Safety Moment

Use of Checklists as an Administrative Control

University of Calgary | VP Services | Environment, Health and Safety

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Introduction of Boeing B-17

In 1935 Boeing introduced the B-17 Bomber.
The first B-17 flight resulted in the aircraft stalling shortly after take off:
• 3 men died
• Boeing was threatened with collapse following this incident
• The incident investigation discovered that the crash was a direct result of the pilot leaving the elevator lock on – this made the airplane unresponsive to pitch control.

It was determined that this incident was not due to pilot error- the aircraft was actually too complex for pilots to fly from memory:
• As a direct result of the complexity of the B-17 Aircraft- the first pilot checklist was developed.
18 B-17 bombers flew 1.8 million hours without further incident after the checklist was implemented

This proved to the government that the B-17 bomber was safe and saved the Boeing company

13,000 B-17 bombers flew in World War II and directly contributed to winning the war
World Health Organization (WHO)

2008 Alliance focuses on patient safety during major surgery (major surgery involves incision, excision, suturing, anaesthesia or sedation)

• Complications reported in up to 16% of procedures
• Death rate of up to 10% in developing countries
• 7 million patients harmed annually
WHO’s Plan to Improve Surgical Safety

- Identify a simple set of surgical safety standards that are applicable in all countries and settings and are compiled in a checklist for use in operating rooms

- By testing and disseminating the Checklist and surveillance measures at pilot sites in every WHO region initially, and then to hospitals worldwide.

- Based on the studies implemented by the Alliance
  - WHO implemented a 4 part corrective action plan to improve surgical patient safety around the world
  - The plan included the development of a surgical safety checklist
Example of the First Edition

Today, improved versions of the checklist are used around the world.
Types of Checklists

- Do- Confirm checklist
  - used for jobs that are performed by memory or habit
  - Typically used for procedures and tasks completed in a specific order
  - Confirms all steps were completed
  - *Coordinating teams, complex tasks, procedural tasks*

- Read-Do Checklists
  - Used as an outline to carry out tasks as they are read, checked off when complete
  - Good for infrequent tasks, tasks with no particular order
  - *Troubleshooting, action plan, preventative maintenance, packing list, workplace inspections*
References

• Angle of Attack – What the B17 Taught us About Checklists

• World Health Organization – Safe Surgery: Tool and Resources
  https://www.who.int/teams/integrated-health-services/patient-safety/research/safe-surgery/tool-and-resources

• SafeStart – 5 Types of Safety Checklists that Help Prevent Catastrophes