

# Emergency Medicine Programme

## Implementation Guide 8:

# Introducing the ED team to the Clinical Microsystems Approach

January 2013

# Introduction



This guide aims to provide Emergency Department (ED) teams with an overview of the Clinical Microsystems approach *Assessing, Diagnosing and Treating your Emergency Department*.<sup>1</sup>

The National Emergency Medicine Programme (EMP) has recommended *Clinical Microsystem*<sup>2,3</sup> as the overarching quality improvement method to support EMP implementation.

## Contents:

What are Clinical Microsystems?

How this approach help improve patient care in EDs in Ireland?

What does the approach involve?

References and resources

# EMP Implementation

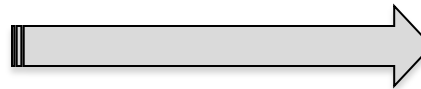


EMP  
First Steps



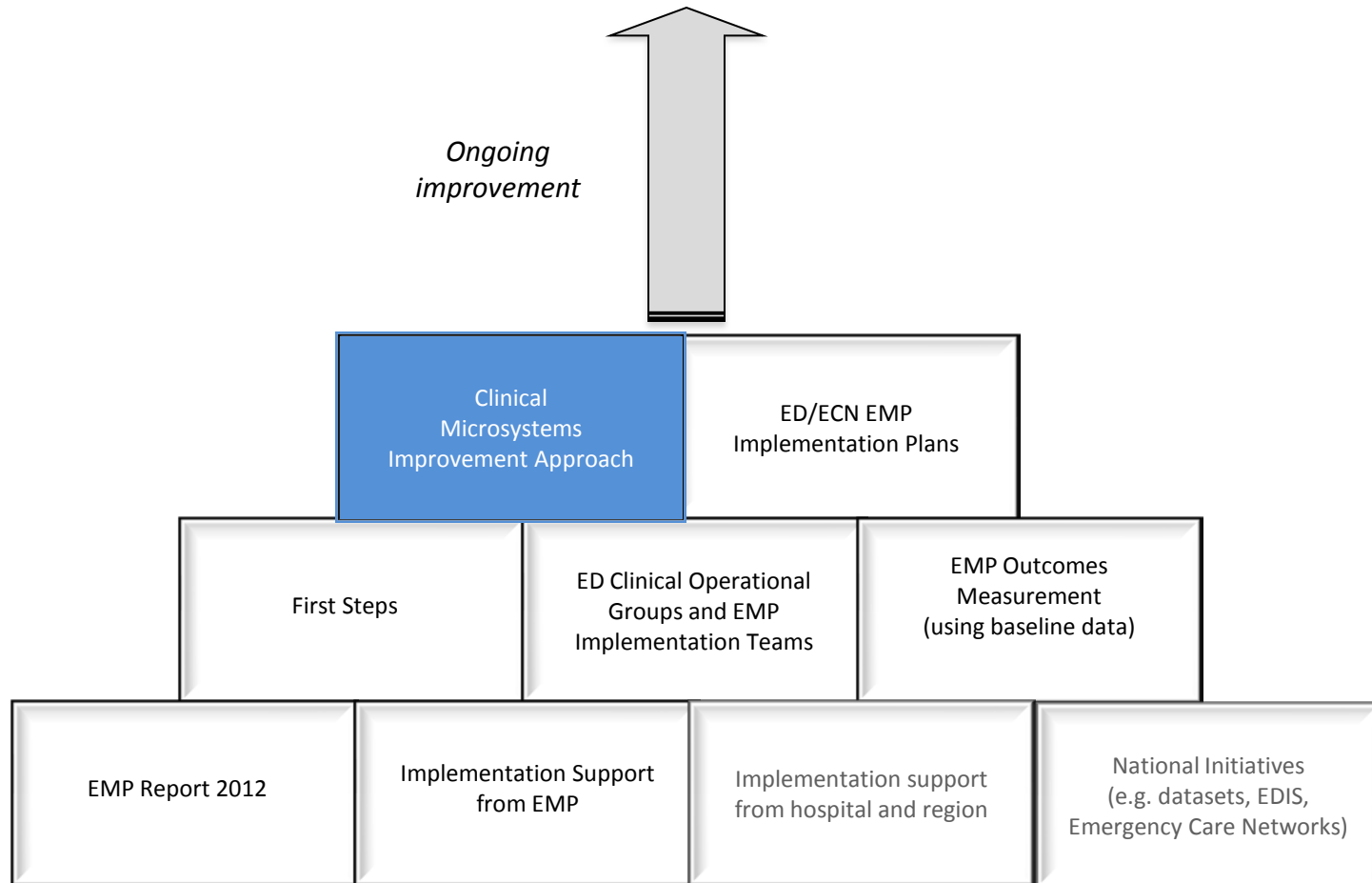
What changes are needed  
to implement  
the EMP in our ED?

How do we implement  
the changes needed  
and sustain  
improvement?



**Clinical  
Microsystems**  
*Assessing, Diagnosing  
and Treating your  
Emergency Department*

# Putting it all together



Building a foundation for sustained improvement

# Why use Clinical Microsystems?



The Clinical Microsystems approach:

- has been shown to be effective in the ED setting;<sup>4</sup>
- focuses on patient and staff experiences of care;
- helps teams identify and prioritise areas for improvement that matter to patients;
- encourages active participation in improvement activity;<sup>5</sup>
- includes implicit recognition that solutions cannot be universally applied or transferred mechanistically across differing contexts.<sup>5</sup>
- is easy to use – all units can adapt the approach without formal training;
- embeds improvement in the daily work of front-line clinical staff;
- increases a team's capacity to absorb and manage externally imposed change and upheaval;<sup>5</sup>
- aims to deliver long-term sustainable improvement.

# What are Clinical Microsystems?



A clinical microsystem is described as “a small group of people (healthcare providers, patients and their families) who work together in a defined setting on a regular basis to create care”.<sup>3</sup>

It is the “atomic unit” of the health system.<sup>3</sup>

Clinical microsystems combine to form meso-systems (the hospital) and macro-systems (the health service).

The clinical microsystem is where care is “made”. It is at this level that quality, safety, reliability, efficiency and innovation are created along with staff morale and the patient experience.<sup>3</sup>

# Clinical Microsystems Approach



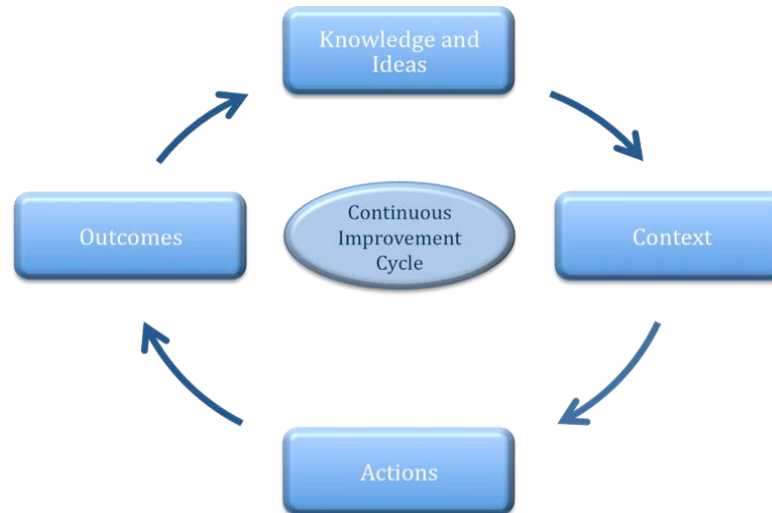
The patient and provider are at the centre of all improvement.

The Clinical Microsystems approach recognises the unique context of each microsystem (or ED) based on culture, processes, habits and traditions.<sup>6</sup>

The Clinical microsystem approach respects existing work and encourages teams to acknowledge and celebrate achievements.

It promotes the involvement of the entire multidisciplinary team in improvement activity.

# Clinical Microsystems Approach



- The context of each ED influences what improvement actions are needed for that unit.
- The outcomes of improvement activity can be measured and used to generate new ideas and knowledge.
- This activity drives a continuous improvement cycle.



# Assessing, Diagnosing and Treating your ED



*Assessing, Diagnosing and Treating Your Emergency Department, The Path Forward*<sup>1</sup> is a Clinical Microsystems workbook developed by an ED team in the USA to deliver sustainable improvement in emergency care. It has been adapted with permission for use in Ireland. It asks ED teams to:

- Organise a lead team to drive and coordinate improvement;
- Assess the ED using the 5 'Ps': Purpose, Patients, Professionals, Processes, Patterns and Metrics that Matter;
- Diagnose the ED to identify areas for improvement;
- Treat the ED by planning and working on improvement projects;
- Follow-up and evaluate improvement so that over time it is embedded in the day-to-day work of the ED.

*Further information on how to use the Assessing, Diagnosing and Treating your Emergency Department workbook is provided in Implementation Guide 10.*

# Improvement Methods included in the Clinical Microsystems Approach



Improvement projects may involve using a combination of tools such as:

- Lean methods;
- The Model for Improvement<sup>7</sup> based on small tests of change using Plan-Do-Study-Act cycles.

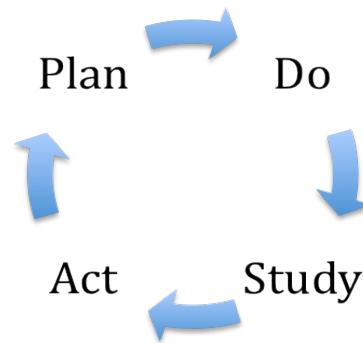
The EMP will provide training and support in using these methods.

Teams will gain confidence in using these improvement methods over time.

Continuous improvement will become part of routine activity in all EDs.

Effective practice and improvement learning will be shared between EDs.

# The Model for Improvement



- Start with small projects and learn as you go along.
- Engage in ‘mini-experiments’ – try a process change for a day or a few hours, review its effectiveness and test the new approach again.
- Achieve small sustainable improvements aligned to your primary improvement goal.
- New practices are tested, implemented and then standardised.

# Safety Briefings (Huddles)



One simple way to embed improvement in the daily work of EDs is to undertake “huddles” or team briefings at the beginning of shifts.

Huddles are structured, efficient briefings to enable teams to be more proactive about the challenges they face in providing high quality emergency care for patients. The suggested template involves:

- A Safety Briefing – increasing awareness of recognised risks in the ED;
- Follow-ups from previous day or shift;
- A “Heads-up” for today;
- Planning for tomorrow and the week ahead;
- Recognising achievements

See the Clinical Microsystem workbook *Assessing, Diagnosing and Treating Your Emergency Department, The Path Forward*<sup>1</sup> for a safety huddle template.

# Pitfalls to Avoid in the Local Application of the Clinical Microsystems Approach



- Dependence on one or a small number of leaders, so that the Clinical Microsystems approach is not sustained without them and is not embedded into routine work;
- Failure to include patient experience as a primary driver of change;
- Focussing on staff satisfaction issues only;
- Regressing to previous culture and approaches in times of additional stress;
- Frustration of identifying problems that prove to be irresolvable within the microsystem - clarify which issues need to be addressed with other systems;
- The build up of conflicting priorities and pressures – prioritisation is essential.

*Source: Williams I, Dickinson H, Robinson S, Clinical Microsystems: an Evaluation. Health Services Management Centre (HSMC), School of Public Policy, University of Birmingham, January 2007<sup>5</sup>*

# Overview



- Improvement learning needs to be communicated and progress sustained.
- ED improvement will be led by a small team, under the governance of the ED Clinical Operational Group but it should ultimately involve all members of the ED multidisciplinary team.
- The Clinical Microsystems approach challenges ED teams to better understand the services they provide from their patients' perspectives and to implement improvements that improve patient outcomes and experiences.
- The approach encourages local adaptation of ideas, sharing of best practice, innovation and teamwork.
- ED teams will need to reach out to other services and specialties across the hospital and in primary care to develop better systems of patient care.

# References



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