



Effective Health Care Spread and Adoption of Innovative Ideas in Health Care

Results of Topic Selection Process & Next Steps

The nominator, Health Management Academy, is interested in a new evidence review on spread and adoption of innovative ideas in health care to inform the creation of leadership development materials for health systems leaders.

We identified an in-process review from the VA Evidence Synthesis Program (ESP) covering the scope of the nomination, therefore, a new AHRQ review would be duplicative. No further activity on this nomination will be undertaken by the Effective Health Care (EHC) Program.

Topic Brief

Topic Name: 0744- Spread and Adoption of Innovative Ideas in Health Care

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Conflict of Interest: None of the authors have any affiliations or financial involvement that conflicts with the material presented in this report.

Summary

- This nomination meets the selection criteria of appropriateness and importance.
- This nomination did not meet the duplication selection criterion. We identified an in-process systematic review from the VA Evidence Synthesis Program (ESP) that will cover the scope of the nomination.

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Background

In a 2003 JAMA editorial, Don Berwick stated: “Health care is rich in evidence-based innovations, yet even when such innovations are implemented successfully in one location, they often disseminate slowly—if at all.”¹ The slow diffusion of innovative ideas through health systems is a complex problem that results in “overuse of unhelpful care, underuse of effective care, and errors in execution”- all of which negatively impact patient outcomes and increase costs.¹ The underlying reasons why health systems are slow to adapt innovative ideas include a lack of awareness or consensus that there is a problem; incompatibility between the values, beliefs, history and needs of health systems and the proposed innovation; and the complexity of implementing innovations.¹ Research in the fields of diffusion of innovation as well as dissemination and implementation have produced strategies and structures to speed up the process of adopting innovative ideas. However, progress has been limited to a few, highly innovative health systems, while others lag behind.

Nominator and Stakeholder Engagement: Health Management Academy nominated this topic on spread and adoption of innovative ideas during a conversation with staff from the Agency for Healthcare Research and Quality (AHRQ) Evidence-based Practice Center Program. Staff from the Scientific Resource Center spoke to the nominator to clarify the questions of interest, to identify the level of evidence needed to inform decision-making by health system administrators, and to discuss examples of health systems that have successfully adopted innovative ideas on a short time frame.

The key questions for this nomination are:

1. What programs, structures, and change management tools (i.e., programs) facilitate the rapid spread and adoption of innovative ideas into health care systems?
 - a. What are the key components of these programs?
 - b. In what contexts/settings have they been used?
 - c. What are the organizational (i.e., staffing, training) requirements for use?
2. Which of these programs have been evaluated?
 - a. What were the outcomes?
 - b. What were the facilitators and barriers to rapid adoption?
 - c. What were the lessons learned?
3. What are the tools for evaluating organizational readiness for change?
 - a. Which of these tools have been validated?
 - b. What does the evidence show in terms of how readiness for change affects spread and adoption?

To define the inclusion criteria for the key questions we specify the population, interventions, comparators, outcomes, settings, and study designs (PICOTS) of interest (Table 1).

Table 1. Key Questions and PICOS

PICOS	Include
Guiding Questions	<ol style="list-style-type: none"> 1. What programs, structures, and change management tools (i.e., programs) facilitate the rapid spread and adoption of innovative ideas into health care systems? <ol style="list-style-type: none"> a. What are the key components of these programs? b. In what contexts/settings have they been used? c. What are the organizational (i.e., staffing, training) requirements for use? 2. Which of these programs have been evaluated? <ol style="list-style-type: none"> a. What were the outcomes? b. What were the facilitators and barriers to rapid adoption? c. What were the lessons learned? 3. What are the tools for evaluating organizational readiness for change? <ol style="list-style-type: none"> a. Which of these tools have been validated? b. What does the evidence show in terms of how readiness for change affects spread and adoption?
Population	Health care administrators, providers, staff and patients
Intervention	1 & 2: Programs, structures, and change management tools 3: Tools for evaluating readiness for change (e.g., surveys or other assessments)
Comparator	Any comparator (pre-post, vs. current program, vs. other program)
Outcome	Time to adoption, cost, provider outcomes, patient outcomes
Setting	All U.S. based health care systems (e.g., hospitals, clinics, federally qualified health centers)
Study Design	Systematic reviews, original research studies, editorials, white papers, government and organization reports, other process evaluations.

Methods

We assessed nomination #0744 *Spread and Adoption of Innovative Ideas in Health Care* for priority for a systematic review or other AHRQ EHC report with a hierarchical process using established selection criteria (Appendix A). Assessment of each criteria determined the need for evaluation of the next one.

1. Determine the *appropriateness* of the nominated topic for inclusion in the EHC program.
2. Establish the overall *importance* of a potential topic as representing a health or healthcare issue in the United States.
3. Determine the *desirability of new evidence review* by examining whether a new systematic review or other AHRQ product would be duplicative.
4. Assess the *potential impact* a new systematic review or other AHRQ product.
5. Assess whether the *current state of the evidence* allows for a systematic review or other AHRQ product (feasibility).
6. Determine the *potential value* of a new systematic review or other AHRQ product.

Appropriateness and Importance

We assessed the nomination for appropriateness and importance.

Desirability of New Review/Duplication

We searched for high-quality, completed or in-process evidence reviews published in the last three years on the key questions of the nomination.

Compilation of Findings

We constructed a table with the selection criteria and our assessments (Appendix A).

Results

Appropriateness and Importance

This is an appropriate and important topic. In 2017, the U.S. ranked highest in cost and lowest in measures of health system performance out of 11 high-income countries.² Inappropriate treatment is a large contributor to these costs. Excessive medical treatment and testing is estimated to cost \$200 billion annually and generate mistakes and injuries that cause 30,000 deaths each year.³ Unnecessary treatment and testing could be curbed through the adoption of innovative ideas- in this case, evidence-based guidelines on appropriate treatment- thereby reducing costs and improving outcomes.

Desirability of New Review/Duplication

A new evidence review on spread and adoption of innovative ideas through health systems would be duplicative of an in-process VA Evidence Synthesis Program review.⁴ This review will provide an overview of what strategies have been used to scale up and spread clinical and administrative practices across healthcare systems, with special attention paid to sites with poor performance or that may be hard to engage in improvement initiatives. The evidence identified in this review, as well as key themes compiled from conversations with subject matter experts, will cover the scope of this nomination. Therefore, a new AHRQ review would be duplicative.

Summary of Findings

- Appropriateness and importance: The topic is both appropriate and important.
- Duplication: This nomination is duplicative of an in-process VA Evidence Synthesis Program (ESP).

References

1. Berwick DM. Disseminating innovations in health care. JAMA. 2003;289(15):1969-75. doi: 10.1001/jama.289.15.1969.
2. New 11-Country Study: U.S. Health Care System Has Widest Gap Between People With Higher and Lower Incomes. The Commonwealth Fund. July 14, 2017. Available at: <http://www.commonwealthfund.org/publications/press-releases/2017/jul/mirror-mirror-press-release>. Accessed on Mar 19 2018.
3. Terhune C. The \$200 billion perils of unnecessary medical tests. PBS News Hour. Mar 24, 2017. Available at: <https://www.pbs.org/newshour/health/200-billion-perils-unnecessary-medical-tests>. Accessed on Mar 19 2018.
4. VA Evidence Synthesis Program. ESP Reports in Progress. Strategies for full system scale/spread. 2018. Available at: https://www.hsrd.research.va.gov/publications/esp/in_progress.cfm#spread. Accessed on Apr 30 2018.

Appendix A. Selection Criteria Summary

Selection Criteria	Assessment
1. Appropriateness	
1a. Does the nomination represent a health care drug, intervention, device, technology, or health care system/setting available (or soon to be available) in the U.S.?	Yes, this nomination represents interventions available in the United States.
1b. Is the nomination a request for a systematic review?	Yes, this is a request for a systematic review.
1c. Is the focus on effectiveness or comparative effectiveness?	Yes, the focus is whether any of these programs improve patient, provider, and health system outcomes.
1d. Is the nomination focus supported by a logic model or biologic plausibility? Is it consistent or coherent with what is known about the topic?	Yes, this nomination is supported by theories of diffusion of innovation and principles of implementation and dissemination.
2. Importance	
2a. Represents a significant disease burden; large proportion of the population	In the U.S., there are large gaps between evidence and practice that lead to poor health outcomes and high costs. Excessive medical treatment and testing is estimated to cost \$200 billion annually and generate mistakes and injuries that cause 30,000 deaths each year. ³
2b. Is of high public interest; affects health care decision making, outcomes, or costs for a large proportion of the US population or for a vulnerable population	Yes, this topic is of high public interest. In 2017, the U.S. ranked highest in cost and lowest in measures of health system performance out of 11 high-income countries. This gap may be narrowed through adoption of innovation in care. ²
2c. Represents important uncertainty for decision makers	Yes, this topic represents important uncertainty for health system administrators. While health systems recognize that quality of care is lacking, it is not clear which innovations to adopt or how to do it successfully in complex health system settings.
2d. Incorporates issues around both clinical benefits and potential clinical harms	Yes, this topic incorporates benefits and harms of adopting innovative ideas within patient, provider, and health system outcomes as well as costs.
2e. Represents high costs due to common use, high unit costs, or high associated costs to consumers, to patients, to health care systems, or to payers	Yes, this topic represents high costs. Implementing innovative ideas can reduce the use of unnecessary and ineffective care, thereby reducing costs.
3. Desirability of a New Evidence Review/Duplication	
3. Would not be redundant (i.e., the proposed topic is not already covered by available or soon-to-be available high-quality systematic review by AHRQ or others)	We identified an in-process VA Evidence Synthesis Program review that will provide an overview of what strategies have been used to scale up and spread clinical and administrative practices across healthcare systems, with special attention paid to sites with poor performance or that may be hard to engage in improvement initiatives. ⁴ The evidence identified in this review, as well as key themes compiled from conversations with subject matter experts, will cover the scope of this nomination. Therefore, a new AHRQ review would be duplicative.

Abbreviations: AHRQ= Agency for Healthcare Research and Quality; VA=Veterans Affairs