

IHI Call Days | Call 12 | Topic 3

● Transforming Healthcare: Personalized, Patient-Centred Innovations for All

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Link to the IHI brokerage platform:

- [Proposal Link](#)
- [Profile Link](#)

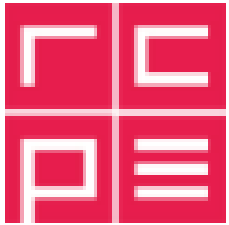


[Proposal Link](#)

Our Developing Consortium



Ghent University
(Belgium)



Research Centre
Pharmaceutical Engineering
(Austria)



Centre Pharmaceutical
Innovation (UK)



F. Hoffmann-La Roche Ltd.
(Switzerland)



UCB S.A.
(Belgium)

- Core Competences:
 - Drug Development and Formulation
 - Pharmaceutical Manufacturing Innovation
 - Material Characterization
- Strongly Connected with:
 - Equipment Manufacturers
 - University Hospitals

Currently coordinated by UGent/CESPE:
<https://pharmeco.eu/> (IHI Call 4, 45 M EUR)
'Advancing safe and sustainable by design practices
in pharmaceutical manufacturing'



Challenges and Objectives

Specific Objective 3:

Demonstrate the feasibility of people-centred, integrated healthcare solutions

Unmet public needs we aim to address:

- Focus populations: paediatric, geriatric, & dysphagia patients with chronic diseases
- Low patient adherence for solid oral dosages – lack of understanding on acceptability
- High burden on healthcare-givers in management of chronic diseases
- Fixed-dose medications fail to cater to physiological variations in individual patients
- Limited availability of/access to medicines for small patient populations

³ EMA Guidelines:

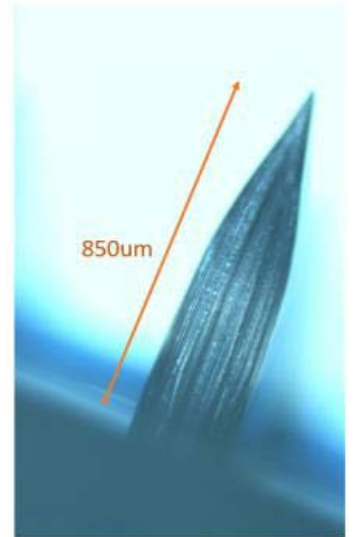
<https://www.ema.europa.eu/en/pharmaceutical-development-medicines-use-older-population-scientific-guideline>

<https://www.ema.europa.eu/en/pharmaceutical-development-medicines-paediatric-use-scientific-guideline>

Our Approach to Solve the Problem

Innovate Formulation & Manufacturing:

- Solid Oral Dosage Forms Tailored to Patient Needs
- Pain-Free and Non-Invasive Therapies
- 3D Printing of Custom Dosage Forms



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Personalize Treatments:

- Patient Monitoring & Smart Drug Delivery Systems

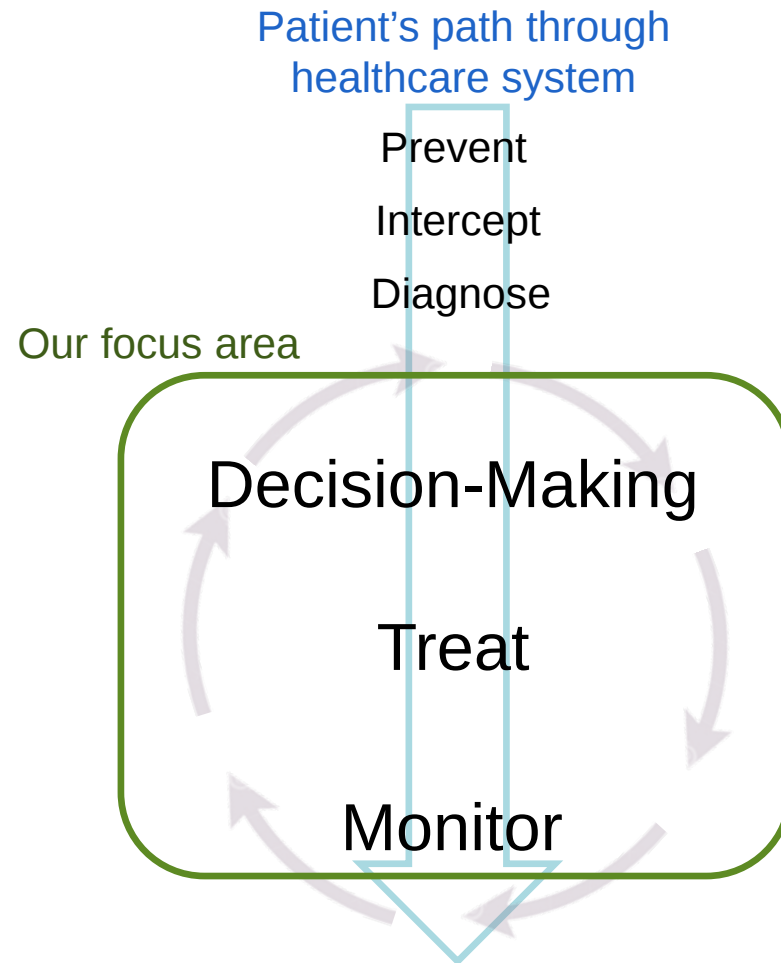
Integrated sensors (wearables), preference surveys, and digital tools (analysis of patient data, treatment algorithms)

Increase Healthcare & Market Adoption:

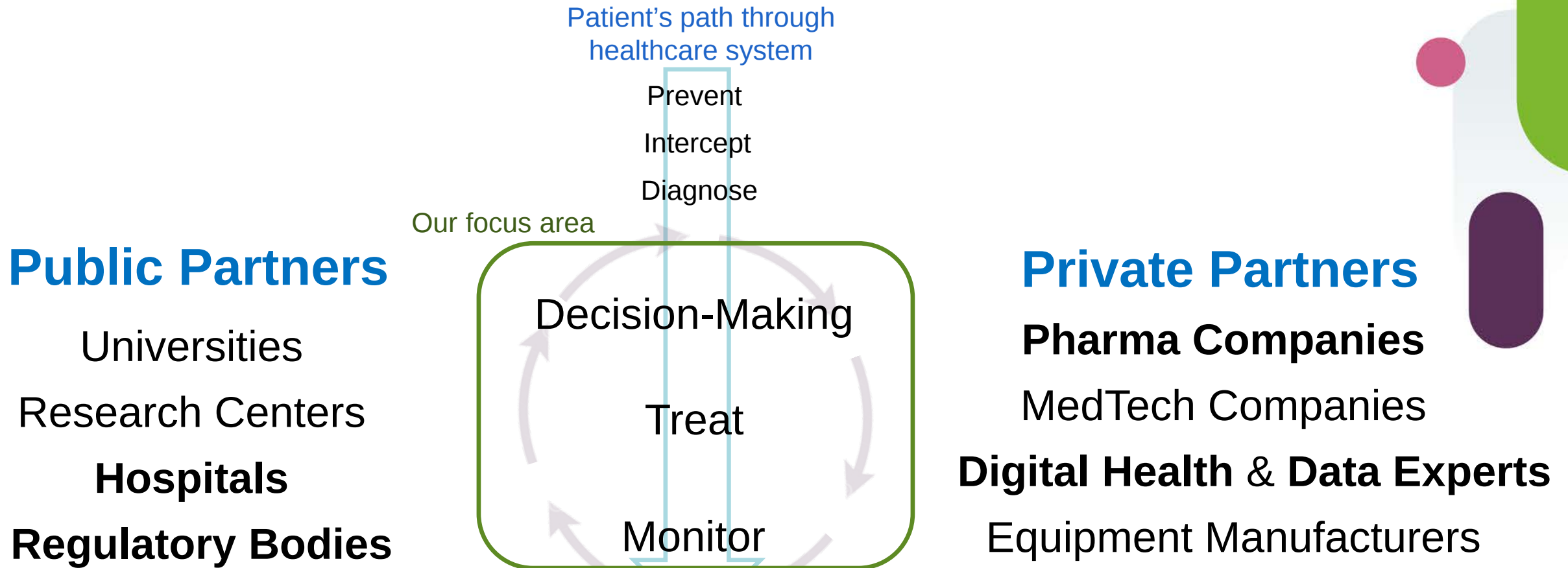
- Quality and Regulatory Compliance

Streamline regulatory approval and foster market acceptance

Envisioned Scope and Consortium



Envisioned Scope and Consortium



Need to combine fractured solutions from numerous fields into an integrated one

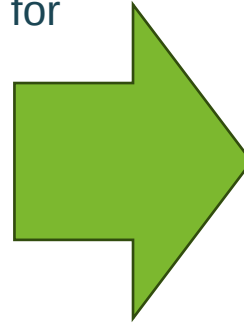
Current Gaps in Consortium Capabilities

- We are looking for partners that can:
 - Recruit for and carry out **usability, acceptability, and adherence studies** eg. Hospitals
 - Advise on current clinical needs and provide **guidance for clinical trials** eg. Pharma Companies
 - Develop patient **models** and treatment **algorithms** eg. Digital Solution Providers
 - Advise on **regulatory strategy** for novel dosage forms, drug–device combinations eg. Regulatory Bodies/Researchers
- @consortiums with similar/complementary research ideas: lets join forces!

Outcomes... ...and Impacts



- **Further develop** personalized 3-D printed, orally-disintegrating, or mini- tablets, and pain-free delivery methods
- **Produce medications that simplify** treatment regimes for both patients and care-givers
- Advance flexible drug systems (e.g., multiparticulates) to allow **dose adjustments during trials**
- **Generate real-world data** from wearables and apps for data-driven innovations



- Position EU and pharmaceutical companies as leaders in patient-centric solutions.
- Reduce non-adherence - a major public health challenge
- Improve study outcomes and speed up development timelines
- Facilitate personalized therapies, post-market surveillance, and enhanced patient engagement