

# Knowledge Translation and Implementation Science in Health Professions Education: Time for Clarity?

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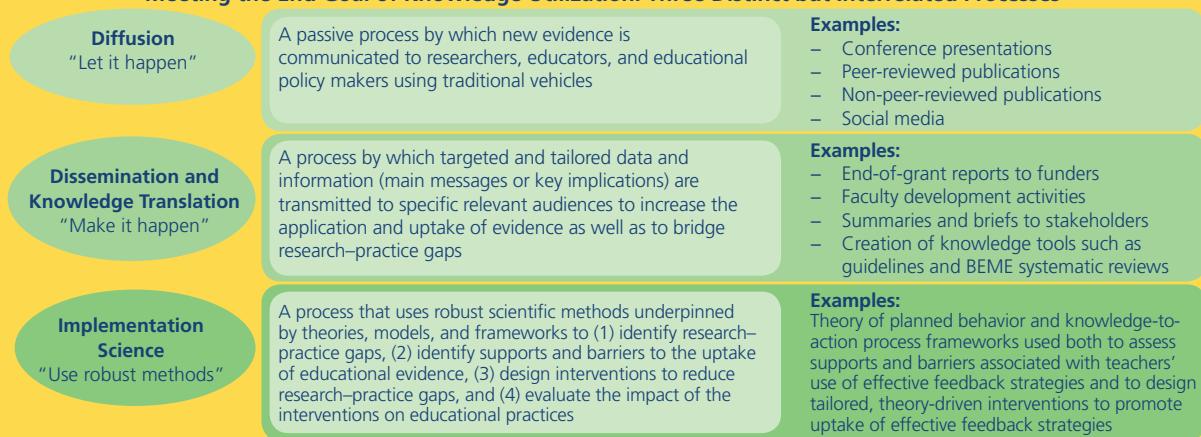
- A central objective of health professions education (HPE) is to provide learners with state-of-the-art education that will prepare them for their future practice as health care professionals.
- There is a growing evidence base in HPE regarding individual learners (teaching and assessment strategies), organizations (curricular review, program evaluation), and policy (accreditation, licensure).<sup>1-3</sup>
- High-stakes decisions such as selection, assessment, and licensure demand a critical and evidence-informed approach to HPE.
- Knowledge translation aims to promote the uptake and application of research evidence to improve educational practices and ultimately patient care.
- Efforts to inform and improve HPE should be underpinned by the science (theories, models, methods) of knowledge translation, also known as implementation science.

## End Goal: Knowledge Utilization to Inform and Improve HPE

TYPE OF UTILIZATION	DEFINITION	EXAMPLES
<b>Research utilization</b>	Specific kind of knowledge utilization whereby the knowledge has a research base to substantiate it. It is a complex process through which knowledge, in the form of research, is transformed from the findings of one or more studies into <b>instrumental, conceptual, or persuasive/symbolic</b> utilization.	
<b>Instrumental utilization</b>	A concrete application of research from one or more studies, which is normally translated into a material and usable form, such as a protocol or set of guidelines	<i>Findings from a BEME systematic review that increase the use/application of an assessment method</i>
<b>Conceptual utilization</b>	Research findings from one or more studies that may change someone's thinking but not necessarily his/her observable actions	<i>Findings from research that influence someone's attitudes and beliefs toward or intention to use a particular assessment</i>
<b>Persuasive/symbolic utilization</b>	The use of research findings from one or more studies as a persuasive (or political) tool to legitimize a position or practice	<i>Findings from research that influence accreditation standards</i>

Numerous terms have been used interchangeably to refer to the dissemination and uptake of research findings that inform and change educational practices (e.g., diffusion, knowledge translation, dissemination, translational research, implementation).<sup>4</sup> Below, we differentiate and clarify these terms to facilitate discussion within HPE and to help highlight the relationship between knowledge utilization and educational practices and policy.

## Meeting the End Goal of Knowledge Utilization: Three Distinct but Interrelated Processes<sup>5</sup>



## Key Messages

- A growing emphasis is placed on evidence-informed approaches to HPE.
- Diffusion (raising awareness), dissemination (use of knowledge), and implementation science (theories and methods that underpin knowledge translation) are distinct but interrelated concepts.
- To promote the uptake and application of evidence in HPE, researchers and educators need to identify research-practice gaps, implement knowledge translation strategies, and evaluate impacts iteratively.

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BEME indicates the Best Evidence Medical Education Collaboration