

20

YEARS OF THE
**PITTSBURGH
REGIONAL
HEALTH
INITIATIVE**

SEEDING QUALITY
CONTAINING COSTS
SPREADING EXCELLENCE

TABLE OF CONTENTS

A REGION—AND NATION—AWAKENS	3
BRINGING LEAN TO HEALTH CARE	5
MOVING BEYOND REPAIR	7
KEEPING PEOPLE OUT OF HOSPITALS	12
REINVESTING IN HEALTH	20
PRHI CELEBRATES 20 YEARS	25
INTERVIEW WITH PRHI'S CO-FOUNDERS	28



A REGION — AND NATION — AWAKENS

It's December of 1994, and Betsy Lehman is at the Dana Farber Cancer Institute. She had covered the renowned institution and the region's healthcare scene for more than a decade as an award-winning reporter at the Boston Globe. This time, Lehman was at Dana Farber to receive chemotherapy treatment for breast cancer. That's when Lehman *became* a headline—one caused by a chain of errors and oversights that would shake a nation's faith in its revered medical system.

Big Doses of Chemotherapy Drug Killed Patient, Hurt Second

Lehman received four times the intended amount of a chemotherapy drug, a lethal dose that destroyed her heart. A doctor misinterpreted Lehman's treatment protocol and prescribed the wrong amount, and more than a dozen physicians, nurses, pharmacists, and other healthcare workers didn't recognize the error. They also didn't act on her gradually worsening symptoms, which alarmed Lehman's husband—a scientist at Dana Farber. She died, of entirely preventable causes, at just 39 years old.

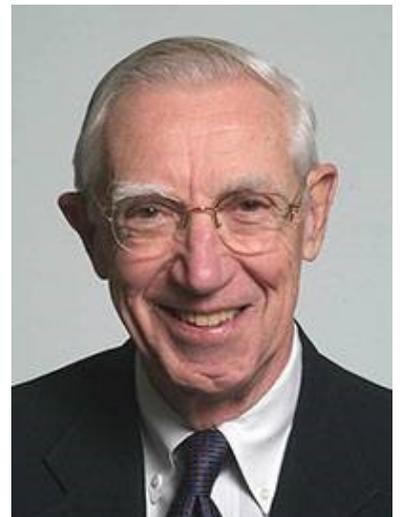
Around the same time, Dr. Lucian Leape releases a study, *Error in Medicine*, which makes it clear that Lehman's story is not just a tragic anecdote. Dr. Leape reveals that an estimated 180,000 patients die annually from preventable medical errors in the U.S.—the equivalent of three jumbo-jet crashes every two days.

Back in Pittsburgh, Karen Wolk Feinstein, PhD, sees an opportunity to act. A child of the '60s, a lifelong activist, and president and CEO of the Jewish Healthcare Foundation (JHF), she guided a young organization that garnered a reputation for taking on urgent public health issues. And what could be more urgent than ensuring safe, reliable, high-quality care? The math was obvious. With more than 180,000 preventable deaths per year—and at even highly regarded medical centers like Dana Farber—things could not be better at Pittsburgh healthcare centers.

Dr. Feinstein had been recently elected to the Allegheny Conference on Community Development (ACCD) board—the first and only female board member since World War II. The ACCD, an association of corporate and community leaders, set the business development agenda for the region. The ACCD embarked on a Working Together Consortium, which aimed to advance Pittsburgh's manufacturing, energy,



Betsy Lehman (Boston Globe)



Lucian Leape, MD

(Continued on page 4)

(Continued from page 3)



PRHI co-founders Karen Wolk Feinstein, PhD, and Paul O'Neill.

transportation, and technology sectors. Health care, which generated more than \$7 billion annually and employed one in eight workers in the region, was conspicuously absent. Here was an opportunity to leverage the importance of health care in the Pittsburgh region to the imperative of addressing medical error and safety issues.

Dr. Feinstein sought to put health care back on the ACCD agenda by recruiting fellow ACCD board member Paul O'Neill to the cause. As chair and CEO of Alcoa, O'Neill was relentlessly committed to creating an injury-free workplace for Alcoa's 143,000 employees spread across 43 countries. He wanted

every one of them to feel respected and own the organization's goals. He walked the floor at Alcoa's plants, and handed out his home phone number to everyone so they could report safety issues. O'Neill abhorred waste and inefficiency, which Alcoa virtually eliminated from many of its processes by championing system-wide Lean quality improvement methods that were developed by W. Edwards Deming and applied by Toyota Motor Company. Under his leadership, Alcoa became the world's safest corporation while also achieving financial success.

Health care cried out for a similar effort. O'Neill also believed that southwestern Pennsylvania had the potential to set the pace nationally in delivering excellent, error-free care, and that cross-sector collaboration was crucial in reaching that aim. So in 1998, Feinstein and O'Neill formed the Pittsburgh Regional Health Initiative (PRHI) as a supporting organization of JHF. PRHI became one of the first organizations in the country to bring stakeholders together from every field to improve its local healthcare delivery system.

From the start, PRHI was an unusual organization that punched well above its weight. In its 20-year history, PRHI has shown not only that Lean methods can increase quality and simultaneously decrease costs, but the goal of zero errors is achievable even in health care. And, if applied in an aspirational way, Lean could not only fix a specific problem but also transform the whole of a workplace culture, pivoting it towards continuous learning and quality improvement. PRHI has guided efforts to drastically reduce hospital-acquired infections, to transform care delivery and payment through demonstration projects that smooth the transition for patients between medical and community settings, and to integrate physical and behavioral health care. PRHI is a founding member and plays a leadership role in the Network for Regional Healthcare Improvement (NRHI), a consortium of 30-plus multi-stakeholder organizations across the U.S. that serves as a key resource for healthcare policy decisions. But we get ahead of ourselves. Join us as we take you on a tour of the PRHI journey, with its relentless focus on healthcare efficiency, safety, and quality.

(Continued on page 5)

1998 — 2003

BRINGING LEAN TO HEALTH CARE

Paul arranges for Karen, together with staffer Ken Segel, and seven physicians and administrators with a passion for safety and quality improvement to attend a four-day training session with twenty of Alcoa's managers. They learn the basics of the Toyota Production System (TPS), the method to which Paul attributes Alcoa's success. They practice the fundamental requirements for safety, efficiency, and reliability as they simulate an assembly line, build a circuit board, and assume the roles of managers, workers, customers, and suppliers. They learn about the importance of clear communications, teamwork, and using data for ongoing improvement. They discover that in the Toyota culture, errors are learning tools for identifying problems and rapidly solving them to root cause. They discover the critical role of the Andon cord, which allows anyone to stop an assembly line if they spot an imperfection. Most crucially, they learn that perfection—as in ZERO errors—is the only acceptable goal.

Armed with a new perspective and training, they join Steve Spear from the Harvard Business School, an expert on TPS, to observe work in hospitals. They are horrified by what they see. Everything violates Toyota principles. Problems are buried and not addressed. Whistleblowers are shunned. Rework, confusion, countermeasures, and work-arounds result. Handoffs are casual. Frontline staff aren't invited even to identify a problem; forget about offering a solution or actually calling for a halt to work until a problem is solved. These problems doomed staff to constantly repeat the same errors. Observing all of this, suddenly Lucian Leape's estimates seemed very plausible. And no wonder staff turnover was high. Fixing the mess became the North Star, the goal that fired up and kept the staff going day after day.

For every \$1:



Although it would take the 1999 Institute of Medicine study, "To Err is Human," before the extent of the healthcare quality and safety problem became common, national knowledge, PRHI's founders and early staff began right away to set about bringing Paul O'Neill's vision of perfection, guided by Lean, to health care.

Developing its own Lean quality improvement method called Perfecting Patient CareSM,

An estimated 40 cents of every dollar spent on U.S. health care is wasted—a misallocation of resources that prevents the system from fully investing in high-value services, treatments, and workforce roles.

(Continued on page 6)

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PRHI heralded a new vision of value: removing waste, overtreatment, and errors; redesigning workflows and team roles; making continuous improvements and innovations at the front line of care; and reinvesting in the services that matter. And they rallied around the research findings that for every dollar spent on health care, 40 cents represented waste in the form of errors, inefficiencies, unnecessary treatments, and avoidable complications.



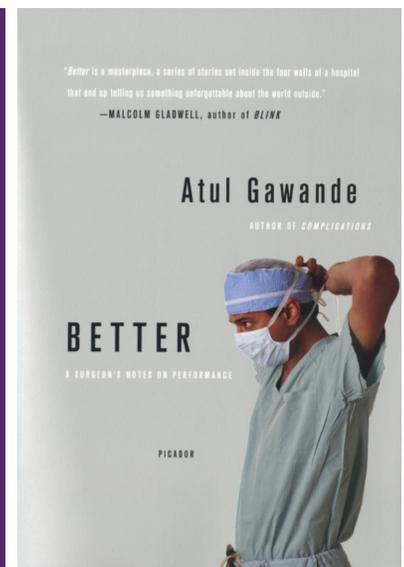
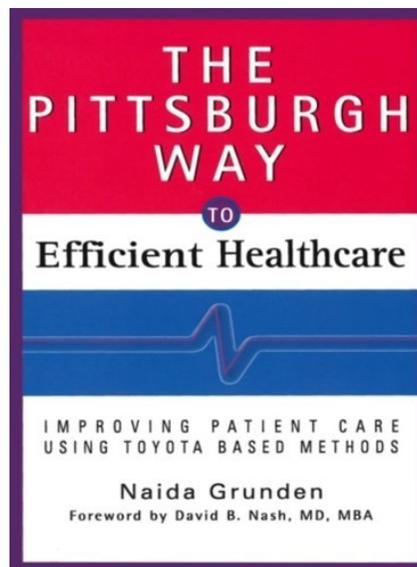
PRHI's early, dramatic success garnered national attention. In 2001, PRHI hosted U.S. leaders for visits to healthcare sites that implemented PRHI's Perfecting Patient CareSM methods. Pictured are: (L-R): Secretary of Health and Human Services Tommy Thompson; Mark McClellan, MD, White House consultant for the Council of Economic Advisors; Senator Bill Frist, MD; Senator Edward M. Kennedy; and PRHI Co-Founder and Treasury Secretary Paul O'Neill.

One of the first healthcare problems at which PRHI took aim was hospital-acquired infections (HAIs)—the source of many of the avoidable deaths. Paul O'Neill remembers, "We began with the idea of including the 44 hospitals in southwestern Pennsylvania as founding members of the initiative. We had an important opportunity to substantially improve outcomes for medical interventions while reducing costs by 30% to 40%." Beginning in 2001, PRHI leveraged these relationships to spearhead a region-wide offensive to reduce Central Line-Associated Bloodstream infections (CLABs) in intensive care units.

Problems with central lines—IVs inserted into main arteries in the chest or groin—can lead to frequently lethal infections that were once accepted as a fact of life in intensive care units. PRHI, marshalling data collection, hands-on teaching and effective public pressure, helped bring about a reduction of 68% in CLABs across 32 hospitals in southwestern Pennsylvania. The Centers for Disease Control and Prevention (CDC) confirmed that CLABs in the region declined by 68% between 2001 and 2005.

The impact on hospital staff who carried out the project was equally impressive. Nurses at the VA, for example, were invigorated by having the chance to make their hospital a model for reducing infections and offering policy guidance. When a PRHI board member visited, the nurses showed him a whiteboard listing all of the improvements they thought could be made. They understood the improvement opportunities better than anyone because they were involved in the work at the front line. And leadership was listening.

Within a decade, PRHI trained thousands of healthcare workers in Lean methods and reported successes in improving quality in virtually every kind of healthcare setting. The organization moved



(Continued on page 7)

(Continued from page 6)

beyond infection control when it also challenged southwestern Pennsylvania to have the world's best clinical outcomes in cardiac care, diabetes and depression, and obstetrics. Many of these stories were captured by Naida Grunden in her 2007 book, *The Pittsburgh Way* (winner of the 2013 Shingo Prize), and, in the same year, by Atul Gawande in *Better: A Surgeon's Notes on Performance*.

While some national experts said that infections and errors were unavoidable, PRHI's work demonstrated otherwise. It also demonstrated that it is possible to increase quality and simultaneously decrease costs.

2004 — 2009

MOVING BEYOND REPAIR

Despite PRHI's early success, staff and leadership were not satisfied. PRHI champions continued to create islands of excellence, but systemic improvements in quality and efficiency weren't taking root in the healthcare facilities where Lean experiments were proving their value. In fact, despite numerous successful improvements, the healthcare system hadn't fundamentally changed, nor were there significant efforts to remove defects, errors, and inefficiencies. Solving a specific problem in one unit of an organization didn't mean that the successful solutions were sustained or spread elsewhere in the organization, even in the unit down the hall. Americans continued to endure a system that woefully underperformed relative to other western countries in both cost and quality of care. PRHI had proved that Lean worked, so why weren't healthcare leaders all over the country insisting on applying Lean methods throughout their organizations? How could PRHI help move the healthcare system towards deep and transformational change?

And yet, the winds of change begin to blow, rousing a growing momentum for transformation. In this period, the three levers that PRHI pulls to nurture the seeds of change—national collaboration, policy advocacy for payment reform, and getting the word out about what was possible—help set the stage for the Patient Protection and Affordable Care Act of 2010, one of the great experiments in U.S. healthcare reform.

National Collaboration

Across the country, more Americans realize that the healthcare system to which they entrusted their lives and those of their families and employees, or in which they provided or paid for care, was vastly underperforming. Much was at stake, from preventing patient deaths and disabilities, to retaining a workforce frustrated by institutional barriers to excellence, to preserving local businesses crippled by mounting healthcare expenses.

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This awareness caused committed physicians, insurers, employers, and administrators to assemble in multi-stakeholder collaboratives across the United States. These collaboratives pursued change from the bottom up, acting collectively and deliberately in different locales to increase the quality of care and reduce costs. They represented a new kind of local coalition formed to take quality engineering to the front line, engage in regional performance measurement and public reporting, and work to prevent and better manage illness in ambitious demonstration projects.

Some collaboratives evolved spontaneously; others evolved within existing coalitions, such as business groups on health or Medicare quality improvement organizations. In 2006, collaboratives with different focus areas recognized their common objectives and aspirations and formed the Network for Regional Healthcare Improvement (NRHI). With funding from the Robert Wood Johnson Foundation, the California HealthCare Foundation, and Jewish Healthcare Foundation, PRHI became one of NRHI's four founding members. Its goal was to transform healthcare delivery and payment systems. NRHI's more than 30 members work together to influence policy at both the local and national levels; to improve the patient experience of care; to improve population health; and to reduce the per-capita cost of health care. Back in 2006, with a seat at the national policy table, PRHI, together with NRHI, took aim at the perverse American payment system.

Chartered Value Exchanges

Regional collaboratives, representing their unique populations and approaches to improving healthcare quality and costs, were given further support in 2007. Mike Leavitt, U.S. Secretary of the Department of Health and Human Services (HHS) between 2005-2009, designated regional or community-based collaboratives as "Chartered Value Exchanges" (CVEs). These multi-stakeholder entities engaged in advancing what the George W. Bush administration defined as the Four Cornerstones of Value-Driven Health Care: transparency of quality information; transparency of prices; interoperable health information standards; and positive incentives that reward value. PRHI was among the first 14 CVEs. For PRHI, its designation as a CVE provided further opportunities to confront directly the challenge of providing consumers and employers with reliable and credible comparative data on cost and quality.



In 2007, more than 80 southwestern Pennsylvania employers gathered in Downtown Pittsburgh to support then-U.S. Secretary of Health and Human Services Michael Leavitt's Four Cornerstones of Value-Driven Health Care. At the event, PRHI was designated as a Community Leader to promote the principles of transparency in cost and quality, interoperable health information systems, and incentives for high-performing healthcare providers.

(Continued on page 9)

(Continued from page 8)

Policy Advocacy: Payment Reform, Penalties, & Public Reporting

A fortuitous series of encounters brought first-rate thinker, inveterate skeptic, and truth-seeker Harold Miller to PRHI. The conundrum of a U.S. healthcare system that consumed a fifth of GDP while delivering sub-standard care attracted his attention. Drilling down on the particularly pernicious problem of HAIs, Miller showed that reducing infections created significant financial penalties for hospitals. Hospitals were actually paid more—in what Modern Healthcare dubbed ‘hospital-acquired revenue’ in their December 2007 cover story—when their patients contracted an infection while hospitalized. It was clear that incentives for investing in quality, safety, and lower cost were challenged by a payment system that rewarded providers for the ‘amount’ of care they delivered. This meant that efforts to contain costs and improve quality weren’t rewarded. Providers who invested in quality lost money. Worse, the inverse was true.

The regional collaboratives, inspired to action by PRHI’s findings, were among the first in the country to recognize that more fundamental payment reforms were needed than Pay-for-Performance systems. To get started, PRHI hosted and NRHI convened National Payment Reform Summits in 2007 and 2008. National thought leaders and regional stakeholders made detailed recommendations on the types of payment reforms needed and requirements to successfully implement these reforms across the country. Many of these ideas were reflected in Miller’s seminal article, “From Volume to Value: Better Ways to Pay For Health Care.” Miller later become NRHI’s first executive director and later, director of the Center for Healthcare Quality & Payment Reform. In addition, Miller’s work at PRHI would demonstrate how to improve care for patients with chronic conditions, while reducing costs.



PRHI gained national attention for revealing that hospitals faced financial penalties for reducing hospital-acquired infections. Pictured on the cover of Modern Healthcare in 2007 are Harold Miller, a former strategic initiatives consultant for PRHI, and Karen Feinstein.



(L-R): Peter Lee, Mark McClellan, Elliott Fisher, and Karen Feinstein at the 2007 NRHI Payment Reform Summit.

Although serious efforts to address the payment system would await the Obama administration’s Affordable Care Act (ACA), PRHI and other regional collaboratives started the ball rolling.

If payments didn’t reward better care, perhaps financial penalties for HAIs and readmissions would help. So in 2007, PRHI advocated behind the scenes with the framers of new Centers for Medicare & Medicaid Services (CMS) regulations to include HAIs as ‘never events.’

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Never events are errors that are serious and largely preventable. In 2008, CMS enacted penalties on hospitals in which never events, including HAIs, occurred.

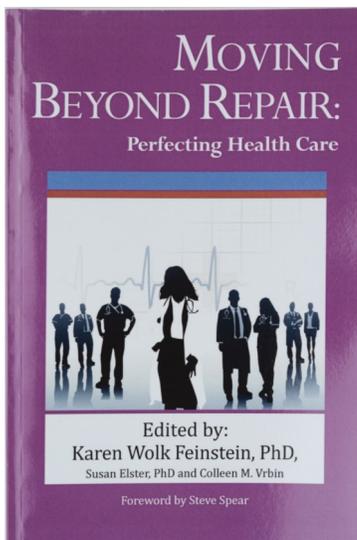
PRHI's efforts to change policy took root in Pennsylvania as well. From her statewide vantage point, Ann Torregrossa (then head of the Pennsylvania Health Law Project who would in 2009 be appointed to head the Pennsylvania Governor's Office of Health Care Reform) remembers hearing about PRHI's successful work at the VA to reduce MRSA. At a time when common knowledge held that HAIs were inevitable, PRHI showed that they could be eliminated. Torregrossa came to see PRHI's work on HAIs—an experience that led to the passage of Act 52 of 2007, the strongest HAI legislation in the country. It tied continued hospital licensure to successfully reducing HAIs, and led to a 24% reduction in HAIs in the first three years of reporting.



(L-R): Dave Malone, president and CEO of Gateway Financial and founding board chair of Health Careers Futures; Karen Feinstein; and Ed Rendell, Pennsylvania governor from 2003-2011.

Getting the Word Out: Improving Communication

PRHI proved that dramatic achievements are possible by applying basic quality improvement methods common to other industries. These methods, however, had been applied unit by unit and practice by practice, and aimed at what PRHI came to call “spot removal.” Clearly, the resulting islands of excellence would not register meaningfully on any national metrics. But PRHI had data to show that it was possible to move beyond spotty repair efforts and transform healthcare organizations to achieve consistently high performance. PRHI had to get the word out.



As part of an effort to shout the message to policy makers and healthcare providers everywhere, PRHI made its case in writing. An impassioned case for applying Lean to systems, rather than one-off care delivery problems, became the subject of a 2011 PRHI book entitled *Moving Beyond Repair: Perfecting Health Care*. The publication aspired to show how these quality improvement methods can be taken to a higher level, demonstrating with specific examples their value not only in solving specific problems, but in supporting both organizational transformation and system redesign.

Its message: Lean only achieves enterprise excellence in a supportive context. A total organizational focus on achieving collective perfection in patient care must guide individual problem-solving efforts. Small successes in rapid problem resolution are valuable and fundamental; however, assuming that these episodes are the ultimate solution results in putting out fires, rather than in achieving transformation.

(Continued on page 11)

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Transformation requires a massive, on-the-job training effort to ensure that all individual and team behaviors, and environmental conditions, are aligned around organizational goals. Everyone in an organization, at all staff levels, should know the organization's goals and how they contribute to organizational excellence. Leaders must understand the value of Lean methods, visit and support the work of daily discovery, understand the enterprise scope of quality improvement, and reward excellence. They understand that their organization has to hit all of the notes on what PRHI depicted as the Xylophone of Quality.



PRHI's Xylophone of Quality—a representation of all of the “notes” that healthcare organizations must hit to achieve enterprise-wide excellence in safety, quality, and efficiency.

Recognizing and Rewarding Quality: The Fine Awards

An accomplished businessman and philanthropist, Milton Fine observed that several defining characteristics of success in the corporate world—collaborating, thinking disruptively, spreading best-in-class concepts—are also critical, yet often underappreciated, in the healthcare sector. Milton and his wife, Sheila, sought to change that in 2008 when their Fine Foundation partnered with PRHI to create the Fine Awards for Teamwork Excellence in Health Care, which recognize and reward local healthcare teams for demonstrating innovative performance around safety and quality improvement within their organizations.



2014 Fine Award winners from the VA Pittsburgh Healthcare System, with (far right) Karen Feinstein, Sheila Fine, and Milton Fine.

(Continued on page 12)

(Continued from page 11)

Since then, the Fine Awards have showcased innovative, sustained, and scalable quality improvement efforts in western Pennsylvania in a host of different healthcare settings. The winning organizations possess motivated frontline workers, a committed and receptive C-Suite, and a belief that they can always improve.

More recently, the Fine Awards for Teamwork Excellence in Health Care formed a union with PRHI's Patient Safety Fellowship to spread excellence across generations, with Fine Award winners serving as ongoing mentors to the students participating in the Fellowship.

Tomorrow's HealthCare™

Tomorrow's HealthCare™, PRHI's online knowledge management and communication platform, was another essential component to getting the word out within organizations, and spreading quality far and wide. Tomorrow's HealthCare™ levels organizational communication, promotes transparency, and fosters a listening culture in which problems are surfaced, crowdsourced, and solved. It uncovers hidden talent and creative minds and offers a venue to share what works. The platform is used in a variety of settings, including hospitals, physician practices, skilled nursing facilities, regional learning collaboratives, and the Centers for Medicare and Medicaid Services' Quality Innovation Network-Quality Improvement Organization (QIN-QIO). As a subcontractor to Quality Insights (a CMS-contracted QIN-QIO), PRHI provides access to virtual learning opportunities for healthcare providers across five states. Collectively, more than 7,000 people are connected across all of Tomorrow's HealthCare™'s various communities.



Tomorrow's HealthCare™, PRHI's online knowledge network.

2010 — 2017

KEEPING PEOPLE OUT OF HOSPITALS

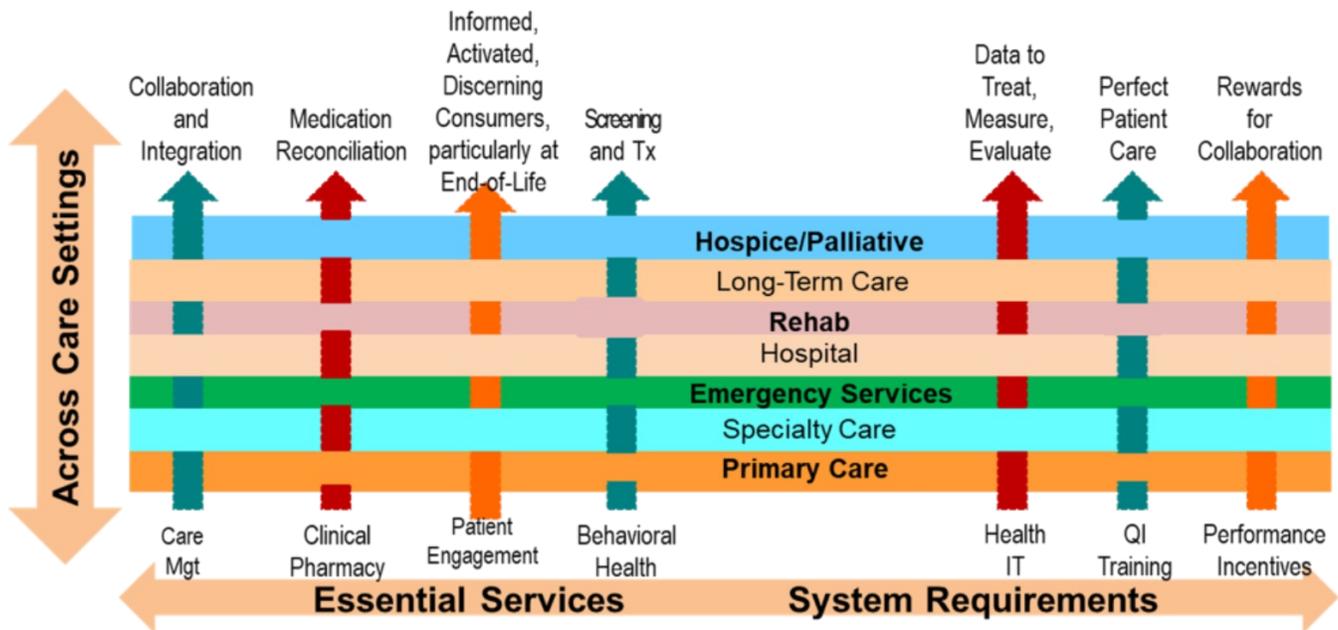
Keeping its eye on the goal of improving patient care, PRHI pursued a significant shift in its agenda. Despite its best efforts to implore hospital leaders to move beyond repair, it was increasingly clear that hospital leaders were not motivated to create a context for perfecting patient care organization-wide. Recognizing also that the fee-for-service payment system meant that few of the essential services are reimbursed, PRHI began to focus less on improving care in hospitals to figuring out how to keep people *out* of hospitals.

(Continued on page 13)

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The vision of a system that invests in health, depicted by a graphic that came to be known as The Lattice, guided PRHI's actions beginning in 2010. The Lattice depicts the key services and system requirements that can not only save money, but also make people healthier. Building on numerous small demonstration projects, the Patient Protection and Affordable Care Act of 2010 grants PRHI the capacity to test these models on a transformational scale.

PRHI showed how efforts to improve the capacity of primary care teams could help people stay well, and how hospitals and nursing homes can prevent avoidable readmissions. In addition, PRHI began to activate patients to take on a new role as the leader of their healthcare team. These efforts take place even as part of international shared learning.



PRHI-developed Lattice offers a vision for systems change that features 100% value.

Increasing Primary Care Provider Capacity

In 2010, the Office of the National Coordinator for Health IT (ONC-HIT) entrusted PRHI to guide primary care practices and federally qualified health centers to install electronic health records (EHRs) and use them to improve the care of their patients. Through the Pennsylvania Regional Extension Center (REACH) program, established by the Health Information Technology for Economic and Clinical Health (HITECH) Act, PRHI provided quality improvement training, workflow redesign, and information on best practices for implementing and optimizing the use of EHR technology to improve the quality and value of health care.

But PRHI achieved much more, helping long-term care facilities go digital and transforming practices by enhancing patients' care access, self-management skills, and connections to crucial non-medical services that influence health. At the project's

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(Continued from page 13)

conclusion, 860 providers were assisted across 340 sites; 99% of those providers were using EHRs; and 90% had attained a federal designation called Meaningful Use by deploying their EHRs to improve patient care.

Preventing Avoidable Hospitalizations

PRHI was early in identifying the frequency of hospital readmissions as a high cost, yet preventable healthcare problem. PRHI's research staff, drilling down on information gathered by the Pennsylvania Health Care Cost Containment Council (PHC4)—the gold standard for measuring what really counts—found that one in five western Pennsylvania Medicare patients with the most common chronic conditions was readmitted within 30 days of discharge. Then, staff began to uncover just how preventable many of these readmissions actually were.

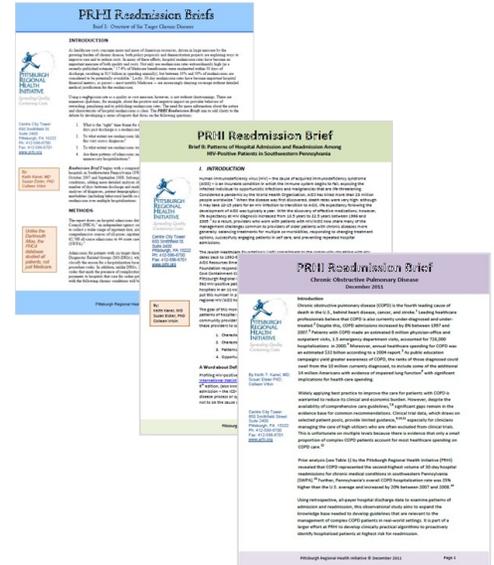
Multiple experiments followed, supported by the Jewish Healthcare Foundation and other local foundations, as well as the federal Agency for Healthcare Research and Quality (AHRQ). These small experiments set the stage for national testing with the passage of the Patient Protection and Affordable Care Act (ACA) in 2010.

The ACA brought historic changes not only to health insurance coverage, but to efforts to improve healthcare quality and safety. The ACA restricted payment for waste, error, unnecessary treatment, and preventable complications. It increased funding for primary care physicians and their prevention activities. And the bill authorized a series of ambitious, regional experiments to test new options for improving quality and patient safety, transforming delivery and payment, and expanding the health work force. PRHI played a key role in raising the imperative of value in healthcare delivery. It had a seat at the table during the Obama administration's health reform planning efforts, and made contributions to the ACA that included improving healthcare quality and efficiency, strengthening the workforce, promoting program transparency, and bolstering community services and supports. PRHI was ready to participate in the experiments to prove their value on a large scale.

The ACA created the Center for Medicare & Medicaid Innovation (CMMI) to test new models of care. This arm of the ACA has been overshadowed by the ACA's provisions that reduced the number of uninsured Americans, but the law also sought to test new models for improving patient care, lower costs in a health system that consumes nearly a fifth of the country's GDP, and better align payment systems to support both.

With \$10 billion to support its activities between 2011 and 2019, CMMI embarked on a highly competitive process to select partner organizations from around the country to test new models of care for achieving its "Triple Aim"—improving the patient experience of care, improving the health of populations, and reducing the per capita cost of health care. PRHI and JHF were honored to be among the organizations selected as either primary or partner investigators. Its early pilot projects

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Using Pennsylvania Health Care Cost Containment Council data, PRHI uncovered the reasons for—and preventable nature of—hospital readmissions for many health conditions.

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blossomed into multi-state, multi-million dollar federal demonstration projects that allowed PRHI to test new models of care to prevent hospitalizations for patients with chronic, complex diseases as well as depression and substance use issues. As Alan Guttman, PRHI's longtime board chair noted, "This let PRHI get the funding it needed to take terrific ideas and make a difference on the local, regional, and national levels."

Three different projects. Three different patient populations. Three different care settings. But one goal: To show that proactively caring for patients can improve or preserve health status and quality of life, and cut healthcare costs.

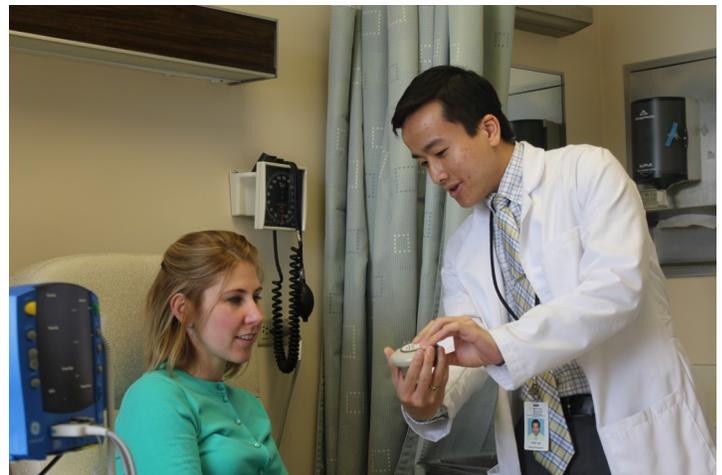
The Primary Care Resource Center (PCRC) Project

In 2007, drilling down on the hospitalizations of patients with chronic obstructive pulmonary disease (COPD) at UPMC St. Margaret and Forbes Regional Hospitals, Harold Miller showed that up to 40 percent of hospital readmissions could be avoided with good care management, including home visits and discharge planning, patient education, and care coordination. This finding led to a pilot project at Monongahela Valley Hospital that showed how weaving support services that bridged inpatient and outpatient care could improve quality of life and reduce preventable admissions.

With \$10.4 million from CMMI, PRHI led a three-year project to show that a hospital-based support hub—called a Primary Care Resource Center (PCRC)—staffed by nurse care managers, a pharmacist, and an administrative assistant with full access to their institution's array of specialty services, could improve care for patients with three common chronic illnesses. Based on the Monongahela Valley Hospital prototype, a network of six additional independent regional hospitals adopted their own PCRCs.

The care teams worked to improve patient care and reduce total cost of care for patients with chronic obstructive pulmonary lung disease (COPD), congestive heart failure (CHF), and/or acute myocardial infarction (AMI). Meeting patients during a hospital stay, the PCRC teams provided 30 minutes of inpatient disease management education and teach-back, motivational interviewing, and discharge medication reconciliation. The teams then bridged the patient's transition from hospital to home by providing post-discharge nursing and pharmacy consults, ensuring that a follow-up appointment was made with the patient's PCP within a week of discharge, and making home visits to patients with particularly challenging health or life circumstances.

PRHI's internal evaluation of the nearly 9,000 patients seen at the PCRCs, no matter what their insurance, showed that average 30-day readmissions dropped by 25% and 90-day total cost of care declined by \$1,000 per patient. CMMI contracted with NORC at the University of Chicago to conduct an evaluation of the PCRCs' impact on Medicare Fee-for-Service (representing about 30% of the total patients seen at the PCRCs during the project). For patients with AMI among



A Primary Care Resource Center team member shows a patient how to properly use her inhaler. As part of the PCRC project, enrolled patients received in-depth disease management and medication reconciliation services.

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this subgroup, NORC found significant drops in total cost of care (by nearly \$8,000 per patient) from avoided hospital and ER visits and better primary care.

RAVEN (Reduce Avoidable Hospitalizations using Evidence-based interventions for Nursing Facility Residents)

With \$19 million in CMMI funding, the RAVEN initiative aims to improve the quality of care and reduce avoidable hospitalizations among long-stay nursing home residents at facilities in western Pennsylvania. PRHI's parent organization, JHF, serves as the lead education partner for the initiative, which is guided overall by UPMC.

RAVEN interventions include having nurse practitioners on site to work with nursing staff to provide preventive services, improve care for residents' medical conditions, and provide advance care planning and palliative care. Customized tools have improved communication among providers. Specialists have improved management of residents' prescription drug use, and telemedicine has enhanced communications among facility nursing staff, physicians, acute care clinicians, and nurse practitioners. In addition, the initiative provides staff training on issues like geriatric syndromes, dementia care, palliative care, quality improvement, communication and team-building, and advance care planning.



JHF Senior Quality Improvement Specialist Stacie Bonenberger, MOT, OTR/L, explains the process mapping techniques that RAVEN nursing home staff can use to prevent falls among residents.

In the spring of 2017, the project's evaluator reported that RAVEN sites in western PA lowered avoidable hospitalizations among long-stay nursing facility residents by 24%, readmissions by 22%, and ER visits by 41%. Combined, these improvements resulted in an almost 12% reduction in Medicare spending and helped countless frail nursing home residents avoid the trauma of a hospital transfer and stay.

CMS renewed the RAVEN initiative through 2020. Nursing facilities that participated in phase one of the grant have received enhanced payment and continued interventions from the RAVEN model. New participants are piloting a new payment model, and take part in a JHF-managed learning collaborative created on Tomorrow's HealthCare™.

COMPASS (Care of Mental, Physical and Substance Use Syndrome)

In 2008, PRHI researchers discovered that many patients with frequent hospital admissions for chronic diseases also had behavioral health problems like depression and substance use disorders—comorbidities that can make managing a chronic

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disease very challenging. The finding led PRHI to launch a series of demonstration projects—first in Pennsylvania, and then with partners across the U.S. The projects show how people with behavioral health problems can be identified and treated sooner by a team of physical and behavioral health providers in a primary care office. These implementation and dissemination experiments aimed to upend and reintegrate the worlds of behavioral health and physical health into a redesigned primary care setting.

Beginning with the Integrating Treatment in Primary Care (ITPC) project, providers at three community health centers received training to identify and treat depression and reduce unhealthy alcohol and other drug use. Grant support from JHF, The Fine Foundation, and the Staunton Farm Foundation made that effort possible. ITPC was followed by Partners in Integrated Care (PIC), an Agency for Healthcare Research and Quality (AHRQ)-funded initiative which brought integrated care to nearly 60 primary care sites in four states. PRHI was the lead in Pennsylvania.

These set the stage for PRHI's participation in the national, CMMI-funded COMPASS project, which sought to help primary care practices treat adult patients with depression together with cardiovascular disease and/or diabetes. PRHI was one of eight national partners on the \$18 million COMPASS project led by the Institute for Clinical Systems Improvement. PRHI was responsible for project management, practice recruitment, training and coaching, implementation, community engagement, and sustainability in Pennsylvania. PRHI enrolled the second-highest number of patients (more than 700) among COMPASS partners.



A medical assistant, primary care physician, and a care manager from Saint Vincent Medical Group huddle to review next steps for a patient enrolled in the COMPASS program.



Patty Rennels, RN, care manager at Excelsa Health Medical Group, and PRHI Director of Government Grants and Policy Robert Ferguson, MPH. Ferguson served as the COMPASS program manager for PRHI.

COMPASS demonstrated that screening and treating patients for depression with an expanded primary care team, including a care manager and consulting psychiatrist, can improve outcomes for patients. For the Pennsylvania COMPASS patients who had an uncontrolled disease at enrollment, 44% achieved depression remission or response. Twenty-three percent controlled previously high blood sugar, and 50% achieved blood pressure control. CMMI's evaluator found the decreases to be significant project-wide, and also found preliminary evidence of lower rates of hospitalization and ER visits among patients enrolled with Medicare fee-for-service insurance.

PCRC, RAVEN, and COMPASS demonstrated that proactive care can improve patient health status and prevent hospital readmissions, regardless of whether they

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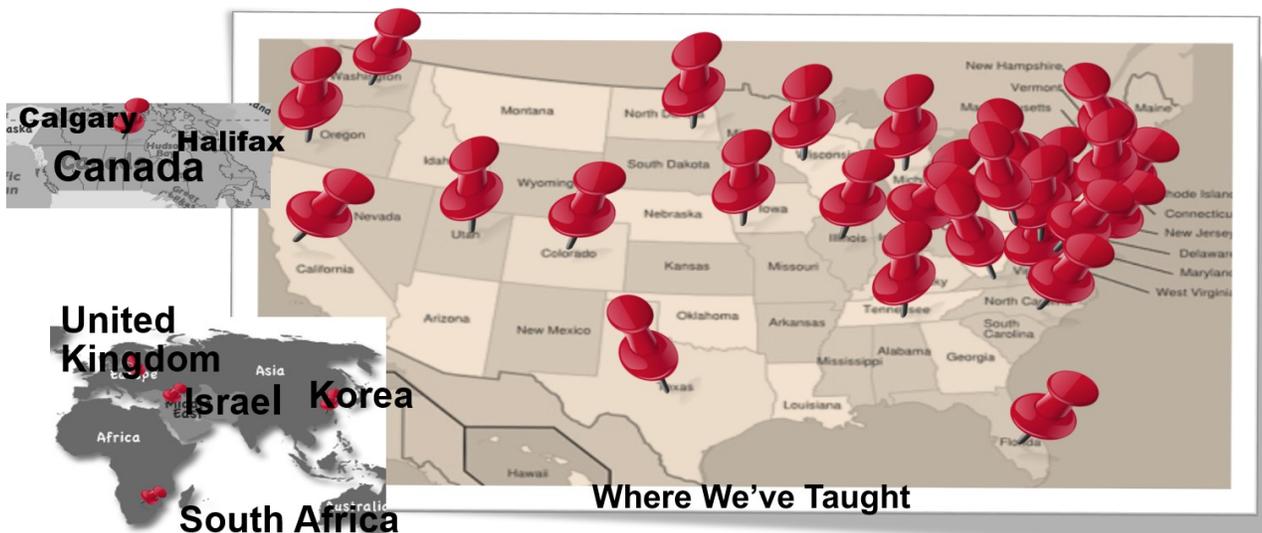
are hospitalized patients, primary care patients living at home, or nursing home residents. The projects further demonstrated that providing better care yielded healthcare cost savings.

Importantly, all three of these projects have been sustained. At the conclusion of the PCRC grant, for example, four of the partner hospitals decided to self-fund their centers and expand services to patients with other chronic conditions. RAVEN will continue through at least 2020, adding the payment redesign components that will be required to sustain and spread the model. And all three of the primary care practices that partnered with PRHI will continue to use elements of the COMPASS model in Pennsylvania to treat patients with both behavioral and physical health conditions. Importantly, CMS created billing codes for behavioral health integration in 2017 so primary care providers can be reimbursed for the time they spend identifying and treating mental health problems like depression.

International Shared Learning

Over the years, PRHI has traveled around the world to learn from the highest-performing healthcare systems and develop plans to improve care back in the states by adapting global best practices. Study tours to Israel, Korea, Japan, South Africa, and the U.K. have inspired PRHI to launch demonstration projects that test new models of care, develop Champions programs that advance emerging workforce roles, and create policy priorities that seek to demolish barriers to higher-quality, safer care.

All modern economies face the twin challenges of providing quality health care for their populations in a cost-effective way. To bring its improvement methodology around the globe, from Canada to Korea to Israel, PRHI has trained more than 10,000 people over the past 20 years. Learning PPC methods, these trainees succeeded in improving workplaces, reducing morbidity, and saving countless lives. In the case of Israel, a multi-dimensional partnership with clinical, administrative, research, and policy counterparts yielded fruit for both countries.



Over the past 20 years, PRHI has delivered Perfecting Patient CareSM training across the U.S. and around the globe.

(Continued on page 19)

(Continued from page 18)

In 2009, as healthcare reform debates began heating up in the U.S., PRHI began searching for promising local, national and international health system models. Israel stood out. Spending just 8% of its GDP on health care (less than half the U.S. rate), Israel had achieved population health outcomes that surpassed those of the U.S. Several fact-finding missions to Israel uncovered not only what could be learned from Israel, captured in a number of PRHI-produced research briefs, but also what PRHI might teach.

With support from its board, in 2010 PRHI launched a comprehensive, multi-year quality improvement partnership with Clalit Health Services—Israel’s largest HMO. Twenty Clalit senior physicians and nurses received training in PPC. The teams then returned to Israel, determined to demonstrate the power of PPC methods to improve patient care. Three hospitals decided to focus on preventing dangerous, central line-associated blood stream infections in chronic dialysis patients.

Fast forward to 2017: In January, the Israeli Ministry of Health released a first-ever report on CLABs rates in hospital Intensive Care Units (ICUs) across Israel. In the report, one hospital stood out. HaEmek Hospital in Afula, one of the three PRHI hospital training sites, achieved zero infections—a reason to celebrate. PRHI and Clalit continue to share insights on topics that include the role of community health workers, the potential of health information technology, disaster preparedness, and the need for more patient- and-family-centered palliative and end-of-life care.

Activating Patients

PRHI embraces the possibility that demand for improvement will ultimately come from healthcare consumers themselves. If consumers assume ultimate responsibility for their health, share in healthcare decision making, “shop” for providers knowledgably, and choose interventions wisely, the hope is that providers will respond. Activating healthcare consumers is especially prominent in PRHI’s work focused on motivating patients to better care for themselves, and in insisting on better care at end-of-life.

Much of health care today involves helping patients manage health conditions that can be greatly influenced by behavior or lifestyle changes. Training in motivational interviewing (MI)—a collaborative, goal-directed conversation style—provides frontline healthcare professionals with tools to enhance communication with patients, and empower them to make choices to improve their health. The MI approach considers health as a tool to accomplish life goals, rather than a series of medical



Karen Feinstein and Ran Balicer, MD, PhD, MPH, chief physician office of Clalit Health Services and director of the Clalit Research Institute. Dr. Feinstein delivered the keynote during the 2011 Israel Society for Quality in Health Care Conference, showcasing how industrial engineering principles can successfully be applied to health care.

(Continued on page 20)

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metrics, like blood pressure. MI training is a component of all PRHI initiatives that encourages patients to achieve better health through behavior change.

PRHI and JHF are also committed to changing expectations for end-of-life care through the *Closure* education, outreach, and advocacy initiative. There is often a wide gap between the kind of end-of-life care that patients and their loved ones desire, and what they actually receive. A key reason for that divide is a lack of communication. *Closure's* goal is to empower consumers and healthcare professionals with easy-to-access, simple-to-understand information and resources to make informed decisions about end-of-life. The project organizes community conversations about end-of-life and trains graduate students and professionals on having conversations with patients and families about end-of-life goals and options.

2017 AND BEYOND

REINVESTING IN HEALTH

Twenty years on, PRHI remains committed to creating a model of safer, higher-quality, and more efficient health care that sets the standard in western Pennsylvania and beyond. To removing the estimated 30-40% of total U.S. health spending that's squandered on errors, unnecessary and potentially dangerous services, preventable complications, and inefficiencies, and reinvesting those savings in treatments, services, and workforce roles that improve health. To enhancing U.S. population health outcomes that are indefensible when compared to similar countries across the world that spend far less. To attacking the ballooning costs of health care that, as Berkshire Hathaway Chair and CEO Warren Buffett recently put it, "act as a hungry tapeworm on the American economy."

A confluence of factors—including new value-based payment models, a reinvigorated business community, technological breakthroughs, a shift toward community-based care, and a generation of unrelenting health activists—set the stage for success.

Choosing Wisely

Through its Reinvesting in Health initiative, PRHI is testing bundled payment models, adopting *Choosing Wisely* guidelines, and engaging employers and payers so that they demand value. Through bundled payments, you pick a health episode, determine the expected time period for that episode, and create the ideal team roles and services that will lead to the best health outcomes. Bundles can be used to stop paying for waste and to reinvest in health by funding what's missing. They allow providers the flexibility to innovate and configure their services and team roles around the patient's needs, rather than discrete services.

(Continued on page 21)

(Continued from page 20)

Choosing Wisely, an initiative of the American Board of Internal Medicine Foundation, is a cornerstone of PRHI’s payment reform strategy. Eighty specialty societies created a list of more than 550 overused tests, procedures, and treatments that patients and consumers should question and talk about it. These unnecessary, low-value, and potentially dangerous services—which are reimbursed and thus incentivized in a fee-for-service system—account for nearly a third of the total U.S. healthcare spending that is wasted each year.

Engaging Employers

Without payers and employers at the table, the opportunity to reinvest in health won’t reach its full potential. That’s why PRHI is engaging both public and private payers, as well as an employer community that’s taking on a more active role in health care. Employers, awakened by our nation’s rising healthcare costs and dismal population health, are striking back. Some are creating “networks of excellence,” directing their employees to the highest-rated providers—no matter where those providers are located. Some are negotiating directly with health systems on bundled payments, and tying contracts to quality and outcomes metrics. Employers must be at the table to push payers to innovate around bundles, and payers must be at the table to partner with providers to create new and meaningful bundled payment models.

The Network for Regional Healthcare Improvement is helping PRHI and other regional collaboratives to respond to this moment-in-time through a national campaign around health, price, and waste. They will amplify our regional work and connect us to national partners, including employer groups who want to act.



On April 12, 2018, PRHI hosted an event that focused on the roles of health systems, providers, health plans, employers, consumers, and policymakers in reducing healthcare waste and unlocking new resources for high-value care.

Leveraging Technology

Advances in health-related technologies, meanwhile, have the potential to change every aspect of the healthcare sector—from prevention, diagnosis, and treatment, to workforce preparation and accreditation, to care design and delivery. And Pittsburgh is positioned to lead the charge. The region boasts world-class research and technology-focused universities; renowned robotics, engineering, and AI programs; large, integrated health systems that are investing in digital health; and a growing base of technology giants with a presence in the city. PRHI is working to connect these core assets, showcase the best digital health innovations, and demonstrate how these breakthroughs can translate into improved population health.

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The ultimate goals of this nascent initiative are to create healthier communities, stimulate the region's start-up activity, establish new career opportunities and pathways, and position health systems to lead the health technology revolution.

The QI²T Center—established in 2012 and located two floors above PRHI's headquarters—is a multidisciplinary learning space where advancements in quality improvement and information technology are integrated to enhance health and health care locally, nationally, and internationally. Created with grants from JHF and the Allegheny County GEDF Infrastructure and Tourism Fund, the Center serves as a nexus for trainings, events, and meetings that move us toward a wired, high-performing, and affordable healthcare system. Executives, administrators, providers, technology and design professionals, students, and data crunchers gather to share breakthroughs and best practices, and identify novel solutions to longstanding healthcare problems. Leaders from Japan, Nigeria, Israel, Scotland, and Ukraine, among other locales, have visited the Center to engage in conversations on topics ranging from streamlining healthcare delivery to integrating behavioral health services in primary care.

Preparing the Workforce of the Future

Without a workforce that is comfortable with multidisciplinary teams and skilled at systems thinking—an army for the revolution, in other words—health care will not change. So PRHI brings its unique training and coaching to support annual multidisciplinary Fellowships and internships for students and early-career professionals, and create Champions programs and ongoing skills training opportunities for workers across the care continuum.



In November of 2017, PRHI hosted a Health Activist Expo at the August Wilson Center. During the expo, participants in the Jonas Salk Health Activist Fellowship showcased their plans for changing policy, practice, and behavior around a health issue.

Collectively, more than 1,000 people have participated in Feinstein Fellowship and internship programs. These Fellowship and internship participants are leading change from the front line, the C-suite, the technology sector, and the community at large.

The Patient Safety Fellowship focuses on quality and safety in healthcare settings, and explores the emerging field of health implementation science. The Jonas Salk Health Activist Fellowship offers a deep dive into changing practice, policy, and

(Continued on page 23)

(Continued from page 22)

perspectives around a health issue. The Death and Dying Fellowship explores the medical, legal, social, cultural-familial, and spiritual components of end-of-life care. And the QI²T Fellowship investigates emerging digital health trends. Talented interns, meanwhile, have advanced many PRHI projects—and a number of them are now full-time staff members.



The Feinstein Fellowships, named in honor of PRHI co-founder Karen Feinstein, provide multidisciplinary students and early-career professionals with the skills and experiences needed to transform the health system.

In addition to Fellowships and internships, PRHI creates a strong workforce by bolstering the clinical, communication, and analytical skills of health professionals at all career stages. Improvements at the point of patient care depend on a team leader, a change method that works, performance measurement, and shared passion for excellence. PRHI's Champions programs are a series of professional development programs and demonstrations that were initiated to bring process engineering principles, systems thinking, and other QI tools into the hands of the region's healthcare professionals. Those trained in the programs are linked in learning networks to further develop and spread understanding of these methods.

Working with physicians, nurses, pharmacists, emergency medical services personnel, medical assistants, community health workers, and managers across the spectrum of healthcare settings, PRHI helps prove the value of PPC in demonstrations targeting both clinical and operational problems.



A team from the 2016-17 Community Health Workers Champions program explains how their quality improvement project led to additional Mental Health First AID training for staff. Over its history, PRHI has led 11 different Champions programs to advance the skills and confidence of a variety of healthcare professionals.

(Continued on page 24)

Advocacy

Advocacy permeates all of PRHI's current and future initiatives. PRHI is cultivating powerful, reform-minded coalitions to create a stronger safety net for teens and families experiencing a behavioral health crisis, reduce maternal mortality rates that are three times higher in the U.S. than in similar nations, and reinvest in services that drive the greatest possible health improvements. PRHI's Health Activist Network, launched in 2017 with funding from the DSF Charitable Foundation and JHF, unites health professionals from across the continuum to accelerate policy and care delivery improvements around these goals. Through the Network, interdisciplinary health professionals have the opportunity to attend in-person and virtual events, learn from national health reform advisors, build local and national advocacy networks, and acquire the tools and training needed to lead improvements in their work settings



PRHI's Health Activist Network, launched in 2017, unites health professionals to accelerate policy and care delivery improvements. The Network offers a variety of opportunities for reform-minded leaders, including Speakers Series events with activists like Community Catalyst's Rob Restuccia (left) and meet-ups in local communities (right).

Never Giving Up

While hospitals were once the nexus of its work, PRHI continues its charge to keep people from ending up there in the first place or returning unnecessarily. Through direct training and coaching, policy work, advocacy and community convening, PRHI champions the concept of Reinvesting in Health. Comprehensive care management. Un-siloed and team-based care. Home-and-community-based supports. Emerging health professions that can move the needle on our population health (including community health workers, doulas, and midwives). The lattice, PRHI's vision for systems change, remains the North Star that guides all of its work. As PRHI marks its 20th anniversary, let's celebrate a scrappy regional health improvement collaborative that has grown into a nationally and internationally-recognized voice on healthcare quality and safety.

Impatience is growing with our underperforming healthcare system in the U.S. Our lapses in safety, reliability, accessibility, efficiency, and outcomes of care open a door for outside innovators to enter. Our regional health systems and institutions are in jeopardy of being replaced by the wizards of technology, frustrated multi-national corporations who are assembling their own components, private start-up companies, and a generation who will move to receive care where, when, and how they want it. Regional collaboratives like PRHI have a narrow window in time to support rapid reforms and innovations on their home turf. The work goes on; the pace must hasten.

PRHI CELEBRATES 20 YEARS OF ELEVATING HEALTHCARE QUALITY, SAFETY

In 1998, Jewish Healthcare Foundation President and CEO Karen Wolk Feinstein, PhD, and Alcoa Chairman and CEO Paul O'Neill co-founded the Pittsburgh Regional Health Initiative with the goal of combatting the U.S. healthcare system's errors and inefficiencies, and inspiring a movement to create the highest-quality, safest system possible while also containing costs.

Two decades on, PRHI has grown from an underdog regional health collaborative into a trusted authority on healthcare safety and quality locally, nationally, and internationally. During a 20th anniversary celebration event on June 19, a number of important figures in PRHI's history shared their reflections on how the organization has helped transform healthcare delivery, policy, and advocacy.

The event featured a recent interview between

Dr. Feinstein and O'Neill, in-person and video tributes, and *PRHI the Musical*—a lyrical romp through the organization's triumphs and challenges performed by JHF COO/CPO Nancy Zionts, MBA, and husband Leon Zionts.

"Today, we celebrate not only the 20th anniversary of PRHI, but also the health reform movement of the past 20 years," Dr. Feinstein said while welcoming more than 80 people who attended the celebration at the QI²T Center. "Many of you know the story—you lived it with us as we uncovered more and more layers of dysfunction that aid and abet errors: leadership, payment systems, measurement systems, education and training, and incentives for high performance. Sometimes, the challenges seemed insurmountable. So, we picked them off one at a time."

PRHI was one of the first regional collaboratives of medical, business, and civic leaders organized to address healthcare safety and quality improvement. Since its founding, PRHI has trained thousands of healthcare workers from around the world in Perfecting Patient CareSM, its signature curriculum based on the Lean QI principles that O'Neill used to make Alcoa the safest corporation in the world. PRHI has provided leadership and quality improvement training to multi-state, multi-million dollar federal demonstration projects that test new models of care to prevent hospitalizations for patients with chronic, complex diseases as well as depression and substance use issues. The organization has also led efforts to help practices harness the power of health IT, enhance patients' care access and self-management skills, and link to other providers and community resources to prevent hospitalizations.

On June 19, a cavalcade of PRHI partners who helped to make those accomplishments possible shared their stories. The list included Rick Stafford, a longtime CEO of the Allegheny Conference on Community Development (ACCD); Ellesha

(Continued on page 26)



(L-R): Alan Guttman, founding PRHI board chair; JHF President and CEO and PRHI co-founder Karen Wolk Feinstein, PhD; JHF Board Chair David Ehrenwerth, JD; PRHI Board Co-Chair Steve Irwin, JD; Jason Kunzman, chief program officer at the Jewish Community Center; and Rick Stafford, a longtime CEO of the Allegheny Conference on Community Development.

(Continued from page 25)

McCray, MBA, a nurse leader who used PRHI quality improvement coaching and training to markedly reduce MRSA infections at the VA Pittsburgh Healthcare System; Eric Rodriguez, MD, a physician and board member who participated in one of PRHI's Champions programs to strengthen the clinical, communication, and data skills of healthcare professionals; Marge Jacobs, a nurse leader who worked with PRHI to drastically reduce COPD hospital readmissions at St. Margaret Hospital; Harold Miller, president and CEO of the Center for Healthcare Quality and Payment Reform, a former PRHI consultant, and a national expert on healthcare payment and delivery reform; Donald Fischer, MD, longtime senior VP and chief medical officer for Highmark and a PRHI board member who has participated in PRHI study tours to learn from healthcare systems in Israel and the U.K.; Fatemeh Hashtroudi, MHA, director of quality improvement for Community LIFE, which is currently working with PRHI on a variety of system-wide quality improvement projects; and Alan Guttman, founding PRHI board chair.



A variety of partners who helped make PRHI's accomplishments possible shared their reflections on the regional health collaborative, including (left) Ellesha McCray, MBA, a nurse leader at the VA Pittsburgh Healthcare System and Harold Miller, president and CEO of the Center for Healthcare Quality and Payment Reform and a former PRHI consultant.

Stafford explained that Dr. Feinstein and O'Neill advocated for health care to be a priority at the ACCD. McCray noted that she was inspired at the notion of getting to zero infections at the VA, and credits her work with PRHI for advancing her career.

"They embraced the concept that the people who do the work on the front lines can make change," McCray said. "I will always hold a special place in my heart for PRHI."



JHF COO/CPO Nancy Zions, MBA and Leon Zions perform *PRHI the Musical*—a lyrical romp through the organization's triumphs and challenges.

Dr. Rodriguez, who participated in PRHI's Physician Champions program, said he has used the QI methodology he learned and philosophy of incremental improvement to enhance care for seniors. Jacobs noted that winning a Fine Award for Teamwork Excellence in Health Care for St. Margaret's COPD work was a high point, and that the readmissions reduction initiative helped to inspire PRHI's Primary Care Resource Center project. Miller, who spearheaded that COPD project, explained how PRHI uncovered perverse financial incentives in health care and banded together like-minded organizations from around the country to form the Network for Regional Healthcare Improvement (NRHI).

(Continued on page 27)

(Continued from page 26)

“The lesson here is that answers come from the bottom up—not from Washington,” Miller said. “Organizations at the local level, like PRHI, understand what needs to be done and then do it.”

Dr. Fischer noted that through international study tours with PRHI, he saw that it’s possible to achieve better value, aligned incentives, and continuity of care in the U.S. Hashtroudi shared how Community LIFE’s partnership and QI work with PRHI supports its mission to help seniors live safely at home. Guttman applauded PRHI’s longevity.

“PRHI exists today, vibrant as ever, because of its willingness to adapt and innovate,” Guttman said. “We leveraged foundation and federal funding to test our theories on a larger stage, creating new models of care and sharing what worked across regions, states, and even continents. We had a vision of a safer, higher-quality health system, and the talent and conviction to make it a reality.”

Following *PRHI the Musical*—a performance by the Zionts’ that had people singing along to healthcare-adapted hits from everything from *Les Miserables* to *Fiddler on the Roof*—Dr. Feinstein explained that PRHI continues to support reform and innovation. PRHI is committed to removing low-value components from the health system, and reinvesting in treatments, services, and workforce roles that improve health. It is also delving into the transformative role of digital health, and cultivating new leaders through the Health Activist Network.

“Let’s keep going,” Dr. Feinstein said. “We’re not done yet.”



PRHI’s 20th anniversary celebration featured many of the organization’s hallmark training and communication tools — from Legos used to teach teamwork and Lean quality improvement principles, to books and research briefs that describe PRHI’s vision for safer, higher-quality care.

PRHI AT 20—THE PARTY ISN’T OVER!

Connect with us on Twitter, Facebook, and YouTube as we continue celebrating PRHI’s 20th anniversary and plan for the next 20 years. Look for video reflections from important PRHI partners who couldn’t be there in person on June 19, photos, media hits, and much more.





PRHI CO-FOUNDERS REFLECT ON 20 YEARS



Twenty years ago, Paul O'Neill and Karen Feinstein co-founded PRHI to confront health care's errors and inefficiencies, and create a healthier population in western Pennsylvania and beyond. The quest continues. Feinstein recently sat down with O'Neill to discuss leadership, PRHI's high points, and what's next in health care.

Karen Feinstein: Starting 20 years ago, your friend, Dr. Lucian Leape, documented over 100,000 deaths each year from preventable medical errors, and it was confirmed by the prestigious Institute of Medicine. Now, the National Patient Safety Foundation has documented not a lot of progress, not what we had all hoped for. Why has there been so much inertia? You're famous for making Alcoa the safest corporation in the world and sustaining that excellence. What will it take to bring that kind of aspiration to health care?

Paul O'Neill: It takes leadership. It needs to be institution by institution. It's not possible to mandate this because organizations have their own culture. And unless the culture is supportive of habitual excellence, you don't get habitual excellence—you get something where people are occasionally good but not habitually. It's a difficult question—how do you get people who are appointed or elected to a so-called leadership position to accept the responsibility for creating a

culture? Creating a culture, for example, where everyone can say 'I'm treated with dignity and respect every day by everyone I encounter, without regard to my race, gender, ethnicity, title, pay level, or any other qualifier? Unless an organization has that cultural characteristic of everyone matters, everyone is accorded equal respect and dignity, there's no way to create the underlying necessity of a system of continuous learning and improvement because people don't own the goal.

Karen Feinstein: That is the sense we had at Alcoa and when we visited the Toyota plant. The people at the front line are proud. They're part of something bigger than themselves, a mission of excellence. They're proud to be affiliated with their organization. When you don't get that, you can aspire to greatness, but you need everyone to pull their oar and they won't.

Where are the governing boards in all of this? At

(Continued on page 29)

(Continued from page 28)

least half of the health systems in the country have mediocre quality ratings. How do those governing boards feel that they represent the patient, purchaser, public? Now there's at least a rating system and a certain level of transparency. How do you just sit around a board room when you know your health system has mediocre quality ratings?

Paul O'Neill: A lot of the people who are serving on boards are public-spirited, well-meaning people. A lot of them give financial support to the institutions, which is unfortunately part of the reason that they get recruited. But they need to put that aside and create a culture for boards with this idea: the board members need to know the right questions to ask, and they should not be put off by an institutional leadership that doesn't respond to their questions.

For example, for me, the first question on the agenda for every board should be worker safety. They should be informed every time they meet how many people were injured, what were the circumstances, what corrective actions did we take, how does it compare to a month ago, a year ago, 10 years ago? And if it's not getting better, the board of directors has failed its essential role of helping their organization get continuously better, beginning with worker safety. Most people don't understand that the most dangerous industry in America, as measured by OSHA [Occupational Safety and Health Administration] recordable injuries, is health and medical care. That's criminal.



PRHI co-founders Paul O'Neill and Karen Feinstein on April 5, 2018.

There's no excuse for that.

[Board members] should be educated so they know to ask and insist at every board meeting, they get informed, how many hospital-acquired infections (HAI) happened here since we last met?

(Continued on page 30)

(Continued from page 29)

Every kind of measurable illness and condition should be part of a routine, regular report that's distributed to the board before they show up so there's no excuse for them to not know. So, they can have an informed conversation with executives about how we get better. We're not just interested in having the data. We want the data to show us that we're intentionally getting better all of the time. If you ask patients, 'is it OK with you if you happen to be one of the people who gets a HAI?', nobody in their right mind would say yes to that. So, what's the right number for things gone wrong in a hospital? Zero. But unless the boards and the physicians agree that our goal is zero, people will never get there.

Karen Feinstein: I thought of you once when I was riding my bike in the remote mountains of Garrett County, MD. There's a plant in the middle of nowhere with a huge sign in front that says, 'we have had zero injuries for four months.' That kind of pride and reporting is important.

Kaiser, which is on nearly everyone's list of our highest performing health systems, chooses their 11 board members because they really understand the business. Rick Shannon, one of our physician leaders at PRHI, is one of those members. They're looking for people to challenge them, which isn't what you see regularly.

Paul O'Neill: It would be a landmark decision for the country to decide that the kind of data that

we're talking about, particularly in hospitals, be available on the internet 24 hours a day, and be updated on the hour. So, not only does the board know, but the people who are thinking about going into the hospital know. Everyone in the country could find out how one place does compared to others. We would get leapfrog activity with people recognizing, once it's out there in the public, that they're not doing what they ought to do.

Karen Feinstein: What made you think when I, along with two of my young colleagues, came to see you—you were well occupied as chairman and CEO of Alcoa—and we asked if you would help us found a multi-stakeholder collaborative, PRHI, to make health care safer and more reliable. Why did you say yes?

Paul O'Neill: I was really attracted to the notion of using the ideas that I was sure from my own experience in creating an injury-free workplace among 143,000 employees in 43 countries, that if we could use those same ideas in health and medical care, we could create a demonstration effect for the whole country by raising the game in Pittsburgh. That's why I said in our early conversations that I was interested in doing this, but only if we included everyone. We started off with 44 hospitals—basically all of the major healthcare providers—and insurance companies, big and small employers, and even representatives of the media so they could be educated about the process of improvement. [Including the media] was almost a game-breaker at the beginning, because

(Continued on page 31)

(Continued from page 30)

there were quite a few people in the provider community who were terrified about the media being involved. But we got started right with all of the legitimate participants having a seat in the room, which I thought could propel us to a different place.

Karen Feinstein: In many ways, it did. At our first meeting, you were a little anxious about whether hospitals would accept that Lean QI techniques, such as the Alcoa Business System and Toyota Production System, would work in health care. I think you single-handedly awakened the nation to the fact that these techniques that had been successful for you at Alcoa could be applied to health care. So now, whether I'm speaking in Seoul, South Korea or Capetown, South Africa and I talk about Lean in health care, everyone nods their head—even though we were told it wouldn't work. Everyone accepts that there's a place for QI techniques. But here's the problem—they're often using them for spot repair. 'Let's put a Lean Band-Aid on something that's going on with medical records, or let's try a Lean Band-Aid for pharmacy. How will we ever get them to understand that if they're not applied as part of your daily work, as part of your DNA like you did at Alcoa, they're never going to produce anything miraculous?

Paul O'Neill: Almost everything is a system. And unfortunately, many systems produce things gone wrong systematically because they're designed to fail and people don't say, 'that's unforgivable, we

don't have to live with that.' You can only have habitual excellence if the maximum leader says, 'we're going to be excellent in everything we do.' And it starts with saying that people who work here are never going to get hurt at work. Because it takes a certain mentality and religious data collection—not just when it's convenient, but every time something goes wrong, chasing it down to understand why it happened and spreading the results across the organization without regard to hierarchy. It needs to be shared with every person, every day so everyone can own the goal. To have an injury-free workplace, everyone needs to say, 'I'm part of that.' It's not up to someone else to watch over me and make sure I do the right thing. The leadership needs to make sure that I get the training, education, tools and equipment.

When I was at Alcoa and I said that people shouldn't get hurt here, I discovered that we had a lot of people getting foot injuries. So, I said that it wasn't going to be OK for anyone to enter our worksites without steel-toed shoes. And then, I bought everyone in the organization two pairs of steel-toed shoes. I didn't want to give anyone a responsibility without facilitating it. Some people said, 'oh my God, that must have cost a lot of money.' I said, 'Who cares?' if you want to be part of a system of habitual excellence, it's up to the leadership to do the things that are necessary to facilitate a non-arguable goal. Who can argue with having an injury-free workplace? There's no organization that's good at safety because they

(Continued on page 32)

(Continued from page 31)

have a good safety department. You can't delegate the responsibility for non-arguable goals for an organization. You need a leader committed to making a corrective action as soon as it's discovered that there's something standing in the way of habitual excellence.

Karen Feinstein: Harvard Business School, the Kennedy Business School—they've interviewed and studied you. The cases are exemplary. So I often wonder, what if the hospital CEOs did what you do? What if they walked through their hospitals, practices, and skilled nursing facilities and gave everyone a card with their home number on it and said if you see a circumstance where you, a patient, or another worker are unsafe, call me? You're famous for this. You told me years ago that it only took one call for people to know that you were serious.

Paul O'Neill: I did get a few [calls]. The fact that someone called me on this, and I responded, swept through the organization like a wildfire—'he really means this.' It only took a couple of examples for people to see that this wasn't just talk—it was how we were going to perform, beginning with me. We would do what we say, every day.

Karen Feinstein: You also engaged the people at the front line. In many health systems, the front line has never seen their CEO. So when it's the middle of the night and they slam the medication

drawer, do they really care if their hospital gets a bad grade? They haven't been engaged.

You continue to work in hospitals through Value Capture, your consulting firm. We [PRHI] bailed out a while ago. We decided that we might be more successful keeping people out of hospitals because we were so frustrated trying to bring about change from within. But you keep working in hospitals. Obviously, you're more optimistic and have seen progress. Tell me what keeps your spirits up.

Paul O'Neill: I keep working at this because it's so important to our country. There are so many people—friends and relatives—who are being injured when they shouldn't be injured when they engage with the healthcare system. I'll tell you a data point that drives me crazy. This is a very famous health system where I was involved in giving a person a prize that we do on an annual basis for excellence in health and medical care. While we were waiting for the formalities at a dinner, I said to this highly respected leader, 'I know you know the number. What's the percentage audited adherence percentage to hand sanitation in your lauded facility?' Without a blink, he said, '78.6%.' this is in one of the best medical institutions with a reputation bigger than all outdoors. The adherence to the most fundamental healthcare idea is 78.6%. Which means that more than 20% of the time in this place with a great reputation, you could get an infection and die because the people didn't sanitize their hands

(Continued on page 33)

(Continued from page 32)

before they touched you. The ugly truth is, that number on average across the U.S. is 50%. This goes back to the leadership question. If it's OK to only do something that we know is essential to safe health care 50% of the time, we shouldn't be surprised at the results that we're getting.

There are happier stories, though. Cincinnati Children's Hospital. Long ago, I convinced them that worker safety ought to be part of their dashboard to reflect back to them, 'how are we doing?' They've got all of the other right things on their dashboard—infections, length of treatment. They've done fabulous work, leading the world in how to better deal with things like cystic fibrosis. They're my poster child. If you ever get discouraged, take a deep breath and take a look at what's going on at Cincinnati Children's. They haven't stopped—they're still getting better. They've created a consortium of children's hospitals to get them all to adopt ideas that they have demonstrated make a difference. There are agents of change who have demonstrated what it can be. That's really important.

Karen Feinstein: Their [Cincinnati Children's] CEO, Jim Anderson, like you came from business. He wasn't habituated to a culture that says, 'we're OK, we don't need to be great.' I wonder if his freedom from accepting the current condition helped.

Paul O'Neill: He didn't accept the routine excuses

that people offer up when they're challenged on these things. He knew from his own experience that you can cause systems to do what you want them to do. But you have to reach the hearts and minds of people who are out there every day doing the work. It can't be nuclear missiles from on high, or threatening jobs. It has to be about positive, constructive leadership that causes people to learn, 'I can be part of something big and important. I'm a contributor, and I'm recognized for what I do. It's not about a threat environment—it's about a reward environment where people do well and they're proud of it. That spreads.

Karen Feinstein: You were known for two things during your tenure at Alcoa. One, you were ethically driven in so many ways. You wanted everyone who worked there to know that the person at the top cared about social issues about equity and justice. You did many things to demonstrate it. At the same time, Alcoa was a leader in productivity and profitability. The lesson that people should have taken from that is it's actually good for an organization if the person at the top isn't only focused on the bottom line, but is grounded in running an organization that stands for something ethically and morally. What could offer more opportunity for ethical and moral leadership than a health system? Why do we see so little of that sort of courageous behavior to say that I'm at the top of a system that's complex and high risk, and decisions that I make can cause heartbreak or joy?

(Continued on page 34)

(Continued from page 33)

Paul O'Neill: It's absolutely demonstrated that if you lead with values, everything takes care of itself. All of the time that I was at Alcoa, 13 years, I never talked to people about a financial goal. I was confident that if we were the best in the world in everything we did, the financials would be great. It turned out that the value of the organization increased by 800% in 13 years. I don't understand why every person who's in a leadership position doesn't look at the evidence and say, 'maybe I ought to try it.'

Karen Feinstein: Do you have any moments during your time at PRHI that stand out?

Paul O'Neill: We had initially focused on Central Line-Associated Bloodstream Infections (CLABSI). Within 18 months, the hospital members had reduced the CLABSI rate 68%. That was a thrilling moment to see that together, we could make a gigantic improvement. When you think about the human beings who were saved from at minimum a longer stay or even death, it was fantastic. For me, it made the whole thing worthwhile. We demonstrated that this works.

Karen Feinstein: I often say, if we hadn't been successful, I don't think PRHI would have survived. I remember one really noted critical care doctor saying to you, 'hospital infections are just a byproduct of healthcare surgery. There's nothing we can do about it.' You proved them wrong. I also

remember a moment when you brought in Kent Bowen and Steve Spear from Harvard Business School. They drew this big spaghetti diagram of all the extra steps at a hospital because one medication wasn't delivered on time. I think we documented 768 unnecessary steps. One of the chief nursing officers from a hospital jumped up and said, 'that's my life!'

When you look at what's next, and what Value Capture might take on next and how we can accelerate progress, what do you see around the corner?

Paul O'Neill: I continue to believe that it's actually possible for people in this country to come close to a non-arguable goal of achieving an injury-free workplace. I would start there because you can't make progress on that important goal unless you adopt cultural characteristics and continuous learning systems that are available, without regard to hierarchy, to every person. Those learnings, tools, and culture are essential to everything else we want to accomplish in making health and medical care everything that it could be and should be.

The first year that I was Secretary of the Treasury, I got invited to give a speech at Georgetown University. Much to their surprise, I talked about these things. I said, 'if I were the Secretary of Labor, I would say we adopt a law that if an OSHA recordable injury rate in any organization is higher than one per hundred per year, we should take

(Continued on page 35)

(Continued from page 34)

away your license to operate.’ The Washington Post made a big deal out of it. If we adopted that law, we’d have a fantastic improvement in the underlying performance. It’s doable. That’s the criminal part.



“There are agents of change who have demonstrated what [health care] can be,” says Paul O’Neill.
“That’s really important.”

Karen Feinstein: Many of us who worked with you over the years are struck by your compassion. How concerned you were about people in Africa who couldn’t get clean drinking water, how much you felt for the families who lost someone to a preventable medical error, how much empathy you had for workers who got up every day and wondered, ‘why am I doing this? I don’t even like the values and culture of my workplace.’ How do we create a more compassionate nation? At the heart of fixing health care is also a compassion for the people who are dependent on that health care for their lives.

Paul O’Neill: Maybe we should create some kind of regulatory organization that certifies people as leaders. Prove that you establish a culture in the important dimensions of integrity and respect for every employee. And if you can’t do that, you’re not a certified leader. I’d love to give that test to a bunch of people that I know.



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