

# Learning from experience

## Changing clinical and management aspects of the International Air Ambulance Business

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ASA 2011 Perth Australia



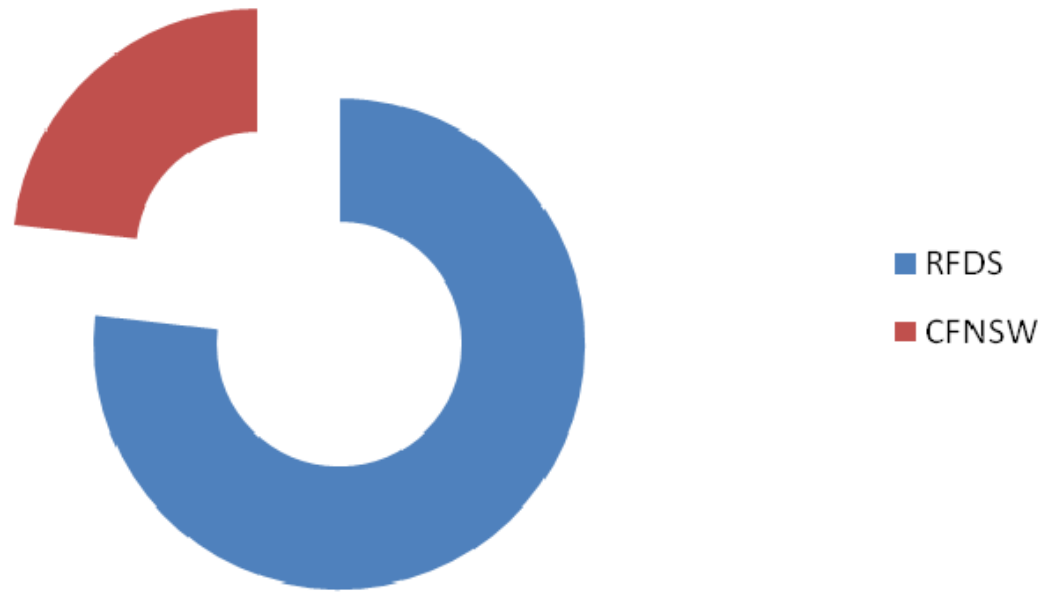


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## The Experience Donut

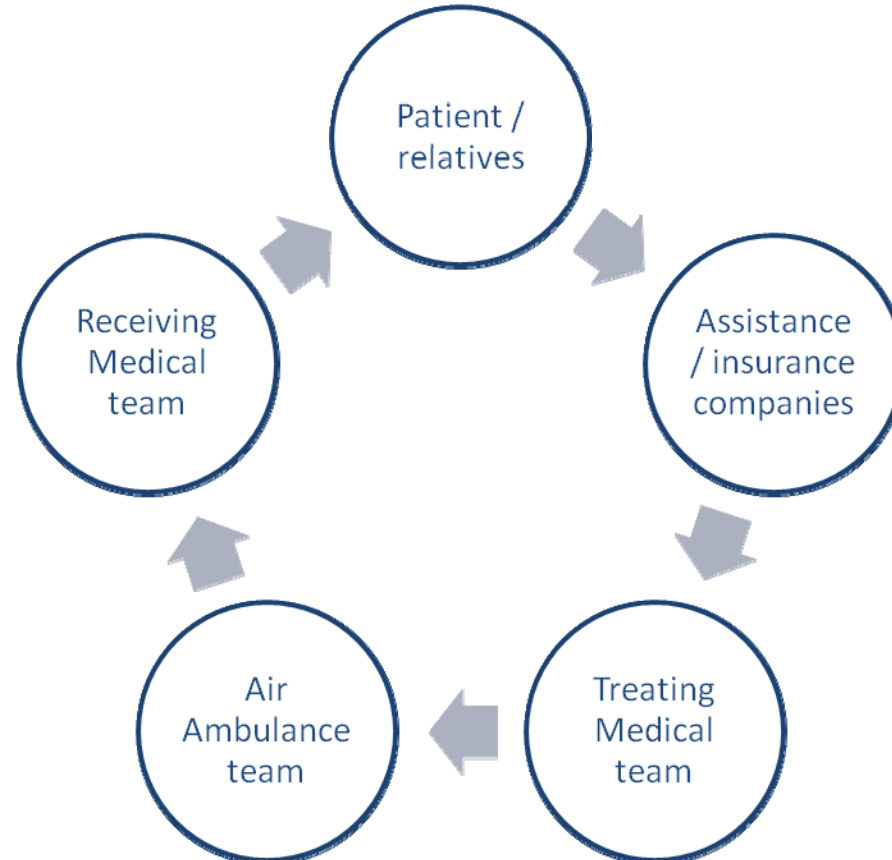


# Introduction

1. Challenges for the management team
2. Challenges for the clinical team
3. Communication

# Challenges for the management team

## Interface between multiple parties

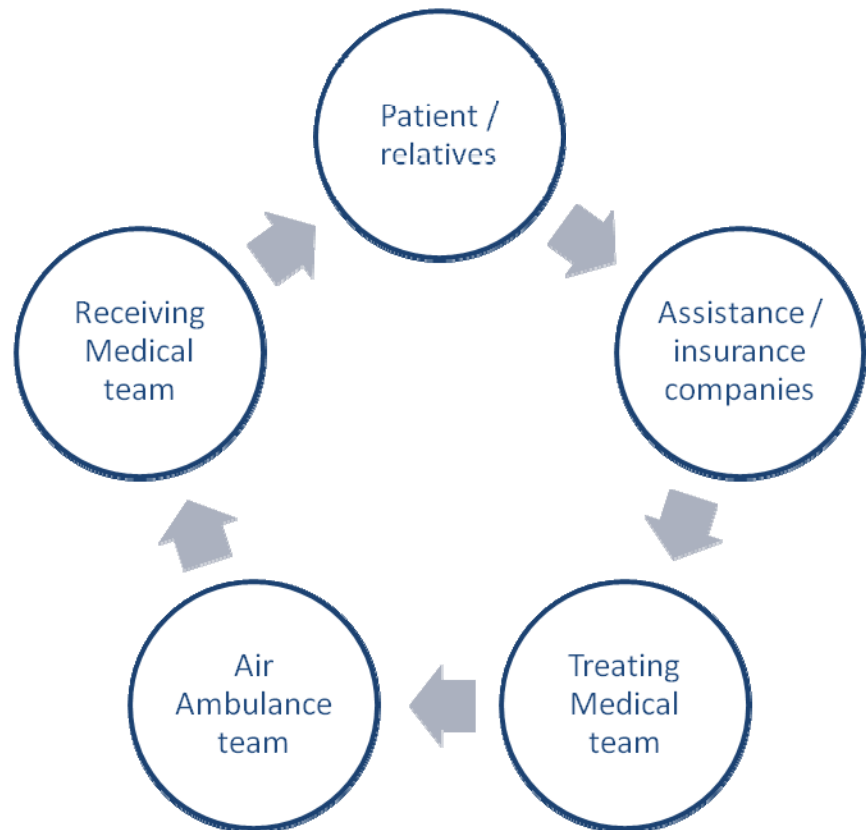


# Challenges for the management team

## “Coalition of the willing”

These parties will often have

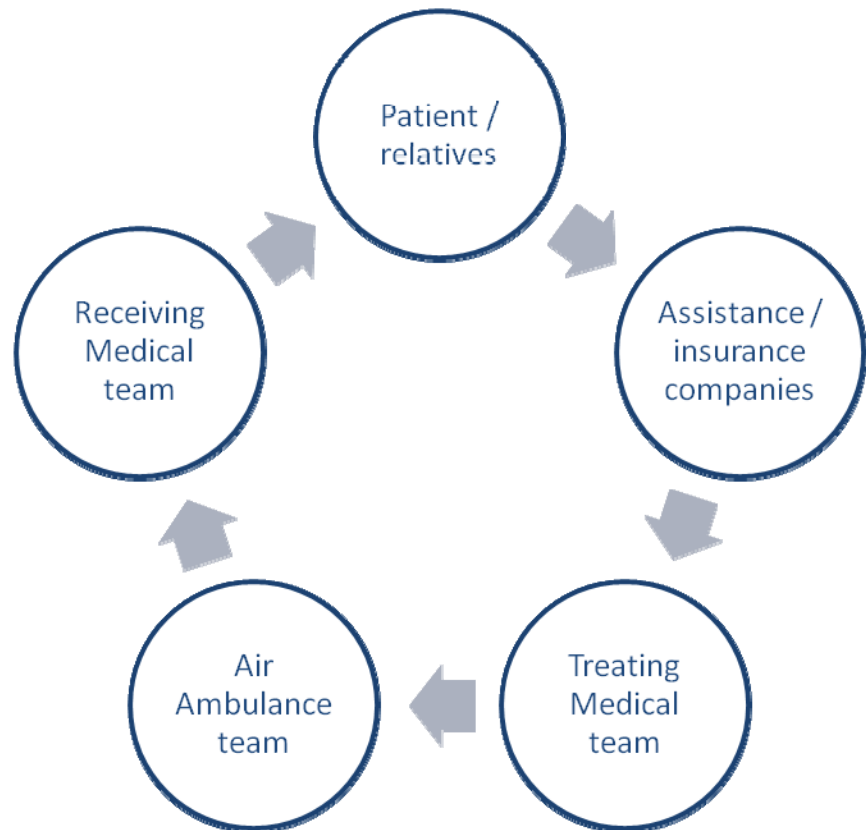
- Different agendas
- Different priorities
- Different assumptions about what’s important
- Different corporate cultures
- Different terminology



# Challenges for the management team

## Coordinating the plan

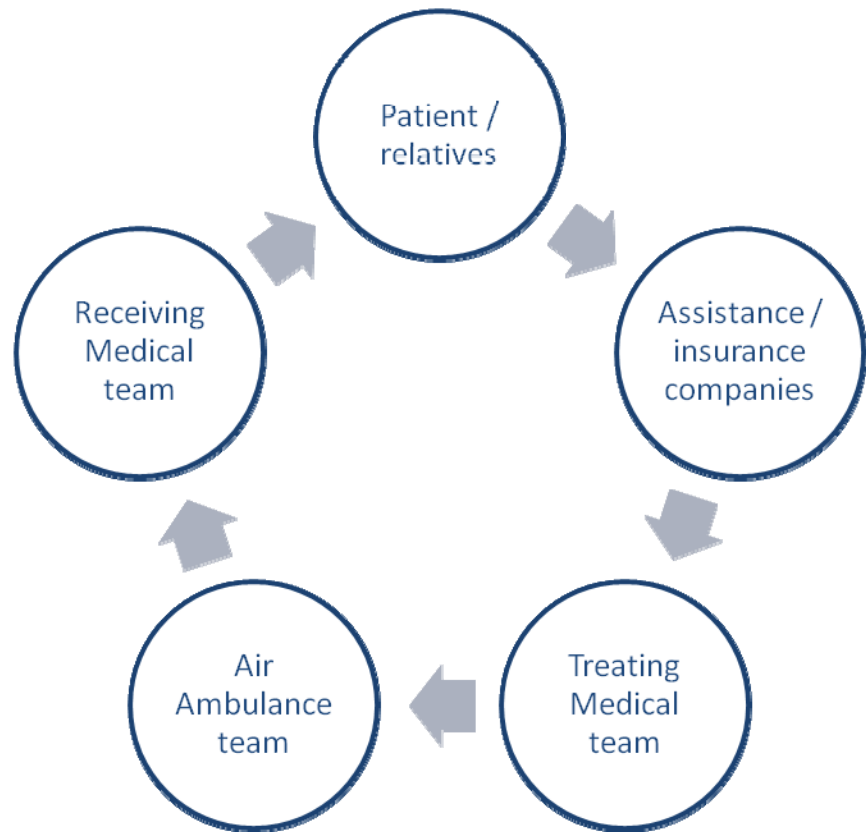
- The tasking authority usually has overall responsibility for bringing all these players together to produce a plan
- This plan must be acceptable to all involved
- And..... must be organized in a timely fashion
- **Compromise often required**



# Challenges for the management team

## Coordinating the plan

- Often waiting for information from third parties
- Information from treating clinicians
- Background information from usual physician
- Pre-existing illness?
- Approval from underwriter
- Confirmation of bed at destination hospital
- Availability of air ambulance
- Timings and limitations of flight

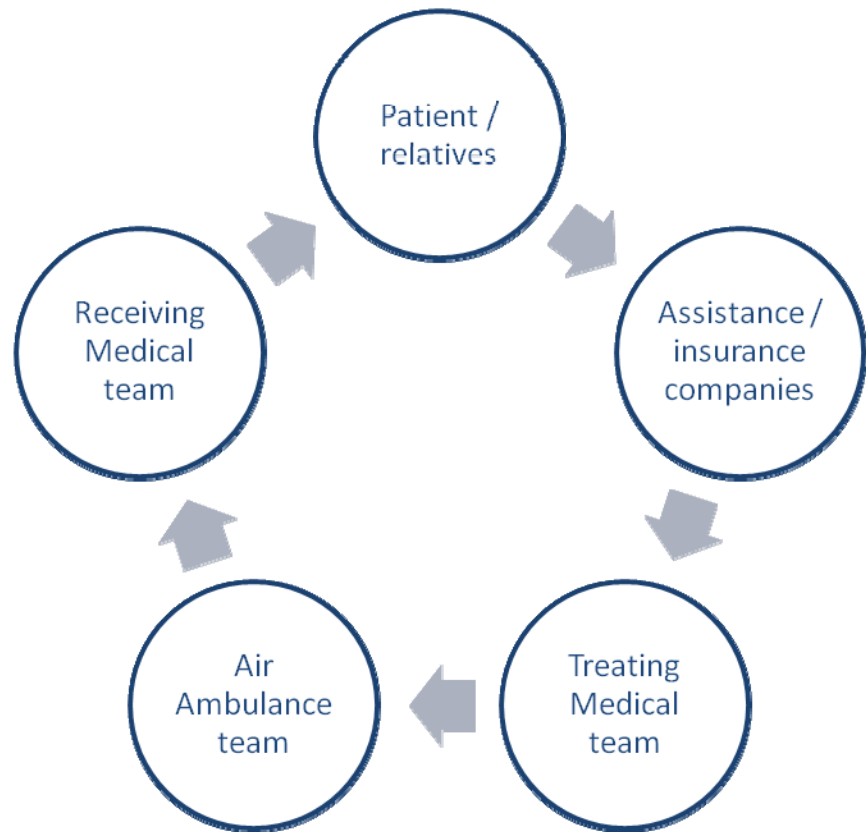


# Challenges for the management team

## Coordinating the plan

### The air ambulance perspective

- Air ambulance operator often only involved fairly late in this process
- If not, there will almost certainly be outstanding items
- Client will often require multiple quotes and options, especially for high cost case

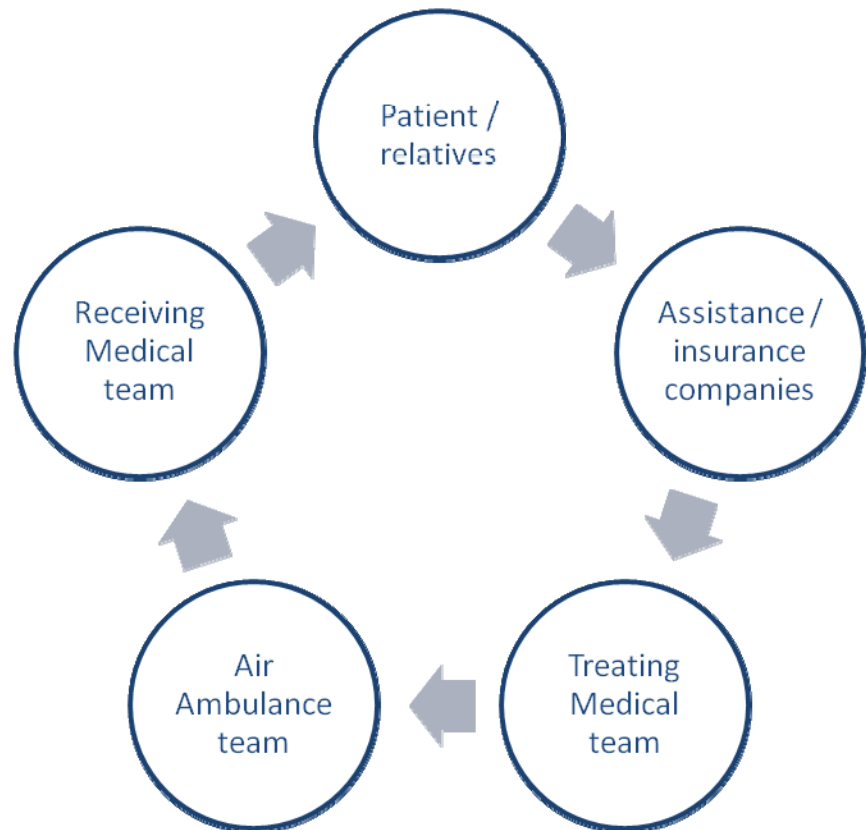


# Challenges for the management team

## Coordinating the plan

### What delays approval from the client ?

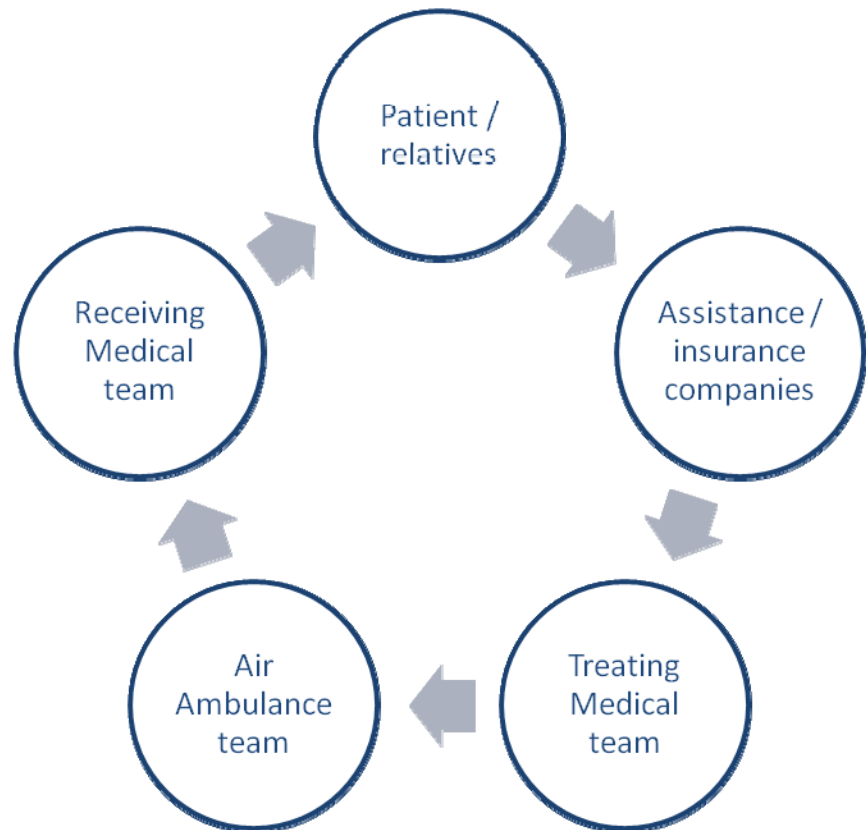
- Patient fails to declare pre-existing illnesses
- Previous history comes to light in report from treating physician
- Need to get collaborative information from usual physician
- Difficult situation. Takes time to resolve
- Awaiting accident reports
- Involvement of drugs or alcohol



# Challenges for the management team

## Coordinating the plan Communication

- Often over the phone
- Barriers
  - Language
  - Cultural
  - Doctor: RN
  - Male: Female
- Different time-zones
  - Key decision makers may not be available 24/7

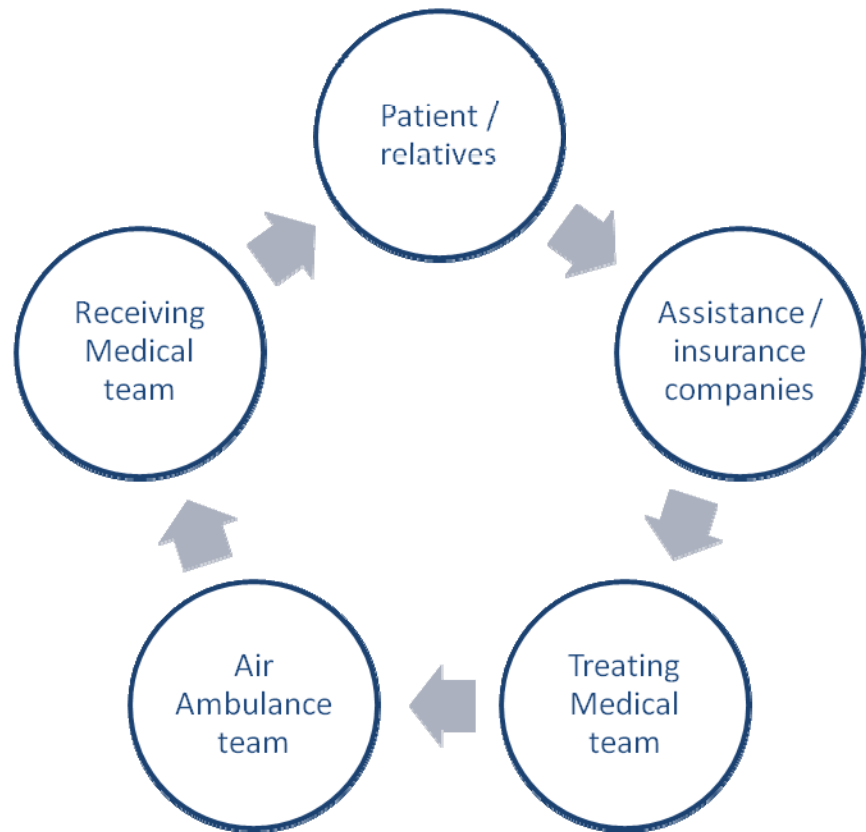


# Challenges for the management team

## Coordinating the plan

### “Victim of unreliable information”

- Other parties will have made estimates and assumptions regarding times
- These will often slip during the mission
- Usually due to things beyond control
  - Weather
  - Traffic
  - Bureaucracy
- Best to be generous with estimates

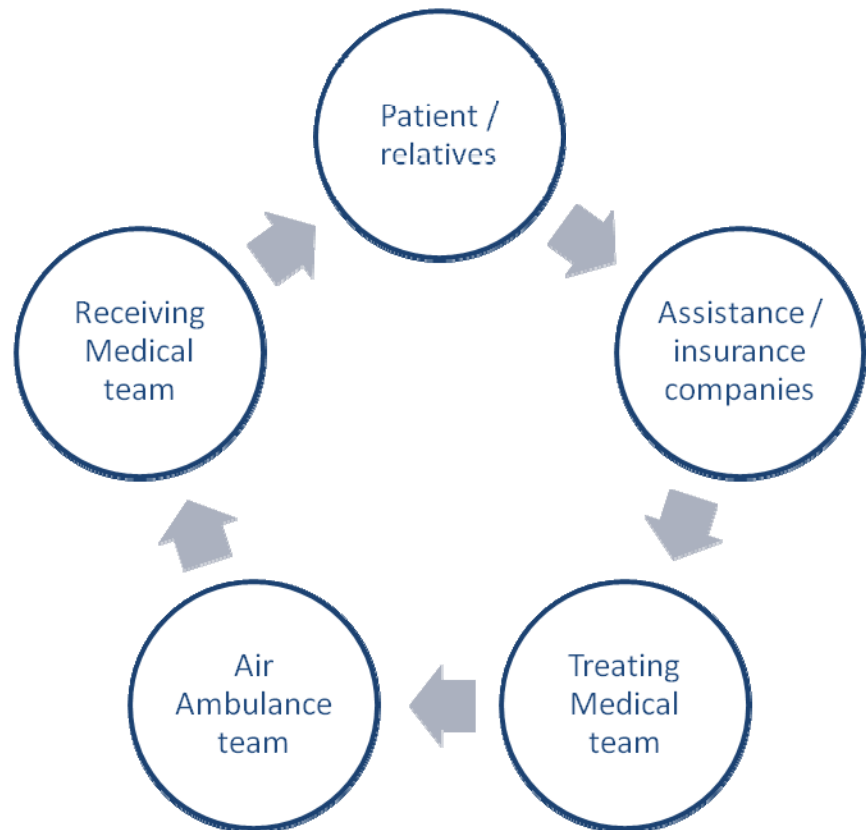


# Challenges for the management team

## Coordinating the plan

### Poor visibility over transfer

- Can be left out of the loop
- **“What’s going on?”**
- Enquiries from patients, relatives, underwriter
- Communication





# Challenges for the clinical team

# Challenges for the clinical team



- Tyranny of distance

# Challenges for the clinical team

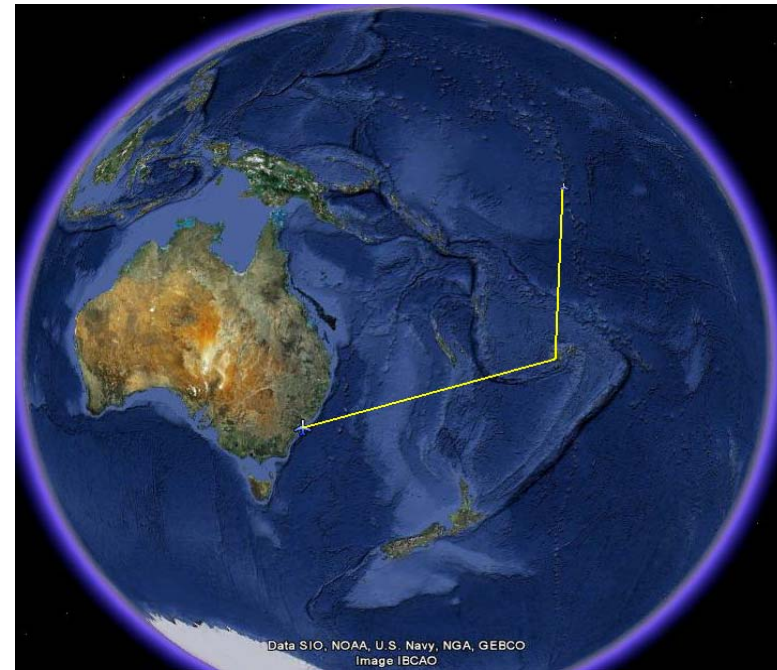
- Tyranny of distance



# Challenges for the clinical team



- Long missions / refuelling
- Crew fatigue and rostering



- Time Zones
- After hours
- Weekends
- Public holidays
- Runway length
- Runway lighting

# Challenges for the clinical team



# Challenges for the clinical team



- Limited clinical capability
  - You don't go here because of the medical care

# Challenges for the clinical team

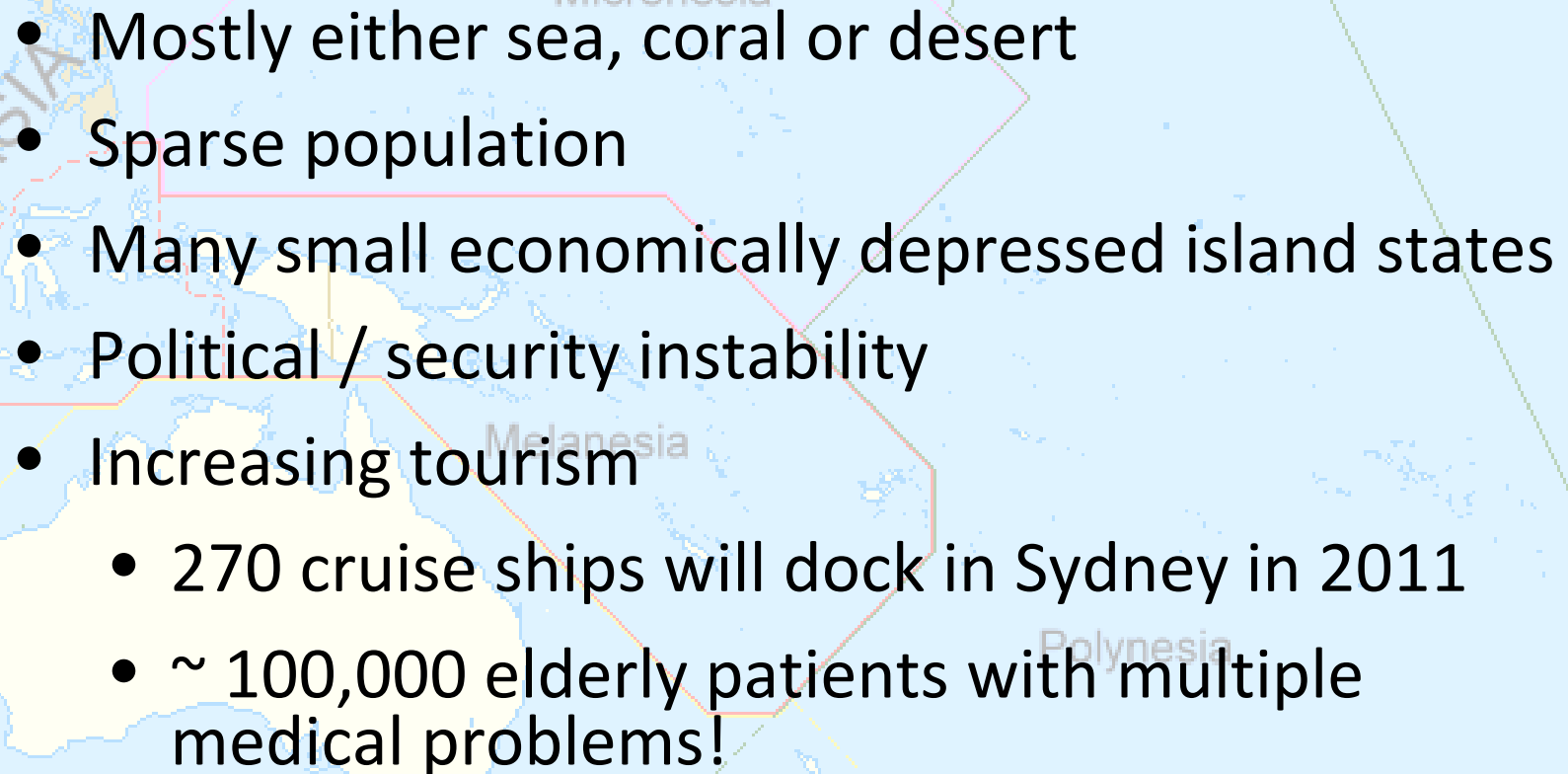
- Minimal pre-hospital services
- Very limited medical resources
- Critical care ~ non-existent
- Limited oxygen
- Few ventilators
- Few CT scanners



# Challenges for the clinical team

## Challenges for the clinical team

- Limited drug compendium
- Limited diagnostics
- Uncertain blood supply
- Basic surgical capabilities
- Zero interventional radiology

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- Mostly either sea, coral or desert
  - Sparse population
  - Many small economically depressed island states
  - Political / security instability
  - Increasing tourism
    - 270 cruise ships will dock in Sydney in 2011
    - ~ 100,000 elderly patients with multiple medical problems!



Noumea's Gaston Bourret is the exception

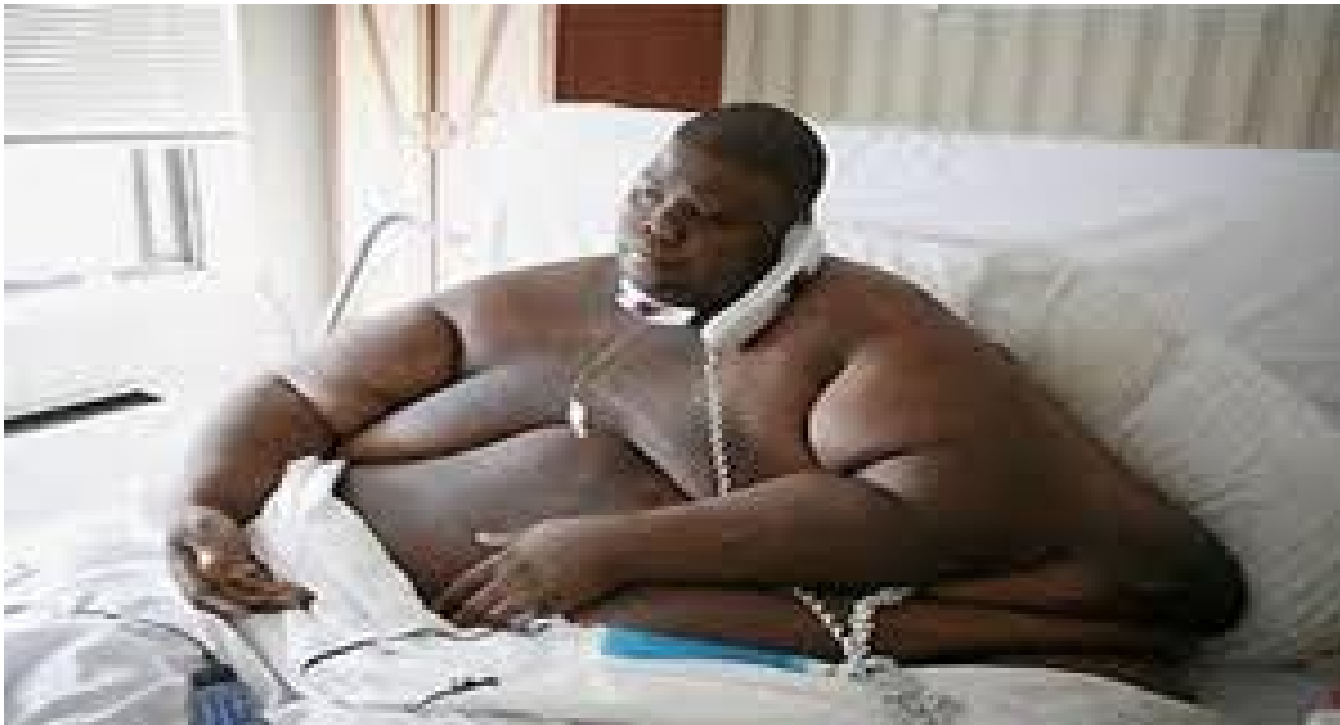
# Challenges for the clinical team



## Local ambulance services

- Availability
- Safety
- Capability
- Reliability!

## Challenges for the clinical team



- Available space!

# Aircraft





No!!

Not those jets.



This one!



Doctor / nurse  
Patient – often > 100kg  
Medical equipment  
Relatives  
Their luggage, their duty  
free.....

# Equipment

- Full critical care
- Point of care pathology
- Blood products
- Intra-aortic balloon pump
- ECMO





- Not a lot of room
- Can't take everything
- Need to be well organised
- Stabilise and perform interventions prior to departing

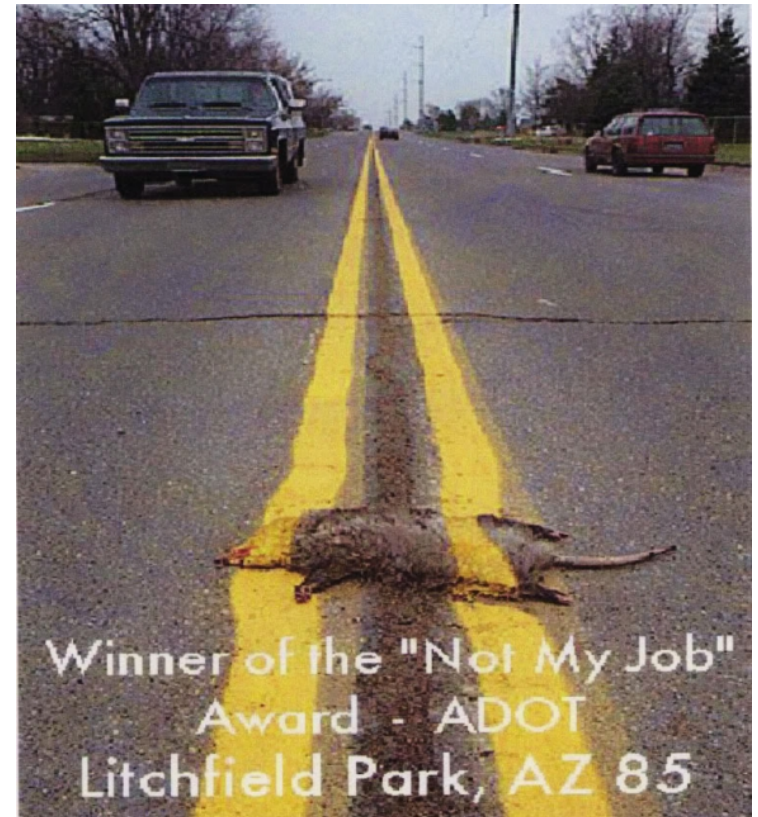


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# Challenges for the clinical team

- Bureaucracy



## Challenges for the clinical team



- Bureaucracy



## Challenges for the clinical team

- Customs
- Immigration
- Ground handlers
- Refuellers
- Team Security

## Challenges for the clinical team

- Crucial people often not present as promised
- First thing in the morning
- Weekends
- Overnight



# Challenges for the clinical team



## Weather

- Diversions
- Headwinds
- Additional fuel
- Ability to carry extra person

## Challenges for the clinical team



Security!

# Challenges for the clinical team



## Communications

- Radio
- GSM mobile
- Sat phone

# Challenges for the clinical team



- Fatigue

## Challenges for the clinical team

- Pilots duty hours subject to company Fatigue Risk Management System (FRMS), which has to be approved by CASA
  - Complex (30 pages)
  - Takes into account i) Duty hours & ii) Flight hours
  - Each of these for past 24 hrs, past 48 hrs, past 7 days, and past 14 days.
  - Night duty has greater implications than day
  - Also sleep hours past 24 hours, & past 48 hours
  - Both pilots have to comply

## Challenges for the clinical team



- Doctors and nurses get tired too!

# Putting it in perspective

## Critical care on the run

- Organising or performing an air ambulance transfer is not easy
- Thousands of transfers over 20 years
  - Something minor often goes astray
    - Cause frustration. Requires communication
  - Major clinical or logistic problems are rare
    - Occasional non-preventable deaths over this time

# Communication

- 2<sup>nd</sup> in importance only to good clinical care
  - Set realistic expectations from outset
  - Key contact points during mission
  - Identify and prevent likely problems
  - Manage problems when they arise
  - Prevents a problem for team escalating into a crisis for the assistance company

# Communication

- Despite importance, this is what goes wrong most often
- “Problem cases” are more often to do with poor communication than poor care
- Technology can fail
  - multiple options
- Overlooked
  - Team gets busy, focuses on clinical problems, and time slips by

# Communication

- Timely
  - Conference call at outset.
  - Get everyone on the same page
  - Routine reporting points / advisories at various points
  - Early on whenever there is a problem
- Accurate information
- Realistic estimates

# Summary

- Many lessons learnt over 25 years
- Increasing volume/acuity = increasing issues
- Must be flexible within mission
- Must be flexible across system processes
- Retain corporate knowledge /experience
- Always learning!