

# **RtKW 12: Tailoring implementation**

Tailored strategies to increase adoption, implementation, and sustained use of point-of-care procalcitonin to guide antibiotic prescription in primary care practices: combining participatory and theory-driven approaches

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Tailoring Implementation Strategies for Scaling Up a Nurse-Led Care Model in Swiss Long-Term Care Facilities Using an Implementation Mapping Approach

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Using realist evaluation to understand how context matters in tailored implementation of primary cancer prevention programs across 11 European contexts

Nikita Hensen<sup>1</sup>, Rixt Smit<sup>1</sup>, Jasmijn Breunese<sup>2</sup>

Tailored implementation of national recommendations on fall prevention among older adults in municipalities in Norway

Maria Bjerk<sup>1,2</sup>, Kristin Taraldsen<sup>1</sup>, Therese Brovold<sup>1</sup>, Signe Flottorp<sup>2</sup>, Siv Linnerud<sup>3</sup>



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### **Research aim**

Point-of-care (POC) procalcitonin is an antibiotic stewardship intervention that effectively reduces inappropriate prescriptions in primary care. This study aimed to develop a multifaceted strategy to implement POC-procalcitonin into primary care physician (PCP) practices based on 43 implementation determinants previously identified in a contextual analysis.

### Setting

This study takes place in Swiss primary healthcare, and strategies may target stakeholders within ('inner setting', e.g. PCPs, medical practice assistants, patients) and outside of PCP practices ('outer setting', e.g. health/regulatory authorities, medical education entities, laboratory machine providers).

### Method(s)

To ideate strategies, we employed three approaches: i) stakeholder interviews about the 'ways to implement POC-procalcitonin'; ii) an expert online brainstorming session; and iii) the Consolidated Framework for Implementation Research (CFIR) and Expert Recommendations for Implementing Change (ERIC) matching tool on the 43 determinants. Dot-voting (in ii) informed strategy prioritisation. Discussions with PCPs and other stakeholders were held to select final strategies. Strategies were rated based on selected APEASE criteria (practicability, effectiveness, acceptability). Final strategies were coded according to ERIC, and Proctor et al.'s 'temporality' (divided into "preparation" and "implementation" phases) and 'action target'.

### Key finding(s)

In total, 176 strategies were ideated in interviews, 145 through brainstorming, and 37 from CFIR-ERIC matching. In this analysis, 32 final strategies were selected: 16 for preparation (targeting "outer setting") and 16 for implementation (targeting "inner setting"). Final strategies were assigned to six of nine ERIC clusters, most often to 'train and educate stakeholders' (e.g., slideshow for PCPs, leaflet for MPAs), 'develop stakeholder interrelationships' (e.g., cultivate relationships with organisations to achieve POC-procalcitonin endorsement), 'support clinicians' (e.g., provide reminders), and 'use evaluative and iterative strategies' (e.g., provide POC-procalcitonin devices for a trial period).

### Discussion

Multiple strategies were deemed necessary to introduce POC-procalcitonin in Swiss PCP practices. Strategies were equally mapped to preparation and implementation. Strategies targeting the outer setting should occur before strategies targeting the inner setting. Strategies will be evaluated subsequently. Do (1) stakeholder involvement or (2) theory-based approaches result in more successful strategies? Have you integrated both approaches when designing strategies? Do you believe the division into 'temporality' and 'action target' successfully created order in the complexity of our results?



### Challenges

Due to the multitude of identified determinants and ideated strategies, finding consensus on final strategies was particularly challenging, especially because of a mismatch between implementation frameworks and the stakeholders' reality. To ensure addressing all ideated strategies time-efficiently, we used creative and design-thinking techniques (e.g., dot-voting, mind-mapping).



# Tailoring Implementation Strategies for Scaling Up a Nurse-Led Care Model in Swiss Long-Term Care Facilities Using an Implementation Mapping Approach

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### **Research aim**

This study seeks to identify and formulate implementation strategies that enhance the implementation of a nurse-led care model (INTERCARE) in long-term care facilities (LTCF). While its effectiveness has been assessed in prior research, the current emphasis is on developing strategies that provide optimal support for its implementation.

#### Setting

Four workshops were conducted between September 2022 and June 2023 with 26 participants from 16 LTCFs. The participants' roles were, among others, leadership team members, nurse experts and nurses with extended tasks. They already had introduced or were about to introduce the INTERCARE model.

#### Method(s)

An implementation mapping (IM) approach was used to design and select implementation strategies. Workshops were conducted to assess the needs of LTCFs by gathering experiences and identifying required support across various organisational levels (IM step 1). Based on these findings, performance objectives were formulated and refined with workshop participants. Determinants of behaviour were identified using the COM-B model and the Theoretical Domains Framework (IM steps 2 - 3). IM steps 1-3 informed the development of tailored implementation strategies and an implementation handbook (IM steps 3 - 4). The effectiveness of these strategies will be evaluated using implementation outcomes (e.g. fidelity).

#### Key finding(s)

After conducting IM steps 1-4, we observed that the reflective motivation of people involved (i.e. professional role and identity as well as beliefs about consequences) and the psychological capability (i.e. knowledge) are critical for model implementation. Accordingly, explaining how the model works and highlighting possible outcomes to be achieved with the model is crucial to getting everyone on board. As facilities are highly diverse in their working conditions, promoting adaptability is an important strategy. Each identified implementation strategy (n= 7) addresses more than one theoretical domain and sometimes even more determinants.

#### Discussion

Mapping all possible determinants is key to a comprehensive picture of possible crucial mechanisms of change. What are suggestions to make pragmatic decisions in the process of focusing on specific determinants? LTCFs often work differently (e.g. available knowledge in the care teams, their residents have varying degrees of care need, etc.) and require support in distinctive ways. How can we ensure the IM approach is flexible to respond to various contextual needs? How can the setting's contradictory needs be considered in the IM approach?

#### Challenges

Designing effective implementation strategies requires considering multiple organisational levels. IM is timeconsuming and resource-intensive due to its iterative nature, demanding meticulous preparation and specialised expertise. Complex interventions like the INTERCARE model target multiple stakeholders, and thus requires many distinctive needs to be considered when developing such implementation strategies.



Using realist evaluation to understand how context matters in tailored implementation of primary cancer prevention programs across 11 European contexts

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### Background

The PIECES project evaluates an online theory- and evidence-based toolkit designed to support the selection, adaptation, and implementation of Primary Cancer Prevention (PCP) programs. In this presentation, we will explain how Realist Evaluation can be helpful to understand how tailored implementation, including intervention adaptation and strategy selection, works in real-world settings.

### Methods

Toolkit users include implementation teams, which feature a stratified structure, including implementation coordinators, leads, and service providers. Organisational heterogeneity is anticipated, with teams operating in varied settings such as schools and the occupational health field. A Realist Evaluation aiming to identify what works for whom is complemented by pre- and post-surveys on implementation competencies and semi-structured interviews with toolkit users.

### Results

The toolkit is structured around three strategies: organising implementation, collaborative learning, and evidence-informed working. Based on the toolkit's logic model, literature, and context assessment of participating settings, we developed Context-Mechanism-Outcome (CMO) configurations. In this presentation, we will discuss the development and assessment of these CMO configurations that are fundamental to Realist Evaluation.

### Implications for research and practice

This presentation contributes to implementation science by introducing tools like the PCP repository and toolkit, enabling tailored implementation to optimise impact in complex, real-world contexts. Additionally, we will propose a method for gaining deeper insights into how context influences implementation, aiming to unravel the black box of tailored implementation.

### Discussion

Realist Evaluation may complement traditional process and outcome evaluations by addressing the complexity of real-world implementation. It may help unravel the black box of tailored implementation and provide insights into why and how it works in different contexts. This approach may be relevant when balancing the need to uphold scientific standards while also making sure findings are useful and relevant in real-world situations.



# Tailored implementation of national recommendations on fall prevention among older adults in municipalities in Norway

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### **Research aim**

This study aims to investigate the effectiveness of a tailored intervention to implement national recommendations on fall prevention among home-dwelling older adults compared to usual practice on health professionals' adherence to the recommendations.

### Setting

This research project is conducted within the municipality health care services in Norway, including home nursing, physiotherapy, occupational therapy, rehabilitation services, preventative services and general practitioners. The study is carried out in twenty-five municipalities from four regions in Norway.

### Method(s)

This study is a cluster-randomised trial. The tailored implementation intervention comprises four components: (1) identifying local structures for implementation, (2) establishing a resource team from different professions and levels, (3) promoting knowledge on implementation and fall prevention, and (4) supporting the implementation process. The Consolidated Framework for Implementation Research (CFIR) was used to categorise determinants of the implementation process, and the Expert Recommendations for Implementing Change (ERIC) guided the matching of barriers to implementation strategies. Outcomes are health professionals' adherence to the national recommendations, injurious falls, the feasibility of the intervention, the experiences of the implementation process and intervention costs.

### Key finding(s)

Data collection included measurements at baseline (August 2023), post-intervention (May 2024), and at follow-up (November 2024). We have collected quantitative data through questionnaires and registers and qualitative data through interviewing managers and health personnel. We will conduct data processing and analyses in 2025. At the conference in June we will present preliminary results and experiences from this large implementation study.

### Discussion

Implementing new regulations and guidelines is challenging in municipal health care services today, especially in a multidisciplinary setting. Another challenge is that leader commitment on all levels is crucial for implementation success. I am therefore curious to discuss these topics with the audience.

- How can we tailor the implementation of global and national recommendations to a local level in multidisciplinary health care?
- How can we ensure leader commitment on different levels?

### Challenges

The tailoring of the implementation intervention to fall prevention services in the municipality health care was a time-consuming process conducting a process including several methods. Based on a co-creation process together with stakeholders and previous knowledge of discovered barriers and facilitators, we developed and pilot-tested the tailored implementation intervention.