Peter Pronovost Checklist Protocol

In his Ph.D. thesis at Johns Hopkins Bloomberg School of Public Health, Dr Peter Pronovost documented that in intensive-care units in Maryland, an intensive care specialist on the staff reduced death rates by a third.

In 2003 he founded the Quality and Safety Research Group. He has published over 200 articles and chapters on patient safety and advises the World health Organization on improving patient safety measurement through WHO's World Alliance for Patient Safety.

He started studying hospital-acquired infections in 2001, concluding that a simple 5 item checklist protocol would greatly reduce infections when inserting a central venous catheter.

Checklist doctors should follow:

- 1. Wash their hands with soap.
- 2. Clean the patient's skin with chlorhexidine antiseptic.
- 3. Put sterile drapes over the entire patient.
- 4. Wear a sterile mask, hat, gown and gloves.
- **5.** Put a sterile dressing over the catheter site.

In the Keystone Initiative, a 2003 study by a collection of Michigan hospitals and health organizations, the median rate of infections at a typical ICU dropped from 2.7 per 1,000 patients to zero after three months. The Keystone Initiative published its results in the December, 2006 New England Journal of Medicine. In the first three months of the project, the infection rate in Michigan's ICUs decreased by sixty-six per cent. In the Initiative's first eighteen months, they estimated that 1500 lives and \$100 million were saved. These results were sustained for almost four years.

Several reasons may explain why a simple checklist protocol is not more widely adapted:

- Many physicians do not like being monitored by nurses or otherwise being forced to follow a checklist;
- 2. A wish to avoid standardized tasks and bureaucracy; and
- 3. A focus by researchers on "more exciting" issues such as disease biology and new treatment therapies.

According to Dr. Pronovost:

The fundamental problem with the quality of American medicine is that we've failed to view delivery of health care as a science. The tasks of medical science fall into three buckets. One is understanding disease biology. One is finding effective therapies. And one is ensuring those therapies are delivered effectively. That third bucket has been almost totally ignored by research funders, government, and academia. It's viewed as the art of medicine. That's a mistake, a huge mistake. And from a taxpayer's perspective it's outrageous.

In 2008, he was named a MacArthur Fellow. In 2011, Pronovost was recognized for his outstanding professional achievement and commitment to service with election to membership in the Institute of Medicine, one of the highest honors in the fields of health and medicine. On March 28, 2013 he was named a Gilman Scholar at Johns Hopkins University.