

The Intersection of MNCH & Emergency Medicine: Lessons from Cambodia & India

Presented By Stanford Emergency Medicine International

Matthew Strehlow, Peter Acker, & Jennifer Newberry

No Disclosures



Stanford
MEDICINE

Emergency
Medicine

Our Partners



Dr. Houy Sikheng
AIDS HealthCare Foundation
Project Manager
Phnom Penh, Cambodia



Dr. Dyaneshwar Shelke
BVG
Chief Operations Officer for Maharashtra EMS
Maharashtra, India

Outline

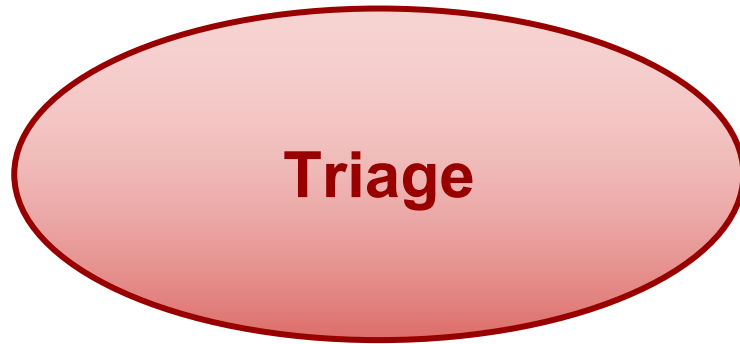
- Lessons from Emergency Medicine
- Elements of a functional emergency referral system
- Design and impact of MCATs in Cambodia
- Prehospital care in India and contribution to maternal health
- Assessing the system

Emergency Medicine Expertise

**Undifferentiated
Patients**

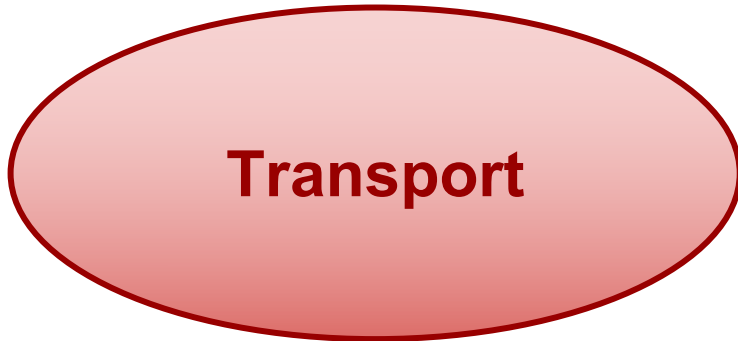
Stabilization

Emergency Medicine Expertise



Acuity, Resources, and Risk of delay

Emergency Medicine Expertise



Mode

Time

Distance

Destination

Emergency Medicine Expertise

Activation

Communication

Continuity

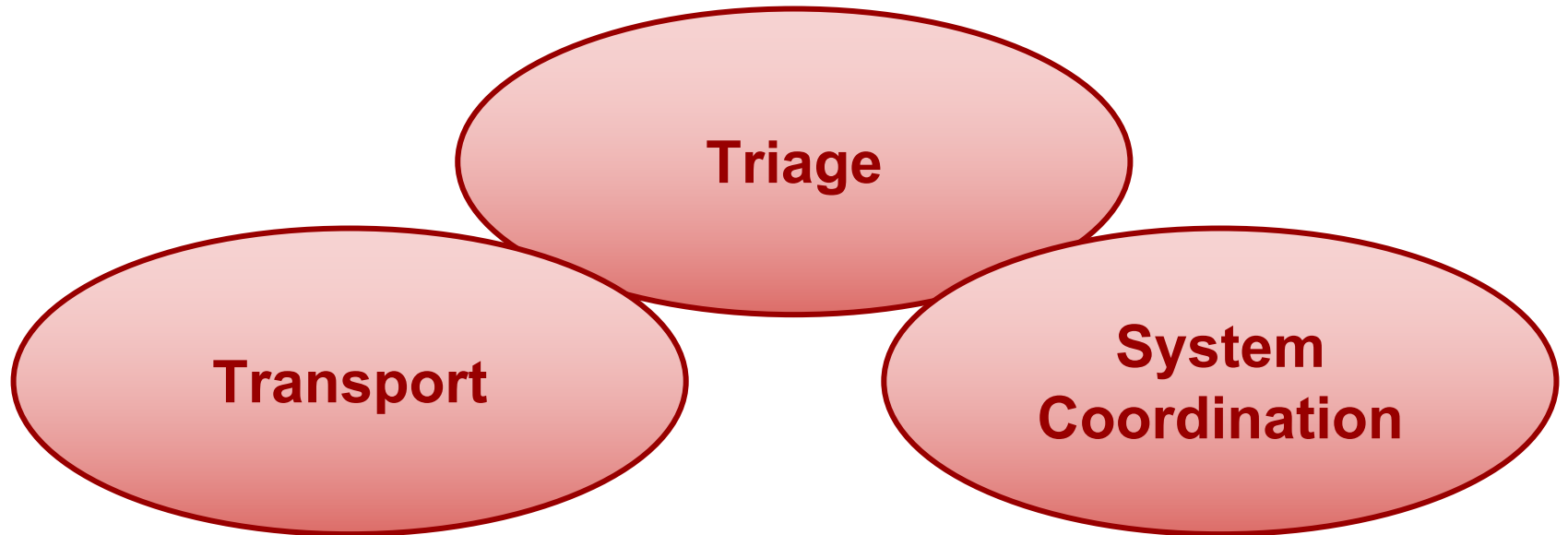
Review



**System
Coordination**

Emergency Medicine Expertise

Right patient, Right time, Right place, Right resources



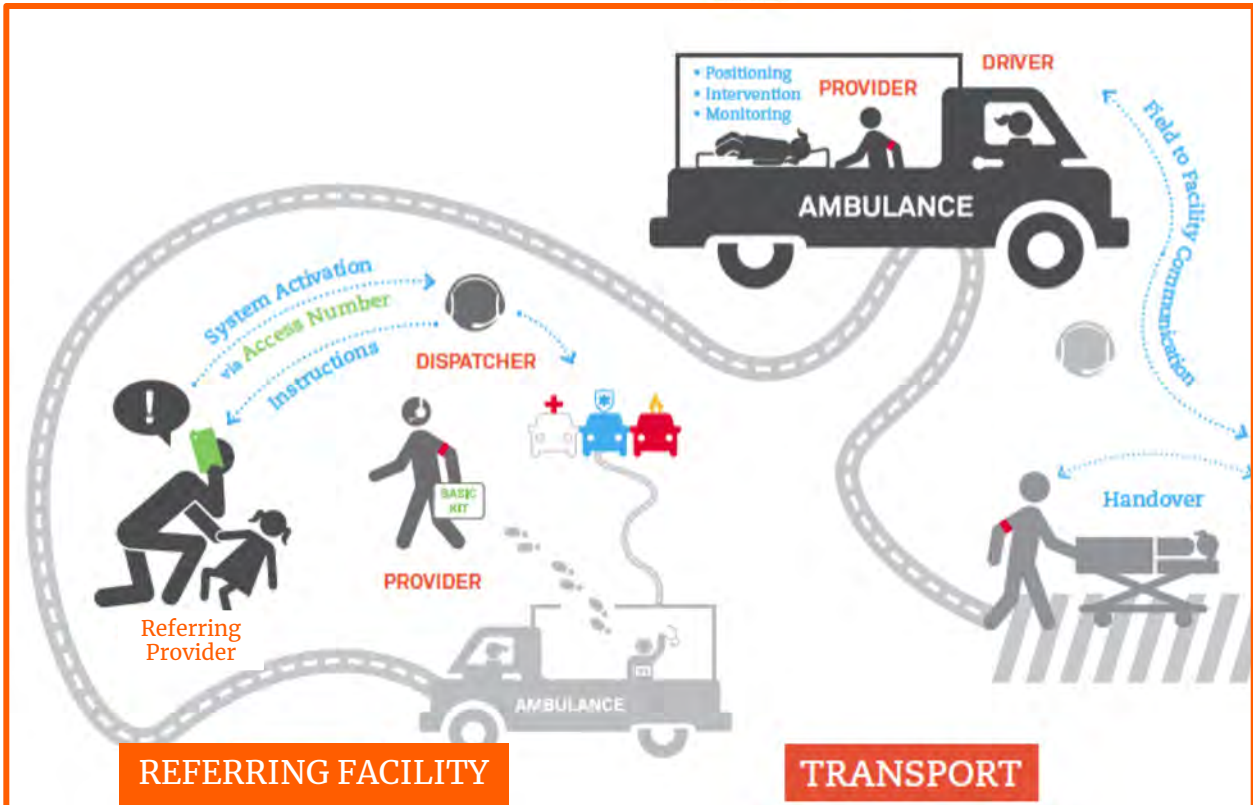
Emergency Referral Systems

Facility Coordination
Prehospital Infrastructure
Monitoring & Evaluation

Elements of a Functional Emergency Referral System



EMERGENCY CARE SYSTEM FRAMEWORK





ROUTINE
CARE
FACILITY



ROUTINE
+ BeMOC



ROUTINE
+ CeMOC



PRE-HOSPITAL
PROTOCOLS



ACCESS TO
EXPERTS



UNIVERSAL
ACCESS #



DATA SYSTEMS



RESOURCE
AVAILABILITY &
MAPPING



EMERGENCY
COORDINATION
CENTER



ROUTINE
CARE
FACILITY



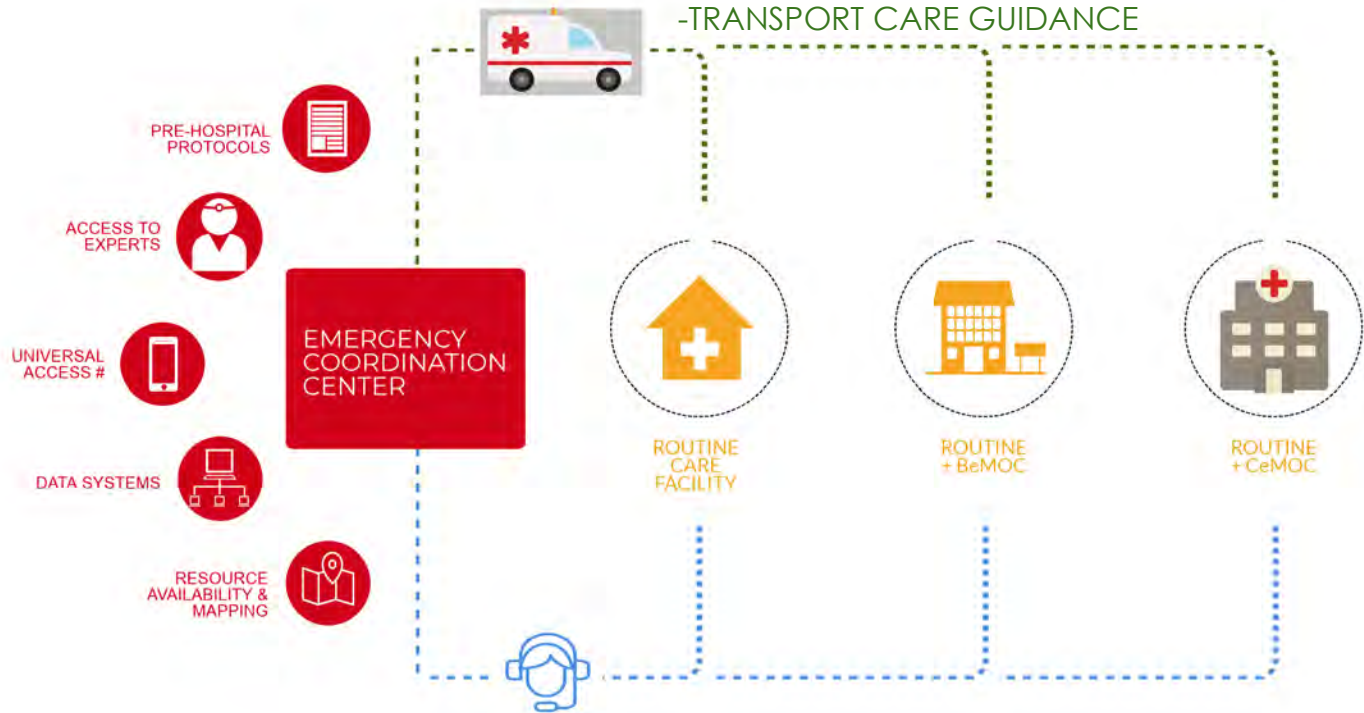
ROUTINE
+ BeMOC

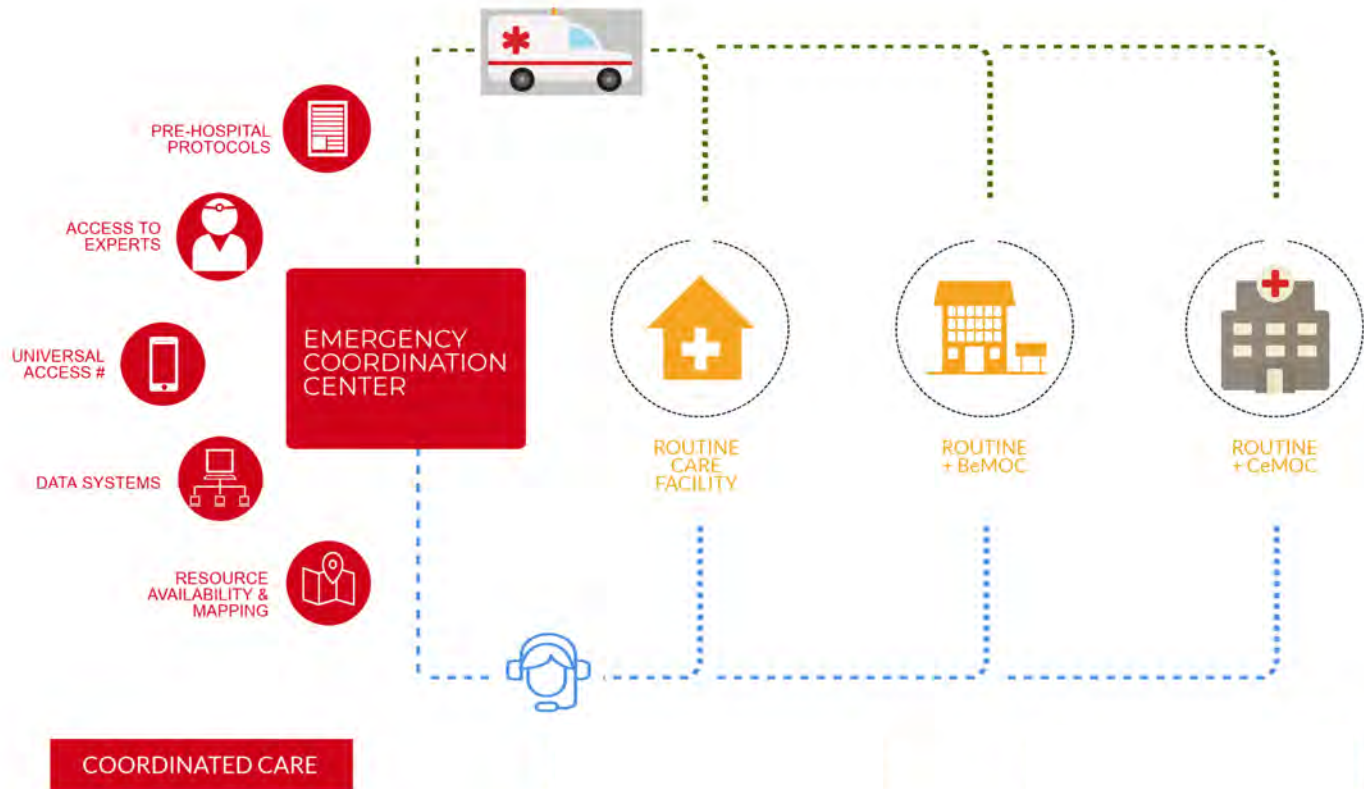


ROUTINE
+ CeMOC

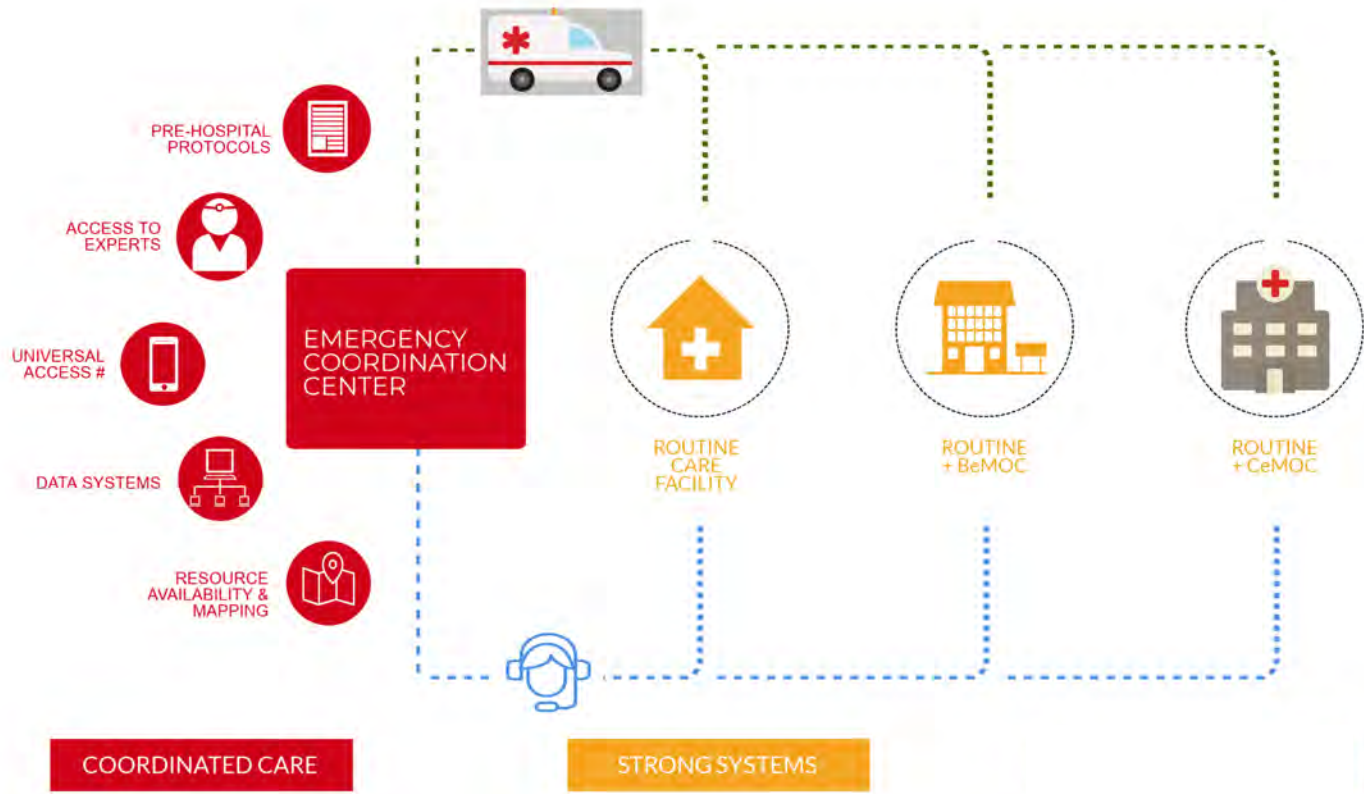


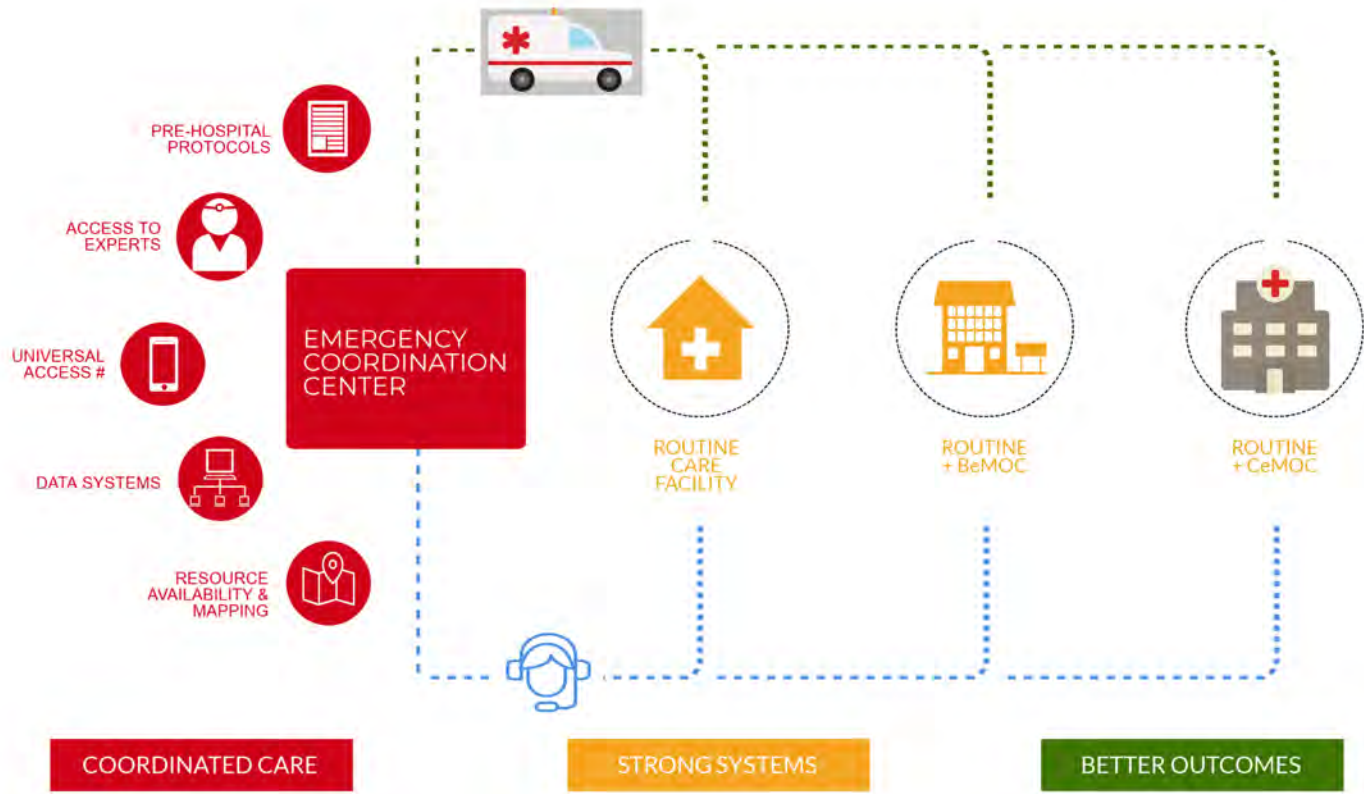
- DATA DRIVEN RECEIVING FACILITY SELECTION
- REFERRAL LOGISTICS COORDINATION
- TRANSPORT CARE GUIDANCE





COORDINATED CARE





Midwifery Coordination Alliance Teams

MCATS

Challenge: lack of linkage between providers at various levels of health system

MCATS

Solution: quarterly regional quality improvement gatherings

- Referring facility staff
- Receiving facility staff
- Local gov't health leadership
- MOH oversight team

MCAT Activities

Discuss facility and system-based challenges

Case-based coaching and feedback

Share new skills and knowledge

Review referral data and trends

Referral System Support

Strengthened inter-facility linkages

Promoted open and regular communication

Created culture of feedback

Provided forum to address system challenges

Impact

Provider empowerment

Increased communication

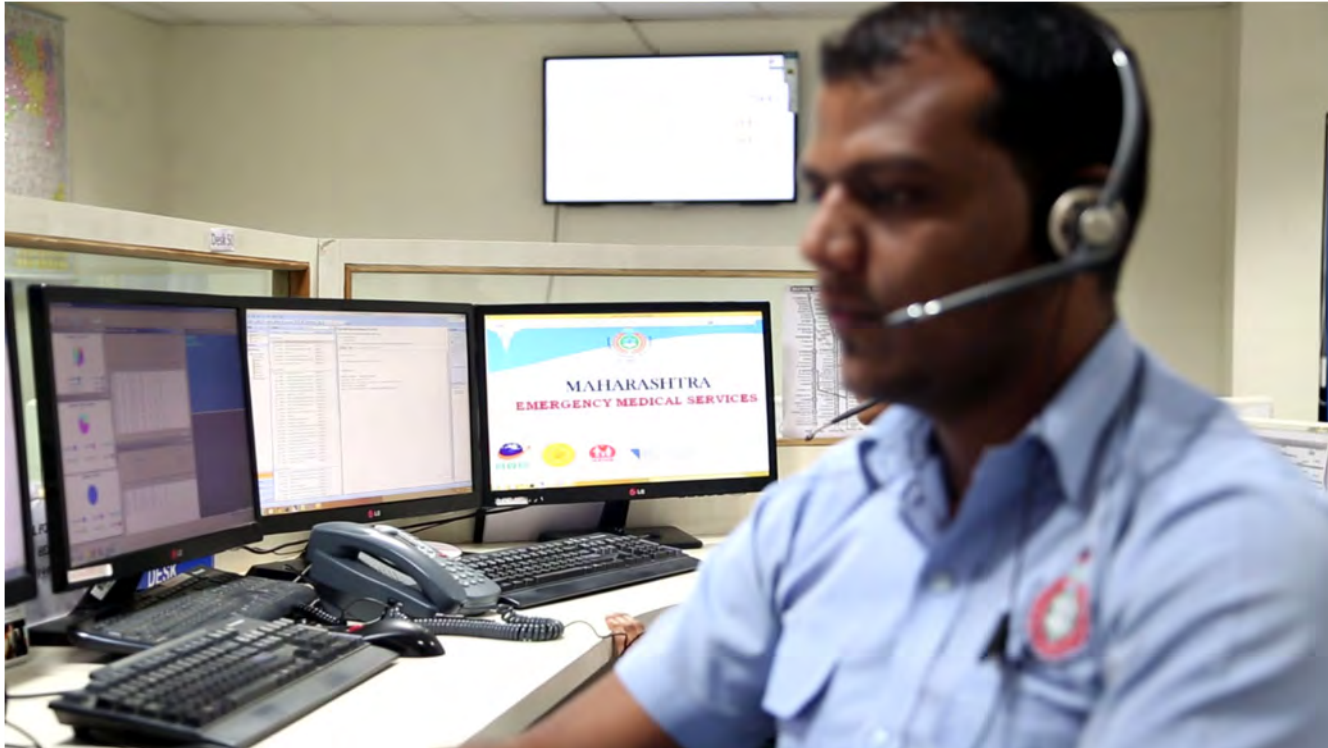
Improved knowledge dissemination

Correlated with increased referral frequency

Endorsed by MOH for entire country

Prehospital Care Systems in India





Building Data Infrastructure for Referral System Guidance & Assessment



DATA SYSTEMS



A referral lens for facility assessments

Mapping systems & outcomes

Team-based quality improvement

AMDD EmONC Tool - Referrals

AMDD EmONC Assessment

Module 11.
Referral for obstetric,
newborn and other
patients.

**not available in French*

- Policies for patients referred out/in
- Communication logistics
- Transport logistics

AMDD EmONC Assessment

Module 4. Section 2.
Facility case summary.

Add Referral Logbook review

- Receiving/referring facilities
- Receiving/referral diagnoses
- Referral rationale

AMDD EmONC Assessment

Module 7.
Provider Knowledge &
Competency.

- Tell me about a typical transfer.
- Tell me a time when...
 - A referral went very well?
 - A referral that went poorly?

Mapping Systems & Outcomes

Can we target specific hospitals for strategic regionalization?

Identify factors that influence current referral patterns?

Can we optimize referral patterns to be based on actual capacity?

Overlay rain and/or traffic patterns?

RESOURCE
AVAILABILITY &
MAPPING



Facility Based Newborn Care Database

(Real Time Monitoring and Tracking of Small & Sick Newborn)

Developed by UNICEF for National Health Mission

User Name:

Password:

SignIn

Special care for newborns
Giving chances to life...



Team-Based Quality Improvement

Individuals



Processes



Teams

Receiving facility teamwork

Prehospital - hospital teamwork

Individuals



Processes



Teams

> 1500 interfacility exchanges

98.5% communicated between teams

Lack of standardized signout

Signout quality differed significantly depending on provider role

DATA SYSTEMS



Data-driven referral systems