

# Emergency Medicine Programme

## Implementation Guide 4:

# Overview of the ED Improvement Approach and EMP Implementation

January 2013

# Introduction



This is a guide for Emergency Department (ED) teams and their hospital colleagues to provide an overview of the quality improvement (QI) approach that is at the core of implementation of the National Emergency Medicine Programme (EMP).

The EMP improvement approach is based on best current evidence from the international literature and improvement science. It supplements the EMP Report 2012.

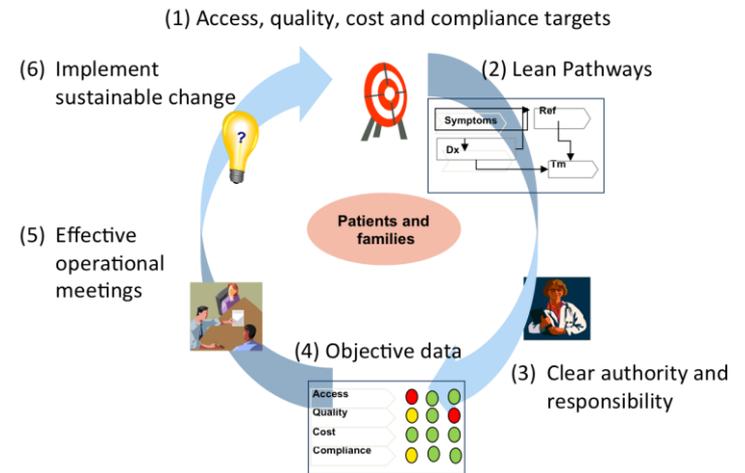
International experience indicates that the application of improvement science in the ED setting is highly effective in achieving better outcomes for patients.<sup>1-3</sup>

The Programme aims to build a foundation for quality improvement in EM that will support long-term sustainable improvement in ED patient safety, quality of care, better access and value. We aim to increase the reliability of emergency care.

# National Clinical Programmes

All Clinical Programmes are expected to deliver data-driven quality improvement.

- Patients are at the core of all improvement
- Defined Programme aim and objectives
- Use proven improvement methods e.g. Lean, Clinical Microsystems.
- Ensure clear authority and responsibility, e.g. ED Clinical Operational Groups
- Defined measures and metrics to drive improvement
- Provide effective operational meetings to action and sustain improvement
- Implement sustainable change

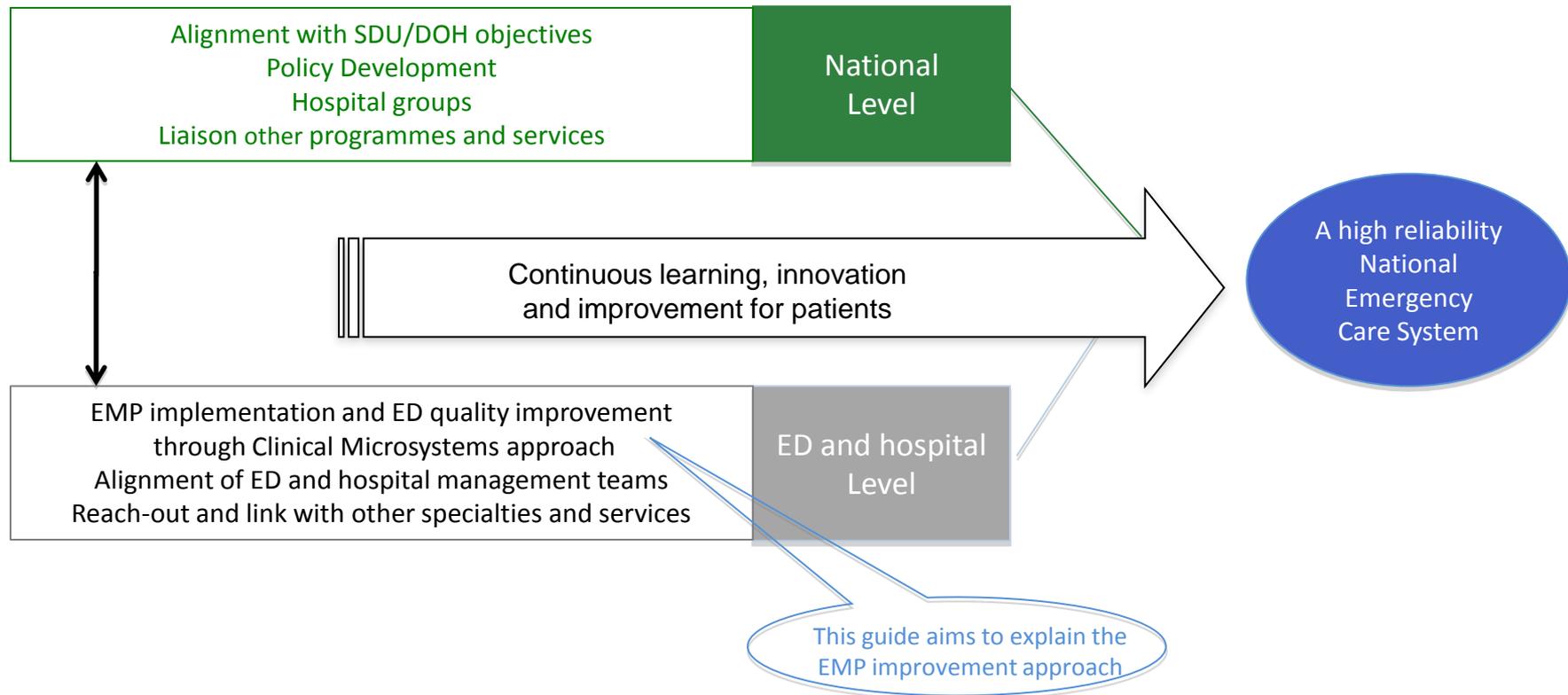


Clinical Strategy and Programmes Directorate<sup>4</sup>

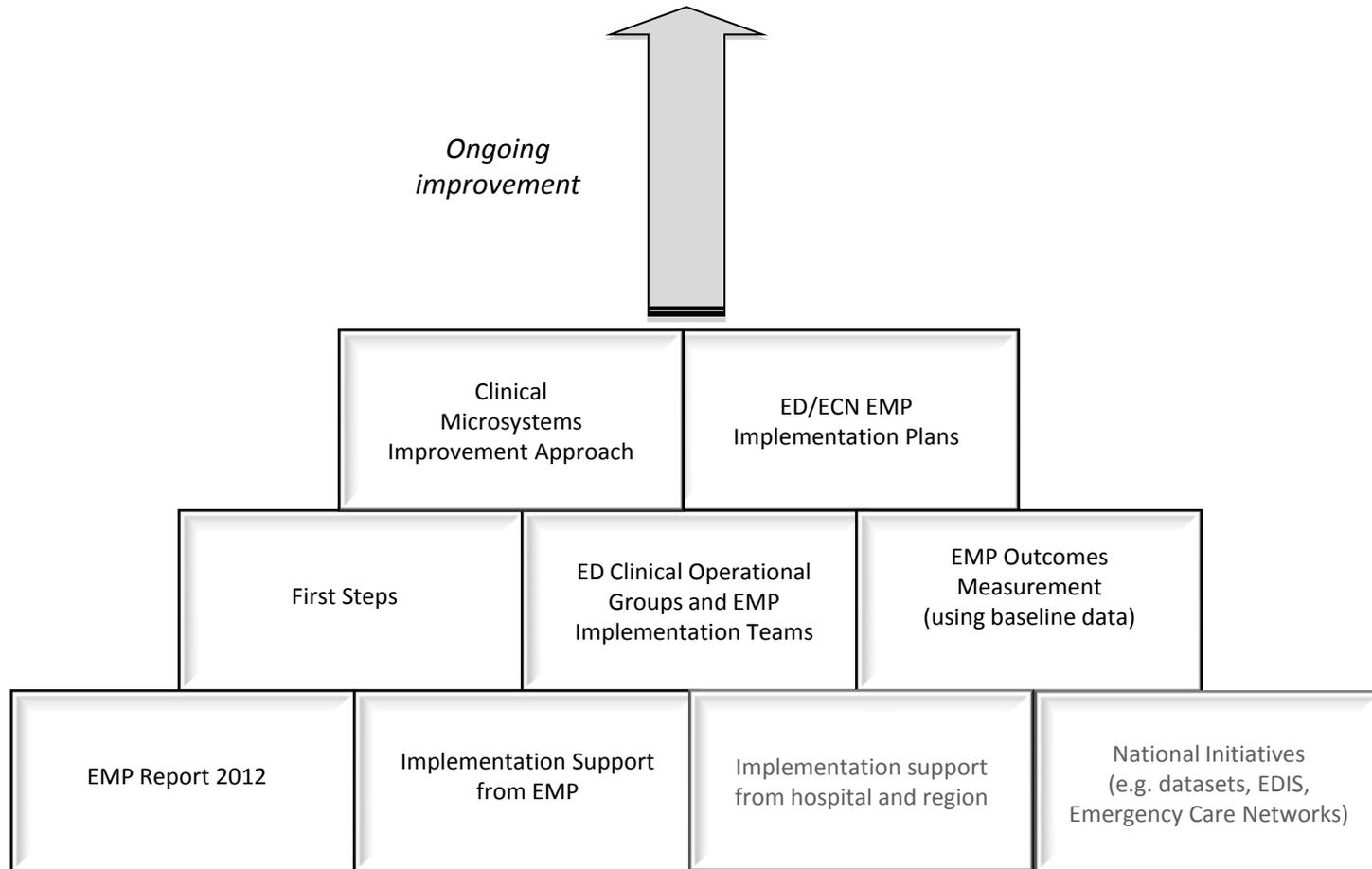
# National Emergency Medicine Programme



## Balancing ground-up and top-down implementation

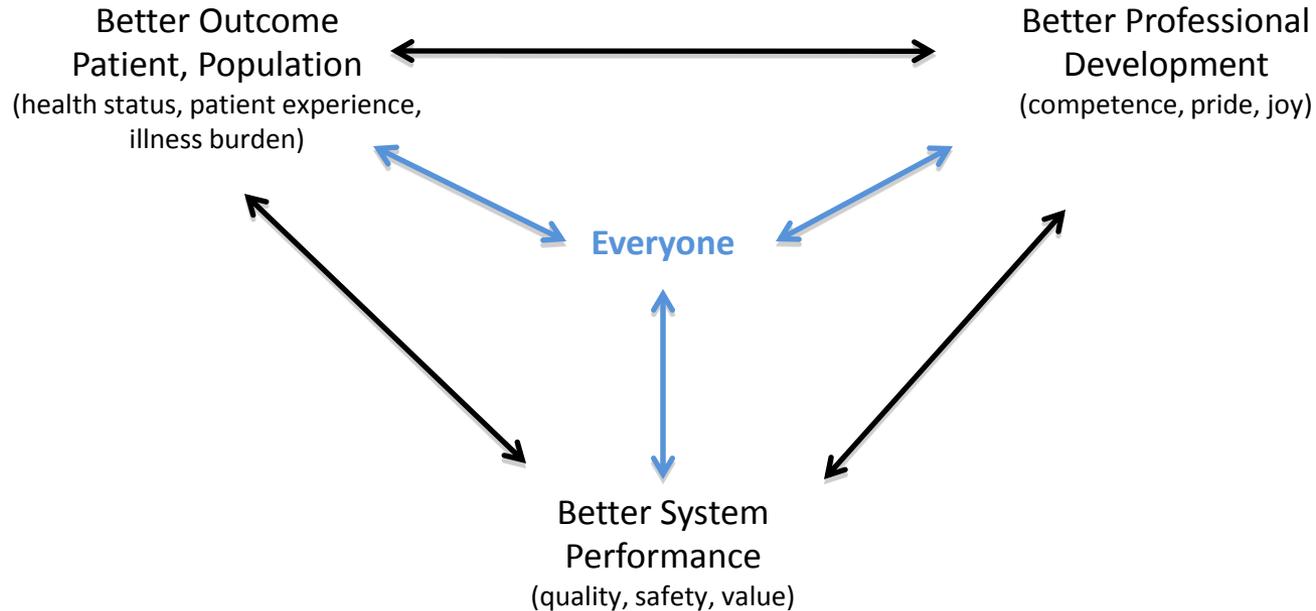


# EMP Implementation 2013



Building a foundation for sustained improvement

# Sustainable Improvement



Batalden Davidoff Sustainable Improvement Triangle<sup>5</sup>

- Sustainable efforts in real settings require inextricable linkages.
- The combined and unceasing efforts of everyone are needed to make the changes that will lead to better patient outcomes, better system performance and better professional development.<sup>5</sup>
- Better professional development involves learning new knowledge, skills and values.
- Clinical Microsystems<sup>5,6</sup> develop essential linkages for sustainable improvement across health systems.

# Improvement in Emergency Medicine



- Who?** All members of the ED multidisciplinary team should be involved.
- Improvement is more likely to be successful if it is driven by frontline service providers but the support of senior leaders is vital.
- Why?** To improve the quality of EM care for patients.
- How?** Using proven improvement methods to make the aims of the National Emergency Medicine Programme a reality for patients and embedding improvement in the daily work of EM teams. This will involve lots of learning and ongoing effort.
- Where?** In all EDs and Emergency Care Network Units.
- When?** Start now! Improvement takes time to achieve results.

# Overarching QI Principles



- Quality Improvement (QI) should be an ongoing sustainable activity, embedded in the culture of an ED, not a once-off event.
- QI needs to be resourced and supported but must yield results to justify this investment.
- Dedicated staff time is essential for QI to be successful.
- The EMP, DCSP and ONMSD will help develop expertise in QI methodology but teams are encouraged to self-direct their improvement work. *Local innovation is encouraged!*
- QI methodology must not become an end in itself – success is measured from the patient's perspective.

# Success Factors for QI



- Teams should aim for incremental but sustained success.
- Teams should not waste time re-inventing the wheel but should adapt QI initiatives that work in other similar EDs.
- Most major change programmes take 18 to 24 months to achieve meaningful outcomes but significant improvements can be achieved in shorter time-frames (e.g. 3-6 months).
- Developing a portfolio of smaller ongoing projects with each contributing to the overall change is a more effective strategy than getting stuck on a single major problem.<sup>1</sup>
- Small “rapid cycle” tests (e.g. PDSA cycles)<sup>7,8</sup> provide data to show that that the change is necessary and worthwhile.

# Pitfalls to Avoid



- Lack of a governance structure and clear accountability.
- Lack of a clear goal.
- Wasting time trying to solve problems that are not within your scope of influence.
- Trying to do too much too quickly and losing focus on the primary objective.
- Failing to consider likely barriers to change – challenges need to be anticipated and managed.
- Wasting time solving issues that are “non-problems”.
- Failing to manage the untoward consequences and unintentional effects of change as they emerge.

# The EMP Approach to QI



- The EMP Report sets out a blue-print for the development and delivery of EM services and the First Steps Document summarises the EMP Report recommendations that are implementable in an ED setting.
- ED Clinical Operational Groups and Implementation Teams will identify the changes needed in their EDs to implement the EMP.
- Proven QI methods will enable ED teams to implement the necessary changes and to sustain improvement in the longer term.
- The EMP recommends the Clinical Microsystems approach *Assessing, Diagnosing and Treating your Emergency Department*<sup>9</sup> as an overarching QI approach for EM in Ireland.
- The Clinical Microsystems approach encompasses improvement tools such as Lean and *The Model for Improvement*<sup>7,8</sup> that is based on rapid cycle PDSA testing.

# The EMP Approach to QI



- The EMP approach aims to respect local work, innovation and the unique context of each ED and ECN.
- The EMP will support ED teams in adapting the Programme, Clinical Microsystems and QI approaches to best meet the needs of their ED patients.
- Enhanced QI capability will accelerate implementation of the EMP.

## EMP QI resources:

- A single overarching approach for all EDs;
- Collaboration, coaching and peer support through the Programme;
- Enhanced support at “start up” sites;
- EMP website resources;
- Training courses and seminars for ED staff;
- Shared learning from other national QI initiatives.

*The following two slides provide a headline introduction to the EMP QI approach – more detailed information will follow or is available in the references and resources*

# Why use Clinical Microsystems?



The Clinical Microsystems approach:

- has been shown to be effective in the ED setting;
- focuses on patient and staff experiences of care;
- helps teams identify and prioritise areas for improvement that matter to patients;
- encourages local adaptation of improvement ideas and innovation rather than a one-size-fits-all approach;
- is easy to use – all units can start to use it without formal training.

*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>5</sup>*

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>5</sup>

# Highly Performing Clinical Microsystems



## Characteristics of Highly Performing Clinical Microsystems<sup>5</sup>

Patient focus

Outcomes

Performance and process improvement

Intelligent use of information and technology

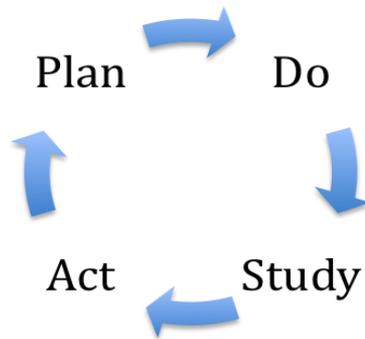
Leadership

Culture

Staff development

Reach out across interfaces and harness support from other linked systems.

# The Model for Improvement<sup>7</sup>



- 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.

## Change Concepts from *The Improvement Guide*<sup>7</sup>

Eliminate waste

Improve workflow

Optimise inventory

Change the work environment

Enhance the patient/provider relationship

Manage time

Manage variation

Design systems to avoid mistakes

Focus on the product or service

# QI Outcomes



- Success is measured from the patient's perspective.
- QI teams learn from failed projects as well as successes.
- All attempted QI activity should be recorded and evaluated.
- QI project learning and outcomes should be communicated to all team members, hospital managers and to the EMP.
- Measurement and monitoring of outcomes are integral to the QI process and should include measures of quality, patient experience, the timeliness of care and the cost-effectiveness of interventions.
- The overall outcomes of the EMP QI approach will be measured in terms of achievement of the Programme's objectives for safety, quality, access and value.

# Long-term QI goal – a high reliability system



Reliability is defined as “failure-free operation over time”.<sup>10</sup> Implementation of the EMP involves standardisation of care and will be a significant first step in improving the reliability of our emergency care system.

High reliability requires quality improvement, a culture of safety and redesign to prevent failure and compensate for the limits of human ability.<sup>10,11</sup>

A high reliability emergency care system would be characterised by:

- High quality care – safe, timely, effective, efficient, equitable and patient-centred;
- A culture of safety and a preoccupation with preventing failure;<sup>12</sup>
- Design that makes the desired action the default;<sup>10</sup>
- The intelligent use of data<sup>5</sup> and a reluctance to simplify interpretations;<sup>12</sup>
- A commitment to resilience;<sup>11</sup>
- Deference to expertise - listening to workers at all levels. <sup>11</sup>

# Summary



- QI underpins implementation of the National Emergency Medicine Programme.
- QI will be led by EMP Implementation Teams and Clinical Operational Groups but all ED staff should become involved in ongoing QI activity.
- The EMP recommends the Clinical Microsystems approach *Assessing, Diagnosing and Treating your Emergency Department* as an overarching QI approach for EM in Ireland.
- Teams should aim for incremental but sustained success.
- Success is measured from the patient's perspective.

# References



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