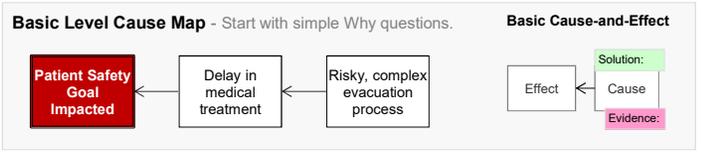


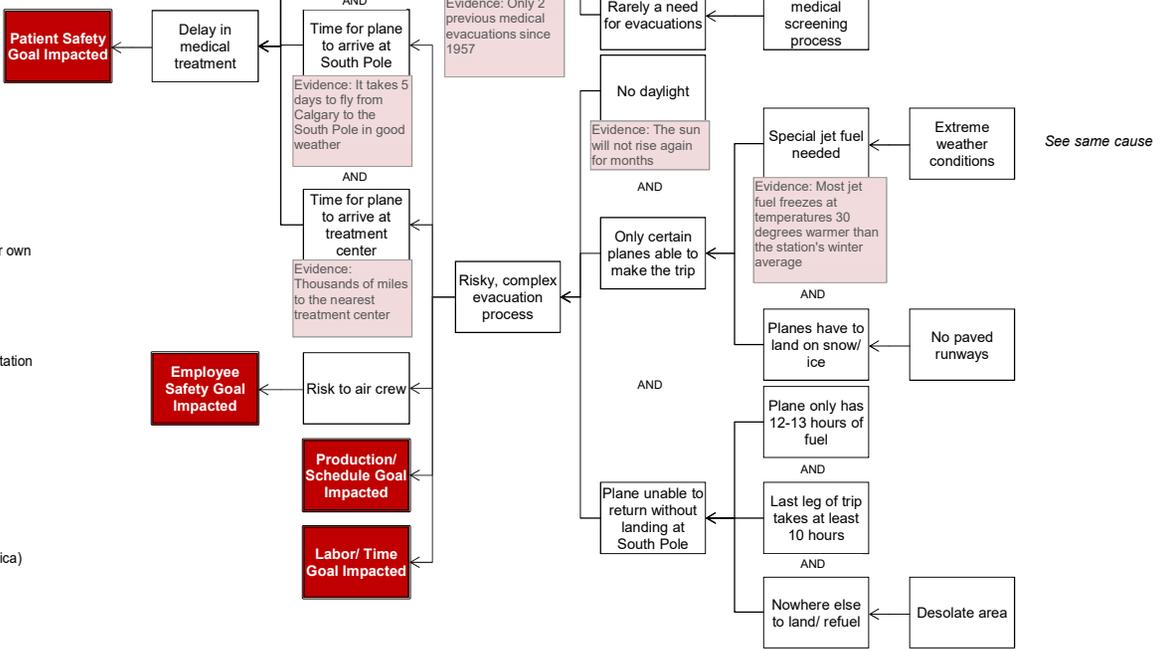
# 1 Problem

What When	Problem(s)	Scientist sickness, evacuation
	Date	See timeline
	Time	
Where	Different, unusual, unique	Extremely cold, almost no daylight
	Facility, site	South Pole
	Unit, area, equipment	Amundsen-Scott research station
	Task being performed	Astronomical & atmospheric research
Impact to the Goals	Patient Safety	Delay in medical treatment
	Employee Safety	Risk to air crew
	Property/ Equipment	Risky, complex evacuation process
	Labor/ Time	
	Frequency	Only 2 other emergency evacuations since 1957

# 2 Analysis



## More Detailed Cause Map



## Timeline

Date	Time	Description
1957		Research station opens
1999		Station's doctor performs her own biopsy, administers her own chemotherapy for breast cancer
April 2001		Medical evacuation for pancreatitis
September 2003		Medical evacuation for gall bladder removal
2011		Scientist who suffers stroke is not medically evacuated
March 22, 2016		Sun set at station (will not rise until September 20)
June 12, 2016		National Science Foundation (NSF) notified of illness at station
June 14, 2016		NSF agrees to send plane for evacuation
		Preparations for trip begin
	7:55 AM MDT	Two planes depart from Calgary, Canada
	1:22 PM MDT	Arrive in Denver, Colorado
	3:28 PM MDT	Depart Denver, Colorado
	10:07 PM CDT	Arrive in McAllen, Texas
	12:07 AM CDT	Depart McAllen, Texas
June 15, 2016	8:16 AM CST	Arrive in Liberia, Costa Rica
		Stop in Punta Arenas, Chile
		Wait for weather
June 20, 2016		Planes arrive at Rothera Station (Adelaide Island, Antarctica)
		Wait for weather
June 22, 2016		One plane departs for research station
		One plane arrives research station
		10-hour wait for flight crew to rest, monitor weather

# MEDICAL EVACUATION FROM SOUTH POLE

## Risky process takes longer than a rescue mission to the International Space Station

Winter medical evacuations have been performed only twice before in the history of the station. On June 14, the National Science Foundation (who runs the station) approved the medical evacuation of a scientist there because the required treatment is not available at the station.

However, the scientist will have to wait: A day and a half of deliberation were required to determine whether or not a rescue plane would be sent. Medical treatment is also delayed by the time required for the plane to arrive at the South Pole, and then for the plane to return the patient to medical treatment center. The trip to the South Pole takes at least 5 days because of the complexity of the process.

"Deciding [whether to evacuate someone] is an intensive process. We have to weigh risk assessments that come from our medical opinions - and we get more than one."  
 - Kelly Falkner, director of the National Science Foundation's Division of Polar Programs