



Flying Rules for Patient Safety?

Barry P. Chaiken, MD, MPH

After several troubling “incidents,” including the tragic accident involving TWA Flight 514 flying into Dulles International Airport in December 1974, the Federal Aviation Administration (FAA) contracted with the National Aeronautics and Space Administration (NASA) to develop and run the Aviation Safety and Reporting System (ASRS). The system prospectively identifies potential causes of aviation errors by collecting data in a voluntary, confidential, and non-punitive way, from those working in the aviation industry.

By choosing NASA to run the program, the FAA, provider of regulatory oversight in aviation, secured the extensive aviation and analytical experience residing in NASA, while employing an agency separate and independent from the FAA and its regulatory oversight.

ASRS collects reports from pilots, air traffic controllers, flight attendants, mechanics, ground personnel, and others involved in aviation operations in an effort to identify patterns that might lead to aviation errors and unsafe events. At least two experts in aviation safety review each report looking for dangerous processes or patterns of unsafe events.

Once identified, these issues are investigated further, and when appropriate, alerts are developed to address the issue presented. These alerts are then distributed to the aviation industry. Alerts can lead to changes in flying rules, maintenance processes, or even the design of aircraft.

The ASRS is separate from the National Transportation Safety Board, the entity responsible for investigation of airplane crashes, although analytical information is shared between the entities.

Strict Confidentiality

Although individuals reporting events are required to identify themselves on each report, that information is only used to contact the reporting person for accuracy and completeness of the information submitted. Once the data collection phase of the report analysis is completed, the identifying information, linking the report to the person reporting the incident, is returned to the reporter and the report becomes de-identified.

Over the past 28 years, NASA has collected more than 600,000 reports without breaking confidentiality on any one. This non-punitive and completely confidential reporting system has helped deliver a progressively safer and more reliable air travel environment for commercial, military, and private flyers.

Reporting at the VA

Building on its commitment to quality and patient safety, the Department of Veterans Affairs (VA), the largest single health care provider in the world, recently implemented the Patient Safety Reporting System (PSRS), a medical error reporting system modeled on the ASRS.

The PSRS is a program being jointly developed by the VA and NASA to discover and learn about issues related to patient

Although individuals reporting events are required to identify themselves on each report, that information is only used to contact the reporting person for accuracy and completeness of the information submitted.

safety. All personnel at VA facilities are invited to report any events concerning patient safety through the PSRS.

The PSRS complements existing internal mandatory reporting systems currently in use at the VA. It provides a voluntary, confidential, and non-punitive reporting vehicle for those who, for whatever reason, feel awkward or uncomfortable reporting patient safety events or concerns through the existing reporting systems. The intent is to allow for reporting of events and concerns such that experts can analyze information submitted to identify potential or real system vulnerabilities and not to attach personal accountability or blame. Like the ASRS, alerts are issued to impact processes to make them safer.

The PSRS asks for reporting of the following types of events:

- **Close Calls.** Events or situations that could have resulted in accident, injury, or illness, but did not, either by chance or through timely intervention.
- **Unexpected serious injury occurrences.** Events that involved a death, physical injury, or psychological injury of a patient or an employee.
- **Lessons learned or safety ideas.**

The PSRS reporting form, seen in Figure 1, can be downloaded as a PDF file from the PSRS Web site (psrs.arc.nasa.gov). The form is relatively simple to complete and provides a narrative section to collect detailed data that can be recorded and later analyzed.

As the potential causes of medical errors are diverse and mostly unknown, the narrative section offers the best way to identify patterns of errors. NASA experience with the ASRS is being applied to the PSRS to allow the codification of this narrative section to make pattern identification easier.

Recognizing the low rate for reporting situations reflecting patient safety vulnerabilities, the PSRS was developed to encourage reporting of useful information that could potentially guide constructive change and enhance safety. Alternatively, reports of intentionally unsafe acts, such as criminal acts, purposefully unsafe acts, and alleged or suspected patient abuse, are not protected and therefore not included in the PSRS program.

As it took several years for the ASRS to be trusted by industry workers, it is expected that it will take time for the PSRS to take hold in the VA. Nevertheless, recent discussions with PSRS personnel suggest that the level of trust and confidence in the PSRS is building among VA staff, reporting rates are increasing steadily, and useful alerts have already been issued.

The PSRS was developed to encourage reporting of useful information that could potentially guide constructive change and enhance safety.

PSRS Outside the VA

The prospects of a PSRS outside the VA are mixed. Unlike the aviation industry, the health care industry remains fragmented with liability spread out among a variety of stakeholders. In addition, unlike the VA, the majority of U.S. health care is decentralized among stand-alone hospitals, clinics, and physician offices.

Establishment of systems similar to PSRS holds its greatest promise at the state level or through regulatory action, for example, by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Even then, issues of liability, tort law, and confidentiality must be worked out before implementation.

In 1986 Congress passed the Health Care Quality Improvement Act, which offers immunity to individuals and health care organizations involved with peer review. A similar type of protection is probably needed to give a national PSRS the traction it needs to effectively contribute to patient safety. 

Note: An expert in the PSRS will be presenting at the October 30, 2004, ABQAURP Conference in Tampa, Florida. Please go to www.abqaup.org for more details.

Barry Chaiken, MD, MPH, has more than 18 years of experience in medical research, epidemiology, clinical information technology, risk management, and patient safety. As founder of his own company, he has worked on quality improvement studies and clinical investigations for the National Institutes of Health, the Framingham Heart Study, and Boston University Medical School. Chaiken is board certified in General Preventive Medicine and Public Health and is the chief medical officer of ABQAURP.

Reference

Patient Safety Reporting System Reporting Form. Retrieved April 19, 2004, from <http://psrs.arc.nasa.gov/reporting.htm#download>.