Emergency Medicine Programme

EMP Update 4 - Update on ED Process Measures   23 July 2011

An update on other aspects of the EMP will be circulated shortly but this update needs to be shared now because the Special Delivery Unit (SDU) intends to start working on ED trolley waits in September. The draft EMP report is scheduled for consultation at the end of August. There will be regional workshops to discuss EMP implementation from September onwards.

This is a confidential document outlining work in progress in planning the implementation of the EMP. It is provided for information purposes for colleagues pending formal consultation and approval.

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EMP – ED Process Measures

Introduction:

This briefing outlines the interface between the EMP and SDU in the use of ED process measures to improve patient waiting times and reduce ED overcrowding. This is only one part of the EMP approach to improving quality of care and patient access but it is being implemented in advance of other components because of the urgent need to start improving waiting times for patients.

Contents of this presentation:

- EMP aims and key solutions
- Development of SDU
- Focus on Governance, ED measures and KPIs in the first steps of EMP implementation
- Phased upgrade of EDIS to capture National Process Dataset
- Need for ED staff to buy-in to data collection despite challenges

EMP Objectives and Aims

Objective:

- To improve the safety and quality of care in EDs and reduce waiting times for patients

Quality:

- Maximise access to Consultant provided care - decreased mortality and morbidity
- Development and attainment of quality targets (HIQA compliant)

Access:

- Patients admitted or discharged within 6 hrs
- Ambulance patient hand-over time
- Patients with high-risk conditions to be assessed by a Consultant/Middle Grade.
- Decreased number of patients leaving before completion of treatment.

Cost:

- Reduction in number of admissions
- Decreased LOS for in-patients referred from ED

EMP has identified these Key Solution Areas

Develop Model of care:

- Staffing, work practices, roles & responsibilities, workforce models/skill mix
- Define governance & clinical audit system requirements
- Pre-Hospital care – develop interface, medical support, training opportunities
- Paediatric Emergency Medicine

Performance Improvement:

- Implement national clinical guidelines: top 20 EM conditions & other DCSP programme guidelines
- Suite of KPIs for process efficiency and quality of clinical care
- Develop data definitions around measures
- Enhance Clinical Decision Unit (CDU) work
- Case-mix/clinical acuity measures
- Best Practice Project: Standardised Care Pathways; Access to Diagnostics; ICT systems; Standardised model of care including workforce planning; equity of resource distribution; audit and data collection standard with KPIs.

Sustaining Improvement:

- Strategic plan for EM – for stakeholder consultation August 2011
- Inter-programme implementation across acute hospital system and regions
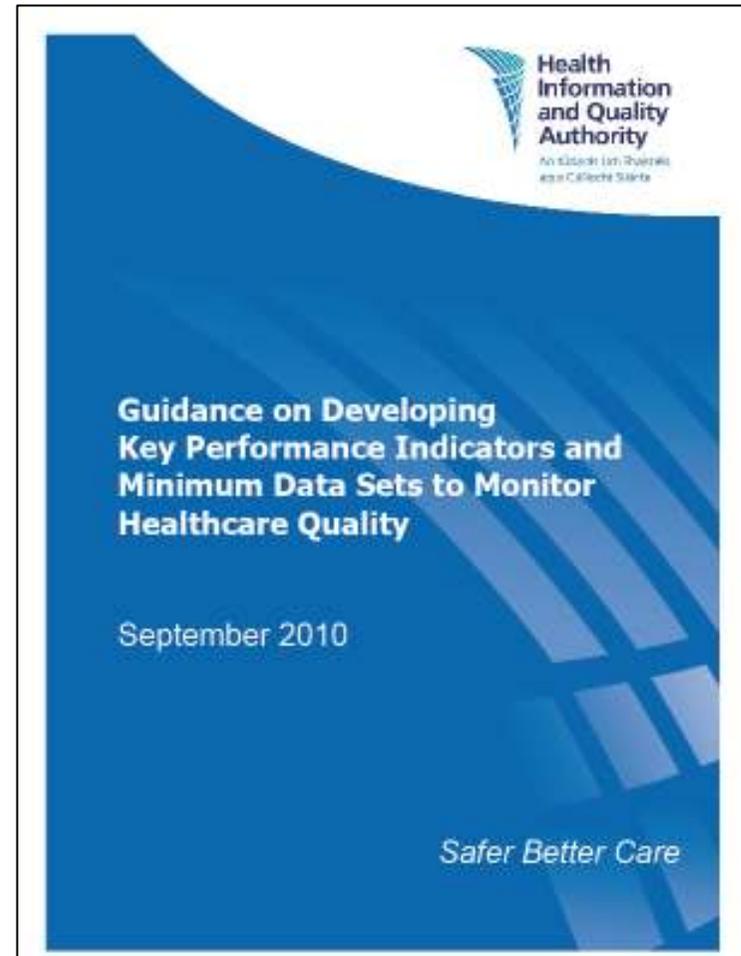- Change management and embed continuous improvement

The SDU and Emergency Medicine

The SDU is being implemented by the **Minister for Health & Children** to drive improvement across the system. Dr Martin Connor has been appointed SDU lead. His priority is to reduce ED trolley waits and out-patient waiting lists.

SDU methodology will involve data-collection and analysis with feedback to hospital management teams. It begins work in September 2011.

The SDU and EMP are aligned in their approach to data-drive continuous quality improvement of ED waiting times and have agreed a National ED Process Dataset.

The measures and KPIs developed by the EMP will comply with HIQA guidance on measures and indicators.

Health
Information
and Quality
Authority
An tÚdarás um Fhaisnéis agus Cáilíocht Sláinte

**Guidance on Developing
Key Performance Indicators and
Minimum Data Sets to Monitor
Healthcare Quality**

September 2010

Safer Better Care

EMP is advocating process measures to

- Support a culture of continuous quality improvement

- Enable staff in each unit to understand, monitor and plan services

- Allow reliable comparison over time and benchmarking between units

- Support KPIs

- Inform capacity planning and resource management

- Be interpreted in conjunction with clinical quality indicators

EMP Measures

EMP recommends implementation of:

- Time line – September:

    EM Activity Measures & definitions (e.g. number of new attendances)

    EM Process Measures & definitions (e.g. total ED time)

    KPIs

- Longer term:

    Acuity and Case-Mix Measures

    Measures of Patient Outcome and Value in EM

EM Activity Measures – some examples

New ED Patient Attendance	A patient who attends ED requesting emergency care for the first time with a particular condition and any patient transferred to or admitted through an ED who requires EM clinical care or resources.
Scheduled Return	A patient for whom a subsequent ED visit is arranged but who remains under the care of EM. This may include patients attending EM review clinics.
Unscheduled ED Return Patient	A patient who returns with the same condition within 28 days of the initial ED visit. This includes patients who re-attend frequently. Two subgroups should be identified – EM patients and patients who re-attend after discharge by other clinical teams.
Paediatric Patient	Aged less than 16 years

Implementing Measures and KPIs

EMP Activity Measure Definitions will undergo consultation and will be implemented following HSE/DoHC approval.

The EMP aims to minimise the burden of data collection through the enhanced use of ICT

ED Information Systems:

• Inadequate ED information systems (EDIS) limit the number of EDs that will be able to provide all ED process data from the outset.
• Limited EDIS upgrades will be undertaken on a phased basis to enable process data capture.
• EMP and SDU are developing a system for the automated analysis and secure web-based display of ED process data for EDs with information systems that support this function.

Capturing process data and achieving KPIs will inevitably involve work-practice changes.

National ED Process Dataset Project

Who?   SDU with Directorate of Clinical Strategy and Programmes, EMP and HSE ICT

Why?   To provide ED data to reduce waiting times and trolley waits

How?   ED staff and hospital management support

Limited EDIS upgrade in some EDs to provide additional data-points

When?   First phase in September 2011- hospitals will be notified shortly.
Hospitals that require minimum changes to provide data will be included in
1st phase with those requiring more ICT development included later.

Good news?   Specification for a national EDIS will be advanced with a view to
developing a comprehensive ICT solution for EDs. The need to expedite
improvement in ED patient waiting times requires that a limited EDIS
upgrade is undertaken where possible while planning for a national EDIS
solution is progressed.

ED patient care has 4 main process steps that can be examined to understand patient flow

Arrival → Clinician → Decision → Departure
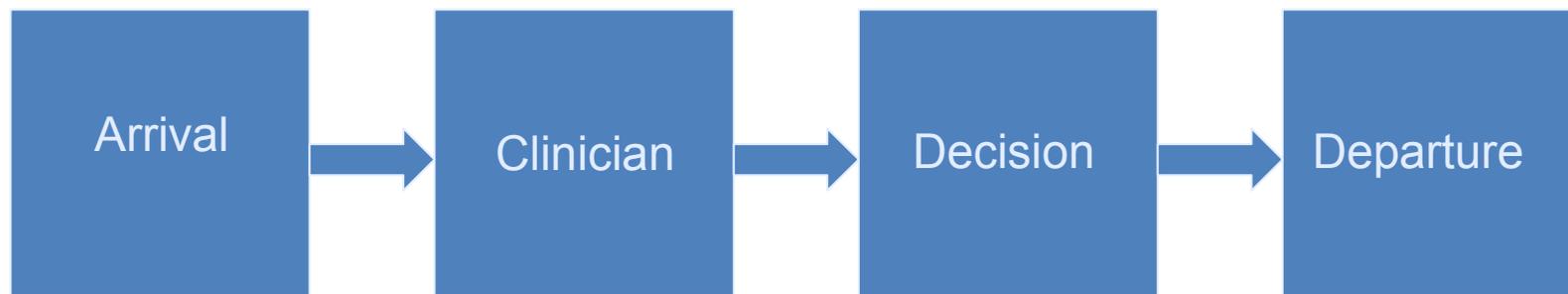
Intermediate steps in the patient journey that are the basis of the process dataset:

ED Processes and Trolley Wait Measures
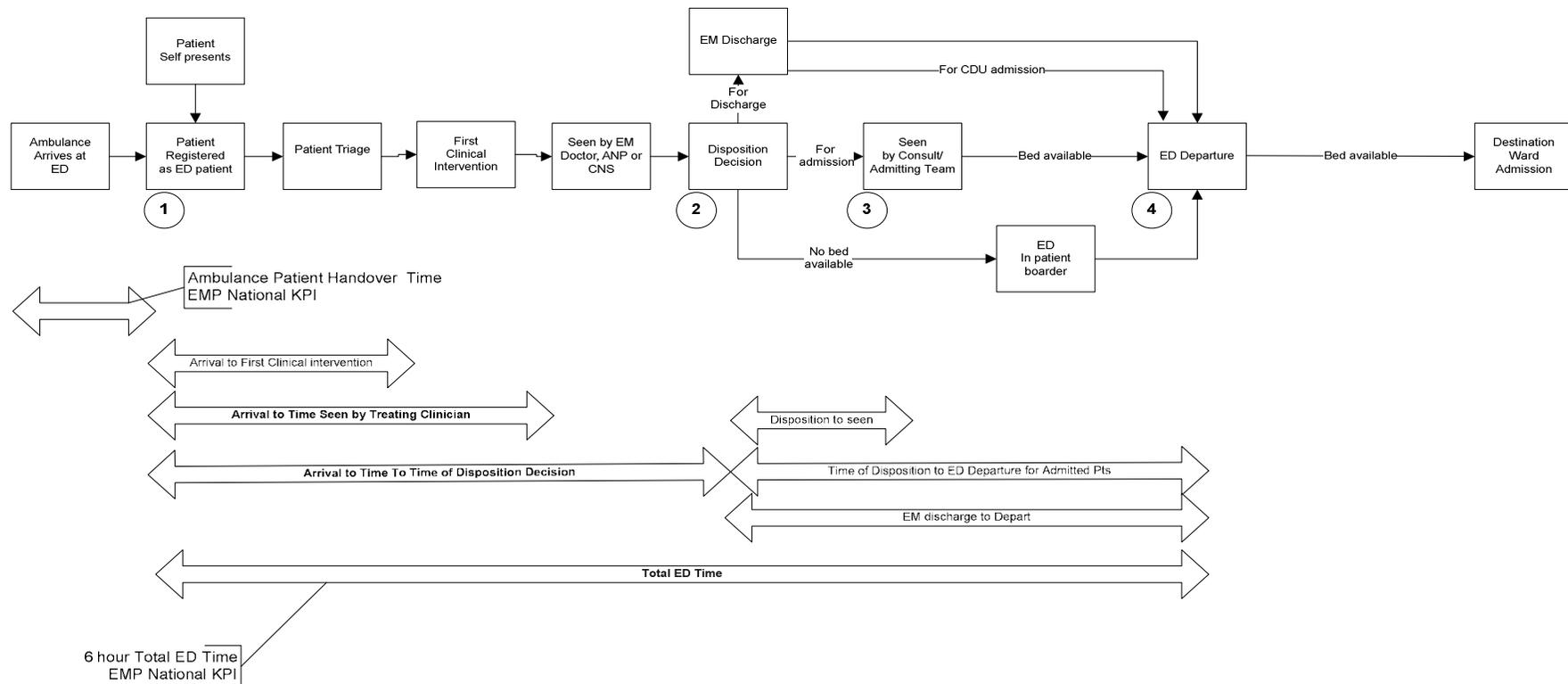
1-4 = Key Process Measures

The National ED Process Dataset

	Time point	Definition:
1	Ambulance Arrival Time	The time the paramedic staff record they arrived at the hospital.
2	ED Arrival Time	The first documentation of a patient's presence in the department is taken as the arrival time.
3	Triage Time	The time that triage is started.
4	Time Seen by Treating Clinician	The time a patient is first examined by a doctor or an Advanced Nurse Practitioner.
5	Time of Disposition Decision	The time the treating clinician decides on a patient's further management. It is the same time as Decision to Admit for patients who are subsequently admitted.
6	Time Seen by Admitting/Consulting team	The time a patient is seen by a doctor on behalf of the admitting Consultant or by a doctor providing a non-EM specialist opinion.
7	Time of Completion of Admitting/Consulting Team Assessment	The time that admitting/consulting teams have completed their assessment of a referred patient.
8	PAS Admission Time	The time that an inpatient bed is requested on the hospital's computerised Patient Administration System.
9	ED Departure Time	The time that a patient physically leaves the ED.

National ED Process Dataset Project

What does this mean for EM teams?

All EDs will be expected to capture data for as many components of the dataset as possible, in "real-time" where possible. Additional data-points may be collected in some EDs but existing EDIS should be configured to provide the national dataset.

Some EDs will have upgrades of existing EDIS to capture the full suite of data-points in the first phase of this project.

Next-day ED Process data will be available to ED teams if EDIS allows

There will be a new emphasis on collecting process data. This will need clinician leadership and support.

Teams will be asked to start collecting data on the understanding that this data is essential to implementing improvements in ED waiting times and ED overcrowding

Hospital improvement teams are being established to drive improvement across the entire patient pathway from arrival to hospital discharge and will collaborate with ED teams on the ED component of patient care.

Access KPIs

The EMP will implement 4 Patient Access KPIs. These are still in draft   format and are undergoing consultation.
The recommended KPIs are:

- Ambulance Handover Times: 95% < 20 minutes
- Total ED Time: 95% < 6 hours (and no patient waits > 9 hours)
- Left before completion of treatment: < 5% of new patient attendances
- Clinical Decision Unit length of stay: 95% < 24 hours

The aim is to prevent distortion in practice through the implementation of linked KPIs from Pre-hospital to ED and ward care. The targets are about improving patient care. The measures and indicators are not an end in themselves. There is also scope for ongoing improvement over and above the targets.

Access KPIs – work-practice changes

Implementation will require work-practice changes in most EDs

Ambulance Handover Times: 95%<20 mins

Time of ambulance arrival needs to be entered retrospectively in the ED PAS from the Pre-hospital Care Record. The time of handover is the time of triage for ambulance patients. Patients should be removed from ambulance trolleys at the time of patient handover. Electronic solutions to capture this data will be developed.

Total ED Time: 95%<6 hours (and no patient waits>9 hours)

Collect data for ED arrival and departure.

Left before completion of treatment: <5% of new patient attendances

Ensure standard definition used (monthly audit if real-time data capture not possible due to lack of ICT)

Clinical Decision Unit length of stay: 95%<24 hours

Summary

- SDU approach integrated with EMP

- One set of measures

- 6-hour target ultimate measure to reduce ED overcrowding

- EMP supports:
    Local ownership of measures;
    Local solutions and innovation;
    Effective Clinical Practice.

- Interpretation of process data along with quality measures

- Culture of continuous quality improvement to be developed within each ED.

Thank you - Feedback welcome!