

Description of Clinical Management and Challenges Experienced in the Community

Dr. Adrian Robertson
Provincial Medical Director EMS
(Manitoba)
Medical Director of Lifeflight

Objectives

- Pathways of care for patients with severe disease.
 - Presentation via clinics
 - Presentation via Emergency Departments.
 - Presentation via EMS.
- Challenges in Prehospital care in Pandemics.

Clinical Cases

- Majority of Cases are similar to mild seasonal flu.
 - Fever, sore throat, cough, headache, malaise.
 - Some cases of Gastrointestinal symptoms have been noted –usually in children
- A minority of cases develop into severe disease.
 - Pneumonia – developing into ARDS
 - Secondary bacterial infection has been noted to occur
 - Cases of myocarditis and encephalitis have occurred.

Time Course

- Most H1N1 patients develop symptoms 3-7 days post exposure.
- Patients that transform to the most severe disease presentation, usually do so slowly on days 4-7 of symptoms.
- Most patients presenting with severe disease report being sick with flu like symptoms for at least several days.

Presentation Pathways

- Many patients do not seek medical attention
- Due to the Pandemics label – more patients are presenting for testing.
 - Clear and accurate public education is essential
- Patients present via one of three pathways:
 - Clinics
 - Emergency Departments
 - EMS

Clinics

- The vast majority of patients presenting to clinics with the flu are relatively well.
- Some severe cases do present to clinics
 - These are often referred to the EMS system, for transport to the Emergency Department.
 - Isolated Aboriginal communities- with nursing stations are an important subset.
- Clinics are challenged to screen incoming patients, maintain separate waiting rooms, and provide masks, and other PPE.



Emergency Departments

- Patients arriving at Emergency Departments
 - Presents themselves
 - Emergency Departments are challenged to pre-screen, provide separate waiting areas, and PPE to incoming patients
 - Present via EMS to the ED
 - Patients presenting via EMS should ideally be pre-screen by EMS
 - EMS informs the receiving emergency department that then prepares to receive the patient.

EMS

- Anatomy of a EMS Call
 - 911 call
 - EMS responds
 - Assessment and stabilization
 - Transport to Care

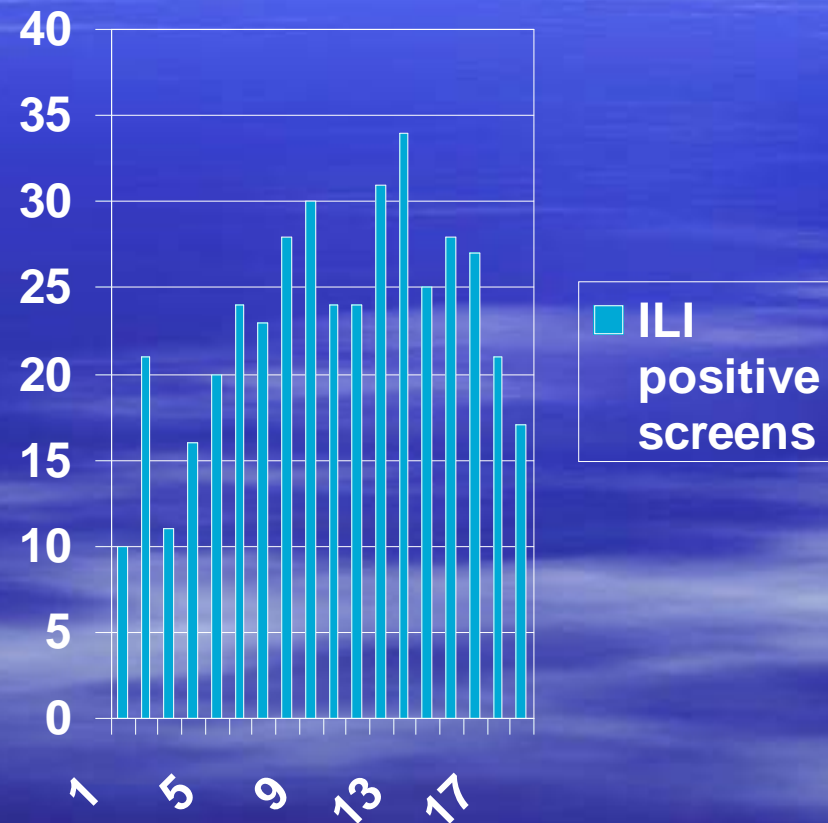


EMS Call Centre

- Calls received by 911, requesting an ambulance are sent to the MTCC. (Medical Transport Coordination Centre)
- The MTCC operators then takes the call determining the complaint category and the urgency of the call.
- To this carefully scripted conversation, we added a influenza like illness screening tool.
- Any positive responses were then passed on to the EMS crew as a positive screen for ili (influenza like illness), and the use of personal protective equipment was recommended.

EMS Surveillance

- The number of positive influenza like illness screens tracked week to week. Provide a crude estimate of the direction of disease in the Provence.



Personal Protective Equipment

- EMS personnel were to don PPE prior to attending to the patient.
 - Eye protection
 - Mask surgical or N95
 - Gown
 - Gloves
- Situational Specific Guidelines
 - Vs. One guideline for all

Assessment

- If the call screens negative for ili. Paramedics will be asked to question the patient on arrival, from a distance of 2 m.
- If the patient screens positive at that point the paramedic will don PPE.
- Patients that can tolerate masks, will have one applied.
- Assessment and Stabilization as per usual.

Transport to Care

Patients are masked if possible for transport.

The receiving facility is notified of the ili. status, and the need for precautions.

Ideally the receiving facility, can receive the patient with minimal delay, and without exposing others to the patient.

Patient is signed over to the receiving staff, with clear communication as to ili. symptoms.

Challenges in EMS

- Surgical masks vs. N95 in EMS
 - The EMS environment is difficult to control
- Assumptions about adequacy of training and retention of skills in donning and doffing PPE.
- PPE while in transport
- Off loading at hospitals
- The Consequences of Fear



Consequences of Fear

- There are a number of unconfirmed reports that we should take notice of:
 - Some EMS personal in Manitoba and other regions in the country reported to me that they were not informed about potential H1N1 status.
 - They believed that was either due to fear that EMS would not transport, or the community would be stigmatized.

Truthfulness

- Our system relies on the truthful communication, between its different functioning parts.
- Health care providers and leaders are encouraged to disclose pertinent medical information.
- To be aware that there is a duty to warn of the need to wear protective equipment.

Question ?

