SC1 – HEALTH, DEMOGRAPHIC CHANGE AND WELLBEING

The 2018-2020 Work Programme (WP) of the Societal Challenge 1 (SC1) tackles four main healthcare challenges Europe is facing:

- The raising and potentially unsustainable **health and care costs**;
- The influence on health of **external environmental factors** including climate change;
- The **risk to lose our ability to protect the populations against the threats of infectious diseases**;
- **Health inequalities** and **access to health and care**.

The SC1 aims to deliver solutions for a better health for all by:
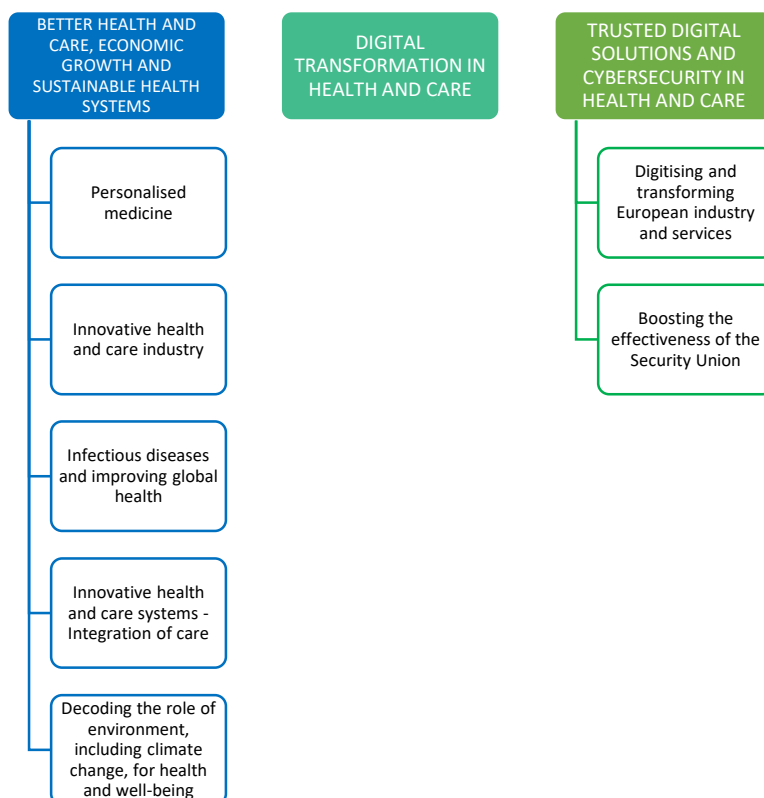
- Effective integration of **personalised medicine approaches** into healthcare services and systems;
- **Fighting infectious diseases** and the growing threat of **antimicrobial resistance**;
- Addressing the needs of the **most vulnerable groups** and the global increase of **chronic diseases**;
- Decoding the **role of environment on health** and developing mitigating measures;
- Exploring the **digital potential** for health innovation and healthcare;
- Stimulating innovation in the European healthcare domain and industry by exploring the **application of advanced technologies**, improve the health of the workforce and promote regulatory science.

The overall budget dedicated to SC1 is about **€2 billion**.

THEMATIC AREAS

3 CALLS

BETTER HEALTH AND CARE, ECONOMIC GROWTH AND SUSTAINABLE HEALTH SYSTEMS

This call will aim at reconciling **better health** and **healthy ageing** with the need to develop sustainable health and care systems and growth opportunities for the health and care related industries. The scope of the call may range from **prevention, diagnosis, stratified approaches, predictive toxicology, the development of novel and repurposed therapeutic approaches**, including medical technologies and advanced therapies, cohorts and registries-based research, to integration of care and systemic digital solutions for health and ageing well. It aims to translate new knowledge into innovative applications and accelerate large-scale uptake and deployment in different health and care settings, making health and care systems and services more accessible, responsive and efficient in Europe and beyond. The inclusion of private companies and other innovators in the projects is encouraged.

Personalised medicine

AIM: delivering personalised health and care solutions to benefit citizens.
AREAS OF APPLICATION: chronic, rare and communicable diseases.
TARGETS: any type of population, including children, the ageing population and high-risk groups.
EXPECTED KEY IMPACT: improved health outcomes for the citizens.

🔗	Action	Topic	Opening date	Deadline(s)
	RIA	Understanding causative mechanisms in co- and multimorbidities combining mental and non-mental disorders	26/07/2018	02/10/2018
				16/04/2019
	RIA	Systems approaches for the discovery of combinatorial therapies for complex disorders	26/07/2018	02/10/2018
				16/04/2019
	RIA	Towards risk-based screening strategies for non-communicable diseases	26/07/2018	02/10/2018
				16/04/2019
	RIA	Pilot actions to build the foundations of a human cell atlas	26/07/2018	16/04/2019
	CSA	Actions in support of the International Consortium for Personalised Medicine	26/07/2018	16/04/2019

Innovative health and care industry

AIM: turning innovative knowledge and technologies into practical applications.
AREAS OF APPLICATION: innovative diagnostics and therapeutics.
TARGETS: citizens, healthcare systems and businesses.
EXPECTED KEY IMPACT: to stimulate the healthcare industry.

🔗	Action	Topic	Opening date	Deadline(s)
SME **FTI**	RIA	Regenerative medicine: from new insights to new applications	26/07/2018	16/04/2019
imi	PCP	Innovation Procurement: Next generation sequencing (NGS) for routine diagnosis	26/07/2018	16/04/2019

RIA: Research and Innovation Action
IA: Innovation Action
CSA: Coordination and Support Action
PCP: Pre-Commercial Procurement
COFUND: Co-funding of regional, national and international programmes

Infectious diseases and improving global health

AIM: improvement of risk assessment and surveillance tools and the development of innovative medical countermeasures.
AREAS OF APPLICATION: antimicrobial resistance, emerging and re-emerging infectious diseases and poverty-related and neglected diseases.
TARGETS: citizens, healthcare systems and businesses.
EXPECTED KEY IMPACT: to prevent, detect and treat priority diseases worldwide.

🔗	Action	Topic	Opening date	Deadline(s)
	RIA	Mining big data for early detection of infectious disease threats driven by climate change and other factors	26/07/2018	16/04/2019
	RIA	Stratified host-directed approaches to improve prevention, treatment and/or cure of infectious diseases	26/07/2018	02/10/2018 16/04/2019
	RIA	Implementation research for maternal and child health	26/07/2018	02/10/2018 16/04/2019
	RIA	Towards a next generation influenza vaccine to protect citizens worldwide – an EU-India collaboration	26/07/2018	16/04/2019
	CSA	Support for the functioning of the Global Research Collaboration for Infectious Disease Preparedness (GloPID-R)	26/07/2018	16/04/2019

Innovative health and care systems – Integration of care

AIM: developing effective, accessible and sustainable health interventions and integrated care systems.
AREAS OF APPLICATION: personalised medicine, management of chronic diseases and health promotion.
TARGETS: citizens.
EXPECTED KEY IMPACT: better evidence for the development of more sustainable and resilient health systems, including through better and more coordinated health technology assessment, resulting in increased access to quality care for everyone and better health systems.

Action	Topic	Opening date	Deadline(s)
RIA	Mental health in the workplace	26/07/2018	02/10/2018 16/04/2019
IA	Demonstration pilots for implementation of personalised medicine in healthcare	26/07/2018	02/10/2018 16/04/2019

Decoding the role of environment, including climate change, for health and well-being

AIM: assess the impact of environment (including climate change) on health and well-being, and the related socio-economic impacts.
AREAS OF APPLICATION: endocrine disrupting chemicals, human exposome, health research agenda.
TARGETS: citizens.
EXPECTED KEY IMPACT: improved risk assessment and mitigation measures.

Action	Topic	Opening date	Deadline(s)
RIA	The Human Exposome Project: a toolbox for assessing and addressing the impact of environment on health	26/07/2018	16/04/2019

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DIGITAL TRANSFORMATION IN HEALTH AND CARE

This call aims at supporting the **management of health and wellbeing** while empowering the participation of citizens and facilitating the transformation of health and care services to **more digitised, person-centred and community-based care models**, thereby enabling better access to healthcare and the sustainability of health and care systems. It will contribute to maximising the potential of the **digital economy** in the health and care sectors aiming at sustainable development to the benefit of society, environment and citizens.

🔗	Action	Topic	Opening date	Deadline(s)
ICT	RIA	Big data and Artificial Intelligence for monitoring health status and quality of life after the cancer treatment	16/10/2018	24/04/2019
	PPI	Large scale implementation of digital innovation for health and care in an ageing society	16/10/2018	24/04/2019
	IA	Scaling up the univocal Identification of Medicinal Products	16/10/2018	24/04/2019
	PCP	Digital health and care services	26/07/2018	14/11/2018
	IA	Large Scale pilots of personalised & outcome based integrated care	16/10/2018	24/04/2019
	CSA	Support for the large scale uptake of open service platforms in the Active and Healthy Ageing domain	16/10/2018	24/04/2019

TRUSTED DIGITAL SOLUTIONS AND CYBERSECURITY IN HEALTH AND CARE

This call aims at **multidisciplinary technologies and solutions in health and care** with a focus on **cybersecurity** to assure data privacy, security and protection of health and care infrastructures. It will contribute to the Focus Areas on "Digitising and transforming European industry and services" and "Boosting the effectiveness of the Security Union".

Digitising and transforming European industry and services

The Digitising European Industry initiative includes the launch of a set of initiatives supporting the building of the **digital industrial platforms of the future**. Proposals need to address all of the following activities: platform building, large-scale piloting, ecosystem building, and standardisation. Furthermore, they should contain an outline business case and industrial exploitation strategy.

🔗	Action	Topic	Opening date	Deadline(s)
ICT	IA	Smart and healthy living at home	26/07/2018	14/11/2018

Boosting the effectiveness of the Security Union

No topics are planned in 2019 on "Boosting the effectiveness of the Security Union".

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Health research in Horizon 2020

ERC - European Research Council	**JPIs** - Joint Programming Initiatives
FET - Future and emerging technologies	**IMI2** - Innovative Medicines Initiative 2 → See a focus on IMI2 here below
MSCA - Marie Skłodowska-Curie actions	**EIP-AHA** - European Innovation Partnership on Active and Healthy Ageing
Research Infrastructures	**AAL2** - Active and Assisted Living Joint Programme 2
Fast Track to Innovation	**EDCTP2** - European and Developing Countries Clinical Trials Partnership 2
SME Instrument	
Eureka Eurostars-2	
LEIT	

HEALTH – FOCUS ON IMI2

IMI2 – CALL 15

This call is not included in the WP Health, demographic change and wellbeing. The call is published on the Participant Portal (under the SC1) and on the IMI website. All documents relating to the call can be found via the Participant Portal and the IMI2 Call documents page, in particular the IMI Manual for evaluation, submission and grant award.

Action	Topic	Opening date	Deadlines
RIA	Integrated research platforms enabling patient-centric drug development	18/07/2018	24/10/2018 15/05/2019
	Blockchain Enabled Healthcare		
	Microenvironment imposed signatures in tissue and liquid biopsies in immune-mediated diseases		
	Emerging translational safety technologies and tools for interrogating human immuno-biology		
	Development and validation of translational platforms in support of synaptopathy drug discovery		
	Digital endpoints in neurodegenerative and immune-mediated diseases		
	AMR Accelerator programme Pillar A: Capability Building Network to accelerate and validate scientific discoveries		
	AMR Accelerator programme Pillar B: Tuberculosis drug development network to accelerate and validate scientific discoveries and advance the R&D pipeline of new and innovative agents to address the global tuberculosis epidemic		

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IMI2 – CALL 16

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Action	Topic	Opening date	Deadline
RIA	Progress new assets (one pre-new molecular entity (preNME) and one first-time-in-human (FTIH) start) for TB that act synergistically with bedaquiline, cytochrome bc or cytochrome bd inhibitors	18/07/2018	24/10/2018
	Progress novel assets (one FTIH start) for non-tubercular mycobacteria (NTM) that may act synergistically with bedaquiline and cytochrome bc drugs		
	Discover and progress novel assets with new mechanisms of action (one preNME for TB and one preNME for NTM) and biomarkers for TB and NTM infection		
	Determination of gepotidacin levels in tonsils and prostatic tissue		
	Infection site targeting, antibiotic encapsulated in nanoparticles for treating extracellular bacterial infections		
	Functional Ethionamide boosters: a novel combination for tuberculosis therapy		
	Intravenous treatments of serious infections (urinary tract infections, intra-abdominal infections & hospital-acquired pneumonia/ventilator associated pneumonia) caused by Gram(-) bacteria (Enterobacteriaceae +/- Pseudomonas and/or Acinetobacter)		

The policy context

https://sustainabledevelopment.un.org/post2015/transformingourworld

COP21
http://www.cop21paris.org/

Ostrava Declaration on Environment and Health
http://www.euro.who.int/en/media-centre/events/events/2017/06/sixth-ministerial-conference-on-environment-and-health

Digital single market
https://ec.europa.eu/digital-single-market/

European One Health Action Plan against Antimicrobial Resistance
https://ec.europa.eu/health/amr/antimicrobial-resistance_en

Directive on the application of patients' rights in cross-border healthcare
http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011L0024&from=EN

Upgrading the Single Market: more opportunities for people and business
https://ec.europa.eu/docsroom/documents/14007/attachments/1/translations/en/renditions/native

Council conclusions on personalised medicine for patients and on pharmaceuticals
http://data.consilium.europa.eu/doc/document/ST-15054-2015-INIT/en/pdf
http://www.consilium.europa.eu/en/press/press-releases/2016/06/17/epsco-conclusions-balance-pharmaceutical-system/

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