

# Reengineering the Radiology Enterprise: A Summary of the 2014 Intersociety Committee Summer Conference



Gerald D. Dodd III, MD<sup>a</sup>, Bibb Allen Jr, MD<sup>b</sup>, Derek Birzniek<sup>c</sup>, Giles W. Boland, MD<sup>d</sup>,  
James A. Brink, MD<sup>d</sup>, Keith J. Dreyer, DO, PhD<sup>d</sup>, Paras Khandheria, MD<sup>e</sup>,  
Jonathan B. Kruskal, MB, ChB, PhD<sup>f</sup>, Peter Ricci, MD<sup>g</sup>, J. Anthony Seibert, PhD<sup>b</sup>, Richard Zane, MD<sup>i</sup>

## Abstract

The current initiative to reform health care from both a quality and a cost perspective has already had a profound impact on the radiology enterprise. We have seen a decrease in the utilization of imaging studies, a reduction in reimbursement, a declining payer mix, shrinking incomes, a proliferation of performance indices, creation of radiology mega-groups, growth of national radiology companies, and increasing turf incursions. Our cheese is clearly on the move, and we must take action to reengineer the radiology enterprise. In keeping with general health care reform, we must be patient-centric, data driven, and outcome based. We must create a radiology enterprise that adheres to the value equation of providing the highest quality health care, for the lowest possible cost, for all citizens.

**Key Words:** Intersociety Committee, Intersociety Committee Summer Conference, ACR, health care reform, Patient Protection and Affordable Care Act

*J Am Coll Radiol 2015;12:228-234. Copyright © 2015 American College of Radiology*

Established by the ACR in 1979, the Intersociety Committee (ISC) is intended to promote collegiality within radiology, foster and encourage communication among national radiology organizations, and make recommendations on areas of concern. The ISC holds an annual Summer Conference, with the topic selected by the Executive Committee. The 50-plus professional radiology organizations that are members of the

ISC include diagnostic and interventional radiology, radiation oncology, and radiologic physics organizations.

The 36th ISC Summer Conference was held July 25 to 27, 2014, in Santa Fe, New Mexico. The objective of the conference was to examine the need to reengineer the radiology enterprise in the face of health care reform, learn about different techniques that could be used to facilitate change, review real-life examples of reengineering initiatives that produced major positive operational and cultural changes, brainstorm about how the radiology enterprise could be reengineered in alignment with the value equation, and learn about specific value opportunities that can be incorporated into the radiology enterprise. To provide a different perspective from which to analyze the radiology enterprise, Richard Zane MD, chair of the Department of Emergency Medicine, University of Colorado, and Derek Birzniek, chief process improvement officer, University of Colorado Health System, were invited to present how process improvement (PI) techniques were used to transform a highly congested and dysfunctional emergency department (ED) at the University of Colorado Hospital into one of the premier EDs in the country in less than 1 year. Eighty-one members and executive directors from 38 organizations participated in the conference. As in previous years, the

<sup>a</sup>Department of Radiology, University of Colorado, Aurora, Colorado.

<sup>b</sup>Trinity Medical Center, Birmingham, Alabama.

<sup>c</sup>University of Colorado Health System, Aurora, Colorado.

<sup>d</sup>Department of Radiology, Massachusetts General Hospital, Boston, Massachusetts.

<sup>e</sup>Department of Radiology, Johns Hopkins University, Baltimore, Maryland.

<sup>f</sup>Department of Radiology, Beth Israel Deaconess Medical Center, Boston, Massachusetts.

<sup>g</sup>Radiology Imaging Associates, Englewood, Colorado.

<sup>h</sup>Department of Radiology, University of California Davis Health System, Sacramento, California.

<sup>i</sup>Department of Emergency Medicine, University of Colorado, Aurora, Colorado.

Corresponding author and reprints: Gerald D. Dodd III, MD, University of Colorado, School of Medicine, Department of Radiology, Mail Stop L954, 12401 E 17th Avenue, PO Box 6510, Aurora, CO 80045; e-mail: [gerald.dodd@ucdenver.edu](mailto:gerald.dodd@ucdenver.edu).

conference consisted of a series of plenary presentations and work group sessions.

## THE CASE FOR CHANGE

The ongoing changes in the medical landscape are driving a necessary reengineering of the radiology enterprise. Since the implementation of Medicare in 1965, national health care spending as a percentage of the gross domestic product has increased dramatically from less than 6% to more than 18%, with federal health care expenditures now accounting for 25% of the federal budget [1,2]. Through this growth, the US health care system has become the most expensive in the world; unfortunately, quality has not kept pace with expense. Using life expectancy as a proxy for the quality of health care, the United States ranks 35th internationally [3]. Evidence of the suboptimal quality of our health care can be found in two key publications, the 1999 Institute of Medicine report *To Err Is Human*, which called attention to the approximately 98,000 iatrogenic deaths that occur in our hospitals each year, and the 1999 presentation and subsequent publication *Escape Fire*, in which Donald Berwick recounted a powerful personal experience of health care gone awry during the care of his wife [4,5]. These facts and perceptions are driving a national health care reform agenda centered on improved quality and reduced cost.

The health care reform movement has already had significant impact on radiology. Recognition in early 2000 that the cost of imaging was increasing faster than other segments of health care led to the implementation of multiple rate-cutting initiatives. Starting with the Deficit Reduction Act in 2005, Medicare payments for imaging services have been cut 13 times [6]. These actions produced marked reductions in both payments for and utilization of imaging services. For example, it is estimated that payments for CT scans suffered a 20% to 23% reduction in the professional component and a 40% to 55% reduction in the technical component [7]. As for utilization, before 2005, the number of CT scans per year was increasing at a rate of 14.3%; now the increase is just 1.4% per year [7]. Overall, the impact of reductions in payment and utilization has been a 21% reduction in Medicare Part B expenditures for medical imaging between 2005 and 2010 [7]. Unfortunately, other payers have adopted many of these changes, with a growing negative impact on personal incomes for many radiologists [8].

There are many other changes that may significantly affect, or have already done so, the radiology enterprise. These include new practice models such as accountable care organizations, bundling of physician and hospital payments, consolidation of hospital systems, dramatic shifts in payer mix, and a ballooning number of value and performance-based metrics. To weather the storm, some radiology groups are merging to form mega-groups; others are

becoming hospital employees. National radiology groups that offer 24/7 subspecialty reads are directly competing with local groups. Considering all of these forces, it is clear that radiology's "cheese" is on the move, and the specialty must adapt to remain relevant [9].

## HOW TO CHANGE

### Methods

Implementing effective change is difficult, particularly if the process is not systematic, well supported, and led by capable leaders. Large corporations and management gurus have been developing techniques to effect successful large-scale change since the 1950s [10]. Two of the most common techniques fall into the categories of process improvement (PI) and change management [11,12]. Both involve a systematic approach to help organizations optimize underlying processes to achieve improved efficiency, better quality, and greater value. Both have a demonstrated utility in the health care arena.

The most common PI techniques are Lean and Six Sigma. Lean is a production philosophy that considers any process or movement that does not directly create value or eliminate waste as disrespectful to the customer and to be eliminated [13]. Six Sigma is organized around the goal of improving the quality of process outputs by identifying and removing the causes of defects (errors) and minimizing variability. Six Sigma relies on statistical methods and creates an infrastructure of people within an organization who are experts in PI ("champions," "black belts," "green belts," "yellow belts," etc). Each project carried out follows a defined sequence of steps and has quantified value targets [14].

"Change management" is an approach to transition groups or individuals from a current state to a desired future state. Multiple large companies, most notably Ford, General Electric, and AT&T, embraced change management and executed successful operational reforms [10,11,15]. Their success spawned key thought leaders such as Peter Drucker [16], whose influential publication *Management in a Time of Great Change* launched a veritable publishing frenzy on the topic. William Bridges [17] developed the Managing Transitions Model, which describes the process of change as a series of transitions from phase 1 through phase 3, with each phase having a sequential series of steps by which transition can be achieved. John Kotter [18] published an alternative 8-step process in *Leading Change*. These steps are described in more detail in the radiology case study discussed later.

Although there are many different approaches to both PI and change management, most emphasize the importance of addressing organizational culture as a key to successful change [19]. Drucker [16] emphasized this importance in

Download English Version:

<https://daneshyari.com/en/article/6245234>

Download Persian Version:

<https://daneshyari.com/article/6245234>

[Daneshyari.com](https://daneshyari.com)