

The Three Paths to Safe Healthcare

The ability to effect change across multiple institutions and populations requires approaching the effort on multiple fronts; SAFER California Healthcare has articulated that patient safety research, clinical delivery system interventions, and proper education and outreach must be the avenues to pursue when trying to affect cultural and organizational change of significant magnitude.

On Research

Pivotal to the success of patient safety improvement is the promotion of patient safety research. Since the Institute of Medicine's influential publication of *To Err is Human* and shocking media exposure of poor adverse events management, the field has exploded with a growing body of researchers. Effectively, patient safety has the potential to develop into a discipline of its own.

However, as with all bodies experiencing rapid growth, the explosion has left many researchers without an organizing body. The dissemination of useful recommendations may be undermined by the absence of a proper avenue. Without organization, research may be duplicated and valuable research time, money, and effort may be wasted due to lack of a regular and proper forum for discussion.

SAFER California Healthcare supports patient safety research, but it also seeks to further the research capacity of the entire field as a whole, by harnessing the strengths of previously independent research activities into a large collaborative, interdisciplinary, and comprehensive patient safety network. Such thoughtful organization is the only means for building a resourceful alliance of scientists and professionals.

On Clinical Delivery Interventions

Likewise, SAFER California Healthcare is unique in that even as it promotes and coordinates research activities, it also provides the infrastructure for an interface between research and the clinical delivery system. The problem with many research projects is that while study findings may be worthwhile, implementation at the clinical delivery level may be difficult to enforce. While SAFER California Healthcare cannot promise implementation of all clinical delivery recommendations everywhere, it can certainly promise an audience of leaders who can collectively appreciate such efforts and can advocate for their progress at the delivery level.

SAFER California Healthcare has a team of healthcare administrators who serve on the Advisory Board, the Planning Committee, and the Executive Committee. Each leader is capable of tapping into the Alliance's research capabilities and implementing clinical delivery interventions at the operational level—it is one of SAFER California Healthcare's goals to always have such a dialogue and interface between the clinical delivery administration and clinical delivery research.

In addition, SAFER California Healthcare provides a forum in which clinical delivery administrators can speak to one another regarding different intervention strategies that have worked or failed at their separate institutions. Without a forum for sharing and discussing experiences that are relevant to patient safety efforts, it can be difficult for any one individual institution to move progressively towards patient safety improvement.

On Education and Outreach

To produce any kind of significant shift in healthcare culture requires investment in educating both the public that consumes healthcare services and the professionals who provide them. The longstanding notion that healthcare service providers are infallible has been eroding slowly, but has not been replaced with a greater understanding of how consumer and system intervention can be used to secure more successful outcomes in healthcare. The beginning of the patient safety effort requires cultivating within the consumer and the provider an awareness of how to constructively evaluate and improve the system

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without assigning accusatory and hurtful blame. SAFER California Healthcare's goal is to help California healthcare professionals respond to this new expectation. We are laying the groundwork for a body of educational programs designed to target the public, healthcare providers, and researchers. Education, and advocacy activities across the state will come together to familiarize one another with individual projects and successes. This also involves disseminating successful patient safety performance improvement strategies and a set of materials and tools that can educate community and rural hospitals in the state about patient safety issues.



Research

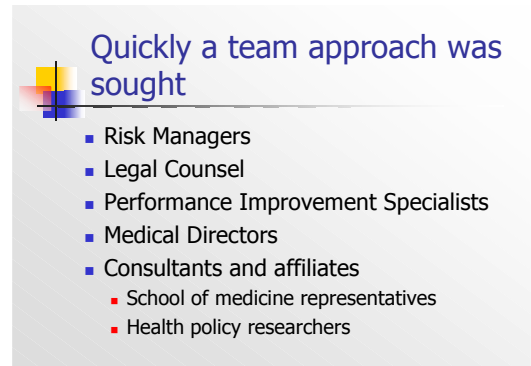
Multidisciplinary Teams

There is a broad spectrum of expertise on our Executive Committee, Planning Committee, and Advisory Board. Collectively, the contacts from these organizations give us the support we need to provide comprehensive and successful answers to some of the complex patient safety issues. For those situations where the appropriate expertise cannot be found, our network is extensive enough that we have leads and the brokering power to pursue them.

At present, we have representation from:

- University of California nursing schools
- University of California medical schools
- State government
- University of California Medical Centers
- Nonprofit healthcare agencies and foundations
- The Airline industry
- University of California quality managers
- Research institutions
- Researchers in systems, public health policy, and education
- Professional organizations

However, we do plan to expand to the nursing and pharmacy professional associations. David Taylor is the Executive Committee member currently pursuing this expansion.



Quickly a team approach was sought

- Risk Managers
- Legal Counsel
- Performance Improvement Specialists
- Medical Directors
- Consultants and affiliates
 - School of medicine representatives
 - Health policy researchers

Collaborating

There are many ways in which this team has been collaborating. A few of the researchers in our network, such as Dr. Michael Broder and Dr. Matthew Weinger, have contacted each other and discussed project similarities. In other ways, SAFER California Healthcare has collaborated with state agencies, like the Medical Board of California, to analyze and rewrite part of the California Senate Bill 2025 that includes provisions to help reduce unsafe physician practices. And lastly, collaborators at the five University of California Medical Center campuses now meet to discuss the requirements of the online incident reporting system and the ways to improve it in future versions.

Challenges

Our greatest challenge and our greatest strength have always been and continue to be the size of our member organizations. Having employees in different organizational structures can make building communication ties and manipulating information difficult. However, it is our strength because this large population, when effectively mobilized, can force very significant changes. The question now is how to manage the mechanics and operations for such team building.

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Team Building

Part of the work involved in overcoming challenges requires us to take steps, however small we may think they appear. At present, SAFER California Healthcare has successfully planned the following three activities to facilitate team building and collaboration within our community:

- The Medical Directors have become increasingly supportive as the work on patient safety has progressed. The regular directors meetings always devote time to SAFER California Healthcare. These meetings too, have also helped all members of the leadership work better as a team.
- With the input of numerous team members, we have planned for an Annual Patient Safety Summit. This is currently planned for two days, with Advisory Board meetings before and after the summit. The Summit is currently planned as focusing primarily on research, although a significant portion of the summit will also be devoted to discussion on how to affect patient safety culture at the point of care delivery.
- We are also establishing a quality managers consortium. This consortium is in the planning phase but we expect that it can be an organizing body that will help us to capitalize on clinical delivery expertise by establishing a forum for sharing the wealth of experience we have at the operational level.

The Pilot Project Proposals:

Attached for consideration are three proposals for possible DCERPS pilot projects. Although we initially proposed three pilot projects as part of our application, we have actually included different projects for current consideration. The reason for selecting different projects relates to the nature of our DCERPS. The projects included in the initial proposal are still viable – in fact one of the three for consideration is an outgrowth of our original concepts. Because our goal is to pull together patient safety researchers from across the state, we elected to call for proposals that would meet the vision and mission of our Alliance.

Having articulated the mission and vision and the scope of the pilot project, we received six proposals from four of our five campuses. The Executive Committee, in consultation with Eileen Hogan, reviewed each of the proposals and selected three based on the likelihood that they could be completed during the two year DCERPS timeframe, their consistency with the mission and vision of the Alliance (all met this expectation), the extent to which intercampus relationships could be fostered by the project, and the likelihood that the project could be completed within the allocated budget. We communicated to the projects not selected that we believed their proposed work was important and SAFER California Healthcare agreed to work with the investigators to seek other sources of funding. Of course, we will extend the same invitation to proposed DCERPS pilot projects not selected as part of this process.

Regarding prioritization of these projects, the three included here all represent activities that SAFER California would like to accomplish and we believe they can be accomplished within the timeframe of the demonstration project. We have also attached several other proposals for discussion during the site visit. These were not submitted as part of the demonstration project solicitation; however, we would very much like AHRQ's input and discussion regarding the merits and limitations of the projects.

Clinical Delivery

The Clinical System Interface

Because the crux of SAFER California Healthcare includes the UC Medical Directors and other key leaders within the UC healthcare delivery system, the group is advantageously positioned to meet its goals. To a great extent, the Executive and Planning Committees comprise the leadership of our delivery system and include representation from individuals who “bridge the gap” between the delivery of healthcare and patient safety research. Many members of our Planning Committee are clinical researchers and quality managers who have vast experience at the operational level with patient safety issues in healthcare. Their presence on these committees helps to determine SAFER California Healthcare’s direction and the kinds of efforts that can be supported by the Alliance. The other advantage, of course, is that having the delivery system so intimately tied to our Alliance allows an early “reality check” with respect to the feasibility associated with and potential obstacles that may be faced by any new proposals.

SAFER California Healthcare has served as the network for University of California researchers interested in conducting interdisciplinary health services research. Members of the SAFER California Healthcare Planning Committee prioritize potential studies, serve as campus specific co-investigators for those selected, and assemble the resources necessary to accomplish those projects. More importantly, the responsibility for conducting these research projects does not rest with the Planning Committee alone. Members of the Planning and Executive Committees identify new internal collaborators whose research and clinical interests most closely parallel the project. For example, in recent months SAFER California Healthcare has facilitated the participation of our campuses in the California Intensive Care Outcomes (CALICO) Project, a hospital quality initiative sponsored by the California Office of Statewide Health Planning and Development and conducted by researchers at the University of California, San Francisco. CALICO is designed to develop and validate an approach to reporting on case mix-adjusted ICU mortality using data from a representative sample of California hospitals.

Implementing Research

Translating findings to practice can almost be assured because our Planning and Advisory Committees include individuals within our system that are at the implementation point. Furthermore, findings we identify and test can be translated for use outside the University and our immediate partners. Our ties to the delivery system, by their very nature, permit us access to the University healthcare delivery system as a laboratory. Once we learn and get the “bugs” out of our test environment, implementing recommendations in other practices should be much easier. A later discussion regarding the implementation of changes following similar sentinel events at member campuses provides an example of how the Alliance can ensure a safer environment across the system.

Virtual and Physical Linkages

As discussed as part of our DCERPS application, we are in the midst of implementing an on-line event reporting system to capture actual events and near misses. Actually the University has had a long tradition of sharing data across our system. In the early 1980s we developed the University of California Health Information Network (UCHIN), a platform to share clinical performance data

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among our members. This system served as the model for the University Health System Consortium Clinical Database that now serves over 100 academic and academically affiliated hospitals.

The online Incident Reporting project is multifaceted, including a structural design component and an information technology component. The system resides at UC Davis and has now been implemented at UC San Francisco and installation at our other sites is underway. Our efforts on this system reaffirm our ability to share systems beyond our individual campuses. We are working toward agreement with respect to structure, definitions, and enhancements.

Over the last year, in response to federal mandates, the University has formed a task force to guide our collective response to the Health Insurance Portability and Accountability Act (HIPAA). This infrastructure serves as a model for future integration and sharing. We are defining intercampus linkages that will provide us with the ability to share patient safety and other key clinical data for research and clinical purposes.

Education and Outreach

Training and Education Programs

Information Gaps

From a concrete standpoint, the Alliance could benefit from greater knowledge and expertise regarding how to manage distance learning. Several of the programs we wish to develop need avenues for dissemination, and a better grasp of the variety of communication tools available to the geographically and time-compressed healthcare provider and student would be very useful. With such development, a provider will be able to go through patient safety training and education programs at their own pace and venue.

What We Want to Do

The Alliance recognizes that information on patient safety is not broadly taught in most healthcare institutions—if taught at all. Thus, the Alliance recognizes the following training and education goals:

- Recognition of patient safety as a topic in and of itself
- Systems-oriented thinking
- Better sharing of information, training, and education efforts at UC campuses and at other professional and healthcare organizations

However, to achieve this, the Alliance must identify experts and champions who are

- Familiar with the systems approach to error, health policy, healthcare ethics, quality assessment and systems analysis and who can develop an evidence base for core competency refinement
- Versed in education research to develop tools for use to quantitatively and qualitatively assess education programs and teaching methods.

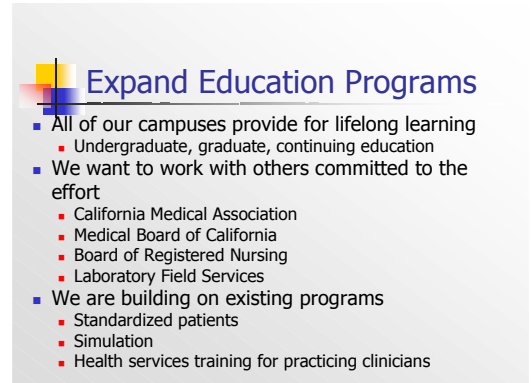
To reach our aims, our efforts require: access at the patient level, a set of core research staff, understanding of the organizational structures currently in place at each institution, curriculum development, and access to healthcare staff.

In the Works

We have recruited the interest of leading experts on education and healthcare safety. Together, we are working to develop and implement several education proposals:

Robert Wachter, MD, is Associate Professor of Medicine and Epidemiology at UCSF. He serves as Associate Chair of the Department of Medicine and Chief of the Department's Clinical Service at Moffitt-Long Hospital. He completed the Robert Wood Johnson Clinical Scholars Program at Stanford University before joining the UCSF faculty in 1990. Before assuming his present positions, he served as the Program Director for the Sixth International Conference on AIDS, and the Director of UCSF's Internal Medicine Residency Program. He has published more than 50 articles and one book in the areas of clinical epidemiology, health policy and economics, medical education, and ethics.

Joanna Weinberg, JD, LLM, is Associate Professor of Health Policy, Law and Ethics in the Department of Social and Behavioral Sciences at UCSF School of Nursing and a faculty member in the Institute of Health and Aging. She is involved in patient safety research and patient-provider communication issues. She is active in medical education, teaching in the Foundations of Patient care course at UCSF and serves on the Policy and Culture and Behavior Task Forces of the UCSF School of Medicine curriculum redesign process. She is curriculum coordinator for the postdoctoral program in Health Services and Health Policy Research.



Expand Education Programs

- All of our campuses provide for lifelong learning
 - Undergraduate, graduate, continuing education
- We want to work with others committed to the effort
 - California Medical Association
 - Medical Board of California
 - Board of Registered Nursing
 - Laboratory Field Services
- We are building on existing programs
 - Standardized patients
 - Simulation
 - Health services training for practicing clinicians

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Matthew B. Weinger, MD, is a Professor of Anesthesiology at UCSD and the Director of the Anesthesia Ergonomics Research Laboratory at the VA San Diego Medical Center. Dr. Weinger is a recognized authority in anesthesia patient safety research with a 15-year history of publications and extramural support in medical human factors, clinical decision making, medical device user interface design and evaluation, and related safety topics. Dr. Weinger has special expertise in the application of human factors to the medical domain and in the impact of “performance shaping factors” such as clinical experience, workload, sleep deprivation and fatigue on clinicians, and on the use of medical technology. Dr. Weinger’s course entitled “Personal and Professional Decision Making,” taught to UCSD medical and graduate students for the past four years, employs a variety of active-learning and participatory tools to teach patient-safety relevant topics: human error, cognitive bias, risk and uncertainty, interpersonal influence, leadership, teamwork, strategic thinking, quantitative decision tools, negotiation and conflict resolution, clinical decision making, and computer-based decision support. He chairs UCSD’s Institutional Patient Safety Advisory Group and has spearheaded local efforts to create a Center for Medical Simulation and to construct a new state-of-the-art Education Building. Nationally, Dr. Weinger is Co-Chair of the AAMI Human Factors Committee that is developing national consensus standards for all medical device user interfaces.

Neil S. Wenger, MD, is Associate Professor of Medicine at UCLA. He serves as Chair of the Medical Enterprise Ethics Committee and is a faculty member for the Robert Wood Johnson Clinical Scholars Program. Dr. Wenger’s research has focused intensely on quality of care and medical ethics.

LuAnn Wilkerson, EdD, is Senior Associate Dean for Medical Education, Director for the Center for Educational Development and Research, and Professor of Medicine at the David Geffen UCLA School of Medicine. She has served as co-principal investigator for an R-25 grant received in 1994 by UCLA for Nutritional Education and as principal investigator for an R-25 grant received in 1997 for a Cancer Prevention Curriculum. She is nationally and internationally renowned for her teaching and research on problem-based learning and faculty development. She served as national chair of the Group on Education Affairs of the Association of American Medical Colleges.

Michael Wilkes, MD, is Professor of Medicine and Associate Dean for Medical Education at the University of California, Davis. He has extensive experience in the development, management and evaluation of longitudinal, case-based curricula. He was the senior chair of UCLA’s Doctoring curriculum, a series of classes and seminars that runs through all four years of medical school and includes topics such as doctor-patient communication, clinical reasoning and end-of-life care. The curriculum has served as a model for schools nationally and internationally. Dr. Wilkes is also interested in the use of audiovisual and information technology applications in medical education.

We are currently defining a list of core competencies for patient safety education, which Dr. Joanna Weinberg is spearheading. Enclosed in the back of this section is a draft of what has been developed thus far.

Dr. Weinberg also developed a plan for a patient safety mentor corps, which is included in this notebook as a pilot project proposal. The Safety Mentor Corps will educate healthcare provider leaders at all campuses on patient safety competencies, while also training them on the techniques to use when training their own staff. Dr. Weinberg’s work may be later developed into a patient safety training module that can be used at any campus and healthcare institution. Along these aims, the UC Medical Directors have also spoken about standardizing their previously separate in-house healthcare provider training—these are indicative of the kinds of collaborations being made within the members of the Alliance.

Dr. LuAnn Wilkerson developed a curriculum for an educational program for all graduating medical school students at the five University of California campuses. She will work with Dr. Michael Wilkes, associate dean at the UC Davis School of Medicine.

In the future, we will develop additional programs for patient safety to educate consumers and patients. These will include brochures, like the ones being spearheaded at UCI Medical Center and the UCLA Center for Patient Safety.