Report on performed countries support process

The objective of the collaboration between the Ministry of Health (MoH) of Hungary (HU) and the mHealth Hub is to "Co-create a Strategy and Roadmap for the implementation and setup of a large scale mHealth intervention in Hungary in the area of Diabetes management". The collaboration focussed on proposing a possible strategy to strengthen current efforts with an evidence-based and health outcomes-focused digital intervention. The proposed collaboration aimed to:

• Co-create/integrate a new/already existing mHealth application addressed at OAD (oral anti-diabetic) treated Diabetes

• Facilitateing of knowledge exchange on the topic of patient education and for designing an IT communication system between hospital/GP and patient

• Organise stakeholder engagement workshops and roundtables between HU representatives and mHealthHub partners

• Develop offline materials, such as documents developed by the Hub and relevant documents for HU identified through desk research

Hungary – case of tackling type 2 diabetes through co-creation of a support roadmap

Definition of stakeholder and their engagement in workshops (to work through next steps in the application of the methodology of the personas in Hungary)

Multidisciplinary meeting involving clinicians (for setting personas profiles according to clinical focus)

Tailored informative sessions and further co-creation work (persona development approach; service scenarios; building blocks)

Stakeholder matrix development exercise as preparatory work for the co-creation of a process pathway

Process pathway Co-creation and dataflow mapping (ePrescriptions, self-monitoring data, and beyond; service integration)

Offering further tailored information on:
- Assessment, certification and reimbursement
- Evaluation and monitoring
- Training
- To be identified, other horizontal supporting elements

Operations management

Needs assessment and analysis of existing Hungarian organizational structures and current health and care services provided to patients living with diabetes provides grounds for planning, identifying gaps in knowledge and supporting decision-making.

To better understand the current Hungarian system, the Hub Team together with the HU Team collected comprehensive data about:

- Political and strategic background of mHealth infrastructure: National and regional policy, National Digital Skills promotion strategy

- Current care services provided to diabetes patients, their empowerment and ICT elements

- Existing systems, privacy, and security measures available

- Relevant national and regional policy

- Organisational structures and current services provided

- Stakeholder analysis, consultation and engagement

- Focus fields and discussion (newly diagnosed patients in oral anti-diabetic treated patients

Content development and adaptation

Multidisciplinary work involving clinicians for defining support needs and target group in terms of
• applying the persona approach for needs identification, and
• service scenario development

The Hub Team developed together with the Hungarian representatives a scenario representative for János and its' interactions with the healthcare providers. The scenario guiding questions focused on:
• Scenario focus / event / episode
• What factors likely caused, triggered, or led to the event?
• Key actors involved
• Needs of key actors and their interactions
• ICT tools persona uses or services supporting the scenario elements above
• Interoperability (if any)

Identification of Health system challenges, pain points and bottlenecks (crucial for future process pathway development through Identification of gaps/ issues in the workflow of delivering health services) involved:
• Key "turning points" in János' health and care journey
• Identification of pain points. specific gaps or problems in the workflow of delivering health services (early detection, clinical decision support, monitoring, self-management)

ICT infrastructure and Technology

Several elements were under investigation:
Discussion on HU on-going pilots
Priority setting process and implementation focus
Analysis of existing mHealth applications addressing needs and pain points in Hungary

Criteria for selection of relevant applications were:
• The inclusion criteria used to identify and select relevant mobile applications (mHealth apps) was based on the following two main conditions:
• The needs of the persona János who has been recently diagnosed with Type 2 diabetes, and
• The different pain points identified in the Hungarian care pathway: i) early detection; ii) self-management; ii) monitoring and iv) clinical decision.

Domains used for the analysis:

reliability

interoperability
scalability

safety
effectiveness

transparency
security

privacy
tech.stability

validity
usability

accessibility

Evaluation and Monitoring

Core evaluation questions that need to be considered in the evaluation process are:
- What are the changes to care quality that can be attributed to the new pathway?
- What are the changes to perceived care outcomes and care experience on the side of the citizen that can be attributed to the new pathway?
- Is the new pathway cost-effective across all service areas involved?
- What are the changes to the satisfaction of care professionals that can be attributed to the pathway

The BHBM mDiabetes describes key aspects to be included in the evaluation and monitoring framework such as:
- Key outcomes (e.g., clinical, socio-economic)
- Desired degree of demographic stratification of results and sample size
- Research design: randomized clinical trial, pre-post study, survey or questionnaires
- Continual monitoring of the programme and targeted research
- Costs of evaluation and operational costs of monitoring

Furthermore, when evaluating the process of entire-rollout process, key questions to be answered include:
- Have the elements of the intervention been implemented as planned?
- In how far are there both intended and unintended effects?
- What are the barriers and drivers regarding the implementation and the achievement of the intended impacts?
- Which contextual factors have what kind of impact?
- Which mechanisms (structures and processes) have been used?