Maritime Telemedicine: Research Vessels

2011
Introduction

• Case documenting system changed in April 2011
• Better data capture
  – Maritime specific scripts
  – More safety/occupational health focus
  – Better medical categorization
• 1,041 cases (324 vessels)
  – 108 UNOLS + 8 non-UNOLS cases
Cases per year – Research vessels

- 2008: 85 cases
- 2009: 113 cases
- 2010: 141 cases
- 2011: 108 cases (with 62 as a percentage)
Distribution of vessel situation per year

- At anchor
- In port
- Underway at sea

2009
2010
2011
Case distribution by operation profile

- Research: 40%
- Tanker: 43%
- General cargo: 8%
- All other: 9%
Patient type – Research vessels

- Scientist: 33%
- Other: 24%
- Oiler: 7%
- Able Bodied Seaman (ABS): 6%
- Boatswain / Bosun / Head Seaman: 5%
- Second Engineer: 4%
- Captain / Master: 3%
- Electrician / Electronics Officer (ETO): 3%
- Ordinary Seaman: 3%
- Chief Cook / Chef: 2%
- Chief / First Engineer: 1%
- Chief Mate / Officer: 1%
- Qualified Member of Engine Dept (QMED): 1%
- Second Cook / Baker: 1%
- Second Mate / Officer: 1%
- Steward(ess) / Messman: 1%
- First Mate / Officer: 1%
- Third Engineer: 1%
- Third Mate / Officer: 1%
- Wiper: 1%
Patient type – Research vessels

- Scientists, 44, 38%
- Engineering, 26, 22%
- Deck, 18, 15%
- Officers, 10, 9%
- Galley, 8, 7%
- All Other, 10, 9%

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Median, max and min ages

- Scientists
- Other
- Officers
- Galley
- Deck
- Engineering

- High
- Low
- Median
Diagnostic categories

- Tankers
- Initial
- Tankers
- Final
- Research
- Initial
- Research
- Final

- Urologic/Renal
- Respiratory
- Ophthalmological
- Obstetrical/Gynecological
- Neurological
- Musculo-skeletal
- Mental
- Injury/External
- Infectious/Communicable
- Hematological/Oncological
- General
- Gastrointestinal
- Endocrinological
- Ears, Nose and Throat
- Dermatological
- Dental
- Cardiovascular
- Allergy
Diagnostic categories comparison
Yearly variation

Obstetrical/Gynecological
Endocrinological
Neurological
Cardiovascular
Allergy
Infectious/Communicable
Musculo-skeletal
Ears, Nose and Throat
General
Urologic/Renal
Ophthalmological
Dental
Respiratory
Dermatological
Gastrointestinal
Injury/External
Diagnostic categories comparison
By activity

- Deck: 25%
- Engineering: 17%
- Galley: 8%
- Officer: 8%
- Other: 10%
- Scientists: 43%

- Urologic/Renal: 6%
- Respiratory: 16%
- Ophthalmological: 13%
- Obstetrical/Gynecological: 25%
- Neurological: 20%
- Musculo-skeletal: 7%
- Mental: 12%
- Injury/External: 16%
- Infectious/Communicable: 10%
- General: 12%
- Gastrointestinal: 18%
- Endocrinological: 16%
- Ears, Nose and Throat: 13%
- Dermatological: 25%
- Dental: 10%
- Cardiovascular: 20%
- Allergy: 7%
Final disposition

- Tanker
  - Patient expired: 10%
  - Vessel diverted: 20%
  - Evaluated shore side: 70%
  - Treatment completed onboard vessel: 90%

- Research
  - Patient admitted to hospital: 10%
  - Vessel diverted: 20%
  - Evaluated shore side: 60%
  - Treatment completed onboard vessel: 90%
Shore side evaluation and diversion

- Vessel diverted - Patient separated from vessel
- Vessel diverted - Patient returned to vessel
- Evaluated shore side - Patient separated from vessel
- Evaluated shore side - Patient returned to vessel
Diversion patient separated from vessel

- Hx of kidney stones
- 16 NM to coast
- Blood in urine
- Important weight loss
- 24 hours turn around
Diversion patient returned to vessel

- Foreign object in the eye
- 454 NM to Kodiak
- Treated initially on board
- Evaluated at shore side clinic
- Returned to vessel after treatment
- 8 days
Thank you!!