Voluntary Hospital Coalitions to Promote Patient Safety

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Abstract

Translating research or care innovation into broader clinical practice requires more than simply the publication of new findings. Understanding both the perspectives of the target providers and the environmental factors that can facilitate or impede adoption is key to getting "buy-in" and achieving eventual implementation. This paper describes a unique patient safety initiative developed by the Georgia Hospital Association (GHA), working closely with State regulatory agencies and health care professional groups. Building upon existing relationships, GHA and its collaborators formed the Partnership for Health and Accountability (PHA) as a comprehensive, voluntary patient safety program. With a focus on systemic prevention strategies, PHA fulfills both dissemination and implementation roles in translating research into practice. The program, which involves adult acute care hospitals across the State, has shown that engaging health care organizations in an iterative change process, while focusing on an ultimate goal, can yield promising results. Included here is a description of PHA structure, how hospitals become actively engaged in implementation, challenges encountered in the change process, and preliminary evidence of success.

Introduction

This paper describes a unique patient safety initiative developed by the Georgia Hospital Association (GHA), with the support of the State legislature, State regulatory agencies, and health care professional groups. The Partnership for Health and Accountability (PHA) was formed with the purpose of improving health and the quality and safety of health services. Intensive efforts to create a comprehensive, voluntary patient safety program started 6 months later, following endorsement by the State legislature. PHA includes a voluntary and confidential event reporting system, organizational self-assessment programs, and data-driven medication error reduction and clinical quality improvement programs. The initiative bolsters the success of the programs through ongoing education, monitoring, and implementation support.

The Partnership for Health and Accountability

Background

PHA, officially established by the GHA board of directors in September 1999, was in the planning stages well before the Institute of Medicine published its landmark report on medical errors in December 1999.[1] The strength and momentum of the collaborative effort, led by the GHA and more than 75 stakeholders, allowed PHA to negotiate a compromise with those who were calling for State mandates related to error reporting. As a result, the Georgia General Assembly recognized PHA's Accountability and Health Safety (A&HS) Committee as a testing ground for a unique voluntary patient safety initiative. Following 2 years of initial funding by the GHA, in 2001 the Agency for Healthcare Research and Quality provided funding to PHA for a demonstration project, partially supporting PHA implementation as well as an evaluation of the PHA program.

The PHA model is built on a broad and cooperative framework, which includes collaborators from the health care industry, government, and the community. Major partners include the Georgia Department of Community Health (DCH), Georgia Department of Human Resources (DHR), Division of Public Health and Office of Regulatory Services (ORS), Georgia Cancer Coalition, Georgia Medical Care Foundation, and State professional associations of physicians, nurses, and pharmacists. The group has worked closely with State lawmakers and regulatory agencies to build a voluntary event-reporting program that is broader than the mandatory State reporting system. DCH accepts a hospital's participation in PHA as meeting their contractual mandate for participation in a statewide patient safety program with an external peer review process. This condition of participation for Medicaid and the State health benefits plan has provided added impetus for broad-scale hospital involvement in the initiative.

All 148 eligible acute stay hospitals are at some stage of developing or implementing improvement plans, and 113 are currently involved in clinical studies. Small hospitals comprise 55 percent of PHA membership, and medium size hospitals (100–299 beds) represent 25 percent of the membership; the remaining member hospitals have 300 or more beds. The member hospitals are evenly divided between urban (54 percent) and rural (46 percent).

PHA carefully reviewed current hospital reporting requirements of organizations and agencies such as the Centers for Medicare and Medicaid Services (CMS) and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) in order to avoid duplication of effort. Existing assessment structures, such as the Collaborative Quality Improvement Partnership (CQIP) and the Institute for Safe Medication Use, formed the basis for the program, and PHA created additional data-gathering instruments only where members felt gaps existed. In most cases, PHA built its evaluation component on existing systems and has been able to use the data produced as the basis for

guiding the development of improvement plans and corrective action plans and identifying best practices.

Dissemination and implementation goals

One model of practice change describes three stages of knowledge transfer: diffusion, dissemination, and finally implementation.[2] While diffusion of information (e.g., journal publications) can be effective for motivating early adopters, widespread variations in current clinical practice provide ample evidence that diffusion alone is not sufficient to ensure a change in practice.[3, 4] The more active processes of dissemination and implementation, which are characteristic of the PHA program, are typically necessary for translating research or care innovation into broader clinical practice.

PHA, as part of its dissemination role (Table 1), targets and tailors information for its member hospitals. Through multiple channels such as regularly scheduled teleconferences, the Internet, and site visits, PHA provides education, data, and other tools and resources to hospitals and their medical staff throughout the State. Telephone and Internet access increases participation by small, rural hospitals that could not otherwise send staff members to regular conferences.

PHA maintains an active Web site (www.gha.org/pha) that provides a central communication hub for the initiative and resources related to patient safety. It includes a password-protected area for sharing proprietary information. PHA also prepares safety alerts and publishes a weekly e-newsletter with reminders of deadlines and announcements of grant opportunities, new resources, and forthcoming national regulations. The organization makes available to all hospitals a number of tools, including education materials regarding patient safety and a collection of attractive bulletin board tool kits that hospitals may download from the Internet and customize for their use. Some bulletin boards such as "JCAHO Patient Safety Goals 2004" and "Take Your Meds!" are targeted toward consumers; others such as "Hand Washing" and "X Marks the Spot" are targeted toward hospital staff. The bulletin boards have been well received, and PHA has also shared the kits with several other States and countries upon request.

PHA's four field representatives facilitate many of the dissemination activities, maintaining contact with their designated hospitals via telephone and twice-yearly site visits. Field representatives may also provide presentations to hospital administrators and managers on such topics as root-cause analysis, failure mode and effects analysis, and the effective use of data.

While PHA plays an active role in dissemination, most of the organization's resources are focused on implementation of programs directed at improving patient safety (Table 1). Improvement programs are tailored to the specific clinical site by involving local change agents (providers and administrators) who are knowledgeable about and credible in their practice setting. Consideration of local perspectives and their influence on adoption of new practices is a key step in the translation of care guidelines into improved outcomes.

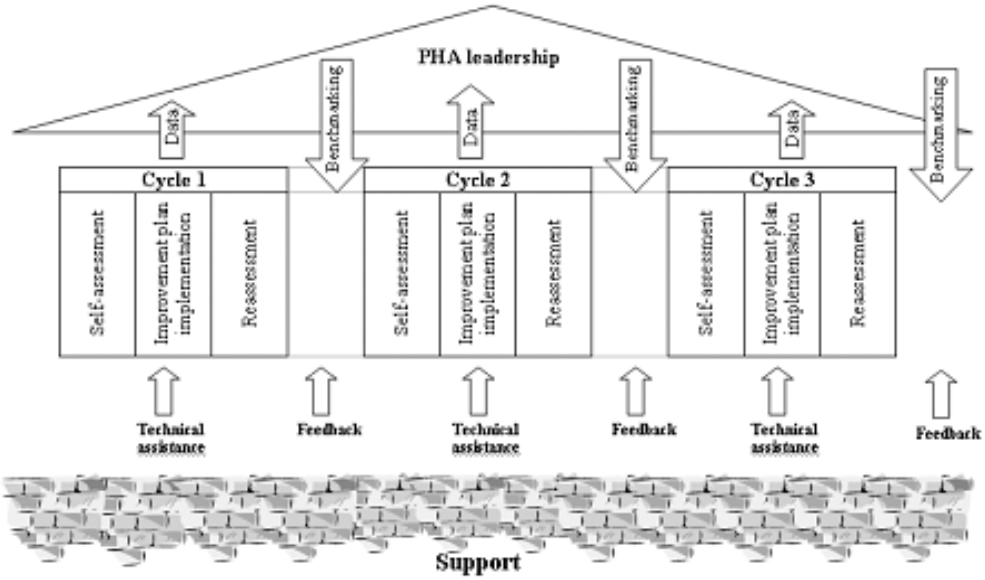
Table 1. Examples of PHA programs that facilitate and support practice change

Dissemination	Implementation
Targeting, tailoring, increasing awareness, changing attitudes, increasing knowledge	Enabling or facilitating change in practice, local change agents, address barriers, local perspectives
• Informs hospitals of prevention strategies, high-risk situations, and new guidelines via - Safety alerts - E-newsletters - Other publications	• Actively involves influential local providers and administrators on committees and as leaders
• Organizes teleconferences/conferences/ presentations on timely topics of interest	• Brings together peers from across the State's medical community
• Conducts orientations to new initiatives or tools	• Facilitates change via local self-assessment and monitoring components through - Clinical studies - Safe medication use improvement plans - Safety issue action plans - Patient safety award programs
• Facilitates the sharing of data, best practices, and issues among hospitals	• Provides administrative structure for improvement activities and reduces the burden on individual hospitals
• Provides via the Internet centralized, easy access to - Evidence-based practices - Tools such as bulletin board kits	• PHA field representatives provide onsite technical support for improvement processes

Each PHA improvement program requires that a hospital assess its *structure* around patient safety, focus on *processes* through improvement plans, and monitor *outcomes*. One of PHA's implementation strategies is its ongoing data-driven evaluation system, which is designed to keep important issues on the front burner and reinforce desired changes. A hospital may see how it benchmarks against similar facilities, whose aggregate information is available on a password-protected Web site.

While diffusion, dissemination, and implementation would appear to be a logical and orderly way to translate research into action, change rarely occurs in a linear fashion. Because the introduction of new concepts and practices is usually met with varying degrees of acceptance, reinforcement during the process may greatly enhance adoption. PHA was designed on this premise and has understandably experienced a similar back-and-forth motion as it has undertaken the broad-scale task of effecting change in a diverse statewide system of medical care organizations. Institutionalizing a process may require as many as three cycles (Figure 1). PHA provides leadership for the statewide initiative and has established a consistent framework for packaging, targeting, and delivering

Figure 1. PHA provides both leadership and support for reducing errors



pertinent information. It goes a step further, however, in that it also champions and guides the implementation process. The synergy of these two processes, i.e., dissemination and implementation, within one organization lends strength and stability to the initiative.

Programs and initiatives

Three examples of programs are described below to illustrate the range of PHA's activities.

Event reporting system

Providing a voluntary event reporting system was one of the main priorities of the PHA initiative. As first envisioned, the event reporting system would negate the need for a State-mandated sentinel event reporting system. However, the DHR board thought the State had a public responsibility to receive reports on certain sentinel events. Two and a half years following the initiation of the PHA safety program, the State mandated reporting of sentinel events (unexpected death, rape, wrong-site surgery). Hospitals were expected to report appropriate events to the State system, as well as a broader array of errors to the PHA event reporting system.

When a hospital's peer review contact reports an adverse event to PHA, he or she is guided through an anonymous Web-based questionnaire that collects specific and standardized data elements describing who discovered the event; where it occurred; what category of event occurred and its severity; the role of underlying technical, organizational, and human factors; and the anticipated improvement plan. This collected information is aggregated by PHA staff. Safety

alerts are then produced and distributed so that an error at one institution can contribute to improved processes at other participating hospitals.

After a pilot phase, PHA staff received feedback from hospitals that were concerned that having a voluntary reporting system in parallel to the newly mandated State reporting created duplicative data entry processes. PHA also received feedback from the State that hospitals were unnecessarily reporting events to the State that did not meet the mandatory reporting requirements. The State is now developing a Web tool for hospitals to submit mandatory reports. PHA is in discussions with the State to develop a secure portal to allow hospitals to submit all event records to PHA and then have the State-mandated information automatically forwarded to the regulatory agency, thus eliminating duplication of effort. Event data will be aggregated and used by PHA to identify trends and guide educational initiatives, including best practices and safety alerts. Hospitals will be able to access their own data internally so that error reports can be used to guide root-cause analyses and improvement plans. Because this reporting system is still in development, it is too early to say how hospitals are able to use this information to guide their own error reduction programs.

Safe medication use (SMU) program

The SMU program, which focuses on reducing the frequency of medication-related errors, involves an annual cycle in which a hospital completes a self-assessment, identifies its three most common medication errors, and develops an improvement plan for at least one of those errors. Hospitals report on their results in 6 to 9 months. A review of SMU improvement plans over the three cycles that the program has been in place under PHA's administration reveals that during the first cycle, improvement plans tended to be global in nature. Learning that lack of measurable goals limited the effectiveness, during the second cycle PHA modified the reporting form, and hospitals accordingly made their plans more specific and developed achievable goals. Increased understanding gained through implementing second cycle improvement plans then allowed the hospitals, by the third cycle, to institutionalize the process and make it a functional part of their own environments.

Patient safety issues—medical events (PSI–ME)

In the PSI–ME program, participating hospitals were required to choose to focus on one of the following priority patient-safety issues: (1) pressure ulcers, (2) patient falls, or (3) deep vein thrombosis (DVT). Based on their findings, the hospitals submitted to PHA a self-assessment of the focus issue using evidence-based guidelines and a plan of action. In 2004, after evaluation of the first cycle of this program along with feedback from participating hospitals, PHA expanded the program options. Hospitals may (1) continue their self-assessment/improvement plans relative to pressure ulcers, falls, or DVT; (2) participate in a collaborative failure mode and effects analysis (FMEA), which allows the hospital to work on a topic of interest along with other hospitals; or (3) select an alternative clinical initiative that is a pressing issue in their facility. Offering more options provides

flexibility to meet the needs of hospitals with a variety of improvement priorities, patient populations, and staff capacity. In 2004, 70 percent of hospitals elected to continue with the first option, 13 percent changed to the second option, and 17 percent selected their own hospital-specific initiative.

PHA structure

The Accountability and Health Safety Committee

The workhorse of the PHA implementation effort is the A&HS Committee. This committee is composed of patient safety stakeholders and was established as the clearinghouse and oversight committee for the PHA program. All reports and data generated by PHA staff and the stakeholder subcommittees flow to the A&HS Committee, where they are reviewed. The information related to outcomes, processes of care, medication use, medical errors, and other patient safety issues provides the A&HS Committee opportunity for identifying common root causes, analyzing statewide trends, sharing best practices, and developing solutions that yield optimal patient safety practices and models for Georgia hospitals. Proponents of the system feel that in this atmosphere of trust, stakeholders are able to focus their energy on continuous improvement of systems rather than on deciding who is to blame.

The A&HS Committee accomplishes its day-to-day work via subcommittees and ad hoc task forces (Table 2). One such group, the Best Practices Subcommittee, acts as the clearinghouse for peer review protected data. The subcommittee, consisting of physicians, nurses, pharmacists, risk managers, and quality improvement/process improvement (QI/PI) staff from member hospitals, sets the parameters that determine outliers in clinical data that are submitted. The team analyzes the de-identified data, determines trends, and prepares feedback reports for participating hospitals. When the Best Practices or other committee reviewing PHA-required data notes lack of improvement, the concern can be referred to an ad hoc panel, appointed by the A&HS Committee. This panel, composed mostly of physicians, makes recommendations regarding specific improvement strategies. If improvement is not forthcoming, the panel may recommend dropping the hospital from the program. When a sentinel event occurs in a hospital, a PHA field representative reviews the hospital's corrective action plan and provides technical assistance to the hospital upon request.

The A&HS subcommittees are composed of more than 100 hospital representatives and physicians, supported by PHA staff (Table 2). This interdisciplinary approach provides valuable perspective and a sense of ownership, as the committees identify corrective actions and guide patient safety initiatives. While each subcommittee has a particular focus in implementing the peer review process, all have as their foremost goal the creation of a blame-free system and a neutral, nonpunitive forum for sharing and understanding sensitive data and learning from it. All individuals involved in subcommittees are required to sign a confidentiality agreement. Along with standing subcommittees, the A&HS has the built-in flexibility to form ad hoc task forces and special-request

Table 2. Accountability and Health Safety subcommittees

Safe Medication Use Subcommittee (SMU) Members: pharmacists, nurses, physicians • Reviews medication errors data to determine imminent and potential problems • Identifies and promotes safe medication use system designs and practices • Analyzes and reviews medication-related sentinel events prior to their submission to the peer review panel
Best Practices Subcommittee Members: physicians, nurses, pharmacists, risk managers, QI/PI staff • Reviews evidence-based best practices and promotes the adoption of those that are broadly accepted • Shares aggregate data with participating hospitals and providers and assists them in identifying opportunities for improved practices and procedures • A clinical process team within the subcommittee guides the clinical studies, setting target thresholds for the indicators
Patient Safety Issues Subcommittee (PSI) Members: nurses, pharmacists, risk managers, QI/PI staff, physicians • Designates selected patient safety areas (nonmedication related) as statewide priorities • Reviews and analyzes reports on all nonmedication-related sentinel events prior to submission to the PHA peer review panel
Event Reporting Task Force Members: risk managers, pharmacists, QI/PI staff, nurses • Develops online reporting tool and methodology used by health care organizations to report sentinel event information • Evaluates and streamlines reporting requirements to avoid duplicative efforts • Explores ways to facilitate and encourage intrahospital and interhospital sharing of reports to identify potential solutions

subcommittees to accomplish short-term projects. For example, the PHA Advisory Council formed the Community and Media Task Force to establish criteria for involvement of consumers and the media in PHA.

Peer review committee

Each hospital has a peer review committee, and, to maintain consistency and confidentiality, PHA requires that each participating hospital assign a peer review contact to be the hospital's liaison to PHA. The peer review contact is the main point of communication for PHA's field representative to that hospital and is responsible for transmitting the hospital's confidential data to PHA.

PHA field representatives

PHA field representatives promote and facilitate hospital involvement, give technical assistance where needed, and provide resources at the local level when

they are in short supply. This allows facilities to concentrate their efforts on the improvement process. Field representatives, who have a master's degree in nursing or public health and previous experience in hospital quality improvement, are each responsible for about 40 hospitals. Field representatives meet annually with their assigned hospitals' peer review contacts, quality teams, and other key staff to review hospitals' executive summary reports. This report includes all the data the hospital has submitted to PHA for that year, as well as comparison data from facilities of similar size, which allows benchmarking.

Examples of other technical assistance the field representative can supply upon request include

- Guidance in completing PHA self-assessments
- Interpretation of data, e.g., CARE-2 reports, and suggestions for application of findings
- Root-cause analysis and FMEA (consultation or performing the analysis)
- Research (e.g., data on fall rates or insulin error rates)
- Bulletin board tool kits (including response to special requests)
- Training on use of PHA Web site resources

Preliminary evidence of success

Awards program

PHA began its Quality and Patient Safety Awards program in 2000 as a way to recognize top performers and provide an incentive for grassroots involvement. Applicants developed and implemented initiatives proven to reduce the risk of medical errors and improve patient safety and outcomes. Winners are now selected annually in the following five hospital categories: critical access hospitals, hospitals with fewer than 100 beds, hospitals with 100–299 beds, hospitals with more than 300 beds, and hospital systems. From a modest start of 7 award applicants, hospital participation mushroomed to 28 applicants in 2002, and, a year later, to 50 award applicants, attesting to growing grassroots involvement and hospitals' confidence in their patient safety initiatives. PHA presents the annual awards at its well-attended patient safety summit, providing winners with recognition among their peers. News releases in awardees' local communities provide visible evidence of their efforts, and award winners subsequently share their best practices with other PHA member hospitals via educational teleconferences. Information about the winning projects is prominently displayed on the PHA Web site, along with contact information, which allows interested hospitals to gain additional information at any time. During National Patient Safety Week, awardees are celebrated again with a trip to the State capital to meet legislators and receive official commendations for PHA's and the hospitals' safety efforts.

Award winners have initiated a variety of programs that generally show a heightened level of commitment from both leadership and patient-care staff. One recent winner, a 250-bed hospital in a rural area of the State, implemented executive walkarounds, which focused on creating a culture of patient safety and identifying and resolving safety issues. The walkarounds were such a success that they have become a permanent component in the hospital's quality improvement feedback loop. Another awardee (a 300+ bed regional hospital) developed the Systematic Assessment of Flow and Error (SAFE) tool, which staff use to analyze care delivery processes. As a result, the hospital made improvements in numerous systems, including attaining a Safe Medication Rate approaching *Six Sigma* (a measure of quality that strives for near perfection), improving the rate of appropriate insulin dosing by 70 percent, and reducing falls by 15 percent. More detailed information about these and other award-winning programs is available on the PHA Web site.

Public reporting

As part of its community focus, PHA publishes *Insights,* a quarterly hospital-specific report that lists individual hospital participation in safety and quality initiatives. The report cites hospitals that measured in the top 10 percent and the top 50 percent of JCAHO-accredited hospitals for CQIP measures for which they submit data. Hospitals may choose to opt out of reporting data for these rankings. In 2003–2004, the large majority of hospitals in the PHA system (133 hospitals or 88 percent of members) chose to report their data, which may serve as one indication of the openness of hospitals to voluntary reporting.

Safe medication use program

The Safe Medication Use (SMU) program, which has met with enthusiastic response from participating hospitals, provides a glimpse of the progress that is possible when facilities become invested in a well-designed improvement process. PHA provides hospitals participating in the SMU program a template and structure for analyzing their internal data and developing a process improvement plan, as well as guidelines for reporting their postimplementation results.

In 2001, 137 hospitals submitted improvement plans as well as followup assessments. Review of the 2001 followup assessments found that successful hospitals had focused on a small number of specific actions and set measurable goals. First, PHA used the results from this analysis to revise the improvement plan and followup assessment questionnaires such that most questions now have standard response categories that can be quantified, and additional key questions request more detailed information. Second, the findings were presented to participating hospitals at PHA meetings and in telephone conferences in order to provide hospital staff with examples of best practices.

In 2002, 147 hospitals submitted improvement plans along with followup assessments. Among participating hospitals, 105 (73 percent) reported a decrease in the targeted medication error rate. The mean decrease was 35.8 percent. An additional 10 hospitals (7 percent) successfully increased rates of compliance with

recommended therapeutic or training guidelines. Nineteen hospitals (13 percent) saw no change or an increase in reported errors, despite their improvement plan. Only 14 hospitals (7 percent) were unable to provide a measurable outcome from their medication error improvement process.

Key elements of success

Hospitals look to PHA for both support and education of best practices. PHA staff attributes the program's success to a number of factors, which are summarized in Table 3. They cite old-fashioned principles like trust and communication combined with respect for diversity at the local level, along with creating the infrastructure and nonpunitive environment that encourages involvement of providers, staff, and administrators toward improved patient safety.

Table 3. Key elements of success

- **Trust.** Previous shared experiences and a confidential environment in which to share sensitive information foster an atmosphere of trust.
- **Stability.** Long-standing relationships with an established entity instill confidence in its viability and longevity.
- **Perspective.** Staying in tune with the environment and the issues facing the target provider increases acceptance.
- **Communication.** Proven communication channels play a key role in rallying hospitals around significant issues.
- **Infrastructure or dovetailing.** Minimizing the burden on hospitals by building on existing programs and initiatives allows immediate progress.
- **Tailoring.** Building in flexibility allows productive participation by a diverse target audience.
- **Grassroots involvement.** Involving committed staff leaders who have the respect of stakeholders facilitates buy-in at the local level.
- **Local ownership.** Empowering local teams to address their unique issues enhances learning and creates a sense of ownership of the improvement process.
- **Iterative process.** A nonpunitive environment that is based on a continuous cycle of evaluation and developing and executing action plans fosters behavior change and encourages implementation of improved procedures.

Conclusions

As a collaborative patient safety voluntary reporting program, PHA is showing promising preliminary findings with its active awards program, its public reporting initiative, and its safe medication use program, now in its third cycle, which has participation from all eligible hospitals. Most hospitals report significant improvement following implementation of their improvement plans, but not all do. Hospitals are willing to share negative findings as well as their internal assessments of the reasons behind a lack of improvement. This

willingness to participate and openness to sharing positive as well as negative results is a strong validation of the voluntary, nonpunitive reporting system.

The complexity of organizational and individual change required to move patient safety initiatives from research to implementation is always challenging, and it may be particularly so within a voluntary program.[5] The task at hand is often eclipsed by concerns regarding liability, staff turnover, tight budgets, and conflicting internal priorities; and progress can easily be derailed by any one of multiple stakeholders, each with their own ideas, agendas, and concerns. Statewide leadership, a systematic process for tailored, targeted dissemination, and support for ongoing implementation efforts may be an effective model for promoting patient safety among a diverse group of hospitals.

This process has proven to be flexible enough to meet local needs, yet structured enough to accomplish overall goals. The small successive steps that incorporate learning and making adjustments at each juncture not only can lead to system change, but can also promote sustainable grassroots involvement. The challenge remains how to implement such a program while continuing to streamline the collection of data. The most successful program gathers sufficient data to be helpful, while resisting the temptation to collect more than is necessary to effect change.

The PHA voluntary patient safety program exists in a unique environment; however, many facets may be applied in other States. The design framework of the program, including the collaboration of key constituencies and the iterative process incorporating feedback, may be readily transferable. While there is no a priori solution to the problem of facilitating change, PHA has shown that engaging health care organizations in an iterative change process, while focusing on an ultimate goal, can yield promising results.

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