blue of california foundation

profile

July 2010

Health and Technology

A Blue Shield of California Foundation Legacy Program

Background

In 2004, the Blue Shield of California Foundation (BSCF) Board of Trustees approved the creation of an innovative health philanthropy grantmaking program: Health and Technology.

The program's goal was to advance the application of evidence-based medicine and health technology to support effective, high-quality care for all Californians. Between 2004 and 2008, the Health and Technology program did just that, investing more than $34 million in grants targeting California's public, rural, and safety net providers.

The funding for the Health and Technology program was phased down in 2008, as the BSCF Board of Trustees made the strategic decision to focus Foundation resources on achieving universal health coverage and ending domestic violence in California. However, the program has and continues to have a lasting legacy on the entire field.

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Health and Technology's Impact

The legacy of BSCF's Health and Technology investments remains strong with the ongoing work and contributions of grantees. In 2010, state and national policy is active in each of the program's areas of focus: pathways to innovation and best practices in healthcare delivery.

With universal coverage now signed into law, Health and Technology's legacy and accomplishments can help lead the way to ensure that all

Californians receive affordable, high quality care that is supported by current evidence and demonstrated, high-value technologies.

Key Accomplishments

Eliminating Hospital-Acquired Infections (HAIs) in California

BSCF's California Healthcare-Associated Infection Prevention Initiative (CHAIPI) and other BSCF-funded efforts (e.g., the Southern California Patient Safety Collaborative, the California Children's Hospital Association HAI Collaborative, and others) aimed to eliminate HAIs by using current evidence-based practices in 160 California hospitals.

CHAIPI stands out among California collaboratives for its focus on fostering adoption of automated surveillance technology (AST) as a best practice among California hospitals. AST is an effective tool for detecting and preventing HAI in hospitals and has been shown to prevent infections, save lives, and reduce the cost of care.

CHAIPI began in 2005 when BSCF launched a 10-hospital pilot to demonstrate the impact of AST in California hospitals. Pilot hospitals demonstrated impressive results: 605 fewer infections, 4,641 fewer "patient days," and more than $9 million saved in cost of care.

CHAIPI evolved in 2008 to become a $3.5 million California collaborative supporting 51 not-for-profit hospitals. Participating hospitals included leading hospital systems (such as Kaiser, Sutter Health, Sharp Healthcare, and University of California), independent hospitals (such as Cedars Sinai Medical Center), and public and rural hospitals. Below are key elements of CHAIPI's success:

- A learning collaborative for all participants, and a peer network of 20 hospitals opting to implement AST;
- Faculty from nationally recognized organizations, including the Association of Professionals in Infection Control and Epidemiology (APIC) and the Institute for Healthcare Improvement (IHI);
- Strategies to reduce HAIs that are high frequency, high cost or high mortality, including: MRSA, central line blood stream infection, catheter-associated urinary tract infection, surgical site infection, C difficile, and ventilator-associated pneumonia; and
- Back-to-basics prevention strategies for hand hygiene and contact precautions.

In the end, CHAIPI transformed California hospitals and showed strong results including:

- Increased compliance with hand hygiene (typical improvement from 46 to 90 percent compliance);
- Increased contact precautions (typical improvement from 30 to 88 percent compliance);
- Dramatic reductions and zero-rates achieved for CHAIPI target HAIs at many participating hospitals. For example, one hospital went 14 months without a case of ventilator-associated pneumonia, and another went seven months without central line-associated blood stream infection; and
- Many hospitals demonstrating cost savings of five percent or greater that were directly related to the reduction of HAIs through participation in CHAIPI.

CHAIPI's legacy is a better trained and empowered California Infection Preventionist workforce that now has better tools for demonstrating results through fewer infections.

Showcased nationally by IHI, APIC and others, CHAIPI is recognized as an effective, collaborative approach to HAI elimination. CHAIPI's legacy is a better trained and empowered California Infection Preventionist workforce that now has better tools for demonstrating results through fewer infections. CHAIPI and the cost containment potential of HAI reduction were featured by the California Task Force on Affordable Care in its groundbreaking May 2010 report, *Creating a High Value Healthcare System for California.*

Adopting Clinical Best Practices in California

BSCF programs also fostered adoption of other best practices through learning collaboratives for rural and safety net providers that were modeled after the IHI Breakthrough Series.

Examples of initiatives in this area include support for 40 public, rural, and critical access hospitals participating in the IHI 100,000 Lives Campaign, and later, the IHI 5 Million Lives Campaign. These collaboratives were designed to catalyze adoption of best practices in cardiac care, use of Rapid Response Teams during life-threatening emergency, and prevention of selected HAIs. Through these collaboratives, BSCF achieved improvement in the quality of health care provided by California's safety net and saved hundreds of patient lives across the state.

Adopting Electronic Health Record (EHR) and Telemedicine Technology

Other major Health and Technology grants supported electronic health record (EHR) technology in California clinics, and telemedicine technology to expand access to high-quality care in underserved regions of the state.

Major grants in this area included support for the California Community Clinics Initiative EHR expansion and other regional efforts – through which hundreds of California clinics received funding, technical, and operational support for effective EHR implementation. And, together with other funders, BSCF pioneered a California funders collaborative: Funders Fostering Technology for Quality.

Health and Technology also supported significant expansion of California's telemedicine infrastructure and expertise in regions of critical need throughout rural Northern and Southern California. BSCF grantees, such as the California Telemedicine and eHealth Center, expanded healthcare delivery system capacity by creating regional telemedicine networks in critical access areas. A new Southern California Telemedicine Learning Center, at the University of California, San Diego, supports southern regions of the state with telemedicine training and technical assistance.

Setting the Stage for Further Advancements

Since 2005, BSCF grantmaking has built significant technical and leadership capacity among hundreds of California clinics, rural providers, and public hospitals by advancing the adoption and use of health information technology (HIT). The progress of these grantees now positions California competitively for recent federal grant funds through a historic set of initiatives:

- The American Recovery and Reinvestment Act of 2009 and Health Information Technology for Economic and Clinical Health (HITECH) Act: initiatives that will provide nearly $600 million in grants to providers and regional coalitions over two years to implement a nationwide HIT infrastructure that allows for the meaningful exchange and use of electronic health information.
- The Beacon Community Cooperative Agreement Program: with $220 million in additional federal funds, the program will foster innovation in use of EHR for quality improvement and population health.

For example, Northern Sierra Rural Health Network (NSRHN) is currently working closely with the California Health and Human Services Agency Health Information Technology and Exchange initiative to support a statewide infrastructure for the widespread adoption of electronic health records among ambulatory clinics. As a membership network of rural clinics from nine counties in rural Northern California, NSRHN is positioned to participate with the state's proposal to facilitate HIT adoption and health information exchange connectivity within the nine county service area.

NSRHN is leveraging experience, internal capacity and resources from BSCF's $1million investment in NSRHN's project to qualify as a regional service provider. With this strong foundation, NSRHN believes it can effectively expand its scope of work as a service provider organization to facilitate meaningful use of electronic health records with focus on quality improvement and patient safety across the nine county region.

Advancing Clinical Effectiveness Research and Medical Technology Policy

BSCF's California Technology Assessment Forum (CTAF) and other technology assessment groups focus their reviews on the comparative clinical effectiveness of emerging technologies. Health and Technology supported CTAF and advanced the science of comparative effectiveness research to include both cost and clinical quality.

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One noteworthy accomplishment was BSCF's support for the launch of the Institute for Clinical and Economic Review (ICER). ICER has emerged as a pre-eminent source for comparative effectiveness research methodology, and for published assessments of the comparative effectiveness of emerging clinical advances and technologies.

ICER assessments add depth to CTAF and other technology assessment reviews by examining efficacy, comparative cost, and quality. Health plans, payors, policymakers, and stakeholders across the nation look to ICER as a source for practical, authoritative guidance on the comparative effectiveness of procedures in high-cost, high-impact areas of medical practice.

At the national level, Health and Technology supported a major contributor and thought leader in this area—the National Academy of Sciences Institute of Medicine (IOM) Roundtable on Value and Science-Driven Health

Care led by IOM Senior Scholar, Michael McGinnis, MD. By examining, highlighting, and developing state-of-the-art strategies for assessment of cost and outcomes, the Roundtable is working to achieve a national goal: By 2020, 90 percent of clinical decisions will be supported by accurate, timely, and up-to-date clinical information, and will reflect the best available evidence. To accomplish this goal, the IOM supports national innovation collaboratives addressing the following areas:

- Clinical effectiveness research;
- Value incentives;
- Best practices;
- Electronic health record innovation; and
- Evidence communication.

"The Foundation's support for the Institute of Medicine's Roundtable on Evidence-Based Medicine has had benefits on multiple fronts. Because of the early timing and the independent sector source of the support, the grant from BSCF was especially important in giving the IOM the capacity to get work of the Roundtable underway quickly, effectively, and in time to inform policy discussions in the Administration and Congress on comparative effectiveness research (CER). This work coincided with, and was a resource to, Congressional and related policy discussions on the issue, and helped informed decisions to include $1.1 billion in the American Recovery and Reinvestment Act for CER."

IOM Senior Scholar, Dr. Michael McGinnis

In addition, BSCF supported *Health Affairs*, the nation's leading health policy journal, in developing the journal's coverage and capacity in medical technology policy into an ongoing content area. Through BSCF support, *Health Affairs* has published thematic issues, feature articles, TechWatch, and a blog feature focused on policy issues in medical technology and advancement of evidence-based medicine.

A groundbreaking California effort in comparative effectiveness and medical technology policy is Integrated Healthcare Association's (IHA) New Medical Technology Value Assessment and Purchasing Demonstration,

a statewide effort involving 70 participating hospitals and health plans. This project identifies best practices for managing use of high-cost medical devices in orthopedics and cardiology that support high-quality care.

One such strategy is bundling medical technology costs in an episode of care reimbursement, an approach designed to reduce costs while maintaining high-quality standards through episode guidelines developed and agreed to by California providers and purchasers alike. With strong interest among participants and health plans in this approach, IHA statewide roundtables are examining this and other cutting-edge topics such as:

- Best practices in physician-hospital alignment for medical device evaluation and selection;
- Financial conflicts of interest for physicians;
- The challenge of confidentiality provisions in vendor contracts; and
- The need for price transparency in medical technology to enable meaningful reform in medical technology-related costs of care.

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