Collaborate, Innovate, Adopt!

February 27th, 2024

Report of the Second Health Procurement TIE Event
Innovation and Strategic Futures Area
AQuAS

Content

1. Agenda

16.00 — **Welcome**

Adriana Díaz. Communities Manager, ECHAlliance. **Ramon Maspons.** Chief Health Innovation Strategist, Ministry of Health, Government of Catalonia & Chief Innovation Officer, Agency for Health Quality and Assessment of Catalonia (AQuAS).
Natalia Allegretti. Senior Innovation Project Manager, ECHAlliance.
Vicente Traver. Director ITACA-SABIEN group & University Professor – Universitat Politècnica de València (UPV).

16.20 — **Setting the scene: introduction to innovation adoption**

Rossana Alessandrello. Value Based Procurement Director, AQuAS & Coordinator of Value Based Procurement Subcommission of the Innovation & Tranformation Departamental Commission of Catalonian Health System.

16.30 — **Innovation projects presentation and collaborative identification of adoption pathways**

- **BEAMER** **Beatriz Merino**. Project Manager, UPM.
- **Can.heal** **Nancy Frederickx**. Scientific Researcher, SCIENSANO.
- **SIRENE** **Miriam Cabrita**. SHINE2Europe.
- **KHEALTHinAIR project** **Sandra Vilaplana / Mireia Ferri**. Senior R&D Consultant and European Project Manager at Kveloce / Senior R&D Consultant and Researcher in Social Sciences at Kveloce.
- **HARMONICS** **Carlos Molina**. Head of Department of Neurology, Stroke Unit, Vall d'Hebron Stroke Center.
- **SAVE-COR** **Andreu Climent**. CEO and Co-founder of Corify Care SL.
- **Brainteaser** **Vincenzo Carbone**. Senior Product Manager at MedTech, InSilicoTrials Technologies.

18.50 — **Wrap-up and call for action**

Adriana Díaz. Communities Manager, ECHAlliance.

19.00 — **Cocktail**

2. Welcome

Ramon Maspons

Chief Health Innovation Strategist @ Ministry of Health, Government of Catalonia.
Chief Innovation Officer @ Agency for Health Quality and Assessment of Catalonia (AQuAS).

The welcome speech by Ramon Maspons was focused on presenting five ideas not only related with the agenda of the meeting but also with AQuAS agenda, as an institutional party.

Firstly, Ramon Maspons introduced the idea of "generation of innovation vs adoption". Specifically, he draw the attention to the point that during the last 40 to 50 years the focus of mainstream innovation has clearly being the "generation of innovation". Whereas, during the last 10 years, the discussion about "innovation adoption", fortunately, gained important among stakeholders.

The second idea he brought into the spotlight was that "adoption of innovation" is clearly related with the concept of "need", implying a necessity to be accurate in everything related to a proper definition of "needs". This indicates the cornerstone role of multi-dimensional teams (i.e. clinicians, engineers, lawyers, etc.) contributing in the design of the innovation adoption process since the early stages.

Third idea was the relationship among innovation and solution –understanding "solution" as an output of mixing products, services, knowledge and experience to cope with a defined need.

The fourth idea was related to predictable frameworks, not only legal frameworks, but also common vision of needs and problem, risk sharing, benefit appropriability, common strategy and long-term partnerships and collaborations.

Last, but not least, the fifth idea showcased by Ramon Maspons was related to data usage and the need for clear frameworks, like the new European Health Data Space, in order to set up a public-private collaboration.

Adriana Díaz

Communities Manager @ ECHAlliance Global Health Connector.

In her talk, Adriana Díaz introduced the audience to the ECHAlliance by pointing out the tasks of the institution, namely: i) to connect people, organizations and companies at a global level through their large network of 1,100 members, while helping them to work together on different topics; ii) to convene the right audience by bringing together face to face and online events using their ability as a neutral party (i.e. 4 Years From Now event at the Mobile World Congress); iii) to amplify their members' activity through their newsletters and social media; and, last but not least, iv) to accelerate innovation, mostly by means their engagement in European (EU) projects.

Adriana Díaz also highlighted the importance of their ecosystems -understanding an ecosystem as a permanent community of stakeholders that match need and solution. Finally, she presented the idea of the Thematic Innovation Ecosystems (TIE) whose purpose is the same as the mentioned before but, instead of being geographic focused, they are thematic focused. New TIEs to be launched in 2024 include healthy ageing, women's health and cancer.

2. Introductory talks

2.1. Setting the scene

Rossana Alessandrello. *Value Based Procurement Director @ Agency for Health Quality and Assessment of Catalonia (AQuAS) & Coordinator of Value Based Procurement @ Sub-commission of the Innovation & Transformation Departmental Commission of Catalonian Health System.*

The talk of Rossana Alessandrello started by pointing out the definitions of the most relevant concepts to take into account within the innovation adoption process.

Firstly, she emphasized the importance to understand the concept of "intervention" as an action put in place by an actor in order to impact on a target by making use of specific means. Importantly, interventions' targets are not necessarily limited to patients, but they include as well healthcare professionals and the rest of healthcare delivery stakeholders.

Secondly, she reminded the definition of "innovation" in agreement with OECD Oslo Manual. She highlighted few characteristics, as: it can be something new or an improvement related to processes or products (or the combination thereof) that differ significantly from current ones. Importantly, she emphasized that the concept of innovation is inseparably related to the fact that is brought into use (implemented). When no user is making use of the innovation, it means we are still in the research and prototyping phase. She reminded that bringing an innovation into use indicates that a transformation is taking place: an "innovative intervention".

Then, she referred to the EC co-funded project Can.Heal and its Evaluation Framework to explain that the "innovative innovations" can be characterised by their readiness levels: i) Level 1 Implementation: From design to prove of concept; ii) Level 2 Adoption: From early adoption to multi-health providers/healthcare system adoption; and, iii) Level 3 Scale Up: From one health system adoption to multi-health systems scale-up.

At last, she concluded her presentation by introducing the conceptual framework developed by AQuAS providing a guidance to ensure that any innovation addressing identified unmet needs can be ultimately adopted. The main steps of the framework, include: i) assessment of the needs; ii) assessment of the market/innovator readiness; iii) assessment of the adopter readiness, design of the relationship adopter-market/innovator and evidence generation; iv) assessment of the outcomes and payors' reimbursement scheme.

2.2. Digital Health Uptake: Supporting the Uptake of Digital Solutions in Health and Care

Natalia Allegretti. *Senior Innovation Project Manager @ ECHAlliance Global Health Connector*

In her speech, Natalia Allegretti focused in the ECHAlliance task of bringing innovation to their members, in this case, channelled by the Digital Health Uptake EU project, an EU-funded project under the Digital Europe Programme.

The main aim of the project is to promote the adoption of digital health solutions by streamlining policies, instruments and activities leading to ensure a seamless integration and effective utilisation of digital health technologies. The project also supports the dissemination of good practices within regional ecosystems in EU. The project articulates by means of three main actions: i) to monitor and analyse the uptake of digital health solutions; ii) to create an environment of cooperation between demand and supply parties; and, iii) to strength capacity building for digital health uptake.

Natalia Allegretti emphasised a key instrument crucial to the project's operations: the Digital Health Uptake Radar. This platform serves as a distinctive repository, offering the chance to delve into and learn about digital health innovations in Europe, encompassing their adoption and accomplishments. Furthermore, it facilitates connections with both creators and users of digital health innovations.

2.3. iRaise: Upskilling for More Efficient Innovation Adoption in Health Systems

Vicente Traver. *Director @ ITACA-SABIEN group & Associate Professor @ Universitat Politècnica de València.*

Vicente Traver introduced the audience to iRaise, an initiative initially funded by EIT-Health were different partners were involved and nowadays is run by AQuAS and the Universitat Politècnica de València. iRaise is a hands-on training programme targeted to multidisciplinary teams of professionals from healthcare organizations to boost demand-driven sustainable adoption of innovations.

He emphasized the effort that iRaise puts into promoting the acquisition of different skills for innovation adoption (i.e. practical thinking, problem solving, teamwork and leadership, innovation and creativity, etcetera). To this end, its learning design of relies on four areas: i) flipped classrooms where the traditional teaching roles are flipped and students study the material at home and dedicate the time in class to discussion and collaborative work; ii) the tackling of in-house real challenges; iii) mentorship meetings; and, iv) the involvement of the Alumni network and the industry through the iRaise Industry Innovation Alliance (I3A).

iRaise will celebrate this year its sixth edition with over 150 people trained, including 30 mentors and sixteen public procure innovation (PPI) processes ongoing, among other significant achievements.

3. Innovation projects presentation & collaborative identification of adoption pathways

The structure for this part of the event comprised a 10-minute presentation for each project, followed by a 5-minute engagement session with the attendees after each presentation. The methodology for audience contributions and the topics covered were as follows:

a. **Innovation maturity level** of the innovation categorized into 5 stages, namely:

- Level 1: from design to prove of concept.
- First transition level: from level 1 to level 2.
- Level 2: from early adoption to multi-healthcare providers/ healthcare system adoption.
- Second transition level: from level 2 to level 3.
- Level 3: from one healthcare system adoption to multi-healthcare systems scale up.

b. **Key factors influencing implementation**, adoption, scale up of the innovation.

c. **Contributions I can provide** to facilitate the implementation, adoption, and scaling up of the innovation.

d. **Benefits the innovation can offer me** upon implementation, adoption, and scaling up.

e. **Insights for enhancing implementation**, adoption and scaling up of the innovation into:

- Pain/problem – Need definition/analysis
- Solution → Intervention definition/analysis
- Value proposition definition/analysis
- Implementation/adoption journey definition/analysis

3.1. BEAMER: Improving Adherence Behaviour Together

Beatriz Merino. *Senior Project Manager @ Universidad Politécnica de Madrid.*
Ana Roca-Umbert. *Senior Research Consultant @ PredictBy.*

The BEAMER project addresses the challenge of improving patients' adherence to treatment across all therapeutic areas, which is a critical issue worldwide mainly due to population aging. Beatriz Merino identified several areas for potential improvement to meet this challenge: i) implementing effective behavioural science; ii) stratifying and supporting patients; and, iii) personalizing interventions.

Therefore, BEAMER's main goal is to develop a disease-agnostic model to predict adherence behaviour and segment the population based on personalised support needs. This will result in a validated disease-agnostic adherence behaviour model with real world benefits. The project is structured into four main phases, namely: i) conceptualization; ii) model deployment; iii) model testing and validation; and, iv) creation of an implementation strategy.

Beatriz Merino emphasized that the BEAMER solution could potentially impact key stakeholders, such as patients and caregivers, healthcare professionals, the pharmaceutical industry and policymakers, among others.

Ana Roca-Umbert then presented the high-level BEAMER roadmap for implementing its solution, comprising four main stages: i) model conceptualization; ii) stakeholders engagement for requirements extraction and elicitation; iii) controlled implementation in specific sites; and, iv) implementation in real-world settings. Additionally, the team is developing a dissemination and exploitation plan to ensure sustainability beyond the project's lifespan.

Insights of the Audience on Innovation Maturity and Implementation Factors

Maturity Level of the Innovation

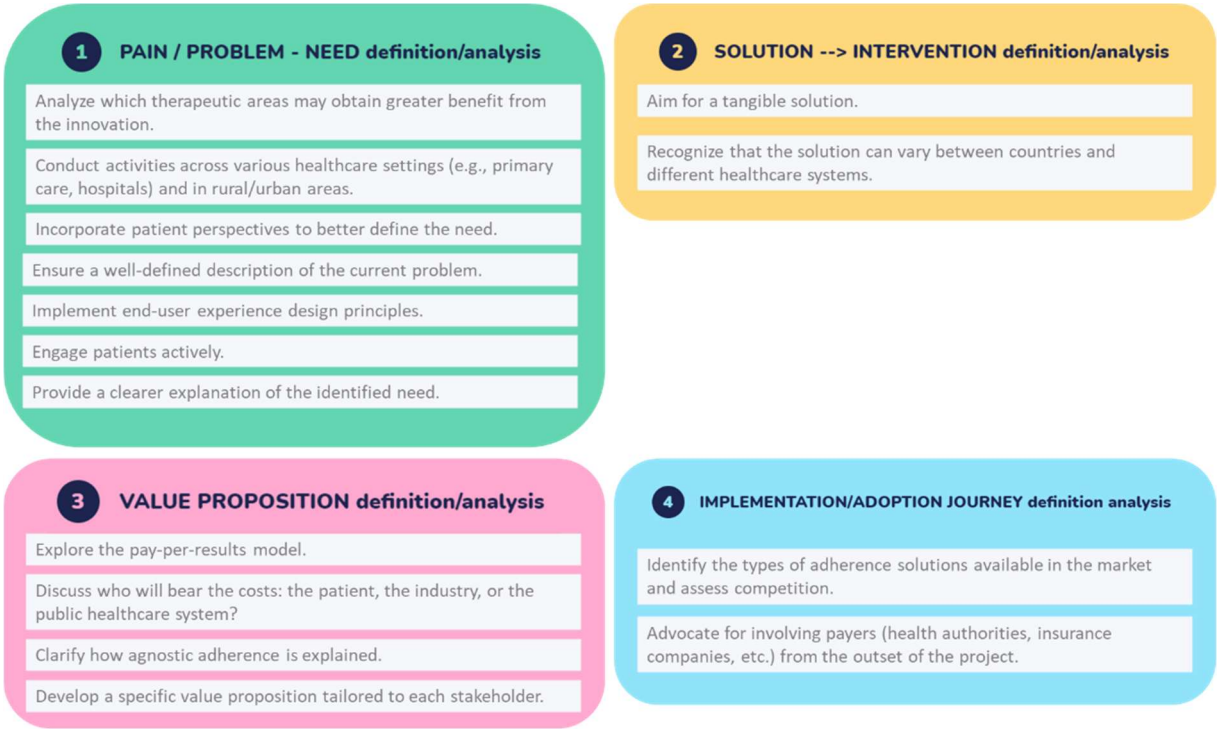
The audience assessed the maturity of the innovation presented as Level 1, indicating that it is currently positioned from design to proof of concept.

Key Factors Influencing Implementation and Adoption

The audience identified several critical factors that significantly influence the implementation, adoption, and scaling of the presented innovation. Top choices were as follows:

- Patients' Voice: Incorporating feedback from patients is paramount. Their insights and preferences not only enhance the relevance of the innovation but also foster trust and acceptance within the target population.
- Regulatory and Legal Adaptations: The necessity for compliance with regulations, such as the Medical Device Regulation (MDR) and the General Data Protection Regulation (GDPR), was highlighted. Adapting the innovation to meet these legal frameworks is essential for its acceptance and integration into existing healthcare systems.
- Results Measurement and Evidence Generation: Establishing robust mechanisms for measuring outcomes and generating evidence is crucial. This aspect not only demonstrates the effectiveness of the innovation but also supports its credibility and facilitates stakeholder buy-in.

Factors enhancing the implementation, adoption and scale up of the innovative solution



3.2. CAN.HEAL: Building the EU Cancer and Public Health Genomics Platform

Nancy Frédérickx. *Scientific Researcher @ Sciensano.*

In her talk, Nancy Frédérickx emphasized the role of next-generation sequencing (NGS) in generating more genetic data, increasing decision-making complexity. She highlighted the importance of decision support tools (DST), such as computer systems, in aiding healthcare providers facing complex recommendations about individual patients. In this regard, the Can.Heal consortium is addressing this by mapping, describing and identifying the gaps in the current oncology DST landscape, aiming to promote harmonization and interoperability to support oncology DST implementation.

The consortium is developing a consensual EU oncology DST (EU-oncDST) concept through the following activities: i) consortium brainstorming; ii) surveys on NGS and molecular tumour board (MTB) practise and DST use; and, iii) mapping exercises with oncologic DTS stakeholders. The EU-oncDST concept aims to be modular, transparent, interoperable and ever-growing concept, with suggestions for capacity building and a protocol outlining its implementation roadmap.

Nancy highlighted that the EU-oncDST concept will benefit patients by facilitating enrolment in clinical trials, improving, by extension, their treatment. It will also aid healthcare providers in MTB discussions, patient diagnosis, and support the standardization of data format and protocols. Finally, it will also offer access to an evolving cancer care system. Challenges include the harmonization between the current available options, interoperability between modules and hospital electronic health records, and reimbursement strategies.

While there are no immediate implementation plans, a protocol roadmap is being developed to engage stakeholders and enable a modular implementation of EU-oncDST tailored to institutional needs. Additionally, it will also facilitate the development of an MTB module, a central module to the concept and the interoperability between modules allowing evidence collection to support reimbursement.

In conclusion, the EU-oncDST concept promotes: i) the harmonisation of the landscape; ii) data centralization; iii) case overview; iv) structured final reporting; and, v) interoperability.

Insights of the Audience on Innovation Maturity and Implementation Factors

Maturity Level of the Innovation

The audience classified the maturity level of the innovation as **Level 1**, indicating that it is currently situated between the design phase and proof of concept.

Key Factors Influencing Implementation and Adoption

Participants identified several pivotal factors that significantly impact the implementation, adoption, and scaling of the innovation:

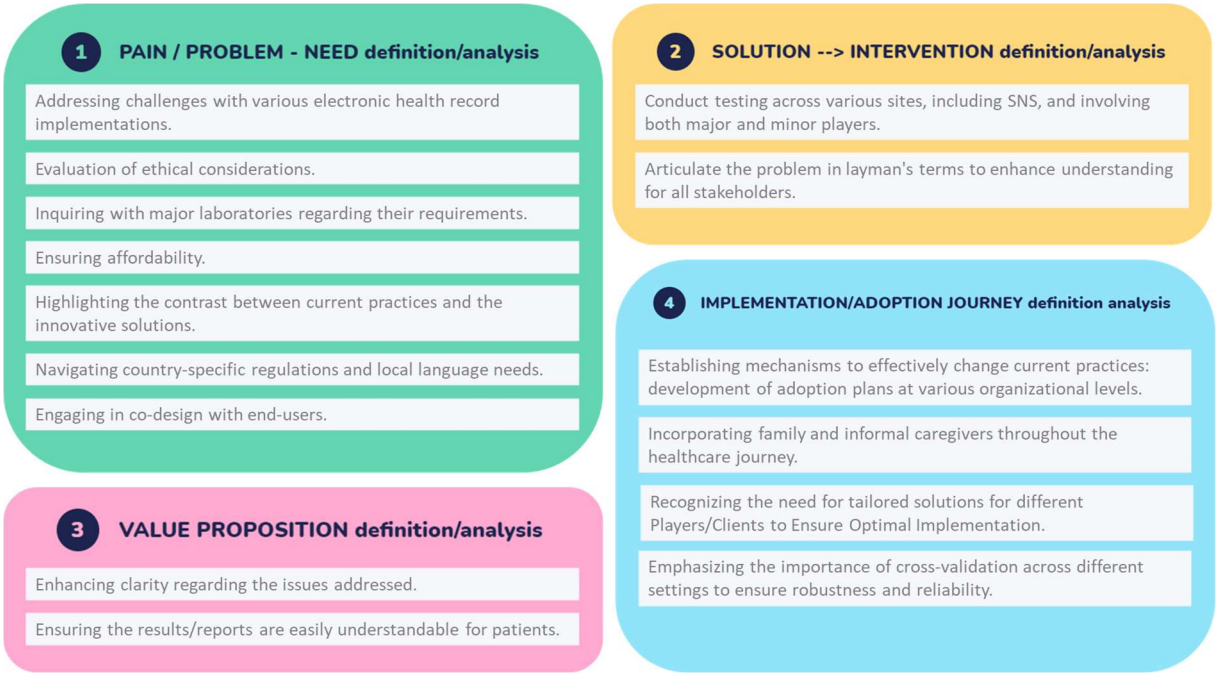
- Regulatory and Legal Adaptations: The importance of complying with regulatory frameworks, such as the Medical Device Regulation (MDR) and the General Data Protection Regulation (GDPR), was emphasized. Adapting the innovation to align with these legal requirements is crucial for its successful integration into healthcare systems.
- Current Reimbursement Model vs. New Reimbursement Proposal: The existing reimbursement structures and how they compare with proposed changes were highlighted as a critical factor. Understanding how the innovation aligns with or alters the current financial incentives can significantly influence its adoption.
- Preparedness Level of Implementers/Adopters: The readiness of those responsible for implementing and adopting the innovation is vital. This includes their familiarity with the innovation, training needs, and organizational capacity to integrate new solutions into existing workflows.

Mutual Benefits for Adoption and Implementation

The audience discussed what participants can offer to the initiative and what the initiative can provide in return:

- What Participants Can Offer: Participants can contribute expertise and insights from their respective fields, enhancing the initiative's development and adaptability. They can also facilitate networking opportunities and promote advocacy for the innovation within their organizations and communities, helping to raise awareness and support.
- What the Initiative Can Offer Participants: Once adopted and scaled, the initiative can provide participants with valuable contacts within the healthcare ecosystem, enabling future collaborations and partnerships. Additionally, it can help participants understand and communicate the value of the initiative, equipping them with tools and resources that strengthen their role as advocates for high-value care solutions.

Factors enhancing the implementation, adoption and scale up of the innovative solution



3.3. SIRENE: Social Innovation Responsive Environments Network

Miriam Cabrita. Researcher & Project Manager @ SHINE2Europe.

Miriam Cabrita commenced her speech by underscoring SHINE2Europe's primary objective: fostering social inclusive societies at all levels and stressing the significance of collaborative efforts to meet this goal. She outlined four primary focus areas that must be engaged when working towards active and health communities: i) sustainable built environments; ii) health & social care; iii) digital technologies; and, iv) inclusive and accessible communities.

The SIRENE project is a Coordination and Support Action co-funded by the EU Commission aimed at nurturing the growth of social innovation ecosystems that engage with the aforementioned sectors, while adding an eco-friendly environments layer. SIRENE operated through two different tracks. Firstly, a social innovation framework designed to furnish tools and knowledge applicable in everyday contexts. Miriam emphasized the importance of SIRENE's social ecosystem, particularly in representing citizens and the private sector, often underrepresented in other ecosystems. SIRENE'S social innovation framework comprises five key components: i) a manual offering foundational knowledge on social innovation and delineating social innovation actors; ii) a blueprint of best practices; iii) a hands-on toolkit offering practical engagement with or within ecosystems; iv) a capacity building framework; and, v) a sustainability strategy. Moreover, the SIRENE project also delivers two digital tools – an online repository with relevant resources and an online hub to promote knowledge exchange

between experts – to support the need for strong local connections while learning from global perspectives.

Miriam brought the attention onto the issue of "working in silos" as a significant barrier to innovation procurement, alongside bureaucratic hurdles. She posited that the mission undertaken with the social innovation framework could be equally applicable in procurement. Therefore, she urged the audience to join their webinars, capacity-building activities and utilize their training materials. Additionally, she encouraged the submission of procurement-related best practices to be included in SIRENE's repository, and advocated for the application of their social innovation framework in health procurement, inviting individuals to become ecosystem testers or early adopters.

Insights of the Audience on Innovation Maturity and Implementation Factors

Maturity Level of the Innovation

The audience assessed the maturity level of the innovation as Level 1, indicating it is currently at the stage of transitioning from design to proof of concept.

Key Factors Influencing Implementation and Adoption

Participants identified several critical factors that significantly impact the implementation, adoption, and scaling of the innovation:

- Patient's Voice: The importance of incorporating patient feedback and perspectives was emphasized. Understanding the patient experience and preferences is essential for ensuring that the innovation meets real needs and garners acceptance among users.
- Needs to be Addressed and Value Definition: Clearly identifying the specific needs the innovation aims to address and articulating its value proposition is crucial. This includes defining the benefits for different stakeholders, which helps in garnering support and facilitating adoption.
- Multilevel Stakeholder Value Definition: Engaging various stakeholders to collaboratively define the value of the innovation at multiple levels is vital. This collaborative approach ensures that all parties see the benefits, enhancing the likelihood of successful implementation and scaling.
- Results Measurement and Evidence Generation: Establishing robust mechanisms for measuring outcomes and generating evidence is fundamental. This ensures that the innovation's effectiveness can be demonstrated, supporting its credibility and facilitating stakeholder buy-in.

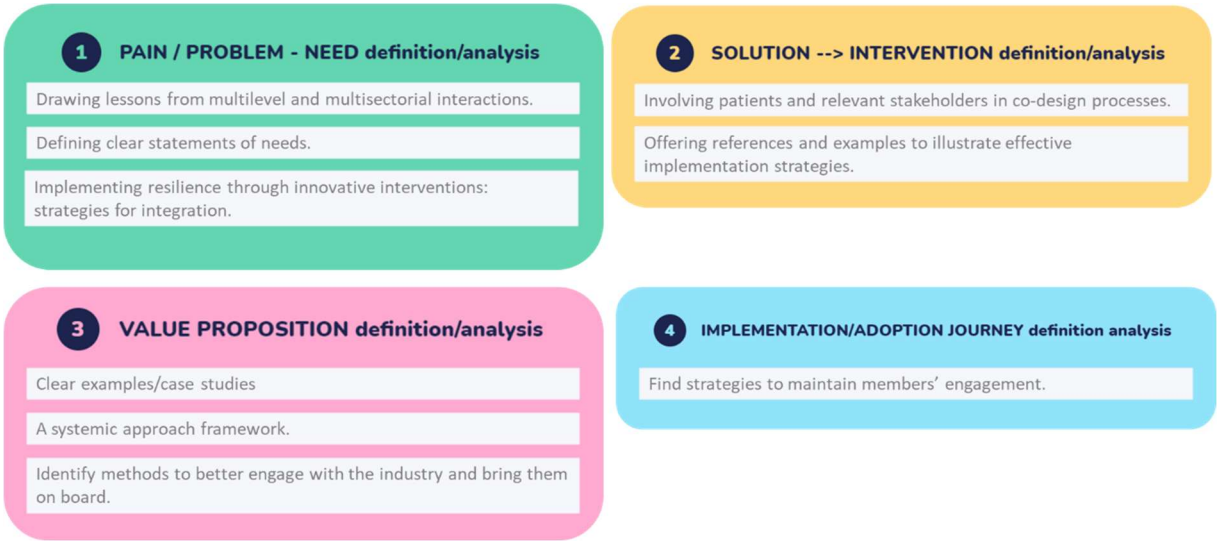
Mutual Benefits for Adoption and Implementation

The audience discussed what participants can offer to the initiative and what the initiative can provide in return:

- What Participants Can Offer: Participants can provide a region for validating the innovation. This geographical and contextual setting can serve as a practical testing ground, allowing for real-world evaluation and feedback that is crucial for refinement and further development.

- What the Initiative Can Offer Participants: Once adopted and scaled, the initiative can provide participants with the possibility to increase social innovation "re-proposals." This opportunity allows participants to leverage the insights gained from the innovation to propose new solutions and initiatives, fostering a culture of continuous improvement and social impact.

Factors enhancing the implementation, adoption and scale up of the innovative solution



3.4. K-HEALTHinAIR: Knowledge for Improving Indoor Air Quality and Health

Mireia Ferri. *Senior R&D Consultant & Researcher in Social Sciences @ Kveloce.*
Sandra Vilaplana. *Senior R&D Consultant & European Project Manager @ Kveloce.*

Mireia Ferri put the spotlight into the real healthcare challenge that represents poor indoor air quality (IAQ), mainly due to the pollutants caused by the fuel used to cook and home heating in central and east Europe. Most frail groups affected by this issue are women, children, elderly people and citizens suffering from cardio-respiratory conditions.

To tackle this health concern, she identified the following main actions to be undertaken within the K-HEALTHinAIR project: i) implementation of cost-effective monitoring solutions; ii) increase the knowledge about IAQ characterization and impact on health status by means of an artificial intelligence algorithm; iii) definition of guidelines and training on how to improve IAQ, as well as raising awareness campaigns; and, iv) recommendations to enlarge the current regulation. Specifically, the project aims to provide a scientific-based assessment of IAQ in health, based on the results of clinical studies including high-risk outpatients, as well as an extensive campaign collecting samples to monitor chemical and biological indoor air pollutants.

Moreover, the project also envisages an open knowledge platform and providing open databases, thematic guidelines and new regulation proposals. Another final output of the project is the development of new sensors for IAQ assessment and user friendly portable

monitoring solutions. Together with the Horizon Results Booster services of the EU Commission, they are already starting to focus on analysing strategies for long-term sustainability of the technological platform, the knowledge sharing module and the sensors.

Insights of the Audience on Innovation Maturity and Implementation Factors

Maturity Level of the Innovation

The audience classified the maturity level of the innovation as Level 1, indicating it is currently in the phase of transitioning from design to proof of concept.

Key Factors Influencing Implementation and Adoption

Participants identified several critical factors that significantly influence the implementation, adoption, and scaling of the innovation:

- Results Measurement and Evidence Generation: Establishing effective mechanisms for measuring outcomes and generating robust evidence is crucial. This helps validate the innovation's effectiveness, supporting its credibility and fostering stakeholder confidence.
- State of the Art Analysis and Market Assessment: Conducting thorough analyses of current market conditions and technological advancements is essential. Understanding the competitive landscape and identifying opportunities for differentiation can enhance the innovation's appeal to potential adopters and investors.
- Investor and Market Interests: The alignment of the innovation with investor interests and market demands is a key factor in its adoption. Engaging with potential investors and understanding market trends can facilitate support for scaling the initiative.

Mutual Benefits for Adoption and Implementation

The audience discussed what participants can offer to the initiative and what the initiative can provide in return:

- What Participants Can Offer: Participants suggested the possibility of conducting controlled testing of the innovation within a Living Lab environment. This facility can serve as a practical testing ground, allowing for real-world evaluation and feedback, which is essential for refinement and further development.
- What the Initiative Can Offer Participants: Once adopted and scaled, the initiative can help raise awareness of the participants' contributions and innovations. This heightened visibility can facilitate further collaboration, networking opportunities, and the potential for increased impact within the healthcare ecosystem.

Factors enhancing the implementation, adoption and scale up of the innovative solution

3.5. HARMONICS: Harmonizing Data Collection to Deliver High Value Stroke Care and Improve Patient Outcomes

Carlos Molina. *Head of Department of Neurology, Stroke Unit @ Vall d'Hebron Stroke centre.*

Carlos Molina introduced the epidemiology of stroke pointing out that it is the major cause of death and severe disability worldwide; with nine million European citizens surviving to a stroke per year. This figure, cumulated year after year, is representing a huge challenge for healthcare systems. It is important to point out that, during the last two decades, the focus has been put into the acute phase of stroke, however, little attention has been paid to the post-hospitalization care.

The HARMONICS project is working on smoothing the transition from acute hospitalization to post-hospital care. Within this context, Carlos Medina presented three major needs of the stroke patient, namely: i) rehabilitative; ii) social; and, iii) clinical. In this regard, HARMONICS aims to create an ecosystem, a network of hospitals, harmonizing the protocol of care and providing a continuum of care through the pre-hospital scenario, the emergency room and the post-hospitalization setting.

In order to ensure this continuity of care, Carlos Medina stressed out the importance of reinforcing effective communication across healthcare tiers. To this end, the HARMONICS project developed NORA, a hybrid digital solution that not only provides communication, but also collects important clinical outcome data which, in turn, is used to propose innovative value-based payment models. Interestingly, the NORA platform also includes in its continuum of care

pathway other stakeholders like ROCHE and SIEMMENS. Among other functionalities, NORA includes: i) the possibility to send reminders to the patient to increase treatment adherence by accompanying the through the process; ii) control of risk factors; iii) tele-rehabilitation; iv) personalized educational material; and, v) a dashboards for professionals integrating holistic and stratified data from the acute stroke hospitalization and post-hospital care.

Currently, the HARMONICS is targeting 6,000 patients and its concept is being implemented in seven European countries as well as in México, Chile, Argentina, Uruguay and Colombia.

Insights of the Audience on Innovation Maturity and Implementation Factors

Maturity Level of the Innovation

The audience assessed the maturity level of the intervention as Level 3, indicating that it has progressed from health system adoption and is moving towards broader implementation and scaling within various healthcare contexts.

Key Factors Influencing Implementation and Adoption

Participants identified several critical factors that significantly influence the implementation, adoption, and scaling of the innovation:

- Multidisciplinary Teams: The involvement of diverse, multidisciplinary teams is essential for successful implementation. Collaboration among healthcare professionals from different specialties enhances problem-solving capabilities and fosters comprehensive approaches to patient care.
- Patients' Voice: Incorporating the perspectives and feedback of patients is crucial for ensuring that the innovation meets their needs and preferences. Engaging patients throughout the process can drive acceptance and facilitate better health outcomes.
- Results Measurement and Evidence Generation: Establishing robust mechanisms for measuring outcomes and generating evidence is fundamental. This ensures that the intervention's effectiveness can be demonstrated, which is vital for gaining support from stakeholders and decision-makers.
- Preparedness Level of Implementers and the adopters: The readiness and capability of those responsible for implementing the innovation play a critical role in its success. Adequate training and support for implementers are necessary to ensure they are equipped to execute the intervention effectively.

Mutual Benefits for Adoption and Implementation

The audience discussed what participants can offer to the initiative and what the initiative can provide in return:

- What Participants Can Offer: Participants expressed their willingness to provide case manager contacts who can facilitate connections within healthcare settings. Additionally, they showed interest in discussing collaboration opportunities for upcoming Horizon Europe calls, which could enhance funding and resource allocation for the initiative. They also highlighted their capability in generating outcome-based evidence to convince payers about the value of new reimbursement models.
- What the Initiative Can Offer Participants: By collaborating with this initiative, participants can gain access to valuable insights and data that support their efforts in advocating for innovative reimbursement models. This partnership can enhance their credibility and effectiveness in influencing health policy and funding decisions.

Factors enhancing the implementation, adoption and scale up of the innovative solution

3.6. SAVE-COR: Increasing Heart Arrhythmia Treatment

Andreu Climent. *CEO and Co-founder of Corify Care SL.*

In his talk, Andreu Climent presented that one third of the European adult population will suffer an arrhythmia during their life, and its prevalence in the EU is expected to double between 2010 and 2026. Although the important burden that this signifies to the healthcare systems worldwide, clinicians do not have yet a tool to identify optimal treatment for each patient, namely: drug treatment, electrical shocks or surgery; resulting in less of 30% of cured patients.

Andreu attributes this situation to two primary challenges: (1) only 4% of patients receive intraoperative cardiac mapping to understand their heart's electrical activity, and (2) the limited accuracy of current mapping techniques. The SAVE-COR project seeks to address these issues by developing a safe, rapid, and highly accurate cardiac mapping system.

The proposed solution is a vest-like electrode array that records the electrical activity across multiple points on the patient's chest. This wearable system automatically generates both

the patient's heart geometry and the corresponding electrical activity, providing clinicians with real-time insight into every point of the heart. The system is currently being used in operating rooms to monitor the heart's global activity before and after ablation procedures. In the future, it may also become a valuable tool in outpatient cardiology clinics.

The final aim of SAVE-COR is to change the patients' journey, so when the patient has an arrhythmia, the clinician can immediately assess the heart and, consequently, perform patient selection, identify the proper treatment and identify the ablation target region.

Andreu identified several barriers to the adoption of innovation: i) The readiness of technology to move from prototype to scalable solution; ii) The need for a substantial volume of scientific evidence supporting its various applications and effectiveness; iii) Regulatory approval, which Andreu emphasized is particularly burdensome for small companies, as the complexity of these regulations favours larger markets capable of navigating the process; iv) Resistance to change within the system, particularly regarding reimbursement strategies for innovative solutions; v) The fact that large-scale Randomized Clinical Trials (RCTs) are not always appropriate or feasible for generating evidence of an innovation's effectiveness; vi) The challenges of large-scale production and scalability; vii) Limited economic resources to support the innovation's development and expansion.

Corify solution has already been implemented in six hospitals across Spain and Portugal, with requests for installation in over twenty additional hospitals across the EU and the United States in the coming months.

Insights of the Audience on Innovation Maturity and Implementation Factors

Maturity Level of the Innovation

The audience classified the maturity level of the innovation as Level 3, indicating a transition from adoption within a single health system to scaling across multiple health systems.

Key Factors Influencing Implementation and Adoption

Participants identified several critical factors that significantly influence the implementation, adoption, and scaling of the innovation:

- Multilevel Stakeholder Value Definition: Clearly defining and articulating the value of the innovation across various stakeholder levels is crucial. Understanding how different stakeholders, including patients, providers, and payers, benefit from the innovation fosters buy-in and support for its adoption.
- Change Management Plan: Implementing a robust change management plan is essential for guiding the transition and ensuring all stakeholders are aligned. This plan should address potential resistance and facilitate a smooth integration of the innovation into existing workflows.
- Regulatory and Legal Adaptations: Adhering to regulatory requirements and adapting to legal implications are necessary for the innovation's acceptance. Navigating these aspects effectively can expedite the implementation process and mitigate potential barriers.
- Timeframe for Implementation: Establishing a realistic and well-defined timeframe for readiness is vital. Stakeholders need clarity on when the innovation can be implemented and scaled to ensure adequate preparation and resource allocation.
- Current Reimbursement Model vs. New Proposals: Evaluating the existing reimbursement model in relation to new proposals is essential. Addressing potential discrepancies and

demonstrating the value of the innovation can facilitate smoother integration into financial frameworks.

Mutual Benefits for Adoption and Implementation

The audience discussed what participants can offer to the initiative and what the initiative can provide in return:

- What Participants Can Offer: Participants expressed their potential to provide an interesting case that illustrates the journey to market for the innovation. This case could serve as a valuable reference point for stakeholders looking to understand the practical implications and pathways for successful implementation.
- What the Initiative Can Offer Participants: Once adopted and scaled, the initiative could explore whether the device measurements generated through the innovation can be utilized to validate electrophysiology computational models. This collaboration could enhance research capabilities and contribute to the development of more accurate predictive models in healthcare.

Factors enhancing the implementation, adoption and scale up of the innovative solution

3.7. BRAINTEASER: Bringing Artificial Intelligence Home for a Better Care of Amyotrophic Lateral Sclerosis and Multiple Sclerosis

Vincenzo Carbone. *Senior Product Manager @ MedTech, InSilicoTrials Technologies.*

In his speech, Vincenzo Carbone explained that the primary goal of BRAINTEASER is to integrate Artificial Intelligence (AI) into home care for improved management of amyotrophic lateral sclerosis (ALS) and multiple sclerosis (MS). These conditions are marked by a wide range of symptoms that are often difficult to identify and track. Patients face a growing need for care both at home and in hospitals, which adds psychological and economic burdens. AI tools can assist clinicians by helping to better assess the severity of each patient's condition, predict the progression of the disease, and provide personalized recommendations for treatment.

The BRAINTEASER project aims to harness the potential of big data—including medical, lifestyle, and environmental information—by leveraging cost-effective sensors and apps to support patients and their clinicians. The project's ultimate goal is to develop AI-integrated software that informs patients, aids clinical decision-making, simulates in silico trials, and suggests personalized treatments based on a data-driven approach.

The project expects three main outcomes: i) An app for patients and caregivers that fosters self-management, encourages healthy lifestyles, and provides psychological support; ii) A technological platform for clinicians to enhance clinical decision-making, research, and medical training; iii) A commercial platform for the pharmaceutical industry to improve patient stratification and monitoring during clinical studies, while also serving as a digital companion for patients participating in trials. The growing interest in AI, combined with an aging population, is expected to expand the market size to nearly USD 40 billion by 2030.

BRAINTEASER, which began in 2021, is currently testing its technology through various pilot studies. The team is now refining its roadmap for exploitation and certification to better identify market opportunities. Additionally, the project collaborates with other EU initiatives focused on computational solutions, modelling, and simulation in healthcare, and also created a broad network to support the scalability of innovations and facilitate market access.

Insights of the Audience on Innovation Maturity and Implementation Factors

Maturity Level of the Innovation

The audience categorized the maturity level of the innovation as Level 1, indicating its current status as being in the early stages, from design to proof of concept.

Key Factors Influencing Implementation and Adoption

Several critical factors were identified by participants that significantly influence the implementation, adoption, and scaling of the innovation:

- Patient's Voice: Incorporating the perspectives and preferences of patients is essential for developing a patient-centered approach. Actively engaging patients can ensure that the innovation addresses their needs and improves their overall experience.
- Regulatory and Legal Adaptations: Adapting to regulatory requirements and legal frameworks is crucial for the successful adoption of the innovation. Navigating these complexities can help mitigate risks and facilitate smoother implementation processes.
- Results Measurement and Evidence Generation: Establishing robust mechanisms for measuring results and generating evidence is vital. Demonstrating the efficacy and impact of the innovation can foster trust among stakeholders and support its adoption.
- Business Case of Implementers/Adopters: A compelling business case that outlines the financial and operational benefits of adopting the innovation is essential. Stakeholders need to understand how the innovation will add value to their organizations, including cost savings or improved outcomes.

Mutual Benefits for Adoption and Implementation

Participants shared insights on what they can offer to the initiative and what the initiative can provide in return:

- What Participants Can Offer: Participants expressed interest in discussing collaborations in Horizon Europe projects focused on developing AI models for healthcare. They highlighted their Catalonia AI cases, which could serve as valuable examples for scaling these models in other healthcare systems.
- What the Initiative Can Offer Participants: Once adopted and scaled, the initiative could provide expertise on the actual piloting of AI interventions. This knowledge could enhance participants' understanding of effective AI implementation strategies and best practices.

Factors enhancing the implementation, adoption and scale up of the innovative solution