## SLUTKONFERENS PCP BOOST

Title:

Region Jämtland Härjedalen's experience from participating in two Pre-Commercial Procurement projects and lessons learnt from the three phases in a PCP (concept, prototyping, test)

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INCAREHEART project info



01

HSMONITOR project info



PCP – PPI overview & benefits



Lessons learnt from the 3 phases in a PCP







Innovative ICT-enabled integrated care solutions to advance multidisciplinary health and care for patients with chronic heart failure







# Chronic Heart Failure (CHF)



### 15 million people living with CHF in Europe

4% to 10% hospital death rates

\$108 billion p.a. managing heart failure costs





To procure R&D services that deliver an ICT-enabled integrated care solution to effectively support the management of a multidisciplinary care and support model for people living with **C**hronic **H**eart **F**ailure





MINISTRY OF HEALTH Turkey



REGION OF CENTRAL MACEDONIA Greece 5 procurers

1,320,000

people living with heart failure

UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II Italy



SANTA CASA DA MISERICORDIA DA AMADORA Portugal €4,650,000 for procurement



REGION JÄMTLAND HÄRJEDALEN (LEAD PROCURER) Sweden

Source: <u>https://flickr.com/</u> (Labelled for non-commercial reuse)

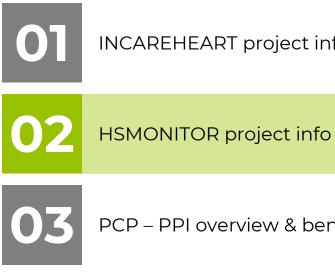


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024

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Food for thought



### HSMonitor - some facts

- Title: Pre-commercial Procurement of innovative ICT-enabled monitoring to improve health status and optimise hypertension care
- Instrument: HORIZON 2020
- Type: Pre-commercial procurement
- Grant Agreement Number: 856698
- Acronym: HSMonitor

Duration: Oct '19 – Feb '23 (3 ½ years)

- ▶ **Budget**: €5,932,980
- Carried out by ten partners supported by an Advisory Board
- Five procurers representing a population of over 96 million people, of which over 31 million have hypertension



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HSMONITOR project info

02

 $\mathbf{O}\mathbf{1}$ 

PCP – PPI overview & benefits

04

Lessons learnt from the 3 phases in a PCP

Food for thought



## PCP and PPI are complementary, and the core difference is the readiness (i.e. risk) of an innovative solution

PCP Introduction | PCP and PPI

	РСР	PPI
When?	<b>Requires R&amp;D</b> to get new solutions developed. Problem clear, but pros/cons of <b>competing</b> <b>solutions</b> not compared/validated yet. No <b>commitment to deploy yet</b> .	Requires solution which is <b>almost on the</b> <b>market/already on the market</b> in small quantity, but not meeting public sector requirements for large scale deployment yet. No R&D involved.
What?	Public sector buys R&D to steer development of solutions to its needs, gather knowledge about pros/cons of alternative solutions, to avoid supplier lock-in later.	Public sector acts as launching customer/early adopter/first buyer for innovative products and services that are newly arriving on the market.
How?	Public sector buys R&D form <b>several suppliers</b> in parallel (comparing alternative solution approaches), in form of <b>competition evaluating</b> <b>progress after critical milestones</b> , risks and benefits of R&D) shared with suppliers to maximise incentives for the wide commercialisation.	Public sector acts as facilitator establishing a buyers group with critical mass that triggers industry to scale up its production chain to bring products on the market with desired quality/price ratio within a specific time. After a test and/or certification, the buyers group purchases a significant volume of products.



### A Win-Win for everyone!

#### **Benefits for taxpayers**

- Access to **better public services;**
- More innovative and globally competitive society;

- Attractive for foreign investment;
- Increased **employment** demand.

#### **Benefits for procurers**

- Solutions steered to public sector needs;
- Increase quality of services;
- Knowledge about pros/cons of alternative solutions;
- Procurers get to **select the best option**.

#### **Benefits for suppliers**

- Opportunities to gain leadership in a sector or to enter new markets;
- Retention of IPR ownership;
- Testing under real world conditions;
- Shortening time-to-market for innovative products/services;
- Enhance collaboration between start-ups, SMEs and large corporations.



### Results from completed PCP and PPI

### Opening a route-to-the market for new market players:

73,5% of PCP contracts are won by SMEs, 61,5% of total values of PCP contracts, more than twice the average in public procurement across Europe (29%).

#### Impact on stimulating cross-border company growth

33,1% of PCP contracts are awarded cross-border, 20 times more than the average in public procurement across Europe (1,7%).

#### Bringing research results to the market

30% of contracts have universities or research centers as partners in the winning consortia (often together with university startups)

#### Contribution to growth and jobs in Europe

Nearly all bidders (99,5%) are doing 100% of the R&D for the PCP contract in Europe

#### Steady business growth

 ${\sim}50\%$  of all companies are already generating revenue from commercialising their PCP solution

#### Deployment of solutions by procurers from the project

Procurers from 55% of the completed PCPs have already deployed developed solutions



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02

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HSMONITOR project info

03

PCP – PPI overview & benefits

Lessons learnt from the 3 phases in a PCP

05 Food for thought





#### All Phases:

- Co-design process
- Multi-disciplinary team approach
- Patient engagement, healthcare professionals onboard in all phases

#### • Pre-Phase, call for tender preperation

- Challenge brief
- Procurement, legal, IT, clinical, business expertise required

#### • Phase I:

- Outcome: Detailed report describing the solution and a detailed plan for the prototyping and testing activities in Phases II & III.
- Elaborate the solution design, its technical specifications and development approach
- Demonstrate the technical, medical, financial and commercial feasibility of the proposed concept, approach and solution to meet project requirements
- Integrated all recommendations and feedback received by the Buyers Group
- Identifies data flows and interfaces





#### • Phase II:

- Outcomes:
  - Prototype specification (v1)
  - Prototype demonstration (v2)
  - Plan for development of a limited volume of solutions for field-testing
  - Updated cost/benefits forecast including a preliminary business plan
- Ethics approvals
- Authorisation process to deploy any system either on premises or on cloud
- GDPR compliance and Data Processing Agreement (DPA) between each pilot and supplier

#### • Phase III:

- Outcomes:
  - Implementation in testing sites
  - Overall assessment and success verification
  - Updated cost/benefits forecast, including a preliminary business plan
- Cloud deployment IT infrastructure readiness? Integration with EHR? Datasets for training AI and ML? Security?
- Recruitment of patients by HCP
- Pilot testing helpdesk troubleshooting first line support both for clinical and technical issues
- Impact assessment evaluation



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02

 $\mathbf{O}\mathbf{1}$ 

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03

PCP – PPI overview & benefits

04

Lessons learnt from the 3 phases in a PCP

Food for thought



### Public sector innovation is about new ideas that work at **creating public value**

Characteristics of public sector innovation:

- **Novelty**: innovations introduce new approaches, relative to the context where they are introduced
- **Implementation**: innovations must be implemented, not just remain as an idea
- **Impact**: innovations aim to result in better public results including efficiency, effectiveness, and user or employee satisfaction
- Public sector innovators should not innovate in a **vacuum** but in a structured organisational environment
- Asking public employees to innovate may not go very far if the organisational environment **is not conducive in supporting innovation**





### Organisational attributes influencing public sector innovation

**Generating and sharing ideas:** build the capacity, improve public decisions, share knowledge

**Empowering the workforce:** cultural dimension

**Navigating rules and processes:** legal/regulatory framework, budgeting processes and regulations, approval processes

**Reviewing organisational design:** structure teams, break down silos and work in partnerships across organisations and even sectors

Public sector innovation takes root when the knowledge of a problem and its potential solutions come together **with people who are able and motivated to do something** about it.

These people also need **the opportunity and the resources** to innovate, and this suggests the need to consider how the rules, laws, and bureaucratic processes that regulate the public sector can be designed to encourage public sector innovation to flourish





### Barriers to public section innovation





Innovation is practice, not theory

### Thank you for your time







