

# Risk Management: Teamwork and Communication Introduction

*by Capella Healthcare*



## WHAT'S COVERED

In this lesson, you will be introduced to a real-world example of teamwork and communication in the aviation industry. Specifically, this lesson will cover:

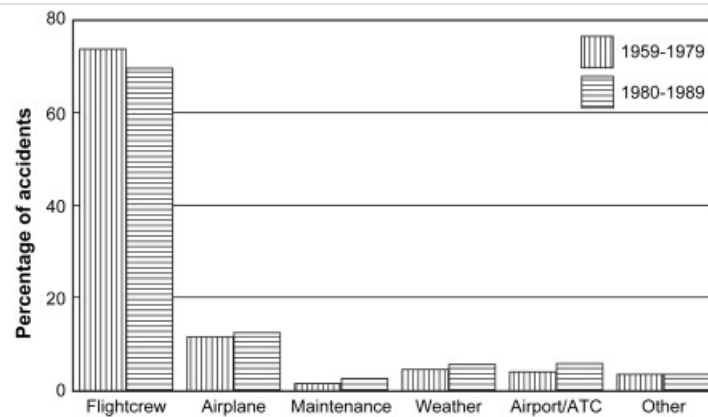
1. Course Introduction
2. Real-World Example

## 1. Course Introduction

In the United States, an estimated 85% of the population has at least one medical encounter, while 25% of these people have as many as 8 to 9 encounters, annually. A single visit involves a multidisciplinary team of healthcare professionals, administrative staff, patients, and their families or friends. Often such an encounter results in multiple visits to other clinicians or services in multiple organizations using different medical records. Fragmented care has been identified as a common contributor to medical errors. Studies have also indicated that more than half of adverse events in healthcare are attributable to surgical care, most of which are deemed preventable. Furthermore, root cause analyses have associated patient outcomes with non-technical aspects of performance, such as teamwork and safety culture, and not to a mere lack of technical expertise. The effective delivery of surgical care requires the orchestration of a multidisciplinary team working in harmony in a time-sensitive and complex environment. Any breakdown in these interdependent processes can potentially lead to performance failures and adverse events. In an interview study of surgeons, communication was found to be a causal factor in 43% of errors made in surgery.

## 2. Real-World Example

The aviation industry has demonstrated the importance of effective teamwork on flight safety and has verified the effectiveness of specific team training to improve safety. As aircraft systems became more complex in the 1970s, they noted that more accidents were occurring (Fig. 1) and conducted a formal investigation to identify root causes so they could reduce the number of accidents.



**Fig. 1 Primary causes of hull loss accidents (excluding military and sabotage): worldwide commercial jet fleet, 1959-1989. Data from Boeing Aircraft Company.**

Source: Helmreich, R. L., & Foushee, H. C. (2010). Chapter 1 Why CRM? Empirical and Theoretical Bases of Human Factors Training. In 918058059 721337967 B. Kanki (Ed.), *Crew Resource Management* (2nd ed., p. 7). New York, NY: Elsevier.

The record of the investigations provides alarming documentation of ways in which crew coordination failed at critical moments.

The following are human errors caused by interpersonal miscommunication (Helmreich & Foushee, 2010):

- A crew, distracted by the failure of a landing gear indicator light, failing to notice that the automatic pilot was disengaged and allowing the aircraft to descent into a swamp.
- A co-pilot, concerned that take-off thrust was not properly set during a departure in a snowstorm, failing to get the attention of the captain with the aircraft stalling and crashing into the Potomac River.
- A crew failing to review instrument landing charts and their navigational position with respect to the airport and further disregarding repeated Ground Proximity Warning System alerts before crashing into a mountain below the minimum descent altitude.
- A crew distracted by nonoperational communication failing to complete checklists and crashing on take-off because the flaps were not extended.
- A breakdown in communication between a captain, co-pilot, and Air Traffic Control regarding fuel state and a crash following complete fuel exhaustion.
- A crew crashing on take-off because of icing on the wings after having inquired about de-icing facilities. In the same accident the failure of a flight attendant to communicate credible concerns about the need for de-icing expressed by pilot passengers.

## REFLECT

Consider if any of these types of miscommunication have happened in your work?

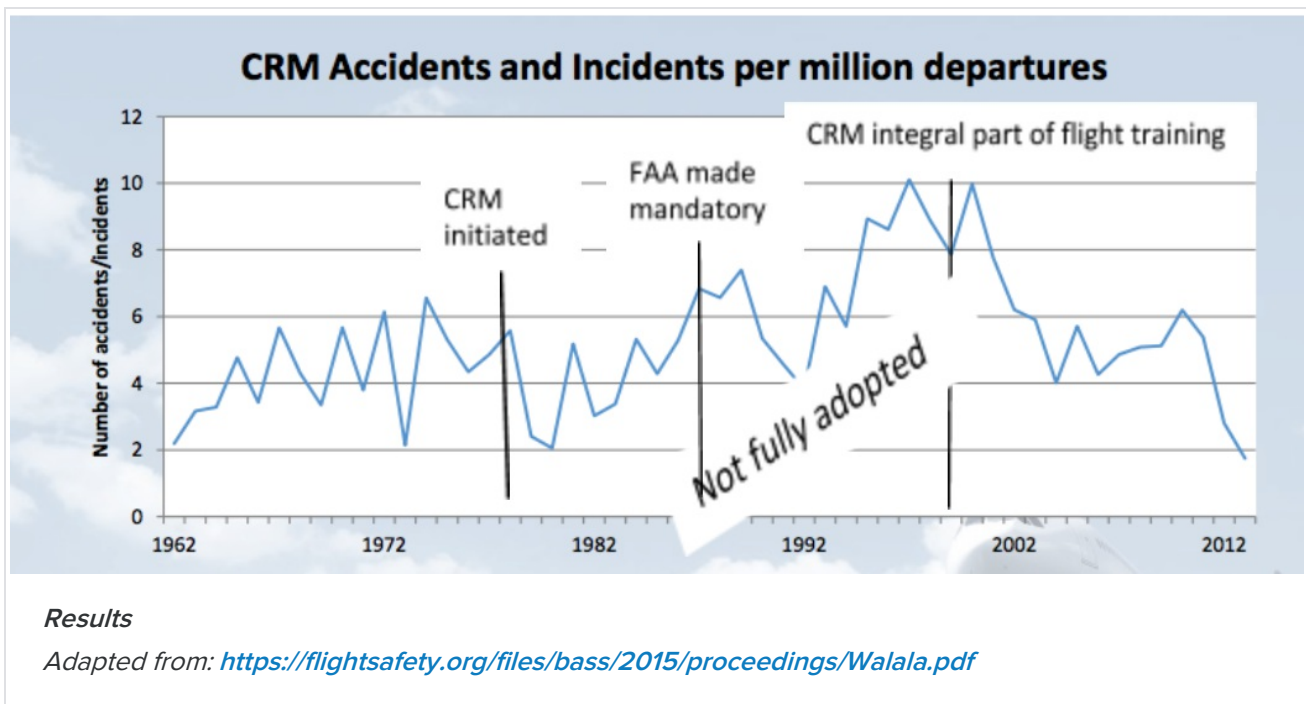
As a result of this investigation, the focus shifted from individual issues to crew-level issues that compromised safety; it was a significant achievement in our understanding of what determines safety in flight operations. Just as performance can suffer because of poor technology or inadequate training, so too can system effectiveness be reduced by errors in the design and management of crew-level tasks and of organizations.

Beginning in 1980, NASA endorsed Cockpit Resource Management (CRM, later named Crew Resource

Management). CRM focuses on interpersonal communication, leadership, and decision making and is used in environments where human error can have devastating effects. It is regarded as a countermeasure with three main goals:

1. Error avoidance
2. Trapping emerging errors before they amplify risk
3. Mitigating the consequences of any errors committed

CRM training, like any new approach in a well-established traditional enterprise, was not universally accepted in its early years. When it was first introduced to pilots and the FAA, it was viewed with skepticism despite a string of recommendations from the National Transportation and Safety Board that CRM training be required of the nation's airlines. Training began in 1980; however, it was noted in the 1990s that organizational culture was an obstacle to effective implementation. Again, culture eats safety for lunch...Really!!



## BIG IDEA

Over the last few decades, extensive efforts have been made to apply lessons learned from aviation and other high-risk, complex industries to healthcare and develop new healthcare-specific evidence for teamwork and patient safety. In this course, we will explore the fundamentals of teamwork and communication in healthcare and how to create effective teams to achieve safe, reliable, and effective care.

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## Support

If you are struggling with a concept or terminology in the course, you may contact [RiskManagementSupport@capella.edu](mailto:RiskManagementSupport@capella.edu) for assistance.

If you are having technical issues, please contact [learningcoach@sophia.org](mailto:learningcoach@sophia.org).

