Scaling Beyond Early Adopters:
A Systematic Review and
Key Informant Perspectives

January 2019

Prepared for:

Department of Veterans Affairs

Veterans Health Administration

Health Services Research & Development Service

Washington, DC 20420

Prepared by:

Evidence Synthesis Program (ESP) Center

West Los Angeles VA Medical Center

Los Angeles, CA

Paul G. Shekelle, MD, PhD, Director

Authors:

Principal Investigators:

Isomi Miake-Lye, PhD

Paul G. Shekelle, MD, PhD

Co-Investigators:

Christine A. Lam, MD, MBA

Anne C. Lambert-Kerzner, PhD, MSPH

Research Associates:

Selene S. Mak, MPH, PhDc

Deborah M. Delevan, MEd

Pamela M. Secada, MPH

Jessica M. Beroes-Severin, BS

Tanya T. Olmos-Ochoa, PhD

VA | U.S. Department of Veterans Affairs
Veterans Health Administration
Health Services Research & Development Service

PREFACE

The VA Evidence Synthesis Program (ESP) was established in 2007 to provide timely and accurate syntheses of targeted healthcare topics of importance to clinicians, managers, and policymakers as they work to improve the health and healthcare of Veterans. These reports help:

· Develop clinical policies informed by evidence;

· Implement effective services to improve patient outcomes and to support VA clinical practice guidelines and performance measures; and

· Set the direction for future research to address gaps in clinical knowledge.

The program is comprised of four ESP Centers across the US and a Coordinating Center located in Portland, Oregon. Center Directors are VA clinicians and recognized leaders in the field of evidence synthesis with close ties to the AHRQ Evidence-based Practice Center Program and Cochrane Collaboration. The Coordinating Center was created to manage program operations, ensure methodological consistency and quality of products, and interface with stakeholders. To ensure responsiveness to the needs of decision-makers, the program is governed by a Steering Committee comprised of health system leadership and researchers. The program solicits nominations for review topics several times a year via the program website.

Comments on this evidence report are welcome and can be sent to Nicole Floyd, Deputy Director, ESP Coordinating Center at Nicole.Floyd@va.gov.

Recommended citation: Miake-Lye IM, Mak SS, Lambert-Kerzner AC, Lam CA, Delevan DM, Secada PM, Beroes-Severin JM, Olmos-Ochoa TT, Shekelle PG. Scaling Beyond Early Adopters: A Systematic Review and Key Informant Perspectives. VA ESP Project #05-226; 2019. Posted final reports are located on the ESP search page.

EXECUTIVE SUMMARY

INTRODUCTION

The process of moving research insights into clinical practice can be slow and a gap often remains between best practices, frequently developed within single sites or small populations, and general practice delivered at a population scale. The field of implementation science seeks to mend this gap by promoting the adoption and appropriate use of effective interventions, practices, and programs, which includes the study of scale-up and spread of innovations. While hard-to-engage sites may have unique characteristics from sites that are engaged quickly or earlier, they are not typically differentiated in scale-up and spread processes. Thus, there is a lack of information about hard-to-engage sites and how to tailor approaches to these sites in scale-up and spread efforts. The objective of this project is to use systematic review and qualitative interview methods together to understand strategies available to scale up and spread clinical and administrative practices across large healthcare systems such as the VHA, with a focus on "hard-to-engage" sites.

METHODS

Systematic Literature Review

To identify relevant literature, we searched multiple databases using key terms related to scaling or spread of health interventions, improving low-performing organizations, and learning health system(s). In addition to searching publicly available databases, we searched abstracts within a database of all projects funded by the VA QUERI program from fiscal years (FY) 2008-2012. Studies were excluded at either the abstract or the full-text level if they were: not about healthcare delivery systems (*eg*, spread within schools or community-based non-profits), about low-income country settings, about learning healthcare systems but not spread (*eg* only discussed data infrastructure), discussed spread conceptually without a specific example or case study, or studies that did not have a large magnitude of spread (fewer than 10 sites included in the spread effort). We abstracted data on the following: the macro model the spread followed (collaborative/exchange to support spread of multiple initiatives within a specific topic area, initiative-specific spread, or embedded spread within a system), any specific micro strategies reported as part of the spread effort, the catalyst or rationale for starting the spread effort, focus/topic area of the practice or initiative, the country or countries where spread occurred, if and how the publication described working with hard-to-engage sites, and magnitude of spread.

Key Informant Interviews

We invited a total of 24 key stakeholders to participate in semi-structured interviews. The participants were drawn from 2 distinct samples: project leads and improvers on VA's quality metrics. We identified 8 project leads based on their project's spread magnitude and any specific references to spread activities being analyzed or implemented. These interviewees shared their perspectives on and experiences with strategies to scale up and spread clinical and administrative practices across healthcare systems, with a focus on "hard to reach" sites, which could also include low performers. The second group of interviewees were improvers in the VA's performance metric system, that tracks a multitude of individual metrics, combines them to produce an overall global score for each VA facility, and then ranks sites into quintiles. We

identified 7 sites that had improved their quality ranking and invited 2 key informants from each site. These key informants represented one person in a leadership position and one person closely involved in improvement activities at the site. We interviewed a total of 16 key stakeholders from these sites, who shared perspectives on and experiences with strategies their sites used to improve their overall score, as well any specific metrics that may have been targeted for improvement.

Data Synthesis and Analysis

We drew from a combination of both key informant interviews and literature review findings to address the key questions. We first analyzed the literature and interviews separately, as described below, and then synthesized across these data sources by comparing and contrasting findings within key questions.

RESULTS

We identified 1,919 potentially relevant citations, of which 964 were included at the title screening and 307 abstracts were included and obtained as full-text publications. A total of 52 publications were identified at full-text review as meeting inclusion criteria and contributed to our final sample.

What Does Large Magnitude Scale-up and Spread Look Like?

Breaking down the national spread process

After working with innovators to test and pilot the initiative and then working with early adopters to test scale-up and spread strategies, activities described in our data split the final phase of full-scale spread into 2 parts with distinct strategies. The first part of the full-scale spread, which we are calling the "mass broadcast" phase, uses strategies intended to reach maximal audience. The second part of the full-scale spread phase, which we are calling the "re-personalize" phase, returns to using strategies more often employed in the first 2 phases of the spread process.

Macro models

We identified 3 distinct macro models to describe the organization or infrastructure of spread efforts in the 52 included publications. These included spread efforts that embedded scale-up or spread within a system of care (n=29), collaboratives or exchanges to support the spread of multiple initiatives within a specific topic area (n=14), and initiative-specific spread efforts (n=9).

Preconditions to consider in large-magnitude scale-up

Several factors repeatedly arose throughout the QUERI interviews, SAIL interviews, and literature as crucial information to gather prior to engaging in large magnitude scale-up. It is crucial that scale-up initiators gather information on who will need to be involved at each site and identify context-specific strategies that will be aligned with the goals of the scale-up.

VA preconditions and existing networks for spread

In addition to building networks de novo for a specific collaborative or exchange, spread efforts can also leverage existing networks in a similar model to collaboratives or exchanges. To better understand the existing conditions in VA that could facilitate spread efforts, we used data from the SAIL improver interviews. This information-seeking almost always occurred after working on homegrown solutions and analyzing local priorities and challenges. Once specific initiatives or issues had been identified, SAIL improvers sought information related to that particular area of interest. Existing sources of spread in the VA include peer to peer connections, existing VA hubs of information, central office expertise, and some non-VA entities.

Considerations and Strategies for Working with Hard-to-engage Sites

We drew from the QUERI spread project papers and interviews, as well as from the 18 publications we identified as either providing descriptions of hard-to-engage sites (n=11) or additionally providing descriptions of strategies used with these hard-to-engage sites after identifying/describing them (n=7). The proportion of hard-to-engage sites was small, and the phrase "N-of-1" was used repeatedly throughout the QUERI interviews to describe experiences working with hard-to engage sites. While descriptions of hard-to-engage sites often portrayed challenges, a number of beneficial characteristics also warrant mention due to their repeated appearance. Hard-to-engage sites may have low bandwidth or limited resources, local innovations or homegrown solutions that present competition for an innovation, or competing priorities that do not overlap with the priorities of a spread initiative. While these were among the common challenges hard-to-engage-sites might face, a number of potential benefits were also highlighted: a healthy skepticism can lead to collaboration and potential innovation improvement, hard-won engagement that is slow to come may be more durable in the long-term, and low-performing sites can sometimes be easier to engage since their priorities are in alignment with a spread initiative's goals.

Since hard-to-engage sites are highly variable in their needs, QUERI interviewees recommended "a flexible, tailored approach to one [site] at a time." Useful strategies for hard-to-engage sites, as highlighted in the most salient themes from the literature and interviews, include facilitation, creating a web of support, establishing peer to peer communication, allowing sites to kick the tires of an innovation, tackling upstream issues, increasing visibility with multiple levels of leadership, utilizing a hard core with soft periphery model of innovation, maintaining engagement with non-adopter sites, and framing the message to initiate positive and helpful working relationships.

CONCLUSIONS

Low performers and hard-to-engage audiences are most in need of engagement when spreading innovations intended to standardize practice or improve quality of care, but they were understudied in the identified literature on large-magnitude scale-up and spread efforts. Variations in care delivery will require a better understanding of how to work with low performer and hard-to-engage groups. Hard-to-engage sites can be highly variable in terms of the challenges or barriers they face. For these myriad of individual factors, bundles of engagement strategies that are more personalized and intensive can help spread initiators reach these groups. More testing of strategies to use with these groups, as well as documentation of adaptations or

tailoring large-magnitude spread efforts make in engaging different groups of adopters, is needed.

ABBREVIATIONS

AHRQ	Agency for Healthcare Research and Quality
CIDER	Center for Information Dissemination and Education Resources
COREQ	Consolidated criteria for reporting qualitative research
HSR&D	Health Services Research and Development Service
IHI	Institute for Health Improvement
NIH	National Institutes of Health
OSVA	Office of the VA Secretary
QUERI	Quality Enhancement Research Initiative
SAIL	Strategic Analytics for Improvement and Learning
TEP	Technical Expert Panel
VHA	Veterans Health Administration
VISN	Veterans Integrated Services Networks

ACKNOWLEDGMENTS

George Jackson, PhD, MHA
Healthcare Epidemiologist, HSR&D Center for Health Services Research in Primary Care

Joe Francis, MD, MPH
Director, Clinical Analytics and Reporting, Office of Analytics and Business Intelligence

Peter Almenoff, MD
Senior Advisor, Office of the Secretary of the VA, Director, Organizational Excellence

Peer Reviewers

The Coordinating Center sought input from external peer reviewers to review the draft report and provide feedback on the objectives, scope, methods used, perception of bias, and omitted evidence. Peer reviewers must disclose any relevant financial or non-financial conflicts of interest. Because of their unique clinical or content expertise, individuals with potential conflicts may be retained. The Coordinating Center and the ESP Center work to balance, manage, or mitigate any potential nonfinancial conflicts of interest identified.

Collaborators

Dr. Miake-Lye, one of the principal investigators of this project, is the Implementation Core Lead of the Care Coordination QUERI Program. The work for this project was also supported with in-kind effort by other members of the Care Coordination QUERI Program:

Deborah Delevan, MEd, *Program Coordinator, Care Coordination QUERI Program*
David Ganz, MD, PhD, *Corresponding PI, Care Coordination QUERI Program*