P. U. 4 PAGE 1 OF

THE QUEST FOR EFFICIENCY: How Mass. Hospitals Are Getting It Done

by Lisa Alcock
Contributing Writer

How do you cut costs and maintain quality?

That is the question virtually every Massachusetts hospital confronts today. For many, improved use of available technology, thoughtful revision of case management policy, consolidation of services, evaluation of clinical and administrative processes, and reductions of inpatient treatment have and will continue to be priorities in the quest for efficiency.

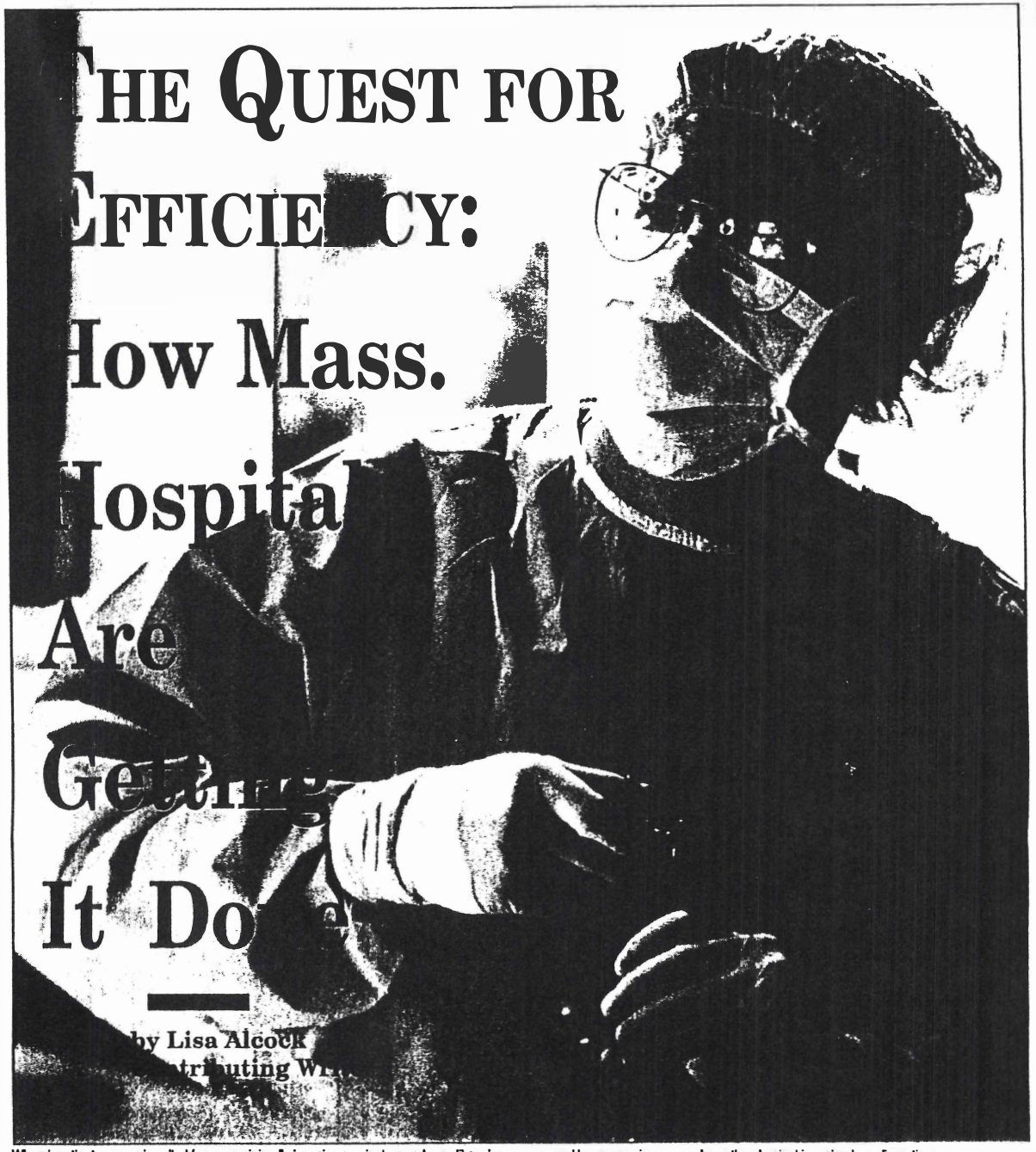
There is work to do. According to health care expert and professor at Boston University School of Public Health, Alan Sager, care in Massachusetts hospitals to date has been expensive.

"The bottom line numbers are still a little discouraging," he said recently. "According to the latest data from the American Hospital Association, for example, hospital costs per person in Massachusetts are still right around 35 percent above the national average."

"A small amount is attributable to serving people from other states. There is more commitment to teaching, and research. There is greater reliance on hospitals for outpatient care than in other states. The wages are a little higher." But Sager sees all of those and other legitimate inflations to the cost as only about a third of the excess. The remainder, he said, likely reflects "a relatively expensive and elaborate pattern of clinical services."

"The surgery rate in Massachusetts hospitals is about 20 percent above the national average, for example. More tests, more measurements... more treatments," he said. "This may be associated with higher quality of care, but certain studies by John Wennberg (a Dartmouth-based health care researcher) and others in New Haven have shown that cost of care there is about half that in Boston with no identifiable, measurable differences in quality."

Continued on page 10



When inpatient surgery is called for, new minimally invasive surgical procedures, like microsurgery and laparoscopic surgery, keep the physical invasion less disruptive... and help lower costs. Above is Mark Stoker, M.D., director and founder of the Center for Laparoendoscopic and Laser Surgery at Worcester's St. Vincent Hospital. This facility, established in 1991, has served as a training and resource center for surgeons from throughout the world.

Continued from page 1

Sager has raised publicly his concern about the risk of rapid removal of dollars from the health care system.

Still, he acknowledged that figures like these reflect that "there's room to spend money better." The hope, he noted, is that increased efficiencies will not be simply drawn out of the system, but returned in the form of at least equal, if not better care.

He is not alone in recognizing there is plenty of room for improved efficiencies. Many Massachusetts hospitals are beginning to roll up sleeves and clean house. "Most of them have worked to become more efficient," Sager said.

"There's no single path to efficiency," said Andrew Dreyfus, vice president of Massachusetts Hospital Association. "But hospitals have worked hard to lower their costs. Through everything from better scheduling of medical and surgical procedures to the extension of new medical technology, and the redesign of the process of care itself."

Among the major goals has been to minimize costly acute care stays.

"More and more we are treating patients on an outpatient basis, so we are doing a lot more same day and outpatient surgery," explained Robert E. Maher, Jr., president and CEO of St. Vincent's Hospital in Worcester. "We're putting patients in skilled nursing facilities much more quickly than we used to. We're sending them home with home care. More and more physicians are treated patients on the outpatient side than the inpatient side. That all drives cost down."

Less Disruptive Surgery

When inpatient surgery is called for, new minimally invasive surgical procedures, like microsurgery and laparoscopic surgery - using smaller incisions, microscopes, and smaller instruments keep the physical invasion less disruptive.

"You are in and out a lot faster, less trauma to the patient, quicker recovery as a result, and you've got them under anesthetia a lot less time," Maher said.

"Hospitals have been working hard to eliminate the waiting period between procedures, to ensure that when patients are scheduled for surgery," Dreyfus said, "that the follow-up tests are close as possible to the surgery," with the goals being "to try to both eliminate from the patient's perspective a lot of the waiting time, but also, as one way to eliminate the number of days the patient actually stays in the hospital."

"If you think about the patient as being the center of a process with fewer resources, the less time that you take, generally speaking, the healthier the patient is, when they are done. And there's less cost to it," Maher said.

Case managers oversee the process of patient care, with the goal of improving the efficiency of service delivery, such as minimizing medically unnecessary delays between tests and treatment. Cases are reviewed before patients enter the hospital, and plans for discharge are often begun even before treatment or surgery.

Paper Trail Delays Process

Inefficient paperwork can slow cases. New opportunities are arising in the quest for centralized but discreet information systems that will allow efficiencies throughout the hospital, within virtually every element of the business, from the operating room to the nursing station.

Diane Keogh-Frione, director of Information Services at Newton-Wellesley Hospital, has seen a geometric improvement in efficiency attributable to technology.

One area impacted is the operating room. At Newton-Wellesley, an automated system matches a patient's case with a doctor's supplies preference for the scheduled procedure. "It makes sure the proper supplies are there," Keogh Frione said. The result: less waste of unnecessary supplies to the case (which must be disposed), and fewer delays from setup errors.

Another efficiency in the OR is paperless procedure for a case, Keogh-Frione explained. Outcome analysis—what went right, what went wrong—for a case can be considered immediately, with related data.

Nursing is one area hospitals are examining closely for improved efficiency. Newton-Wellesley is one of the first to cut down on drug treatment errors with an automated system for nursing stations.

"There's room to spend money better."

—Alan Sager
Professor
Boston University School of Public Health

A drug dispensing system called Meditrol "is a unit that sits on the nursing station with an interface to the pharmacy. It's kind of like a vending machine," Keogh-Frione explained. The nurses "enter the patient's name and the vending machine knows what medication the patient is on and will spit out the appropriate dose."

As in the operating room, documentation is a major time absorber. "Nurses have to document everything that they do for a patient," explained Maher. So one efficiency goal, he said, is to remove handwriting, replacing it with exception reporting, or better still, computerized reports to a central system. "You're going to save an inordinate amount of time. And if you save that time, and choose more productively to do other things, you save money," he said.

For many hospitals, this is happening already in home care, with visiting nurses using hand held computers to input treatment and patient status.

Order entry is yet another area where technology has cut down on time and labor, said Maher. "A doctor comes in and sees a patient in the morning, and writes a bunch of orders. In a labor intensive situation, you would have a unit secretary taking those orders and writing out requisitions for an x-ray, for a laboratory test, for physical therapy treatment, and so forth. With a computer you can simply go in, make the request, it gets transferred automatically." Fewer people involved, faster results.

The Computer Advantage

Likewise, Maher and Keogh-Frione both noted the advantages realized by using computers for results reporting. "If the laboratory has done your lab tests, they can fire that back via the computer to the nursing unit, to the doctor's office," Maher said. Excessive follow-up phone calls are eliminated, and, with positive results, patients can head out sooner. "To the extent you can

. Hospitals Are Getting It Done

discharge a patient in a more timely manner, you're going to save resources, save costs," he said.

Automation improves patient satisfaction as well, Maher said, noting the endless times a patient entering the hospital has to repeat personal information. "It makes a lot of sense for patient satisfaction and for efficiency to ask the question once, get it in the database, and be able to send it to whoever needs it," Maher said. "So on the administrative side of medicine, computers are playing a major role in reducing wasted time."

"It's an industry in revolution right now."

—Robert E. Maher, Jr.
President and CEO
St. Vincent's Hospital

The technological improvements are part of an overall goal of looking at processes and how to change them for the better. "We're spending a lot of time, as are other hospitals, trying to re-engineer processes, both clinical and administrative," Maher said.

Hospitals now are group purchasing organizations that can buy supplies at lower rates. Supply standardization has helped also in this effort.

"For example, if you've got 20, 30 or 50, physicians, each one of whom prefers a certain kind of suture, what you try to do is get them to agree to reduce it from 50 different kinds to five. So you buy those five in greater volume and lower your costs," Maher said.

Likewise, hospitals are outsourcing. Food service and building services are the kinds of responsibilities that can often be more efficiently contracted to outside firms. Hospitals are finding that national food service companies like Marriot and Seilers frequently can do it better and more inexpensively.

Sometimes the necessary changes are simple better matching of the services to the most effective available resources to treat the specific needs of the patient. For that, hospitals are drawing on focus groups to hammer out better routines.

"Hospitals have employed a variety of quality management techniques which tend to try to break down the process of care into individual steps," Dreyfus said.

"On the clinical side, that means we look at how, for example, we take care of patients with pneumonia," Maher explained. "We get a bunch of doctors, nurses, and pharmacists, and other pertinent parties together and say, let's look at how we take care of these patients. Let's actually flow chart the entire process, when interventions take place. Let's look at our data again and come up with a better way to do it."

"And that happens on the clinical side and on the administrative side. And it results in much more standardization, and it also eliminates wasteful and sometimes duplicative, and sometimes non-value-added work. So there's a tremendous amount of that going on."

Labor is a hospital's most expensive and valuable resource. "They really drive costs, satisfaction and quality," Maher said. But in the era of major mergers, "It the whole human factor that needs to be dealt with," he explained. "People need to feel valued. You need to give them time to change. You need to involve the doctors and nurses - all the key players - or it won't work, they will be resistant."

Efficiency the Key

Nevertheless, efficiency is the "e-word" for survival for many Massachusetts hospitals. "It's an industry in revolution right now. You're seeing, generally speaking, that each employee is expected to do more than they were formerly asked to do. That means each of us needs to find the things we are doing that perhaps aren't very valued-laden and stop doing them. If you look at your day, and how you spend your time, you always find there were things that were wasted, and that's being required of virtually everybody who works in health care," Maher said.

While Massachusetts hospitals have a challenge before them, the trend is favorable, Dreyfus said, noting, "Hospitals costs are growing at less than half the rate they were growing at only several years ago, so the last few years we have seen among the lowest rates of growth in hospital costs over the past 10 to 20 years. So while some of that may be attributed to the overall slowing of health care costs, clearly the efforts by hospitals to manage themselves more efficiently are a major factor in lowering the growth in health care costs."

Sager, who remains concerned about the balancing of patient needs and the industry quest for efficiency, said that he hopes any improvement "means we have more resources with which to save lives," and not loss of health care quality. "Efficiency," he said, "usually means keeping quality constant but lowering costs."

Similarly, Dreyfus said that in the quest for efficiency, and survival, the industry must return to its purpose for being as an ultimate guide. "As the pace of change intensifies," he concluded, "it's important not to lose sight of why we went into the health care field, and what our true mission is - to take care of people with compassion." ❐