Five categories of factors influence the use and de-implementation of low-value care

What is the context of this review?

- The use of low-value care, which are healthcare practices with little or no benefit to patients, is a widespread problem both for individuals and health systems.
- Despite efforts like the Choosing Wisely campaign identifying practices that are considered low-value care, the problem persists.
- A review is necessary to understand the facilitators and challenges of de-implementing low-value care.

> **Box 1: Coverage of OHT building blocks**
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> This review addresses building block #8:
> 1) defined patient population
> 2) in-scope services
> 3) patient partnership and community engagement
> 4) patient care and experience
> 5) digital health
> 6) leadership, accountability and governance
> 7) funding and incentive structure
> **8) performance measurement, quality improvement, and continuous learning (domain 53 – performance measurement across the quadruple aim and across sectors)**

What questions are being addressed?

- What factors influence the use of low-value care?
- What factors influence the de-implementation of low-value care?

How was the review done?

- The authors conducted extensive searches in electronic databases and trial registries. A total of 6,570 documents were initially identify, 101 of which were included in the final review after assessing their eligibility.
- Of those, 92 studies focused on factors influencing the use of low-value care and 9 studies focused on factors influencing the de-implementation of low-value care.

How up to date is this review?

- The authors searched for studies published between January 2013 and June 2018.

What are the main results of the review?

- The authors identified a series of factors that influence both the use and de-implementation of

low-value care. These factors were grouped into five categories: 1) the patients; 2) the professionals, 3) the outer and inner contexts, 4) the processes of managing low-value care, and 5) the evidence and practices related to low-value care (see table 1 below).

- Organizations must consider determinants at different levels when attempting to de-implement low-value care. Strategies only targeting on category of factors may not be sufficient.

Table 1. Factors influencing the use and de-implementation of low-value care

Factors	How they determine the **use** of low-value care	How they affect **de-implementing** low-value care
Patients	• Patients' characteristics (age, gender, ethnicity, and socio-economic status), their health conditions (severity of illness), their expectations, and expectations from relatives can influence the use of low-value care	• Expectations from patients, requests for tests and treatment and their preferences were all barriers to de-implementing low-value care • Patient knowledge can help or hinder de-implementation
Professionals	• Age, gender, medical specialty, professional training, personality, knowledge (more knowledge protected against use of low-value care), expectations, attitudes, and behaviours (fear of malpractice and liability) • Cost-consciousness and discussing low-value care were linked to lower use of low-value care	• Expectations and behaviours of professionals can lead to resistance to change or lack of interest in saving money which hinders de-implementation • A gap in knowledge about the use of low-value care or forgetting to re-assess patient's eligibility for use can hinder the de-implementation of low-value care

Outer and inner contexts	• Outer contexts refer to the geographical contexts of healthcare settings (location, economy, policy and political support)
	• Inner contexts refer to the structural and social environment of the healthcare settings (organizational structures)
		• Policy and political support:
		  o clear reason for change help de-implementation
		  o a weak political willingness can hinder de-implementation
		• Setting, culture, and care process either help or hinder de-implementation

Processes for managing low-value care	• Strategies used to limit the use of low-value care (for example, communication with patients and relatives) proved to be effective	• Strength of leadership, communication and resources can either hinder or help de-implementation
Evidence related to low-value care	• Conflicting guidelines and beliefs about the effectiveness of low-value care led to it being used more often	• A lack of alternative practices to low-value care, or a lack of reliable and available information on safety, effectiveness, and costs are barriers to de-implementation

How confident are we in the results?

- This is a recent and moderate-quality review with an AMSTAR score of 5/9