eMOM GDM
CleverHealth Network

Remote monitoring of gestational diabetes project

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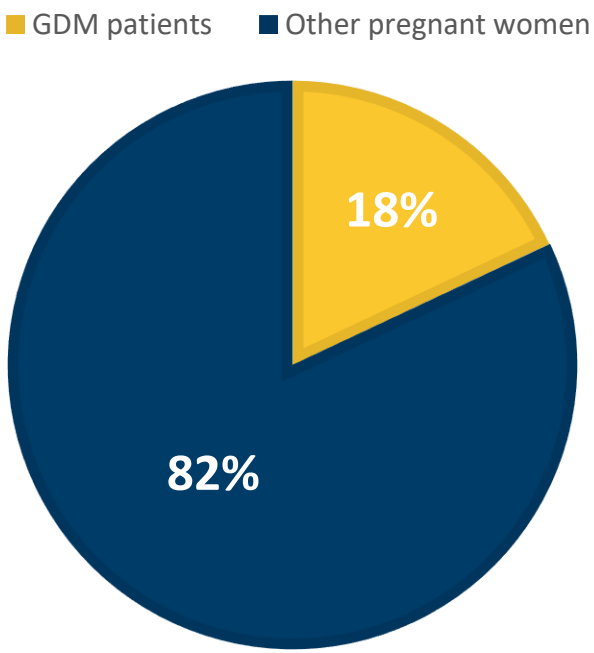
Why is it important to treat gestational diabetes?

- Substantial increase in cases of gestational diabetes (GDM)
  - Increasing number of overweight pregnant women:
    in Western countries, up to 60% of women of reproductive age are overweight
  - GDM incidence 19% in 2019 (2,500 women in Helsinki University Hospital area)
- GDM predisposes to:
  - type 2 diabetes
  - metabolic risks – also in the next generation
- Pregnant women are motivated to make lifestyle changes and easily reachable: opportunity for prevention
- Childbirth safety



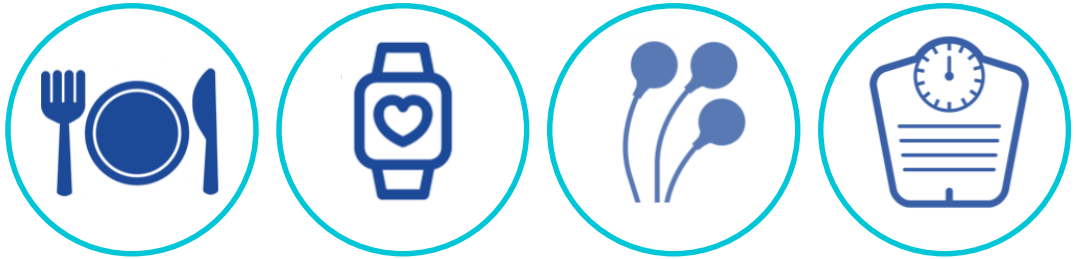
Challenges to solve

Insufficient GDM monitoring at the level of individuals

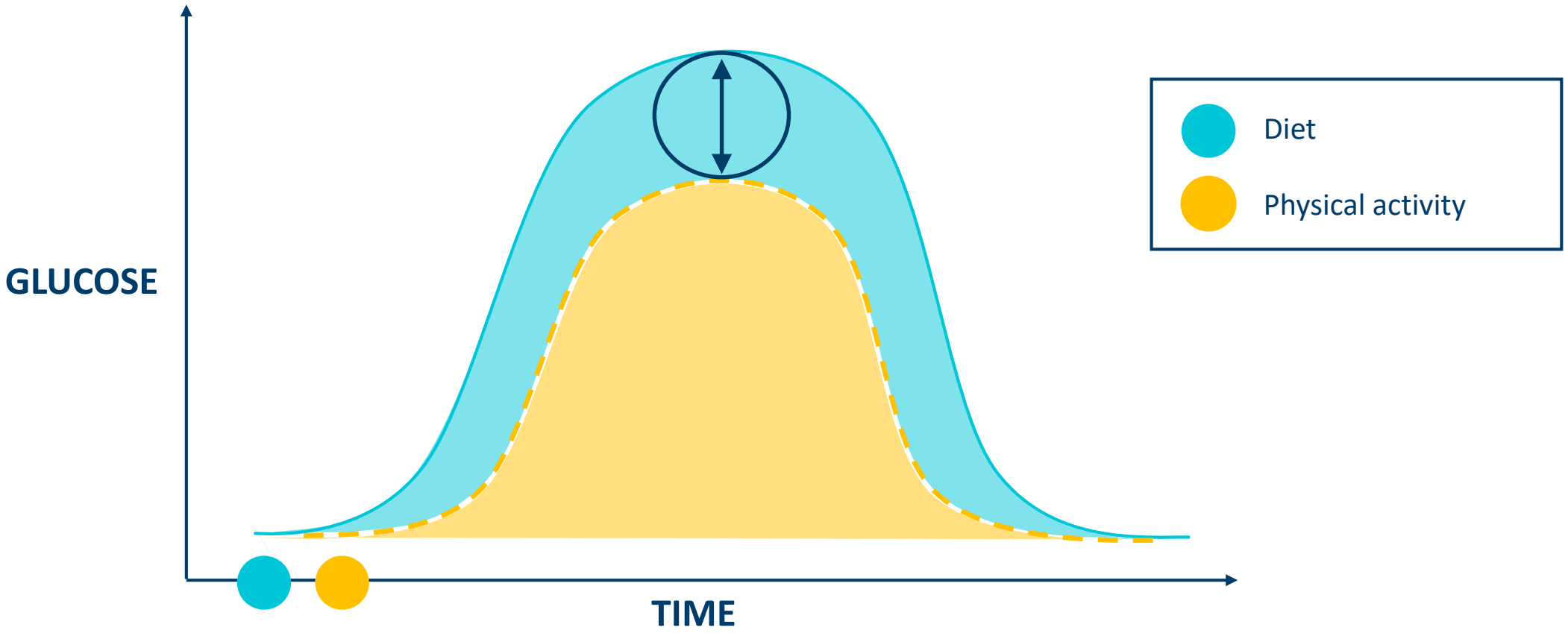
- Blood glucose levels are measured a few times a week with fingertip measurements
- Instructions are dated

Making visible how diet, physical activity, sleep and stress influence:

- Glucose levels in real time (also night-time glucose levels)
- Weight gain during pregnancy
- Weight and body composition of a fetus



Real time monitoring

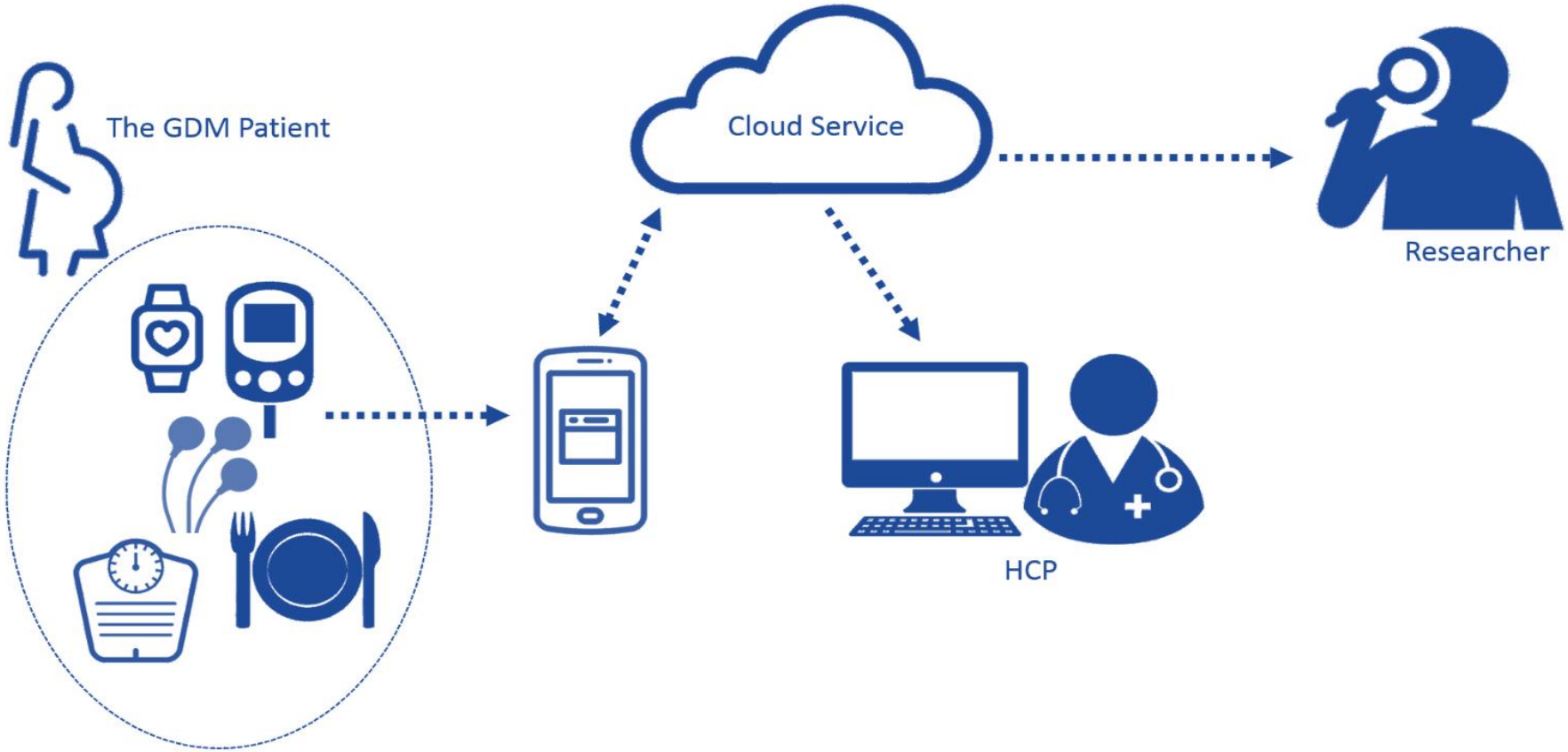


Project objectives

- An easy-to-use mobile application improves the treatment and monitoring of gestational diabetes without additional human resources
- The project combines important factors concerning lifestyle and treatment of gestational diabetes

- The application will forward the data in real time to health care personnel, who can provide guidance as needed

eMOM-service concept as part of the care pathway



Long-term objective

- To establish eMOM service concept in the markets and extend it to cover other diseases in addition to GDM
- The service model can be developed in different ways, e.g. with artificial intelligence and predictive analytics

GENERATIONS OF SELF-CARE

G1	G2	G3
• Self-monitoring of capillary blood glucose • Limited number of measurements	• Continuous glucose monitoring • Mobile profile	• Artificial intelligence • Predictive analytics • Analysis and instructions

Several, wonderful research areas → Spinoffs for the other risk groups

Project participants:

HUS	elisa	FUJITSU	A?	Subcontractors
Coordination and research	Develops the mobile application and integrates data from different sensors	HUS DataLake integration and user interface for healthcare professionals	Research	

- The final service product developed during the project will be commercialized by Elisa and Fujitsu
- HUS acts as the project coordinator and its main role is in research
- Business Finland funds the project

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