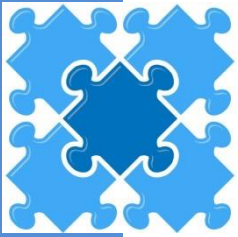


Challenges and targeted opportunities for integrating Innovation into Europe's Healthcare Systems.

Denis Horgan, EAPM Executive Director



European Alliance for
Personalised Medicine



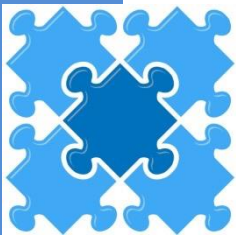
What is Innovation ?

Innovation = translation of knowledge and insight to value

Value=

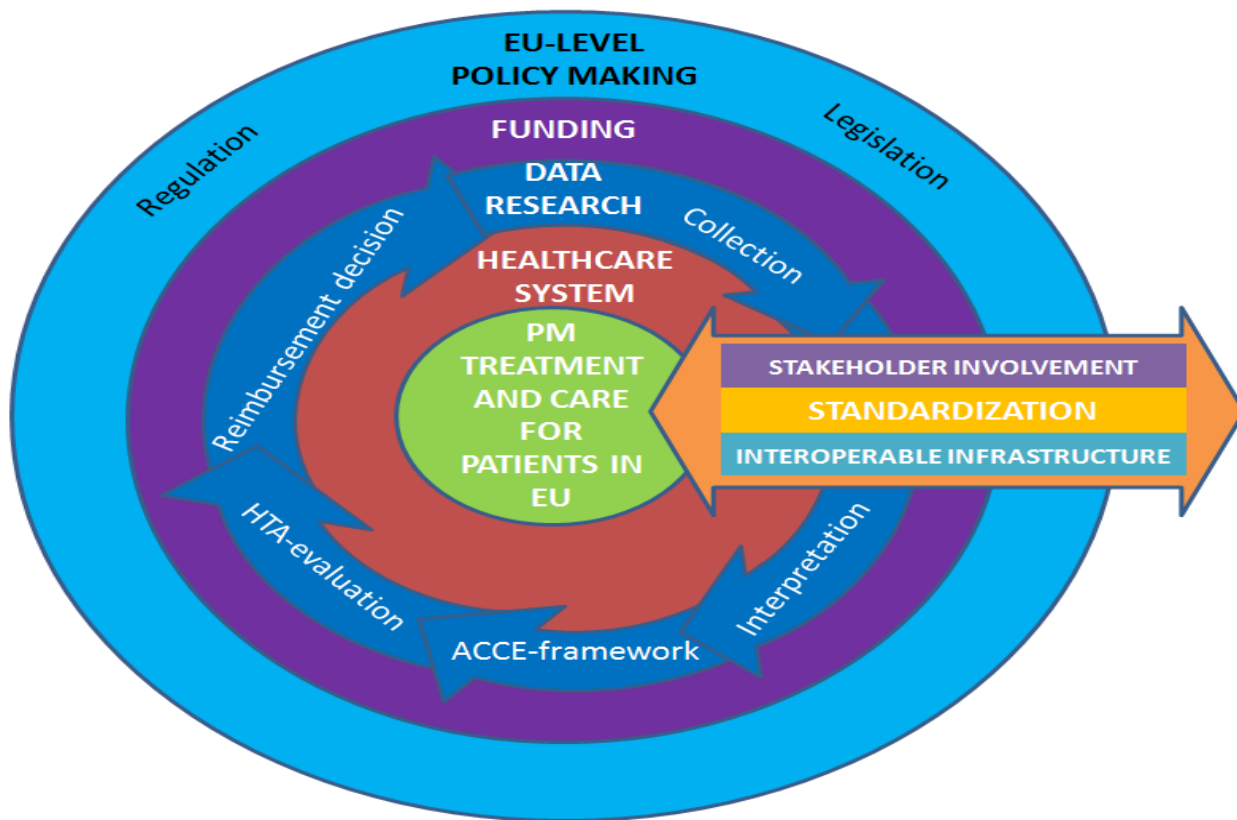
- **Value to patients**
- **Value to Society**
- **Return on Investment**

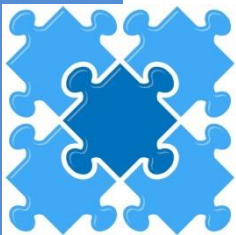




WHY ARE THE BARRIERS? -

Index





2016 Council “Roadmap” to PM

HCP
education

Public education

Specialists
collaboration

Best practices
& MS dialogue

HTA, STAMP

GDPR

Data standards,
collection, sharing
and processing
inc biobanks and e-
HRs

Promote H2020
results

Study on Big Data
for PM

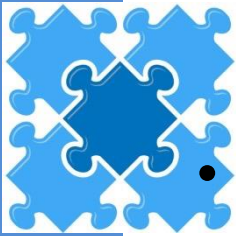
Leverage ERNs for
R&D

Access to PM
therapies

Use genomics for
public health



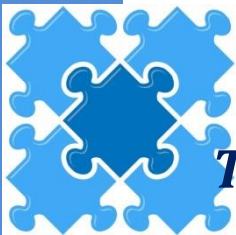
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The Translational Challenge

- There is a **wide research-to-market gap in Europe**. The latest EU innovation scoreboard, published in June 2017, noted that although the innovation performance of the EU is improving, **progress is too slow**. Many of our global competitors are increasing their innovation performance at a faster pace, and **performance gaps remain wide within the EU** itself. **Europe's comparative advantages in education, research, broadband infrastructure and ICT training are not matched by venture capital investments and the number of SMEs introducing innovations, both of which are declining strongly.**
- Europe still faces harsh choices about **whether it is actually going to do what it has so often discussed.**





THE DATA ISSUE

DIFFERENT DATA

**Electronic Health
Records**

Registries

**Digital
phenotypes**

Hospital data

**Health Insurance
Data**

**Patient and physician
surveys**

Biobanks

Genomes





COMMON UNDERSTANDING



Interoperability of healthcare information



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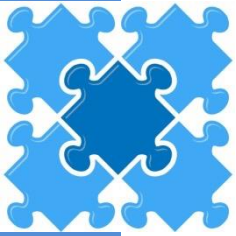
Regional performance groups



Regional Innovation Scoreboard 2017



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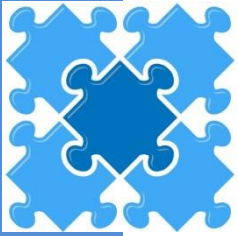
Action is needed in a hundred areas. The need is often recognised.

But **action does not always** follow.

Health services are still:

- struggling with paper-based systems for patients' health records,
- the slow development of disease management plans, or
- the absence of medication plans to improve coordination for patients taking several medications





Big Data Evidence - regulatory oversight of medicines

What is the relevant patient population for gene therapy?

What is the incidence and outcome of opportunistic infections with natalizumab?

What is compliance in the elderly?

What are the long term health benefits of a new treatment compared with standard treatment?

Genetic susceptibility to adverse drug reactions

Genetic basis of responder/non responder status

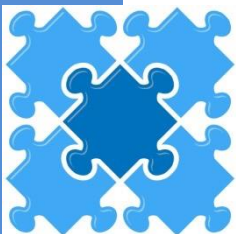
Infection spread following vaccination

Patterns of codeine prescribing genetics and the incidence of death

What is the extent of off label prescribing with SGLT2 inhibitors?



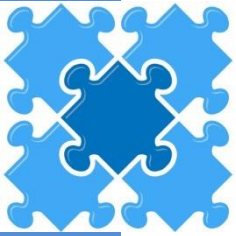
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Finding Benefits

Stakeholder	Benefits
Patients & Families	Increased quality of life, better health outcome and more treatment options
Policy Makers	Provide new ways to improve access to innovative therapies, as well as a framework for how to set proactive healthcare agendas
Clinicians	Provide more effective treatment options to provide patients the best treatment for their individual needs
Society	Equal participation of all people in decision making Ensuring the landless participate in decision making
Society	Productive people, reduced welfare costs
Payers	Costs avoided by reduction in future procedures/long term treatment and better disease management
Pharma, ICT & Diagnostics	Incentive to invest in high risk innovation for diseases with a high unmet need
Healthcare providers	More effective use of resources





In 2018, the European Commission initiated a **formal process of reflection on options**:

Five scenarios were:

1. Carrying on much as at present, with the EU27 focusing on "its positive reform agenda"
2. Nothing but the Single Market, with the EU27 "gradually re-centred on the single market"
3. Those Who Want More Do More: The EU27 allows willing Member States to do more together in specific areas
4. Doing Less More Efficiently: The EU27 focuses on delivering more and faster in selected policy areas, while doing less elsewhere
5. Doing Much More Together: Member States decide to do much more together across all policy areas



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