In 1999, the Institute of Medicine released a report indicating that as many as 98,000 people die per year due to medical errors in hospitals. This well-known report, titled “To Err is Human: Building a Safer Health System,” shook the American health care industry, and fueled momentum for improved patient safety measures across the country.

Even before the release of this report, the U.S. Department of Veterans Affairs (VA) was making strides to set new standards for patient safety and further enhance the quality of health care in the United States. The VA, which operates 163 medical facilities across the country, formed an expert advisory panel in 1997 to address patient safety. One year later, the Department established the National Center for Patient Safety in order to develop and maintain safe practices throughout the organization.

With these prevention measures in place, the VA was looking for a partner that could obtain completely confidential information and act as a “safety valve.” Therefore, it decided to call on its Federal sister agency, NASA, to assist in the development of such a punitive-free reporting system. As an “honest broker,” NASA would help the VA provide protections for health care professionals who voluntarily report adverse events or “close-calls.”

In May 2000, senior officials of the VA and NASA signed an agreement that would commit the two agencies to create the Patient Safety Reporting System (PSRS) to report: events or situations that could have resulted in accident, injury, or illness, but did not, either by chance or through timely intervention (close-calls); unexpected serious occurrences that involved a patient or employee’s death, physical injury, or psychological injury; lessons learned; and safety ideas. The VA provided NASA with funding for the initial development of the new system, which automatically removes all personal names, facility names and locations, and other potentially identifying information before entering reports into its database.

Designed to complement the VA’s current internal reporting systems, the PSRS is modeled after NASA’s Aviation Safety Reporting System (ASRS), which was established in 1975 under a Memorandum of Agreement between the Federal Aviation Administration (FAA) and NASA, and began operation in 1976. The ASRS, operated by NASA’s Ames Research Center, collects, analyzes, and responds to voluntarily submitted aviation safety incident reports in order to decrease the likelihood of aviation accidents. Pilots, air traffic controllers, flight attendants, mechanics, ground personnel,
and others in aviation operations can submit reports to the ASRS when they are involved in, or observe, an incident or situation that compromises aviation safety. This system has been lauded for its strict confidentiality procedures, managed reports, easy retrieval of database information, creation of safety products, and distribution of safety information.

According to Linda Connell, NASA's ASRS/PSRS director, "the experience gained in operating the ASRS for 26 years will be invaluable in establishing the collection of voluntary, confidential data reported by health care providers on the front line of patient care in VA facilities." Connell also adds that the relationship between NASA and the VA represents a "good blend" of expertise for the purpose of learning about humans and safety. NASA will help to incorporate the highly successful aviation safety model and information technology developments within the VA medical environment and the VA will identify vulnerabilities from the information provided by NASA.

After the joint agreement was signed, employees from Ames' Human Factors Research and Technology Division conducted intensive training sessions for VA patient safety coordinators who would be operating and maintaining the systems across the country. At the conclusion of the training, NASA and the VA launched a national roll-out for the PSRS in April 2002.

Presently, Ames is working on new mechanisms to disseminate PSRS results and data; nonconfidential reports and products are expected to be publicly released as the roll-out progresses. Ames officials anticipate that the accomplishments of the PSRS will provide VA hospitals with lessons learned and the fundamentals needed to eliminate errors and streamline overall health care operations.

Designed to complement the U.S. Department of Veterans Affairs' current internal reporting methods, the Patient Safety Reporting System is modeled after NASA's Aviation Safety Reporting System, which Ames Research Center operates for the Federal Aviation Administration.