



Using innovation procurement to accelerate the uptake of digital health solutions addressing unmet needs

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Policy Brief: Innovation procurement as an instrument to accelerate use and uptake of digital health technologies that address unmet needs

Innovation procurement offers significant potential to address unmet needs of European healthcare systems, aiming to maximise the use of digital technologies to deliver timely and high-quality care to their citizens. This policy brief explores innovation procurement as a policy instrument, detailing its key principles, benefits, relevant guidance, supporting initiatives, and policy recommendations to ensure its effective use in accelerating the adoption of digital technologies in health and care.

Innovation procurement in the context of EU public procurement

Public procurement is the process by which public authorities, such as government departments or local authorities (i.e. public buyers representing the demand side), purchase works, goods or services from economic operators, such as companies or other organisations (i.e. suppliers representing the supply side).

Public procurement accounts for about 14% of the European Union’s gross domestic product (GDP), a significant portion of which is procurement in the health sector.

In light of rising healthcare costs in the EU, public procurement has increasingly been promoted as a tool for enhancing efficiency in healthcare and contributing to better health outcomes.

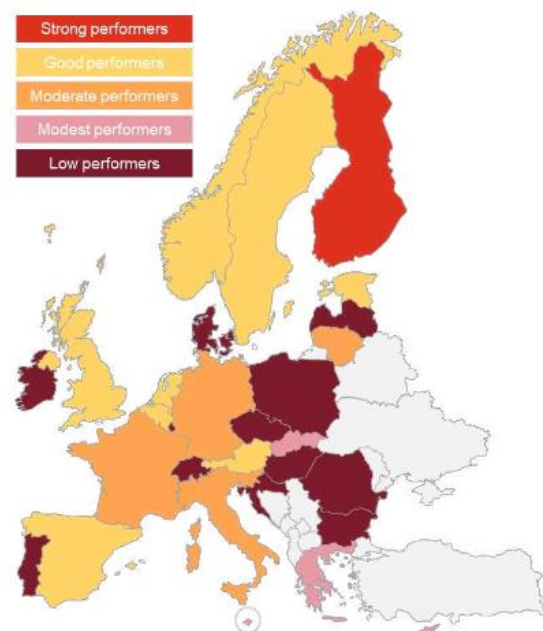
Yet, its potential in creating a market for innovative products and services remains underutilised. (European Commission 2024)

This is particularly true in the field of digital health, characterised by a very dynamic and ever-evolving environment where technologies such as Machine Learning, Artificial Intelligence, and Telemonitoring are still not fully deployed in supporting health systems as part of routine health and care services at national, regional, or local levels.

Strategic use of innovation procurement in the EU

The European Commission periodically monitors the EU’s national policies on the public procurement of innovation. Monitoring

indicators, such as whether EU Member States have an official definition of innovation procurement embedded into national policies, or whether action plans to foster innovation procurement are in place, help provide an overview of the progress across the EU in terms of the strategic use of innovation procurement. The latest monitoring analysis from 2021 showed that overall, innovation procurement



policy frameworks across the EU operated at just above one-fourth of their full potential.

Source: (pwc 2021)

Key aspects of innovation procurement

Public procurement of innovation refers to the development of innovative solutions through the procurement of research and development services and/or procurement of outcomes of innovation activities. The solutions aim to fill specific unmet needs of the procurers and need to be developed, because they do not exist, are

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not available on the market yet, or are not widely available.

Procurement of innovation typically involves three main steps:

1. Preparatory stage (before procurement) which includes, among others, identification and assessment of needs, their verification against what the market can deliver (open market consultation), drafting of the tender documents.
2. Tendering stage (procurement) which focuses on conducting the tender procedure (publication of tender documentation, tendering, evaluation of offers, awarding the contract(s)).
3. Contract implementation stage, which includes continuous monitoring and assessment of the produced results and any implementation works required.

(EAFIP 2024)

Public procurement as a policy instrument

In its 2021 opinion on the public procurement in healthcare systems, the Expert Panel on Effective Ways of Investing in Health (EXPH) traced the main ideas behind procurement of innovation back to the 1970s. In 2004, the governments of France, Germany and the United Kingdom issued a position paper to the European Council calling for the use of public procurement of innovation across Europe to spur innovation. This development was manifested in reports such as that by the Aho Group Report, which identified grand challenges, where policies that support demand for innovation could be used more: digital health, pharmaceuticals, energy, environment, transport and logistics, security and digital content. (Expert Panel on Effective Ways of Investing in Health (EXPH) 2021)

Among demand-side innovation policies, public procurement is increasingly recognised as a potential strategic instrument and a policy lever for achieving government policy goals, such as innovation, the development of SMEs, sustainable green growth and social objectives

like public health and greater inclusiveness. (Edquist, et al. 2015)

Given the scale of public procurement, governments, among other actors, can influence demand on national or sub-national levels, and can also create a signalling effect as lead user and influencing the diffusion of innovations more broadly. As a result, the role of the purchaser in the public sector is changing to include more elements of active risk and benefit management. In the same way, to reap the benefits of procurement for innovation, the envisioned policy changes have to be well planned. The implementation of strategic use of procurement for innovation requires strong

Demand and supply – policy implications

In the field of innovation policies, governments have traditionally directed their efforts towards the supply side, ensuring that the private sector operates in an environment conducive to innovation. In recent years, however, the role of “demand-side policies” to support innovation has gained in prominence and has been receiving growing interest from many countries. Governments recognise that innovations materialise when there is a demand for innovation. Therefore, effective policies to support innovation have to focus on both supply and demand conditions.

(OECD 2011)

political commitment, strategic management, capabilities to manage new organisational processes and new ways of working across all levels of government. (OECD 2015)

Joint innovation procurement in the EU – developing solutions for common unmet needs

Many of the challenges in Europe related to the use and scaling up of digital health are common. Since 2007, the European Commission has been providing support to public procurers in the form of guidance and

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funding opportunities in the healthcare and other sectors.

Several dedicated funding forms are available, including competitive dialogue, pre-commercial procurement (PCP), public procurement of innovation (PPI), innovation partnerships. (European Commission 2021)

PPI is used when challenges can be addressed by innovative solutions that are nearly or already in small quantity on the market and do not require new research and development.

Examples of PCP and PPI projects

- [eCARE](#): Supporting continuum of care for frailty prevention in old adults
- [HSMonitor](#): Monitoring to improve health status and optimise hypertension care
- [MAGIC](#): Empowering patients to optimise their recovery from a stroke
- [RELIEF](#): Improving the monitoring and relieve of chronic pains
- [PROEMPOWER](#): Disease self-management to address the diabetes pandemic
- [ANTISUPERBugs](#): Detecting resistant microorganisms to prevent infections
- [RITMOCORE](#): Innovative treatment for elderly patients with bradycardia
- [INCAREHEART](#): multidisciplinary health and care for patients with chronic heart failure
- [DYNAMO](#): Modelling and dynamic assessment of integrated health and care pathways enhancing response capacity of health systems

PCP can be used when there are no near-to-market solutions yet and new research and development is required. PCP can then compare the pros and cons of alternative competing solution approaches. This will in turn enable to gradually de-risk the most promising innovations step-by-step through solution design, prototyping, development and first product testing. (European Commission 2024)

Networks and initiatives that support public procurers of innovation

Over the last years, the topic of innovation procurement and its use in Europe has been steadily expanding, supported by a number of initiatives aimed at promoting its use, providing valuable guidance and tools, stimulating dialogue and cooperation among demand and supply side, and fostering the development of new solutions to address key challenges in healthcare and other sectors.

[Procure4Health](#) is a community of health and social care innovation procurers dedicated to promoting innovation procurement through knowledge sharing and capacity building; networking and matchmaking; identification of common needs and the launch of joint actions to address them.

[ProcurCompEU](#) is a tool designed by the European Commission to support the professionalisation of public procurement using 30 key competences.

[SPIN4EIC](#) is an initiative of the European Innovation Council (EIC) which aims at enhancing the ability of the supply side (EIC innovators) to access procurement markets both in Europe and worldwide.

[Procura+ Network](#) is a network of European public authorities that connect, exchange and act on sustainable and innovation procurement

The [European Assistance for Innovation Procurement \(EAFIP\)](#) promotes good practices and reinforces the evidence base on completed innovation procurements across Europe.

[InnoBuyer](#) is coordination and support action that aims to become a testing ground towards the implementation of a demand-driven methodology that brings together procurers and solvers to jointly co-create innovative solutions, and speed-up the process leading to a concrete innovation procurement.

[Procure Innovation EU](#) is a training programme supported by supported by the European

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Innovation Council and SMEs Executive Agency (EISMEA) and Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs. It offers training to public buyers to enhance the uptake of strategic public procurement.

The **Big buyers Initiative** (2020-2022) was a community dedicated to enabling dialogue with public procurers, pooling resources and maximising power and impact of procurement activities.

[Innobroker](#) (2018-2020) was a network of public buyers. It aimed at supporting the identification of procurement needs and helped to connect them to suitable suppliers, while piloting five regional procurement of innovation broker schemes.

Impacts of innovation procurement

Based on more than 40 completed and ongoing joint procurement projects, many of which related to the health sector, a number of key benefits can be observed, most of which are also applicable to national and regional innovation procurement projects:

- **Opening the route-to-the market for new market players.** For example, 71,5% of total value of all PCPs contracts are won by small and medium sized enterprises (SMEs) through direct award (SME as sole or lead bidder).
- **Helping also established market players bring products to the market:** 16% of contracts are won by large companies as single bidder. 19% of contracts consist of consortia of SMEs and larger companies bringing innovative products together to the market.
- **Facilitating cross-border company growth:** 33,1% of PCP contracts are awarded cross-border, 25 times more than the average in public procurement across Europe (1,7%).
- **Bringing research results from the university to the market:** 30% of contracts have universities or research centres as partners in the winning consortia (often together with university start-ups).

- **Contributing to growth and jobs in Europe:** Nearly all bidders (99,5%) are doing 100% of the R&D for the contract in Europe

Policy recommendations at a glance

- Continue to adopt national legal and regulatory frameworks which foster the use of innovation procurement.
- Continue to provide guidelines and tools to support the application of innovation procurement.
- Provide financial incentives and support.
- Strengthen capacity building and training.
- Promote collaboration and knowledge sharing through sustainable networking.
- Monitor and evaluate impact.
- Consider allowing variations in the procurement to make it more agile.

- **Reducing the R&D risks for procurers and encouraging commercialisation of results by suppliers:** Leaving the IPR ownership rights with suppliers reduced the R&D cost for procurers on average by 50% as suppliers see wider commercialisation potential for their solutions.
- **Improving the quality and efficiency of public services:** All completed PCPs have delivered working solutions that can contribute to the strategic goals of the procurer. 60% of procurers use PCP to obtain more open, interoperable solutions.

(European Commission 2021)

Policy recommendations for fostering the use of innovation procurement to accelerate use and uptake of digital health technologies that address unmet needs

Continue to adopt national legal and regulatory frameworks which foster the use of innovation procurement. All EU Member States should enable the use of this policy instrument in order to foster innovation and the development of solutions which are tailored to the needs of public procurers.

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Continue to provide guidelines and tools to support the application of innovation procurement. While the popularity of PCP and PPI is growing, funding interest for such grants is still relatively low compared to other instruments, such as innovation actions within the Horizon Europe Programme. Procurers should be supported in following the legal requirements of the instrument, while focusing on the content-related activities, such as elaborating good unmet needs/requirements, conducting thorough open market consultations with suppliers, and making sure that end users are involved throughout the process to ensure acceptance and use of the final solutions.

Provide financial incentives and support. Ensure there are sufficient programs, grants, and financial incentives both at national and EU level to support innovation procurement. Consider the use of coordination and support actions as prequels to innovation procurement that help to elaborate unmet needs and requirements and form a community of interested suppliers, especially relevant for emerging topics which require more preparation before launching procurement procedures.

Strengthen capacity building and training. Implement training programs and workshops for public procurement officials and other stakeholders to build their capacity and knowledge on innovation procurement. This should cover topics such as market consultation, risk management, and intellectual property rights.

Promote collaboration and knowledge sharing through sustainable networking. Encourage collaboration between public authorities, industry, academia, and other stakeholders. Create platforms and networks for knowledge sharing, best practice exchange, and joint procurement initiatives. Ensure such platforms work towards becoming sustainable and not contained within limited funding periods.

Monitor and evaluate impact. Establish mechanisms for monitoring and evaluating the impact of innovation procurement activities. This should include the development of key performance indicators (KPIs) and regular reporting to assess the effectiveness of policies and identify areas for improvement.

Consider allowing variations in the procurement to make it more agile. For example, using small procurement budgets combined with shorter execution times can make the procurement instrument more accessible to less experienced procurers.

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