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Commentary

## Lean Enterprise Transformation within VHA

Heather Woodward-Hagg, PhD, Veterans Engineering Resource Program Office, Washington, DC, VA Center for Applied Systems Engineering, Indianapolis, Indiana and Robin Hemphill, MD, MPH, VA Office of Quality, Safety and Value, Washington, DC, VA National Center for Patient Safety, Ann Arbor, Michigan

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In its landmark report, "Crossing the Quality Chasm: A New Health System for the 21st Century" the Institute of Medicine (IOM) provided a framework for the development of an improved U.S. health care delivery system. The IOM based this framework on the key tenets of providing health care services that are safe, effective, patient-centered, timely, efficient, and equitable.

In the more than 13 years since publication of the IOM report, enterprise-level deployment of the U.S. translation of the Toyota Production System—widely known as 'Lean Enterprise Transformation'—has been promoted as a means of transforming health care organizations. Much of this movement is a direct result of the success of Lean transformation efforts within manufacturing companies (Toyota, Ford, Dell) and the highly publicized application of these methods within key health care organizations (Thea-care, Virginia Mason, Denver Health).

However, the implementation of Lean enterprise methods within health care systems often fails to result in long-term, sustained organizational transformation. In fact, according to a 2009 study by the American Society for Quality, it seems that failure is much more likely than success. Researchers have found that the application of Lean in the health care sector often fails when implementation focuses on limited application of Lean tools and methods with little or no emphasis on the cultural transformation necessary to sustain results over time. Fur-

thermore, as one of the basic tenets of the Toyota Production System is maximizing value for the customer, the complexity of the health care value proposition may limit the direct translation of Lean strategies, and impact sustainability and diffusion of these strategies throughout health care systems.<sup>1</sup>

### Health Care: A Complex Value Proposition

**Why is the value proposition within health care so complex?** As is the case within other service industries, the definition of value within health care is based on the experience of the customers (both patient and staff) as they engage with health care systems and processes. Thus, value is often dependent on an individual's norms, attitudes, and beliefs, which may change over time. This evolution requires continuous assessment and improvement of systems and processes to ensure that the potential for the customer to extract value from the system is optimized. Additionally, organizations must assess and manage any tension between customer expectations and other aspects of patient care to ensure that the basic tenets of safe and high quality care are not violated.

Given these challenges, it becomes clear that the large-scale deployment of Lean enterprise strategies within health care systems requires translation of the existing evidence base into deployment models that are health care-based, support continuous improve-



## Director's Letter

Everyone seems to agree that American health care costs too much and delivers too little. An estimated 30 percent of health care spending is wasted on therapies that are unnecessary, ineffective, or poorly targeted. For health systems under a global budget such as VA, achieving higher-value care is especially critical. Low-value services can crowd out needed care or innovation.

There are essentially four ways to achieve higher-value care: (1) we can drive down the prices we pay for medical services; (2) we can seek out new interventions that lower costs of care while improving health and patient experience (the so called “triple aim”); (3) we can limit the provision of “low-value” care; or (4) we can reduce waste and inefficiency in how we deliver care. The different perspectives in this issue illustrate this range of approaches, and outline a research agenda for identifying which approaches are most effective and feasible within VA.

The list of medical innovations that actually save money is vanishingly small, but cost-effectiveness analysis (CEA) can distinguish whether new interventions provide good value relative to other services we are providing; it may even be able to help rationalize prices for new treatments. Americans have not yet embraced decisions that explicitly reference CEA, however, especially decisions to limit care. Language in the Affordable Care Act prohibits use of CEA to set a threshold for coverage.<sup>1</sup> Recent proposals to prioritize which patients receive hepatitis C drugs in VA caused a backlash.<sup>2</sup> Choosing Wisely ([www.choosingwisely.org](http://www.choosingwisely.org)), a multi-specialty group initiative to reduce the use of specific services that are often unnecessary may hold more promise. Initial VA Choosing Wisely activities aim to reduce MRIs for uncomplicated low back pain and to avoid tight glycemic control in older patients.

Reducing inefficiency may be the most palatable way to achieve higher value from health care services within VA. The Veterans Engineering Resource Centers (VERCs), established in 2010, apply systems re-engineering methods to improve efficiency in areas such as scheduling, staffing, patient flow, and inventory control. Researchers have partnered with some of the VERCs through the QUERI program and the current solicitation to create an Operations Research program project should strengthen these connections.

Research has contributed a lot in helping us distinguish high-value from low-value care. Next, we need research that examines how best to use that information at different levels of decision-making—with individual patients, in facilities, and as a health system—in order to improve outcomes for all Veterans.

David Atkins, M.D., M.P.H.  
Director, HSR&D

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ment of processes and systems, and are established on the foundational elements of patient safety and high quality of care. This is a critical concept; if clinicians feel safety is being sacrificed for efficiency, cynicism and resistance will follow.

## Three Key Strategies for VA Implementation

In 2012, the VA Center for Applied Systems Engineering (VA-CASE) initiated a formal review of the strategies utilized by multiple U.S. health care organizations that have been recognized as successful in enterprise-level transformation through the application of Lean transformation efforts.<sup>2</sup> The review found that successful organizations utilized dynamic deployment cycles with a focus on three strategies key to their transformation efforts: (1) respect for people; (2) strategic alignment; and (3) strategic deployment. These three strategies are often bundled together under the term “Lean Management System.”

**How do these strategies work together to enable transformation?** An organizational culture supporting *respect for people* ensures that internal capacity and capability is developed at the staff, mid-management and leadership levels, thereby enabling continuous focus on creating and maintaining value for both patients and employees. *Strategic alignment* methods provide transparency throughout the organization with respect to goals and metrics. A balanced portfolio between large-scale, system-level initiatives and small-scale, unit-level initiatives ensures that program results are sustained without significantly increased complexity. *Strategic deployment* mechanisms (such as daily improvement huddles and area improvement centers) ensure that the transformational initiatives are tangible and relevant to the front-line staff members and support continuous daily improvement of processes.

Based on these findings, the VA Center for Applied Systems Engineering developed a VHA translation of the Lean Management Systems and initiated deployments in six VHA Healthcare Systems in 2011 and 2012. Of the initial six health care systems participating in this initiative, five continue to demonstrate successful deployment. The

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## Response to Commentary

# Evidence-Based Implementation: Towards a Scientific Agenda for the Learning Healthcare System

Amy Kilbourne, PhD, MPH, Director, QUERI Program, Washington, DC

VA is undergoing a major reorganization to transform the way it provides services nationally for its Veterans. This magnitude of change has not been seen in almost a generation. This transformation has already involved new policies such as the Veteran's Choice Act, which will change the role of the Veterans Health Administration (VHA) into serving as a payer as well as provider of health care for millions of Veterans nationwide. Moreover, the reorganization under "MyVA" includes new initiatives designed to emphasize Veteran experience, access, and timeliness of care, shared VA services (e.g., combining health care and benefits customer service), and new models of care as emphasized in the VHA Blueprint for Excellence. These changes will require VHA to transform into a Learning Healthcare System, which the Institute of Medicine has described as one that is responsive to new information, adapts to implement more effective clinical practices, and is committed to an ongoing mission of excellence, supported by a culture of self-reflection and continuing education.

## Lessons from Systems Engineering

To this end, there has been a growing interest in applying techniques used in systems engineering or systems redesign to operationalize essential elements of the Learning Healthcare System and improve quality. Many of these initiatives involve development of large national datasets to monitor and model care processes, but as Drs. Woodward-Hagg and Hemphill wisely observe, many efforts to implement Lean do not reach their full potential because of a lack of focus on promoting the cultural transformation necessary to improve care. This observation means that in addition to technical and data support, individuals on the front lines of care also need to feel valued and empowered to do their best.

VA's Quality Enhancement Research Initiative (QUERI) and Health Services Research and Development (HSR&D) programs have responded to this need for best practices to promote the Learning Healthcare System through new initiatives and research that will help current Lean practices in VA. HSR&D, through the VA Office of Research and Development, is promoting several pathways to promote the science of the Learning Healthcare System, notably through initiatives that seek to further validate and discover new ways that health care providers and systems can change for the better.

Serving as a trusted partner to providers and clinical leadership, QUERI applies a deep knowledge of evidence-based care and innovative implementation science to support providers and clinical leaders in the adoption of research findings into clinical practice, asking crucial questions regarding the intended and unintended impacts of implementing new treatments or programs and the best strategies for speeding their adoption into practice. No other VA entity has specific responsibility for using scientific rigor to study the best implementation strategies for facilitating adoption of effective practices into routine care.

A close complement to Lean techniques, implementation science provides a systematized approach to identifying barriers and facilitators to system change, and uses this information to refine and test implementation strategies. Many of these strategies focus on methods to support providers in the use of a clinical treatment across different practice settings, including lower-resourced sites. In contrast to many quality improvement efforts, implementation scientists often use strategies aimed at helping providers adopt specific evidence-based practices (or in some cases, stop low-value practices). Common implementation strate-

gies can encompass elements of Lean but also involve techniques such as facilitation, or guided efforts by internal or external organizational staff to support multiple levels of system change through provider or team-based coaching that focuses on leadership potential.<sup>1</sup> Nonetheless, a comprehensive clearinghouse of effective implementation strategies and empirical evidence of their support for Lean and similar health systems transformation techniques remains elusive.

## Informing Implementation Strategies

To this end, VA HSR&D and QUERI are supporting new initiatives in concert with recommendations from the Office of Management and Budget (OMB) that seek to inform the development of implementation strategies to ultimately promote a Learning Healthcare System. Key components include measurement science, operations research, point of care research, provider behavior, and randomized program evaluation and implementation to further support VA's transformation as a Learning Healthcare System. First, HSR&D is promoting research focused on measurement, which involves further developing methods for accurately assessing quality metrics that are tailored to Veteran needs. These new initiatives also focus on provider behavior, seeking to understand complex factors associated with variations in care through application of cognitive science, decision-making styles, and information processing to enhance performance improvement and adoption of evidence-based practices. In addition, HSR&D recently released a request for applications to promote operation research, which applies health systems data to develop mathematical models of health systems functions in order to improve health care timeliness and efficiency.

Finally, HSR&D and QUERI are involved in the support of rigorous evaluations of new programs such as the Lean Transformation Initiative Partnered Evaluation Center. OMB has strongly supported the use of rigorous methods to study and scale-up policies or interventions that have demonstrated effectiveness, or apply these methods towards assessing the effectiveness of new programs or policies of national priority for VA.

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## Research Highlight

# Measuring Value

Todd Wagner, PhD, Steven Asch, MD, MPH, both from HSR&D's Center for Innovation to Implementation, VA Palo Alto Healthcare System, Palo Alto, California

How do you measure value? That question was tackled by a panel as part of a recent State of the Art (SOTA) conference on performance measurement. In our panel, experts from a range of backgrounds met virtually on three occasions to define value and help focus priority areas for further VA research on measurement strategies.

### Value in the Health Care Lexicon

Value has become a buzzword in the health care lexicon, but that was not always the case. In the 1990s, value was not a common term; instead the focus was on cost-benefit and cost-effectiveness analysis. In these models, the goal was to compare the lifetime societal costs and benefits for alternative technologies or treatments. Cost-effectiveness analysis, though more popular than cost benefit analysis, hit roadblocks as results were often treated lightly (or even fearfully) and their policy implications were often ignored.

The past five years has seen a growing interest in value as evidenced by the recent IOM report that espoused better care for less.<sup>1</sup> In 2012, HSR&D funded two Centers of Innovation (COINs) with explicit value goals and several others whose goals touch on value. Our COIN in Palo Alto, the Center for Innovation to Implementation (Ci2i), has an overarching value theme, and seeks opportunities to improve the value of care for mental health and specialty care services.

Often we are asked how we define value. We, like the SOTA panel, define value as the gain in health outcomes per dollar spent. At first blush, this definition is consistent with the American College of Physician's endorsement of cost per quality adjusted life year as the best measure of value.<sup>2</sup> The feeling of déjà vu is likely to be palpable for many of our generation. If outcomes are measured using quality adjusted life years, then our definition seems to suggest that value equals cost effectiveness analysis, which some publicly accountable decision makers still regard as the untouchable third rail.

Of course, we see some important distinctions between value and cost-effectiveness analysis. To measure value, the outcomes need to gauge what is most important to the consumer. While the concept of health-related quality of life may sound great, it is hard to look at the items on the EQ-5D or SF-12 scales and agree that they are measuring exactly what is most important to each patient. These generic scales undeniably miss improvements that patients would say have high value *to them*. Consequently, we need to measure other endpoints that are proxies for patient outcomes. Process quality metrics that have great evidentiary support can be good proxies, while others might also include access or patient-reported outcomes, such as satisfaction.

### Current vs. Past Discussions of Value

The SOTA discussions helped us further identify three ways that the current discussion about value differs from past discussions on cost-effectiveness. First, the standard cost-effectiveness analysis should assume efficient production. There is near universal agreement that the U.S. health care system is burdened by so many inefficiencies that up to 30 percent of spending could be cut without negatively affecting patients' outcomes.<sup>1</sup> Thus, by disconnecting value from cost-effectiveness, we do not have to assume efficient production and being more efficient, cutting waste, and becoming lean—all issues embraced by the Blueprint for Excellence—are important components of value.

This subtle shift also allows us to broaden our discussion to consider organizational culture, which is a critical component of safety, quality, and efficiency. Therefore, we are able to consider clinician behaviors, and the use of information and incentives as ways to improve the delivery of high value care. Inefficiencies are readily apparent: we observe the use of more expensive biologics for age-related macular degeneration, the use of more expensive second generation anti-

psychotic drugs, and the use of more technically challenging surgical techniques. These arguably “suboptimal” behaviors continue even when there is evidence that less expensive or better treatment options exist.

Second, many well-done cost-effectiveness analyses were divorced from economic questions of implementation. However, when purchasing expensive new technologies, such as a robot to rehabilitate stroke patients, cost-effectiveness cannot be easily divorced from implementation. Therefore, within these discussions about value we can also raise important questions about the organization and delivery of care, especially as organizations are tasked with purchasing new innovations within a fixed budget.

Finally, the discussion about value enables us to consider alternatives, such as competition, that are not easily measured with a traditional cost-effectiveness analysis. Most Veterans over age 65 can choose whether to get care from VA or a Medicare provider. If they choose to use VA over the alternatives, then they value VA. VA can (and sometimes does) do things that can cause Veterans to reconsider their choice to use VA care. We recently published a paper that followed five large-scale adverse events (LSAE). We found that patients over age 65 responded to quality and safety information, as evidenced by their switch of providers after an LSAE.<sup>3</sup>

Before the SOTA, we heard from many people about the inherent difficulties of measuring value. Some said it was hopeless, that value, like beauty, is in the eyes of the beholder. The SOTA convinced us that some clear thinking on what we mean by value, and how to measure it in a relevant way, can avoid that trap and make our work as health services researchers much more focused and useful.

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## Research Highlight

# Does Better Quality Cost More?

Eileen Moran, MS, VHA Office of Productivity, Efficiency & Staffing (OPES); Peter Almenoff, MD, FCCP, VHA Office of Analytics and Business Intelligence; Jian Gao, PhD, VHA OPES, all located in Washington, DC

Health care has lagged behind other industries in achieving high quality and low cost at the same time. By employing the tenets of a 'lean' approach, non-health care sectors have yielded higher quality results while reducing waste.<sup>1</sup> Within the health care industry, there is a belief that better quality must cost more, or that reducing costs will come at the expense of quality. However, in the Veterans Health Administration (VHA) we have found the opposite—high quality is associated with high efficiency or low cost across the medical centers.

## Assessing Operational Efficiency

Economists have long framed the theory of productivity and efficiency, and have developed methods of measuring them. Two common econometric approaches to assessing efficiency are stochastic frontier analysis (SFA) and data envelopment analysis (DEA). The merit of SFA lies in its ability to: (1) absorb all of the information yielded by the traditional regression; (2) enhance the traditional regression by separating random factors that are not within a manager's control from true inefficiency; and (3) benchmark each facility against a cost frontier (based on all facilities' data) rather than the national average. Since 2008, the VHA Office of Productivity, Efficiency and Staffing (OPES) has been routinely assessing VHA operational efficiency using SFA. The objectives of this effort are to determine whether and to what degree costs vary within the VA health care system, to unveil the factors correlated with greater or lesser efficiency, and to examine how quality of care relates to cost.

To measure operational efficiencies at the medical center level, we build two SFA models: one for clinical cost and one for administrative cost. In both models, the independent variables or the outputs consist of: (1) the number of patients and their charac-

teristics (e.g., case-mix and demographics); (2) reliance (e.g., Medicare enrollment rate and covered by private insurance); (3) facility characteristics (e.g., teaching mission and infrastructure); and (4) quality measures (e.g., HEDIS and ORYX). Based on these variables, we estimate the VHA cost frontier and assign an efficiency score to each facility. An efficiency score of 1.0 represents the frontier, or best performance, and an efficiency score greater than 1.0 indicates inefficiency.

## Assessing the Link Between Quality and Efficiency

To assess how efficiency could affect quality of care or vice versa, we examine the correlation between the SFA efficiency score and the combined ORYX and HEDIS measures at the facility level. ORYX (also referred to as Hospital Quality Alliance [HQA] process measures) includes 31 inpatient measures, while HEDIS (Health Effectiveness Data and Information Set) is composed of 19 outpatient measures. Both ORYX and HEDIS are among the most recognized and accepted quality indicators in the industry. We find that better cost efficiency is associated with better quality of care, i.e., facilities that are more efficient also offer higher quality of care as measured by ORYX and HEDIS. Additionally, we do not find that avoidable hospitalization rates or waiting times are associated with high cost or low efficiency.

Moreover, we find that the variation in system efficiency remains low, with the most recent data (FY14) ranging from 2.6 percent to 19.4 percent inefficiency [Median 1.064 IQR: 1.049 – 1.086]. This association between efficiency and quality makes common sense—high quality of care improves health, prevents complications, and reduces costs.<sup>2</sup> Likewise, Dartmouth Atlas has consistently demonstrated that overuse of health

services does not yield high quality. To reduce waste and improve efficiency, OPES has developed an Efficiency Opportunity Grid (EOG) that can help facilities identify areas to improve. The EOG contains more than a dozen statistical models such as the fee care expenditure model, administrative staffing model, and ambulatory care sensitive condition (ACSC) hospitalization model. All of these EOG models produce and report observed to expected ratios (O/E) for each facility after adjusting for risks and confounders. An O/E of 1.0 indicates utilization at the national average for a facility, less than 1.0 implies utilization below the national average, and greater than 1.0 means utilization above the national average. As intended, the EOG models provide tools for VISNs and facilities to understand where opportunities exist for efficiency improvement and to optimize resource deployment. It also can serve as a repository for 'best practices' by providing detail on high performing VISNs/facilities so that effective strategies can be shared for system wide improvements.

Health care is labor intensive. With over 300,000 employees and counting, VHA finds itself under increasing pressure to demonstrate its value—providing high quality services and being good stewards of taxpayer dollars. As such, VA must seek to improve employee productivity much in the same way as other industries.

In conclusion, VA faces unprecedented challenges relating to quality and efficiency. Its very future will vitally hinge on the value (quality and cost) of care it delivers; especially when compared with the private sector.

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## Research Highlight

## Value and Efficiency in the Context of Dual Use

Walid F. Gellad, MD, MPH, HSR&D Center for Health Equity Research and Promotion, VA Pittsburgh Healthcare System, Pittsburgh, Pennsylvania

The issues of value and efficiency have become central to every conversation about health care since the passage of the Affordable Care Act (ACA). In a much publicized perspective piece in the *New England Journal of Medicine* in March 2015, the Secretary of the Department of Health and Human Services (HHS), Sylvia Burwell, emphasized the growing role of value-based payment systems under which health care providers are accountable for the quality and cost (i.e., value) of care they deliver.<sup>1</sup> In the same piece, Burwell outlines how HHS will focus its efforts in improving value using three strategies: (1) developing financial incentives; (2) improving integration and coordination among providers; and (3) accelerating information use to guide medical decision making.

The second HHS strategy—improving coordination among providers—should be of particular interest to VA, which shares the same goals of increasing quality and reducing costs. Many Veterans are able to receive care in both VA and the private sector, making coordination of care among providers uniquely challenging. This issue of ‘dual use’ has been a challenge to VA for years, but has become increasingly important over the last decade, first with the introduction of Medicare Part D prescription coverage, and most recently with Medicaid and private insurance expansions under the Affordable Care Act and with the Choice Act. Each additional opportunity for Veterans to receive care in multiple health systems—from multiple health professionals who have only limited communication with each other and limited data sharing—represents an additional opportunity for care fragmentation and its associated value and efficiency problems.

### Examples of the Impact of Dual Use

As an example of the impact of dual use on value and efficiency, consider glucose test strips. Glucose testing can be painful, burdensome, and expensive. Little consensus or evidence exists regarding the optimal frequency of testing for patients with diabetes. In a research project last year, we examined glucose test strip utilization in a national cohort of all VA patients over age 65 with diabetes using linked VA and Medicare Parts A, B, and D data.<sup>2</sup> We measured the quantity of test strips dispensed to Veterans along with overuse of strips, defined as using more than one strip per day among those taking no diabetes medications, oral diabetes medications alone or long-acting insulin alone, or more than four strips per day among those taking short acting insulin.

In total, 363,996 community-dwelling older VA patients received at least one test strip during the year, of whom 22.8 percent received strips from Medicare alone and 5.6 percent received strips from both VA and Medicare. Among Veterans taking no diabetes medications, for whom daily glucose testing would almost never be indicated, the median number of strips received was 4 times as high in dual users compared to VA only users (400 vs 100), increasing the odds of overuse by more than 15 times after adjustment for disease severity. Our results illustrate the importance of understanding dual VA and Medicare coverage and its impact on value and efficiency.

There are other examples within VA of the adverse impacts of dual use on quality, value, and efficiency. For example, an analysis by Trivedi and colleagues of dual VA and Medicare Advantage enrollees found duplicative federal payments for services and financial waste.<sup>3</sup> Other analyses have found higher rates of hospitalization for ambulatory care sensitive conditions and worse outcomes in cancer when care is fragmented. In ongoing work funded by VA HSR&D, our group is examining the impact of dual use on quality and efficiency among older adults with dementia and among users of opioid medications. From a measurement standpoint, more generally, there are additional concerns around capturing accurate comorbidity adjustment and utilization in Veterans who are dual users when non-VA data is not available; this inability to fully capture non-VA data impacts VA’s ability to accurately measure its own quality and efficiency.

Not all studies have identified problems stemming from dual use, and in some cases there are clearly benefits for individual patients in improving access or convenience in obtaining medications, specialty care, or even diabetes testing supplies. VA’s burden, however, is to reconcile the desire to increase access and choice for Veterans with the potential downsides that come with increasing levels of dual use and care fragmentation. VA HSR&D researchers can play an important role in helping VA meet this challenge.

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## Berlowitz Receives 2015 Under Secretary's Award for Outstanding Achievement in Health Services Research



Dan R. Berlowitz, MD, MPH, is the recipient of the 2015 Under Secretary's Award for Outstanding Achievement in Health Services Research. This award is the highest honor for a VA health

services researcher. It represents exceptional achievement in improving the health and quality of care of Veterans, inspiring and training the next generation of health services researchers, and enhancing the visibility and recognition of VA research nationally.

Dr. Berlowitz is a leading health services researcher with strong methodological expertise in the areas of quality assessment, risk adjustment, and the use of large databases. His work focuses on assessing and improving the quality of health care for Veterans. For example, he examined the care of Veterans with hypertension and recognized what is now referred to as "clinical inertia"—the failure to intensify therapy when indicated. His research led to a reevaluation in how people think about the problem of uncontrolled hypertension, and VA responded through a quality

improvement initiative. Hypertension control rates are now well over 70 percent, in large part due to reducing clinical inertia. In addition, Dr. Berlowitz has worked with more than 20 Fellows and Career Development Awardees on diverse projects, with many achieving successful academic careers. He also is a prolific author, with more than 170 publications.

Dr. Berlowitz is the former Co-Director of HSR&D's Center for Healthcare Organization and Implementation Research (CHOIR), located in Bedford and Boston, Massachusetts. From 2004 to 2013, he served as Director of HSR&D's Center for Health Quality, Outcomes and Economic Research, and since 2012, he has served as Acting Chief of Staff for the Edith Nourse Rogers Memorial VA Hospital in Bedford.

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Palo Alto and Indianapolis VA Medical Centers and FHCC Lovell Medical Centers are the longest running of the initial sites, now in their third and fourth years of deployment, respectively.

To date, fifteen VA Healthcare Systems have initiated the journey to organizational transformation through implementation of VHA's translation of the Lean Management System. In March 2015, the VHA National Leadership Council formally adopted Lean Management as the foundation for a standard VHA quality improvement strategy, opening the doors for deployment of Lean Management throughout VHA.

### A Call to the HSR&D/QUERI Community

In May 2015, the Veterans Engineering Resources Center (VERC) program, in collaboration with the VA Quality Enhancement Research Initiative (QUERI), initiated a Partnered Evaluation Center (PEC) to conduct a formative evaluation of VHA Lean Management Systems deployment. The overarching objective of this evaluation is to understand which strategies interact to ensure successful, sustained transformation efforts and investigate how current Lean Enterprise deployment strategies can be improved. This evaluation is just a start, however, and there are many other aspects

of the Lean Management System integrated within VHA that can and should be studied by the HSR&D/QUERI Community.

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### HSR&D Holds National Conference

"Health Services Research for a Veteran-Centered Learning Organization" was the theme of the 30th HSR&D/QUERI National Conference held July 8-10 in Philadelphia. This year's theme emphasized a robust commitment to forward-looking system change oriented around Veterans' needs, helping to meet the goals of VHA's Blueprint for Excellence. See [www.hsrd.research.va.gov/meetings/2015/](http://www.hsrd.research.va.gov/meetings/2015/) for more information and conference abstracts.

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Translating research into quality health care for Veterans

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VA Boston Healthcare System (152C)  
150 South Huntington Avenue, Boston, MA 02130-4893

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Randomized program evaluations of new programs or policies should focus not only on determining their impact on Veteran care but whether they were implemented as intended. They should ask not only “does the program work?” but also “what makes it work?” and “how can we make it work in the real world?” These evaluations ultimately produce greater return on the resources invested in implementing new programs. This approach to data-driven decision making has been referred to as “evidence-based policy,” and VA and other federal programs are proposing greater investment in program evaluation, preferably involving systematic allocation of new programs using comparison groups to assess return-on-investment across programs.<sup>2</sup>

As a bridge between research and clinical operations, QUERI’s role is the rigorous study and support of effective implementation or quality improvement strategies such as Lean that ultimately seek to empower frontline providers, promote transparency across organizational levels, and ensure that transformative initiatives are implemented to ultimately improve Veterans’ care experience.

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Karen Bossi and Margaret Trinity, Co-Editors

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VAMC Long Beach,  
Long Beach, CA

Richard Owen, M.D., Director,  
VA HSR&D Center of  
Innovation, Little Rock, AR

DeAnne M. Seekins, MBA, VA  
Medical Center Director,  
Durham, NC

Frances Weaver, Ph.D.,  
Director, VA HSR&D Center  
of Innovation, Hines, IL