During the past 2 decades, the amount of information the public receives has increased consistently. For example, in the travel industry, consumers can shop Internet-based companies, such as Expedia, Orbitz, and other sites, to find the best deals on flights, rooms, and car rentals, while studying the quality ratings of various hotels and airlines. Customers now can plan and pay for a trip to Europe, for example, while sitting at home and can be confident about obtaining a great price and having a high-quality trip. The market demands this ease and convenience.

In the health care industry, the concept of providing the public with information has lagged behind other industries in that the communicated information usually comes from the health care systems rather than from patients, and most of the cost and quality information is not located on a one-stop Internet site. This information tends to be condensed for each health care delivery entity; each hospital uses marketing techniques to place its organization in the best possible light on its Web site, stating all the reasons the customer should use the facility.

Most of the time, the institution describes itself as “the best” at a particular service, such as having the best cardiology services or having the latest and best radiology or radiation therapy technology available. This type of information tends to be one-sided and amounts to the institution selling its products. Although health care delivery is not at a point where the consumer can view consumer-driven reviews of health care systems based on metrics and outcomes, this will be coming to health care organizations and medical imaging departments and facilities soon.

Considering the example of airlines, hotels, and rental car companies, it should be noted that all of these industries advertise their products. However, in today's world, the savvy consumer mentally bypasses the advertisements and, instead, heads to the Internet to read about their costs and quality ratings, which are based on metrics. This is the new paradigm.

**Historical Perspective of Health Care Public Information and Quality**

From a historical perspective, there have been 6 primary landmarks in which the concepts of quality have changed social mores about health care delivery through public discourse or policy. The landmarks all led to changes in health care delivery through increasing communication and information symmetry between the health care industry and the consumer. Communication took much longer when print (eg, newspapers, books, and magazines) and the spoken word (eg, radio and television) were the primary sources of communication compared with today. The Internet and other communication networks offer the consumer a wealth of information and greater benefits.

The first landmark occurred in 1863, when excerpts from Florence Nightingale's book, *Notes on Hospitals*,...
were published in London newspapers. These articles discussed Nightingale’s thesis that low-quality hospitals could do more “harm to the sick than good.” The intense public outcry from Nightingale’s articles about hospitals and quality changed how hospitals operated and helped to transform them from ivory towers to transparent public entities in most developed countries, including the United States.¹

The second landmark was the 1906 Pure Food and Drug Act in the United States that mandated that labels be placed on all drug packaging, which further increased public knowledge about health care. This change was partially based on the 1906 book by Upton Sinclair, *The Jungle*, an exposé of the U.S. meat industry.²³ This consumer-driven legislation was one of the first major laws in the United States, and the country was already 130 years old. The public demanded action; they wanted to know exactly what they were putting into their bodies. The paradigm was that increased consumer communication and knowledge led to higher quality.

The third landmark was the 1964 Civil Rights Act, which brought future federal legislation concerning health care, including⁴:  
- Women’s work rights.  
- A pregnancy act (stating that women could not be fired for being pregnant).  
- The Americans With Disabilities Act.

Numerous consumer protections came from the Civil Rights Act that ultimately increased quality in the areas of employee access to jobs (eg, women, people with disabilities, and minorities). Therefore, the Civil Rights Act has greatly affected individual and group protections and is the linking principle behind current policies on increasing nonbiased public information on the quality of health care organizations and departments.

The fourth landmark was the federal Nutritional Labeling and Education Act of 1990, which mandated that nutritional labels be placed on all foods and drinks sold in the United States. This legislation linked back to the 1906 Pure Food and Drug Act and was related to improving public health and quality of life for the American public through access to information.¹⁰

The fifth landmark was a report by the Institute of Medicine, which had much the same effect as Florence Nightingale’s book in 1863. The 1998 report stated that approximately 98 000 people in the United States died every year from hospital-acquired infections or accidental deaths while in the hospital and from complications not associated with their disease."¹¹ That is, a consumer died because he or she was admitted to the hospital. This report further noted that patients could not always be confident in the safety and quality of care while in a U.S. hospital. The overall takeaway was that hospitals in the United States needed to improve performance, care, and quality and that measuring performance and reporting the results would improve outcomes."¹¹ The report was coupled with the statistics that the United States spends more money per capita on health care than any other country in the world. This report suggested that something was wrong with the U.S. health care system and offered a solution for improvement.

An alliance between the private and government health care sectors was the sixth landmark. The Hospital Quality Alliance, established in 2002, was a collaboration of the Association of American Medical Colleges, the American Hospital Association, and the Federation of American Hospitals, along with the U.S. Department of Health and Human Services and Centers for Medicare & Medicaid Services.¹² This was a national initiative between private and government entities involved in health care delivery. The goal was to improve quality by improving transparency and reporting the results of performance metrics to the public. For example, the measure for a myocardial infarction includes¹²:

- Administration of aspirin on arrival to the emergency department.  
- Time from arrival at the emergency department to fibrinolysis.  
- Administration of fibrinolytic therapy within 30 minutes of arrival.  
- Time to perform an electrocardiogram.  
- Time to transfer from the emergency department to the coronary care intervention unit.

The Hospital Quality Alliance was a first step in determining performance measures and outcomes. Over the next 5 years, consumers will have greater access to these data.
Management Toolbox
Increased Consumer Communication and Knowledge Leads to Higher Quality in Health Care

Current Health Care Public Information
During the past 6 years, health care public information has increased rapidly. By connecting major initiatives from 1863 to 2002, we begin to see a common thread of the government protecting the consumer, either through federal legislation or providing access to and synthesis of information. Communication in the health care industry is becoming more transparent and symmetric to the consumer, and consumer knowledge should continue to increase.

Health care delivery is becoming more transparent and more quality driven. These changes shift attention to analyzing the patient experience to determine change pathways in health care and enhance consumers’ selection. The health care process and outcome measures are integrated into life expectancy, patient safety, and healthy communities, and increased standards of care are incorporated that emphasize controlling costs and increasing quality while maintaining access and services.

The complexities of managing a department or organization most likely will increase for medical imaging department managers. Because of the history of increasing government intervention for the benefit of the consumer in various aspects of health care delivery, coupled with the quantity of information being produced, it is going to be more difficult to maintain managerial, administrative, and operational functions with this increased level of complexity.

Goals for Managers
Managers should continue to improve their education. Some might already have a graduate degree, but they should begin to consider other types of education. Managers should understand statistics and consider taking courses on developing assessment and outcomes plans. Managers should understand how to develop these plans and how the business process relates to patient safety initiatives because they will no longer be allowed to say, “We have a great department.” They will have to prove it with metrics.

The future of health care will be data driven. Therefore, managers should begin to think about “big data” and how they analyze the data. For example, going back to the travel industry example, consumers visit the Tripadvisor.com Web site to see simplified data.

Managers must be able to design, collect, interpret, and evaluate complex data, and then present it to health care administrators in a simplified manner. Examples of metrics include patient wait times, billing reimbursement vs payout amounts, patient safety metrics, scores on employee satisfaction surveys, and scores on patient satisfaction surveys.

Managers might consider examining higher education assessment models or reading books about assessment. The concepts of big data, assessment, and outcomes measurement have been part of higher education for many years. Previously in health care delivery, managers have not had to think like this. Assessment plans in higher education obtain data from their students (customers), alumni, and external communities of interest. The successful assessment plan allows the education program to be dynamic and fluid based on what is determined from the data (the outcomes). This different type of thinking will become important for health care managers.

Volunteering for anything new at work is a great way for managers to learn on the job. As the paradigm of reimbursement payment changes toward bundling, some of the best learning can come from being on new committees. This is a way for managers to examine intrinsic ways to add value to their organization. They must begin to think not only retrospectively and about putting out fires but also prospectively beyond the budget year. Speaking with others at all levels within their departments helps managers learn what people think and how much they know.

Managers should become more involved professionally. Some of the best information comes from a national professional society, such as the American Society of Radiologic Technologists. Checking the Web site frequently, speaking at or attending conferences, or holding office are great ways to stay engaged. Networking and leading others will have a greater affect on a manager’s career as these changes in health care delivery begin to increase.

The great paradox is that as our health care system becomes more transparent and how we do our work becomes more standardized, managers must remember that what works in one facility might not work in another. To achieve significant outcomes, we probably will not
be able to “copy and paste” what others are doing in their workplaces. That could have been done in the past, but in the future, it will be more difficult to do while maintaining a high level of quality. There might be ideas that can be transferred from another system or organization, but individual systems and organizations are different, and to achieve a high-level system, managers have to identify what will work specifically for their organization, with its specific culture, mission, vision, and goals.

**Conclusion**

The increased complexity of communication and transparency in health care delivery systems requires the manager to decide which metrics to gather based on the community he or she serves, patient demographics, budget, number of staff, and available equipment. It is, therefore, important for managers and leaders to increase their education and training, as well as their personal and collective networking. Managers need to make it a goal to increase the quality of care and be able to document it with metrics and, ultimately, proven outcomes measurements. We all need to better prepare for what is coming.

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**References**


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1. The mission of the 2002 Hospital Quality Alliance initiative was to:
   a. standardize labeling of all drug packaging.
   b. decrease the incidence of hospital-acquired infections and accidental deaths.
   c. improve health care delivery through reporting of performance measures.
   d. expand the government’s role in protecting consumers.

2. To help prepare for the increasing complexities of managing a medical imaging department, managers should:
   1. learn how to develop assessment and outcomes plans.
   2. participate in new committees at work.
   3. implement processes that work in other facilities.

   a. 1 and 2
   b. 1 and 3
   c. 2 and 3
   d. 1, 2 and 3