WtT 6

To do or not to do? – the art of de-implementation

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Introduction

Healthcare is expected to provide high-quality services and use resources efficiently. Yet practices with limited evidence for their efficiency and practices that are potentially harmful to patients are being provided. This has highlighted the need for de-implementation, i.e., abandoning practices of low value. This symposium will help implementation researchers and healthcare professionals to start de-implementation projects. We will provide an overview of the research related to de-implementation based on the Choosing Wisely De-implementation Framework, present determinants for use of low value care and effectiveness of strategies for de-implementation both in short and long-term, contributing to the topic of implementation sustainability.

Presentation I: *Relative importance and interactions of factors influencing low-value care provision: A factorial survey experiment among primary care physician*

Background: Several determinants for providing low-value care have been identified, but understanding how these factors influence professionals' decisions, individually and jointly, is a necessary next step to guide de-implementation.
Methods: A factorial survey experiment was employed, using vignettes that presented hypothetical medical scenarios among 593 Swedish primary care physicians. Each vignette varied systematically by factors such as patient age, patient request for the LVC, physician's perception of this practice, practice cost to the primary care centre, and time taken to deliver it. For each scenario, we measured the reported likelihood of providing the LVC. We collected information on the physician's worry about missing a serious illness.
Results: Patient request and physicians' positive perceptions of the practice were the factors that increased the reported likelihood of providing LVC the most. When the LVC was low in cost or not time-consuming, patient request increased the likelihood of providing it. In contrast, credible evidence against the LVC reduced

the role of patient request. Physicians' fear of missing a serious illness was linked with higher reported probability of providing LVC, and the credibility of the evidence against the LVC reduced the role of this concern.
Discussion: What are the most important differences between implementation and de-implementation determinants? What experience do you have, from research or clinical work, concerning the reasons for the provision of low-value care?

Presentation II: *What are the most effective de-implementation strategies?*

Background: Low-value care is a major problem in modern healthcare. De-implementation strategies may help achieve higher quality healthcare by decreasing the use of low-value care. We conducted a systematic review and meta-analysis of different de-implementation strategies in primary care.
Methods: We searched Medline and Scopus databases until 10 July 2024. We included all randomised trials on de-implementation strategies and used standard systematic review methodology to assess the evidence.
Results: We screened 12,113 abstracts, of which 140 were eligible. Provider education combined with audit and feedback reduced low-value care use (odds ratio 0.73, 95% confidence interval 0.63 to 0.84; moderate evidence certainty). Low certainty evidence suggested that (provider) audit and feedback (0.82, 95% CI 0.67 to 1.00, low certainty); and patient education (0.70, 95% CI 0.30 to 1.66, low certainty) may reduce low-value care use. Low certainty evidence suggested that provider education alone may reduce (0.86, 95% CI 0.72 to 1.03) low-value care use. The combination of provider and patient education may lead to a reduction (0.64, 0.50-0.83, low certainty) in low-value care use.
Discussion points: What are your experiences with de-implementation strategies, and do they align with these results? Should de-implementation strategies be targeted more to patients rather than healthcare providers?

Presentation III: *Achieving Sustainable outcomes with de-implementation strategies*

Background: A challenge in implementation research lies in developing interventions with sustained effectiveness. While numerous studies demonstrate positive short-term outcomes, the long-term sustainability of these remains largely unexplored. Understanding the long-term effects of successful strategies and how to sustain these results is vital. We assessed the sustainability of two de-implementation projects and analysed the influencing factors of both strategies.
Method: The long-term effects of two de-implementation projects were analysed. One focused on reducing laboratory test volume in two hospitals, and the other on inappropriate peripheral venous catheters and urinary catheter use in five hospitals. Sixteen interviews were conducted involving 23 participants, including healthcare professionals and ward managers.
Results: A sustained reduction in laboratory test volume was observed in one of the two hospitals nearly two years post-implementation. Five years after de-implementation efforts, a decrease in inappropriate peripheral venous catheters but not in inappropriate urinary catheters persisted in four of all five hospitals. Strategy components aligning with daily practice or automated processes facilitated their continuity. Barriers to continuing the de-implementation strategy included changes in the external context, competing priorities, absence of champions, and high turnover among young healthcare professionals. Intrinsic motivation among healthcare professionals, especially active champions, emerged as a critical facilitator. Notably, no correlation was found between the number or intensity of maintained strategy components and the sustainability of effects.
Discussion: To what extent do you emphasise integrating strategy components into daily routines, leveraging automation? Does that align with the barriers to de-implementation?