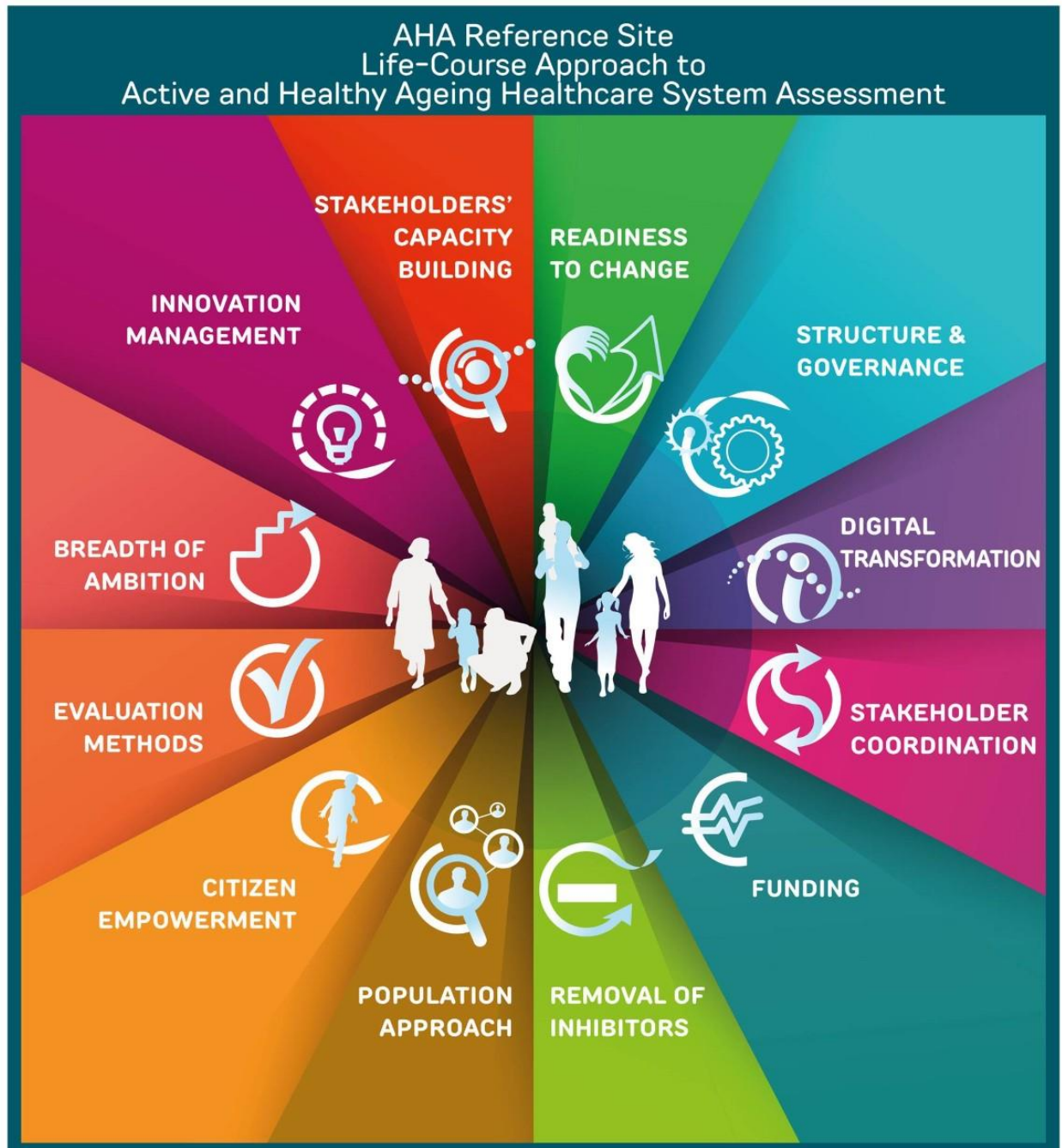


## SCIROCCO Exchange Maturity Model for addressing a life-course approach to active and healthy ageing



SCIROCCO Exchange self-assessment tool. Assessment of Maturity for addressing a life-course approach to active and healthy ageing

## 1. Readiness to Change

### Objectives

If the existing life-course approach to active and healthy ageing (AHA) needs to be re-designed this will require change across many levels, the creation of new roles, processes and working practices, and new systems to support information sharing, inclusive engagement, and collaboration across the health and care stakeholder alliance in the region. This will be disruptive and may be viewed negatively by health and care professionals, policy makers, patients, the public, and members of the Quadruple Helix coalition, so a clear case needs to be made for those changes, including a justification, a strategic plan, policies, and a vision to deliver health and care transformation with person-centred innovation and digital technology solutions for AHA at the centre.

- Creating, and implementing, a compelling vision across the Quadruple Helix coalition (Public authorities, Health and Care Providers / Academia, Researchers / SMEs, Start-Ups / Civic Society, Patients), with a real sense of urgency, and enlisting their support.
- Accepting the reality that systems supporting existing life-course approaches to active and healthy ageing are unsustainable and need to change.
- Considering the need to address the risks for health and underpinning 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 (comprising elements of health, social care and wellbeing).
- 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.

## 2. Structure & Governance

### Objectives

The broad set of changes needed to deliver a life-course approach to active and healthy ageing 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 of the Quadruple Helix coalition, and the willingness to collaborate and put the interest of the overall care system above individual incentives. It also means managing the introduction of person-centred innovative and digital technology solutions for AHA in a way that makes them easy to use, reliable, secure, and acceptable to care professionals and citizens alike.

- Enabling properly funded programmes (e.g. Disease Prevention, Health Promotion, etc), including a strong programme, project management and change management; providing workforce development programmes, to support roll-out; distributed leadership, to reduce dependency on a single heroic leader; excellent communication of goals, progress and successes.
- Managing successful innovative and digital technology solutions for AHA within a properly funded, multi-year transformation programme.
- Considering the need to address the risk of health and social inequalities.
- Empowering structures to develop and implement new protocols, guidelines, health and care pathways, for adopting innovation and digital technology solutions for AHA.

#### 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 Transformation

#### Objectives

The Digital Transformation of health care will benefit people, health care systems and the economy as it will enable innovative approaches to independent living or integrated health and social care.

Health data and data management are crucial when it comes to empowering citizens and building a healthier society. The European Commission set out 3 priorities for the Digital Transformation of Health and Care:

- Citizens' secure access to their health data, also across borders - enabling citizens to access their health data across the EU. The goal is to make it possible for citizens to exercise their right to access their health data across the EU, including, for example, the interoperability of Electronic Health Record (EHR) systems.
- Personalised medicine through shared European data infrastructure. Researchers and other professionals should pool resources (data, expertise, computing processing and storage capacities) across the EU, for better health prevention, faster and more personalised diagnosis and treatment. In order to achieve this, authorities and other stakeholders share data and infrastructure for prevention and personalised medicine research and treatment.
- Digital tools for user feedback and person-centred care - using digital tools to empower people to look after their health, stimulate prevention and enable feedback and interaction between users and healthcare providers.

Furthermore, access to healthcare data helps researchers to produce faster, more accurate tests on medicines to be launched on the market. Through the use of big data, researchers can help health care professionals and health policy makers to identify, simulate, select and monitor the effectiveness of current and new treatments.

### Assessment scale

- 0 - There is no digital transformation plan and/or strategy to support health and care.
- 1 - There is a recognition of need but there is no strategy and/or plan to support the digital transformation of health and care
- 2 - There is a mandate and plan(s) to deploy regional/national digital transformation in addressing a life-course approach to active and healthy ageing, including innovative approaches to independent living or integrated approaches to health and social care; but it is not yet implemented.
- 3 - Digital infrastructure to address a life-course approach to active and healthy ageing including innovative approaches to independent living, or integrated approaches to health and social care; are piloted but there is not yet region-wide coverage. A set of agreed technical solutions exists for digital tools. Some consolidations of ICT and eHealth solutions are underway.
- 4 - Digital transformation to address a life-course approach to active and healthy ageing including innovative approaches to independent living or integrated approaches to health and social care; is deployed widely but not by all stakeholders. A unified set of digital solutions and services are widely deployed, and digital tools are available to share data and interact with citizens.
- 5 - Universal, at-scale digital transformation is deployed at regional level. A unified set of digital solutions and services to address a life-course approach to active and healthy ageing including innovative approaches to independent living, or integrated approaches to health and social care; are fully implemented. Stakeholders share data and there is an infrastructure for prevention and personalised medicine. Citizens' secure access to their health data is guaranteed and regional digital tools are available to boost citizen empowerment.

## 4. Stakeholder coordination

### Objectives

Coordination of Quadruple Helix's coalition of stakeholders that are linked, engaged and interact together is critical to achieve common objectives of a life-course approach to active and healthy ageing (AHA). Stakeholder coordination requires new pathways and services to improve the quality and efficiency of deploying innovative, person-centred solutions for AHA and avoid unnecessary variation. The need for coordination increases when a life-course approach to active and healthy ageing requires the collaboration of different stakeholders. Stakeholder coordination enables effective deployment and scaling up of innovative and digital technology solutions for AHA services by:

- Developing mechanisms to bring stakeholders together to exchange the knowledge and experience on developing new and/or scaling up of existing services, products and

solutions for AHA, funded and/or reimbursed, and which are aligned with the strategic objectives for a life-course approach to active and healthy ageing within the region.

- Encouraging coalition partners for the implementation of Quadruple Helix to align their goals and objectives with the region/country's strategic goals and objectives for a life-course approach to AHA.
- Defining and agreeing plans for developing, testing and implementing new services and solutions for AHA that can be scaled up in the region/country or wider Europe.
- Advising on measures to ensure sustainability of new services and pathways for AHA.

### Assessment scale

- 0 - Quadruple Helix coalition Stakeholders have not been identified, or are not formally brought together, to address a life-course approach to active and healthy ageing in the region. No formal guidelines, description, agreements or standards on innovative coordinated care processes and services are in place or in development.
- 1 - The Quadruple Helix coalition Stakeholders have been identified and brought together to collaborate on a life-course approach to active and healthy ageing; however, the goals of their organisations do not align with the strategic goals for a life-course approach to active and healthy ageing in the region.
- 2 - There is evidence the goals of the organisations within the Quadruple Helix coalition Stakeholders substantially align with the strategic goals for a life-course approach to active and healthy ageing in the region.
- 3 - The goals of the Quadruple Helix coalition Stakeholder organisations align with the region's strategic goals for a life-course approach to active and healthy ageing and an Action Plan has been developed. The Action Plan sets out activities to support the coalition's learning, development, and engagement needs; and how the coalition will collaborate in the development and implementation of innovation and digital technology solutions to address the life-course approach to active and healthy ageing priorities in the region.
- 4 - Innovation and Digital Technology solution addressing a life-course approach to active and healthy ageing which were developed through the Quadruple Helix coalition Stakeholders have been implemented in the region and an evaluation of their impact has been completed.
- 5 - There is an annual review of the Quadruple Helix coalition Stakeholder's Action Plan, and how the activities undertaken have aligned with the region's priorities for a life-course approach to active and healthy ageing. The AHA Reference Site has clear plans for the growth of the Quadruple Helix coalition.

## 5. Funding

### Objectives

Changing systems, tools and processes so that they can offer improved life-course approaches to active and healthy ageing (AHA) requires initial investment and funding; a degree of operational funding during transition to the new service delivery models; and on-going financial support until the new services are fully operational and at large scale 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 funding, public-private partnerships (PPP) and risk-sharing mechanisms.

#### Assessment scale

- 0 - No additional funding is available to support the move towards a life-course approach to active and healthy ageing in the region
- 1 - Funding is available but mainly for the pilot projects and testing
- 2 - Consolidated innovation and digital technology solutions funding available through competitions/grants for individual service delivery organisations 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 infrastructures, many factors can still make a life-course approach to active and healthy ageing (AHA) difficult to deliver, by delaying change or limiting how far change can go. These may include legal issues with data governance, resistance to change from individuals or professional bodies, cultural barriers to the use of innovative digital technology solutions, 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, or internal (regional) regulations, 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 across the Quadruple Helix coalition partners.
- Reimbursement adaptations to support behavioural change and process change.
- Education and training to increase understanding of life-course approaches to active and healthy ageing, and innovation and digital technology solutions in order to speed up solution delivery and transformation of health and social care systems.

### Assessment scale

- 0 - No awareness of the effects of inhibitors on a life-course approach to active and healthy ageing
- 1 - Awareness of inhibitors and there are some ongoing efforts within organisations to their management, but no overall strategy is agreed
- 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

A life-course approach to active and healthy ageing can be developed to address the needs of an ageing population so that they can live full, independent, and active lives as long as possible. Population health 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 active and healthy lives 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 ensure all policies and services provided in the region support the needs of the population.

### Assessment scale

- 0 - Population health approach is not applied to addressing a life-course approach to active and healthy ageing
- 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 a life-course approach to active and healthy ageing 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, who feel empowered, would be willing to do more to participate in their own healthcare and well-being 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.

- Understanding level of citizens willingness to be involved in managing their own health, care and well-being needs
- Policies to encourage and facilitate citizen empowerment, level of engagement with patients and caregivers on their health and care needs and the development of individual health, care and well-being plans

### Assessment scale

- 0 - Citizen empowerment is not considered as part of a life-course approach to active and healthy ageing
- 1 - Citizen empowerment is recognised as an important part of a life-course approach to active and healthy ageing but effective policies to support citizen empowerment are still in development
- 2 - Citizen empowerment is recognised as an important part of a life-course approach to active and healthy ageing, effective policies to support citizen empowerment are in place but citizens do not have access to their health information and health data
- 3 - Citizens are consulted on a life-course approach to active and healthy ageing and have access to health information and health data
- 4 - Incentives and tools exist to motivate and support citizens to co-create innovative and digital technology services and use these services to participate in decision-making processes about their own health and care needs
- 5 - Citizens are fully engaged in decision-making processes about their health and care needs and are included in decision-making on service delivery and policy-making in addressing a life-course approach to active and healthy ageing.

## 9. Evaluation Methods

### Objectives

As new innovative care pathways, tools, and services are introduced to support a life-course approach to active and healthy ageing, there is a clear need to ensure that the changes are having the desired effect on quality of health and care, cost of health and 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. Evaluation methodologies such as Cost Benefit Analysis, Health Technology Assessment (HTA) etc. can be used to justify the cost of scaling up life-course approaches to active and healthy ageing 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 the region's life-course approach to active and healthy ageing is in place or in development
- 1 - Evaluation of the life-course approaches to active and healthy ageing across the region is planned to take place and be established as part of a systematic approach
- 2 - Evaluation of life-course approaches to active and healthy ageing across the region exists, but not as a part of a systematic approach
- 3 - Some life-course approaches to active and healthy ageing initiatives and services are evaluated as part of a systematic approach
- 4 - Most life-course approaches to active and healthy ageing 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

A life-course approach to active and healthy ageing across the region includes many levels of integration, such as integration between primary and secondary care, social care, education, built environment, transport, etc and therefore involves all stakeholders involved in the process, across many different 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). It may also include relationships across a range of public authorities e.g. health, social care, housing, education, transport, community services, etc. 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 information sharing. The long-term goal should be a collaborative, inclusive and fully integrated life-course approach to active and healthy ageing which provides a complete set of seamless interactions for the citizen, leading to enhanced service provision and improved outcomes.

- Collaboration and Integration supported at all levels within the region - at the macro (policy, structure), meso (organisational, professional) and micro (service delivery) levels.
- Collaboration across all Quadruple Helix coalition stakeholders in the region.
- Seamless transition for the citizen/patient between and within all public 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 health and care (e.g., primary care) is achieved
- 3 - Integration between health and care levels (e.g., between primary and secondary care) is achieved
- 4 - Improved coordination of a life-course approach to active and healthy ageing service needs is introduced across all Quadruple Helix stakeholders

5 - Fully integrated services across health & social care, housing, transport, education, etc are in place and functional.

## 11. Innovation Management

### Objectives

Many of the best ideas are likely to come from those directly delivering services; and those developing innovative, and digital technology solutions for a life-course approach to active and healthy ageing (AHA) including clinicians, nurses, and social workers who understand where improvements can be made to existing processes. These innovations need to be acknowledged and recognised, assessed and, where possible, scaled up to provide benefit across the system. At the same time, other public authorities (Housing, Transport, Education, etc), universities and private sector companies are increasingly willing to engage in open innovation, and innovative procurement, in order to develop new solutions and 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 providers, other public 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. Stakeholder Capacity Building and Development

### Objectives

Capacity building is the process by which individuals and organisations obtain, improve and retain the skills and knowledge needed to do their jobs competently. As the life-course approach to active and healthy ageing systems are transformed, many new roles will need to be created and new skills developed. These will range from successful change management and innovation management to technological expertise and project management. The systems 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.
- Adopting good practice approaches to change management
- 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 - Capacity building by Quadruple Helix’s coalition of stakeholders is not considered as an element of a life-course approach to active and healthy ageing.
- 1 - Some approaches to capacity building for a life-course approach to active and healthy ageing services are in place
- 2 - Cooperation on capacity building for a life-course approach to active and healthy ageing is growing across the region
- 3 - Learning about a life-course approach to active and healthy ageing and change management is in place but not widely implemented
- 4 - Systematic learning about life-course approaches to active and healthy ageing and change management is widely implemented; knowledge is shared, skills retained and there is a lower turnover of experienced staff
- 5 - A ‘person-centred learning system’ involving reflection and continuous improvement is in place within stakeholder organisations.