the co-ordination of health and social care in Scotland. As a result, local authority nominees, responsible for the provision of social care, were added to the Health Boards' membership to improve the coordination of health and social care. As a result, there are 31 HSCPs that are jointly responsible for the commissioning and delivery of social care, community health, primary care and some hospital services. Midlothian HSCP is one of these Partnerships⁹⁵. The aim of this Act was to enable better coordinated, joined-up and more continuous care, resulting in improved patient experience whilst achieving greater efficiency and value from health and social care delivery systems. There was a recognition of the need to move towards a more integrated, person-centred approach that is designed for citizens in a way that co-ordinates services around their needs and puts them in control, thus enabling them to participate in, and make informed decisions about, their care. The mainstreamed adoption of technological solutions within service redesign was perceived as a major facilitator of such a change.

2. Self-assessment process in Midlothian, Scotland

2.1 Identification of local stakeholders

The local stakeholders were identified with the support of the Midlothian HSCP. A multi-disciplinary and multi-level group of experts in health and social care integration was selected to assess the maturity of the Partnership for the adoption of integrated care. The main rationale was to capture the perceptions of stakeholders at three distinct levels:

- governance,
- strategic/planning;
- operational.

The profiles of the local stakeholders are provided in the table below:

⁹⁵ <https://www.legislation.gov.uk/asp/2014/9/contents/enacted>

Table 2: Stakeholders' profile

Position	Group
Chief Officer	Integration Joint Board/Strategic Planning Group & Joint Management Team
Head of Services - social work and adult services	Strategic Planning Group
Elected Member	Integration Joint Board
Community Representative	Integration Joint Board
Service User Representative	Strategic Planning Group
Strategic Planning Lead	Strategic Planning Group
Lead Physiotherapist	Joint Management Team
Union Representative Member	Strategic Planning Group
Strategic Planning Lead - Acute Hospitals	Strategic Planning Group
Public Health Consultant	Strategic Planning Group
Lead Occupational Therapist	Joint Management Team
Service Manager - Disability	Joint Management Team
Programme Manager - mental health/COPD	Joint Management Team
Service Manager - Community Justice	Joint Management Team
Operational Lead - Intermediary care	Joint Management Team
Technology Enabled Care Strategic Lead	Strategic Planning Group
Elected Member	Integration Joint Board
Integration Manager	Joint Management Team
Integration Manager	Joint Management Team
Chief Nurse	Integration Joint Board & Strategic Planning Group
Lead Pharmacist	Joint Management Team

2.2 Self-assessment survey

In order to capture stakeholders' individual perceptions and opinions on the maturity level of the Midlothian HSCP in integrated care, **22 stakeholders were invited to participate** and they all accepted the invitation. The self-assessment process was carried out between December 2019 and January 2020.

Stakeholders were invited to:

- Register on the SCIROCCO Tool's web page
- Perform the individual self-assessment
- Share their self-assessment outcomes with the HSCP's local coordinator.

In this regard, the local coordinator provided the following information to stakeholders:

- Background information to the SCIROCCO Exchange project, its objectives and potential added-value for the HSCP;
- Information on the organisation of the maturity assessment process in Midlothian and next steps.

All stakeholders filled the online survey at the beginning of January 2020.

2.2.1 Outcomes of self-assessment survey

13 stakeholders filled the online self-assessment survey, including the provision of their justifications for their ratings. The following spider diagrams reflect the diversity of the stakeholders' perceptions on the maturity of integrated care in the Midlothian HSCP. It is very insightful to observe the differences in perceptions, not only among the three different levels of stakeholders, but also within these groups themselves.

Figure 1- Outcomes of the individual self-assessments - Perceptions of Integration Joint Boards

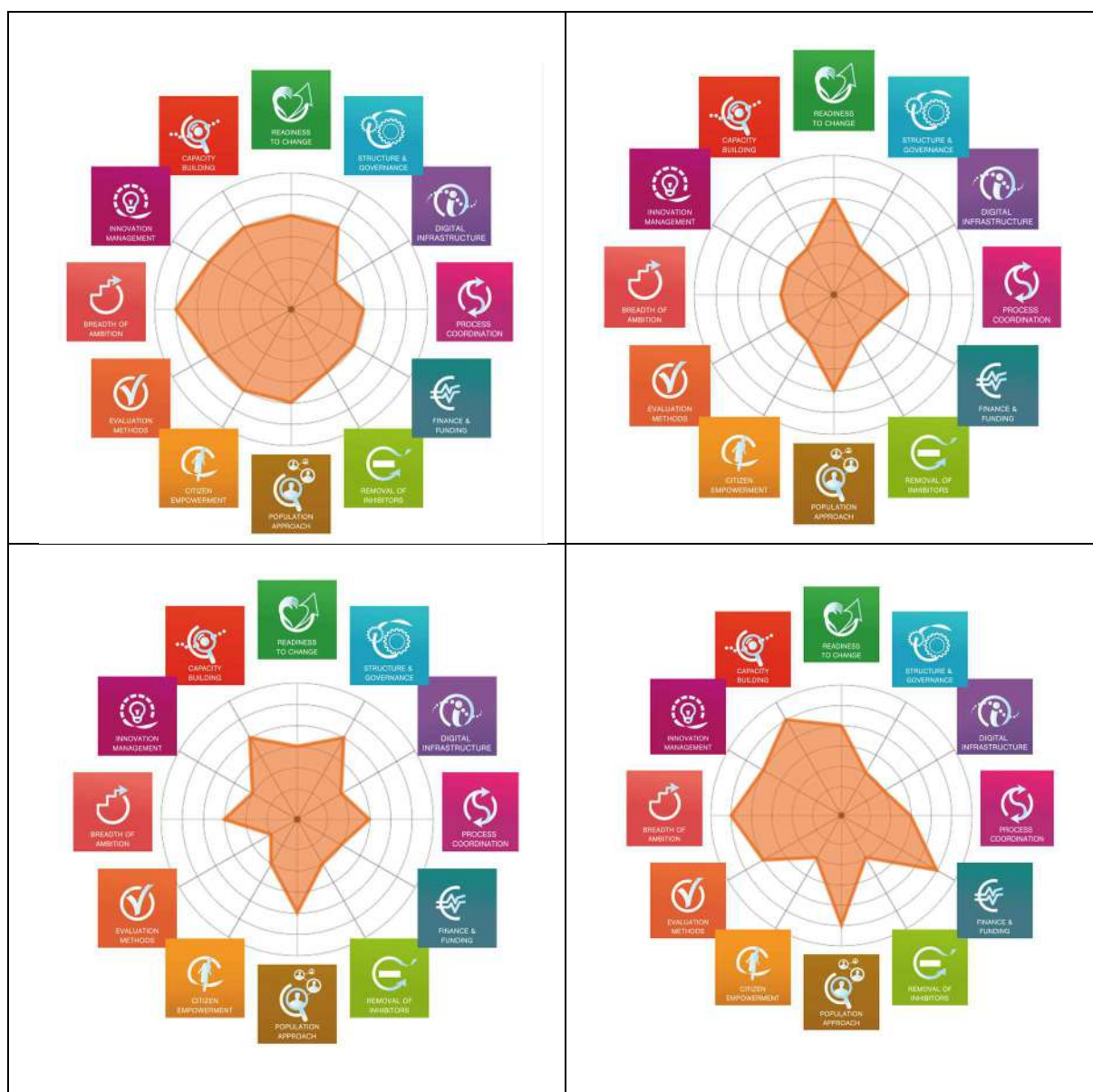


Figure 2 - Composite diagram - Diversity of perceptions of the members of the Joint Board



As the outcomes of the individual assessments in the Joint Integration Board group indicate (Figure 2), there is a disparity in members' perceptions of the level of maturity of integrated care in Midlothian's HSCP. We can observe that agreement was reached in only two domains of the SCIROCCO Exchange tool: **“Digital Infrastructure”** and **“Process Coordination”**, for which a maturity level 2 was agreed for both.

All stakeholders tended to agree that there was a strong recognition of the need for more joined up and integrated digital infrastructure but that IT systems still remained separate at all levels of health and social care delivery. Also, services were not digitally integrated from the users' perspective. However, although there were some good examples already in place, the approach was not systematic.

With regard to **“Process Coordination”**, respondents acknowledged that some standardised, co-ordinated care processes were underway, particularly when in relation to new services, but this was not the case for existing routine services. A more systematic approach is planned and more work still needs to be done to increase the maturity of this dimension.

A relatively good level of agreement was also reached on the following dimensions:

- **“Readiness to Change”** - Stakeholders tended to agree that there was a vision and plan for transformation towards integrated care embedded in policy, supported by strong leaders and champions. This was reflected in a relatively high average level of maturity (3). However, they acknowledged that there was a lack of awareness by some staff and that this might be due to a number of reasons; e.g. position in the organisation. Also, more work needs to be done on public awareness as citizens are unlikely to have the same level of understanding of the need for change.
- **“Removal of Inhibitors”** - Stakeholders tended to agree that there was a great level of awareness of the need to remove inhibitors and some plans and strategies are in place. However, this domain scored relatively low (a maturity level of 1-2) as there was still some silo thinking despite all the hard work internally within the Partnership. There is no systematic planning on the removal of inhibitors, but the overall situation has improved.
- **“Population Approach”** - Stakeholders agreed quite a high level of maturity for this dimension (3-4) which is reflected by the existence of a number of good solutions based on risk stratification and also by the fact that this is an agenda that can be supported and influenced locally. There is also a need to focus on what to do with the results of stratification.
- **“Innovation Management”** - the scoring of this dimension reached either the level of maturity of 1 or 3. With regard to the maturity level of 2, the main perception was that, although the Midlothian HSCP is very forward looking and stakeholders explore outside their own areas, generally across Scotland there is a lack of sharing of good practices. In contrast, those ranking this dimension as 3 acknowledged that there was a strategic plan and political commitment to innovation, also supported financially, which is a crucial factor for more formalised innovation management.
- **“Structure and Governance”** - A similar situation was observed in this dimension. Stakeholders tended to rank either a maturity of 1 or 3. For those scoring the level 1, the main issues were: existing fragmentation of governance in the Partnerships (some are members of both groups (as outlined in the Table 2) which sometimes creates conflicting pressures); and lack of long-term funding which means that the planning is limited. As a result, systems and processes are still separated. In contrast, those ranking this dimension as 3 acknowledged that new governance structures to support the integration of health and social care services are in place so the roadmap for change has been partially implemented. However, it was also highlighted that the current governance arrangements could have been simplified. There is governance at a national level but the situation at a local level is too complex to achieve a higher maturity scoring.

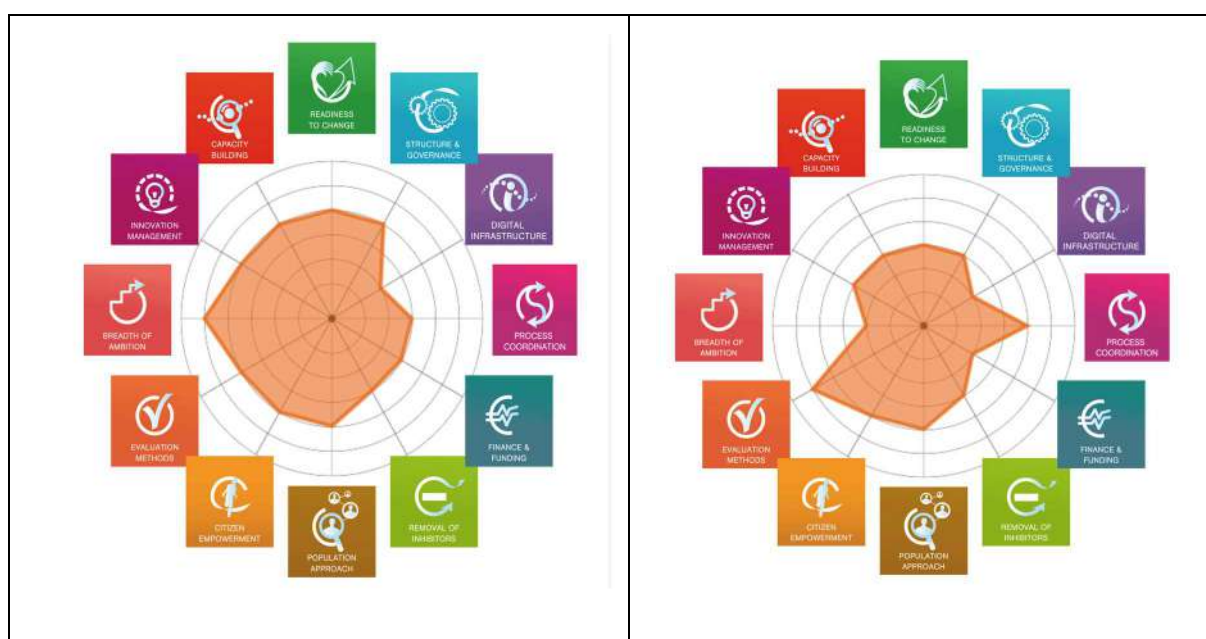
The dimensions with the highest level of disparities of scoring were:

- **“Funding”** - Ranking in this dimension varied from 1-4 levels of maturity. One of the arguments for low scoring was the fact that the funding is diverse and short-term which limits the funding of any extra transformation or scaling-up initiatives. The

situation is even worse when it comes to social care. In contrast, there was also a perception that funding for ongoing operations is available and decisions are done locally about where the funding is allocated.

- **“Citizen Empowerment”**- Ranking on this dimension varied between 1-3 even though the majority of stakeholders tended to agree that the level of maturity should be 1 for a number of reasons; despite all the good practices in the Partnership, citizen empowerment is still not fully embedded, and it lacks consistency. There was also a feeling that public engagement needed to be improved. In contrast, other stakeholders argued that there is a strong commitment in Midlothian HSCP to citizen empowerment and citizens are consulted on their health and social care services and have access to their data. However, it was also acknowledged that more work is needed to improve the situation.
- **“Evaluation Methods”** - Ranking on this dimension also varied between 1 to 3 level of maturity. One of the low scoring perceptions was that we tend to evaluate the effectiveness of services rather than the degree of integration or how things come together holistically. The goals and targets for evaluation need to be better defined. In contrast, it was argued that in case of new services, evaluation is systematic and embedded as part of system redesign which is a great improvement.
- **“Breadth of Ambition”**- Ranking on this dimension varied between 1 to 4 level of maturity. The arguments for lower scoring were the fact that even though we have elements of all levels of this dimension in place, but it is not consistent. In contrast, it was argued that there are policies, systems and process in place to support the ambition of full health and social care integration. The ambition is set quite high, both at national and local level.

Figure 3- Outcomes of the individual self-assessments - Perceptions of Strategic Planning Group



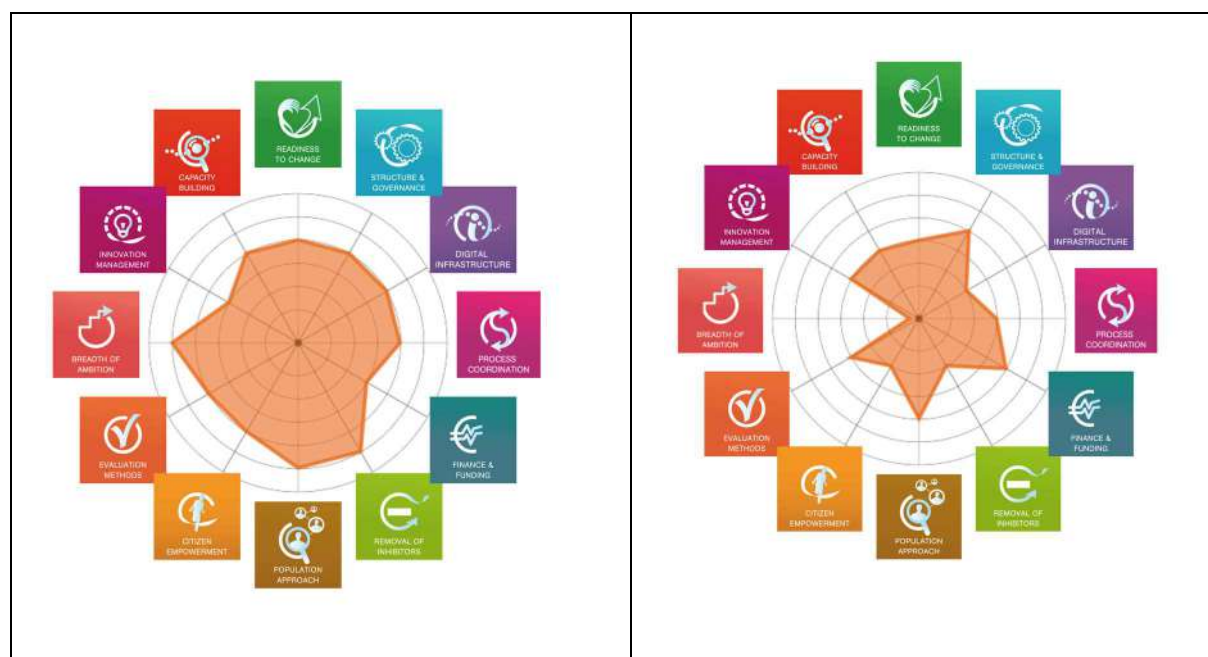


Figure 4 Composite diagram - Diversity of perceptions of the members of the Strategic Planning Group



As the outcomes of the individual assessments in the Strategic Planning' Group indicate (Figure 4), there was a disparity in members' perceptions of the level of maturity of integrated care in Midlothian HSCP. It is interesting, however, that we can observe much more coherent scoring, with only slight variances across a number of dimensions compared to members of the Joint Integration Board. However, there was no single dimension where all stakeholders assessed the same level of maturity.

A good level of agreement was reached in a number of dimensions:

- **“Readiness to Change”** - Ranking in this dimension varied between the maturity of 2 and 3. Stakeholders clearly agreed that the need to change was acknowledged widely by the Midlothian HSCP which is reflected in a number of plans and strategies in place. These are also supported by strong monitoring and reporting on the outcomes. There are already some good examples of change however there is still a lack of coherent and consistent approach adopting new models of care. Also, there is complexity of the relationship between the acute and primary care sectors which seems to be a barrier to faster progress. In addition, the needs of social care needs to get a higher profile, as the current system is still dominated by medical models of care. Public consensus is still very difficult to measure in order to score higher in this dimension.
- **“Structure and Governance”** - Ranking in this dimension varied between the maturity of 2 and 3, with a majority of stakeholders voting for maturity level 3. There was a high level of agreement that there is an ongoing internal restructuring that will see the establishment of appropriate governance to address the national ambitions for integrated care. This new governance framework is supported by a change management plan; however, the real implementation still remains a challenge and there is a need to continue building relationships among the new entities. Stakeholders reflected that the structure at a local level could have been simplified.
- **“Process Coordination”** - Ranking on this dimension varied between the maturity of 2 and 3. There was an agreement that the services, pathways and care processes are getting formally described in a standardised way and some improvements can be observed. However, progress in this area is rather complicated because the acute part of the healthcare system that Midlothian HSCP works with also operates across other Integration Joint Board areas. There is a dichotomy between the ambition to provide services that meet local needs and the benefits of standardising to some extent on a regional/Midlothian basis. In general, one can conclude that establishment of a reliable process varies by team/services. Whilst there are well defined pathways in health and care respectively, at some interfaces (particularly care requests and allocation) the bridge is still variable.
- **“Funding”** - Ranking on this dimension varied between 1, 2 and 3, with a majority of stakeholders voting for maturity level 2. It was acknowledged by stakeholders that there is a diversity of funding available, but it is not enough to achieve scaling-up ambitions. In contrast, most of the discussion about integrated planning and financing was about budget reductions which inhibits the development of services.
- **“Population Approach”** - Ranking on this dimension varied between 3 and 4, with a majority of stakeholders voting for the maturity level 3. The main arguments

acknowledged all the work that has been undertaken to understand the population of Midlothian and the risks within the population, with a view to guiding the solutions that are put forward. This can be seen as a core focus of Midlothian's strategy. However, most of the available data still has a health bias.

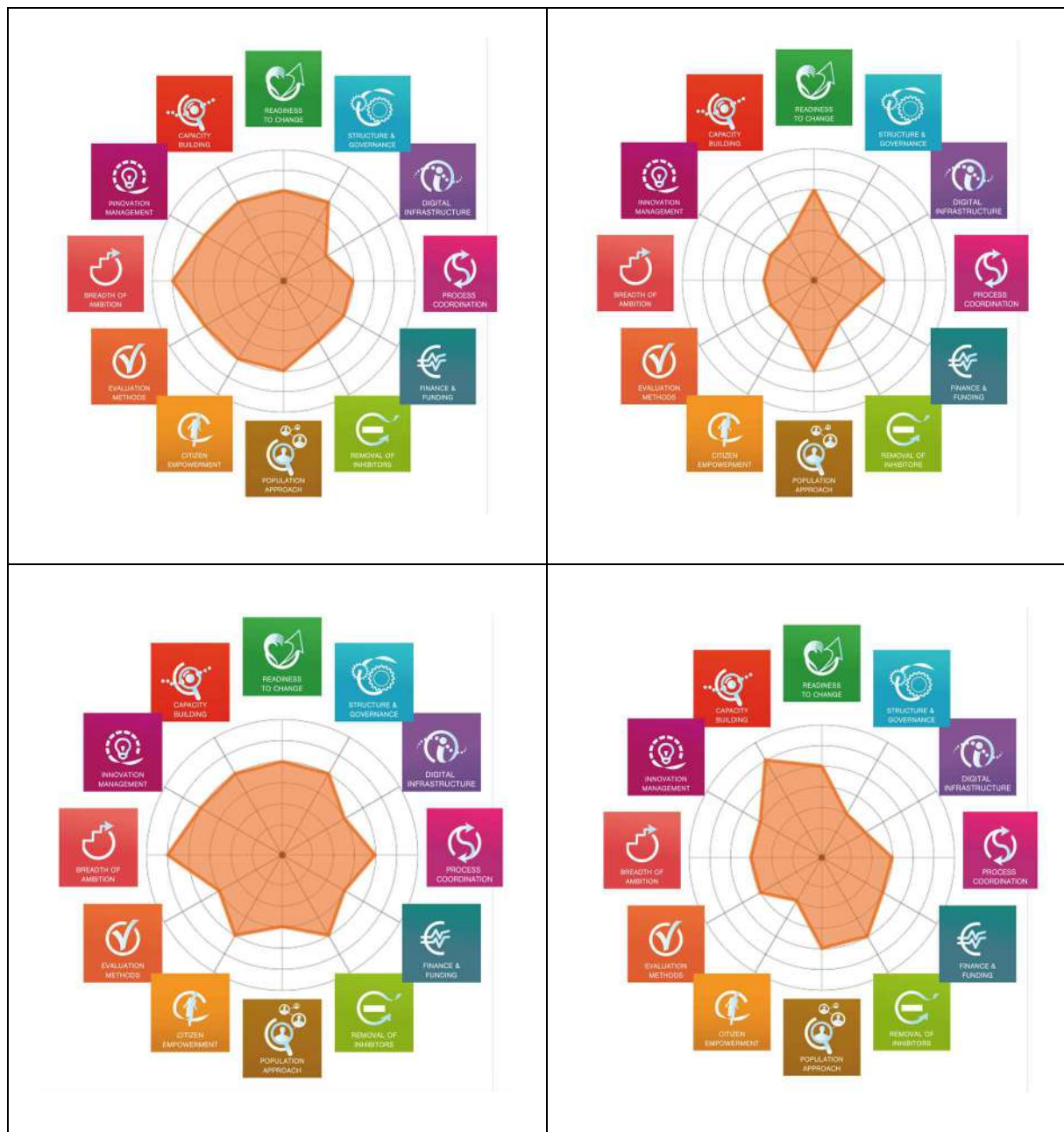
- **“Citizen empowerment”** - Ranking on this dimension varied between 1 and 3, with a majority of stakeholders voting for the maturity level of 3. It was acknowledged that the citizens of Midlothian were consulted in the development of the Strategic Plan and Midlothian HCSP continues to reach out to citizens for feedback on services. There is a strong commitment to citizen empowerment but this lacks a systematic approach. It is also very difficult to ensure the consistent involvement of all citizens.
- **“Evaluation methods”** - Ranking on this dimension varied between 2, 3 and 4, with a majority of stakeholders voting for the maturity level of 3. It was perceived by local stakeholders that some services are being measured and assessed (based on objective metrics) but this is not consistent. There is a recognition that there is a value in taking a more systematic approach to evaluation through the Strategic Planning Group. In general, more qualitative data is required.
- **“Innovation Management”** - Ranking on this dimension varied between 2 and 3, with a majority of stakeholders voting for the maturity level of 2. Innovation is very much recognised across Midlothian HCSP which is also reflected in the local strategy, however further involvement of social care staff should be encouraged. There are already some good practices in place and innovation is mostly seen as the key driver for achieving long-term financial sustainability as well as the objectives of the realistic medicine. Further improvement is perceived when it comes to the capturing of innovation and supporting more efficient knowledge transfer.
- **Capacity-building** - Ranking on this dimension varied between 2 and 3, with an equal distribution of scorings. Stakeholders agreed that cooperation on capacity-building is growing across the Partnership, the journey has started but more work is needed to improve on this dimension. It is a consistent problem of how to build capacity and resilience in the constant cycle of change management and, at the same time, maintain the day-to-day operation of services. In general, there is definitely an ambition to share knowledge and experience in Midlothian.

The dimensions with the highest level of disparities were:

- **“Digital infrastructure”** - Ranking on this dimension interestingly varied from 1-4 level of maturity. One of the arguments for low scoring was the fact that, whilst means of sharing data do exist, this is far below the level of connectivity required to deliver an integrated digital infrastructure. IT provision is still NHS or Council, formal exchange tools (beyond web forms/email) are inoperative locally, basic administrative organisation calendars is lacking as well as no shared Wi-Fi. There are a number of good practices, but overall IT systems are not interconnected.
- **“Removal of Inhibitors”** - Ranking on this dimension varied between 1 and 4. The main argument for the lowest scoring was that inhibitors are dealt with on a project basis and there is no systematic approach to removal of inhibitors. In contrast, there were views that Midlothian worked really hard on removing the inhibitors, particularly when it comes to information governance.

- **“Breadth of Ambition”**- Ranking on this dimension varied between 1 and 4 as well. The main argument for the lowest scoring was that even though the HSCP is integrated legislatively, it is lacking operational integration. In contrast, it was argued that ambitions for integrated care are set very high also at the local level. There are attempts to engage both horizontal and vertical stakeholders in planning and measuring services.

Figure 5 - Outcomes of the individual self-assessments - Joint Management Team



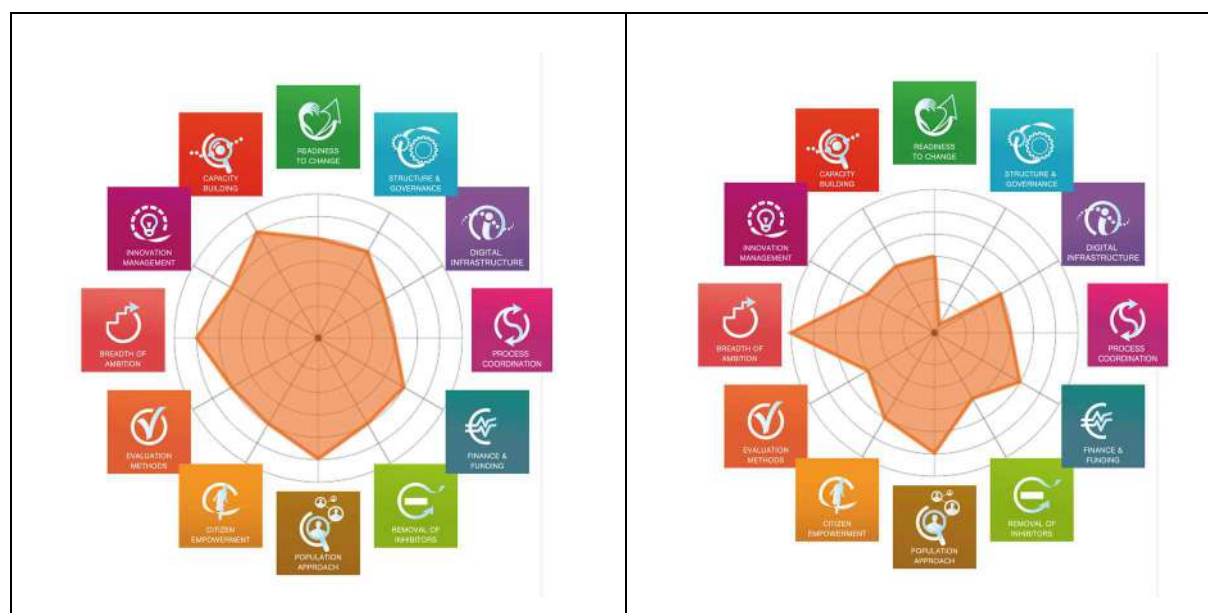
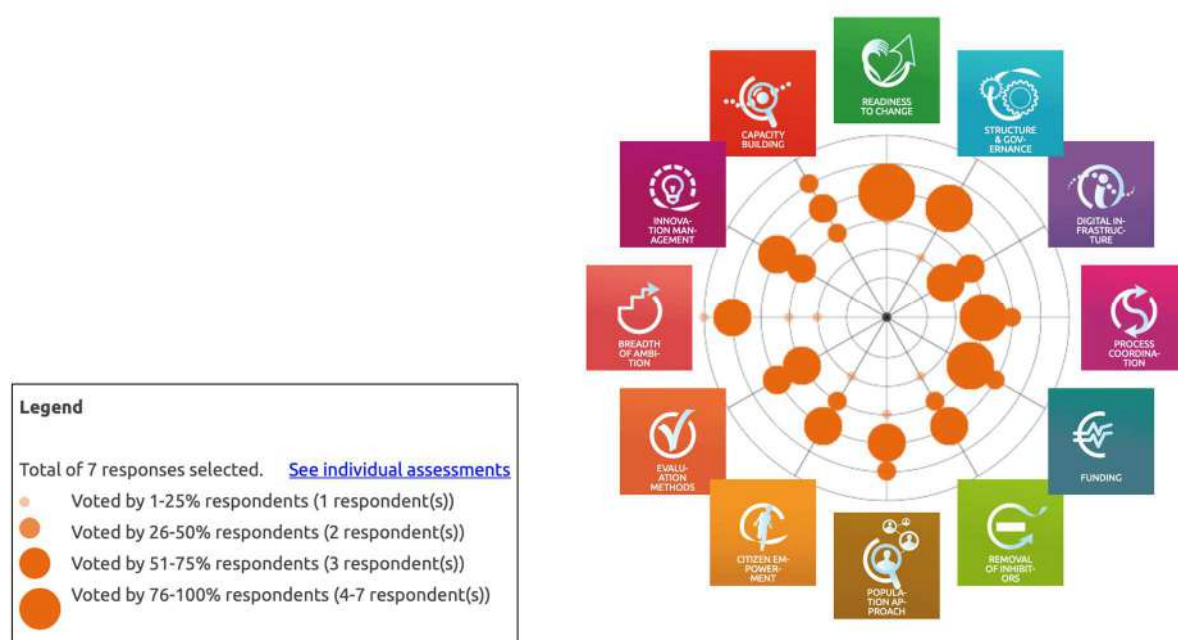


Figure 6 - Composite diagram - Diversity of perceptions of the members of the Joint Management Team



As the outcomes of the individual assessments in the Joint Management Team' group indicate (Figure 6), there is a disparity in members' perceptions of the level of maturity of integrated care in Midlothian's HSCP. It is interesting that we can observe much more diverse scoring, with only slight variances across a number of dimensions, compared to members of the Joint Integration Board or Strategic Planning Group. However, there was no single dimension where all stakeholders gave the same level of maturity.

A very good level of agreement was reached in a number of dimensions:

- **“Readiness to Change”** - Ranking on this dimension varied between the maturity of 2 and 3, with a clear majority of stakeholders voting 3. Stakeholders strongly agreed that there is a clear internal vision and plans but the need to change is not communicated to the wider public. Roles and responsibilities are clearly aligned to these visions and plans, including joint management arrangements and stronger links with other key agencies and systems which are vital to the prevention agenda, e.g. community planning, leisure and sport. Leaders are emerging with a strong passion and commitment for change, but it is not clear how it will be delivered operationally.
- **“Structure and Governance”** - Ranking on this dimension varied between the maturity of 1, 2 and 3, with a clear majority of stakeholders voting 3. Stakeholders acknowledged that, within the Midlothian Partnership, there is a clear structure and routes of governance are in place. However, the overall programme for change is still missing, although there are some individual change plans in specific areas. There is a need for ongoing review of structures and governance to reflect the actual needs in integrated care delivery. Some frameworks have been developed to ensure a consistent approach in Midlothian. The rationale for the lower maturity scoring was the fact that some technical difficulties prevent smooth governance changes.
- **“Digital Infrastructure”** - Ranking on this dimension was relatively low and varied between the maturity of 1 and 2, with a majority of stakeholders voting 1. The main arguments included: separation of IT systems for health and social care despite the existence of a few good practice examples; dependency on national solutions; need for cultural shift both within the workforce and in general public; lack of strategy on integrating health and social care systems.
- **“Process Coordination”** - Ranking on this dimension varied between the maturity of 2 and 3, with a majority of stakeholders voting 2. It was agreed that the work has started on better coordination of the processes and services but there is no systematic approach, this is mostly the case for new services, so it is not universal. Processes, in general, vary in different areas and across the services. It is very difficult to ensure that care pathways are in place when the Partnership is at the beginning of the journey.
- **“Funding”** - Ranking on this dimension varied between the maturity of 2 and 3, with a majority of stakeholders voting 2. They argued that some funding is available but, overall, funding constraints have a limiting effect. The Partnership is making maximum use of available transformation funding, however double running is major challenge and undoubtedly slows up the capacity for change. There remains the responsibility of responding to individual needs whilst seeking to invest in long term prevention and early intervention strategies. There is lack of recurring funding. A lack of experience and awareness of different funding is also an issue.
- **“Evaluation Methods”** - Ranking on this dimension varied between 2 and 3, with the majority of stakeholders voting 2. The main rationale was that there is lack of systematic evaluation and much evaluation tends to be the single system. Whilst Performance Management is becoming a stronger component of Midlothian’s Health and Social Care Partnership, the toolkit to use evaluation methods is more ad hoc.

There are, however, good and emerging examples including the local Wellbeing Service and involvement in national programmes including dementia and cancer.

- **“Innovation Management”** - Ranking on this dimension varied between the maturity of 2 and 3, with a majority of stakeholders voting 2. They argued that there are some innovation processes in place but these processes are not formally implemented and knowledge transfer between different areas of work is limited. The innovation is captured in a number of reports but not systematically. However, there are some good evolving examples - e.g. quarterly summits with the voluntary sector; telehealthcare programme; strategic planning at all levels of care; and transformation being the main driver for achieving long-term financial sustainability as well as the objectives of Realistic Medicine. In general, innovation is encouraged across the Partnership, however, it is very difficult to ensure systematic and formalised innovation management as the projects are so diverse and workload is large.

The dimensions with the highest level of disparities were the following:

- **“Removal of Inhibitors”** - Ranking on this dimension interestingly varied from 1, 2 and 3 levels of maturity. One of the arguments for low scoring was the fact that there are still two separate systems and processes for the health and social care system and there are no obvious moves at government level to rectify this. It is also very difficult to make changes at the ground level. Also, one needs to consider that some inhibitors are easier to remove than others and not everything is achievable in a short term. A systematic approach to remove inhibitors is missing. On the other hand, the main rationale for higher scoring was that inhibitors have been identified and have been removed despite all the difficulties. The Health and Social Care Partnership is fairly well integrated with clear established lines of communication. Many of the barriers can be simply overcome by communicating with your co-workers.
- **“Population Approach”** - Ranking on this dimension varied from 2, 3 and 4 levels of maturity, even though most of the stakeholders tend to agree on the level of maturity level 3. The main rationale for the scoring 3 was the existence of a number of good practice solutions being used for some specific service users’ groups, but there are still a number of areas where there is no risk stratification, however work is being progressed. There is a feeling that this is an agenda that can be supported and influenced locally. In contrast, some stakeholders still perceive that the risk stratification approach is used in certain projects and on experimental basis hence they scored this dimension much lower.
- **“Citizen Empowerment”** - Ranking on this dimension varied between 1, 2 and 3 levels of maturity, with a majority of stakeholders voting for level 3. These stakeholders acknowledged that there is a strong commitment to citizen empowerment, including number of good practices but the systematic approach is lacking. Locally, there is a good sense on this agenda, but implementation remains a challenge. Public is consulted on service change implementation as a matter of course. Also, public views on how the Partnership provides its services are regularly asked for. The principle of user involvement is well embedded in the organisation. Co-creation takes place in some areas but not methodically across services. However, there is still a tendency

to ask people what they think of well thought out proposals rather than involving people from the outset. The biggest limitation of the citizen empowerment is lack of accessing the healthcare data.

- **“Breadth of Ambition”** - The ranking on this dimension varied between 1, 2, 4 and 5 levels of maturity with most of stakeholders voting for the maturity scale 4 and 5. The main rationale is the recognition that Scotland’s, as well as Midlothian’s, ambition in the agenda of integrated care is set quite high. There is already improved co-ordination between health and social care, however there are gaps in integration between care at different levels. In contrast, some stakeholders perceived that there is still a long way to go to manage to integrate primary and secondary care despite the existence of some of the good practices. At present, it seems that integration at primary care level is easier to achieve.
- **“Capacity-building”** - The ranking on this dimension varied between 2, 3 and 4 levels of maturity with quite dispersed perceptions between stakeholders. The higher scoring reflected Midlothian as a place where change is encouraged, always looking for new and more effective and efficient ways to run and manage the services. It is a relatively small sized Partnership which allows sharing of knowledge and spread of innovation across the whole area. There is a strong commitment to capacity-building which is evident through the retention of Midlothian’s own Learning and Development Service which is increasingly adopting an integrated approach. There has been significant investment in Organisational Development over a number of years although a dedicated resource is no longer available. Evidence through measures such as lower staff turnover is complex and not yet in place. Others argued that there is some acknowledgement of the need to build capacity to improve and develop services, but the acknowledgment of the scale of capacity that needs to be developed is limited.

2.3 Stakeholder workshop

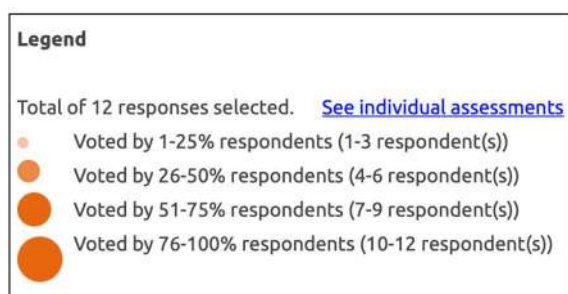
The consensus workshop was organised by Midlothian Health and Social Care Partnership and facilitated by the International Engagement Team of the Scottish Government on 14 January 2020. The objective of the workshop was to discuss the preliminary findings of the self-assessment survey in the Partnership and to seek a multi-stakeholder understanding of the maturity of health and social care system for integrated care in Midlothian. The outcomes of the self-assessment surveys served as the basis for the multi-stakeholder discussion, negotiation and consensus-building.

2.3.1 Negotiation and consensus building

17 stakeholders participated in the face-to-face meeting with the ultimate objective of reaching a consensus across all 12 dimensions of SCIROCCO tool to achieve a final spider diagram, capturing the maturity of integrated care in the Midlothian Health and Social Care Partnership. The discussion was facilitated by the International Engagement Team of the Scottish Government. Each dimension was presented in terms of its objectives and assessment scales, followed by introducing the different levels of maturity perceived by stakeholders. The main similarities and differences were highlighted and stakeholders were invited to reflect on these variations. As illustrated in Figure 7 below, stakeholders tended

to agree the level of maturity for the following dimensions: Readiness to Change and Process Coordination. In contrast, the major discrepancies were found in the dimensions of: Evaluation Methods, Breadth of Ambition and Capacity-building. Ultimately, stakeholders were asked to provide the final scoring. In case there was no agreement on the final score of a dimension, the scoring with the majority of the votes was chosen. However, in general, the negotiation process was straightforward.

Figure 7 - Composite Diagram for Midlothian HSCP - Diversity of perceptions of all stakeholders



2.3.2 Final consensus

The outcomes of the consensus-building workshop are captured in the spider diagram and Table below:

Figure 8 - Final Consensus Diagram for Midlothian HSCP

Legend

Total of 12 responses selected. [See individual assessments](#)

- Voted by 1-25% respondents (1-3 respondent(s))
- Voted by 26-50% respondents (4-6 respondent(s))
- Voted by 51-75% respondents (7-9 respondent(s))
- Voted by 76-100% respondents (10-12 respondent(s))



Dimension	Scoring	Justifications & Reflections
Readiness to Change	3	There are plans and strategies to drive the agenda of integrated care in place and embedded in policy, mostly at national level. However, there is still a lack of awareness of wider public of the vision for a change and its rationale. It should be also noted though that this lack of awareness is also internal within the organisation which might be due to a position/role in the organisation. Senior teams are strong champions of the vision and need for a change and there is relatively good buying of all stakeholders involved.
Structure & Governance	2	The vision for change and integrated care is embedded very well at national level and this is followed by the structure at local level. However, there is a lack of action plans /operational guidelines on how to bring this vision into reality. Acute and community sectors are still working pretty much separately so there is no governance as such. Very often the new structures put some roles/positions in the organisation in the conflicting role e.g. dual memberships in the Boards. The structure seems to be more political than operational. Also, sometimes there is a feeling that the structure is in place, but it is not used effectively mostly due to the complexity of decision-making.
Digital Infrastructure	1	There is no single IT system for health and council staff which makes the digital infrastructure quite complex and fragmented. There are some good examples of work, particularly when it comes to the TEC Programme initiatives, but the system is not integrated from users' point of view. In general, from a governance perspective, there are multiple information systems in place that often do not meet the requirements of the users. In addition, often digital care solutions are not embedded as part of service redesign and they are implemented mostly on adhoc basis. Digital infrastructure should be designed to reach the outcomes agreed, not the other way around. There are some good examples but there is no wide scale implementation of digital services. In some cases, basic problems such as connectivity and poor broadband connections pose the major barrier. Support services for the use of existing infrastructure need to improve as well, they are lacking awareness of what is needed to deliver truly integrated care services. However, there is strong commitment, and leadership buy-in, for the need for digital services. Technical standards are missing to facilitate data exchange, accompanied by a lack of trust in sharing health data. There is a need for national solutions and long-term investment otherwise it feels like "we have been there before" and no change is happening on the ground. From a social care point of view, the digital infrastructure is perceived as much more integrated.
Process Coordination	2	Some standardised coordinated processes are in place and guidelines are being used, particularly when it comes to new services, but no systematic approach is planned.
Funding	2	There is a diversity of funding coming to the Partnership from the Council and NHS but there is not enough funding for scaling-up and transformation of services, most of money is

Dimension	Scoring	Justifications & Reflections
		used for the core services. The funding is also mostly short-term.
Removal of inhibitors	1	There is a great awareness of existing inhibitors, but there is no real strategic approach/operational plan in place detailing how to remove these inhibitors systematically. There is still a lot of silo thinking within the organisation (e.g. how particular changes will affect my people). However, situation is much better if one looks at concrete local projects and teams.
Population Approach	3	Risk stratification is used for specific groups, but a population-based approach is not widely implemented yet. This is the only dimension which stakeholders felt they could directly influence.
Citizen Empowerment	2	Citizen empowerment is widely recognised as a key component of integrated care policies and strategies in Midlothian but there is lack of systematic approach. Citizens want to have better services but sometimes it is difficult for them to articulate how these services should look like. The language remains a key driver or rather obstacle of citizen engagement and further empowerment. There are pockets of good practices but not at wider scale.
Evaluation Methods	3	Some new integrated care services are evaluated but there is no systematic approach as such. Evaluation data should be readily accessible and embedded in the decision-making process and development of business plans rather than some targets to measure on. There is a plan for the development of new evaluation performance framework capturing both quantitative and qualitative data.
Breadth of Ambition	4	The ambition and vision for integrated care is set high both at national and local level. However, it is important that the wider public share these ambitions and vision as well. If looking at the current level of maturity, the integration and coordination of services is mostly on the shoulders of caregivers.
Innovation Management	3	There is a strategic plan in place to encourage innovation in the organisation, supported by the budget management. There is also new governance in place to manage the innovation more effectively. The challenge still remains how you capture the innovation e.g. what is innovative in Midlothian compared to other Partnerships or organisations.
Capacity Building	3	There is a strong commitment to the need for learning about integrated care and change management but there is no systematic approach as yet. It is a consistent problem how you build resilience and capacity while being involved in the delivery of day-to-day services. Some good examples are already in place and we need to build on them.

3. Analysis of the outcomes

6. The self-assessment outcomes reflect the actual maturity of Midlothian HSCP, showing progress towards integrated care in a number of dimensions. The outcomes provide a diverse picture of maturity, ranging between “1” to “4” in all dimensions. No results were particularly surprising to the stakeholders involved.
7. There are some connections/grouping of specific dimensions that can be observed: Q2 - Structure and Governance; Q3 Digital Infrastructure and Q6 - Removal of Inhibitors. This is particularly the case when it comes to the deployment and use of digital services. The competences for digital infrastructure are mostly at a national level which not always meet the local needs and requirements. This often discourages the use of digital services or requires more effort at the local level to deliver these services.
8. The greatest strengths were observed in a number of dimensions: Q1 - Readiness to Change, Q7 - Population Approach, Q10 - Breadth of Ambition, Q11 - Innovation Management and Q12 - Capacity-building.
9. Room for improvement was recorded for the dimensions: Q2 - Structure & Governance, Q3 - Digital Infrastructure, and Q6 - Removal of Inhibitors.
10. The factors that justified the scoring and influenced the outcomes of the maturity assessment process are mostly organisational. Most of the competences when it comes to Digital Infrastructure are at a national level with no ability to influence it from the local level. The size of the HCSP is also an important factor - the relatively smaller size of Midlothian HCSP enables the quicker establishment of new governance, service redesign or innovation management. Cultural factors also still play a role and more effort needs to be invested in change management.

4. Key messages

Stakeholders agreed that the maturity assessment process was very useful in confirming the current state of integrated care in the Midlothian HSCP. It was highlighted that the main value of the SCIROCCO Exchange tool and assessment process is not to provide an objective representation of where we are, but rather to help to prompt fruitful discussion and make people think about themselves and what they can do to improve the delivery of integrated care. The consensus-building workshop generated critical discussion but, at the same time, the Tool facilitated very good and useful conversations. Stakeholders felt that the Tool and process were easy to use and apply, however, some improvements were suggested: easier navigation on the page and clearer interpretation (description) of some of the dimensions. In terms of the outcome of the process itself, the Tool helped stakeholders to reflect on which dimensions can be influenced and improved locally, and which ones are fully dependent on national direction - which participants found very useful. Particularly, it was emphasised that the commitment to further integration and the use of digital solutions, are enablers of close and transformative working in Midlothian. Working together across organisational boundaries is essential to progress complex issues such as the co-ordination and integration of health and social care services.

5. Conclusions and next steps

The self-assessment outcomes reflect the actual maturity of Midlothian HSCP, showing progress towards integrated care in a number of dimensions such as Readiness of Change, Population Approach, Breadth of Ambition, Innovation Management and Capacity-building. In contrast, further improvement needs to be achieved in the dimensions of Structure and Governance, Digital Infrastructure and Removal of Inhibitors. A follow up meeting will be organised with the involved stakeholders to agree on the priorities for the upcoming knowledge transfer and improvement planning activities of the SCIROCCO Exchange project.

Annex 1 Self-Assessment Workshop in Scotland - Agenda

Workshop Objectives

- To test the methodology developed for the maturity assessment process in the EU Health Programme co-funded project SCIROCCO Exchange.
- To test the SCIROCCO tool as a tool to assess the readiness of healthcare system for integrated care.
- To inform the further refinement and improvement of the SCIROCCO tool.
- To identify the gaps and weaknesses of Scotland (and Midlothian HSCP specifically) in the adoption of integrated care and to inform about the current state of play.
- To provide a measure of the capacity of the health and care system to adopt integrated care in the form of a "radar diagram".
- To facilitate learning and exchange of experience in designing and implementing integrated care with local stakeholders in Scotland.

Expected outcomes

- Understanding of the maturity of the health and care system for the adoption of integrated care in Scotland, and Midlothian HSCP specifically, including its weaknesses and strengths.
- Reaching consensus among local stakeholders on the current state of play in integrated care in Scotland and Midlothian specifically.
- Testing of the SCIROCCO tool in Scotland and Midlothian specifically and informing its further improvement and refinement.
- Understanding the experience of users in using the SCIROCCO tool.

Agenda

Time	Session Title
09.30	Welcome, Introductions & Meeting Objectives Andrea Pavlickova, Scottish Government
09.40	Maturity assessment process in Midlothian <ul style="list-style-type: none"> Brief introduction to the organisation of maturity assessment process in Midlothian and assessment outcomes. Feedback & reflections from the local participants. Andrea Pavlickova, Scottish Government
10.00	Negotiation & Consensus Building <ul style="list-style-type: none"> Facilitator of the session will introduce the outcomes per each dimension of SCIROCCO tool and seek the consensus from the partners on the final scoring per particular dimension, including the rationale for scoring. Nessa Barry, Scottish Government
11.30	Reflection of the stakeholders on the maturity assessment process <ul style="list-style-type: none"> Moderated discussion on the experience of local stakeholders with the self-assessment process and SCIROCCO tool. Nessa Barry, Scottish Government
11.50	Conclusion and next steps Andrea Pavlickova, Scottish Government
12.00	End of meeting

x



D5.1 Readiness of European Regions for Integrated Care

Annex I: Self-assessment process in Kosice Region, Slovakia

WP5 Maturity Assessment for Integrated Care

Document information

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1. Introduction

The self-assessment process was conducted by the Department of Social and Behavioural Medicine, PJ Safarik University in Kosice, Slovakia. The mission of the Department of Social and Behavioural Medicine is to deliver cutting edge research, engagement and training that advances social and behavioural medicine, influences health policy and develops professional skills for the delivery of better health and social care in the community.

The national coordinator of the SCIROCCO Exchange project, Dr. Iveta Nagyova, is actively involved in knowledge translation and serves as an advisor to the WHO Country Office in Slovakia and the Ministry of Health of the Slovak Republic. Since March 2020, she has been President of the European Public Health Association.

The department's interdisciplinary team conducts basic translational and clinical research contributing to bio-behavioural and psychosocial innovations in chronic condition management; and promotes development and implementation of patient-centred, integrated models of care.

1.1 Characteristics of healthcare system

Item	Description
Region	Slovakia/Kosice (KE) region
Geographical scale of the region	Regional (State, province, territory)
Geographical size and dispersion of the region (km ²)	49.035/6.753 ⁽¹⁾
Population size of the region (thousands)	5.450 000/799.816 ⁽¹⁾
Population density of region (inhabitants/km ²)	111.15/118.42 ⁽¹⁾
Life expectancy of the region (years)	76.70/76.35 ⁽²⁾
Fertility rate of the region (births/woman)	1.40/1.40 ⁽²⁾
Mortality rate of the region (deaths/1,000 people)	9.9/9.0 ⁽²⁾
Top three causes of death of the region	cardiovascular diseases, cancer, respiratory diseases ^(2,4)
Organisation and governance of healthcare services	The Slovak health system is based on statutory health insurance; a basic benefit package; universal population coverage; a competitive insurance model with selective contracting; and flexible pricing. About 80% of healthcare spending in the Slovak Republic (SR) is publicly funded. Compulsory health insurance contributions are collected by the health insurance companies. There is one state-owned health insurer and two privately owned health insurance companies. They are obliged to ensure accessible healthcare regulated by legislation - this means they

Item	Description
	<p>must contract a sufficient network of providers as determined by the Ministry of Health and Self-governing Regions (regional responsibilities mainly for outpatient care). The Health Care Surveillance Authority is responsible for surveillance over the health insurance and healthcare provision. Pharmacies and diagnostic laboratories, as well as almost 90% of outpatient facilities are private. The state owns the largest healthcare facilities in the country, including university hospitals, large regional hospitals, specialist institutions, psychiatric hospitals, and sanatoria. Institutional healthcare consists of 71 general hospitals, 42 specialised hospitals, 29 spa facilities, 12 hospices, 6 mobile hospices, 9 nursing homes and 1 biomedical research facility. Healthcare is financed by public resources - via health insurance. The main source of revenue of the health insurance companies is represented by contributions from employees and employers, self-employed, voluntarily unemployed, publicly financed contributions on behalf of economically inactive persons and dividends. Additional sources of financing include public financial resources represented by budgets of particular municipalities or the Ministry of Health. Another important component is the category of direct payments of patients, e.g. co-payments for prescribed medication, durable medical equipment, dental care, fees in private hospitals/outpatient healthcare and direct payments for over-the-counter medication or spa treatment. The sole investments come only from the EU structural funds. The outpatient care includes primary care and specialised care. Primary care in SR consists of GPs for adults/children, gynaecologists, and dentists. ⁽¹⁻⁷⁾</p>
Healthcare spending of the region (% of GDP)	5.2 billion € (5.8% of GDP) ⁽³⁾ /NA
Healthcare expenditure of the region (thousands)	1.538 € per capita ^(2,3) /NA
Distribution of spending in the region	<p>Inpatient care: 28%; 1276.000 000</p> <p>Outpatient care: 23%; 1044.000 000</p> <p>-specialised care 17.7%; 809.000 000</p> <p>-primary care 5.1%; 235.000 000</p> <p>Prevention: 0.01%; 312.073</p> <p>Social services: 0.23%; 12.000 000</p> <p>Medications: 24%; 1258.000 000⁽⁶⁾</p>
Size of the workforce (thousands) and its distribution (%) in the region.	<p>Nurses; SR: 30.732 (5.6/1.000 inhabitants) (8)</p> <p>Midwives SR: 1.834 (0.3/1.000 inhabitants) (8)</p> <p>Nurses; KE region: 4.745 (5.9/1.000 inhabitants) (8)</p> <p>Midwives KE region: 260 (0.3/1.000 inhabitants) (8)</p>

Item	Description
	<p>Nurses; inpatient care; SR: 16.913 (5.9/1.000 inhabitants) (8)</p> <p>Nurses; inpatient care; KE region: 2.876 (3.6/1.000 inhabitants) (8)</p> <p>Nurses and midwives; outpatient care; SR: 11.286 (2.1/1.000 inhabitants) (8)</p> <p>Nurses; outpatient care; KE region: 1.837 (2.3/1.000 inhabitants) (8)</p> <p>Physicians SR: 18.608 (3.4/1.000 inhabitants) (8)</p> <p>Physicians KE region: 2.958 (3.7/1.000 inhabitants) (8)</p> <p>Physicians; inpatient care; SR: 6.774 (1.2/1.000 inhabitants) (8)</p> <p>Physicians; inpatient care; KE region: 1.038 (1.3/1.000 inhabitants) (9)</p> <p>Physicians and dentists; outpatient care SR: 11.050 (2.0/1.000 inhabitants) (8)</p> <p>Physicians; outpatient care; KE region: 1.837 (2.3/1.000 inhabitants) (8)</p> <p>General practitioners SR: 3.480 (8)</p> <p>General practitioners for adults, SR: 2.430 (0.4/1.000 inhabitants) (3)</p> <p>General practitioners for children, SR: 1.050 (0.2/1.000 inhabitants) (3)</p> <p>General practitioners KE region: 508 (4)</p> <p>General practitioners for adults, KE region: 319 (4) (0.4/1.000 inhabitants)</p> <p>General practitioners for children, KE region: 189 (4) (0.2/1.000 inhabitants)</p> <p>Dentists SR: 2.723 (0.5/1.000 inhabitants) (8)</p> <p>Dentists KE region: 483 (0.6/1.000 inhabitants) (8)</p> <p>Social workers; SR: 5.000; (1/250 clients)</p> <p>Number of providers of social services in SR: 1.548</p> <p>Number of providers of social services in KE region: 238</p> <p>Informal caregivers in SR: 55.000</p> <p>Informal caregivers in KE region: 5.547</p> <p>Social services establishments in KE region: 1.242</p> <p>Nursing services at home in KE region: 345 (10)</p>
Healthcare policies in the country/region	<p>1. Integrated care. Since 2014, the Slovak healthcare system is in a process of adopting new strategic planning framework which aims to ensure integrated outpatient care, to contain overutilization and to restructure inpatient healthcare. Integrated care is aimed to consist of an organized, coordinated and collaborative network linking various healthcare providers</p>

Item	Description
	<p>to secure the availability of continuous health services. Still, some health indicators such as life expectancy, healthy life years (54 yrs.) and avoidable mortality (44% of all deaths)¹⁵ (amenable (1.7/1.000), preventable (3.6/1.000) mortality) in the SR are worrisome ^(3,12). Furthermore, number of hospitalizations in SR is higher (184/1.000) than in other OECD countries (156/1.000); number of physician visits is twice as high as in other OECD countries (11 per year). The image and status of the general practitioners (GPs) is poor. GPs often fulfil the role of “referral clerks” to specialists and healthcare becomes more expensive. Moreover, passive capitation provides GPs incentives to see few patients and to work shorter hours. Specialists in SR are paid fee-for-service, their overall reimbursement is capped, which results in long waiting periods for specialised care. This fragmentation of outpatient healthcare and overuse of inpatient healthcare has a negative impact on healthcare quality and costs. Thus, the main goal of integrated care in SR is to: A) improve efficiency by strengthening primary care, and B) reduce reliance on the specialised care and hospital sector. Poor hospital management, high numbers of unused acute care beds, over-prescription of medications, overuse of specialised, tertiary healthcare, limited amount of core competencies in GPs, high average age of nurses and physicians, especially in GPs (56.7 years), and poor gatekeeping lead to inefficiency of healthcare. Eliminating these inefficiencies in healthcare is one of the key factors in improvement of healthcare quality and cost reduction. ^(3,5,7,14,15) C) The next goal of integrated care is to ensure health system to be renewed by GPs and specialists by means of residential programme (financially promoted specialisation study), with subsequent placement in the regions with shortage or high average age of physicians in outpatient care. D) Finally, integrated care also aims to implement public health programmes focusing on prevention of communicable and noncommunicable diseases. ^(3,5, 10, 7, 15)</p> <p>2. Inpatient healthcare is provided by hospitals or other healthcare facilities. In this area, the key priorities include: A) to redefine and stratify types of hospitals and range of healthcare services they provide, review existing types and organisational structures in inpatient healthcare (e.g. as individual hospitals in SR significantly differ in terms of mortality, re-operation, and rehospitalization of patients, they will be authorised to provide a certain specialisation only if they will be able to achieve the required minimal limit of these procedures);* B) as according to OECD, by 2050, 30% of the Slovak population may be over 65, insufficient long-term and institutionalised care will require immediate solutions. There is poor quality, availability and no financing or lack of financing</p>

Item	Description
	<p>from insurance companies. Thus, it is necessary to re-evaluate a number and structure of acute care beds and to strengthen after-care, rehabilitation, nursing care beds and beds for long-term patients; C) to implement a programme related to renewal of healthcare infrastructure of hospitals aimed to effectively use the human resources, buildings and medical equipment; D) to effectively receive and transfer information (eHealth) between the hospitals and other healthcare facilities of inpatient/outpatient healthcare; E) to stress the continuity of healthcare while transferring patients from hospital to their own home or wider community environment. ^(5,14,15)</p> <p><i>*2020: law was not approved</i></p> <p>3. Public health indicators such as life expectancy at birth, number of life lost years due to premature deaths and disease consequences and prevalence of chronic non-communicable diseases, place Slovakia at the bottom of the ranking of EU countries. Therefore, priorities of public health are: A) to create a healthcare system at national, regional and local level; B) to implement the public health programmes for prevention of socially significant diseases and health risks; C) to increase the level of public health in communities of socially disadvantaged people; D) to increase the level of readiness for biological, chemical and radiation threats; E) to better improve understanding of social determinants of health (multisectoral collaboration in the field of life, work and social environment); F) to strengthen individual interest and responsibility for own health, to promote health literacy, healthy lifestyle, physical activity, healthy eating, decrease in consumption of alcohol and tobacco, prevention of drug addiction, prevention of mental health disorders. ^(4,6,9,10)</p>

1.2 Integrated care in the Kosice Region / Slovakia

Integrated care in the Kosice region / Slovakia is minimally implemented. Slovakia lags behind in implementing health information technologies as compared to other countries in Europe. The focus of integrated care is related to integration of mandatory primary outpatient care, gynaecological care and dental care as the first contact physicians. The Ministry of Health of the Slovak Republic declares that a total of €126 million will serve for the building and reconstruction of 140 integrated centres. In these integrated care centres, the presence of other services such as social care or psychological care is optional. Moreover, there is no system of integration of health and social care services for people with chronic diseases, disabilities, people in older age, homeless or other vulnerable groups. The responsibility for the provision of social services is decentralized to the municipalities and the regional self-governments. The overall financing is insufficient, provided by the state, regions and the municipalities. ^(3,5,7,10,13)

2. Self-assessment process in the Kosice Region / Slovakia

2.1 Identification process of the local stakeholders

For the self-assessment process the stakeholders from the regional and local levels were selected based on their previous collaboration and with regard to the main dimensions of SCIROCCO Exchange Maturity Model. In total 23 representatives of various institutions were included in the assessment process:

Table 1: Stakeholders' profile

Type of organisation	Stakeholder
State administration	Regional Public Health Authority in Kosice (2 people) Healthcare Surveillance Authority - Kosice Social Insurance Agency in Slovakia - Kosice Office of Labour, Social Affairs and Family Kosice
Self-government - regional and local level	Kosice Self-governing Region - departments/units on regional development, fundraising, social services, healthcare (7 people) District of Kosice - North (unit on social affairs)
University	PJ Safarik University in Kosice - Faculty of Public Affairs PJ Safarik University in Kosice - Faculty of Law
Regional representatives of professional healthcare associations	General practitioner Doctor - specialist in Rehabilitation Physiotherapist
Primary health care provider	Doctor - specialist in Neurology
Health and social care provider	Manager in complex of health and social care facilities
Patients' non-governmental organisations	League Against Cancer - Kosice Union of blind and partially visually impaired in Slovakia - Kosice Association for Mental Health - INTEGRA, o.z., Michalovce

2.2 Self-assessment survey

Individual self-assessment surveys were conducted using the translated Slovak version of the SCIROCCO Exchange self-assessment tool. Data were collected in February - March 2020. An invitation letter (Annex 1) with the printed form of informed consent (Annex 2) and the Tool was sent via regular mail to selected participants at the end of February. They could complete the paper version or online version of the Tool (after receiving an email reminder in the middle of March). A short user manual in Slovak, with detailed instructions for completing the online version, was also prepared and sent with the email reminder (Annex 3).

Out of 23 eligible respondents, the Regional Public Health Authority in Kosice and Kosice Self-governing Region nominated only one person per institution (i.e. 2 respondents instead of the 9 invited), 7 stakeholders did not respond and 2 stakeholders sent an apology that

they could not attend, yielding a total response rate of 30.0%. One of the presumed reasons for non-participation was the timing - at the same time, measures were introduced by the national government in response to the outbreak of COVID-19. A total of 7 stakeholders participated in the self-assessment process in the end and all stakeholders filled in the paper version of the Tool.

2.2.1 Outcomes of self-assessment survey

1. General Manager of health and social care facilities



2. Manager of social insurance agency, Kosice



3. Vice-Director of regional Public Health Authority



4. Regional Expert for Physiotherapy and Medical Rehabilitation



5. Social worker of Kosice district - North (Social affairs unit)



6. Director of Association for Mental Health - INTEGRA, Michalovce



7. Head of Department on Social Care Facilities Administration, Kosice Self-Governing Region



2.3 Stakeholder workshop

The consensus building workshop was held on the 26th of March 2020. Due to restrictions related to safety measures to prevent the spread of COVID-19 in Slovakia, the meeting was organised virtually using the GoToMeeting platform. The stakeholders workshop lasted for 2.5 hours. **A total of 3 professionals (out of 7 stakeholders) were available to participate virtually**, and 4 stakeholders sent their apology in advance. All attendees were representatives of different settings at regional or local level (self-governing region, health and social services and clinical health care).

Before the meeting, all stakeholders filled their individual integrated care assessments, using the paper version of SCIROCCO tool. The outcomes of these assessments were then entered into the online Slovak version of the SCIROCCO Self-Assessment Tool. A short presentation with the outcomes was also sent in advance of the meeting in order to facilitate the discussion during the meeting.

2.3.1 Negotiation and consensus building

The consensus-building process was based on a moderated discussion. The moderator was the SCIROCCO Exchange project national team member and an expert in a field of health and social care. The main principle of the consensus building was built on expert discussion via shared facts, experience of the clinical practices, social care experiences, offered opinions and responses to questions asked by the moderator. The discussion was triggered and facilitated by an online shared presentation and also with the assistance of 2 other members of the SCIROCCO Exchange project national team.

The differences in stakeholders' perceptions on the level of maturity for integrated care in Kosice Self-Governing region is illustrated in the Figure 1 below:



Figure 1: Composite diagram - Kosice Self-Governing Region

No single dimension was identified as having reached an appropriate maturity level. The overall dimension scores were very poor and the maturity levels in the final consensus varied mostly between 0 (in 4 dimensions) and 1 (in 7 dimensions). The final consensus showed that only one dimension (Process Coordination) was able to reach a higher (but still not satisfactory) level of maturity (score 2). The main reason for the insufficient maturity level of health and social care integration in Slovakia at regional, as well as at national level, is the lack of effective communication and co-ordination between the Ministry of Health; the Ministry of Labour, Social Affairs and Family of the SR. Governmental authorities are aware of the lack of integration between health and social systems or under-developed long-term care. Nevertheless, no efficient policy or systematic actions are taken.

2.3.2 Final consensus

The consensus spider diagram shows the maturity of Kosice Self-Governing Region for integrated care. The local stakeholders reached consensus across the twelve dimensions of SCIROCCO Exchange tool.



Figure 2: Consensus diagram - Kosice Self-Governing Region

Dimension	Scoring	Justifications & Reflections
Readiness to Change	1	The need is accepted. However, a feasible vision or any planning is lacking.
Structure & Governance	0	No systematic guidelines are given by the national or regional government. Some rare incentives exist - accompanied by non-systematic, individual bottom-up approach to change. There is potential for cooperation between professionals, especially within the social care system, but there is no clear vision, planning or management at regional level. Despite the fact that the national "Long-term Care Strategy" has existed since 2019, there is no real progress from the perspective of implementation. The communication between the Ministry of Health and the Ministry of Labour, Social Affairs and Family of the SR is formal and ineffective.
Digital Infrastructure	1	There is a certain level of data sharing, as well as data availability and data protection (but it is usually limited to the healthcare system by means of eHealth). There is no digital infrastructure with a potential to interlink health and social care systems. Both systems (health and social care) are built on their own separate digital infrastructure and there is no plan to change it. According to official government documents dealing with digital infrastructure, there is no legislative support for the integration of health and social care.
Process Coordination	2	There are some basic norms adopted and standard procedures developed; however, it is not possible to integrate health and social care, as these standards are not uniform, interdisciplinary and suitable for usage by a wide range of existing diagnoses.
Funding	1	While there is a certain level of funding from EU sources, these financial resources are primarily used for the construction and reconstruction of integrated care centres. These centres are planned to provide primarily an integration of primary care medical professionals (GPs, paediatricians and gynaecologists). The availability of other services such as social services and psychological care is only optional.
Removal of inhibitors	1	There is no initiative or will to remove inhibitors. A more detailed picture could be given by a detailed analysis of the causes of worrying health indicators (such as avoidable deaths or health life years). However, no one wants to take responsibility for this. It is also assumed that adoption of some effective measures would lead to financial loss of some involved subjects.
Population Approach	0	A population-based approach is needed, but it is still not applied to all diagnoses - just to some of them (e.g. cerebral palsy). In addition, there is no screening tool to identify vulnerable (at high-risk) population groups in Slovakia. There is also a lack of available community services. Therefore, people often have no other efficient solution than to call an ambulance and stay in hospital (also in cases when hospitalisation would not be required).
Citizen Empowerment	1	Citizens are not the centre of attention. There are no integrated health and social services in case of health problems, especially for older people. The state does not provide adequate assistance and support. Measures or policies aimed at preventing these tragic situations are not adopted. Patient organisations substitute the role of the state and its responsibility.
Evaluation Methods	0	A Health Technology Assessment strategy is planned; however, it has not been formally adopted by the competent national authorities yet.
Breadth of Ambition	0	Several pilot projects are ongoing. However, integration exists to some extent - only between hospital and outpatient healthcare.

Dimension	Scoring	Justifications & Reflections
Innovation Management	1	Innovations are very limited and mostly exist only in one separate and specific area. Innovations are not systematic and are based largely on individual initiatives. The pressure to change is mostly driven from the bottom up and is very rarely supported. Therefore, it is difficult to create and enforce innovative ideas. Occasionally, innovations are strengthened by management at organisational level.
Capacity Building	1	The high average age of social care and health care professionals (especially doctors, nurses) may represent one of the significant obstacles in capacity building. Capacity building is preferably driven by bottom-up initiatives and non-governmental organisations.

3. Analysis of the outcomes

1. The self-assessment outcomes reflect the current situation and the most significant problems related to integrated care implementation at regional, as well as national level, in Slovakia.
2. The self-assessment outcomes were not surprising. Based on previous knowledge and negative experience related to integrated care implementation at a national level, similar results were expected and confirmed at regional level.
3. Common factors connecting all the dimensions seem to be the absence of clear, uniform and effective state governance, preferably from the level of Ministry of Health and Ministry of Labour, Social Affairs and Family of the Slovak Republic, together with a lack of measures adopted by national and regional governments to facilitate the integration process between health and social care systems. Also, an absence of community-based services, missing person-centred care approach in care provision, and changes usually driven only by bottom-up initiatives and non-governmental organisations can be considered other important weaknesses of integrated care implementation process in Slovakia at both, national and regional level.
4. Not one single dimension could be identified as having reached an appropriate maturity level. Final consensus showed that only one dimension (4. *Process Coordination*) was able to reach a higher (but still not satisfactory) level of maturity (score 2). The overall dimension scores were very poor and the maturity levels in the final consensus varied mostly between 0 (in 4 dimensions) and 1 (in 7 dimensions). Thus, further improvement in all dimensions is necessary.
5. The lowest valued maturity level (score 0) was found in the following four dimensions: 2. Structure & Governance, 7. Population Approach, 9. Evaluation Methods, and 10. Breadth of Ambition. Of those, Structure and Governance dimension seems to be the most important starting point that might help to facilitate the process of adoption of all inevitable changes. One of the key problems is the lack of communication and coordination between The Ministry of Health and The Ministry of Labour, Social Affairs and Family. Governmental authorities are aware of the lack of integration between health and social system or underdeveloped long-term care. Nevertheless, no efficient policy nor systematic actions have been taken. An expert working group that would be able to advise/propose measures for integration process at the regional level and/or municipality level is needed. Another important issue identified by stakeholders is funding. Although a certain level of funding from EU sources is available, these financial resources are primarily used for the (re)construction of integrated care centres.
6. Structural characteristics such as high average age of social care professionals and health care professionals may have negative effect on the integration of health and social care. The need for integrated care is accepted, but only in terms of individual values. Feasible vision or any planning is still lacking. The problem may be an excessive conservatism bias and resistance to change. In general, this is our “national” phenomenon. Furthermore, involvement of responsible institutions or individuals is poor. Therefore, change is usually driven only by bottom-up initiatives and non-governmental organisations. In general, there is low level of awareness of the need for integrated care in different populations.

Consequently, people do not put pressure on the competent authorities and don't ask them to find solutions.

4. Key messages

When accompanied by the outcomes of consensus meeting, the SCIROCCO Exchange tool may be of great help in the process of adoption of necessary changes as it may facilitate the further development process related to integrated care. In terms of the total quality management (TQM), this tool represents the important part of the PDCA cycle that needs to be completed. Some specific actions related to the adoption of new measures need to be taken, however. Finally, the SCIROCCO Tool helps to facilitate interdisciplinary discussion.

5. Conclusions and next steps

The following next steps were identified by stakeholders as a result of the maturity assessment process:

- Communication of the outcomes of the maturity assessment process at regional level in order to increase awareness about the need for integrated care and to get this concept of integrated care on the agenda of upcoming economic and social development programme of the Kosice region;
- Communication of the outcomes of the maturity assessment process at national level in order to get the concept of integrated care on the agenda of the new government of the Slovak Republic (government policy statement).

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Annex 1 Invitation letter to participate in self-assessment process

UNIVERZITA PAVLA JOZEFA ŠAFÁRIKA V KOŠICIACH Lekárska fakulta



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Košice
18.02.2020

Vážená pani, Vážený pán,

Lekárska fakulta UPJŠ v Košiciach je partnerom EÚ projektu SCIROCCO-Exchange. Cieľom projektu je podpora národných a regionálnych autorít pri budovaní kapacít potrebných pre efektívnu implementáciu integrovanej starostlivosti. **Integrovaná starostlivosť** je novým celosvetovým trendom v rámci prebiehajúcich reforiem zdravotníckych a sociálnych systémov. Jej cieľom je nájdenie nového organizačného usporiadania a zabezpečenie lepšej koordinácie služieb zdravotnej a sociálnej starostlivosti.

Touto cestou si Vás dovoľujeme osloviť, aby ste sa zapojili do procesu hodnotenia potrieb a priorit pomocou SCIROCCO nástroja a vyjadrili svoje názory a postrehy týkajúce sa pripravenosti *Košického kraja* pre zavedenie integrovanej starostlivosti. Proces hodnotenia pozostáva z dvoch fáz.

Fáza 1: Dotazník

Dotazník zahŕňa hodnotenie 12 dimenzií súvisiacich s pripravenosťou Košického kraja pre implementáciu integrovanej starostlivosti. Odpovedové možnosti sa pohybujú na stupnici od 0 do 5, pričom vyššie skóre znamená lepšiu pripravenosť regiónu.

Dotazník prosím vyplňte a zašlite nám späť najneskôr **do 6. marca 2020** v priloženej obálke. Odhadovaný čas potrebný na vyplnenie je 30 min.

Fáza 2: Fokusová skupina

Odborníci zapojení do vyplnenia dotazníka budú následne pozvaní na stretnutie fokusovej skupiny, ktorej cieľom bude dosiahnutie konsenzu ohľadom pripravenosti Košického kraja v 12 dimenziách.

Stretnutie fokusovej skupiny je plánované **na 19. marca 2020 v čase 12.00-16.00.**

V prípade nejasností alebo ďalších otázok nás prosím neváhajte kontaktovať.
Vopred Vám ďakujeme za spoluprácu a tešíme sa na osobné stretnutie.

S úctou,



Dr. Iveta Rajničová Nagyová, PhD.



Annex 2 Informed consent to participate in self-assessment process



SCIROCCO Exchange: Model pripravenosti pre integrovanú starostlivosť

Vážená pani, Vážený pán,

Dovoľte nám, aby sme Vás oboznámili so štúdiou, ktorej cieľom je **hodnotenie pripravenosti zdravotných a sociálnych systémov z hľadiska integrovanej starostlivosti na regionálnej úrovni**. Štúdia je súčasťou EÚ projektu *SCIROCCO Exchange* financovaného prostredníctvom Health Programme of the European Union, Grant Agreement No. 826676 (CHAFEA).

Týmto listom by sme Vás chceli požiadať o súhlas so zaradením do tejto štúdie, čo by pre Vás znamenalo vyplnenie priloženého dotazníka a následnú účasť na fokusovej skupine. Jej cieľom bude získať bližšie informácie a dosiahnuť konsenzus týkajúci sa posúdenia pripravenosti Košického kraja na implementáciu integrovanej starostlivosti na regionálnej úrovni.

Vaša účasť v štúdiu je dobrovoľná. Údaje, ktoré získame budú dôverné a ďalej využívané v anonymizovanej podobe.

Prosíme Vás, aby ste potvrdili Váš súhlas so zaradením do štúdie podpisom „Informovaného súhlasu“.

Za celý výskumný tím Vám vopred ďakujeme,

Dr. Iveta Rajničová Nagyová, PhD. a MUDr. Zuzana Katreniaková, PhD.
Ústav sociálnej a behaviorálnej medicíny, Lekárska fakulta, UPJŠ v Košiciach

Informovaný súhlas so zaradením do štúdie

Ja, (Meno a priezvisko) svojím podpisom potvrdzujem, že som si prečítal(-a) pravidlá štúdie, uvedeným pravidlám a postupom rozumiem a súhlasím s nimi. Súhlasím, aby moje dáta boli použité ako súčasť projektu SCIROCCO Exchange. Rozumiem, že účasť v štúdiu je úplne dobrovoľná a zo štúdie môžem kedykoľvek odstúpiť. Rozumiem, že štúdia je anonymná a všetky získané informácie sú chránené v zmysle zákona č. 18/2018 Z. z. o ochrane osobných údajov a o zmene a doplnení niektorých zákonov a v zmysle čl. 6 ods. 1 písm. a) a čl. 7 Nariadenia Európskeho parlamentu a Rady (EÚ) 2016/679 zo dňa 27. apríla 2016 o ochrane fyzických osôb pri spracúvaní osobných údajov a o voľnom pohybe takýchto údajov, ktorým sa zrušuje Smernica č. 95/46/ES (všeobecné nariadenie o ochranných údajov)

Podpis:

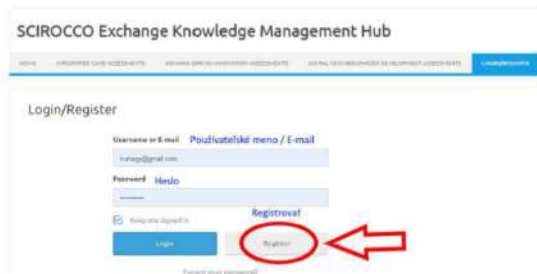
Dátum:

Annex 3 Slovak instruction manual for completing the online Tool

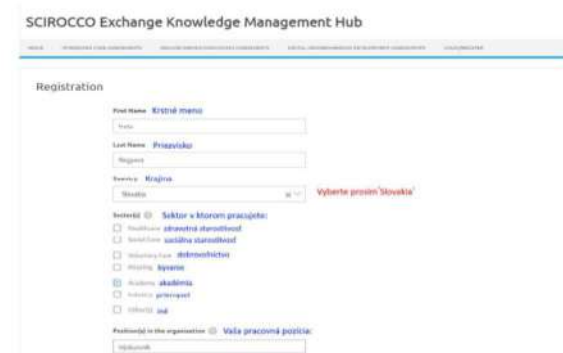
Postup pri vyplňaní Scirocco Self-Assessment Tool for Integrated Care

REGISTRÁCIA

1. Po kliknutí na <https://scirocco-exchange-tool.inf.ed.ac.uk/login/> sa Vám otvorí prihlasovacia stránka, cez ktorú sa najprv potrebujete zaregistrovať (Obr. 1):

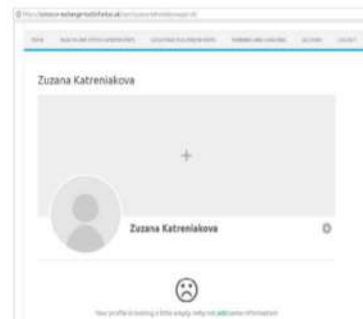


2. Vyplňte registračný formulár (Obr. 2). Pri výbere jazyka (Language of choice) zvolte „Slovak“ – aby sa Vám následne dotazník zobrazoval v slovenskom jazyku.

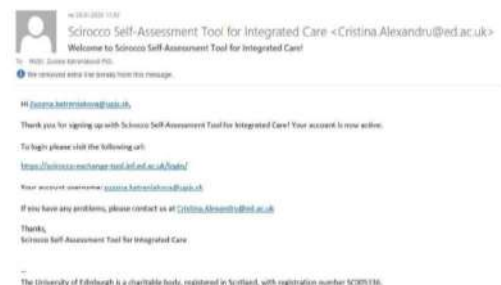


3. Po vyplnení sa Vám otvorí stránka s Vaším profilom (Obr. 3) a na e-mailovú adresu uvedenú v registračnom formulári dostanete potvrdzujúcu správu (Obr. 4):

Vytvorený profil užívateľa – príklad (Obr. 3) – Nateraz ho prosím ignorujte.



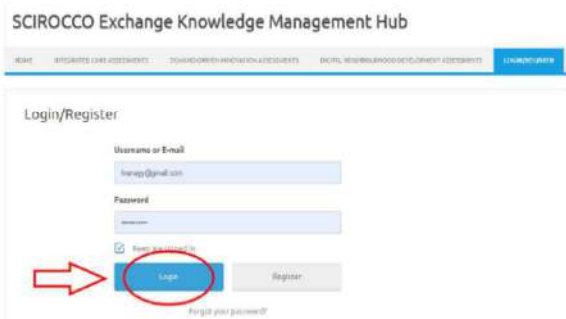
Obr. 4 - Potvrdzujúca e-mailová správa – príklad:



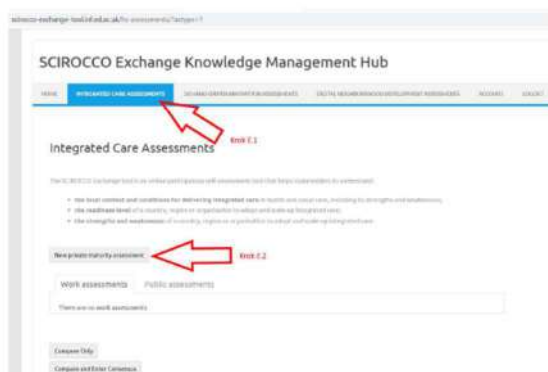

VYPLŇANIE ON-LINE HODNOTIACEHO DOTAZNÍKA

4. Po kliknutí na link <https://scirocco-exchange-tool.inf.ed.ac.uk/login/> by ste mali byť prihlásený do systému. A môžete pokračovať vo vyplňaní dotazníka podľa inštrukcií na ďalšej strane (str. 5).

V prípade, že Vás systém presmeroval na prihlasovaciu stránku, zadajte prosím Vami vytvorené prihlasovacie meno a heslo. Taktiež môžete zaškrtnúť možnosť "heslo ponechať zapamätané" (Obr. 5):



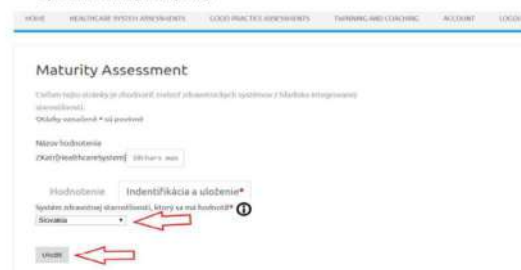
5. Ak sa Vám po potvrdení prihlásenia otvorí priamo podstránka „Integrated Care Assessments“, kliknite prosím najprv na možnosť v hornom menu „INTEGRATED CARE ASSESSMENTS“ (Krok č. 1) a potom Krok č. 2 „New private healthcare system assessment“ (Obr. 6):



7. Po prečítaní bližšej charakteristiky príslušnej hodnotenej oblasti, vyberte jednu z možných odpovedí na stupnici od 0 do 5 (Krok č. 1) a doplníte klikne zodpovedne Vášho výberu do prázdneho políčka (Krok č.2). Následne kliknite na možnosť „Identifikácia a uloženie“ (Krok č. 3) (Obr. 8):



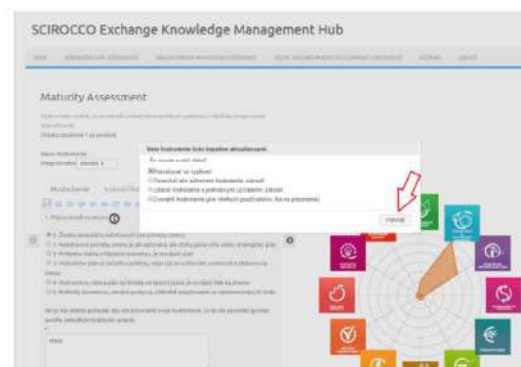
8. Po vyplnení hodnotenia v danej oblasti kliknite na tlačidlo „Identifikácia a uloženie“ sa Vám otvorí podstránka, na ktorej vyberte „Systém zdravotnej starostlivosti, ktorý sa má hodnotiť“ ako „Slovakia“ a potvrdíte tlačidlom „Uložiť“ (Obr. 9):



6. Následne sa Vám otvorí prvá z 12 položiek (Q1) hodnotiaceho nástroja v slovenskom jazyku a po kliknutí na ikonku ❶ sa Vám otvorí bližšia charakteristika príslušnej hodnotenej oblasti (Obr. 7):



9. Po uložení sa Vám otvorí opäť podstránka s príslušnou hodnotenou položkou. Po kliknutí na tlačidlo „Aktualizovať“ sa môžete následne rozhodnúť, či budete vo vyplnení hodnotenia pokračovať hneď alebo neskôr a v akom rozsahu má byť Vaše hodnotenie zdieľané. Po výbere stlačte tlačidlo „Potvrdiť“ (Obr. 10):

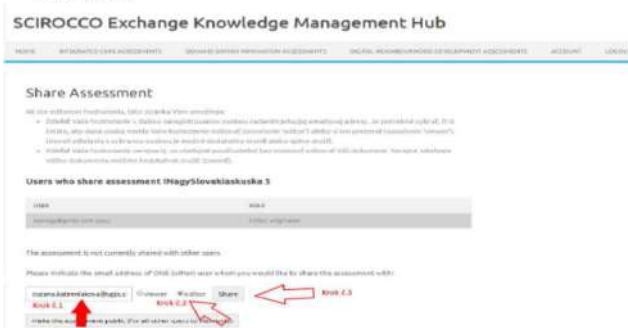



Pri hodnotení ďalších oblastí pokračujte zopakovaním postupu podľa bodov 6. až 9.

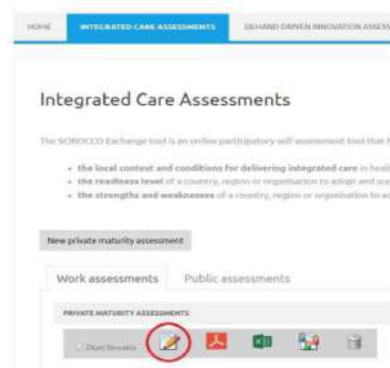
10. Po ukončení hodnotenia všetkých 12 dimenzií, prosím nezabudnite kliknúť na tlačidlo „Zdieľať“ (Obr. 11).



11. Následne do príslušného okienka zadajte e-mail nuzana.katreniakova@upis.sk a kliknite na tlačidlo „Editor“ (Obr. 12).



12. Dotazník nie je potrebné vyplniť naraz, ale je možné odpovede priebežne ukladať. Pokiaľ sa rozhodnete, že hodnotenie nevyplníte naraz, po opätovnom prihlásení cez <https://scirocco-exchange.tool.int.ed.ac.uk/login/> a kliknutí na podstránku „INTEGRATED CARE ASSESSMENTS“ sa Vám otvorí prehľad k Vašmu hodnoteniu. Po kliknutí na ikonu  sa dostanete k oblasti, ktorej hodnotenie ste naposledy vyplňali (Obr. 13).



V prípade akýchkoľvek nejasností pri vyplňaní dotazníka sa prosím neváhajte obrátiť na nás e-mailom na adresu nuzana.katreniakova@upis.sk alebo telefonicky na číslo +421 910 930 950.

Ďakujeme Vám za spoluprácu a zostávame s pozdravom,

SCIROCCO-Exchange Slovensko



D5.1 Readiness of European Regions for Integrated Care

Annex J: Self-assessment process in Municipality of Trbovlje, Slovenia

WP5 Maturity Assessment for Integrated Care

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1. Introduction

The Social Protection Institute of the Republic of Slovenia was founded in 1996 by the Republic of Slovenia. On its behalf, the executive rights and obligations are carried out by the Ministry of Labour, Family, Social Affairs and Equal Opportunities (MLFSA). In 2004, the Child Observatory joined the Research Department. The Social Protection Institute of the Republic of Slovenia creates and maintains a variety of databases for social assistance and social services including development and experimental programmes. The Institute monitors the implementation of a number of government programmes by establishing specialised systems of indicators and provides informational support for them by collecting and analysing data. For the purposes of effective decision-making, it provides expert opinions on a number of government measures and advises the MLFSA. The Institute is experienced in evaluation, monitoring and mapping of community and institutional services in the national context.

1.1 Characteristics of healthcare system

Table 1 - Characteristics of the Municipality of Trbovlje

Item	Description
Municipality	Municipality of Trbovlje
Geographical scale of the municipality	City-wide
Geographical size and dispersion of the municipality (km²)	58 km ²
Population size of the municipality (thousands)	16.339
Population density of municipality (inhabitants/km²)	282
Life expectancy of the region (years)	Region: Zasavje Men: 76,94 years Women: 82,60 years
Fertility rate of the municipality (births/woman)	1,45 (2018)
Mortality rate of the municipality (deaths/1,000 people)	10,92 (Municipality of Trbovlje)
Top three causes of death of the municipality	Cardiovascular diseases, neoplasms, injuries, poisonings and some other external causes.
Organisation and governance of healthcare services	See Annex 1
Healthcare spending of the country (% of GDP)	Slovenia: 8,19%
Healthcare expenditure of the municipality (thousands)	300.000
Distribution of spending in the municipality	No data available
Size of the workforce (thousands) and its distribution (%) in the country	See Annex 2
Healthcare policies in the country	See Annex 3

1.2 Integrated care in Municipality of Trbovlje, Slovenia

In Slovenia, the field of long-term care is not systematically regulated as a single independent area but is provided in the health and social care sector by several service providers with each of them having its own history and culture of service provision. Slovenia has been paying considerable attention to regulating long-term care for many years. For almost fifteen years, legislation to regulate long-term care has been in preparation. The Ministry responsible for social affairs has already identified several weaknesses of the existing system in the National Report on Social Protection and Social Inclusion Strategies 2008-2010, including: existing services and benefits are not integrated into a single system; poor coordination between services providing different services, impedes access to services and diminishes their quality; users are not always given equal access to quality services and many times services are not meeting their needs. In 2017, the Ministry of Health took over the preparation of the law. With the aim of finding better solutions, pilot projects are currently underway in Slovenia to test new services and the new way of organisation of long-term care delivery.

2. Self-assessment process in Municipality of Trbovlje, Slovenia

2.1 Identification process of local stakeholders

The selection of stakeholders was made by the Municipality of Trbovlje with the rationale that **the selected stakeholders are the most familiar with the problems of long-term care in the region** because they are daily in touch with the elderly and disabled people. The following stakeholders were invited to participate in the self-assessment process:

- Health centre of Trbovlje
- Centre for Social Work
- Zagorje ob Savi Occupational Activity Centre
- Retirement home of France Salamon Trbovlje
- Association of people with disabilities Trbovlje
- Municipality of Trbovlje
- Youth centre of Trbovlje
- Adult education centre of Zasavje
- Seniors Association Trbovlje
- Intergenerational Association Upanje, Trbovlje

2.2 Self-assessment survey

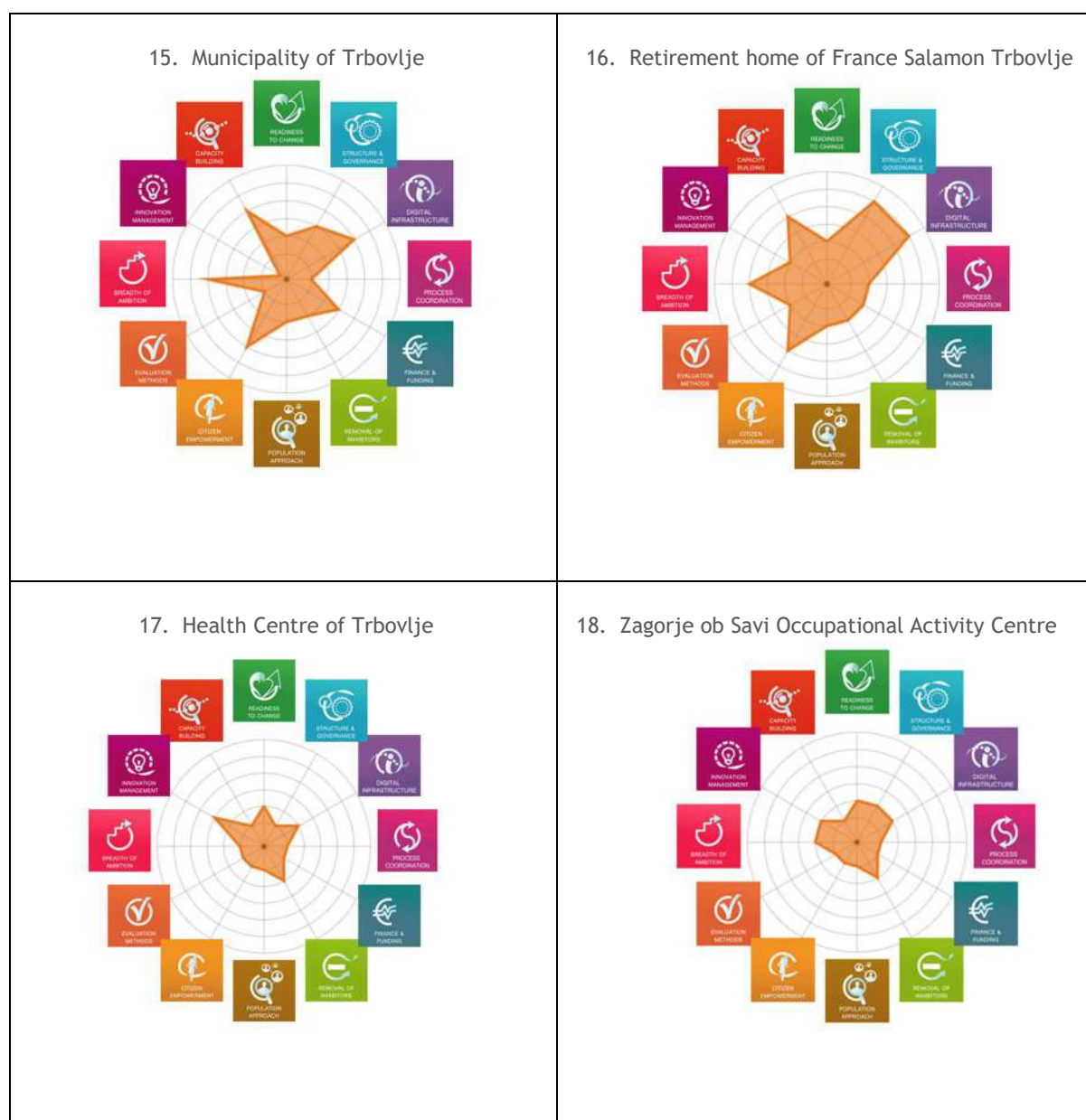
On the 16th of October 2019, an email with an invitation to participate in the maturity assessment survey was sent to selected stakeholders. The email included instructions on how to complete the survey (pdf document with screenshots for every step of assessment process). The first completion deadline was set on the 25th of October 2019, but it was later prolonged until the 18th of November 2019 due to a low response rate. Therefore, the data were collected from the 16th of October until the 18th of November 2019.

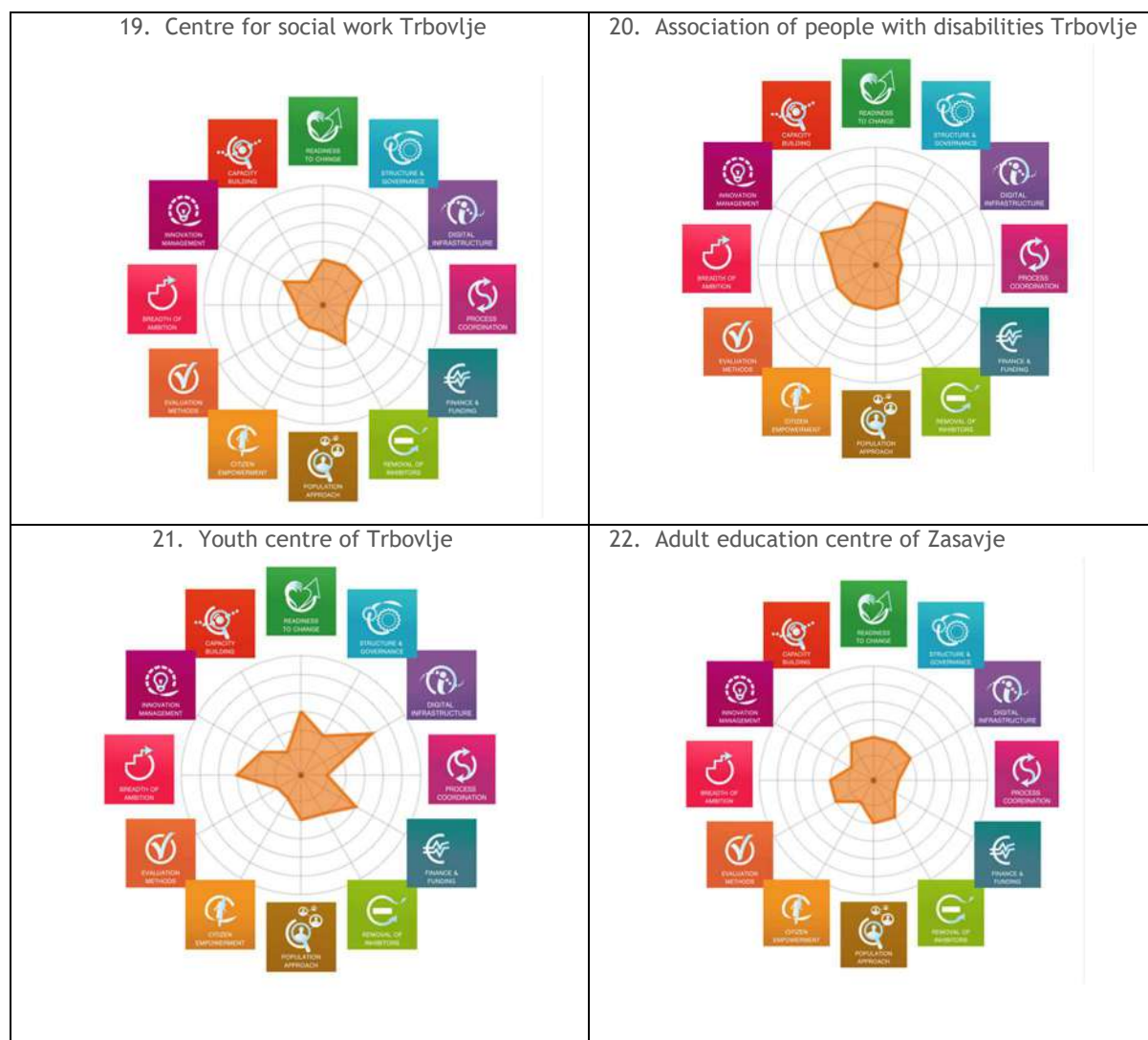
8 stakeholders responded to the survey. Two stakeholders did not complete the survey for unspecified reasons. Some stakeholders completed the survey on their own, but for some of them help via a phone call was provided (the institute staff fulfilled the survey according to their responses).

2.2.1 Outcomes of self-assessment survey

The following spider diagrams reflect the diversity of the stakeholders' perceptions on the maturity of the municipality of Trbovlje for integrated care.

Figure 1- Outcomes of the individual self-assessments





2.3 Stakeholder workshop

The consensus building workshop was carried out on the 27th of November 2019 from 12.00 to 16.00, in the town hall of Municipality of Trbovlje. **Six out of nine invited stakeholders attended the workshop.** The total number of attendees was eight, because two organisations (Heath Centre and Centre for Social Work) were represented by two attendees. The workshop was led by two researchers from the Social protection institute of the Republic of Slovenia.

For further information about the workshop, see Annex 4.

Figure 2: Consensus building workshop in progress.



2.3.1 Negotiation and consensus building

Figure 3: Composite diagram for the Municipality of Trbovlje



First, we presented the individual results of the maturity assessment and explained each dimension of the SCIROCCO Maturity Model so that all attendees would understand them the same way. Then, attendees were separated into two groups for the negotiation process. Researchers asked that the attendee from the Municipality of Trbovlje and the attendee from the Retirement home were not in the same group due to the outcomes of their self-assessment surveys (they both gave much higher scores than the other stakeholders, so we did not want them to build consensus in the same group). Each group was provided with

instructions to score every dimension of the Maturity Model and suggest any possible improvements towards integrated care. Researchers did not take part in groups negotiation, but only monitored the process.

Two dimensions appeared with the biggest differences:

- **Breadth of Ambition** - one group gave a score 3 with justification that, at the local level, care is integrated (primary and secondary level) but more collaboration with NGOs and the general hospital would be needed. The second group scored this dimension with 0 and justified that, at the local level, there is only some sort of coordination of services, but not integration. We assume that groups interpreted this dimension slightly differently and that is a possible reason for the big difference in their scores.
- **Structure and Governance** - in the group which scored the dimension with the maturity of 2, one attendee was a coordinator of a home care service. She justified that the home care service is well coordinated with community nursing services. The second group gave this dimension a score of 0 and explained that they did not see a real collaboration between organisations and professionals from different sectors. Here, the reason may also be the difference in understanding of the dimension and the different working experiences in this field.

2.3.2 Final consensus

The consensus spider diagram shows the maturity of the municipality of Trbovlje for integrated care. The local stakeholders reached consensus across the twelve dimensions of SCIROCCO tool.

Figure 4- Final consensus diagram of the municipality of Trbovlje



Table 1: Scores, Justifications and Reflections assigned to each of the dimensions

Dimension	Scoring	Justifications & Reflections
Readiness to Change	1	We are aware of the problems in the field of integrated care, but there are no actual measures. We suggest raising awareness of importance of integrated care. First, an analysis of the current state at national level should be done and then it can be applied locally.
Structure & Governance	1	Patronage and home care are functioning, but the networking of services is not systematic. There is no coordination. The local hospital lacks a social worker (it is the only hospital in the country without this role) and it would be necessary to provide one in near future. Also, suggestions should be sent to the authorities on the national level.
Digital Infrastructure	3	There are some options, but they are not fully spent. More promotion and information sharing among citizens would be needed.
Process Coordination	0	There is no unified database, data is fragmented and duplicated. Often GDPR makes things complicated.
Funding	1	Some little investments are in telecare (SOS button), otherwise funding is mostly at national level. We expect pilot projects to be funded.
Removal of inhibitors	1	There should be more collaboration between sectors and organisations. If municipalities would collaborate, they could achieve more. First, we need a resolution and then an action plan.
Population Approach	0	We are aware, but there is no strategy, no goal, no plan. There should be made clear definition and distinction between social and health services and then single-entry point should be set (social and health services at one place).
Citizen Empowerment	1	We try to provide as much information as we can, but at the national level there is no unified information system. People should be informed when, where and how they can get services they need.
Evaluation Methods	0	Evaluation is not systematic. Unless there is no long-term care act, we cannot plan evaluation, because it is unknown what we should evaluate.
Breadth of Ambition	2	There is good coordination of services at the local level. We miss more collaboration with NGOs and public hospital. Both formal and informal forms of care should be included.
Innovation Management	1	Innovations are always welcome. Every year the region picks the best innovation of the year. But locally there is envy of those who give ideas and innovate. Also fear of change is present.
Capacity Building	1	Some organisations run human resource management, but generally there is lack of specialised professionals (e.g. psychology specialist, logopedics specialist). The profession of a home care worker is low valued. There should be systematic planning of personnel development, starting at education level (e.g. presentation of professions, scholarships). We need to define which are key competences of people working in the field of long-term care.

3. Analysis of the outcomes

Stakeholders concluded that the maturity for integrated care in Municipality of Trbovlje is low. These results can be compared with previous analysis of home care (Nagode et al. 2019), which is poorly developed in the region. It can be concluded that outcomes of maturity assessment process shows the actual situation of the integrated care in Zasavje region. Additionally, attendees of the workshop provided us with some important insights about the current state of long-term care in the Municipality of Trbovlje. Their information mostly supported the results of the survey.

The outcomes of the maturity assessment process were not specifically surprising, because we selected the Municipality of Trbovlje according to some previous indicators that showed poorly developed home care, so we expected maturity for integrated care to be low in this region.

Some connections between the dimensions of the SCIROCCO Maturity Model can be observed. There is a connection between the dimensions “Removal of Inhibitors” and “Capacity-building”. Stakeholders pointed out that lack of trained staff presents a big obstacle for the implementation of integrated care.

Digital infrastructure and digital services are seen as the strongest dimension, but there is still space for improvement (e.g. better and more systematic organisation of ehealth capacities). The overall maturity of the region is low, and each dimension needs improvement (especially those dimensions with the maturity levels of 0 or 1).

Even though all of the dimensions showed many weaknesses of the local environment for integrated care, the following dimensions were particularly highlighted:

- **Evaluation Methods** - except from informal evaluation between some of stakeholders (talking, sharing reflections and experiences) no standards or methods are available, especially not in integrated care. This can be considered as a result of absence of long-term care legislation, which is going to be the main guidance document and basis for defining integrated care services.
- **Process Coordination** - lack of a unified database and efficient transfer of data between different stakeholders.
- **Population Approach** - because there is no strategy and clear distinction between social care and health services, it seems impossible to local stakeholders to make plans where considering the whole population who would benefit of integrated care.

Readiness to change should be addressed as a priority for knowledge transfer and improvement activities planned for the SCIROCCO Exchange project as we see this dimension as a starting point of transformation towards more integrated health and social care delivery in the Municipality of Trbovlje. Without being ready to change a current situation, no further steps can be taken.

When it comes to specific factors influencing the outcomes of the maturity assessment process, these are mainly organisational. Stakeholders participating in the maturity

assessment process pointed out that the national authorities are fully aware of the needs in the field of long-term care, but they do not take enough action to change the current state and organisation of health and social care delivery. Beside this, the health and social sectors are divided and do not collaborate enough effectively.

4. Key messages

The assessment process provided stakeholders with a broader picture about integrated care and highlighted the areas/aspects of integrated care organisation in the municipality of Trbovlje with the highest needs and gaps for improvement. The consensus building workshop, as a part of assessment process, had a positive influence on stakeholders because they received an impetus to get together and collaborate in the future. The overall results of the assessment process showed many weaknesses in the implementation of integrated care, not only in the Municipality of Trbovlje, but also in the region and, at some levels, in the whole country. These findings are the basis for planning and taking actions in a direction of more integrated care.

Furthermore, to raise the efficiency of using the SCIROCCO self-assessment tool, stakeholders recommended that it should be simplified because some of the stakeholders had problems to understand and successfully complete the survey.

5. Conclusions and next steps

Stakeholders agreed that not having a social worker employed in the general hospital of Trbovlje represents a great disadvantage of the readiness of local environment for integrated care. They have decided to take an initiative to employ a social worker, who will become a part of multi-disciplinary team of professionals in the regional hospital. Also, stakeholders concluded that the social and health sectors should be more collaborative and this is the reason why participating stakeholders decided to run regular meetings for all important decision-makers in the field of long-term care.

Findings of projects like SCIROCCO Exchange should be taken in account when preparing new law regarding long-term care.

Annex 1 Organisation and governance of healthcare services

The Slovenian healthcare system is largely financed by compulsory healthcare insurance with the only provider the Health Insurance Institute of Slovenia. Insured people under the compulsory healthcare insurance are the employed, owners of private companies, recipients of various social benefits, other people with income and citizens of the Republic of Slovenia with permanent residence in Slovenia and their family members such as children, spouse, etc.

The compulsory healthcare insurance does not cover all financial costs incurred during treatment. Full coverage is only provided for children, schoolchildren and only for certain illnesses and conditions. For other services, compulsory insurance provides only a certain percentage of the price of the health care service, while the other part is covered by supplementary health insurance.

With the collected funds, the Insurance Institute provides insured persons equal access to healthcare services and other rights covered by the insurance system.

Healthcare in Slovenia is provided at three levels:

- Primary (basic) healthcare which consists of general and family medicine specialists, paediatrics, gynaecology, and dentistry. Primary-level healthcare enables first-time contact with a doctor to diagnose and treat acute and chronic illnesses, promote health and healthy lifestyles, prevent disease, counsel and educate patients. The health care network at the primary level is designed and implemented by the municipality.
- Secondary health care is carried out by hospitals, health resorts, medical specialists in specialised fields in health centres, concessionaires and private doctors without a concession.
- Tertiary healthcare addresses the most serious illnesses, injuries and other conditions.

For secondary and tertiary treatment, the patient requires a referral from the GP. The GP is the gatekeeper in the healthcare system. Most of the funding is spent on hospital treatment, followed by specialist outpatient services and funds for medicines and medical devices.

Annex 2 Healthcare policies in Slovenia

In Slovenia, the priority in this area is to prepare an efficient, high-quality and also financially sustainable long-term care system, for which a broader social consensus needs to be reached, by adopting a long-term care law and appropriate systemic solutions in the field of organised care for the elderly. The role and responsibility of the local community in providing long-term care should be defined. At the level of providers (social and health services and other providers in the public and private sectors and civil society), it is essential to ensure mutual cooperation and integration with the aim of improving communication, mutual respect, better organisation and quality of services. In the system itself, support is provided to informal caregivers in the form of training, counselling, and assistance in the absence of informal carers and more.

Annex 3 Size of the workforce and its distribution in the Municipality of Trbovlje, Slovenia

Healthcare sector

Trbovlje General Hospital

- Total employees: 319,15
- Health sector: 22,7 doctors (specialists), 14 specialist registrars, 59 registered nurses, 9 midwives, 88 nurses, 8,75 physiotherapists.
- Social sector: 19 health administrators
- Non-health sector: 82,7 employees

Health centre Trbovlje

- Total employees: 105
- Health sector: 1 doctor, 14,75 specialists, 6 specialist registrars, 8 dentists, 21 registered nurses and midwives (5 of nurses also work as community care nurses), 1,5 physiotherapists, 33 health care technicians
- Social sector: 1 clinical psychologist
- Others: 22 administration and technical work

Retirement home of Dr. Franc Salamon Trbovlje

- Total employees: 175
- Health care: 75 employees
- Social care service: 92 employees (11 of them working at home care)
- Others: 12 management and administration, 3 others

Social sector

Youth centre of Trbovlje

Social work centre of Trbovlje

- Employees: 12

Adult education centre of Zasavje

- Total employees (in year 2018): 11
- Volunteers (in year 2018): 26

NGOs (social sector)

SOCIOS - Institution for social services

Institute SRC3, Institution for social and just society

- 2 volunteers (in year 2018)

Annex 4 Self-Assessment Workshop in Municipality of Trbovlje, Slovenia

Agenda

Time	Session content
12.00	Project presentation and methodology
12.15	Presentation of self-assessment tool outcomes <ul style="list-style-type: none"> • Presentation of individual spider diagram results • Split stakeholders into two groups
12.45	Consensus building in groups <ul style="list-style-type: none"> • Discussion about individual results with aim to build a consensus and preparation of group diagram (»spider diagram«)
14.00	Break
14.15	Consensus building for all stakeholders <ul style="list-style-type: none"> • Representatives of two groups present group diagrams • Consensus building and preparation of spider diagram of Municipality of Trbovlje
15.30	Discussion about self-assessment process - experience sharing
15.45	Conclusion and further work on SCIROCCO Exchange project