Promoting Patient Safety Through Data Collection, Analysis and Guidance

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Patient Safety Authority Background

Act 13 (March 2002)

- 11-member Board appointed by the Governor and General Assembly
- Independent Agency
- Non-regulatory
- Dedicated Funding Stream
- Contract with outside entity to collect, analyze and evaluate reports of Serious Events and Incidents and identify trends
- Advise and issue recommendations for changes and improvements in healthcare practices (Advisories)
- Focused education, research and collaboratives

PA - Reporting Components

Who Reports	Types of Events	Other Considerations
Hospitals	**Near-Misses** ("Incidents")	**Mandatory**
Ambulatory Surgical Facilities	**Adverse Events** ("Serious Events")	**No Individual Identifying Data**
Birthing Centers	**Infrastructure Failures**	**Confidentiality Provisions**
Certain Abortion Facilities		**Non-discoverable**
Nursing Homes (Early 2009)		**Whistleblower Protections**
		Facility assessment
		Written Patient Notification
		Anonymous Reports

Healthcare Facilities

Incidents

Serious Events

Infrastructure Failures

COMMONWEALTH OF PENNSYLVANIA

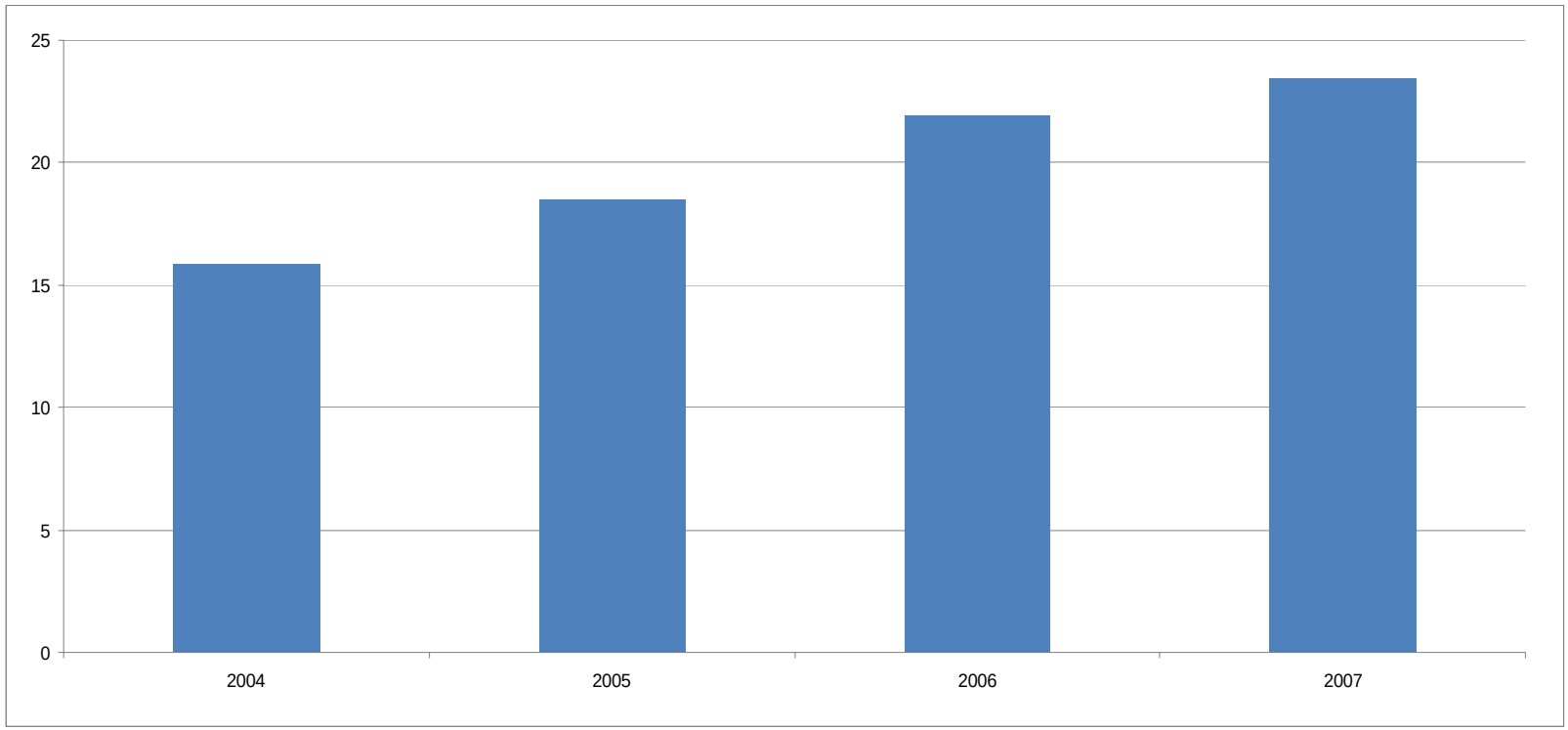
PATIENT SAFETY AUTHORITY

DEPARTMENT OF HEALTH

2007 PA-PSRS Reports by Event Type and Serious Events

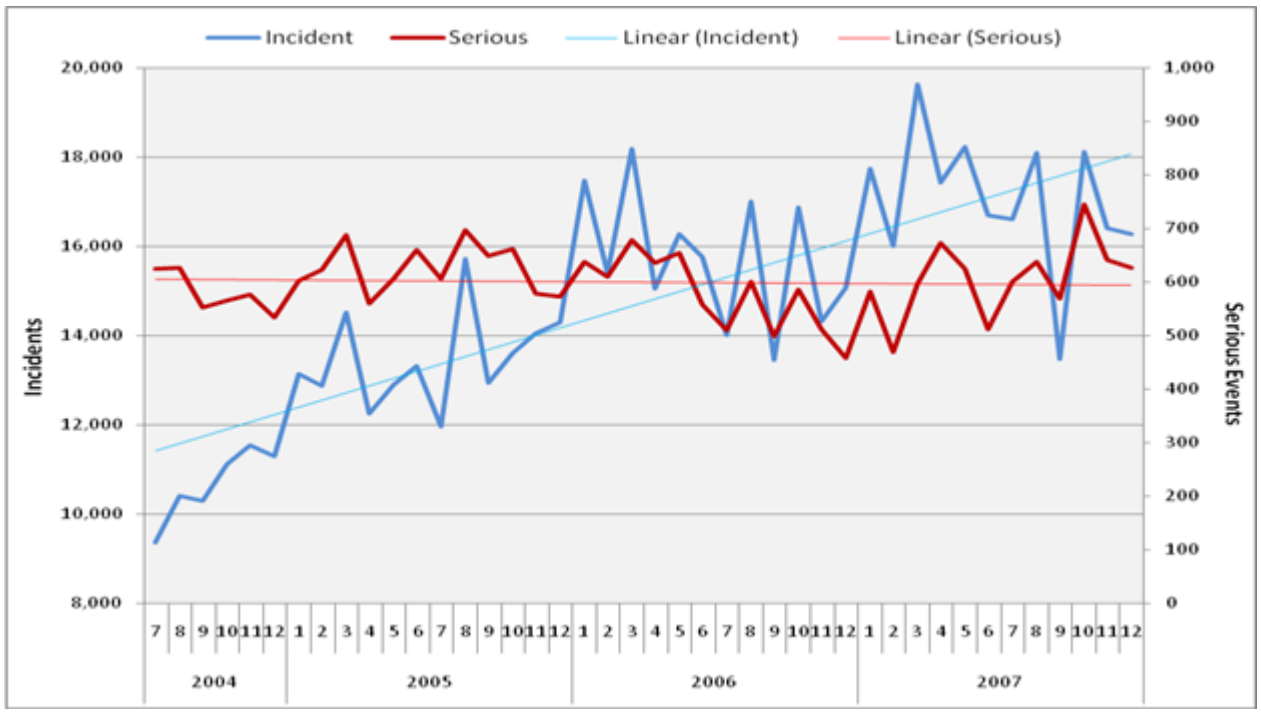
Event Type	% PA-PSRS Reports	# of PA-PSRS Reports	% Serious Events	# of Serious Events	% Incidents	# of Incidents
Medication Errors	22%	47,492	4%	262	23%	47,230
Adverse Drug Reactions	2%	5,051	4%	258	2%	4,793
Equip./Supp/Devices	1%	3,160	1%	62	1%	3,098
Falls	17%	35,033	17%	1,240	17%	33,793
Errors of P/T/T	23%	49,057	8%	596	24%	48,461
Complications of P/T/T	16%	31,416	45%	3,283	14%	28,133
Transfusion	1%	2,310	0%	20	1%	2,290
Skin Integrity	11%	23,567	10%	750	11%	22,817
Other/Miscellaneous	7%	14,897	11%	806	7%	14,091

Reports Submitted by Hospitals per 1,000 Patient Days (2004*- 2007)



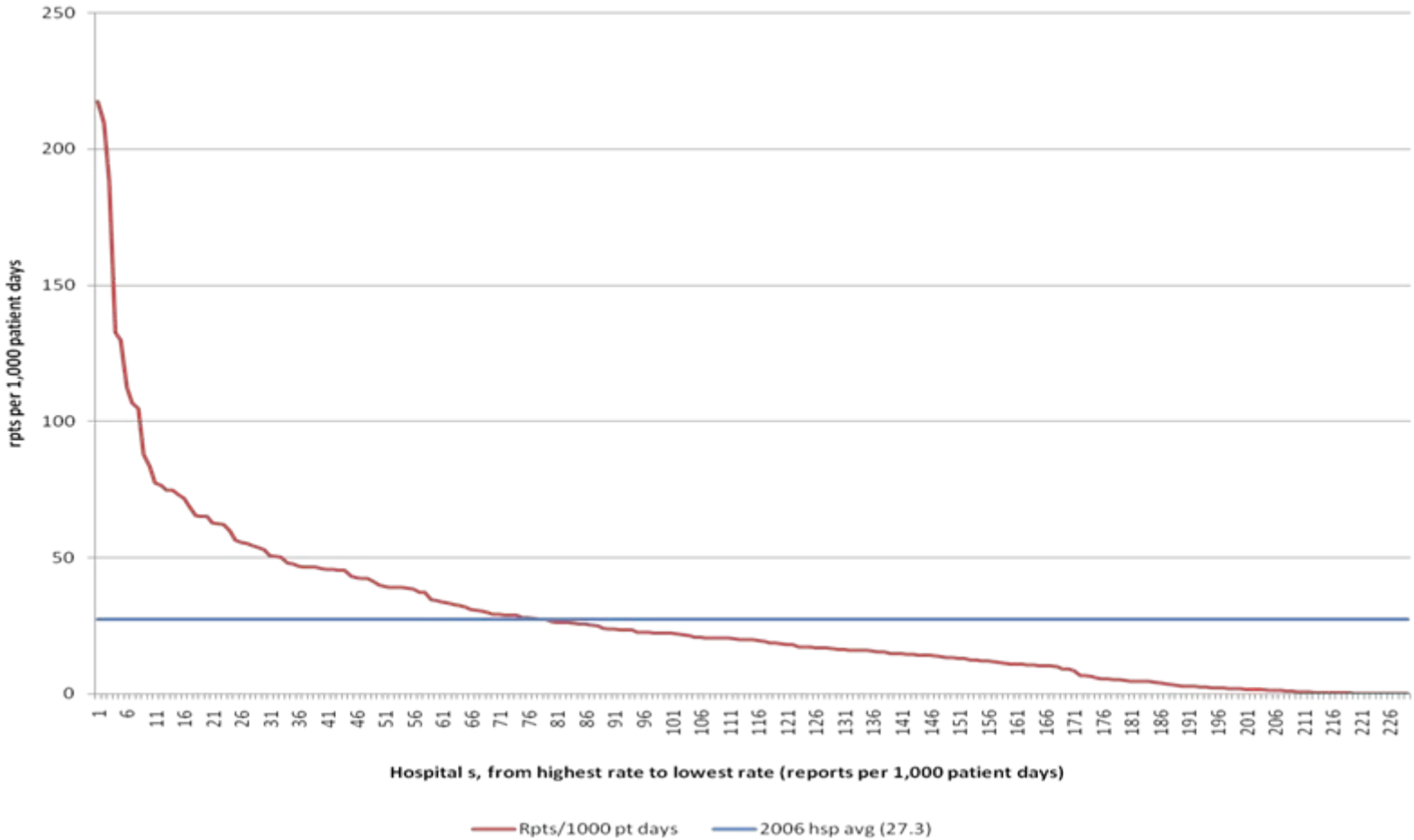
***PA-PSRS Began Collecting Reports June 28, 2004;these figures reflect the second half of 2004.**

Serious Event and Incident Reports since 2004



Number of Serious Event and Incident Reports since Inception of PA-PSRS

Reports Submitted by Individual Hospitals Per 1,000 Patient Days (Highest to Lowest)



Patient Safety Authority Contract Partners

ECRI
A NONPROFIT AGENCY

ISMP
Institute for Safe Medication Practices

EDS

PA-PSRS: Clinical Analysis

Incoming Reports

Triage

Patient Safety Review Meeting

Analytics

Program Outputs

PSA Annual Report

Public Advisories and Recommendations

Contact with Individual Facilities

PA-PSRS

Data Output:

- Real time feedback to facilities
- Patient Safety Advisories
- Annual Report
- Integrated Facility – specific Analysis

Other Patient Safety Activities:

- Education and Training Programs
- Research
- Promotion of Culture of Safety
- Encourage Full and Open Disclosure

PA PSRS

Patient Safety Advisory

Produced by ECRI & ISMP under contract to the Patient Safety Authority

Vol. 1, No. 4—Dec. 2004

Patient Safety Authority Update

It has been five years since the release of the Institute of Medicine's seminal report *To Err Is Human*, and there has been considerable discussion among both health policy makers and the media on the report's impact. In response to the question, "Is healthcare any safer today than it was five years ago?", an honest answer would be, "Yes, but there is a lot more to do."

Certainly, the development and implementation of the PA-PSRS system is, in great measure, a direct outcome of the groundbreaking IOM report. In the six months since the start of statewide mandatory reporting, we have received more than 60,000 reports of Serious Events and Incidents. This is a significant database that allows individual facilities and PA-PSRS analysts to assess the types of adverse events and near misses that are occurring, identify why they occurred, and suggest steps they can take to prevent reoccurrence.

A distinguishing characteristic of the PA-PSRS system, one that sets it apart from other adverse event reporting systems around the country, is that PA-PSRS contains integral analytical components to provide immediate feedback to facilities. These analytical tools, as well as Patient Safety Advisories based on specific reports submitted through PSRS, will be a measure of the system's success as we move forward. Correspondence received indicates considerable use of the analytical tools. We are told that Advisory articles are being distributed to clinical and program staff. And we are encouraged to hear "success" stories about changes made by individual facilities and the lessons learned through the PA-PSRS system.

As PA-PSRS staff have repeatedly stated, the success of this program is not measured by the reports the system collects, but by the actions facilities do to enhance their internal risk management and patient safety efforts. Whether it is the IOM report and six months of PA-PSRS reporting, or PSRS, how is your facility responding to improve patient safety?

The Role of Empowerment in Patient Safety

Can any member of your healthcare team stop the delivery of healthcare because of concerns for patient safety?

One hospital reported to PA-PSRS that a patient's pre-operative EKG was read by a cardiologist as indicating possible myocardial injury. The patient was nevertheless cleared for surgery by a physician. A nurse brought the EKG reading to the attention of a senior anesthesiologist, who responded to the finding with a workup before clearing the patient for surgery.

This is an example of what safety experts call a high reliability team.[1] One team member had a concern that another member may have made an error and felt confident in questioning the decision. The response was to focus on the core issue of patient safety rather than the peripheral issue of hierarchy.

In contrast, other reports submitted to PA-PSRS suggest that members of some healthcare teams are reluctant to speak up:

- A surgeon left ring
- A nurse witness
- A physician

In This Issue

PA PSRS

Patient Safety Advisory

Produced by ECRI under contract to the Patient Safety Authority

Vol. 1, Sup. 1—Oct. 28, 2004

SUPPLEMENTARY ADVISORY

Overdoses Caused by Confusion Between Insulin and Tuberculin Syringes

PA-PSRS Patient Safety Advisory is issued quarterly. However, the PA-PSRS clinical staff may periodically identify a situation that warrants more immediate communication with facilities to advise them of changes they can take to reduce Serious Events and Incidents. In those cases, the Patient Safety Authority will issue a *Supplementary Advisory*.

PA-PSRS has received several reports describing errors in which tuberculin (TB) syringes (with affixed 25-gauge needles) were used in place of insulin syringes. In one report, a nurse selected a TB syringe instead of an insulin syringe and administered 0.9 mL (90 units) of insulin, which resulted in a ten-fold overdose. Two additional reports described errors with using TB syringes in place of insulin syringes. In these cases, one patient received 60 units of insulin instead of 6 units, and another patient received 40 units of insulin instead of 4 units.

One reason for the error may have been the resemblance in packaging of the TB syringe and the insulin syringe. The TB syringe is packaged in a white wrapper with black and orange print with an orange plunger tip—the same color used for many years on insulin syringes. Previously, the TB syringe, typically used for subcutaneous injections, had a blue needle hub and label.

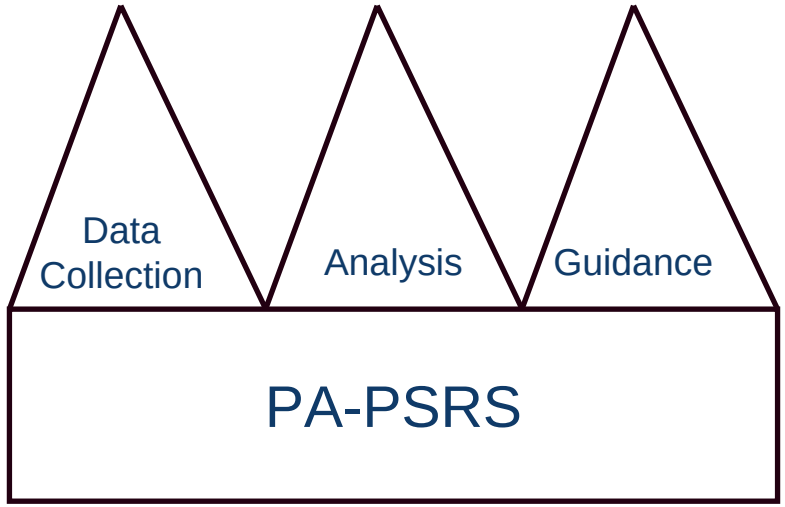
The Institute for Safe Medication Practices (ISMP) has previously reported cases of mix-ups that occurred when both the TB and insulin syringes were accidentally mixed together in the same storage compartment.[1-4] One contributing factor was the similarity between the outer boxes that contained either the TB or insulin syringes, which contributed to a re-stocking error. For example, in one case a nurse selected the syringe from its usual storage area, saw the orange color on the plunger tip of the TB syringe and thought it was an insulin syringe. Believing she was using an insulin syringe, she then thought the ".5" mL marker represented 5 units, when that volume actually represents 50 units. Unfortunately, some TB syringe manufacturers do not include a leading zero on the syringe scale (0.5 mL)—something that might have helped prevent confusion. A similar "near miss" occurred when the syringes seen in Figure 1 below were confused. Due to the similar packaging and orange color coding a nurse mistakenly used a TB syringe to draw up an insulin dose. Fortunately, the error was caught during a standard double-check process for insulin before it was administered to the patient.

Situations such as these occur because the International Organization for Standardization (ISO) has

Figure 1. Tuberculin and Insulin Syringes from One Manufacturer. The TB syringe appears at the top of the photo, the insulin syringe at the bottom. The vertical orange stripes on both products contribute to the confusion.

Where We Are

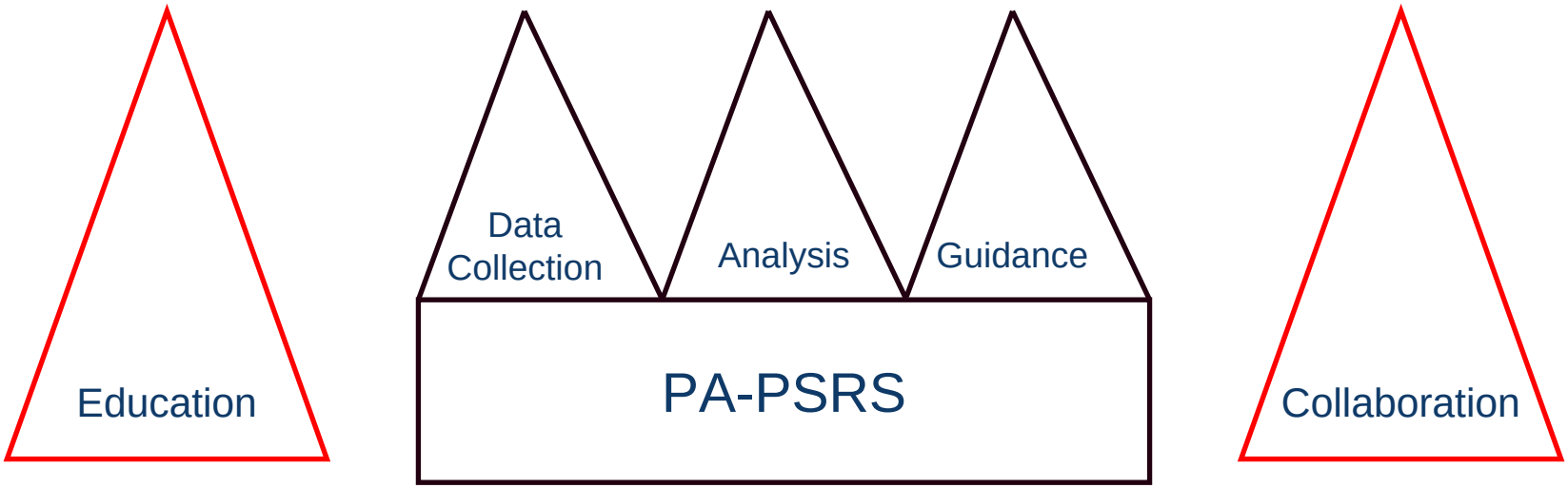
Safe Patient Experiences



- Over one half million reports reviewed
- Patient Safety Advisories
- RCA and new user training
- Special Projects

Where We Are Going

Safe Patient Experiences



- FMEA
- Healthcare acquired infection
- Board of Trustees
- Root cause analysis
- Health care training grounds
- Nursing homes

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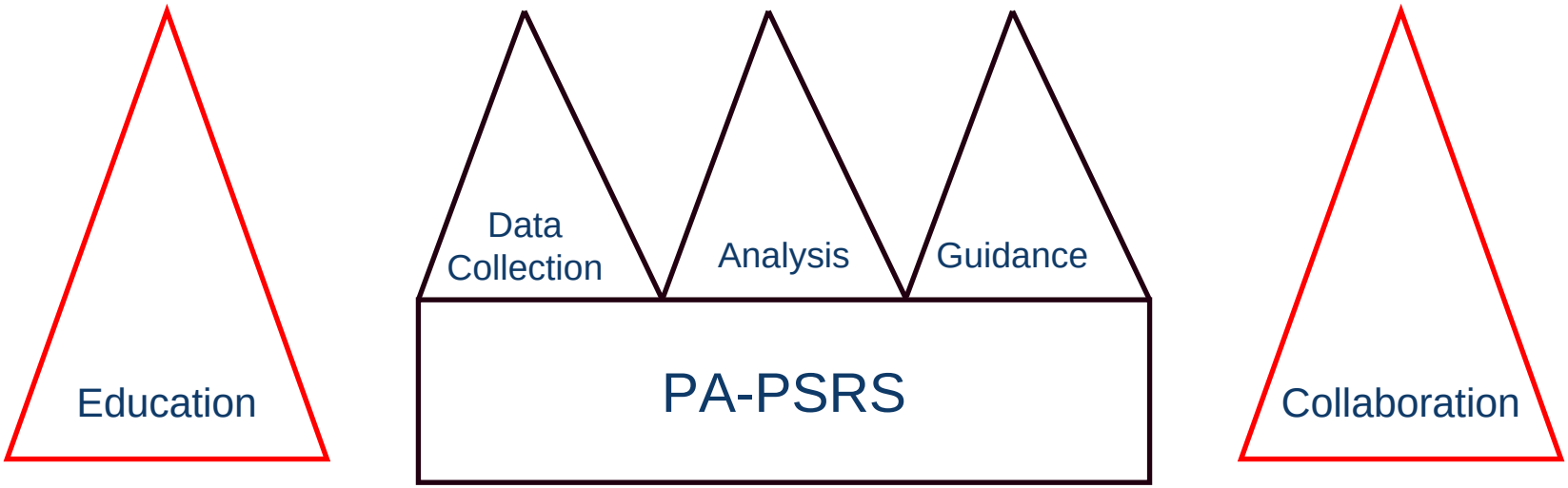
- PaSsKEy
- Board of Trustees
- Extended local presence
- State Agencies
- HAP, IHI, HCIF, others

Where We Are Going

Safe Patient Experiences



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- Recommendations
- Reporting consistency

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Strategic Plan Initiatives

- A: Educate Executive Management and Boards of Trustees
- B: Infection Awareness and Reduction
- C: Patient Safety Knowledge Exchange (PaSsKEy)
- D: Improve Reporting Consistency and Recommendations
- E: Increase Effectiveness through Extended Presence
- F: Governor's Office of Healthcare Reform (GOHCR) Collaboration
- G: Data Collaboration
- H: Patient Safety Methods Training
- I: Nursing Home Data Analysis
- J: PA-PSRS System Enhancements
- K: Maintain Success of Patient Safety Advisory

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