

## KTI 14. MULTIFACETED INTERVENTIONS

### WHAT ARE MULTIFACETED INTERVENTIONS?

#### MULTIFACETED INTERVENTIONS DESCRIPTION

- An intervention with two or more components (e.g. reminders and audit and feedback).

#### MULTIFACETED INTERVENTIONS' GOAL(S)

- To change healthcare professionals' behavior in different clinical settings to improve patient care.

#### CURRENT FINDINGS FROM THE EVIDENCE

- There is no compelling evidence that multifaceted interventions are more effective than single-component interventions.

### SYSTEMATIC REVIEW OF THE EVIDENCE FOR MULTIFACETED INTERVENTIONS

Source: Squires JE, Sullivan K, Eccles MP, Worswick J, Grimshaw JM. Are multifaceted interventions more effective than single-component interventions in changing health-care professionals' behaviours? An overview of systematic reviews. *Implementation Science*. 2014 Dec;9(1):152.

EVIDENCE FROM THE SYSTEMATIC REVIEW	
Description of Multifaceted Interventions	Article offered no information about the studies in the reviews, including no descriptions of interventions.
Setting	<u>Healthcare settings</u> : Hospital, clinical, primary care, community, etc. <u>Healthcare topic</u> : General <u>Study location</u> : Not Specified
Intervention Deliverer	Not Specified
Intervention Recipient	Physicians, nurses, pharmacists
Quality of the systematic review	High risk of bias (Assessment tool: ROBIS)
Quality of studies included in systematic review	Median AMSTAR score was 7 (range 4 to 9)
OUTCOMES OF SYSTEMATIC REVIEW	
Comparisons:	1. Multifaceted interventions vs single interventions
Health care provider process outcomes:	Statistical evidence from the 3 included reviews indicates that increasing the number of intervention components does not significantly improve the effect size and that single interventions

	<p>compared to usual care may have larger effects than multifaceted compared to single interventions.</p> <p>The majority of reviews included in this overview reported direct (but non-statistical) or indirect comparisons of the effectiveness of multifaceted compared to single component interventions.</p> <p>The evidence provided in these reviews, although less robust than the statistical effect based analyses, lends further support to the conclusion that multifaceted interventions are not necessarily more effective than single interventions.</p>
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## OPERATIONALIZATION OF MULTIFACETED INTERVENTIONS

This review indicates that it is critical to consider the design and implementation of interventions to change health-care professional behaviours in different clinical settings so that effectiveness and efficiency are more appropriately balanced.

If one begins with a barrier and enabler assessment to changing a specific clinical behaviour, a multifaceted intervention will often be the logical next step. However, a single-component intervention or a multifaceted intervention with fewer components might be as or even more appropriate, either as ‘the single best bet’ or as ‘the most appropriate off the shelf intervention’.

The review authors are not suggesting that multifaceted interventions are not useful, but rather that a single or less complex multifaceted intervention that is tailored to overcome the barriers and enhance the enablers of the behaviour that needs to be changed may be appropriate.

## STUDY EXAMPLE OF MULTIFACETED INTERVENTIONS FROM THE SYSTEMATIC REVIEW

Source: Légaré F, Turcotte S, Stacey D, Ratté S, Kryworuchko J, Graham ID. Patients’ perceptions of sharing in decisions. *The Patient-Patient-Centered Outcomes Research*. 2012 Mar 1;5(1):1-9.

STUDY INFORMATION	
Goals of Intervention	To improve health professionals’ adoption of shared decision making in routine clinical practice.
Description of Intervention	<p>Included healthcare professionals-targeted interventions (printed educational material, educational meetings, audit and feedback and reminders) and patient-mediated interventions.</p> <p>Patient-mediated interventions are aimed at changing health professional behavior through either provider-patient interactions or through information provided by or to the patient (e.g. a patient decision aid to help prepare patients for participating in decision making)</p>

Setting	Community (primary, specialized and ambulatory care)
Intervention Deliverer	Not Specified
Intervention Recipient	Healthcare professionals (mostly physicians)
Quality of the Study	High quality
<b>STUDY OUTCOMES</b>	
Comparison	<ol style="list-style-type: none"> <li>1. Single intervention vs. usual care</li> <li>2. Single intervention vs. single intervention</li> <li>3. Multi-faceted intervention vs. usual care</li> <li>4. Multi-faceted intervention vs. single intervention</li> <li>5. Multi-faceted intervention vs. multi-faceted intervention</li> </ol>
Health Care Provider Process Outcomes	<ol style="list-style-type: none"> <li>1. Single intervention vs. usual care Two studies found no statistically or clinically significant difference between intervention groups. One study did find a statistically significant effect favoring the control, but it was not clinically significant.</li> <li>2. Single intervention vs. single intervention None of the interventions recorded a significant effect</li> <li>3. Multi-faceted intervention vs. usual care Of the four RCTs, only one found a significant effect. This study reported that, compared with usual care, an educational meeting for physicians and a patient-mediated intervention improved patients' perception of shared decision making (p = 0.003).</li> <li>4. Multi-faceted intervention vs. single intervention Two of the three multifaceted RCTs produced a significant effect.</li> <li>5. Multi-faceted intervention vs. multi-faceted intervention Neither study found a statistically significant difference between the professionals' adoption of shared decision making</li> </ol>