Cluster 1 - Health

Destination 1: Staying healthy in a rapidly changing society.

Draft expected impacts:

Proposals for topics under this destination should set out a credible pathway to contributing to staying healthy in a rapidly changing society, and more specifically to one or several of the following impacts:

- Citizens adopt healthier lifestyles and behaviours, make healthier choices and maintain longer a healthy, independent and active life with a reduced disease burden, including at old ages or in other vulnerable stages of life.
- Citizens are able and empowered to manage better their own physical and mental health and well-being, monitor their health, and interact with their doctors and health care providers.
- Citizens' trust in evidence-based health interventions and in guidance from health authorities is strengthened, including through improved health literacy and equity (including at young ages and including digital health literacy), resulting in increased engagement in and adherence to effective strategies for health promotion, diseases prevention, treatment and palliative care, including increased vaccination rates and patient safety.
- Health policies and actions for health promotion and disease prevention are evidence-based, people-centred and thus targeted and tailored to citizens' needs and designed to reduce health inequalities.
- Through healthier ageing, the elderly are increasingly seen as a resource and asset to society rather than as a burden. Health care systems have access to and implement state-of-the-art cost-effective screening programmes for non-communicable diseases.
- Citizens & communities are supported by the development of technologically and/or socially innovative services, policies, guidelines and digital solutions for health promotion, disease prevention and (re)habilitation in ways that are accessible, equitable, and effective. This includes addressing the needs related to chronic and acute health conditions, intellectual and physical disabilities, mental health issues, or age-related impairments.

Main expected outcomes:

- New tools, digitally enabled solutions and evidence-based health and care services to adapted solutions from an integrated health approach to improve the quality of life of people with intellectual and physical disabilities, their families and carers, contributing also to the social inclusion of persons with intellectual and physical disabilities.
- Personalized innovative and user-friendly tools to support citizens' healthy lifestyle choices.
- Innovative solutions to help children, adolescents and their parents manage the mental and physical health of the young.
- Novel approaches implemented in health care systems to steer patients into optimal primary care channels and outpatient facilities for a personalized and holistic approach to health and wellbeing.
- National screening programs for non-communicable diseases are revisited in terms of costeffectiveness and where needed, alternatives are offered. National screening programmes are adapted on the basis of new evidence.

Cluster 1 - Health

Destination 2: Living and working in a health-promoting environment.

Draft expected impacts:

Proposals for topics under this Destination should set out a credible pathway to contribute to living and working in a health-promoting environment, and more specifically to one or several of the following impacts:

- Policy-makers and regulators are aware and well informed about environmental, socioeconomic and occupational risk factors as well as health-promoting factors across society;
- Environmental, occupational, social, economic, and health policies and practices at the EU, national and regional level are sustainable and based on solid scientific evidence.
- The upstream determinants of health are known, understood and reduced;
- The health threats and burden resulting from hazardous chemicals and air, water and soil pollution and contamination and climate change are lessened, so that the related number of deaths and illnesses is substantially reduced;
- Living and working environments in European cities and regions are healthier, more inclusive, safer, resilient and sustainable;
- The adaptive capacity and resilience of populations and health systems in the EU to climate and environmental change-related to mental and physical health risks are strengthened;
- Citizens' health and well-being are protected and promoted, and premature deaths, diseases and inequalities related to environmental pollution and degradation and climate-related stressors are prevented;
- Citizens understand better complex environment and health issues, and effective measures to address them and support related policies and regulations.

Main expected outcomes:

- Health promoting and disease-preventive actions enabled by the collection, combination and analysis of environmental, occupational and human health-related data;
- Evidence on the identification and characterisation of emerging and persistent environmental, occupational and climate change-related stressors accessible to policy makers, health stakeholders and the scientific community;
- Evidence on causal relationships between exposure to the identified stressors and health impacts;
- Translation of research results into indicators, early warning systems, interventions and evidence for regulatory preparedness, targeted at informing decision making levels where action is needed;
- Cross-sectoral approaches to mitigate and prevent adverse health outcomes and promote beneficial health impacts, in collaboration with actors inside and outside the health area.

Cluster 1 - Health

Destination 3: Tackling diseases and reducing disease burden.

Draft expected impacts:

Proposals for topics under this destination should set out a credible pathway to contributing to tackling diseases and reducing disease burden, and more specifically to several of the following impacts:

• Burden of diseases in the EU and worldwide is reduced through effective disease management, including through the development and integration of innovative diagnostic and therapeutic approaches, personalised medicine approaches, digital tools and other people-centred solutions for health care. In particular, patients are diagnosed early and accurately and receive effective, cost-efficient and affordable treatment, including patients with a rare disease, due to effective translation of research results into new diagnostic tools and therapies.

• Premature mortality from non-communicable diseases is reduced by one third (by 2030), mental health and well-being is promoted, and the voluntary targets of the WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020 are attained (by 2025), with an immediate impact on the related disease burden.

• Health care systems benefit from strengthened research and innovation expertise, human capacities, know-how and tools for combatting communicable and non-communicable diseases, including through international cooperation. In particular, they are better prepared to respond rapidly and effectively to health emergencies and are able to prevent and manage communicable diseases transmissions and epidemics, including within healthcare settings.

• Citizens benefit from reduced (cross-border) health threat of epidemics and AMR pathogens, in the EU and worldwide.

• Patients and citizens are knowledgeable of health threats, involved and empowered to make and shape decisions for their health, and better adhere to evidence-based disease management strategies and policies (especially for controlling outbreaks and emergencies).

• The EU benefits from high visibility, leadership and standing in international fora on global health and global health security, especially in partnership with Africa.

Main expected outcomes:

The proposed actions in this destination will contribute to the following expected outcomes:

• Health research stakeholders, clinicians, policymakers and patients will get better understanding of diseases and disabilities, their drivers and consequences, and their relationship and links to different health determinants and conditions.

• Healthcare providers, clinicians and patients will have access to advanced therapies for noncommunicable diseases, supported by strategies to make them cost-effective and affordable.

• Citizens and healthcare systems will benefit from better surveillance, prevention, detection, treatment and crisis management of infectious disease threats.

• Healthcare providers, clinicians, regulators and patients will get access to innovative health technologies developed and validated in clinical practice, including personalised medicine approaches and use of digital tools to optimise clinical workflows.

• Health research stakeholders, clinicians, policymakers, regulators and patients will benefit from the establishment of new international partnerships on brain health research and continuation of cooperation with international organisations/initiatives to combat infectious diseases, to prepare for upcoming pandemics, building resilience and to reduce burden of non-communicable diseases.

• Policymakers will get support to evidence-based health policy-making.

Cluster 1 - Health

Destination 5: Unlocking the full potential of new tools, technologies and digital solutions for a healthy society.

Draft expected impacts:

• Europe's scientific and technological expertise and know-how, its capabilities for innovation in new tools, technologies and digital solutions, and its ability to take-up, scale-up and integrate innovation in health care is world-class

• Citizens benefit from targeted and faster research resulting in safer, more efficient, cost-effective and affordable tools, technologies and digital solutions for improved (personalised) disease prevention, diagnosis, treatment and monitoring. This leads to better patient outcome and well-being, in particular through increasingly shared health resources (interoperable data, infrastructures, expertise, citizen/patient driven co-creation)

• The EU gains high visibility, leadership and autonomy in terms of health technology development, including through international cooperation.

• The burden of diseases in the EU and beyond is reduced through the development and integration of innovative diagnostic and therapeutic approaches, personalised medicine approaches, digital tools and other people-centred solutions for health care.

• The productivity of health research and innovation, as well as the quality and outcomes of health care are improved by the use of health data and innovative analytical tools, such as (generative) artificial intelligence (AI).

• (Generative) Artificial intelligence is used for the benefit of citizens and health care settings in a secure and ethical manner, respecting individual integrity and underpinned with public acceptance and trust.

• Citizens trust and support the opportunities offered by innovative technologies for health care, based on expected health outcomes and potential risks involved.

Main expected outcomes:

• Biomedical scientists and Health technology developers get access to and use better tools for developing innovative health technologies

• R&I actors of different disciplines and sectors strive for the convergence of health technologies, integrating medical technologies, pharmaceuticals, ATMPs and digital health technologies.

• Clinicians will get access to novel preventive, diagnostic and therapeutic approaches.

• Healthcare providers and patients will benefit from integrated health solutions, including the ones using (generative) artificial intelligence.

Cluster 1 - Health

Destination 6: Maintaining an innovative, sustainable and globally competitive health industry.

Draft expected impacts:

Proposals for topics under this destination should set out a credible pathway to contributing to maintaining an innovative, sustainable and globally competitive health industry, and more specifically to one or several of the following expected impacts:

• Health industry in the EU is more competitive and sustainable, assuring European leadership in breakthrough health technologies and strategic autonomy in essential medical supplies and digital technologies, contributing to job creation and economic growth, in particular with small- and medium-sized enterprises (SMEs).

• Health industry is working more efficiently along the value chain from the identification of needs to the scale-up and take-up of solutions at national, regional or local level, including through early engagement with patients, health care providers, health authorities and regulators ensuring suitability and acceptance of solutions.

• European standards, including for operations involving health data, ensure patient safety and quality of healthcare services as well as effectiveness and interoperability of health innovation and productivity of innovators.

• Citizens, health care providers and health systems benefit from a swift uptake of innovative health technologies and services offering significant improvements in health outcomes, while health industry in the EU benefits from decreased time-to-market.

• Health security in the EU benefits from reliable access to key manufacturing capacity, including timely provision of essential medical supplies of particularly complex or critical supply and distribution chains, such as regards vaccines or medical radioisotopes.

Main expected outcomes:

• Improved uptake of breakthrough technologies and innovations in clinical practice as well as in the health system; increased global competitiveness of the EU health sector. Improved safety, efficacy and quality of tools and technologies for health and care as well as their ethical, legal and social impact.

• Patients and clinicians benefit from technologies and innovations that are safe and effective.

• Health research stakeholders, policymakers and regulators will get better evidence and guidelines regarding better uptake of innovations from advancing regulatory science.

• Facilitation of cooperation between health-related industries and healthcare systems for the development of value-added products and services.

• Overall, the expected outcomes aim to make the EU health industry more resilient, sustainable, and globally competitive, while ensuring improved access to healthcare, reduced health inequalities, and alignment with broader European policy objectives.