

Personalised medicine and EU cooperation

ICPerMed activities and vision

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Context for Personalised Medicine – what has changed?

- **Technology:** digital revolution in health; access to and linking of large databases; “omics” technologies; novel computational approaches for analysis and interpretation of complex data;
- **Approach to healthcare:** focus on patient, through extensive individual profiling; drive towards prevention and early intervention;
- **Sustainability of healthcare systems:** increased costs and complexity; better use of resources through prevention, early diagnosis and improved therapeutic efficacy;
- **Societal expectations:** more informed and engaged citizens and patients; expectation of improved health-related quality of life.

ICPerMed – An International Consortium

Research driving change - need of a mechanism to support:

- **Coordination:** map ongoing activities, align research and funding activities, provide a forum to explore policy recommendations
- **Collaboration:** general support for collaboration in PM research
- **Creation of synergies:** collaboration between funders to create synergies and avoid overlaps

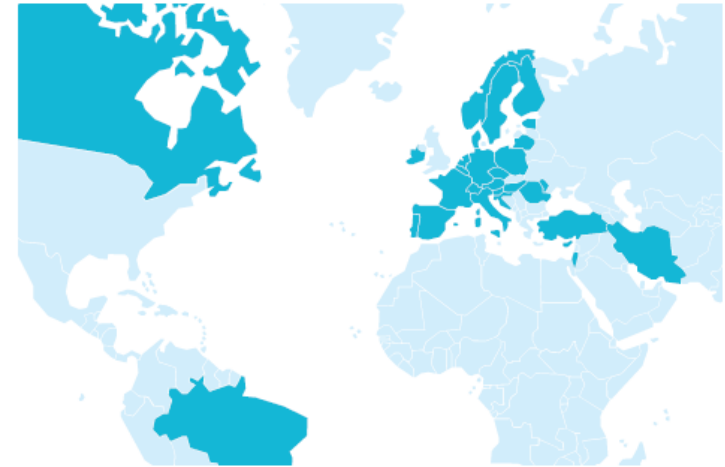
Research as a driver of personalised medicine

November 2016 - Launch of ICPeMed

ICPerMed – An International Consortium

- **ICPerMed Member state-driven**

> 40 members representing policy organizations (ministries of health, science or other), research funding agencies



Platform to support exchange and align and encourage efforts on personalized medicine research, funding and implementation:

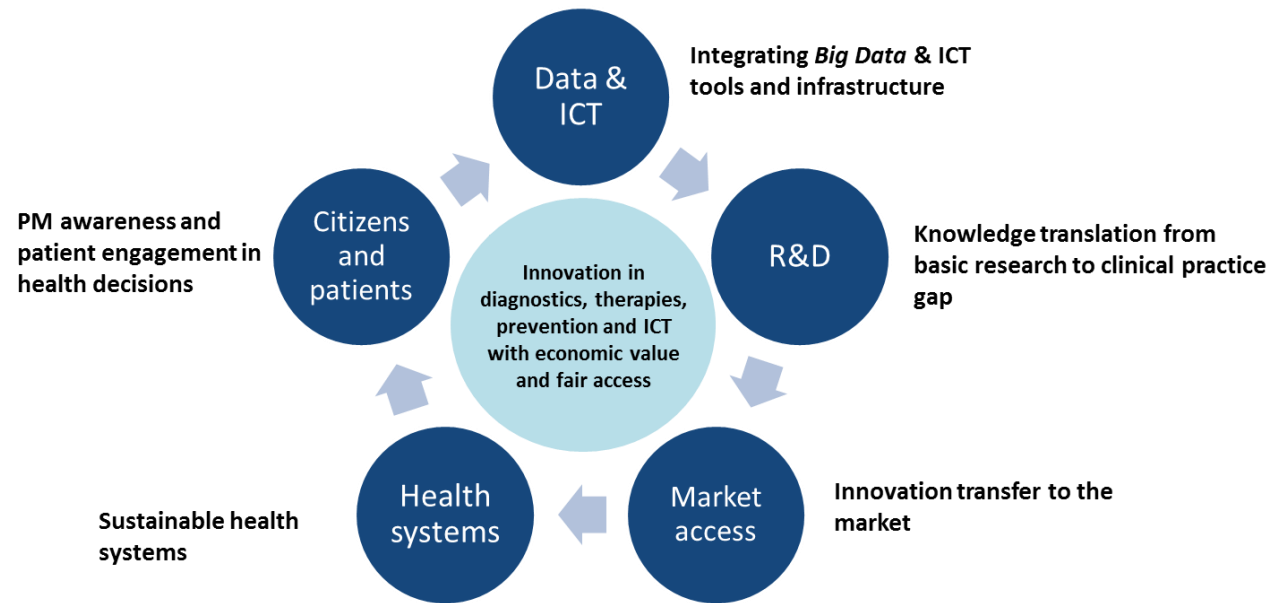
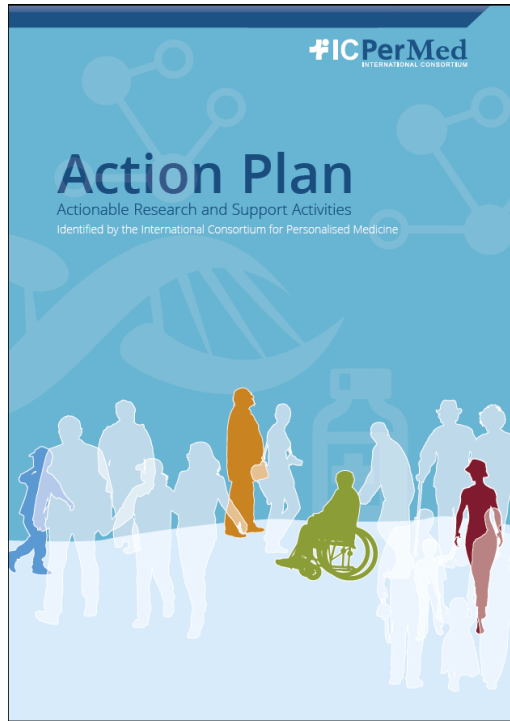
- Identify common strategic goals
- Align research funding
- Share results, data, standards and best practices

ICPerMed aims:

- Establish **Europe as a global leader** in personalised medicine research
- Support the **personalised medicine science base** through a coordinated approach to **research**
- Support research to investigate **the benefits** of personalised medicine to **citizens** and **healthcare systems**
- Pave the way for personalised medicine approaches for **citizens**

ICPerMed Action Plan

- Actionable research and support activities

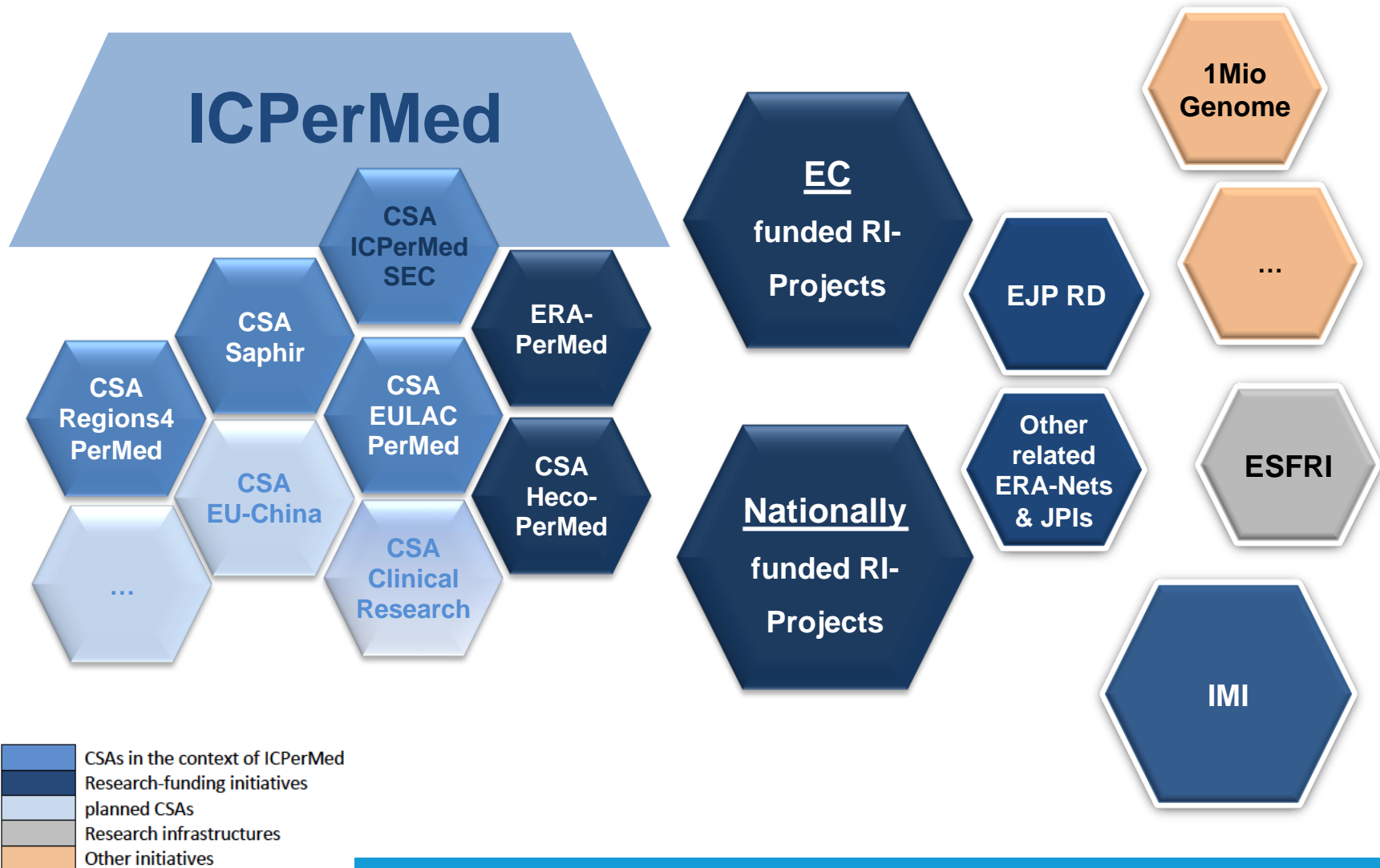


- Inform national and European strategic discussion of research funders

www.icpermed.eu

Released March 2017

ICPerMed Family and related Initiatives



ICPerMed Events & Activities:

- **1st ICPerMed Workshop: Innovative Concepts on Data Generation and Use for Personalised Medicine Research**, Milan June 2017
- **ICPerMed Partnering Tool** to identify and contact potential cooperation partners
- **Mapping Activity:** Survey and database on ongoing funding programmes in PM
- **1st ICPerMed Conference: Personalised Medicine in Action**, Berlin Nov 2018
- **ICPerMed Best Practice Recognition 2018, 2019**
- **2nd ICPerMed Workshop “Citizens, patients and implementation”**, ISCIII, Madrid November 2019
- **2nd ICPerMed Conference – Paris 2020**



ICPerMed Vision for 2030 – how PM will lead to the next generation of healthcare

ICPerMed Vision for 2030

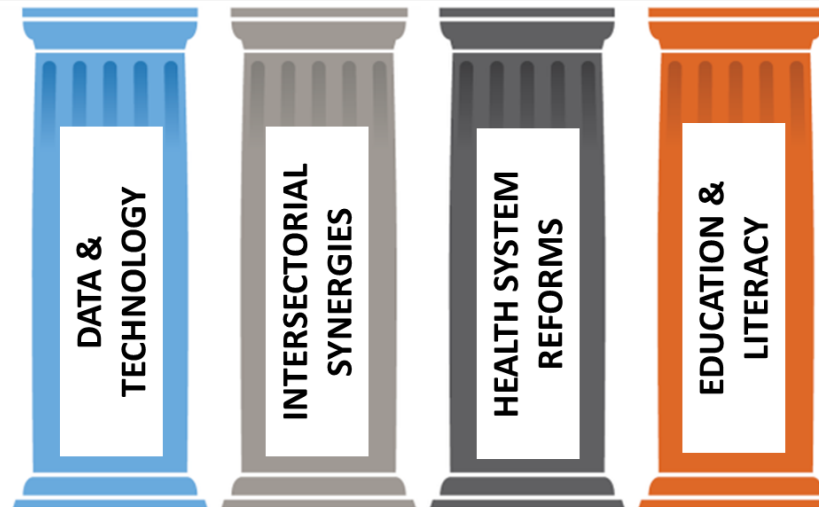
Perspective 1: Informed, empowered, engaged, and responsible citizens

Perspective 2: Informed, empowered, engaged, and responsible health providers

Perspective 3: Healthcare systems that enable personally tailored, optimised, health promotion and disease prevention, diagnosis, and treatment, for the benefit of citizens and patients

Perspective 4: Availability and optimal use of health-related information for optimised treatment, care, prevention, and research

Perspective 5: Economic value by establishing the next generation of medicine



ICPerMed Vision for 2030

Perspective 1: Informed, empowered, engaged and responsible citizens:

- Health data controlled by the informed citizen
- Improved sources of reliable medical information

Perspective 2: Informed, empowered, engaged and responsible healthcare providers

- Routine use of health and research data in the clinic
- Clinical decisions by multidisciplinary teams/novel health professionals
- Clinician-researchers interactions for rapid development and implementation of PM solutions

Perspective 3: Healthcare systems enable tailored, optimised health promotion and disease prevention, diagnosis and treatment

- Equitable access to optimized PM services
- Allocation of resources consistent with societal values
- Health data flow from citizens and healthcare systems to research and regulatory authorities

ICPerMed Vision for 2030

Perspective 4: Available health data for optimised treatment, care, prevention and research

- Electronic Health Records widely used in clinics and research
- Harmonised solutions for data privacy, security and management
- PM based on personal data benefits citizens, minimizing costs and risks

Perspective 5: Economic value by establishing the next generation of medicine

- Balance between investment, profit and shared benefit
- Business concepts and models
- Telemedicine and mobile solutions
- New jobs created

Data and technology

- Digital technology ubiquitous enabler of society, embedded in new generation
- Regulatory frameworks and data managed are adequate
- EHR, wearable devices – continuous real time tracking and monitoring of health – profiling for prevention; requirement for AI for integration

Synergies

- Clinics to research to clinics - fast assimilation of research results in clinics
- Policies of other sectors in health
- Private sector – fast technological development and novel business models

Healthcare system reforms

- Treatment to risk definition – prevention, health promotion
- Societal perspective – equity, economic value and societal benefits
- Investment in tech infrastructure; public ownership of data
- Novel professions, novel working models, networking and data sharing platforms

Education and literacy

- Professionals – digital literacy, biological interpretation, multidisciplinary
- Citizen literacy on PM including ethical issues, regulatory issues and data control
- Informed healthcare managers

PM is not so much a paradigm change but the evolution of medicine in a biotechnology, data and information-rich era

ICPerMed Newsletter



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