



19TH WORLD STERILIZATION CONGRESS 2018

XIII INTERNATIONAL STERILIZATION CONGRESS
AND HOSPITAL DISINFECTION

OCTOBER 31 TO NOVEMBER 3
2018 WORLD TRADE CENTER
MEXICO CITY

SCIENTIFIC PROGRAM



Quality Improvement Division



To Err is Human-
Building a Culture of
Quality Improvement in
Decontamination
Practice- an Irish
Experience WFHSS 2018

INSTITUTE OF MEDICINE

Shaping the Future for Health

TO ERR IS HUMAN: **BUILDING A SAFER HEALTH SYSTEM**

Health care in the United States is not as safe as it should be—and can be. At least 44,000 people, and perhaps as many as 98,000 people, die in hospitals each year as a result of medical errors that could have been prevented, according to estimates from two major studies. Even using the lower estimate, preventable medical errors in hospitals exceed attributable deaths to such feared threats as motor-vehicle wrecks, breast cancer, and AIDS.

Medical errors can be defined as the failure of a planned action to be completed as intended or the use of a wrong plan to achieve an aim. Among the problems that commonly occur during the course of providing health care are adverse drug events and improper transfusions, surgical injuries and wrong-site surgery, suicides, restraint-related injuries or death, falls, burns, pressure ulcers, and mistaken patient identities. High error rates with serious consequences are most likely to occur in intensive care units, operating rooms, and emergency departments.

Beyond their cost in human lives, preventable medical errors exact other significant tolls. The Institute has estimated that total costs (in-



What was happening?

Types of Errors

Diagnostic

- Error or delay in diagnosis
- Failure to employ indicated tests
- Use of outmoded tests or therapy
- Failure to act on results of monitoring or testing

Treatment

- Error in the performance of an operation, procedure, or test
- Error in administering the treatment
- Error in the dose or method of using a drug
- Avoidable delay in treatment or in responding to an abnormal test
- Inappropriate (not indicated) care

Preventive

- Failure to provide prophylactic treatment
- Inadequate monitoring or follow-up of treatment

Other

- Failure of communication
- Equipment failure
- Other system failure

Adverse Events

- ▶ “Unintended injuries or complications resulting in death, disability or prolonged hospital stay that arise from health care management”.

¹ World Health Organization, Baker JL. (2006). Introduction to Patient Safety Research: Measuring Harm: Retrospective Chart Review. Available: http://www.who.int/patientafety/research/strengthening_capacity/research_classics_baker.pdf [2009, 1 Introduction]



Statistics

2.9%-16% 1 or more AE

10% EU Average

37%-51% Preventable

Most common AE

Healthcare-associated infections (HAIs)

1.4- 1.7 million people affected world wide/ any given time.



Scale and Cost of AE/ Errors

Country	No. of cases/year	No. of deaths/year	Costs/year
UK	100,000	5,000	UK£ 1 billion
USA	2 million	90,000	US\$ 4.5 billion
MEXICO	450,000	32/100,000 inhabitants	US\$ 1.5 billion
CANADA	220,000	8,000/year	Data not available

16 Years Later

Types of Errors

Preparation
Failure to follow the protocol
Failure to use the correct disinfectant
Failure to use the correct concentration
Failure to use the correct exposure time
Processing
Failure to use the correct disinfectant
Failure to use the correct concentration
Failure to use the correct exposure time
Failure to use the correct disinfectant
Failure to use the correct concentration
Failure to use the correct exposure time
Post-processing
Failure to use the correct disinfectant
Failure to use the correct concentration
Failure to use the correct exposure time
Other
Failure to use the correct disinfectant
Failure to use the correct concentration
Failure to use the correct exposure time

INSTITUTE OF MEDICINE

The End of the Beginning

The Institute of Medicine (IOM) report, *The End of the Beginning*, published in 2002, was a landmark document in the history of patient safety. It was the first major report to focus on the prevention of medical errors, and it was the first to identify the need for a national patient safety program. The report identified a number of key areas for improvement, including the need for a national patient safety program, the need for a national patient safety database, and the need for a national patient safety research program. The report also identified a number of key areas for improvement, including the need for a national patient safety program, the need for a national patient safety database, and the need for a national patient safety research program.

Country	Year	Patients Recalled	Source of Contamination
UK—North Cumbria	2014	357	Machine Failure decontamination failure
USA—Illinois	2014	245	Design of Endoscope presents challenges to the cleaning process- MDR Bacterial Infections
USA—Seattle	2015	135	Design of Endoscope presents challenges to the cleaning process- MDR Bacterial Infections
Ireland	2015	11	Machine Failure



Do we need to change?



Here is Edward Bear coming down the stairs – “bump, bump bump on the back of his head”.

He thinks there must be another way of coming down the stairs

If only he could stop bumping for a moment to think of it !

Why do we need to do things differently ?



- We keep doing the same things and expect different results?
- Decontamination services reactionary.
- Human Factors- engagement?
- Guide the planning and delivery of services away from crisis management
- and move towards proactive service improvement



What does Quality Improvement mean for frontline decontamination staff?

"...everyone in healthcare really has two jobs when they come to work -
to do their work
and to improve it."



Healthcare will not reach its full potential unless quality improvement becomes an intrinsic part of everyone's job, every day, in all parts of the system.



10 Steps to Improving Quality of Healthcare

- Make quality improvement a leadership priority for hospitals.
- Develop the skills and capabilities for improvement.
- Use data effectively.
- Focus on relationships/ engagement and building a quality culture.
- Enable and support frontline staff to engage in quality improvement.
- Work together as a system.

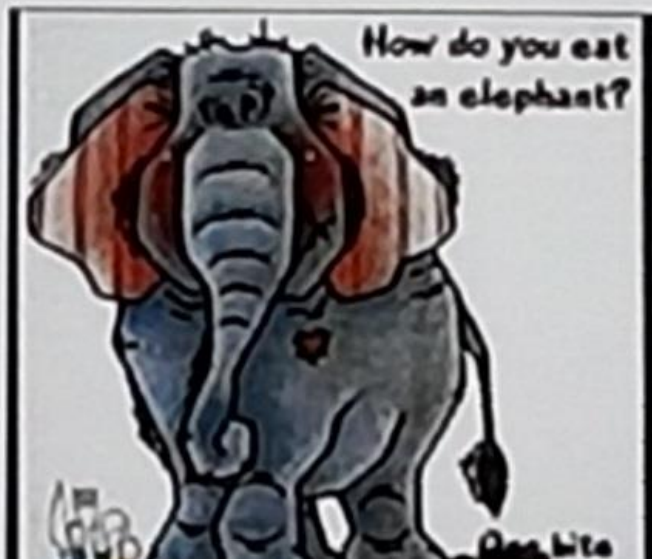
<https://www.kingsfund.org.uk/publications/making-case-quality-improvement>



Foundation Programme for Quality Improvement in Decontamination Practice

Aim: is to provide an evidence based curriculum that supports the development of QI knowledge and skills

- Working with Decontamination Teams
- 4 days over 5 months
- Project based
- 4 Key Concepts



Concept 1 : Health Service Framework for QI





Concept 2: Method for Improvement

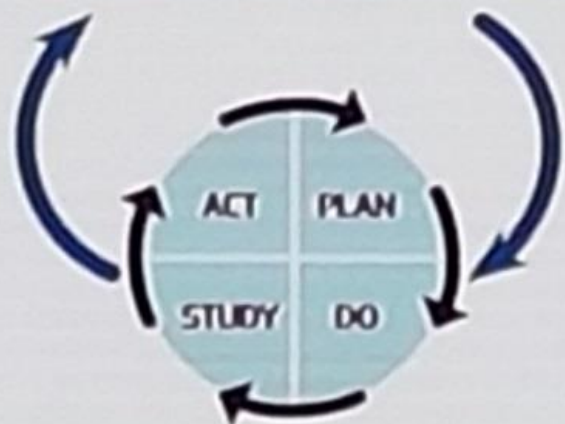


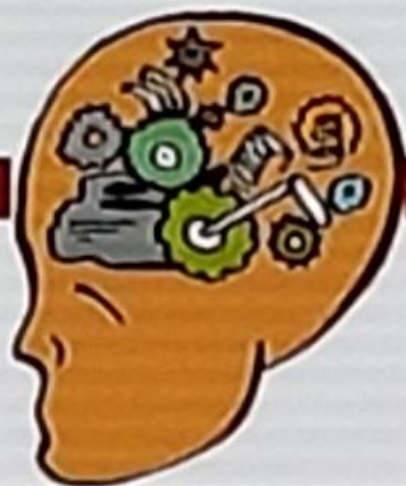
Figure 5: Model for Improvement

Model for Improvement using
small tests of change/Plan Do
Study Act Cycles

Plan the change, do the change,
study / measure to see if there is
an improvement – Act on the
results and refine if needed.

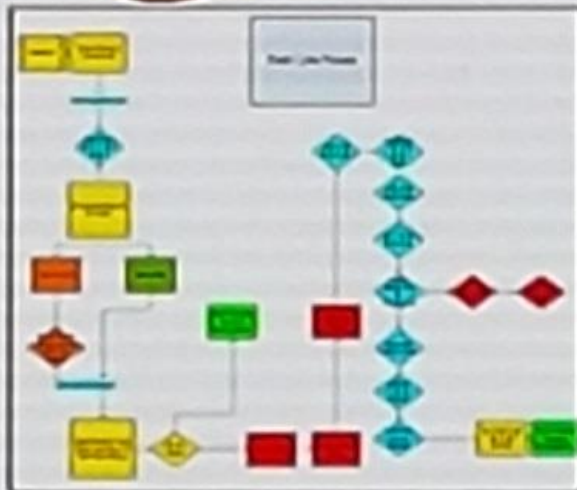
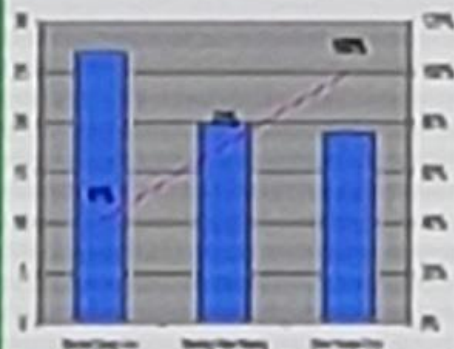


Concept 3- Measurement

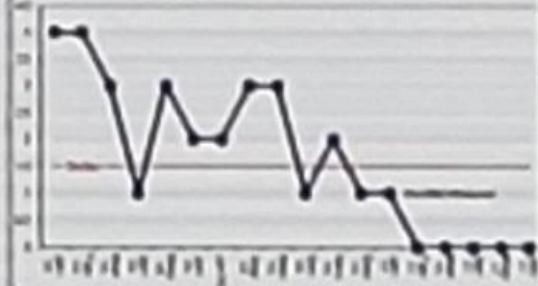


5%

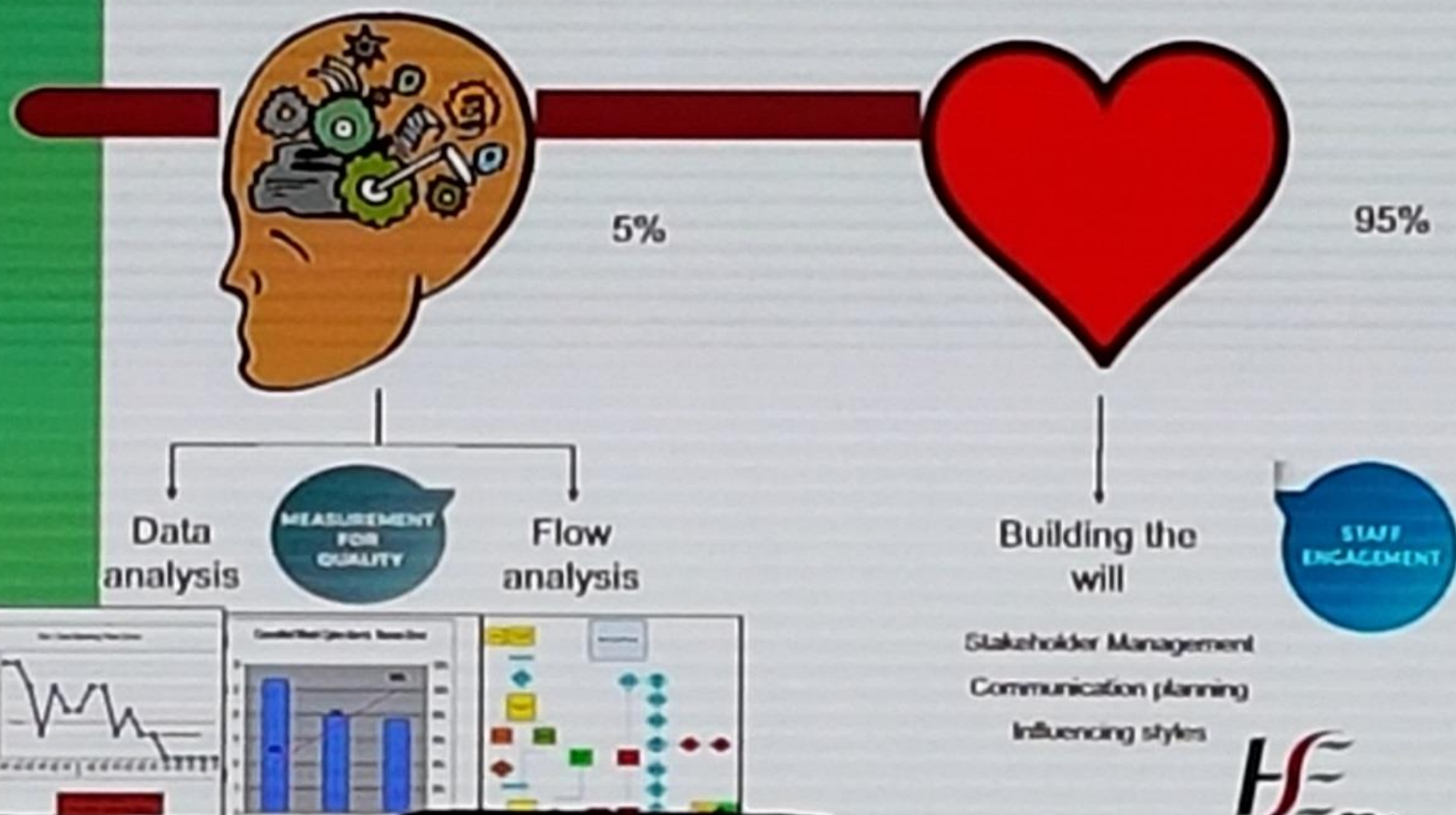
Cancelled Work Cycles due to Human Error



Run Chart Showing Process Errors



Concept 4 Winning Hearts and Minds for QI





Basic Tools for Stakeholder Engagement

Stakeholder	Initial support	Level of influence	Key Concern	Steps to getting buy in
CEO	L	H	Fear / Time / Other Priorities	Get everyone else's buy in 1 st - Set up business case - Constant Communication - Data Timeliness of Care -
ADON	L	H	Unaware of data and significance. What the CEO thinks	Decontamination Lead influences her thinking - Data
Decontamination Lead /Committee	H	H	Level of push back from CEO and ADON	Sell it as a Key Quality Requirements, Safe Care, Effective Care, Timely Care
CCO	M	H	Level of Push back from ADONs	Get ADONs on board 1 st - ensuring business case addresses their concerns - Data Timely Care
Theatre	M	M	Level of noise from other staff in the area- Timeliness of Procedure	Key Quality Requirements, Safe Care, Timely Care- support patient throughout - communication and data and ownership
Decontamination Manager	H	H	Lot of staff turnover and changes at present	Work in tandem with newly appointed Supervisor in CCU
Technicians	L	H	Waste is not our responsibility	Allow the frontline staff to come up with ideas and co design the QI - constant communication and education and data



How to Win the Hearts?

STAFF
ENGAGEMENT



➤ Involving Team in QI and co- design of the improvement leads to FLO.

➤ Work with the willing.

➤ Benefits of Staff Engagement

Positive staff experience

Better patient and service user outcomes

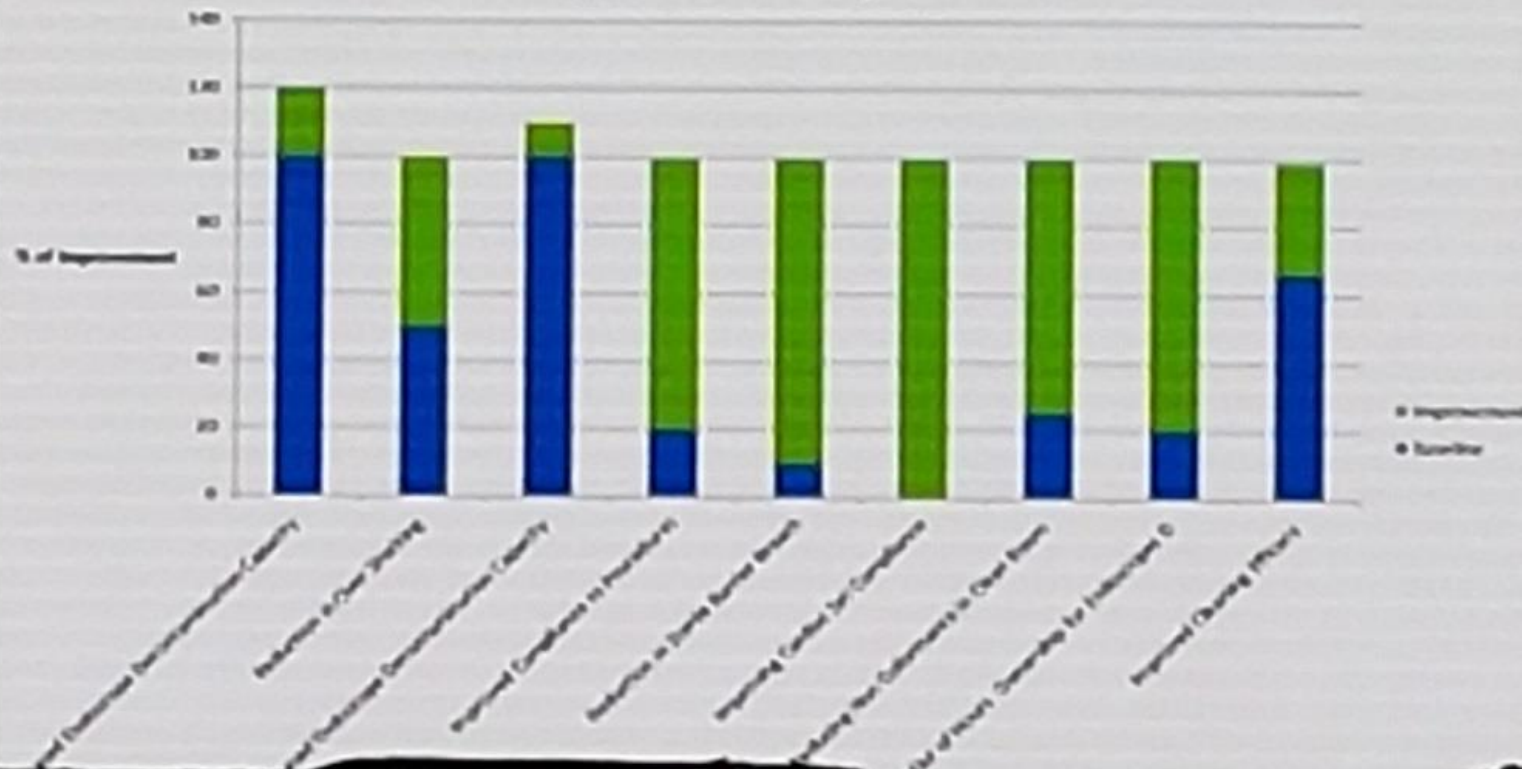
3.5% reduction in Mortality

Improve clinical quality and safety

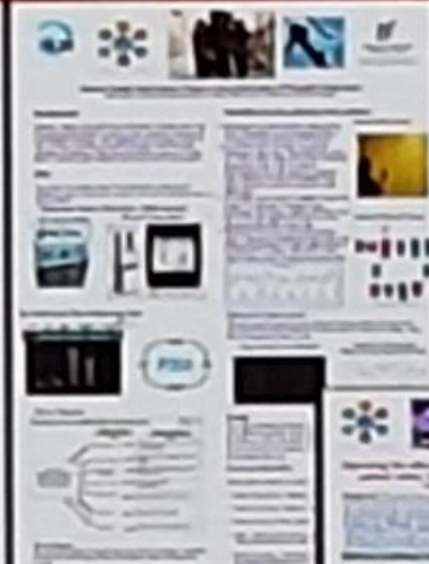
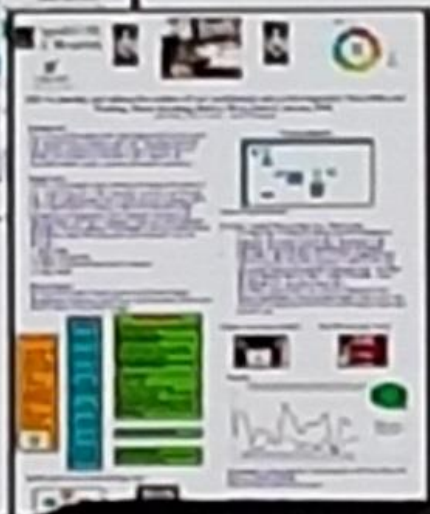
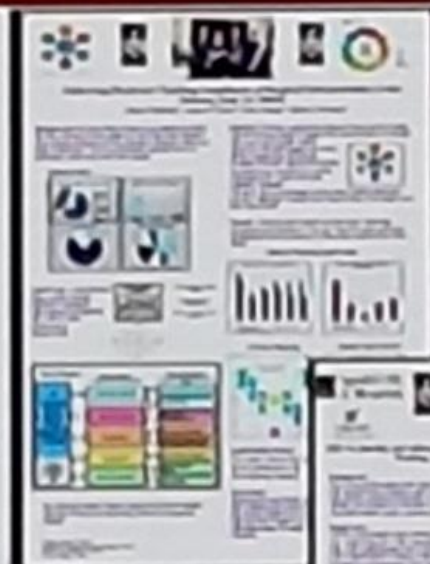
Increased staff productivity (HSE 2018)

Outcomes

Examples of QI Team Improvements



Outcomes



Decontamination Safety Programme Network Event 2018

Spread



Participant Feedback

Great to
Share –
Learning
we all have
similar
problems

Great to
know
what is
happening

Great
Projects
well
presented
and posters
really useful

Import to
expanding
frontline
staff in
response

We need to
work
together to
achieve the
same goals

Would try
to have the
Event twice

Next Steps Building and Online Network of Decontamination Improvers



The screenshot displays the 'Community of Practice Web Portal' for the HSE Quality Improvement Division. The page features a green header with the HSE logo and the portal title. Below the header is a navigation menu with links: Home, About CoP, CoP Home, Register, Sign in, and Contact. The main content area is titled 'Home :: Aim of the HSE Quality Improvement Division CoP'. It contains a circular diagram with 12 colored segments (blue, green, yellow, orange, red) representing a cycle. The center of the circle lists 'All HSE Quality Improvement Division CoP's'. To the right of the diagram is a 'Updated Content' section with a list of items: 'Practice Change', 'Sharing Knowledge', 'Personal Practice', and 'Quality Improvement'. At the bottom, there is a paragraph about minimizing the risk of device-related healthcare-associated infection in acute care by supporting the development of capability among decontamination practitioners through the design and use of a virtual Community of Practice. The footer includes the HSE logo, a small circular icon, and a 'Let's Get Started' button with a play icon.

Community of Practice Web Portal
Enabling Sustainable Quality Improvement Through Networking & Sharing of Learning

Home :: Aim of the HSE Quality Improvement Division CoP

Updated Content

- Practice Change
- Sharing Knowledge
- Personal Practice
- Quality Improvement

Minimise the risk of device related healthcare associated infection in Acute Care by supporting the development of capability among decontamination practitioners through the design and use of a virtual Community of Practice

Let's Get Started

What we have learnt

- We all share the same problems
- Where participants come from different hospitals , but operate the same process e.g. decontamination, they gain as much learning from each other as they do from the course content itself.
- Quality Improvement Programmes , which have traditionally focused on supporting clinical teams, can be successfully adapted to improving decontamination practice.
- Project success has given recognition to our decontamination teams of the complementary





Thank You for Listening !

