Swiss Cheese Model

This is a model that is used to show why no system is foolproof and how to decrease the chances of a poor outcome for patients. It is a model that uses slices of Swiss cheese to represent processes we put in place to help ensure success and the holes represent systems flaws. The more slices and the fewer or smaller the holes are, the less likely you are to have a series of errors that connect all the way through and reach the patient. Also, a good reminder that we tend to blame the last error or person (the pointy end through the last slice of cheese) but in reality, there are usually multiple issues involved in every harm event.

How can this be helpful?
It can be used to discuss error. It focuses on looking at underlying systems-based issues. Learning where you need to shrink the holes or add more slices of cheese can help make processes safer for our patients.

Swiss cheese model example: Here is a completed example of the Swiss Cheese Model.

- **Protective system** (Slice of cheese - designed to prevent errors)
  - People Resources: All Associates involved in anesthesia are fully trained
  - Equipment & Materials: Properly color-coded anesthesia tubing
  - Leadership & Expectation setting: Hold team accountable to comply with all anesthesia Clinical Essentials

- **System Flaw** (Hole in the cheese)
  - Associate has not completed anesthesia training and does not know how to trace gas flow through breathing circuit
  - Team did not colour-code new anesthesia tubes on breathing circuit

- **Hazards**
  - Pet Died
  - Human Error (Hole in the last slice of cheese)
    - Anesthesia breathing circuit tubing set up incorrectly

As you review the example above, you can see the slices of cheese are named to indicate factors and the holes represent the flaws.
Swiss Cheese Model Worksheet

Instructions
Use this worksheet to assess an adverse event in your hospital. Consider the common root causes of errors (e.g., rules/policies/procedures, environment, equipment, training, fatigue, scheduling, communication) and determine what are the root causes and contributing factors for this event. Label the different parts of the Swiss Cheese diagram with protective systems that are in place, along with some of the system flaws and/or human errors that may have led to the event. Capture findings in the Datix CLASP form for this event.

Event Description:


Factors Leading to Patient Safety Event:
1. 
2. 
3. 
4. 
5. 
6. 

Swiss Cheese Diagram

Protective system
(Slice of cheese - designed to prevent errors)

Sentinel event or safety event

Human Error
(Hole in the last slice of cheese)

System Flaw
(Hole in the cheese)

Hazards