

# **ADDENDUM F: 2012 Pennsylvania Patient Safety Authority Strategic Plan**

## Background and Methodology

### *A Brief Overview of the Pennsylvania Patient Safety Authority*

The Pennsylvania Patient Safety Authority is an independent state agency established under Act 13 of 2002, the Medical Care Availability and Reduction of Error (Mcare) Act. It is charged with taking steps to reduce and eliminate medical errors through the collection of data, identification of problems, and recommendation of solutions that promote patient safety in hospitals, ambulatory surgical facilities (ASFs), birthing centers, and abortion facilities. In June 2009, in compliance with additional laws passed by the legislature, the Authority began collecting healthcare-associated infection (HAI) reports from nursing homes. The Authority's role is nonregulatory and nonpunitive.

The Authority initiated statewide mandatory reporting in June 2004, making Pennsylvania the only state in the nation to require the reporting of Serious Events and Incidents (near misses). The Authority also collects Infrastructure Failure reports for the Department of Health (DOH) and forwards all Serious Event reports to DOH. Reports are submitted by facilities through the Pennsylvania Patient Safety Reporting System (PA-PSRS), which is a web-based electronic data reporting application. All reports are confidential and nondiscoverable, and they do not include any patient or provider names.

## 2007 Strategic Plan

Prior to 2007, the Authority was primarily focused on the development and implementation of PA-PSRS, data collection, analysis of collected reports, and guidance provided through the *Pennsylvania Patient Safety Advisory*. The Authority board wanted to build on those successes and have a greater impact on patient safety in Pennsylvania. Input was solicited from primary stakeholders and national patient safety experts. The Authority received valuable feedback from Pennsylvania healthcare facilities, government entities, patient safety organizations and healthcare membership organizations. Based on this information, the Authority developed a set of objectives and initiatives that were incorporated into a comprehensive strategic plan that addressed the patient safety needs of Pennsylvania's healthcare community to better protect patients.

It is important to note that the initiatives incorporated in the 2007 strategic plan did not replace the Authority's then current activities involving data collection, data analysis, and providing guidance through the *Advisory*. The 2007 initiatives were intended to build upon these successful activities to increase the Authority's role and presence in Pennsylvania patient safety. However, the board believed the Authority could make a significantly greater impact on patient safety in Pennsylvania by branching out through broader programs. Therefore, education, training, collaboration, and communications were featured more prominently in the new initiatives.

The strategic plan was approved in May 2007. The plan provided direction by identifying eleven new initiatives, most significantly resulting in the Patient Safety Liaison (PSL) program and in a large increase in educational programs. The Authority began fulfilling its mission of educating its stakeholders not only through its *Advisory* but also through its outreach and collaboration efforts. The PSL pilot program, which began in 2008, has allowed one-on-one visits to individual facilities to help tailor patient safety improvement programs. Along with the PSL program, the Authority began educating boards of trustees and top-level management through another pilot program developed in partnership with the Hospital and Healthsystem Association of Pennsylvania (HAP) and the American Hospital Association (AHA). The Authority also reached out to several state associations to provide continuing education credits for physicians, nurses, and pharmacists.

In addition, the 2007 strategic plan addressed the challenges of Act 52 of 2007 with programmatic commitments to infection awareness and reduction both in acute care and long-term care facilities. Also, the Patient Safety Knowledge Exchange (PassKey) was initiated, which created a private forum for Pennsylvania patient safety professionals and also established a common platform for nearly every statewide patient safety collaborative since that time.

Since the 2007 initiatives, the Authority has increased the number of healthcare providers trained from approximately 100 per year to over 7,300 in 2012. In total, the Authority has now published 426 *Advisory* articles, 40 patient safety toolkits, and 29 Consumer Tips reports.

## 2012 Strategic Planning

In preparing for the 2012 strategic plan, the Authority first developed the format, time frame, and location for a planning retreat. Significant effort was made to identify and retain a consultant to manage and moderate the executive retreat. Out of this process, John Deadwyler and his staff from Bernard Consulting Group LLC of Kansas City, Missouri, were selected and retained based on his substantial and highly recommended national experience with health system retreat planning.

Prior to the retreat, the consultants worked with the Authority to conduct an online survey involving members of the board, staff, and selected external stakeholders. This was performed over several weeks, and the results were summarized. Additionally, in-depth one-on-one phone interviews were conducted with 18 key stakeholders, from which the Bernard consultants transcribed notes and developed summaries. The assessment data from the surveys and interviews were developed into an executive summary of findings for use in guiding the retreat.

The retreat was held November 8 to 9, 2011, at the Radisson Hotel and Conference Center in Camp Hill, Pennsylvania. The participants included the following individuals:

Members of the Authority Board:

Stanton Smullens, MD, Acting Chair  
Gary A. Merica  
Anita Fuhrman  
Joan M. Garzarelli  
Terry Hyman, Esq.  
Lorina L. Marshall-Blake  
Cliff Rieders, Esq.  
Marshall W. Webster, MD

Hospital Association of  
Pennsylvania (HAP)  
Kelly Thompson, Esq., HAP  
Deborah Donovan, Highmark  
Inc.  
Jane Montgomery, VP of  
Clinical Services and  
Quality, Hospital Council  
of Western Pennsylvania

Authority Staff:

Michael Doering  
Fran Charney  
Laurene Baker  
Howard Newstadt  
Chris Hunt  
Megan Shetterly  
Teresa Plesce

Bernard Consulting Group:

John Deadwyler  
Denise Knight

General Counsels:

Greg Dunlap  
David Chick

ECRI Institute Staff Members:

John Clarke, MD  
Bill Marella  
Theresa Arnold  
Sharon Bradley

Stakeholder Representatives:

Kate Flynn, President, Health Care  
Improvement Foundation  
Mary Ellen Mannix, Patient Advocate  
Allen Vaida, PharmD, Exec. VP,  
Institute for Safe  
Medication Practices  
Daniel Glunk, MD, President,  
Pennsylvania Medical  
Society (PMS)  
Amy Green, PMS  
Carolyn Scanlan, President and  
CEO, Healthsystem and

In addition, there were three featured speakers:

Ronni Solomon, Esq., ECRI Institute executive vice president and counsel, presented “The Federal Landscape in Patient Safety” and “Getting to the Root: It’s the Why, not the What.”

John O’Brien, field director at the Centers for Medicare and Medicaid Services (CMS), presented on CMS quality initiatives, including hospital readmission charges, raising the floor, raising the bar, and smooth transitions between care centers.

Diane Pinakiewicz, president, National Patient Safety Foundation and the Lucien Leape Institute, gave an enlightening talk on the value proposition of the accountable care organization movement.

The remainder of the two-day retreat was spent developing the critical issues and strategic directions that will be discussed in the following sections.

### **Critical Issues**

The primary output from the strategic planning exercises was the identification and development of critical issues facing the Authority and strategic directions that should be taken by Authority staff to address the critical issues. The critical issues and their associated strategic directions follow.

**CI-1: How can we best measure the Authority’s effectiveness in improving safety?**

Current Situation: Since launching its reporting program in 2003, the Authority has sought reliable means of measuring the safety of Pennsylvania healthcare facilities. Reporting patient safety events is not a goal in its own right. Rather, it is a means to an end: we report and analyze these events in order to reduce or prevent patient harm. We also recognize that reporting, by itself, is not sufficient to improve safety. Analysis of the reports must lead to actionable guidance that will improve the safety of the healthcare system if it is adopted and executed by healthcare providers. Gauging the Authority’s effectiveness in meeting its ultimate goal of improving patient safety requires the monitoring of safety-related measures that are valid and reliable.

SD 1-1 Demonstrate the progress of the Authority in improving patient safety.

**CI-2: How do we bring consistency to reporting among the Authority, DOH, and healthcare facilities?**

Current Situation: Since healthcare facilities began using PA-PSRS to submit reports to the Authority and DOH, the volume of reports submitted has varied considerably among facilities even after adjusting for the type of facility and the volume of healthcare services delivered. Even among hospitals of similar size and type, there can be a 40-fold difference in reporting volume. We believe this reflects more on the facilities’ cultures than on actual

differences in their safety of this magnitude. The Authority has documented this variation in its annual reports and in communications with the healthcare facilities. The sources of this variation include legitimate differences of opinion about the meaning of “unanticipated injury” in the Serious Event definition, confusion over when complications should be considered unanticipated, and conflicting guidance from DOH surveyors. Because DOH, as the regulator of these facilities, is responsible for enforcing Mcare Act reporting requirements, the Authority is more likely to succeed with clarifying the reporting requirements with DOH’s agreement and cooperation.

SD2-1 Renew efforts with new leadership at DOH to resolve issues around reporting consistency and recommendations.

SD2-2 Examine existing Authority processes and tools for enhancing consistency.

SD2-3 Ensure reliability of HAI data reported into PA-PSRS from nursing homes.

### CI-3: How do we mutually engage patients and providers in patient safety?

Current Situation: The Authority’s mission is to reduce and eliminate medical errors to improve patient safety. To the extent the Authority achieves this mission, patients and their families are the principal beneficiaries of its efforts. The activities that the Authority is charged with under the Mcare Act, however, focus on interaction with healthcare providers and healthcare facilities. The board of directors has determined the Authority can improve its effectiveness by making patients influential stakeholders, by giving patients an active voice in its priorities, and by incorporating patient perspective into its activities. We will seek to build on our existing efforts to encourage patients to be more active participants in their care.

SD3-1 Increase the level of patient involvement in how the Authority carries out its mission.

### CI-4: How do we strategically align ourselves with healthcare priorities and trends critical to patient safety?

Current Situation: While the Authority collects a broad range of patient safety data as mandated by our authorizing legislation, the Authority places special emphasis on selected topic areas based on patterns and trends in the reports we receive from Pennsylvania facilities but also based on issues raised in the broader health industry and the national patient safety community. Our educational and collaborative projects are informed by the frequency and severity of events reported to us, but we also try to align with national priorities such as the National Quality Forum Serious Reportable Events, payer policies of nonpayment for selected adverse events, and the CMS Hospital Engagement Network (HEN).

SD4-1 Position the Authority as a recognized resource for patient safety issues supported by data.

SD4-2 Determine the Authority’s role in identifying patient safety opportunities associated with new care trends through our reports and related research.

SD4-3 Identify opportunities to supplement Authority data with other data sets that capture rates.

**CI-5: How do we learn to effectively influence facilities and providers to implement our recommendations?**

Current Situation: The Authority is charged with reducing medical errors by collecting reports of adverse events and publishing the results of our analyses. These analyses include guidance from the peer-reviewed clinical literature, relevant professional societies, and healthcare facilities themselves regarding the best practices to implement, where these are known, and how to implement them. Our guidance was initially provided solely through the *Advisory*, and we later developed the PSL program, modeled after the practice of academic detailing, to encourage adoption of that guidance. We further expanded our activities into voluntary, multifacility collaboratives to leverage facilities' own native interests to reduce certain types of events.

SD5-1 Identify barriers to implementation of best practices to prevent patient safety events.

SD5-2 Develop and implement strategies based on information obtained to encourage behavioral change that sustains preventing wrong-site surgeries.

SD5-3 Incorporate business case methodology and value analysis into implementing our guidance.

SD5-4 Consider partnering with others (those who also have levers) to develop effective implementation mechanisms. This might include payers, regulators, facility boards' quality chairs, and provider educators.

SD5-5 Mature our system for recommendations as stipulated under Act 13.

SD5-6 Evaluate the effectiveness of our implementation strategies.

SD5-7 Encourage transparent collaboration.

It is important to note that the results of the board's strategic planning effort do not drastically modify the current direction of the Authority. In addition, the board does not wish to curtail the Authority's current programs that were approved by the board in the 2007 strategic plan, and which the board and strategic planning participants believe have proven to be valuable to patient safety in Pennsylvania's patient safety community. The results of the strategic planning exercise appear to be additive to the Authority's current work and direction. The critical issues, strategic direction, and the initiatives identified in this plan, to a large degree, optimize the current activities. As pictured in Table 1, the critical issues apply to the Authority's primary areas of emphasis as identified in the 2007 strategic plan.

**Table 1. Intersection of Current Activities and New Strategic Direction**

<b>Critical Issue</b>	<b>Data Collection and Guidance</b>	<b>Education</b>	<b>Collaboration</b>
1. How can we best measure the Authority’s effectiveness in improving safety?	Yes		Yes
2. How do we bring consistency to reporting among the Authority, DOH, and healthcare facilities?	Yes	Yes	
3. How do we mutually engage patients and providers in patient safety?	Yes	Yes	Yes
4. How do we strategically align ourselves with healthcare priorities and trends critical to patient safety?	Yes	Yes	Yes
5. How do we learn to effectively influence facilities and providers to implement our recommendations?	Yes	Yes	Yes

**New Initiatives and Projects Descriptions**

Based on the critical issues and strategic direction identified by the board, Authority staff have outlined nine initiatives, or projects, that will be pursued to implement the board’s strategic direction.

1. Work with DOH to Clarify Reporting Standards and Develop Recommendations Protocols
2. Standardize Specific Patient Safety Events in Selected Clinical Areas and Monitor Low-Volume Reporters
3. Measure Progress and Quantify Benefits
4. Validate and Analyze Nursing Home HAI Data, and Develop and Implement Improvement Strategies
5. Review National Patient Safety Priorities, Common Formats, and Health Information Technology (IT)
6. Increase Integration of Patient Voice into Authority Activities
7. Develop Strategic Partnerships
8. Execute HEN Collaboratives
9. Design PA-PSRS Data Warehouse to Improve Data Accessibility

Table 2 represents how the strategic directions align with the projects identified by staff. Detailed descriptions of each project follow.

**Table 2. Intersection of Strategic Directions and Projects**

Project	Strategic Directions														
	1.1	2.1	2.2	2.3	3.1	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	5.6	5.7
1 – Work with DOH		X	X				X						X		
2 – Standardize Events	X	X	X	X		X		X							
3 – Measure Progress	X		X	X		X		X			X		X		
4 – Nursing Home HAI Improvement	X	X	X	X		X	X	X	X		X	X			
5 – National Priorities	X		X		X	X	X	X				X			
6 – Patient Voice			X		X		X		X			X			
7 – Strategic Partnerships					X	X	X	X		X	X	X	X		
8 – HEN Collaboratives	X		X				X		X	X		X	X	X	X
9 – Data Warehouse			X	X		X		X						X	

Project 1: Work with DOH to Clarify Reporting Standards and Develop Recommendations Protocols

**Strategic Directions**

SD 1.1	SD 2.1	SD 2.2	SD 2.3	SD 3.1	SD 4.1	SD 4.2	SD 4.3	SD 5.1	SD 5.2	SD 5.3	SD 5.4	SD 5.5	SD 5.6	SD 5.7
	X	X				X						X		

Objectives

1. Improve patient safety event reporting standardization
2. Foster similar interpretation of reporting requirements for all constituencies, including:
  - a. Facilities
  - b. DOH surveyors
  - c. Authority PSLs and analysts
3. Promote improved/appropriate use of reported data
4. Review requirements of Act 13 of 2002, which address recommendations to DOH and determine appropriate methodology and protocol
5. Comply with Act 52 of 2007 regarding hospital-acquired infection duties and responsibilities

Structure

The overall collaborative project will be led by Anna Marie Sossong of DOH and Mike Doering of the Authority. They will convene a meeting of key project staff at least monthly to discuss project direction and to review progress.

The collaboration will begin with a patient safety data summit. The objective of this summit will be to identify the goals and objectives of the collaboration, identify data uses and needs, and get collaboration participants on the same page.

Work will be divided into several subprojects. Objectives and activities will be assigned to each subproject team. A project work plan will be developed for each subproject team. The work plan will identify activities, responsibilities, project milestones, and timing. Teams will be given overall guidance regarding expected results and priorities but will be free to develop appropriate project work plans. Teams may include representatives from other organizations or facilities, when appropriate and with consent of overall project leaders. Progress will be determined through assessment of whether project milestones are being reached in timely manner.

Individual sub-projects will be segregated as follows:

1. Data Summit and Project Kickoff
2. Reporting and Standardization
3. Education and Training
4. Facility Reporting, Including Nursing Home HAI Reporting
5. Recommendations Policy and Process
6. IT Development

## Activities and Responsibilities

### *Data Summit and Project Kickoff*

This meeting will serve as a project kickoff and set the stage for the ongoing collaboration project. Specific activities to be conducted in this meeting include the following:

1. Review of PA-PSRS's current state
  - a. Data fields
  - b. Data flow
  - c. Data uses
    - i. Authority
    - ii. DOH
2. Describe objectives for future data use
  - a. DOH
    - i. Act 13
    - ii. Act 52
  - b. Authority
3. Identify potential PA-PSRS modifications that would assist DOH and the Authority with data analysis
4. Identify other applications or processes that would enable DOH and the Authority to perform appropriate analysis
5. Provide an overview of collaboration project objectives and preliminary timelines
6. Lay out objectives for ongoing project teams

## Reporting Standardization

The reporting standardization team will focus on the following activities:

1. Review of the 12 principles for Serious Event reporting, suggesting changes, and confirming final
2. Review of Infrastructure Failure reporting and development of detailed guidance regarding what should be categorized and submitted by facilities as an Infrastructure Failure

3. Work on any other initiatives that may improve reporting standardization (e.g., review the Authority's process for low-reporting-volume facilities)

### Education and Training Team

The education and training team will focus on the following activity:

1. Based on the output of the reporting standardization team, develop and conduct education program to synchronize reporting standards between DOH surveyors, Authority PSLs and analysts, and reporting facilities

### Facilities Reporting Team

This project team will focus on the following activities:

1. Support nursing home reporting
  - a. Modify PA-PSRS to improve reporting accuracy (currently, the Authority is planning an upgrade to include business rules for limiting and identifying reporting errors based on requests by DOH)
  - b. Determine what data should be provided to nursing homes, appropriate media for content delivery, and sources (DOH or Authority)
  - c. Monitor federal plans to require nursing home HAI reporting, determine impact on Pennsylvania, and suggest appropriate action to minimize the burden on nursing home facilities
2. Appropriately use the statewide HAI advisory panel managed by the Authority
3. Address special issues created by National Healthcare Safety Network (NHSN) reporting requirements

### Recommendations Policy and Process Team

The recommendations team will focus on the following activity:

1. Develop policies and processes related to Act 13 of 2002 referring to recommendations

### IT Development

Depending on the outcome of the data summit and other subprojects, there may be modifications to make to PA-PSRS so that DOH and the Authority can optimally use the system. This will become clearer as the project progresses.

**Project Timeline**

	2013												2014											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Data Summit and Project KO			X																					
Reporting Standardization																								
12 Principles																								
IF Definition Etc.																								
Others																								
Education and Training																								
HAI Reporting																								
Recommendations Pol & Proc																								
IT Development																								

**Project Resource Requirements—Staffing**

It is estimated that all work can be completed with the current complement of Authority staff. The training and education component may require a significant amount of time during the first three months of 2014 as staff and reporting facilities are trained regarding the updated reporting expectations. Staff time requirements will depend on the extent of electronic distance learning used as opposed to in-person regional training. The Authority anticipates a combination of learning modalities at this time.

**Project Resource Requirements—Additional Funds**

Additional funds requirements related to the subprojects are as follows:

1. Data Summit and Project Kickoff—The Authority may experience minimal additional costs associated with meeting support.
2. Reporting and Standardization—The Authority may experience minimal additional costs associated with meeting support and travel.
3. Education and Training—Funding requirements will depend on the extent of electronic distance learning used as opposed to in-person regional training. The Authority anticipates a combination of learning modalities at this time.
4. HAI Reporting—Additional funding is already included in FY 12-13 budget.
5. Recommendations Policy and Process—No anticipated costs are associated with this subproject.
6. IT Development—Significant costs could be associated with this subproject. Initial estimates show a range of \$200,000 to \$350,000. However, these costs will not be clarified until after the data summit/project kickoff has been conducted and the other subprojects are under way.

Project 2: Standardize Specific Patient Safety Events in Selected Clinical Areas and Monitor Low-Volume Reporters

**Strategic Directions**

1.1	2.1	2.2	2.3	3.1	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	5.6	5.7
X	X	X	X		X		X							

Objectives

1. Standardize reporting criteria
  - a. Identify a minimum of seven common patient safety issues for which reporting to the Authority can be/has been standardized
  - b. Use denominators/rates (where appropriate)
  - c. Give priority to areas in which PSRS reports can be relied on for valid measures of improvement
  - d. Develop report outlining findings and next steps
2. Monitor and provide feedback to low-volume reporters
  - a. Follow process annually to identify facilities meeting criteria
  - b. Issue letters providing feedback
  - c. Provide PSL intervention

Structure

This project will be led by the manager, clinical analysis, and draw on the expertise and effort of the director of education, PSLs, and analysts. This project will be pursued with guidance from the committee on reporting standardization developed with DOH and with input from Pennsylvania healthcare facility representatives.

Activities and Responsibilities

*Standardizing the Interpretation of Mcare Act Reporting Requirements*

The Authority will work with the committee on reporting standardization to develop a consensus on principles of interpretation for the Mcare Act reporting requirements. These principles will be based on a set of principles adopted by the Authority board and may be refined and augmented by the process outlined here. After agreeing on a set of principles, the Authority and DOH will jointly promulgate them through education of both healthcare facility officials and DOH surveyors. The Authority will take the lead on this educational effort. The Authority will continue to monitor the variation in reporting among facilities to determine the impact of adopting these principles.

### *Standardizing Reporting in Selected Clinical Areas*

The Authority is deeply invested in its mission of reducing medical errors but acknowledges the limitations of reporting systems on their own as reliable indicators of improvement. While no system of measurement is perfect, the Authority believes it is possible to improve the reliability of PA-PSRS reporting in selected clinical areas where consensus definitions of the adverse event are available and their occurrence is objective. For example, the clinical criteria for infections have been standardized, and the Authority has enlisted the support of half of the hospitals in the state who have voluntarily agreed to standardize their definition of falls and falls with harm.

This project will expand on this work by:

1. Identifying criteria for good candidate areas for standardization
2. Developing a list of candidate topics and preliminary definitions
3. Obtaining staff and stakeholder feedback
4. Summarizing the results and next steps in a brief report

Other areas amenable to standardization will be considered for incorporation into a statewide patient safety measurement strategy that will attempt to provide a summary view of the extent to which patient safety is improving in Pennsylvania healthcare facilities.

### Monitor Low-Reporting-Volume Facilities

The Authority has established an annual process for identifying facilities whose reporting patterns suggest disengagement or ignorance of the reporting requirements. The Authority provides feedback to the patient safety officer on their reporting rates compared with those of other facilities like theirs and offers assistance from their PSL. The results of this outreach are analyzed and communicated to the board.



2. Draw on multiple data sources to measure safety over time, including PA-PSRS and NHSN where reporting can be standardized (see project 2)
3. Consider the outcomes of Authority-sponsored multifacility collaboratives and administrative data from CMS and the Pennsylvania Health Care Cost Containment Council (PHC4)
4. Develop quantitative measures that communicate the human and economic impact of safety improvements made in Pennsylvania healthcare facilities

## Structure

This project will be led by a dedicated patient safety analyst who will work with a data analyst; their work will be informed by input from internal and external stakeholders throughout the process.

## Activities and Responsibilities

### *Define criteria for good candidate measures:*

While the field of healthcare quality measurement has matured substantially over the past two decades, the subset of measures related to safety are more controversial. Areas of disagreement include the reliability and validity of different data sources, whether different types of adverse events are preventable, and whether appropriate risk adjustment models are available. Any measures must be evaluated for reliability, validity, feasibility of collection, and applicability to a broad patient population. Other considerations may include whether PA-PSRS or NHSN can collect the required information, whether appropriate denominator information can be obtained, whether reporting in that area can be standardized, and whether the measure is already in use among Pennsylvania healthcare facilities.

### *Develop list of candidate measures and preliminary specifications:*

Conduct searches of relevant measure repositories, including the National Quality Measures Clearinghouse, and databases from major measure promulgators, such as the National Quality Forum, Joint Commission, CMS, and others. Consider measures available from existing public data sources, such as Hospital Compare, Nursing Home Compare, Agency for Healthcare Research and Quality (AHRQ) Patient Safety Indicators, and PHC4. Consider whether necessary data can be or already is collected in PA-PSRS or NHSN. Consider other safety measurement programs and tools, such as The Leapfrog Group, the Medicare Patient Safety Monitoring System, the National Healthcare Quality and Disparities Report, and Institute for Healthcare Improvement Global Trigger Tools. Consider measures used in existing Authority collaborative or educational efforts, including HAIs, wrong-site surgery, falls, and others. Develop a catalog of candidate safety measures identifying the

measure, basic specifications, measure developer and endorsers, and sources of necessary data. Evaluate candidate measures along the dimensions defined in the previous task.

*Obtain staff and stakeholder feedback:*

Conduct a review of the candidate measures with the Authority board and staff and external stakeholders, including relevant provider associations and facility representatives, external patient safety and/or quality measure experts, and other agencies.

*Develop measurement strategy:*

Incorporate reviewers' feedback into a safety measurement plan. This plan should address measures that could be implemented quickly and others that might be phased in over time. Develop a prototype safety dashboard incorporating measures based on readily available data. Identify significant changes to processes, staffing, activities, or infrastructure that would be necessary to implement recommended measures (e.g., statistical consultants for complex risk adjustment, changes to PA-PSRS to collect new data). This includes schedules and work plans for accomplishing these changes. Present this plan to the Authority board.

*Operationalize measurement strategy:*

Subject to the board's agreement, implement and maintain the measurement strategy outlined in the plan above.

Project Timeline

The timeline presented here depends on the timely completion of predecessor tasks in project 2 and the hiring of a dedicated patient safety analyst and data analyst.

	2013				2014				2015														
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N
Define criteria for candidate measures																							
Develop list/specifications for candidate measures																							
Obtain staff & stakeholder feedback																							
Develop measurement strategy																							
Operationalize measurement strategy																							

## Project Resource Requirements—Staffing

Standardizing reporting and developing and executing a measurement strategy for the state will require additional dedicated resources of a patient safety analyst and a data analyst (2.0 FTEs).

## Project Resource Requirements—Additional Funds

The additional analyst staffing resources described above are estimated to cost \$400,000 per year.

### Project 4: Validate and Analyze Nursing Home HAI Data, and Develop and Implement Improvement Strategies

#### Strategic Directions

1.1	2.1	2.2	2.3	3.1	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	5.6	5.7
X	X	X	X		X	X	X	X		X	X			

## Objectives

1. Develop approach for adapting to federal HAI surveillance goals
2. Identify areas for improvement in nursing homes' infection prevention plans, policies, and procedures; infection surveillance; reporting; and other areas; and develop an HAI reduction initiative for long-term care
3. Work with DOH Healthcare Associated Infection Prevention (HAIP) Section to improve nursing home data quality

## Activities and Responsibilities

### *Adapt to federal HAI surveillance goals:*

When Act 52 of 2007 charged the Authority and DOH with implementing HAI reporting in nursing homes, there were no large-scale HAI commercial or public surveillance systems capable of meeting the law's requirements. The Authority met these requirements by developing a nursing home module for PA-PSRS. Recently, the Centers for Disease Control and Prevention released a nursing home module for their NHSN system, which is used by acute care facilities nationwide for HAI surveillance. Forms for only two infection types have been released, but others will follow in the coming years. Concurrently, the national panel responsible for developing consensus standards for HAI criteria for long-term care has issued revisions to the McGeer criteria. The Authority, in conjunction with DOH and the HAI advisory panel, must determine how to adapt to these developments.

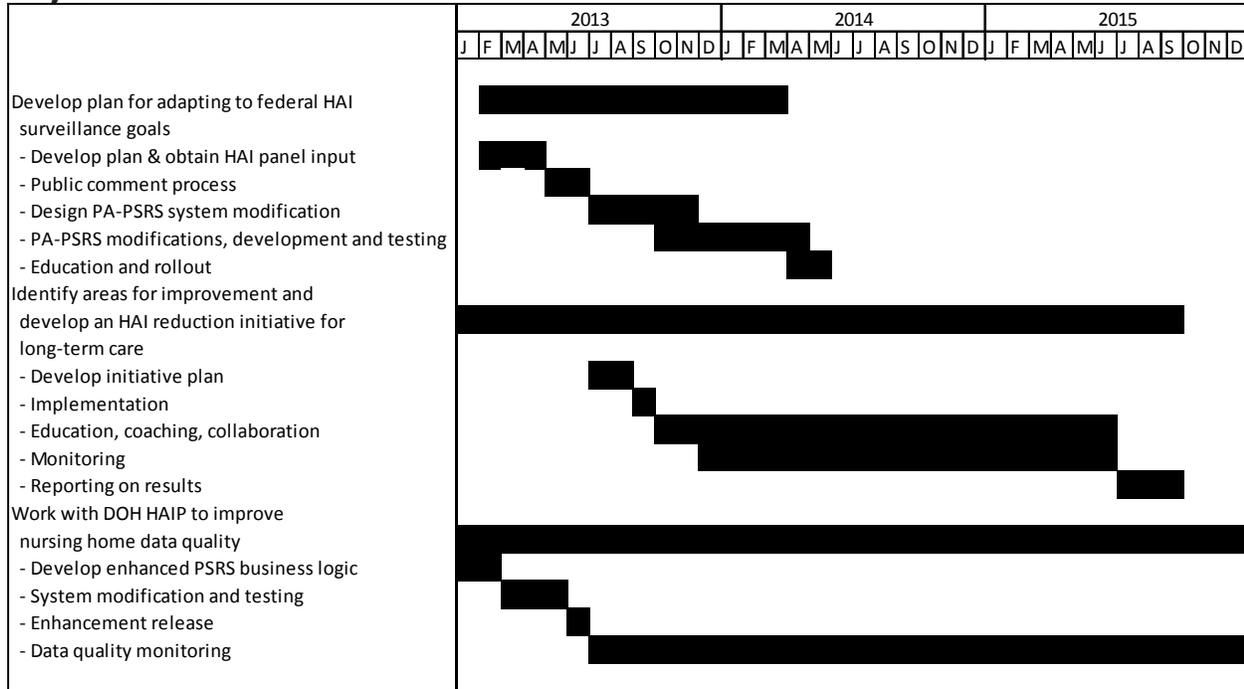
*Identify areas for improvement, and develop HAI reduction initiative for long-term care:*

The Authority will develop a collaborative and coaching program for nursing homes to reduce infections by adopting or improving many of the practices identified in its recent study, "[Impact of Implementation of Evidence-Based Best Practices on Nursing Home Infections](#)." The targeted infection type will be selected based on the frequency and severity of infections reported in long-term care and the availability of evidence-based practices to make measurable improvement. Leaders from among the long-term care community will be enlisted as expert faculty in helping the Authority to spread best practices, and we will also work with DOH to leverage synergies between both agencies' efforts.

*Work with DOH HAIP on nursing home data quality:*

The Authority and DOH have already initiated discussions on how to improve nursing home data quality, and this will be taken up by the interagency HAI work group. Over the past year, the Authority conducted a pilot study among nursing homes with high and low infection rates and found a number of differences in HAI prevention practices contributed to differences in observed infection rates, and there was no evidence of systematic under-reporting among nursing homes with low rates. This project will continue work on ensuring data quality by developing business logic in PA-PSRS that prevents nursing home users from making definite data entry errors and provides them with warnings about possible errors and omissions. DOH has been performing this work manually, sending nursing homes periodic data integrity and validation (DIV) reports. The Authority will automate this process, building the DIV criteria into PA-PSRS, preventing some errors and highlighting others. Nursing homes will be able to run their own DIV reports from within PA-PSRS in real time, enabling them to check immediately that their changes have eliminated identified problems.

## Project Timeline



## Project Resource Requirements—Staffing

The projects outlined above will require the addition of at least one infection preventionist (1.0 FTE) in order to accomplish the nursing home collaborative project while continuing existing HAI activities. The two PA-PSRS system modification efforts can be supported by existing clinical and IT staff provided there are no other concurrent IT development efforts. If other IT development efforts must be pursued concurrently, this will necessitate the addition of a business analyst at HP.

## Project Resource Requirements—Additional Funds

Additional funding will be required to hire a third infection preventionist and to bring on additional IT staff, if necessary. This cost is estimated to be approximately \$130,000 per year.

### *Project 5: National Patient Safety Priorities, Common Formats, and Health IT*

#### Strategic Directions

1.1	2.1	2.2	2.3	3.1	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	5.6	5.7
X		X		X	X	X	X				X			

## Objectives

1. Commission independent evaluation to determine degree of alignment between Authority initiatives and national patient safety priorities
2. Identify any gaps in Authority's portfolio compared with other state patient safety programs and HHS-certified patient safety organizations
3. Identify what roles Authority could play with respect to patient safety problems with health IT
4. Evaluate the pros and cons associated with the Authority adopting and transitioning to or mapping to the AHRQ Common Formats for Patient Safety Data Collection and Event Reporting and estimate resource and/or schedule requirements
5. Identify opportunities to use the Authority's research and expertise to provide the "how" on areas covered by federal and accreditation initiatives

## Structure

The purpose of this project is to determine the extent to which the Authority's focus and activities are aligned with national patient safety priorities and broader trends in the healthcare industry and in healthcare delivery. In particular, the evaluation will address both positive and negative considerations for whether the Authority should transition PA-PSRS to adopt the AHRQ Common Formats. The evaluation will also address what roles the Authority might play in improving the safety of health IT. The Authority's initial study of health-IT-related adverse events from PA-PSRS was cited in the Office of the National Coordinator's (ONC) recent [Health Information Technology Patient Safety Action and Surveillance Plan](#), and the Authority spoke with ONC about the potential for future collaboration. We will also explore how PA-PSRS might be modified to collect information about health IT. While the board and staff aim to keep the agency aligned with national priorities, it is advisable to seek an independent evaluation from an objective third party.

## Activities and Responsibilities

### *Develop scope of work and identify potential bidders*

ECRI Institute will lead the development of the scope of work, identify potential contractors, and identify the format of the procurement. ECRI Institute will issue a request for proposals (RFP).



Project 6: Increase Integration of Patient Voice into Authority Activities

**Strategic Directions**

1.1	2.1	2.2	2.3	3.1	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	5.6	5.7
		X		X		X		X			X			

Objectives

1. Increase the level of patient involvement in how the Authority carries out its mission
2. Create a diverse patient-centered advisory council
3. Identify and test targeted strategies to engage providers and patients to implement recommendations of the Authority
4. Utilize information derived from the patient advisory council to guide future direction and initiatives for the Authority to improve patient safety
5. Seek out funding opportunities (within our statutory obligations) to expand our reach (e.g., grants)

Structure

The Authority will develop and manage a patient-centered advisory council. The advisory council could consist of representatives of the following:

1. Facilities or systems that have demonstrated a deep commitment to the patient voice
2. Patient advocacy groups
3. Patient advocacy individuals
4. Existing patient organizations (e.g., disease management organizations)
5. Other Pennsylvania state agencies such as DOH and or PHC4
6. Pennsylvania and or federal insurers
7. AHRQ
8. Facility-based associations

The advisory council will also include Authority staff, including:

1. Director of educational programs
2. Director of communications
3. PSL
4. ECRI-based patient safety analyst

The first order of business for the advisory council will be to develop a mission and framework that is consistent with the board’s objectives. Ongoing activities of the advisory council could consist of the following:

1. Kickoff meeting to develop understanding of the role of the advisory council and to fully understand the current activities of the Authority
2. Review of current Authority activities and identify potential enhancements
3. Identification of specific projects that could be undertaken by the Authority
4. Assisting HEN projects with understanding and implementing patient voices
5. Providing feedback on specific topical areas of interest to the Authority
6. Providing an annual update to the Authority board

**Project Timeline**

	2013												2014											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
Program Development																								
Populate Advisory Council																								
Advisory Council Kick-off																								
Develop Plan																								
Review Current Activities																								
Identify potential enhancements																								
Identify potential additional projects																								
Develop final plan																								
Assist PA HEN projects																								
Update Authority Board																								
Assist with implementation																								
Evaluate improvement																								
Repeat process																								

Project Resource Requirements—Staffing

It is estimated that some of the work can be completed with the current complement of Authority staff. However, it is estimated that management of the advisory council will require Authority resources that exceed that of the resources required to manage the HAI advisory panel. The director of educational programs, director of communications, PSLs, administrative staff, and ECRI-Institute-based patient safety analysts will all have roles with the advisory council. Staff estimates additional time will represent approximately 0.25 FTE annually.

## Project Resource Requirements—Additional Funds

Additional funds requirements related to the project are as follows:

1. Kickoff and ongoing meetings for Authority staff and advisory council members. In addition to conference rooms and supplies, the majority of costs will be associated with travel for advisory council members who may be domiciled throughout Pennsylvania. Costs are anticipated to be approximately \$25,000 per year.

### *PROJECT 7: DEVELOP STRATEGIC PARTNERSHIPS*

#### **Strategic Directions**

<b>1.1</b>	<b>2.1</b>	<b>2.2</b>	<b>2.3</b>	<b>3.1</b>	<b>4.1</b>	<b>4.2</b>	<b>4.3</b>	<b>5.1</b>	<b>5.2</b>	<b>5.3</b>	<b>5.4</b>	<b>5.5</b>	<b>5.6</b>	<b>5.7</b>
				X	X	X	X		X	X	X	X		

### Objectives

1. Use partnerships to effectively advance the Authority's mission

### Structure

The Authority is currently in formal and informal partnership with many other entities. However, there has been no strategic focus placed on the partnership portfolio. Before additional activities can be conducted, the Authority must identify all current partnerships. Authority staff will perform an inventory and analysis of the current partnership relationship. Ensuing board discussion will identify continued activities related to this project.

### Activities

- Develop inventory of current relationships
- Identify potential gaps
- Report findings to the board

**Project Timeline**

	2013												2014											
	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
	Inventory and document current partnerships																							
Develop report																								
Review with PSA Board																								
Determine further action																								

**Project Resource Requirements—Staffing**

This project can be conducted using current Authority and contract staff.

**Project Resource Requirements—Additional Funds**

No additional funds are required, as work can be completed using current staffing complement, and there are no foreseen expenses associated with this project.

*PROJECT 8: EXECUTE HEN COLLABORATION PROJECTS*

**Strategic Directions**

SD 1.1	SD 2.1	SD 2.2	SD 2.3	SD 3.1	SD 4.1	SD 4.2	SD 4.3	SD 5.1	SD 5.2	SD 5.3	SD 5.4	SD 5.5	SD 5.6	SD 5.7
X		X				X		X	X		X	X	X	X

Special note: The Pennsylvania HEN projects were just getting under way when the Authority conducted the strategic planning sessions. However, the board determined the HEN projects were a significant new portion of the ongoing operation and fit nicely with the board’s strategic direction. The HEN projects are the first instance in which the Authority is receiving revenue from a third party not connected with facility assessments. The Authority operates the HEN projects as a subcontractor to HAP, which is the primary contractor to CMS.

**Objectives**

1. The overall objective for the HEN project is to reach a 40% decrease in preventable hospital-acquired conditions and a 20% reduction in readmissions.

2. Achieve 20% reduction in falls with harm for hospitals participating in the HEN falls immersion initiative.
3. Achieve 20% reduction in wrong-site surgery for facilities participating in the wrong-site surgery HEN immersion project.
4. Achieve significant reduction in adverse drug events associated with opioids.
5. Provide a patient safety education program to all HEN hospitals that choose to attend.
6. Support all HEN projects with educational opportunities.
7. Support all HEN projects through use of PassKey as the project's collaboration and sharing application (currently supporting approximately 1,800 project participants).

## Structure

The Pennsylvania HEN is funded by CMS with HAP as the primary contractor. There are 10 projects representing hospital-acquired conditions identified by CMS and wrong-site surgery. The Authority manages projects for falls, wrong-site surgery, and opioids. In addition, the Authority provides educational opportunities for all HEN hospitals. Currently, there are 137 hospitals in the HEN. There are 131 facilities participating in the Authority's three projects.

The Authority's program is managed by the executive director. A significant number of Authority staff have been assigned to the projects.

Activities conducted by the individual project teams are numerous and diverse, and they include, but are not limited to, the following:

1. Modify PA-PSRS to allow for standardized falls reporting and provide a new set of specific falls user reports
2. Participate in facility recruitment
3. Maintain PassKey sites
4. Conduct organizational assessments
5. Conduct knowledge assessments
6. Conduct point-prevalence assessments
7. Determine process and outcome measures and rates
8. Conduct training and education
9. Conduct in-person learning and collaboration events
10. Provide toolkits and educational materials
11. Conduct numerous webinars and conference calls
12. Develop and submit monthly, quarterly, and annual status reports to CMS through HAP
13. Update the Authority board periodically

## Project Timeline

The work plans for the HEN projects are complex and very detailed to a level that goes beyond what has been presented in this plan. The planned activities are far too numerous to present here. The projects will continue as planned.

## Project Resource Requirements—Staffing

Staffing resources for the HEN projects are significant. However, these resources are, to a large extent, covered by revenues the Authority receives from CMS by way of HAP. The current funding stream will continue through December 2013. If HAP is able to secure a third year of funding from CMS, the projects will continue through 2014. If a third year of funding is not received, the Authority will direct resources to other project areas and may be forced to decrease staffing to some degree. However, the majority of the staff working on the project has been assigned to the project in lieu of other Authority activities.

## Project Resource Requirements—Additional Funds

Please see section immediately above.

### *PROJECT 9: PA-PSRS DATA WAREHOUSE TO IMPROVE DATA ACCESSIBILITY*

#### **Strategic Directions**

1.1	2.1	2.2	2.3	3.1	4.1	4.2	4.3	5.1	5.2	5.3	5.4	5.5	5.6	5.7
		X	X		X		X						X	

## Objectives

1. Perform additional analyses to more finely identify and communicate the benefits of a PA-PSRS data warehouse that would allow facilities, PSLs, PA-PSRS analysts, and potentially DOH to do more sophisticated analyses of data
2. Develop high-level system requirements
3. Develop plan for data warehouse development, including detailed schedule and resource needs
4. Perform complete development, testing, deployment, and operations/maintenance

## Structure

This project will be led by the IT development team at HP, will have oversight by the PA-PSRS program director, and will have input from multiple internal and external stakeholders. Stakeholders in the PA-PSRS data warehouse include Authority PSLs, analysts, administrative staff, DOH staff, facility patient safety officers, and other facility users. This project will focus on developing a data warehouse for events from acute-care facilities, though a data mart for nursing homes may be evaluated in the future.

## Activities and Responsibilities

### *Obtain stakeholder input and develop more detailed needs assessment*

While internal Authority and DOH users will benefit from the development of the data warehouse, we want to further investigate the potential use of the data warehouse by facilities. Electronic patient safety reporting systems are now widespread among hospitals, and those that have them may perform these types of analyses in their local system. However, we also are aware that a significant number of facilities utilize PA-PSRS as their sole patient safety data repository. We also need to determine how the facilities believe they would utilize the new capabilities. Input should be solicited through structured interviews and surveys of potential end users.

### *Develop high-level requirements and obtain Authority approval to proceed*

Preliminary functional requirements will be developed by stakeholder groups. Different groups may warrant different functionality; for example, it may not be necessary to deidentify reports in a data mart used by Authority staff, while this would be a requirement for facility users. The requirements will address use case scenarios, features to be supported (including free-text searching), and security requirements unique to each user group. Preliminary system functional requirements will be accompanied by detailed resource requirements, effects on staffing and budget, and a finalized schedule. Authority approval will be obtained before proceeding.

### *Future tasks*

Assuming Authority approval is granted after design review and resource requirements are addressed, HP will begin system development, testing, and implementation. Documentation will be developed including user instructions and an online training curriculum. Once implemented, the system will require its own dedicated support and maintenance resources.





(page left intentionally blank)