Support Services for the Management and Utilization of Monitoring and Assessment of the EIP-MAFEIP Tool

MAFEIP

2nd Newsletter

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Our progress so far

The MAFEIP study (Support Services for the Management and Utilization of Monitoring and Assessment of the EIP - MAFEIP Tool) is performed by* Open Evidence *and* empirica *and aims at facilitating the use of the MAFEIP tool by members of the European Innovation Partnership on Active and Healthy Ageing (EIP on AHA).

The purpose of the MAFEIP tool is to estimate the health and economic outcomes of a large variety of social and technological innovations in the health and care sector relative to current care. Examples of innovative interventions include new care pathways, devices, surgical techniques, organisational models, among others.

MAFEIP indeed provides an early assessment of the likelihood that interventions will achieve the anticipated impact, and also helps to identify what drives interventions' effectiveness or efficiency in order to guide further design, development or evaluation. At a later stage of the innovation development, MAFEIP can assess with better precision the value of the innovation for citizens and other stakeholders. MAFEIP therefore represents a clear support to the decision-making process.

The Commission does not intend to assess the incremental cost-effectiveness of an intervention carried out by an EIP on AHA commitment, nor to compare several interventions on their cost- effectiveness. Rather, the general aim of the MAFEIP study is to estimate the aggregated impact of the EIP on AHA on its overall health and health system objectives.

Organisations interested in applying MAFEIP to assess their innovations can visit the official website.

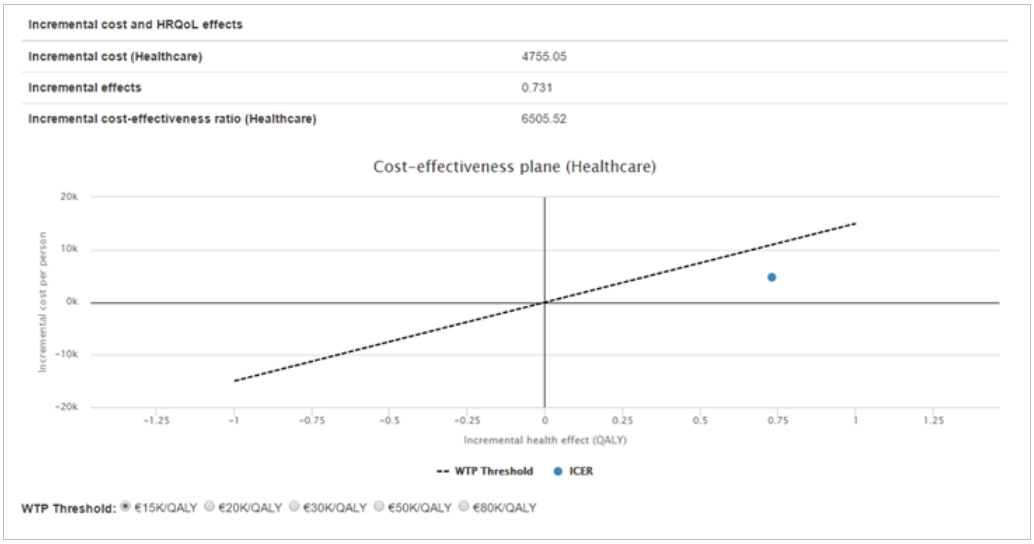
MAFEIP Use Case: BeyondSilos Badalona Serveis Asssistencials

The main aim of the Competitiveness and Innovation Programme (CIP) funded project, BeyondSilos, was to enable the delivery of integrated care to older European citizens and support them to live independent lives in their communities. This goal was pursued by providing the ICT tools necessary to integrate care pathways across organisations and locations, in particular between social and health care providers. One of the key areas of the integration was providing common access to home platforms for all the cross-sectorial care teams in order to improve care coordination and consequently the continuity of care. The project started in February 2014 and lasted for three year It had seven pilots spread across six European countries including: Bulgaria, Germany, Italy, Northern Ireland, Portugal and Spain. This use case includes the analysis of the results achieved at Badalona Serveis Assistencials (BSA), Spain, by means of the MAFEIP tool.

Participants, aged between 64 and 103, were divided into a Control group, receiving usual care, and an Intervention group, and further split in two different integrated common care pathways for short term and long term homecare support respectively:. Selection criteria focused on elderly patients, living at home, autonomously or in a dependency situation, with a history of heart failure and stroke and an additional chronic disease. Selected participants had home care needs or an exclusion risk due to illness or disability. The intervention group received the new BeyondSilos service in addition to the usual care. It is important to stress that BSA has already been providing social and health care services in an integrated way for a longer period. With BeyondSilos, BSA aimed at increasing the effectiveness of the integration beyond current levels through the introduction of a telemonitoring solution and the formalisation of the relationship with third sector care providers.

One of the assessment domains of the project included the observation of the possible changes within the instrumental activities of daily living (Barthel & IADL scales) when comparing the patients receiving the new BeyondSilos service and those receiving usual care. Therefore, the health states of the MAFEIP model are defined based on the change in the Barthel Index, concretely on whether the Index decreased or not for patients compared to their respective initial value. The baseline state was defined as the patient improves/stays the same and the deteriorated health state as the patient's condition worsens.

The MAFEIP analysis showed that the intervention is better (more effective) than the current (standard) care, but that it is also more expensive. Comparing incremental cost-effectiveness ratio (ICER) to the Willingness to Pay (WTP), the intervention emerged as cost-effective for all the WTP threshold options included in the model. In other words, as illustrated below, the solution is cost-effective



if the willingness to pay is at least 6,500 € per QALY (Quality Adjusted Life Year) . The analysis also revealed that the transition between states is very similar in both the intervention and in current care, but the latter displays a slightly higher probability of moving to the deteriorated health state.

The BeyondSilos use case has been particularly well suited for establishing the robustness of the MAFEIP tool as well as for learning which aspects could benefit from refinement. Several difficulties were encountered in adapting the BeyondSilos intervention to the Markov model used in the tool. One is represented by the number of states – baseline health, deteriorated health and dead – used in the Markov model. These did not correctly adapt to the intervention, as the improvement caused in the outcome variable (Barthel Index) was not enough to record a move from the deteriorated state to the baseline state, and, hence, the positive effects of the intervention were not displayed in the model results. For this reason, the health states were defined based on the change in the Barthel Index to better analyse the impact of the intervention. The inclusion of additional health states would therefore be a possible improvement of the tool.

Furthermore, individuals starting the simulation, per default, in the baseline health state and transitioning to the state labeled as 'deteriorated health', or to the 'dead' state, operated with the assumption that the baseline situation should always be one were individuals transition from better health to a state of reduced health. In the BeyondSilos intervention evaluated in this use case, participants were suffering heart failure or stroke plus another chronic disease, therefore being able to specify starting health states would increase the flexibility of the tool. A similar additional difficulty was represented by setting the baseline value of the mortality risk above the average of the general population. Determining how to correctly adjust the number proved to be a challenge and it will be addressed further as the tool continues to develop.

MAFEIP User Community Support

Learn more about the tool and consult additional MAFEIP Use Cases on our website:

- MasterMind
- VPH DARE@IT
- MD-Paedigree

Stay tuned for our upcoming MAFEIP Introduction video series.

The following documents have been made available on the MAFEIP official website in order to help the User Community understand and use the tool with ease:

- MAFEIP User Guide:
  This document is developed to help users work with the tool easily and efficiently.
- Data Collection Codebook:
  This document summarizes the main input parameters required to populate the MAFEIP tool.

MAFEIP Workshops in Europe

MAFEIP Workshop at the eHealth Week 2017

The MAFEIP tool was presented at the eHealth Week 2017, organised in Malta from 10 to 12 May. The purpose of the MAFEIP workshop was twofold: 1) to give a brief introduction of the MAFEIP study and the theory underlying the MAFEIP model and, 2) to train the attendees in the use of the tool through practical case studies.

MAFEIP Workshop at the 3rd WHO Global Forum on Medical Devices 2017

A MAFEIP Workshop took place at the 3rd WHO Global Forum on Medical Devices, which took place between 10-12 May 2017 in Geneva. The MAFEIP session gave a brief introduction in the theory underlying cots-utility analysis. Subsequently, the attendees were guided in a practical experience designed to give them a first grasp of the kind of information they need in order to start an assessment of healthcare technologies in their context.

MAFEIP Workshop at the Forum PA Puglia 2017

A MAFEIP Workshop was organized at the Forum PA Puglia 2017, in Bari, on 4-5 May 2017. The purpose of the Session was to present the work conducted in the MAFEIP study. An additional goal was identifying contributions from stakeholders involved in the EIP on AHA, for the improvement of the tool in view of the this framework's relevance in supporting the monitoring of EIP on AHA objectives.

MAFEIP (assessing eHealth innovations) presented at a workshop in Girona

The MAFEIP study team conducted a workshop in order to inform potential users about the tool, its scope and functionalities, and promote its uptake by providing different support mechanisms. The workshop was held on 27 February 2017 in Gerona, Spain, as part of a meeting in preparation for the the final conference of EU integrated care projects CareWell and BeyondSilos.

More than 20 representatives of EU organisations dealing with integrated care and other active and healthy ageing topics attended the event. They were introduced to the study and the MAFEIP tool by Francisco Lupiáñez-Villanueva and Ruth Vilar, OpenEvidence. The participants benefitted from the experience gathered by assessing a concrete fall prevention intervention presented as a case study by Dr. Leandro Pecchia, University of Warwick. Strahil Birov from empirica presented the different support mechanisms which are at the disposal of any organisation interested in using MAFEIP to assess their innovations in active and healthy ageing. An open discussion followed to allow participants to provide feedback and to better understand their needs and expectations.

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