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EMS ASIA 2013  
Emergency Medical Services in Asia

## National Ambulance Service Qatar

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## National Ambulance Service Qatar

- **Overview:**
  - An overview of the department
  - Current Ambulance Service
  - Future Ambulance Service

## National Ambulance Service Qatar

- The EMS department is the front line of health care in the State of Qatar

### Vision

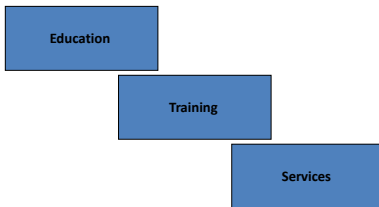
To provide a national service that places Qatar among leaders of pre-hospital professionals around the world

## National Ambulance Service Qatar

- **EMS Standard of Care**
  - The Department complies with the United States Department of Transportation EMS curriculum guidelines
  - All staff who complete HMC EMS training are eligible to take the US registration exam for Emergency Medical Technician – Basic

### National Ambulance Service Qatar

- **In 2007**
  - HMC and University of Pittsburgh Medical Center (UPMC) collaboration resulted in:
  - A review of the EMS



### National Ambulance Service Qatar

- **In 2008**
  - EMS Restructure Project was presented to HMC board
    - Review of vision
    - Review of strategic plan
    - Review of organization structure
    - Review of manpower allocation
    - Review of recruitment and retention factors

### National Ambulance Service Qatar

- **HMC Ambulance Service (HMCAS)**
  - Service provides prehospital emergency care (both ground ambulance and air ambulance) and interfacility transfer services within the borders of the State of Qatar, and occasionally beyond

### National Ambulance Service Qatar

- **HMC Ambulance Service (HMCAS)**
  - In keeping with HMC's mandate, these services are **provided free of charge to all the people of Qatar**, whether resident or visiting
  - The Ambulance Service integrates with primary, secondary, tertiary and ongoing care services as described National Health Strategy 2011-2016

### National Ambulance Service Qatar

- HMC's Ambulance Service aspires to be:
  - A **clinically led, high-performance** ambulance service **providing high-quality** prehospital emergency care and interhospital/facility transport for the people of Qatar

### National Ambulance Service Qatar

- The national ambulance service of the State of Qatar ( $\pm$  1.9M people; 85% in Doha)
- Current workforce establishment comprises 1021 staff from 25 countries

### National Ambulance Service Qatar

- An ambulance service's primary role is to:
  - Respond to patients requiring emergency care
  - Stabilise them by delivering clinically effective care
  - Transport them to an appropriate health care facility

### National Ambulance Service Qatar

- High-quality prehospital care therefore has two main components:
  - **ACCESS** - the degree to which patients receive the right level of care within an appropriate time
  - **EFFECTIVENESS** - the degree to which the clinical care delivered (including onward referral) is clinically effective and improves patient outcome

## National Ambulance Service Qatar

- **Infrastructure:**
  - Headquarters building incorporating a training centre, administration and stores
  - Communications Centre within the Ministry of Interior (MOI) National Command Centre (NCC)
  - Workshops in the Industrial Area and Al Khor
  - LifeFlight Base in top of Hamad General Hospital car park

## Infrastructure

- 6 Hub Stations with 29 Dispatch Points in a 'Hub and Spoke' arrangement

## Clinical Model



- Developed on the basis of evidenced based practice.
- Supported by revised Scopes of Practice and Clinical Guidelines.
- Audited by comprehensive quality measurement and improvement system.

## LifeFlight Deployment

- +/- 800 missions per year
- treated +/- 500 per year
- transported +/- 300

### Dispatch matrix

- Patient transporting vehicles have priority
- Getting to the scene vs. getting to the patient
- Where can a CCP make a difference?

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### Dispatch Response Process



### When do we need them?

- Late morning & mid evening peaks



### Challenge

- Staffing / peak demand mismatch



### HMCAS Operational Demand 2011



### Where calls come from



### Where can we get to?



### Variables affecting travel to calls



## Hub and spoke clustering



## Optimum locations



## Response times

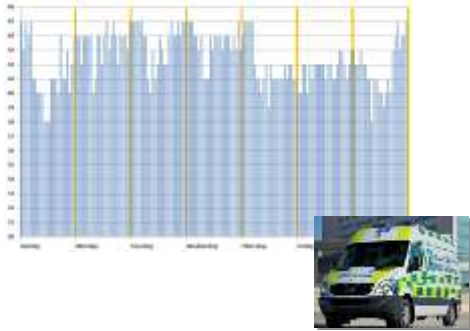


## National Health Strategy response targets

- **75%** of life-threatened patients in urban areas should receive an ambulance within 10 min.
- **75%** of life-threatened patients in rural areas should receive an ambulance within 15 min.

95% percentiles also reported

### Unit hour availability



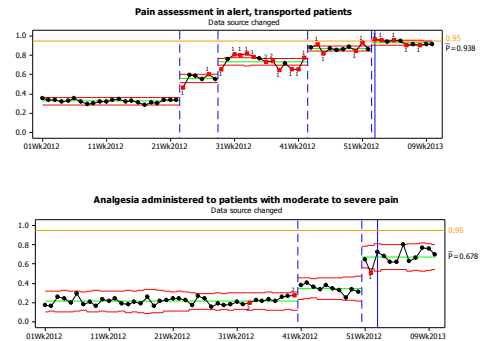
### Ambulance turnaround



### Measured Improvement

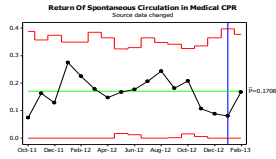


### Measured Improvement





## Measurement for Registry



## Use Of Systems



## New Facilities



## Design features

- Very small ground space required
  - Approximately 100m<sup>2</sup>



**2 Unit Location**



**Removable / Temporary**



**Removable / Temporary**



**Compact Design**



### Self-contained



### Design features

- Visibly bringing emergency care to the public



### ECG Telemetry System



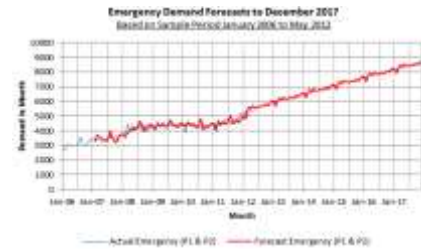
### New Narrow Ambulance Fleet



## National Ambulance Service Qatar

Future developments

## Increased Demand Continues



## Invest in Human Resources

## National Ambulance Service Qatar

- We will work towards this by:
  - Implementing **an effective clinical model based on research evidence and expert consensus**

*“Doing the Right Thing Right”*

### National Ambulance Service Qatar

- We will work towards this by:
- Working with our healthcare partner to develop seamless patient pathways

*“From the Roadside to Recovery”*

### National Ambulance Service Qatar

- We will know we have achieved this when:
  - We have an **established process** for engaging with our patients and clients and use this to inform our planning
  - We have a **robust system for identifying the resources required** for a particular patient and are able to get those resources to the patient within an acceptable time
  - We have a **robust quality improvement system** in place and are able to evidence improvement in the quality of care delivered to patients

### In October - 2011

- Hamad Medical Corporation's (HMC) Ambulance Service has received accreditation from the Joint Commission International (JCI)
- With this achievement, the Ambulance Service, formerly known as Emergency Medical Services, becomes **the first in the region** - and **the first national ambulance service** - to be accredited by the JCI
- HMC's Ambulance Service would **also be the fifth** such service in the world to achieve JCI accreditation, as well as **the biggest ambulance service in the world** that has been assessed by the JCI