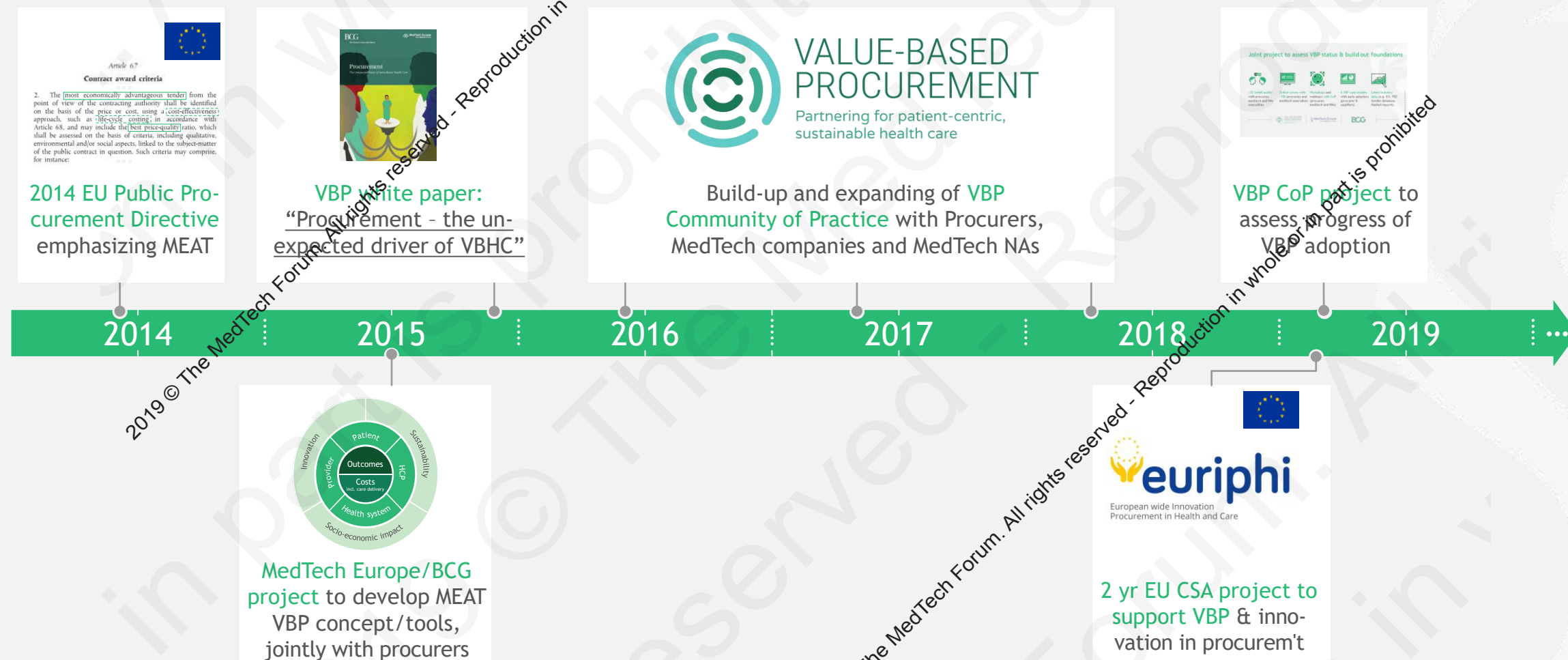


New Horizons in value-driven Procurement, will the EU accelerate change ?

MedTech Forum 2019

Multi-year journey underpinning VBP evolution to date



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Objectives of this session

- Deep dive on medtech actions steps for VBP adoption
- Share EU Commission perspective on fostering innovation in HC
- Highlight options for innovative tendering in EU directives



Medtech actions for VBP adoption (Götz Gerecke)

Recap from our session yesterday on VBP adoption



Momentum is building across Europe



Broad adoption of VBP framework in assessed cases



Early adopters are reaping substantial benefits



VBP seen as important driver of future success



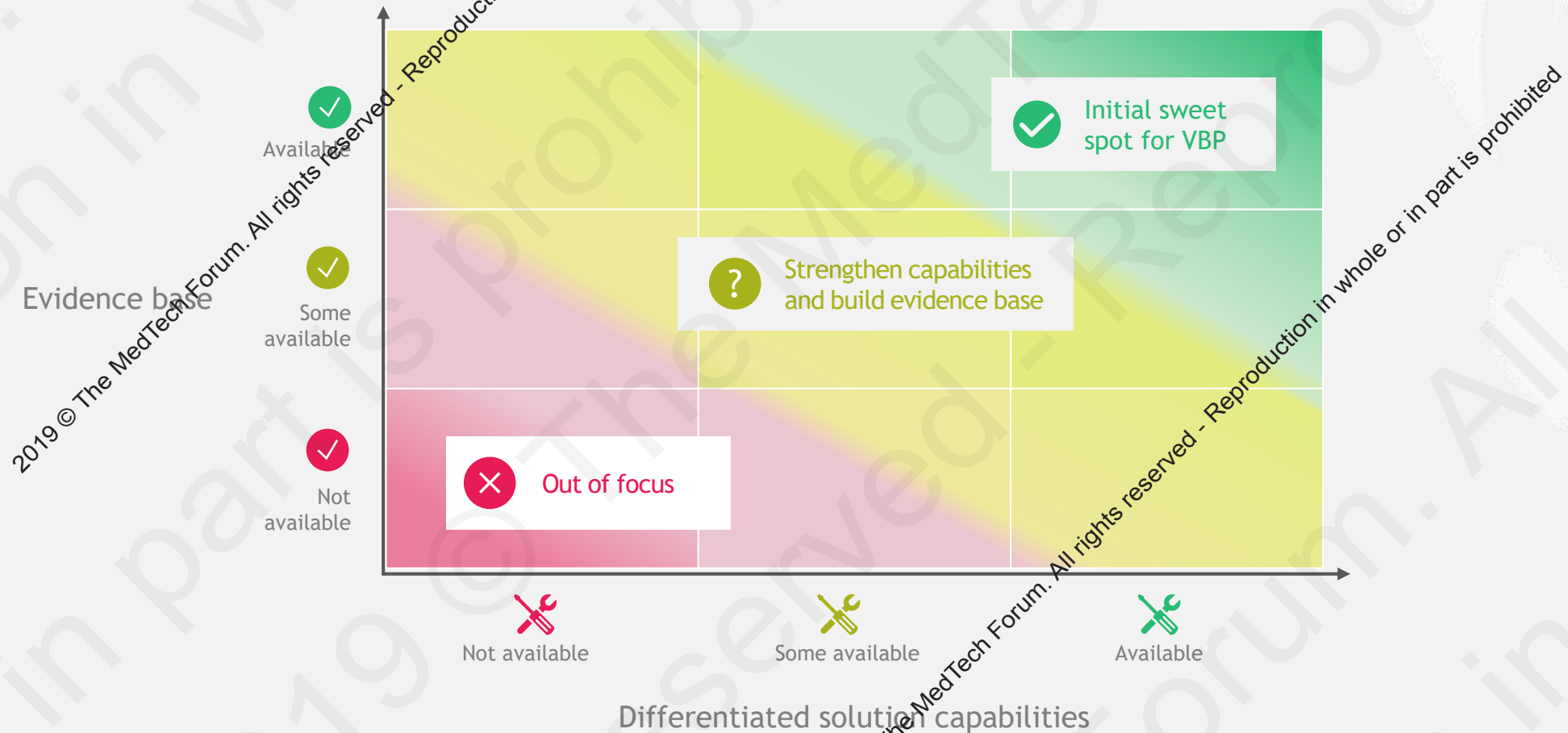
But there is still a lot of work to do

Recommended action steps for medtech

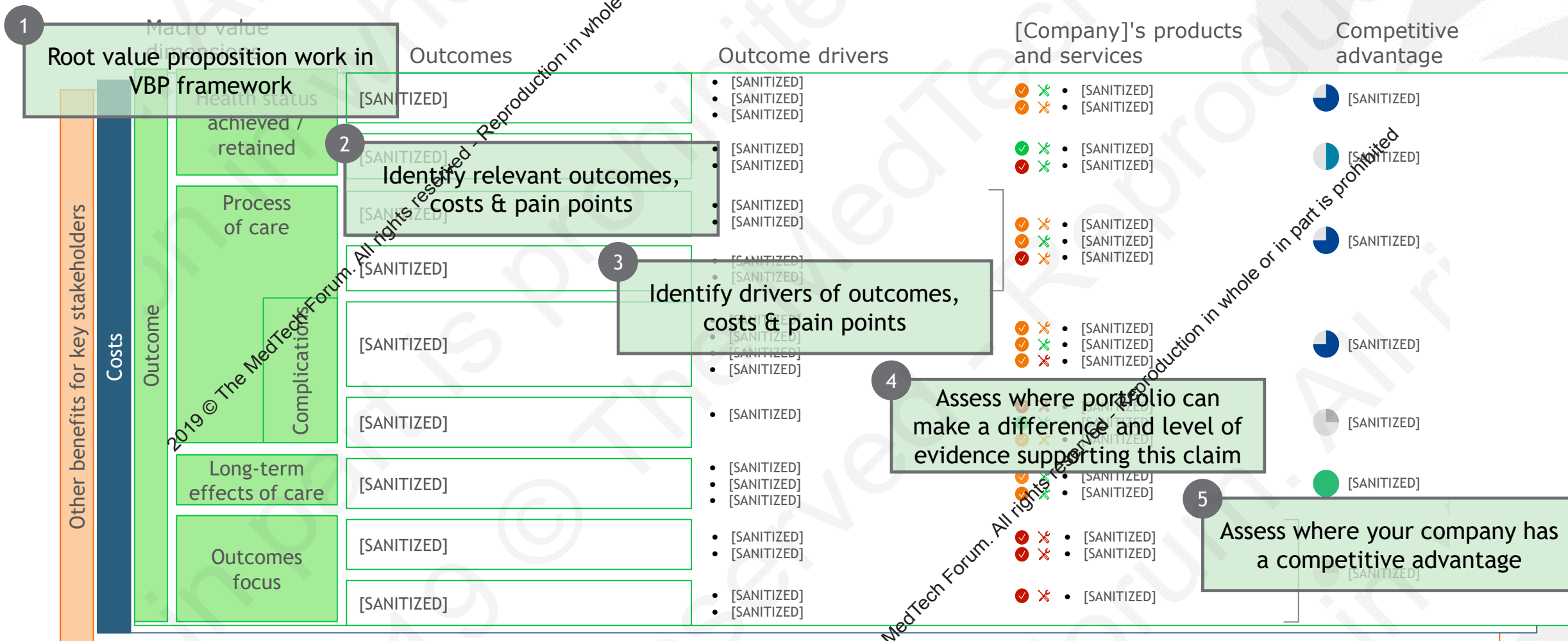


Source: VBP case study deep dives; VBP belief audit interviews; VBP online survey; BCG analysis

Prioritize where to play in VBP



Develop value propositions around VBP framework



Note: Dependencies/interactions between outcome dimensions
Source: BCG

Evidence

- ✓ Available
- ✗ Some available
- ✗ NOT available

Internal capabilities

- ✓ Available
- ✗ Some available
- ✗ NOT available

Competitive Advantage

- Strong vs. top tier players
- Medium
- Strong vs. low cost players
- Marginal

Enable commercial teams



VBP awareness and understanding



Clear, evidence based messaging



Practical VBP toolkit



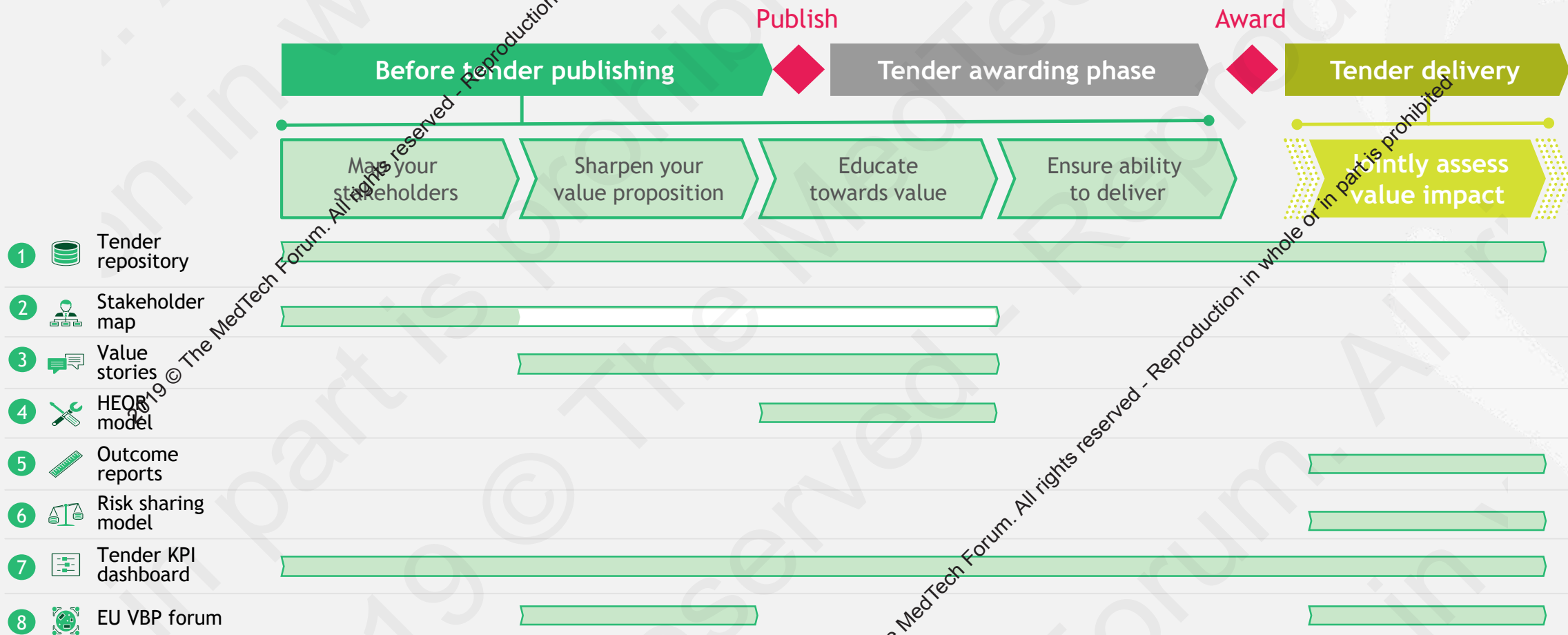
VBP tender & KAM excellence



Interactive VBP simulation games



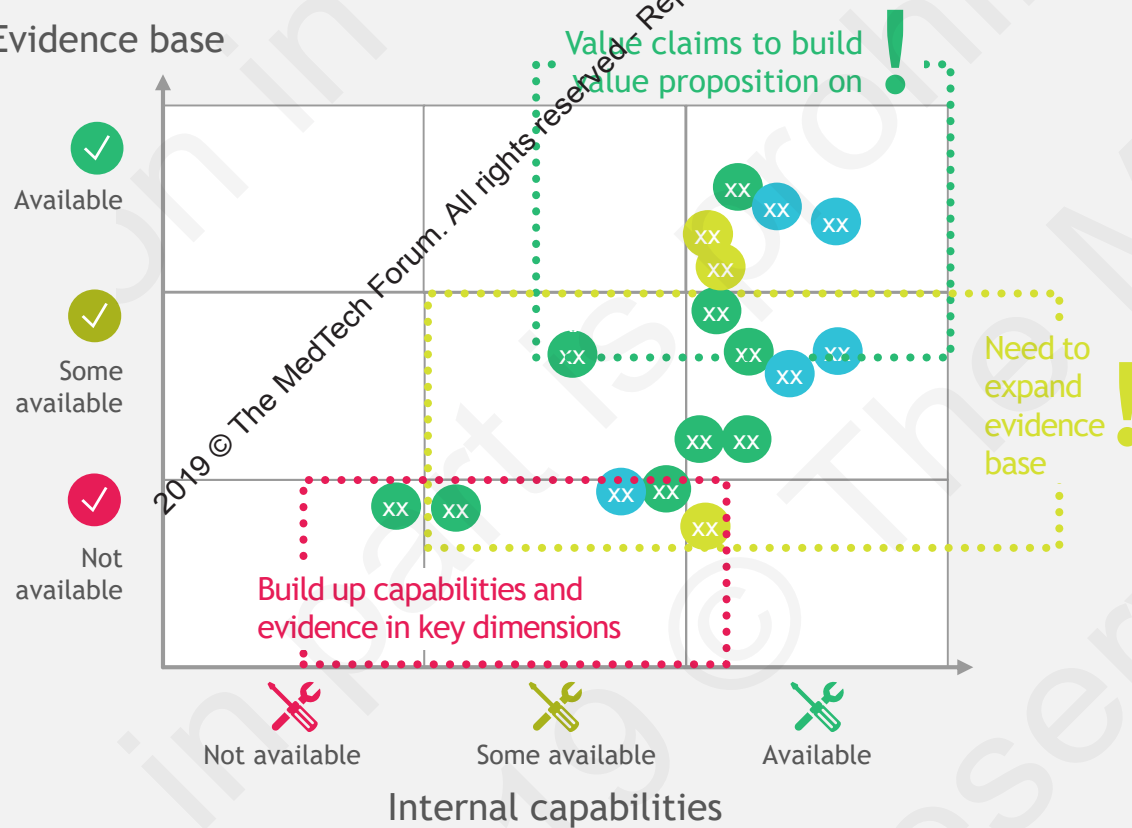
Rigorously execute, starting with prioritized tenders



Learn, collect real world data and fill evidence gaps

Portfolio assessment

Evidence base



Identify and systematically execute evidence investment priorities

- Improve clinical & RWE generation model
- Partner with customers to collect RWE
- Refine VBP approach & value proposition

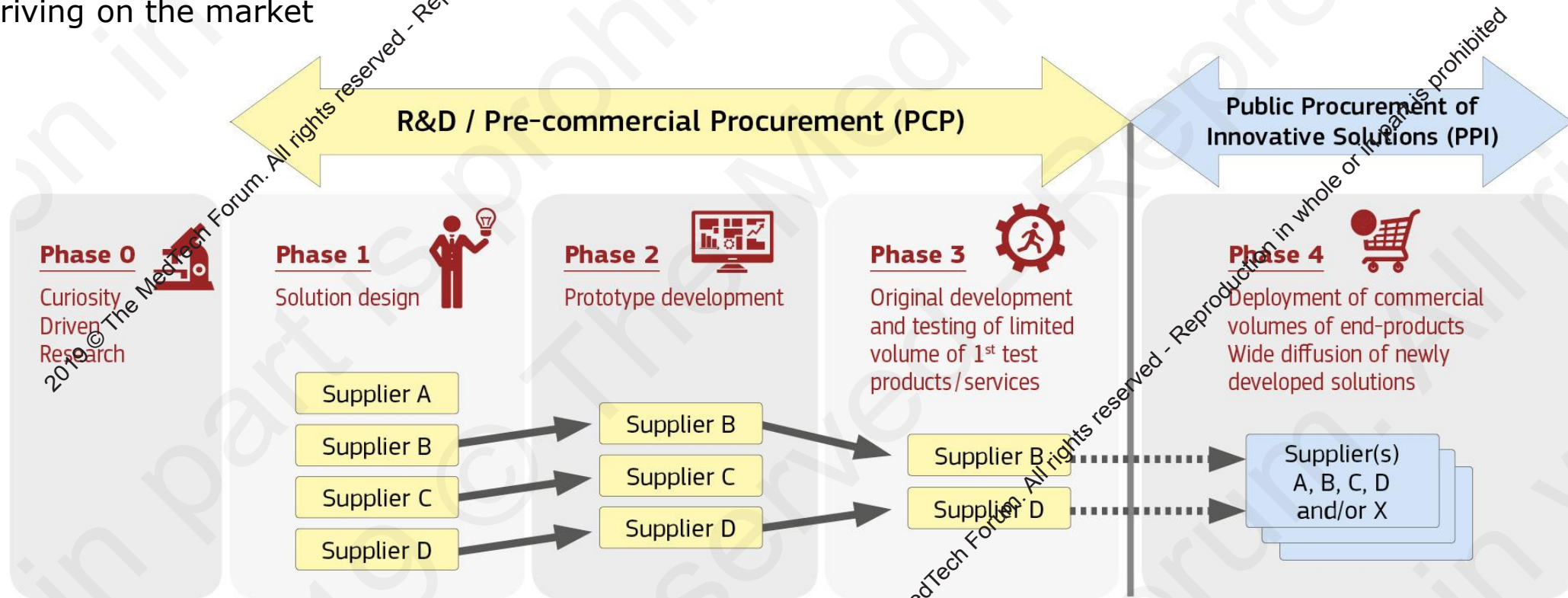


EC support for innovation in HC (Carmen Laplaza Santos)

Innovation procurement instrument in the R&I EU programmes



- **PCP** to steer the development of solutions towards concrete public sector needs, whilst comparing/validating alternative solution approaches from various vendors
- **PPI** to act as launching customer / early adopter / first buyer of innovative commercial end-solutions newly arriving on the market



The following slides **only** provide information **about results of PCPs** (not PPIs)



5 PCPs completed (phase 3 finished)

- [SILVER](#) (Robotics for elderly care)
- [THALEA](#) (Telemedicine for intensive care unit patients at increased risk)
- [Human Brain Project](#) (High Performance Computing for brain simulation)
- [DECIPHER](#) (Mobile health data services)
- [NYMPHA-MD](#) (Mental care for bipolar disorders)

finished
PCP

6 PCPs are ongoing (procuring)

- [QUACO](#) (Quadrupole magnets for large hadron collider)
- [MAGIC](#) (Post stroke recovery)
- [RELIEF](#) (Pain self-management)
- [NIGHTINGALE](#) (Wearable sensors for safer patient monitoring/care)
- [PROEMPOWER](#) (Diabetes self-management)
- [LIVE INCITE](#) (Lifestyle interventions in perioperative medicine)

ongoing
PCP

3 buyers groups are in the preparatory phase

- [ANTISUPERBUGS](#) (Detection of superbugs)
- [STARS](#) (Health stress reduction)
- [SHUTTLE](#) (Toolkit for trace analysis by forensic laboratories)



- **Opening a route-to-market for new players/SMEs**
 - 60,3% of the contracts won by SMEs only
 - Compared to 29% average in public procurements across Europe
 - Mostly small young SMEs: 31% below 10 people, 48% below 50 people, 60% less than 10 years old
- **Helping also larger market players bring products to the market**
 - 16% of contracts won by large companies as single bidder
 - 19% of contracts won by consortia of larger companies plus SMEs
 - 73,5% of contracts won by SMEs (SMEs alone, or as lead bidder)
- **Relevance to universities & bringing scientific results to market**
 - 30% of winning contracts have also a university/R&D center partner in consortium
 - Winning SMEs are also often university start-ups
- **Stimulating cross-border company growth**
 - 33,1% of contracts are won by bidders that are not from a country of any of the procurers in the buyers group (e.g. DE company working for UK+NL procurers)
 - Compared to 1,7% average in public procurements across Europe
- **Creating growth and jobs in Europe**
 - 99,5% of contractors do 100% of R&D activities for the PCP in Europe



- ***Separating PCP (R&D) from PPI (commercial deployment) and using a phased PCP approach***

- Opens the market for small players/SMEs (smaller gradually growing contract sizes)
- Enables procurers to steer industry R&D to meet their needs, achieve desired quality and efficiency improvements in public services and reduce vendor lock-in
- Stimulates cooperation with universities and larger companies
- Enables use of place of performance clauses that create growth/jobs in Europe

- ***Joint cross-border PCP procurement***

- Stimulates cross-border company growth
- Facilitates the creation of more open standards based interoperable solutions

- ***Leaving IPR ownership rights with contractors***

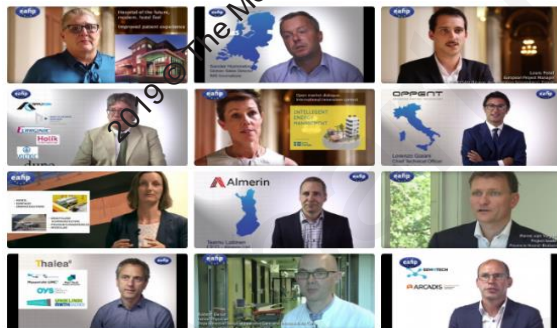
- Reduces the cost / the R&D risk for procurers with 50%
- Encourages wider commercialisation of solutions by vendors

- ***Using a place of performance condition in PCPs***

- Can effectively stimulate growth and job creation in Europe



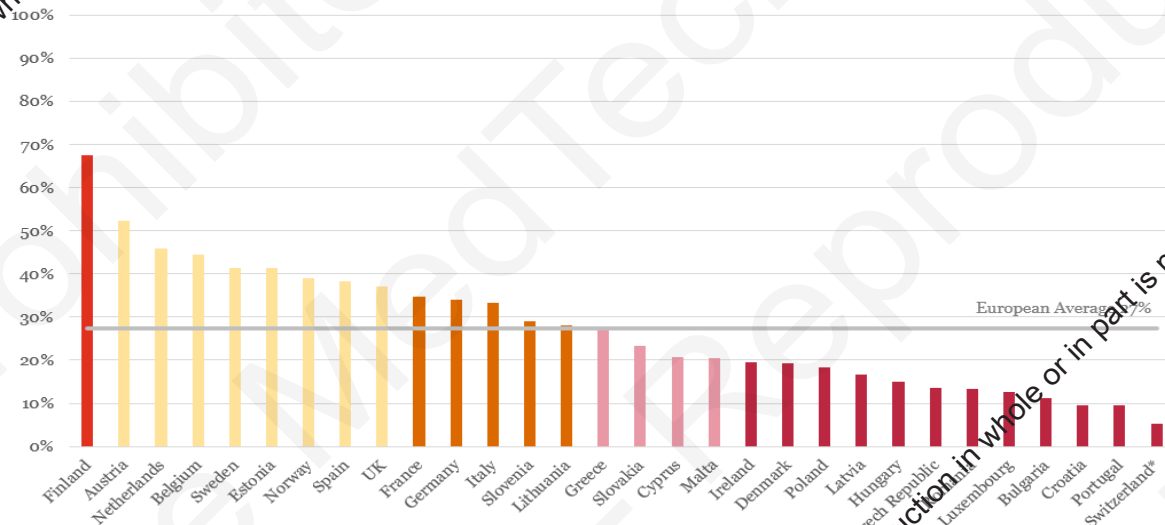
www.eafip.eu



More info - Overview EU funded innovation procurements

<https://ec.europa.eu/digital-single-market/en/innovation-procurement>

<http://ec.europa.eu/digital-agenda/en/eu-funded-projects>



Strong performers Good performers Moderate performers Modest performers Low performers



European Network of national competence centers
for innovation procurement

THANK YOU!



Defining tomorrow's people-centred health-care in Europe

more information in: <https://ec.europa.eu/digital-single-market/en/policies/ehealth>

Some background slides



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Robotics for independent living of elderly

SILVER: benefits for procurers



PCP: procured the development and testing in 5 countries

Oct 2013 -> Aug 2016

7 suppliers (ph 1) -> 3 suppliers (ph 2-3)



Certification of solutions
Scaling up production
SMEs grow their business

INDIVIDUAL PURCHASES by public procurers (DK, SE) + elderly people (NL, UK, FI)

End 2016 - Present

Procurers PCP: City of Odense and region of Southern Denmark (Denmark), city of Västerås (Sweden), city of Vantaa and Oulu (Finland), city of Stockport (UK), city of Eindhoven (Netherlands)

Deployment: Only SE and DK cities are responsible for buying equipment for elderly care. NL, UK, FI cities promoted SILVER to elderly (wide deployment depends on sickness reimbursement schemes for robotics).

Benefits for procurers:

- ❑ Contributing to the goal to bring solutions to the market that enable to **care by 2020 with the same amount of care staff for 10% more elderly people** living a **higher quality life** independently at home
- ❑ **Choice between 5 products.** 5 out of 7 participating contractors are successfully commercialising their solutions: Robot Care Systems (NL), Bioservo (SE), Camanio (SE), Robosoft (FR), Marsibionics (ES)
- ❑ A few hundred of the robotics solutions resulting from SILVER have already been sold and deployed in the SILVER countries & beyond.

Robotics for independent living of elderly

SILVER: benefits for companies

European
Commission

- SILVER triggered the creation of new start-ups and helped existing startups grow their business.

Aug 2016 (end of PCP)



SME, NL



SME, SE



SME, FR



SME, FR



SME, SE



SME, SE



SME, ES

SME ph1 grant (2012) setup the SME
Lerovis merged into RCS (2014)
Raised equity investment (2016)

Agreements with NASA, Airbus, GM, GE
3 equity investment rounds ('13, '14, '16)
NASDAQ listed (2017)
SME ph2 grant (2018) wider commercialisation

Equity investment round (2013)
Spun out Kompaï robotics company (2016)
Won also Fabulos PCP contract

Merged with Brighter Two into Camanio (2016)
Stocklisted on Spotlight (2017)
Office in US, distributors in China, AU, EU

ECHORD ++ support
Agreement with ESCRIBANO (2016)
SME ph2 grant (2018) wider commercialisation
Clinical trials in Spain ongoing
Crowdfunding ongoing

Today

~32 LEA robots (walking and other assistance) sold in NL, UK, DE, Scandinavia

~ 245 i-Hands (smart wearable giving muscular support) sold worldwide to industrial and health market

~ 50 Kompaï robots (walking and other assistance) installed in several nursing homes + hospitals

~350 Mealtime devices (eating assistance) sold worldwide

Wearable bionic exoskeleton (muscular assistance) in trials

Telemedicine for ICU-patients at increased risk

THALEA: benefits for procurers



Thalea[®]

PCP: procured the R&D, testing and deployment (for 4 years) of pre-series systems

June 2015 -> Nov 2016
5 suppliers (ph 1) -> 3 suppliers (ph 3)

Thalea[®] II

PPI: larger scale wider deployment of final certified systems

Call for tenders
Expected by Mid 2019

Certification of solutions
Scaling up development
SMEs grow their business
Enlarged buyers group

Procurers PCP: Univ Clinic Aachen (DE), Univ Hospital Maastricht (NL), Hospital East Limburg (BE), Parc Tauli Sabadell University Hospital (ES), Northern Ostrobothnia Hospital District (FI)

Enlarged buyers group for the PPI: includes also Austrian procurers.

Benefits for procurers:

- ❑ Interoperable (lower cost) platform for tele-detection and tele-care of ICU-patients at increased risk.
- ❑ Significantly improved risk-detection, earlier diagnosis and higher efficiency in the ICU, enabling a reduction in sepsis mortality by 25% and in length of hospital stay by 20-50%.
- ❑ Faster time to market: From research to deployed working systems in 1,5 year time. The three pre-series systems delivered at the end of the PCP by Denrite Clinical Systems, New Compliance and Philips all met the procurers' requirements. They are deployed and in use in the hospitals since 2016.

Telemedicine for ICU-patients at increased risk

THALEA: benefits for companies

European
Commission

Benefits for companies:

- ❑ PCP enabled companies to grow their business cross-border and bring disruptive innovations to the market: Telemedicine center with big data analysis, self-learning and prediction capabilities.

Nov 2016 (end of PCP)



SME, NL

Company setup office in the US (12/2016)
Distributor agreements (2017)
Integration with hospital platforms of big corporates (e.g. GE, Johnson, Philips..)
ERDF funded safety demonstration (2018)
Certified as medical device (2018)
Finalising VC investment round (2019)

Today

OR Cockpit Solution already installed in 25 Dutch and 2 US hospitals. Distributing also in BE.



SME, UK



SME, IE

Setup new company ICView specifically for commercialising the solution in Europe, Middle East, Russia (2017)
Certified as medical device (2018)

ICView Solution is running as a pilot system in several hospitals.

PHILIPS

Healthcare

Further solution enhancements in cooperation with DE hospitals (2017-19)
Certified as medical device (2018)

eICU Solution has been deployed in several hospitals



Improving the quality of public services for European citizens

"I couldn't really believe how good the innovative telemedicine solutions are that were developed in our THALEA PCP, until I saw it in action with my own eyes. Last week the system predicted the risk that a sepsis infection would occur in the intensive care unit in our hospital. Four hours later this situation really happened and thanks to the telemedicine solutions we were able to save lives.

The novel algorithms and improved risk-detection of the new telemedicine solutions result in earlier diagnosis and improve efficiency in the ICU significantly, enabling a reduction in sepsis mortality by 25% and a reduction in the length of hospital stay of patients by 20-50%."

Robert Deisz, Head Doctor, Intensive Care Unit, University Hospital Aachen (projecter in [THALEA](#) PCP)



Innovative tendering in EU directives (Virginie Dor)

EU directive 2014/24/EU

Changes in comparison to the previous Directive

MEAT → BPQR

Possibility for the Member States to forbid/limit tenders based on price only

Price → possibility to refer to **costs** (including internal costs) + reference to life-cycle costs

More possibilities to use negotiated procedures/competitive dialogues

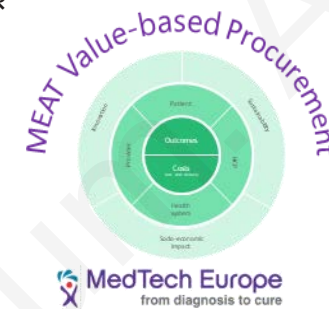
New procedure: Innovation partnership

EURIPHI project – funded by EU Commission

- Partners of the project (lead by MedTech) such as hospital buyers, physicians, industry and legal advisers focus on Value driven procurement to achieve the following goals:
 - **Establishing a sustainable Community of Practice** using innovative procurement methods
 - **Adapting the existing tools** by applying the cross-border value-based PPI and testing this approach in the field of:
 - rapid diagnostics for infectious diseases and
 - new models of patient-centered integrated care
 - **Developing a EURIPHI Regional Network** that will further prioritize investments in the most needed solutions for patient-centered integrated care and rapid diagnostics

Value driven tendering: what to we want to buy and how do we want to award?

- Which **award procedure** will we opt for?
 - PCP?
 - Open or restricted procedure?
 - Competitive procedure with negotiation?
 - Competitive dialogue or innovation partnership?
 - Framework agreement?
- Which **selection criteria** will we use ?
- Which **award criteria** will we use?
 - value based framework as a basis
- Which **award method** will we opt for?
 - Willingness to pay method or classic method of weight per criterion?



Questions?

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