

**Testimony of David R. Page**  
**President and Chief Executive Officer**  
**Fairview Health Services**

**Before the**  
**Permanent Subcommittee on Investigations**  
**Committee on Government Affairs**

**June 11, 2003**

# Creating a Culture of Continuous Improvement

## Contents/Executive Summary

### I. Background

- A. Fairview Health Services: From primary care in the ambulatory, rural setting to organ transplantation in a quaternary, academic teaching center
- B. A broad continuum of care close to home
- C. In partnership with the University of Minnesota's Academic Health Center for excellence in clinical care, research and education

### II. Introduction

- A. The Issue: Safety in hospitals lags far behind quality and safety in other industries
- B. Health care must learn from other industries  
*To become safer, we in health care must learn from other industries that have confronted and overcome similar safety challenges by creating cultures that continue to set high standards, support open communication and embrace continuous process improvement.*

### III. Learning from Industry: The Bold Vision and Focus of Alcoa

- A. We need vision, disclosure, process improvement
- B. Fairview's efforts: Committed to the Institute of Medicine's six aims of medicine
- C. **Congress can help** by holding the health care industry accountable for safe and high quality care though reimbursement based on the quality of outcomes.

### IV. Learning from Industry: The Culture of Open Communication and Anonymous Error Reporting Embraced by the Airline Industry

- A. A policy of full disclosure

- B. Minnesota in the forefront
  - Working together to standardize care processes
  - Embracing Leapfrog
  - Establishing accountability for error reporting
- C. **Congress can help** by encouraging a culture of full disclosure by supporting a non-punitive reporting environment.

**V. Learning from Industry: The Rigorous Process Improvement Methods of Motorola, 3M and Toyota**

- A. The Concern: Lack of metrics and rigorous process improvement
- B. Fairview's efforts: Aligning performance improvement with strategic initiatives focused on customer requirements
- C. **Congress can help** by encouraging and supporting organizations focused on collaborative process improvement across the industry (e.g., The Institute for Healthcare Improvement, The National Quality Forum, and others).

**VI. The Quality Challenge**

- A. Challenge One: A disorganized system of care
  - Fairview's efforts
    - Heparin project
    - Hospitalized patient drug therapy
    - Ambulatory medical record system
    - Advanced access scheduling
    - Collaborating on standardization
  - Congress can help
    - Support funding for ambulatory electronic medical records: Capital-pass through for Medicare, or like the Hill-Burton language
- B. Challenge Two: Rise in chronic illness rates
  - Fairview's efforts
    - Diabetes project
  - Congress can help
    - Support the new CMS strategy to reimburse those health care organizations that show improvements in non-hospital-based treatment of chronic conditions

- C. Challenge Three: Increased complexity of health care science and technology
- Fairview's efforts
    - Ambulatory electronic medical record (AEMR)
    - Telemedicine
    - Working with vendors to improve equipment
  - Congress can help
    - Support funding of AEMR
    - Support development of Information Technology standards
    - Support standardized bar coding
    - Support Medication Errors Reduction Act of 2001

## **VII. Conclusion**

# Creating a Culture of Continuous Improvement

## I. Background

Thank you Chairman Coleman and members of the Permanent Subcommittee on Investigations, Committee on Government Affairs, for convening this hearing of policy makers and leaders, and for inviting me to share Fairview's story. I'm David Page, president and CEO of Fairview Health Services, an integrated health care delivery system serving Minnesota. I also have the privilege of membership on the National Patient Safety Foundation board of directors and leadership of the NPSF Stand up for Patient Safety Campaign.

### A. Fairview Health Services: From primary care in the ambulatory, rural setting to organ transplantation in a quaternary care, academic teaching center

Our mission, improving the health of our communities, has been consistent since the first Fairview hospital was founded nearly 100 years ago. Norwegian Lutheran pastors and members of their congregations responded to the needs of the immigrant community for compassionate, culturally appropriate health care.

### B. A broad continuum of care close to home

Our continuum of care or breadth of services is another differentiator. We operate seven geographically dispersed hospitals ranging from an inner city location, to suburban locations, to greater Minnesota community locations. We are privileged to conduct most of our activities in Minnesota, a perennial leader in health care innovation. In addition to hospitals, in each of these areas we operate clinics and related services appropriate to the local needs. At many of these sites, Fairview provides home care and hospice services, a full range of rehabilitation services, retail and in-hospital pharmacies, elder care, laboratory services and nursing homes. Based on the depth and expertise of the University of Minnesota Physicians, at our largest facility, Fairview-University Medical Center, we offer the most advanced "quaternary" services, including transplantation for all solid organ systems and many other systems, such as blood and bone marrow. Consequently, within Fairview, we believe we can meet all our patient needs close to their homes for most primary, specialty care and even complex care. Our vision is to allow a patient to move through this integrated system seamlessly, receiving care at the most convenient, appropriate location.

In practice, for example, the continuum might look something like this. A home care nurse might visit an elderly patient at home and determine that the patient requires hospitalization for uncontrolled diabetes. The patient is admitted to Fairview-University Medical Center where she is stabilized. But because of her condition, she cannot safely return home, so a care coordinator arranges for her to stay in a Fairview long-term care facility on either an assisted or independent basis. Over time, when the patient requires hospice care, she enters a Fairview hospice facility for palliative care. Such seamless movement of patients through our system in response to their care needs is our vision for

all Fairview patients. We are pursuing excellence in our clinical care systems and the business systems that support them.

### **C. In partnership with the University of Minnesota Academic Health Center for excellence in clinical care, research and education**

Fairview offers two clear differentiators in our marketplace. In 1997, Fairview's system of community hospitals entered into a partnership with the University of Minnesota's Academic Health Center (AHC), purchasing the university's hospital and clinics. The AHC educates and trains health care professionals, while Fairview operates the hospital and clinics that provide a setting for clinical training for future health care professionals, as well for the faculty physicians' clinical group practices. In addition to supplying a platform for leading edge medical research and education, Fairview provides outstanding clinical care and community service through these and its other facilities, serving a significant percentage of the poorest in our state. Moreover, a large portion of the state's most seriously ill patients receive care at these facilities--whether in our neonatal intensive care unit or through our nationally recognized end-of-life services. Fairview also owns and operates the state's largest children's hospital as part of Fairview-University Medical Center. (See attachments: Fairview Health Services "At a Glance" and "Capacity")

## **II. Introduction**

### **A. The Issue: Safety in hospitals lags behind quality and safety in other industries**

As we know, America's health care system and Fairview's don't always work smoothly. While science and technology advance daily, the health care delivery system has not kept pace. In *Wall of Silence*, Rosemary Gibson reiterates the Institute of Medicine (IOM) data revealing that an estimated 98,000 people die each year from preventable medical mistakes. The IOM is not alone in this estimate. We, along with many of our peers, acknowledge that the processes at work in the health care system lag behind many other American industries in the quality of the output and the safety of the participants. To be sure, there are many contributing factors—health care is a complex subject. But too often, we accept the results even in the areas where change and improvement should be possible.

Often we point fingers and place blame, rather than evaluating the system that supports, and too frequently fails, the health care provider and our patients. This environment of blame has led to a public loss of trust in our national health care system. Blame also inhibits our ability to get a clear picture of the number and reasons for errors that happen so we can learn from mistakes. As leaders in health care, we have a responsibility and an opportunity to restore trust and to take accountability for the care we deliver – and we have begun that journey.

Thankfully, there is hope that a better future is ahead of us, and there are signs that work is underway to change the picture. Health care leaders in Minnesota are making significant efforts in quality and safety initiatives, with no reluctance to tackle the hard work ahead.

I am not here today to describe all the complexities of health care delivery or all the barriers and misaligned incentives we face. Rather, I am here to describe what we are doing to make health care safer and more efficient. And, to suggest a few leverage points at which we believe governmental action could add value. Over its 100-year history, Fairview has always followed the Hippocratic Oath, “First, do no harm...” Emphasis on safety and process improvement is nothing new to us. But as health care has grown into a complex system, we now require new systems and techniques to help us manage patient safety and produce excellent outcomes. And we need to deliver those results within the resource restraints imposed on us.

#### **B. Health care must learn from other industries**

We need your help and the help of other organizations here today to facilitate system improvement and system development. If you remember anything from my visit here today, let it be this: *To become safer, we in health care must learn from other industries that have confronted and overcome similar safety challenges by creating cultures that continue to set high standards, support open communication and embrace continuous process improvement.*

### **III. Learning from Industry: The Bold Vision and Focus of Alcoa**

#### **A. We need: vision, disclosure, process improvement**

To meet this challenge, we in health care must do the following. First, we must embrace a bold vision and focus our efforts on applying high standards and expectations. We have examples, like Paul O’Neil modeled at Alcoa to identify and eliminate employee injuries in the workplace. At Alcoa, O’Neil relentlessly focused daily to reduce accidents to a new industry low. He never accepted the “industry average” for injuries as good enough for his organization.

#### **B. Fairview’s efforts: Committed to the Institute of Medicine (IOM) six aims of medicine**

At Fairview, we’re striving for relentless attention to safety—incorporating it into our vision statement:

*You will know us for our continuum of healing care, our responsiveness and for setting national standards for clinical excellence, innovation and safety.*

We are committed to the Institute of Medicine’s six aims of health care outlined in the executive summary of *Crossing the Quality Chasm*. Health care will be:

- Safe – avoiding injuries to patients from the care that is intended to help them.
- Effective – providing services based on scientific knowledge to all who could benefit and refraining from providing services to those not likely to benefit (avoiding under use and overuse, respectively).

- Patient-centered – providing care that is respectful of and responsive to individual patient preferences, needs and values and ensuring that patient values guide all clinical decisions.
- Timely – reducing waits and sometimes harmful delays for both those who receive and those who give care.
- Efficient – avoiding waste, including waste of equipment, supplies, ideas and energy.
- Equitable – providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location and socio-economic status.

We believe with the IOM that adhering to these aims of care will result in safer, more reliable health care.

We have also created an executive level position to help drive our safety agenda across the system. Further, we have incorporated safety expectations into the goals of every executive at Fairview to increase our safety accountability.

### **C. Congress can help**

- Congress can help by holding the health care industry accountable for safe and high quality care though reimbursement based on the quality of outcomes. As stated in a May 27 article in *The Wall Street Journal* called “Medicare Plan Would Give Bonuses for Superior Care”:

*Medicare is planning an experiment: Reward hospitals that provide superior care....*

*Medicare traditionally has paid hospitals the same fee for a procedure regardless of the outcome. But now, it is following the lead of private employers and managed-care plans that have begun paying hospitals and doctors more if they can show their patients fared better....*

*Under the latest pilot project by CMS, hospitals would submit data on patients with eight medical conditions – including stroke, heart attack, hip surgery, pneumonia and heart failure – that are common among Medicare’s patients. A hospital might, for instance, report how quickly patients with pneumonia get antibiotics, which increases the likelihood of a speedy recovery. Or it might report what percentage of heart-attack patients get beta blockers at discharge, which help prevent future heart attacks. Those results would likely be posted publicly.*

*As proposed by CMS, hospitals with top scores on quality would get a small bonus – 1% or 2% -- added to their regular Medicare payments. Under the initial plan, the lowest performers wouldn’t be affected, while the top hospitals would get additional funds for all three years of the project.*

Fairview supports the provider “report cards.” We believe it does give consumers important information and prods providers to change their behavior.

## **IV. Learning from Industry: The Culture of Open Communication and Anonymous Error Reporting Embraced by the Airline Industry**

### **A. A policy of full disclosure**

Second, we must put vision into action through open communication and anonymous error reporting systems. Such systems have transformed the culture of the airline industry, making 2002 the safest year in the air. Such reporting works because the culture supports and demands blameless disclosure. The system encourages anyone with safety concerns to raise issues and stop the process if necessary. Even in the face of the awful crash of the Columbia space shuttle, the aerospace industry focused on learning from that tragedy rather than rushing to blame. We need to develop a similar orientation. I'm pleased that at Fairview we are implementing a policy of full disclosure to patients when an error occurs (see attached), and measuring our culture of safety through surveys so that we can identify and respond to reporting barriers.

### **B. Minnesota in the forefront**

**Working together to standardize care processes.** As mentioned above, Fairview is not facing this challenge alone. Fairview is active in a Minnesota consortium of ten health care systems—one of few such efforts in the country --called Safest in America. In a current initiative, SIA has established a community standard for surgical site marking to ensure that surgical incisions are made in the right location on the right patient. Such an effort is just the first in what we envision as a way of life for health care in Minnesota--competitor systems cooperating to enhance the safety of patients.

**Embracing Leapfrog.** Fairview also is active in a national consortium of health care purchasers and providers known as Leapfrog. The group is working to make hospital safety and quality information available to consumers. As chairman of the Minnesota Hospital Association, I worked with other Minnesota hospital leaders to sign the Leapfrog pledge to report safety efforts annually. I'm pleased to report that all 142 Minnesota hospitals signed the pledge. In the words of Jill Egan, senior vice president and chief operating officer of the Minnesota Hospital Association:

*“As a demonstration of its commitment to patient safety, Fairview took a leadership role in bridging the commitments of both the hospital and business community. Participating in a program of the Business Roundtable call Leapfrog, **Minnesota became the first state in the nation to have 100 percent of its hospitals report their safety efforts for consumers...** Fairview was instrumental in helping to develop the conceptual framework for a registry designed to capture data about medical accidents and share learning with other hospitals. The registry has now become a key component in the recently passed Minnesota legislation requiring reporting of adverse medical events.”*

**Establishing accountability for error reporting.** Minnesota has further led the charge on patient safety by recently adopting a law to systematically track such adverse medical events as wrong-site surgery or death/ disability associated with medical errors. The

Minnesota Adverse Health Care Event Reporting Law mandates that hospitals disclose to the Department of Health when any of 27 “never” events occur and that this information is shared with the public. This is part of Minnesota’s effort to help identify and solve problems, rather than pointing fingers of blame.

### **C. Congress can help**

- Congress can help by encouraging a culture of full disclosure by supporting a non-punitive reporting environment.

## **V: Learning from Industry: The Rigorous Process Improvement Methods of Motorola, 3M and Toyota**

In addition to the need for vision and blameless error reporting, third, health care must create a meaningful process improvement culture and apply rigorous process improvement methods like those used at Toyota, Motorola, 3M and countless others to produce better products at lower cost. While Fairview and most other health care providers have pursued quality and process improvement for years, we realized we needed a new level of measurement capability, system-wide alignment of goals and objectives, a commitment to focus, persistent discipline and some new skills to go along with it.

### **A. The Concern: Lack of metrics and rigorous process improvement**

As we observed our own systems, we found in some cases we had difficulties spreading our own best practices from one part of the system to another. We didn’t always have common metrics across our system. For a variety of reasons, we lack meaningful measures in some of our processes. Like many of our colleagues battling rising costs and falling reimbursement, we found ourselves rushed from one crisis to the next. We struggled to understand our care and business processes enough to rigorously improve those processes and their interactions for dramatic performance improvement.

To be sure, we have many examples of improvements and performance gains; but, to deliver on the expectations of our patients in the future, we need to achieve quantum level change: faster action, credible measurement of our processes and demonstrable outcomes that patients and payers can evaluate. For Fairview, a challenge from a captain of industry became one element of our epiphany. At a health care conference sponsored by Motorola, Bob Galvin challenged care health care providers to use the well-known, rigorous and effective process improvement tools of Six Sigma to drive improvement in the health care industry.

### **B. Fairview’s efforts**

Aligning performance improvement with strategic initiatives focused on customer requirements. The Motorola conference inspired us to align Fairview around measurement and rapid process improvement. We developed a document outlining strategic direction, process improvements and performance measures, called a “balanced scorecard” (see copy attached). Creation of the system scorecard requires that

management come together on our areas of focus and prioritize our activities. The system scorecard draws attention to performance measures across six strategic objectives, including clinical excellence. It identifies the high leverage areas in which we believe focused action can deliver dramatic performance improvement. The balanced scorecard exercise also reminds us that our activities involve a great many processes that require ongoing, balanced attention to sustain high performance.

We created balanced scorecards for each of our seven community care systems and for our system-wide businesses such as the pharmacy and laboratory organizations. In addition, many of our individual departments have created scorecards that link to the Fairview Health Services scorecard. We created “stretch goals” in our performance measurements to challenge our reliance on current processes. Focused measurement areas, such as diabetes management in the clinical excellence area, permit us to align activities better to achieve goals. While still in evolution, the scorecard has served as a key focal point to align the company around process improvement.

During the past two years, we have undertaken process improvement projects designed to increase the quality of our performance and productivity. This effort helps to ensure that the patient safety agenda remains consistently on the minds of everyone within Fairview.

Our commitment to process improvement also is expressed in management action. With assistance from Motorola, 3M and others who have applied the tools successfully, we have pursued an understanding of the Six Sigma concept and the rigorous process improvement tools available to assist us. Several dozen of our employees, including those in senior management, have trained in process improvement techniques at the Juran Institute within the University of Minnesota’s Carlson School of Management. We have spread this expert knowledge at various levels within our own employee base to help spark process improvement projects throughout the company. I am currently involved in the Juran process improvement training, and am working on a project team that focuses on how we handle sterile surgical instruments.

### **C. Congress can help**

Congress can help by encouraging and supporting organizations focused on collaborative process improvement across the industry (e.g., The Institute for Healthcare Improvement, The National Quality Forum, and others).

## **VI. The Quality Challenge**

Health care organizations need to focus process improvement efforts on those areas identified as “root causes” of unsafe care. In its 2001 report, *Crossing the Quality Chasm*, the Institute of Medicine underlines several reasons for inadequate quality of care. I’d like to talk briefly today about three of them:

- Chaos and fragmentation within a poorly organized health care industry
- Increase in chronic conditions
- Growing complexity of science and technology

I want to share with you examples of the initiatives Fairview Health Services has undertaken to address these inadequacies and what you can do to help enhance the quality of health care delivery.

### **A. Challenge One: A disorganized system of care**

When the health care system works seamlessly, it can be a wonder to behold. With a hospital as its hub, each is comprised of primary care and specialty clinics, a full range of rehabilitation services, pharmacy services, home care, hospice care and elder care. When patients move among our care systems seamlessly, they access the care most appropriate to their needs. As one patient summed up her experience, *“My son and I died, but you saved our lives.”* At nearly eight months pregnant, her heart started failing. She arrived at one of our community hospitals in labor and gasping for breath. A helicopter transferred her to Fairview-University Medical Center in Minneapolis, where she delivered her son by Caesarean section and underwent heart surgery. For this patient, the system worked spectacularly.

#### **Fairview’s efforts**

**Heparin project.** Sometimes the system doesn’t work even at the best and most prestigious health care institutions. Paper records get lost or delayed, or patients get the wrong drug or the wrong dose. The media is littered with heart-breaking examples of cases that harden our resolve to make systems work better. For example, we are working to spread across our system the gains of a project at Fairview Southdale Hospital in Edina that successfully reduced reported overdose incidents of heparin, a powerful blood thinner, by 66 percent over four months. Staff achieved these gains by consolidating a heparin order form with a medication documentation record, as well as other administrative changes, thereby simplifying the process and reducing the potential for errors.

**Hospitalized patient drug therapy.** In another recent process improvement effort, a Fairview Southdale Hospital team created a new practice to ensure that a new hospitalized patient’s current, complete drug therapy is integrated accurately with in-hospital medication. I’m pleased that this team has reduced medication errors in their hospital area by 84 percent. Staff created a new form both to record medication histories and for use by physicians to order home medications. Pharmacy technicians deployed to the surgical admission area record medication histories to gather complete information, instead of surgeons who may not be familiar with specific drug therapy or doses.

**Investing in an ambulatory medical record system.** Part of our system has access to an ambulatory electronic medical record that puts patient information at the fingertips of caregivers, solving many problems associated with paper records. With electronic medical records, physicians can access patient information from any site in the system or even from home. Information can be updated instantly for real-time data on current test results. Information is accessible from anywhere in the system or from any computer with Internet access through a tool called a “portal.” In the words of one clinic physician:

*“I had seen a patient who had a fairly serious problem. I wanted to be able to get the lab results back to her as soon as possible. I couldn’t get the paper test results until the next day. However, the results were available electronically. I just got on the portal, reviewed the test results, and was able to call her and discuss the results that evening from my home. She was relieved and reassured and surprised that I was able to get her results and call her while I was at home. When my patients are happy and get better care, I love it.”*

A special physician medication and test-ordering feature also provides automatic alerts for allergy or drug interactions at time of medication ordering. Such knowledge-based ordering allows the physician to change a medication order if needed for better safety and effectiveness.

**Advanced access scheduling**. Also on the ambulatory side, I’m pleased with a recent series of system changes at several of Fairview’s clinics. An effort called same day access scheduling allows patients to see their own doctors on day of request for better continuity and stability of physician/patient relationships. While we still offer urgent care for same day response to acute problems, same day scheduling allows patients to see their own physicians for more seamless care.

**Collaborating on standardization**. As mentioned earlier, Fairview is participating in a community effort to fight chaos and fragmentation through a surgical site marking project to establish standardized protocols for marking of surgical site in every hospital in the metro area. Ten local health care systems are participating in the effort, which was two years in development.

### **Congress can help**

Congress can help by supporting funding for ambulatory electronic medical records which will result in better integration of patient data.

The Centers for Medicare and Medicaid Services (CMS), in developing Medicare payment methods, has recognized that certain costs are difficult to accommodate appropriately in developing prospective payment system rates and paid them through various pass through methods.

Therefore, this legislation could work like a capital-pass through for Medicare or like the Hill-Burton language, which helped hospitals invest in bricks and mortar. Today we need bytes and memory to help health care providers deliver appropriate, safe care to patients.

While the costs of information systems are covered by hospital inpatient and outpatient prospective rates and are considered in determining the annual update factor, increases related to new technology allowed in update factors usually are offset by assumed increases in productivity or other cost savings. We recommend funding to pay for information technology systems related to clinical process improvement and safety. These funds should be used to pay hospitals that implement systems under a cost pass through methods.

## **B. Challenge Two: Rise in chronic illness rates**

People are living longer than they did even a generation ago, and health care advances can take some of the credit. But as Americans age in larger numbers, the percentage of the population with such chronic illnesses as diabetes, obesity and heart disease are going up as well. Some 19 percent of the population has chronic health conditions, according to the Centers for Disease Control. Chronic conditions, lasting more than three months, are the leading cause of illness, disability and death, according to IOM's *Crossing the Quality Chasm*. Often, clinicians can deliver the best and most cost-effective treatment in non-hospital settings like clinics or the patient's home. For example, patients with congestive heart failure often have more success managing their condition with medication and diet at home rather than waiting for a serious episode and going to the emergency room.

### **Fairview's efforts**

I'm pleased with Fairview's efforts over the last three years to create systems to manage patients with diabetes for better overall health and more cost-effective care. This is an important initiative, because diabetes accounts for 25 percent of all Medicare claims. Our data indicates that adults with diabetes are four times healthier in 2003 than in 2000 based on improvement shown on five clinical measures. Staff selected measures most indicative of good clinical management to prevent complications and costly hospitalizations, based on American Diabetes Association recommendations. The clinical indicators included blood pressure levels, blood cholesterol levels and other measures. They created a diabetes registry to help track the measures on all adult patients with diabetes. They also shared results with patients and physicians so that each could make adjustments in compliance or treatment for best results. The percentage of patients meeting all five clinical indicators jumped by a factor of four from 2000 to April 2003.

### **Congress can help**

- Congress can help reimbursing those health care organizations that show improvements in non-hospital-based treatment of the leading chronic conditions. Fairview supports the new strategy by CMS to improve health care for its 40 million Medicare patients.

## **C. Challenge three: Rapidly expanding complexity of health care science and technology**

The Institute of Medicine's *Crossing the Quality Chasm* characterizes health care today as "more to know, more to manage, more to watch, more to do and more people involved in doing it than at any time in the nation's history."

The rapid advances in health care research and related drugs, interventions, devices and knowledge are mind-boggling. From advances in human genome research and its implications, to new robot-aided surgery, few human minds can grasp, understand and remember all of the care alternatives without the aid of even more technology. Yet as

health care systems become more complex, smarter technology can reduce errors and cost.

### **Fairview's efforts**

**Investment in an ambulatory electronic medical record.** Perhaps one of the most important technology investments a health care organization today can make today is in support of an ambulatory electronic medical record. As I mentioned earlier, the AEMR gives physicians immediate access to full patient information and provides continuity of care for our patients. Our goal is to eliminate handwritten medical records and drug prescriptions, which are a leading source of errors because of such factors as illegible handwriting, transcription errors and misleading abbreviations or symbols. As part of the diabetes project I mentioned, staff is using the AEMR to create “standing orders” for diabetes patients as well as electronic reminders on patient records to signal the need to update such blood tests as measuring levels of hemoglobin A1c and other important indicators and interventions for diabetes.

Not only can technology reduce errors, it can also broaden access to specialty health care for parts of Minnesota that might otherwise be underserved. In partnership with the University of Minnesota's Academic Health Center, Fairview can use telemedicine to allow a dermatologist to examine skin lesions or a psychologist to interview and counsel a patient.

**Working with vendors to improve equipment.** In addition to our technology investment, I am proud of a recent technology process improvement by a team at our Edina hospital. This group eliminated program-related infusion errors on an inventory of intravenous pumps by working with the pump's manufacturer to change a dangerous automated feature. A simple programming mistake using an extra or missing zero could cause a ten-fold over- or under- medication dose. The Fairview group requested that the manufacturer create default amounts and volumes for standard medications. They also created a library of standard doses that the manufacturer has adopted. This project has made our patients safer and saved Fairview money by earning 467 free replacement pumps from the manufacturer.

### **Congress can help**

- Supporting funding for ambulatory electronic medical records, which will result in better integration of patient data.
- Supporting the development of Information Technology (IT) standards to move information within the health care industry and its vendor community. For example, such standards might allow laboratory and electronic medical records systems to share information seamlessly to help ensure consistency in medication ordering and error tracking.

1. Establish a ten-year, \$1 billion grant program for hospitals and skilled nursing

facilities to offset the prohibitively high costs of developing and implementing new and emerging patient safety and information technologies, so as to reduce medication errors.

2. Provide grants of up to \$750,000 for hospitals and up to \$200,000 for nursing facilities, thereby mitigating the cost barriers to the purchase and implementation of new, life-saving technologies. In this way, the efforts of early adopters of new technologies are facilitated and rewarded.

3. Create a 20 percent set-aside in the grant awards for rural providers. Small rural providers are often at a disadvantage for applying for grants because of limited resources. Any money left unused should be made available to non-rural providers.

- Health and Human Services Secretary Tommy Thompson's lead on bar coding is a critical improvement for health care delivery. This effort expected to improve quality significantly through reduced errors in medications and equipment use. Standardized bar standardized bar code labeling on all hospital-administered drugs and devices will help ensure achievement of the five "rights"—right drug, right dose, right time, right patient, right method of administration.

Supporting the Medication Errors Reduction Act of 2001 would reduce medication errors, and the subsequent deaths and injuries, by improving the systems of delivering inpatient and skilled nursing care. Specifically, the legislation would:

## VII. Conclusion

**Thank you** for your interest in this important issue of patient safety. We will look to Congress for support in helping health care learn from other industries that have confronted and overcome similar safety challenges by creating a culture of continuous process improvements. By addressing chaos and fragmentation, chronic illness and the complexity of science and technology with vision, anonymous reporting and rigorous measurement, health care will achieve the same gains as have other high performing industries. All of our citizens will benefit.

### **Summary of how Congress can help:**

- Holding the health care industry accountable for safe and high quality care through reimbursement based on the quality of outcomes.
- Encouraging a culture of full disclosure by supporting a non-punitive reporting environment.

- Encouraging and supporting organizations focused on collaborative process improvement across the industry (e.g. The Institute for Healthcare Improvement, The National Quality Forum and others).
- Supporting funding for electronic medical records, which will result in better integration of patient data. This legislation could be like a capital-pass through for Medicare or the Hill-Burton language, which helped hospitals invest in bricks and mortar. Today we need bytes and memory to help health care providers deliver appropriate, safe care to patients.

The Centers for Medicare and Medicaid Services (CMS), in developing Medicare payment methods, has recognized that certain costs are difficult to accommodate appropriately in developing prospective payment system rates and paid them through various pass through methods.

While the costs of information systems are covered by hospital inpatient and outpatient prospective rates and are considered in determining the annual update factor, increases related to new technology allowed in update factors are usually offset by assumed increases in productivity or other cost savings. We recommend that funds be provided to pay for the costs of information technology systems related to clinical process improvement and safety. These funds should be used to pay hospitals that implement systems under a cost pass through methods.

- Reimbursing those health care organizations that show improvements in non-hospital-based treatment of the leading chronic conditions.
- Supporting the development of Information Technology (IT) standards to move information within the health care industry and its vendor community. For example, such standards might allow laboratory and electronic medical records systems to share information seamlessly to help ensure consistency in medication ordering and error tracking.
- Requiring standardized bar code labeling on all hospital-administered drugs and devices, down to the unit dose.

### **Sources**

Gibson, Rosemary and Janardan Prasad Singh. *Wall of Silence: The Untold Story of the Medical Mistakes That Kill and Injure Millions of Americans*. Washington, DC: LifeLine Press, 2003.

Institute of Medicine, Committee on Quality of Health Care in America. *Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century*. Washington, DC: National Academy Press, 2001.

Gladwell, M. *The Tipping Point: How Little things Can Make a Big Difference*. Boston: Little, Brown and Company, 2000.

Kuhn, Linda T., Corrigan, Janet M. and Donaldson, Molla S. Institute of Medicine, Committee on Quality of Health Care in America. *To Err is Human: Building a Safer Health System*. Washington, DC: National Academy Press, 2000.

## Fairview Health Services—Capacity

Fairview Health Services is a community-focused health system providing a complete range of services, from prevention of illness and injury to care for the most complex medical conditions. Services are provided in many settings, including community centers, homes, clinics, hospitals, and long-term care centers. Fairview is a not-for-profit organization headquartered in Minneapolis with staff and facilities located throughout Minnesota. The following table summarizes Fairview’s 2002 operations:

Total Licensed Beds:	2,240	Occupational Health Resource Centers	2
Inpatient Admissions:	77,658	Institute for Athletic Medicine Locations	5
Total Outpatient Encounters	2,229,531	Hand Center Locations	5
Employees (incl. part-time):	18,400	Counseling Centers	8
Hospitals:	7	Home Care & Hospice Locations	4
Primary Care Clinics:	37	Long Term Care Facilities	3
Retail Pharmacies	29	Adult Day Care Programs	4
Specialty Clinics:	30	Senior Living Facilities	14
Urgent Care Centers	6	Durable Medical Equipment	3

On January 1, 1997, Fairview merged with the University of Minnesota Hospital and Clinics. This merger enabled Fairview's affiliation with the University's Academic Health Center, which includes the University Medical School and other health science schools. This merger gives the state's premier medical research and education programs an opportunity to thrive in an environment that preserves academic integrity while offering patient-centered, high-quality, cost-effective services. Fairview's provider partnerships include Fairview Health Services, Fairview Physician Associates (FPA), Behavioral Healthcare Providers, and the Ebenezer Society, a senior-care organization. In every area of medicine, from heart transplant surgery to cancer treatment, we rank among the nation's most respected teaching institutions. Fairview offers a

patient care environment that balances leading-edge technology and treatments with personal concern – quality care delivered by a staff that demonstrates Fairview’s values of service, dignity, compassion, and integrity.