

Curriculum Summary



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Introduction to the project

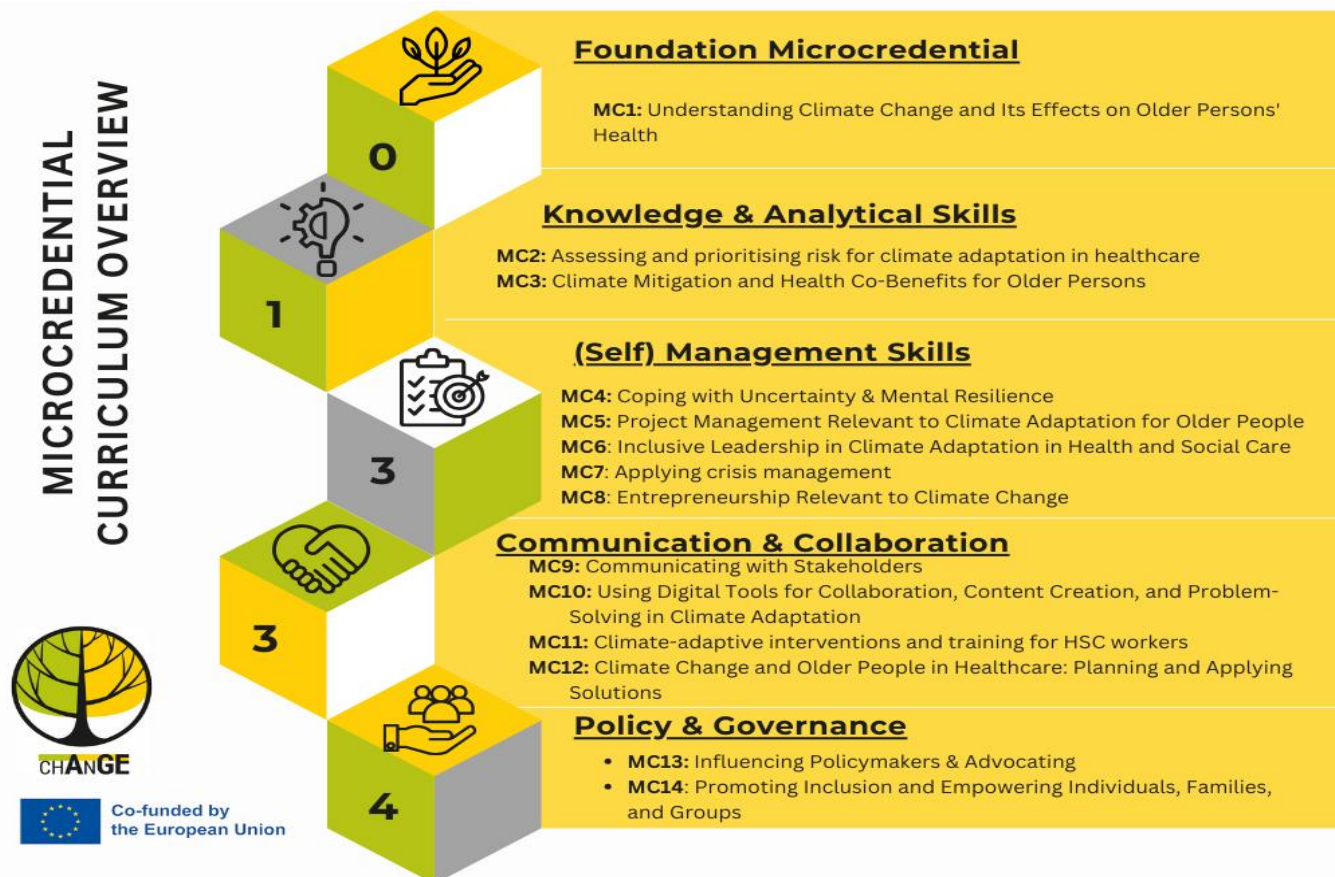


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Recent unprecedented climate change and extreme weather events have led to escalating climate-related health risks within the ever-expanding European population of older people. Climate-vulnerability in older people is exacerbated by challenges in providing safe and responsive healthcare during climate crisis events.

Since October 2023, the *chAnGE* Alliance of universities, vocational training providers, and Health & Social Care organisations in Ireland, Portugal, Finland, Austria & Greece is developing interactive, accessible, and bite-sized e-learning for Health and Social Care (HSC) workers who work with older people [*chAnGE – climate change and healthy ageing*]. The learning consists of stackable micro-credentials (MCs) that allow learners to accumulate credits over time, offering a flexible approach to professional development. MCs are available at European Qualifications Framework (EQF) levels 4, 5, and 6, ensuring accessibility for a range of learners.

During the first 18 months of the project, the final curriculum was developed through stakeholder workshops with HSC workers and older people across participating countries, and expert input, refining topics, teaching methods, and assessment strategies. The MCs will now be piloted with learners across 2025-2026. We present the curriculum summary below, to be freely used by anyone considering developing similar learning, as a source of reference. A more detailed curriculum, based on learners' feedback, will be available at the end of the project (September 2026).



Note: Some of the following microcredentials are offered at different EQFs (4, 5, 6). The core topics are the same but learning outcomes and depth of learning differ (curriculum presented is EQF level 6).

MC1: Understanding Climate Change and Its Effects on Older Persons' Health EQF level 4/5/6

Curriculum:

1. Climate mitigation, adaptation and resilience: definitions.
2. Broad overview of climate change: what is climate change; causes of climate change globally; relevant regional and local climate change related changes; data sources related to changing climate and environmental conditions.
3. Direct and indirect effects of climate change: key effects of climate change on social and economic dimensions of a region, including food variety and availability; important direct and indirect effects of climate change on health e.g. hyperthermia and heatstroke, hypothermia, infectious disease change, foodstuffs and diet; impacts of climate change on the physical health of older people; identification of specific risks for older persons - frailty, delirium, loneliness.

Learning Outcomes:

At the end of this module, learners will be able to:

1. Identify the key drivers of climate change on a global level, and critically analyse the consequences of this for climate globally and locally
2. Differentiate between key direct and indirect effects of climate change on human health
3. Define the likely climate change impacts on the older person in their local region and the consequences for the health and social care service
4. Understand the difference between climate mitigation, adaptation and resilience as concepts.
5. Discuss climate adaptation solutions for their own work context.

MC2: Assessing and prioritising risk for climate adaptation in healthcare. EQF level 6

Curriculum:

1. Social and environmental determinants of health (general introduction): socio-political, financial and cultural; physical environment; vulnerable populations in climate change, focus on older people
2. Risk assessment for older people in need of HSC: hazard recognition and risk prevention; preparedness for recognising older peoples' needs in climate crisis situations; needs recognition to prevent issues arising from specific climate change hazards; risk assessment of specific hazards that affect older peoples' health; risk communication within services.
3. HSC services and staff adaptation in supporting older people: service preparedness to respond to climate change crisis; service key adaptation indicators; staff recognition of the needs of older people and their prioritisation; staff readiness in recognising the different needs of older people; staff training in supporting older people about distinct hazards; adaptation intervention examples; supports for HSC staff wellbeing.

4. International sources of climate change information: sources; training on accessing sources.

Learning Outcomes:

At the end of this module, learners will be able to:

1. Understand the social and environmental determinants of health
2. Be aware of climate change risks and prioritise the risks
3. Recognise and assess the health and social care services climate adaptation in supporting older people
4. Know how to apply risk assessment methods in evaluating health and social care services
5. Assess and discuss the risks older people face due to climate change
6. Understand and discuss needs prioritization for climate change for older people

MC3: Climate Mitigation and Health Co-Benefits for Older Persons EQF level 4/6

Curriculum

1. Introduction to climate mitigation in healthcare: the carbon footprint of healthcare; regulatory frameworks & policies; the role of international and professional organizations; the cost of inaction; application to the national context
2. Opportunities for Climate Mitigation: understanding GHG emissions in HSC; climate mitigation interventions in healthcare; creating awareness and inspiring action
3. Raising awareness for climate mitigation among older persons: introduction to climate-health co-

benefits; health & sustainability in aging populations; climate-sensitive health communication

Learning Outcomes:

At the end of this module, learners will be able to:

1. Explain the importance of climate mitigation in healthcare at different policy levels
2. Identify and critically analyse climate mitigation areas in their work environment
3. Develop strategies for reducing the carbon footprint in healthcare settings
4. Describe health co-benefits arising from climate mitigation for older persons

MC4: Coping with Uncertainty & Mental Resilience EQF level 4/5/6

Curriculum

1. Introduction to psychological resilience: mental health effects of climate change for older people; main factors supporting climate change resilience in older people; direct/indirect effects on mental health and wellbeing (e.g. solastalgia, climate grief, biodiversity loss, unpredictable future [weather, pandemics])
2. Building psychological resilience: in older people and in oneself as a HSC worker; nature based solutions to promote resilience at individual; self help tools
3. Strategies to proactively confront resistance to change within the context of building resilience; theories of behavioural change and examples related

to climate change (e.g. flooding, pandemic); how to identify the need for change

Learning Outcomes:

At the end of this module, learners will be able to:

1. Define mental resilience in the context of climate change for older persons.
2. Identify key factors contributing to resilience or vulnerability.
3. Promote behavioural change at individual and community levels.
4. Utilize nature-based interventions to enhance resilience and well-being.

MC5: Project Management Relevant to Climate Adaptation for Older People EQF level 6

Curriculum

1. Project management for climate adaptation: Principles and methodologies for managing adaptation projects targeting older populations
2. Stakeholder engagement and cooperation: Identifying key stakeholders and fostering collaboration; methods for effective communication and partnership building
3. Co-creation in project development: participatory approaches to designing and implementing adaptation strategies; integrating feedback mechanisms for continuous improvement

4. Project validation and risk management: techniques for assessing project feasibility and impact; risk identification, mitigation, and monitoring in climate adaptation initiatives

Learning Outcomes:

At the end of this module, learners will be able to:

1. Apply systems thinking in project management
2. Develop comprehensive and adaptable strategies for climate adaptation
3. Implement risk assessment and mitigation techniques for older persons

MC6: Inclusive Leadership in Climate Adaptation in Health and Social Care EQF level 6

Curriculum

1. Leading inclusively in climate adaptation: Introduction to inclusive leadership and its role in climate adaptation; understanding diverse needs in HSC settings (clients, staff and communities)
2. Identifying and assessing the needed level of adaptation to climate change within learner's own HSC facility or service
3. Building resilience in HSC settings: overview of concepts and essential components

Learning Outcomes:

At the end of this module, learners will be able to:

1. Analyse and apply inclusive leadership strategies that consider the diverse needs of clients, staff and communities within the context of climate adaptation in HSC settings.
2. Identify and implement sustainable strategies, incorporating innovative and environmentally conscious practices to mitigate the impact of climate change within these facilities.
3. Design and implement resilience-building plans that address and respond effectively to climate-related challenges within health and social care facilities.

MC7: Applying crisis management EQF level 6

Curriculum

1. Understanding crises and climate change: definitions and types of crises; crisis drivers and impacts; crisis management challenges in HSC
2. Crisis management in HSC: pre-crisis planning, emergency response, and post-crisis recovery; resource planning and optimization; risk assessment and vulnerability analysis in older person's care
3. Roles & communication in crisis management: roles of different HSC professionals; crisis communication strategies; interprofessional coordination; implementation of emergency protocols (e.g., evacuation)
4. Workforce adaptation and surge capacity: personnel reassignment and functional reallocation; temporary powers, duties, and responsibilities during crises
5. Mitigation and response to extreme weather events: preventative actions and emergency preparedness;

crisis communication, training, warning systems; recovery protocols and long-term resilience strategies

6. Psychological response and post-crisis evaluation: Supporting personnel and older persons during crises; assessing crisis response effectiveness and planning future improvements

Learning Outcomes:

At the end of this module, learners will be able to:

1. Analyse the different causes of crisis
2. Evaluate the importance of each type of crisis
3. Simplify the sequence of activities taken when applying crisis management
4. Determine which actions must be taken to evaluate a crisis
5. Decide which communication tools must be used, and by whom

MC8: Entrepreneurship Relevant to Climate Change EQF level 6

Curriculum

1. Core concepts: ecosystem, market, product and service, differentiation, stakeholder, customer experience, business model, business value, service value, value proposition, competitive advantage, entrepreneurship, intrapreneurship, innovation, agility, lean start-up, resilience, venture capital

2. Understanding the characteristics, conditions and needs of older people
3. Entrepreneurship skills: effective communication and active listening; project design and management; team management
4. Marketing fundamentals

Learning Outcomes:

At the end of this module, learners will be able to:

1. Identify societal needs for climate adaptation in healthcare
2. Analyse health literacy for older persons
3. Develop innovative healthcare models for climate resilience.
4. Understand research and development applications in healthcare.

MC9: Communicating with Stakeholders EQF level 4/5/6

Curriculum

1. Fundamentals of climate-health communication: key definitions (communication, stakeholders, misinformation); verbal and non-verbal communication with older people; overcoming communication barriers; mobilising HSC workers
2. Challenges in climate change communication: Educating, informing, warning, persuading, and mobilizing stakeholders; media, information sources, and e-health literacy; addressing biases and resistance to change in healthcare communication
3. Tailoring communication strategies: cultural influences, values, and worldviews; effective messaging across different stakeholder levels
4. Crisis communication in climate-related events: Strategies for communication before, during, and

after a crisis; crisis preparedness and response in healthcare and social care

5. Cross-sector collaboration for effective communication: engaging key health and social care stakeholders at national and international levels; coordinating interventions across disciplines for older populations

Learning Outcomes:

At the end of this module, learners will be able to:

1. Apply the principles and strategies of effective stakeholder communication in relation to climate change
2. Select relevant and valid sources of information about climate change
3. Manage communication challenges with diverse stakeholders

MC10: Using Digital Tools for Collaboration, Content Creation, and Problem-Solving in Climate Adaptation. EQF level 4/5/6

Curriculum

1. Digitalisation, Climate & Health: nexus between digitalisation, climate & health; the impact of digitalisation on the healthcare sector; the benefits and challenges of digitalisation; and the digital (CO₂, resources) footprint and its consequences
2. Media Competencies: evaluating online information; effective search strategies; collaboration and communication tools; online collaboration strategies for climate adaptation projects; creating engaging and informative content related to climate adaptation; inclusive content design for older people
3. Digital Tools: digital sensors and health monitoring systems; data and analytics for climate adaptation; introduction to data sources for climate change and health, use of data analytics tools; practical application; engaging digital teaching methods; ethical questions in digital transformation; green IT

4. Digital Innovation: overview of digital innovations in the field of climate health; application of digital innovation concerning climate health to professionals' contexts; developing problem-solving strategies

Learning Outcomes:

At the end of this module, learners will be able to:

1. Describe the impact of digitalisation at a global, organisational and personal level.
2. Outline the principles and parameters of a digital footprint, how to minimise footprints, and how to apply estimations of global, organisational and personal digital footprints and optimise processes.
3. Apply advanced media competencies and advanced digital tools (e.g. databases) to develop barrier-free digital content, AI-based searches, digital content creation and moderation.
4. Design and incorporate digital innovation in practice.

MC11: Climate-adaptive interventions and training for HSC workers EQF level 5/6

Curriculum

1. Revision of climate change's impact on older people
2. Advanced climate-adaptive care strategies for older people in HSC: detailed exploration of options
3. Monitoring and evaluating climate-adaptive interventions: constructing, evaluating and adapting care plans specific to the needs of older adults for climate adaptation; data collection and evaluation methods
4. Communication and education for climate-resilient aging: development and implementation of well-designed training programs, focussing on creating engaging curricula, addressing barriers to implementation, critical thinking, reflective practice, advanced facilitation skills

Learning Outcomes:

At the end of this module, learners will be able to:

1. Evaluate and critically analyse specific risks, and climate adaptation impacts, for older people in HSC settings
2. Develop and implement detailed care plans for advanced climate adaptation measures for these
3. Create and utilize advanced monitoring and evaluation frameworks to assess and improve the effectiveness of climate-adaptive interventions in HSC settings
4. Design and implement a comprehensive training program that equips HSC workers with the necessary skills and knowledge to manage climate adaptation effectively

MC12: Climate Change and Older People in Healthcare: Planning & Applying Solutions

EQF level 6

Curriculum

1. Climate adaptation for older people: case studies and research that highlight successful initiatives and strategies; grassroots community efforts, technological advancements, and global-local policy measures.
2. Healthcare adaptation frameworks: problem-solving methodologies; decision-making models; tools to help address climate-related health risks for older populations, focusing on practical healthcare solutions.
3. Data-driven approaches: statistical methods and indicators are used to quantify health and social changes, supporting evidence-based decision-

making and assessment of adaptation measures for older people.

Learning Outcomes:

At the end of this module, learners will be able to:

1. Analyse existing responses and solutions of climate change effects on health
2. Plan the implementation of solutions in practical settings in context of health and social care
3. Appraise the older person's needs regarding climate adaptation
4. Identify potential partners, having contact networks and knowledge of existing resources

MC13: Influencing Policymakers & Advocating EQF level 6

Curriculum

1. The ethical responsibility of HSC workers to influence decision making
2. Raising awareness of the health risks to older people caused by climate change
3. Supporting older people's participation in influencing decision-making
4. Knowledge-based management and influencing social and health politics and decision-making

Learning Outcomes:

At the end of this module, learners will be able to:

1. Describe international, national, and regional policies on climate adaptation for older people
2. Understand the role and ethical responsibilities of healthcare professionals in policy influence
3. Advocate for policies that address climate-related health challenges
4. Promote civic activism and engagement in climate adaptation policymaking

Curriculum

1. Understanding inclusion and empowerment: definitions and applications across individual, social, economic, and ecological contexts; Strengthening abilities and opportunities for older persons in a changing climate
2. Systemic and holistic approaches: intersection of inclusion, empowerment, sustainability, and climate change in healthcare; the role of care systems in fostering resilience and adaptation
3. Key advocacy tools and strategies: peer support and citizen science as drivers of policy influence; The role of multipliers in spreading awareness and mobilizing action
4. Effective policy engagement: communicating climate-related health risks to policymakers; Leveraging community participation to shape inclusive policies

Learning Outcomes:

At the end of this module, learners will be able to:

1. Analyse the concept of inclusion across different contexts
2. Evaluate the intersection of inclusion with social, cultural, and ecological factors
3. Develop strategies for empowerment at individual, family, and community levels
4. Assess systemic approaches for integrating inclusion and sustainability
5. Explore the impact of peer support and citizen science in climate adaptation

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