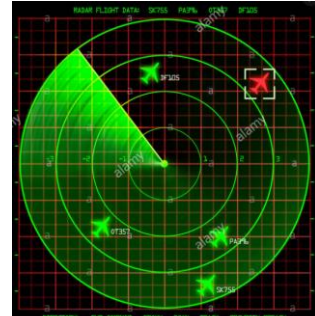


# Near Miss!

We have all probably heard of the term near miss. We use it as a figure of speech when we have an event in our lives that is very close to resulting in a negative outcome. The Federal Aviation Administration (FAA) defines a near miss as an incident associated with the operation of an aircraft in which a possibility of collision occurs as a result of proximity of less than 500 feet to another aircraft, or a report is received from a pilot or a flight crewmember stating that a collision hazard existed between two or more aircraft<sup>1</sup>.



With 227 near misses reported last year<sup>2</sup>, chances are, if you traveled often, you may have been on one of those planes. You, however, would have never known the incident existed. You finished your travel not knowing a stream of activity, paperwork, and focus was placed on the very flight you were on.

So, what does happen behind the scenes with a near miss? The air traffic control equipment alarms and all hands are on deck to avert the crises. Immediately after the incident, the investigation begins. The air traffic controller responsible for keeping the planes at a safe distance is removed from their current duties and put into a program for retraining.

The World Health Organization reports that 1 in every 10 (10%) patients is harmed while receiving care<sup>3</sup>. Nearly 50% of these adverse events are preventable. With 36.2 million hospital admissions a year in the US, this equates to 1.8 million recipients of a harm that could have been preventable.

Comparing FAA's near miss numbers to the healthcare harm events may not be an appropriate comparison. Less than 30,000 passengers would have been impacted by airline near misses compared to the 1.8 million patients in hospitals. The comparison, however leads to some discussion. In these two high risk industries, what process and procedures are different?

Although a plane crash where lives are lost is a very significant event, this industry looks at near misses or processes that went wrong with the same level of diligence. Action plans are initiated as soon as a process failure exists to prevent the crisis from occurring. Healthcare, on the other hand, typically looks at this process failure differently. An event occurs which already harmed the patient and a root cause analysis is done to identify the reasons why it led to an adverse event. Experience tells me that 90% of these root cause analysis findings lead to a failure to adhere to the processes defined. We know what to do, we just don't know how to ensure that we do it.

In the airline industry, an investigation begins immediately and in some cases the process is stopped until a cause can be mitigated. On October 29, 2018 a Boeing 747 crashed followed by another on March 10, 2019. Every Boeing 747 Max was grounded for nearly 2 years. I have been working in healthcare for 30 years and have yet to see a process be "grounded" for any reason.

The last comparison involves training. The training for air traffic controllers accompanies process deficiencies continuously throughout the year. Although, like healthcare, annual training still exists, this training is re-visited as often as necessary in response to outcomes of daily operations and needs.

# Near Miss!

In Healthcare, we identify competencies that are necessary for clinicians to safely perform their duties. Once a year, each employee is required to go through these competencies and demonstrate proficiency. This may be all well and good, however, it is unknown during the 356 days in between if the employee is actually following the processes that were defined during the competencies. It is known, for example, that a patient should have a nursing assessment within 4 hours of admission, that they should be screened for suicide risk on every admission, or they should be repositioned every 2 hours if they are at risk of developing a pressure injury, but we continually miss these standard of care steps. We wait for the pressure injury to exist, report it, do a root cause analysis on the case only to find out the processes of evidence based practice that were put in place to prevent such an occurrence never happened.

Although hospitals are now beginning to take on the challenge of moving to the concepts of High Reliable Organizations (HRO), the fact remains, the outcomes are not where they should be. Until a culture of zero harm is truly accepted in healthcare and evidence based processes managed like near miss airline occurrences, anything in between is nothing but lip service that still results in 1.8 million people harmed by hospital errors each year.

<sup>1</sup>[faa.org](http://faa.org), ENR 1.16 Safety, Hazard, and Accident Reports

<sup>2</sup><https://www.bts.gov/content/number-pilot-reported-near-midair-collisions-nmac-degree-hazard>

<sup>3</sup><https://www.who.int/news-room/fact-sheets/detail/patient-safety>