

Welcome to the Workshop: Design and Delivery of Personalised Interventions for Chronic Disease

Chronic diseases such as diabetes, cardiovascular disease, chronic respiratory illnesses, and mental health disorders represent a significant global health challenge, affecting millions of individuals and placing immense strain on healthcare systems worldwide. Addressing these complex health issues requires innovative approaches that go beyond traditional one-size-fits-all interventions. Personalized interventions tailored to individual needs, preferences, and contexts have emerged as a promising strategy. By harnessing advancements in technology, data analytics, and patient-centered care, personalized interventions can optimize health outcomes, enhance patient engagement, and improve long-term adherence to treatment plans. Such interventions also have potential to contribute to more equitable and cost-effective health care delivery. Please join us for this interactive workshop on the design and delivery of personalized interventions for chronic disease!

With this workshop we also would like to welcome our new Foreign Adjunct Professor, Ralph Maddison (from 1st July 2024) who is an internationally recognised expert in digital health with special focus on design, development, and evaluation of digital health interventions for the prevention and management of chronic disease [Ralph Maddison Profile | Deakin University](#).

Time: 2024-09-04 | 12.00 –16.30

Place: Gene, NEO, floor 5, Blickagången 16, Flemingsberg

Program: See attached for full details on the aim and content of this workshop

Register for the workshop by doing 1 and 2 below:

1. Send an email to Emmie Söderström (PhD student) emmie.soderstrom@ki.se by the 26th August with the following information: name, organisation and any specific requirements for food (lunch will be provided).

2. To optimize the value of this workshop, please log in and submit your main areas of expertise, and current research program on this digital whiteboard by the 26th August: https://miro.com/welcomeonboard/a1F4eFk4UkxxY2hNM3JLYURCeDBMbU1IZVZSaEFrZVp6MDhrR1Zob1BxM01DbHBOU2NOWENnQzk3OGtndXA1WnwzNDU4NzYONTkzOTAONTc1NDgwfDI=?share_link_id=410945840955

If you have any problems with creating an account and submitting your information in miro, please send an email to: emmie.soderstrom@ki.se

Organisers

Marie Löf, Professor, Department of Medicine Huddinge, and Coordinator of the Centre for Nutrition, KI, marie.lof@ki.se together with Professor Ralph Maddison, Deakin University, Melbourne, Australia and Foreign Adjunct Professor, Department of Medicine Huddinge, KI.



**Karolinska
Institutet**

Workshop on the design and delivery of Personalized Interventions for Chronic Disease

Background Introduction:

Chronic diseases represent a significant global health challenge, affecting millions of individuals and placing immense strain on healthcare systems worldwide. Conditions such as diabetes, cardiovascular disease, chronic respiratory illnesses, and mental health disorders not only impact quality of life but also impose substantial economic burden.

Addressing these complex health issues requires innovative approaches that go beyond traditional one-size-fits-all interventions. Personalized interventions tailored to individual needs, preferences, and contexts have emerged as a promising strategy. By harnessing advancements in technology, data analytics, and patient-centered care, personalized interventions can optimize health outcomes, enhance patient engagement, and improve long-term adherence to treatment plans. Such interventions also have potential to contribute to more equitable and cost-effective health care delivery.

The concept of personalized interventions extends beyond clinical treatments to encompass a holistic approach that integrates lifestyle modifications, behavioural interventions, and social support networks. Such comprehensive strategies aim not only to prevent the onset of chronic diseases but also to empower individuals in effectively managing their conditions over the long term.

To accelerate the development and implementation of effective personalized interventions, collaboration among diverse stakeholders is crucial. Healthcare providers, researchers, technologists, policymakers, and most importantly, individuals living with chronic conditions, each bring unique perspectives and expertise to the table.

The aim of this workshop is to envision innovative solutions that will transform the landscape of chronic disease prevention and management. By integrating cutting-edge research with real-world insights, we hope to empower individuals, improve health outcomes, and build resilient healthcare systems capable of meeting the challenges of chronic disease in the 21st century. In this workshop, we aim to ideate personalized interventions that are not only evidence-based but also practical, scalable, inclusive and responsive to the needs of diverse populations.

Together, let us embark on this journey towards personalized health interventions that have the potential to make a profound difference in the lives of millions worldwide.

To maximise the utility of this workshop, we would like to use a Miro board to collect information on participants of the workshop, their main areas of expertise and current research program that could help to inform or guide future collaborative opportunities (e.g., funding, supervision, and publications).

Workshop Outline:

Objective: To collaboratively ideate innovative solutions that will transform the landscape of chronic disease prevention and management and outline potential funding opportunities that support personalized interventions.

Duration: ~4-5 hours the 4th of September 2024 12.00-16.30 (lunch included)

Participants:

- Researchers and clinicians specializing in prevention and management of chronic diseases, with a focus on:
 - medicine and allied health
 - lifestyle modification (e.g., nutrition, physical activity)
 - mental health
 - digital health
 - data science or big data
 - registry linkage
 - Experts in personalized medicine and healthcare innovation
 - Experts in machine learning and artificial intelligence
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Welcome

1. Introduction (15-20 minutes)

Welcome and workshop objectives overview.

Icebreaker activity to familiarize participants with each other's expertise and perspectives.

Overview of the importance of personalized interventions in chronic disease management.

2. Setting the scene: Rapid fire presentations

Presentations on current challenges in chronic disease prevention and management and the potential of personalized interventions. Includes case studies or examples of successful personalized interventions. Some suggestions are provided below (to be finalised dependent on final participant list after registration deadline 26th August).

Current Challenges and Opportunities (15 minutes)

Digital health for disease management (15 minutes)

Mental health (15 minutes)

Role and potential of artificial intelligence (15 minutes)

3. Q&A session to clarify issues and opportunities.

4. Ideation Session: Brainstorming (90 minutes)

Breakout groups (divided by expertise or interest) facilitated by workshop moderators (could include 1 slide outline for participants describing their expertise and research).

Brainstorming session to generate ideas for funding opportunities, considering:

Target diseases or conditions

Specific personalized interventions (genomics, digital health tools, etc.)

Collaborative approaches (academic-industry partnerships, international collaborations)

Each group selects a spokesperson to summarize key ideas.

5. Synthesis and Proposal Development (45 minutes)

Reconvene as a whole group.

Presentation of key ideas from each breakout group.

Discussion on feasibility, impact, and potential funding sources for proposed ideas.

Group discussion to refine and prioritize top funding opportunities.

6. Action Planning and Next Steps (30 minutes)

Small group discussions on action steps:

Identifying potential collaborators and partners.

Outlining responsibilities for proposal development.

Establishing timelines and milestones.

Report back and discussion on collective next steps for pursuing funding opportunities.

7. Wrap-Up and Closing Remarks (15 minutes)

Summary of key takeaways and action items.

Thank you to participants and facilitators.

Opportunity for final questions and networking.

8. Follow-Up:

- Compilation of workshop outputs and key ideas into a report or summary document.
- Distribution of contact information for participants interested in further collaboration.
- Survey or feedback collection to assess workshop effectiveness and gather suggestions for improvement.

Organised by:

Marie Löf, Professor, Department of Medicine Huddinge, and Coordinator of the Centre for Nutrition, KI; and Professor Ralph Maddison, Deakin University, Melbourne, Australia and Honorary Professor at the Department of Medicine Huddinge, KI (1st July 2024).