The National Standards for the Prevention and Control of Healthcare Associated Infection

The View of the Regulator

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Presentation Overview

- The role and function of the Health Information and Quality Authority

- Infection control and systems failure – A cautionary tale

- How we regulate against the National Standards for the Prevention and Control of Healthcare Associated Infection in Acute Hospitals

- Our key findings from 2014

- New developments in 2015, including a review of Antimicrobial Stewardship in Public Acute Hospitals

- Updating the National Standards – Future Plans

The Authority's role

"is to promote safety and quality in the provision of health, and personal social services for the benefit of the health and welfare of the public"

(Section 7 of the Health Act 2007).

Stakeholders

Legislators/Courts

- Oireacteas
- DoH
- CIS
- Coroner's findings
- Legal judgments
- EU Directives

Commissioners/Financiers

- HSE/DoH/Insurers/Patients

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Patient Advocates

- eg IPA, Patient Focus etc
- Individual patients and families
- The general public/ the media

Continuous Improvement in Patient Care

Providers

- HSE
- Private Providers
- GPs and other contractors
- Health service frontline and support staff

System Regulators

HIQA

- MHC

Researchers and Educators

- Frontline care providers
- Third level institutions
- Training colleges
- Commercial industry

Professional Bodies

- Colleges
- Societies

Professional Regulators

- IMC
- An Bord Altranais

- Optician Board
- PHECC
- PSI
- CORU
- Dental Council

HIQA – Our Directorates

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Regulation	Safety and Quality Improvement	Health Information	Health Technology Assessment
Registration, oversight and scrutiny of designated health and social care services in line with our legal remit and requirements • Adult Social Care • **Healthcare (Public Acute Hospitals)** • Children's Care Services • Disability Services	Improving healthcare quality and safety by setting standards, and providing support to service providers and users	Promoting the efficient, and secure collection, use and sharing of information to advance patient and client care	Providing evidence based advice to inform policy development and the delivery of services

Relevant work by each directorate that will impact on public acute hospitals in 2015

Regulation	Safety and Quality Improvement	Health Information	Health Technology Assessment
• **Infection Prevention and Control** • Medication Management • Nutrition and Hydration • Unscheduled care • Maternity services	• Update of the *National Standards for the Prevention and Control of Healthcare Associated Infection* (2016) • Develop National standards for the conduct of reviews and adverse incidents	• Patient experience measurement	Rapid HTAs • Atrial Fibrillation Screening • Use of IT to support early warning scoring and clinical handover • Thrombectomy in acute large vessel occlusive stroke Other HTAs • Chronic disease self management programmes

Relevant recent regulatory work

Type of Regulatory Activity	Specific Body or Programme of Work
Continuous Monitoring Programmes **Under Health Act 2007 Section 8 1(c)**	Announced and Unannounced Inspection Against the *National Standards for the Prevention and Control of Healthcare Associated Infection*
Service Reviews Under Health Act 2007 Sections 8 1(c) and 8 1 (e)	Pre-hospital Emergency Care Services, Limerick University Hospitals Group
Investigations Under Health Act 2007 Section 9	Seven investigations into safety and quality of care published between 2008 - 2015
Other Monitoring Activities Under Health Act 2007 Section 8 1(c)	Ongoing receipt of Unsolicited Information, Continuous monitoring of other relevant data

Healthcare Regulation Business Intelligence Process

Business Intelligence

► responsive regulation

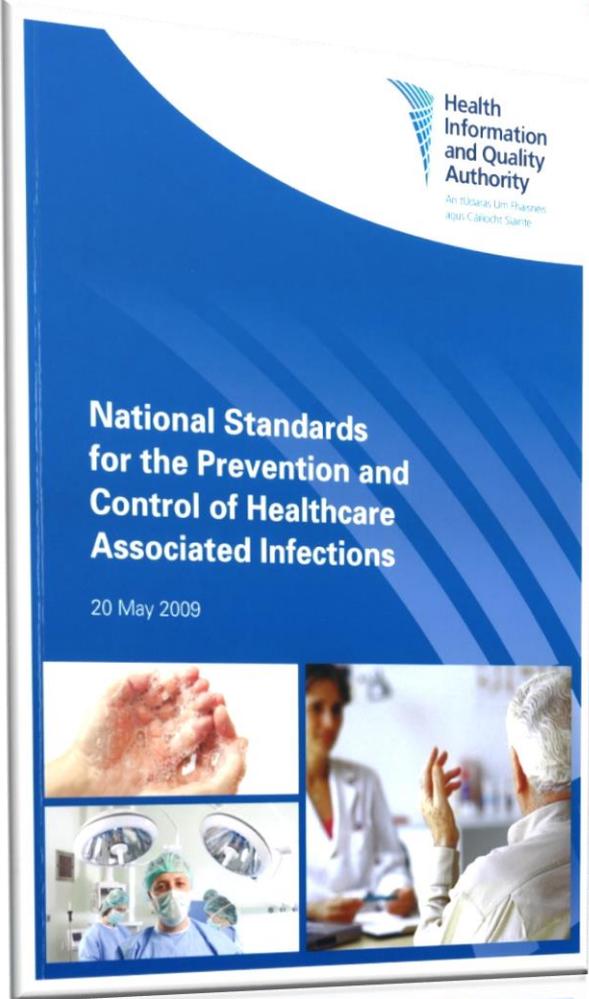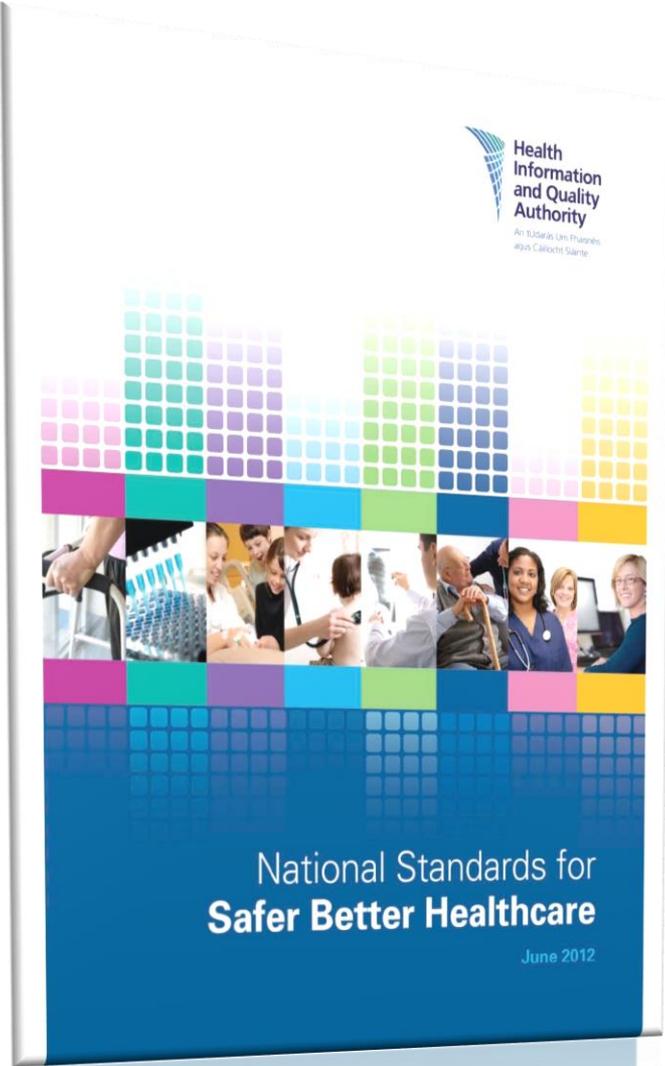| Regulatory findings / unsolicited information | HSE KPI quarterly reports | Publically reported information | National Patient Experience Survey? |

Applicable National Standards for Acute Hospital Services

The National Standards for Safer Better Healthcare

Dimensions of Quality and Safety

Dimensions of Capacity and Capability

Healthcare Associated Infection and Antimicrobial Use

Hospital Acquired Infection (HAI)

- 1 in 20 patients
- Surgical site infections - 18.2%
- Pneumonia - 17.2%
- Urinary tract infections - 15.0%
- Bloodstream infections - 13.2%

Antimicrobial use

- 1 in 3 patients receiving antibiotics in hospital on any given day
- Scope for improvement in usage to improve outcomes, reduce adverse effects and minimise the emergence of antibiotic resistance

Source: *Health Protection Surveillance Centre, Point Prevalence Survey of Hospital Acquired Infections & Antimicrobial Use in European Acute Care Hospitals: May 2012 – Republic of Ireland National Report: November 2012.*

National Standards for the Prevention and Control of Healthcare Associated Infection

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12 standards

1. Governance
2. Implementation of infection prevention and control
3. Infrastructure
4. HR
5. Communication
6. Hand hygiene
7. Prevention of cross infection
8. Invasive medical devices
9. Microbiology laboratories
10. Outbreak management
11. Surveillance
12. Antimicrobial resistance
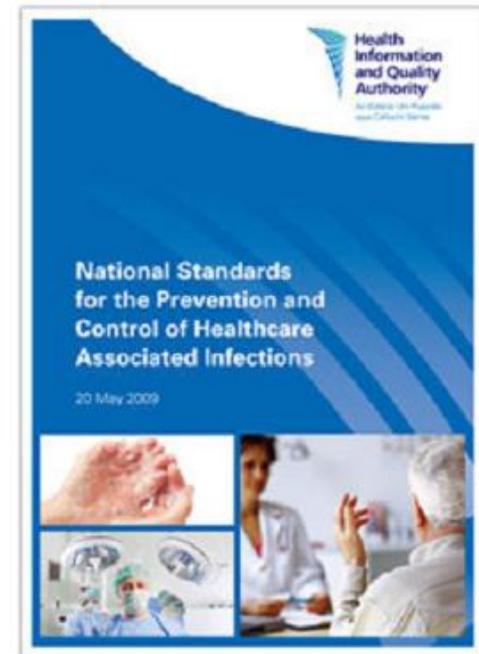
System failure -
The Vale of Leven Enquiry

Background

- Publically funded acute hospital, located in Alexandria, West Dumbartonshire, Scotland (Just north of Glasgow)

- In 2002, the hospital provided a broad range of acute services and had 243 beds

- Health region fell into financial difficulties, region was restructured, services started to be withdrawn from the hospital

- By 2008 the hospital had 136 beds – uncertainty around its future,

  - damaging impact on recruitment, moral and the hospitals physical environment
  - Vacuum in relation to forward planning

Nature of the failure

- From 1st January 2007 to 1st June 2008

    - 131 cases of *Clostridium difficile* infection
    - at least 34 deaths where *Clostridium difficile* was the underlying cause of death, or a significant contributory factor

- Likely a series of outbreaks, or one long continuous outbreak, occurred across multiple wards

- Not identified as a problem by the hospital until mid 2008 and persisted during this time

- Patient advocacy group, C. diff justice (largely families and friends of the deceased) worked to see the eventual establishment of a judicial enquiry

Contributory factors

- National failure to learn the lessons from other outbreaks in the UK (Stoke Mandeville, Maidstone)

- The lack of an inspection regime in Scottish hospitals at the time
  - (Healthcare Environment Inspectorate subsequently formed after the problem was uncovered)

- Poor governance and management at the hospital "led to an environment where infection prevention and control was deficient"
  - Failure of questioning
  - A management culture "that relied on being told about problems rather than actively seeking assurance"

- Deficiencies in medical and nursing care
  - Lack of middle grade medical staff meant that juniors largely provided care
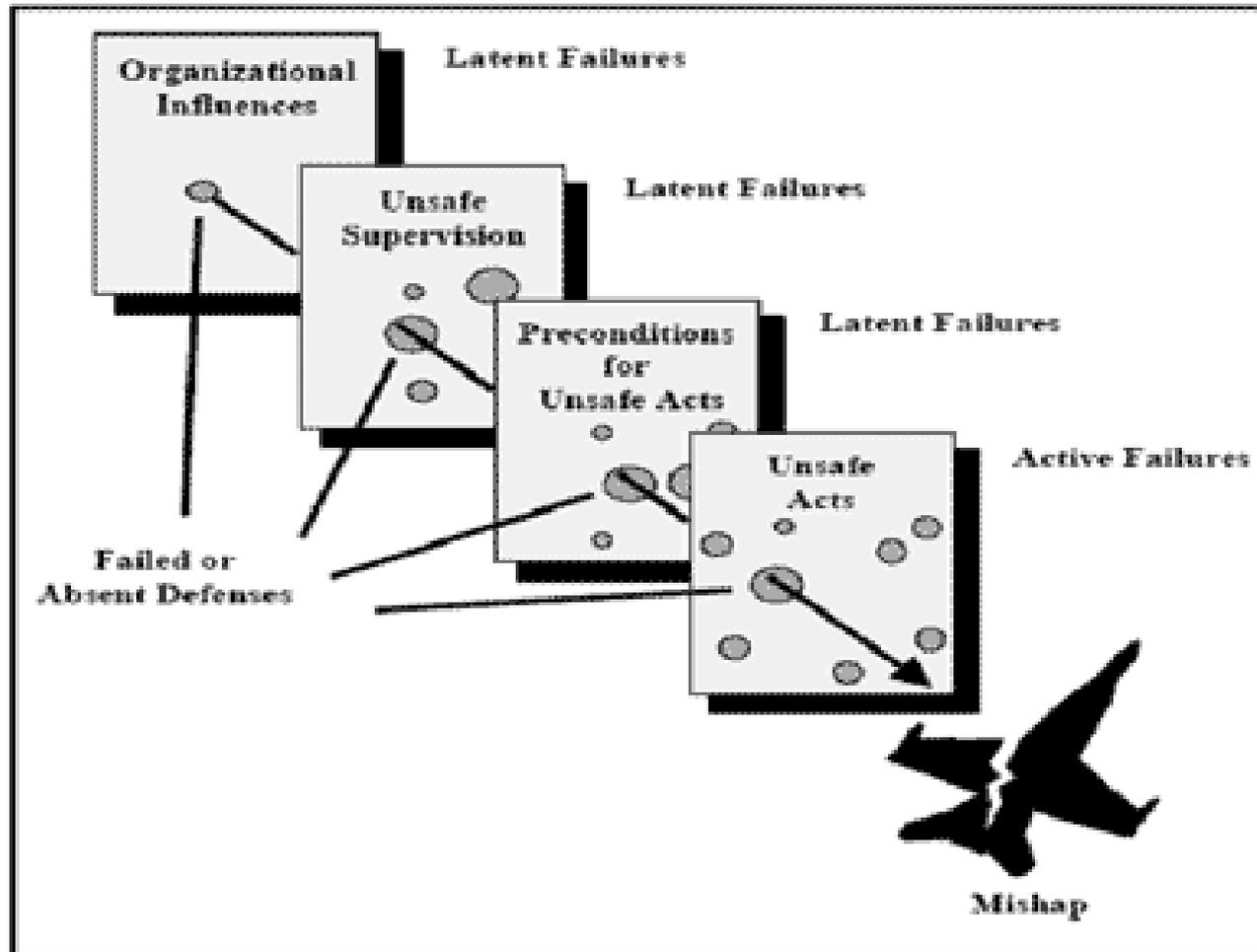 - Delays in treatment identified

Figure 1. The "Swiss cheese" model of human error causation (adapted from Reason, 1990).

"Dysfunctional" Infection Prevention and Control Governance

- Clinical Director role unfilled following retirement - role tasks undertaken by hospital manager . Their responsibilities spanned across multiple hospitals – rarely on site

- Infection Prevention and Control Doctor (Consultant Microbiologist)
  - Unhappy in position, and largely absent from role in hospital – worked elsewhere also
  - Unsupported by line manager
  - Attitude described as "wholly inappropriate and professionally unacceptable" – this was tolerated by the hospital

- Under qualified and unsupervised infection prevention and control nurse, working alone

- Lack of oversight from committees and poor reporting structures – lack of scrutiny from other hospitals

- Failed to spot outbreak(s) and act accordingly

A Failure of Clinical Governance

Clinical Governance

"The system through which healthcare organisations are accountable for continuously monitoring and improving the quality of their services, and safeguarding high standards of care"

- Requires both monitoring and reciprocal action

- In practical terms it is about systems – systems of monitoring and of reporting
  - Risk Management
  - Assurance
  - Audit

Looking at this through the lens of the *National Standards for Safer Better Healthcare*

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Failures in medical and nursing care identified
Poor antibiotic prescribing from unsupervised junior Drs
Delay in treatment post *Clostridium difficile* diagnosis

Failure to identify outbreak(s)
131 cases of *Clostridium difficile*
At least 34 deaths

Standards of care significantly below what would be expected
Only patient advocacy led to the foundation of s full investigation

Failure to apply learning
From prior incidents

Culture of passive assurance from management - poor oversight
Senior managers rarely visited clinical areas
Tolerated unprofessional practice
Uncertainty around hospital future – led to low morale and problems with recruitment of staff

Poor surveillance, and failure of reporting and monitoring.
Lack of subsequent action
Lack of scrutiny from other hospitals

Effective Care and Support
Safe Care and Support
Person-Centred Care and Support
CULTURE OF QUALITY AND SAFETY
Better Health and Wellbeing
Service User
Governance Leadership and Management
Use of Information
Workforce
Use of Resources

Clinical Director position unfilled
Absent and unprofessional Infection Control Doctor
Under qualified and unsupervised Infection Control Nurse
Shortage of medics -Junior Drs charged with more responsibility than usual
No onsite Antimicrobial Pharmacist provision

Hospital trust £84m in debt, lack of investment in infrastructure

Key learning for providers and regulators

- Ultimately, whilst those undertaking the enquiry identified individual failings in care, they assigned the greatest failing to that of the overall governance and management

- This resulted in an environment where infection prevention and control was deficient

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12 standards

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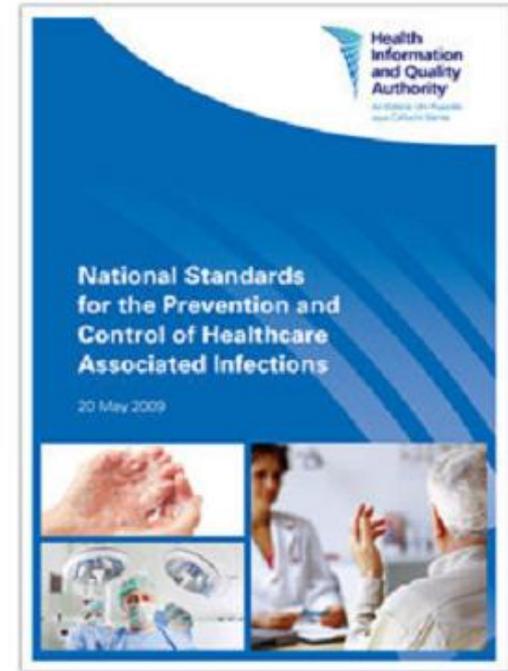
HIQA's Regulatory Approach to Promote Reduction of Healthcare Associated Infection

- Systems regulation

- Use national standards as a framework for onsite announced and unannounced inspection
  - Current main focus is environmental hygiene, hand hygiene and use of infection prevention care bundles

- What do patients **experience**?

- How do middle managers and frontline staff **ensure** best practice is reliably implemented?

- How are senior managers **assured** that the hospital is performing a well as it can, and how are they governing to promote high performance?

Using a lens through which to observe system performance

Case study – Environmental hygiene

- Continuously experienced by patients – poor performance poses both a clinical and confidence risk

- Good performance requires a coordinated, collective and ongoing effort across the hospital

- Effective leadership and governance needed at a senior level

- Collective ownership and good management required at a local level

- Good quality assurance and quality improvement = more consistent overall performance

Standard 6

Hand hygiene practices that prevent, control and reduce the risk of the spread of Healthcare Associated Infections are in place

Hand hygiene policies procedures and systems are in place

Monitoring and audit of hygiene practices

Service users and relatives are informed
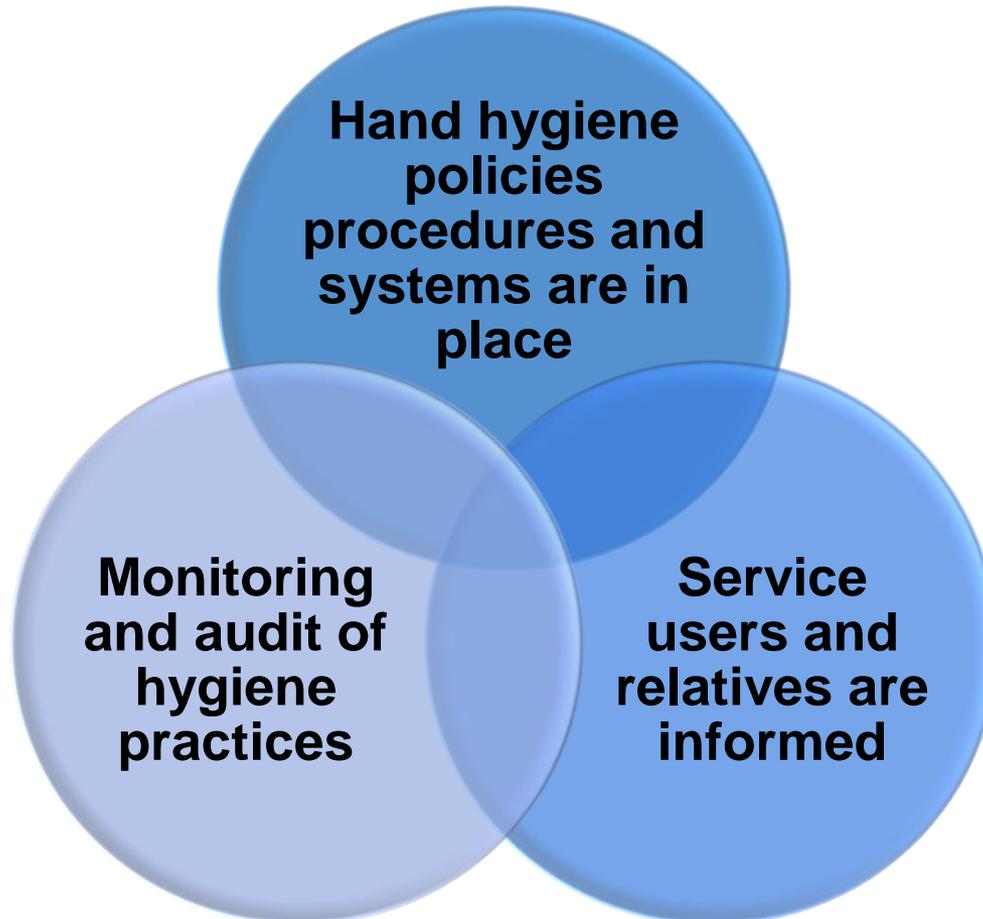
The regulatory approach taken by the Authority

Aims and Objectives

- Safeguard patients
- Provide an independent objective assessment of performance
- Identify areas of good practice
- Identify areas of poor practice
- Share learning across the system
- Provide an additional incentive for continuous improvement

# Triangulation of Evidence
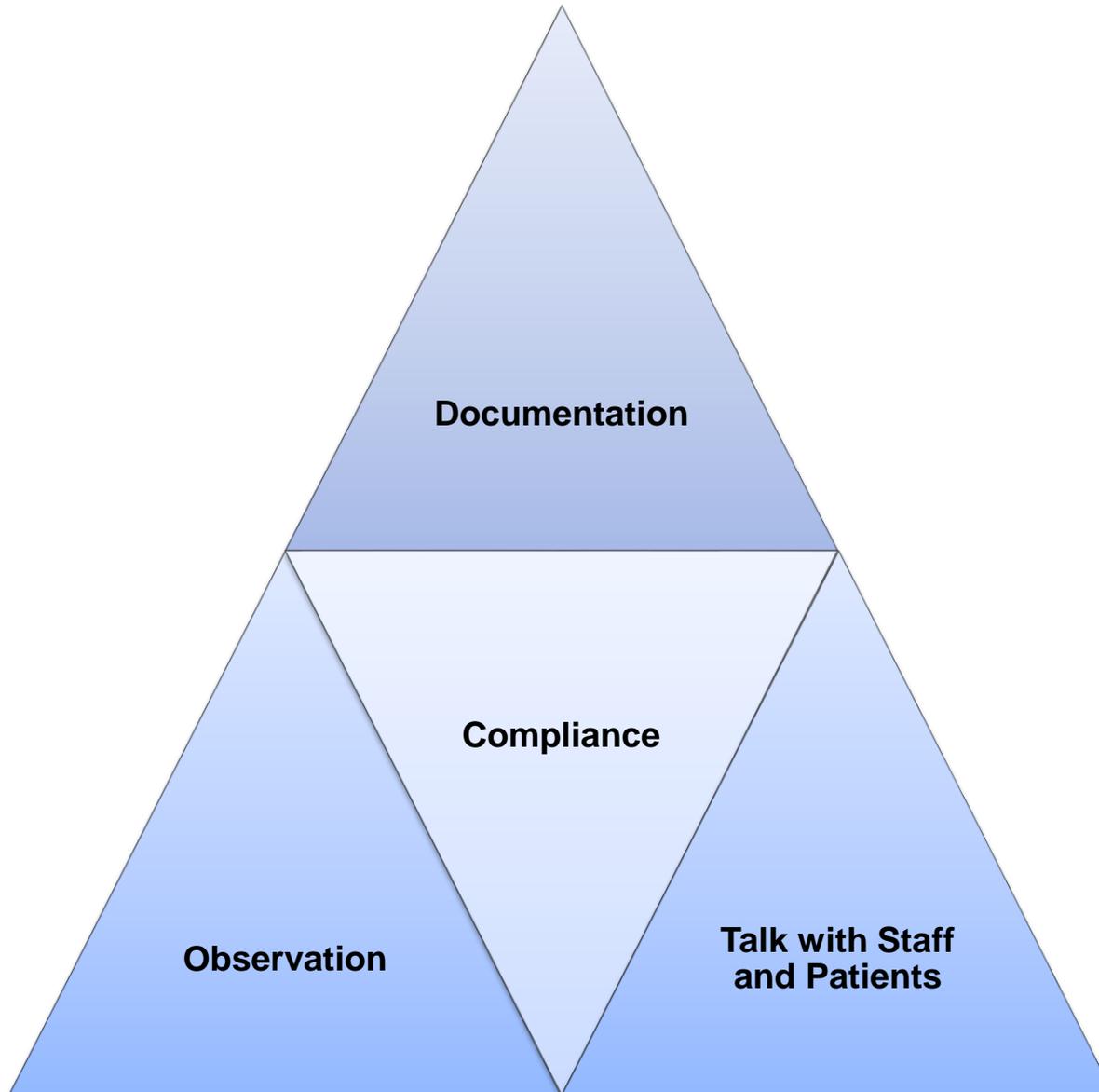
What we are looking for?
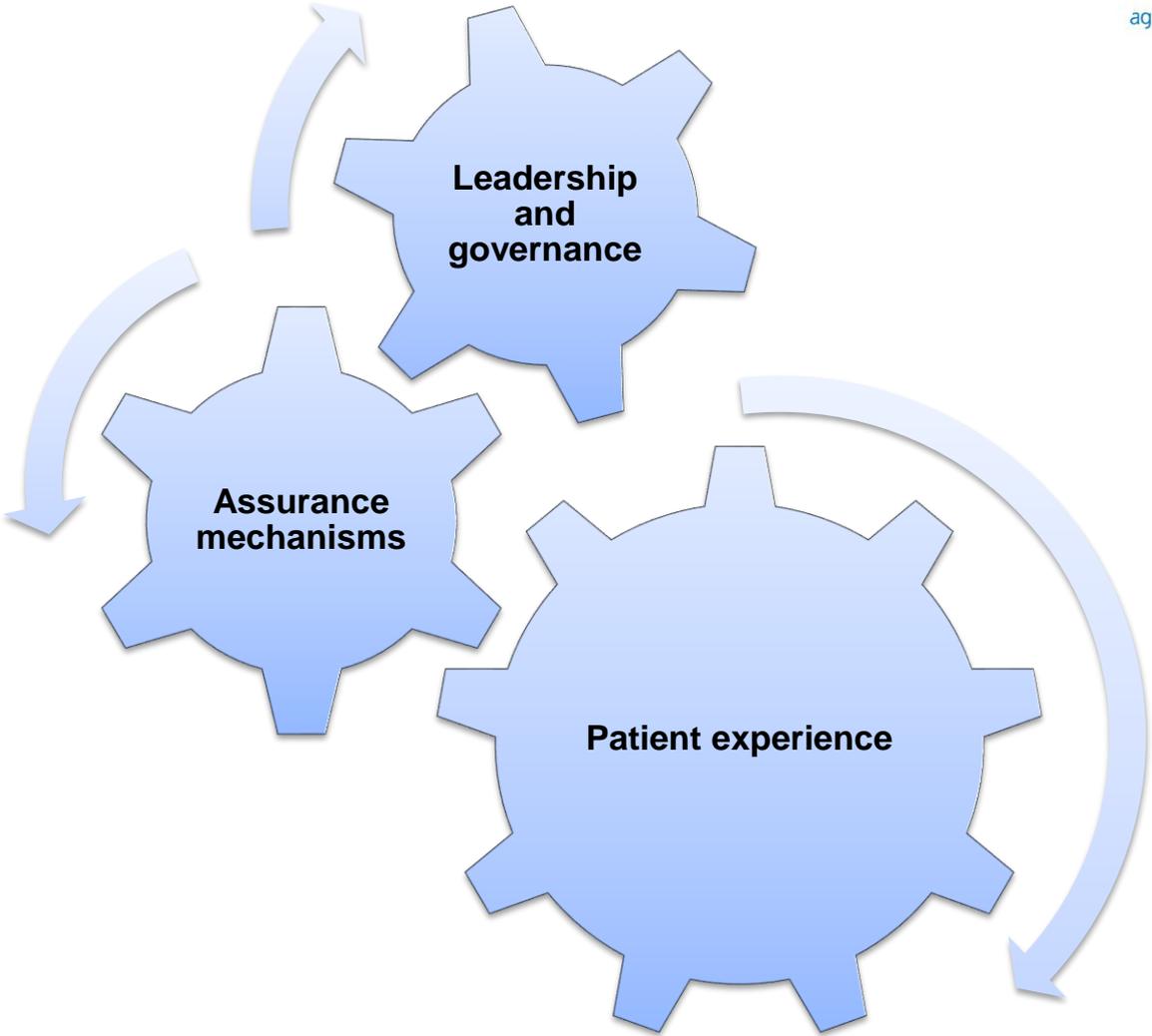
Risk Management

" *The art of risk management is not just in responding to anticipated events but in building a culture and organisation that can respond to risk and withstand unanticipated events. In other words, risk management is about building flexible and robust processes and organizations"*
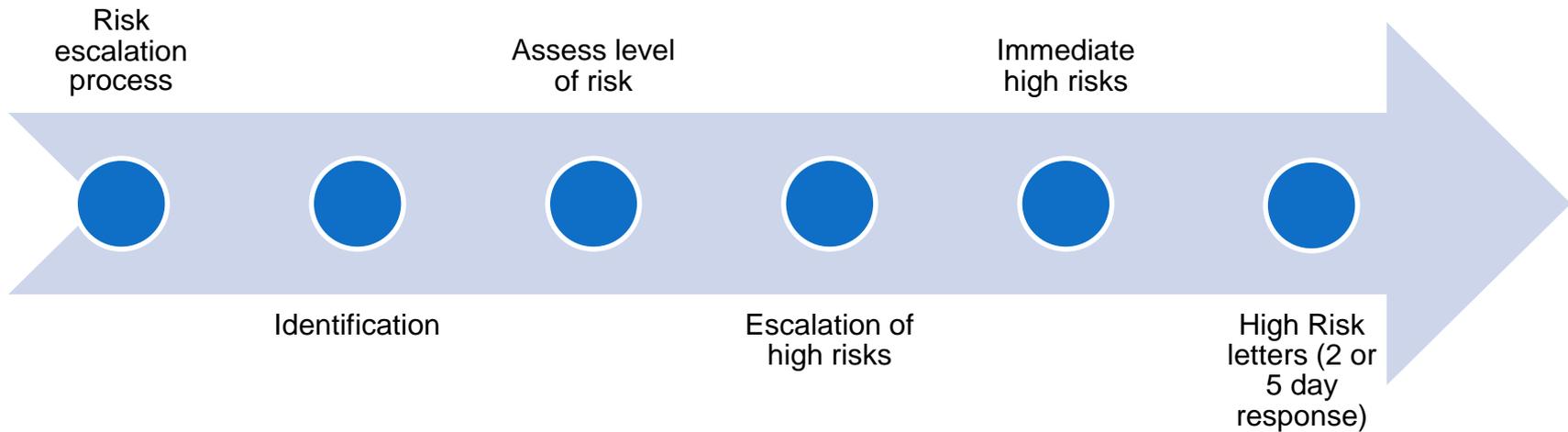
Thomas Coleman ('A Practical Guide to Risk Management')

Risk Management
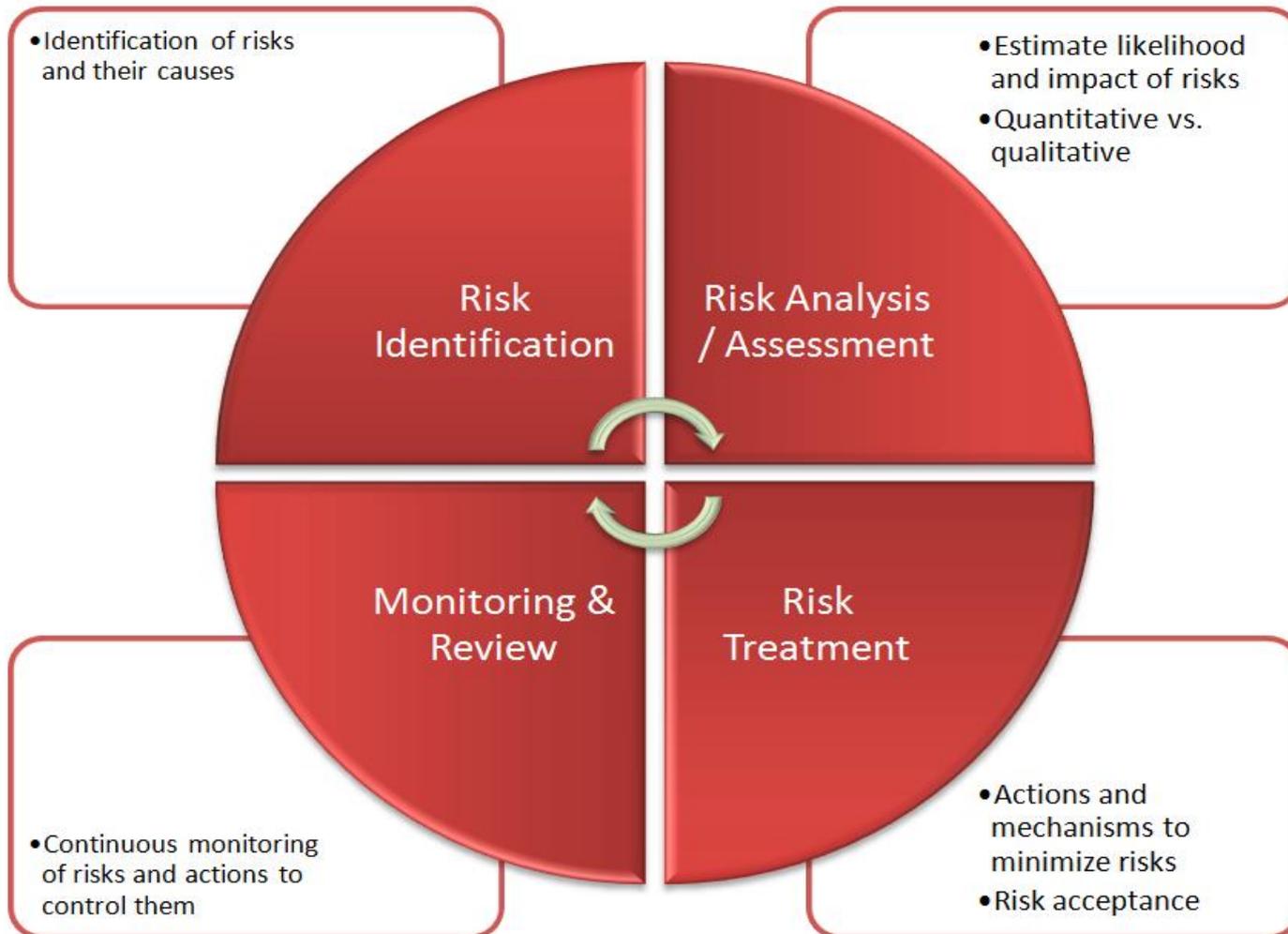
HIQA and managing risks

Unannounced Inspections 2014

- Acute publically funded hospitals

- Standard 3 – Environmental hygiene

- Standard 6 – Hand hygiene

- Other standards

- Minimum 1-3 areas inspected

- Triangulation (observation, discussion and documentation)

- Six week re-inspection

- Report

Number of hospitals where unclean items of patient equipment were observed in clinical areas inspected during 2014.

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Item	Number of hospitals
Commodes	37
Mattresses	22
Mattress Covers	22
Temperature Probe Holders	17
Oxygen Saturation Probes	12
Blood Glucose Monitors	12
Blood Glucose Monitor Holders	11
Temperature Probes	8

Number of hospitals
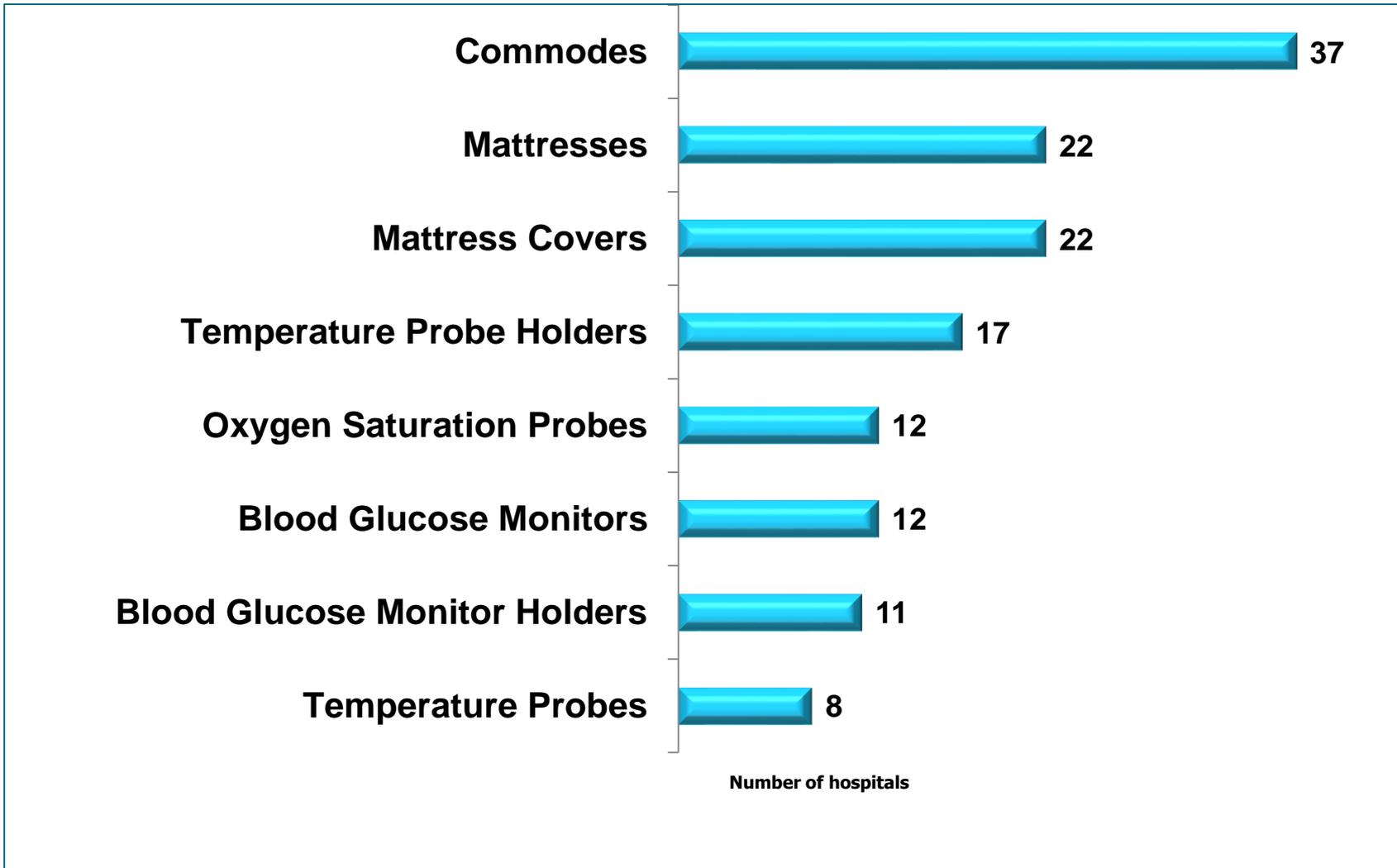
Categorisation of overall hospital compliance with environmental observations during 2014 inspections.
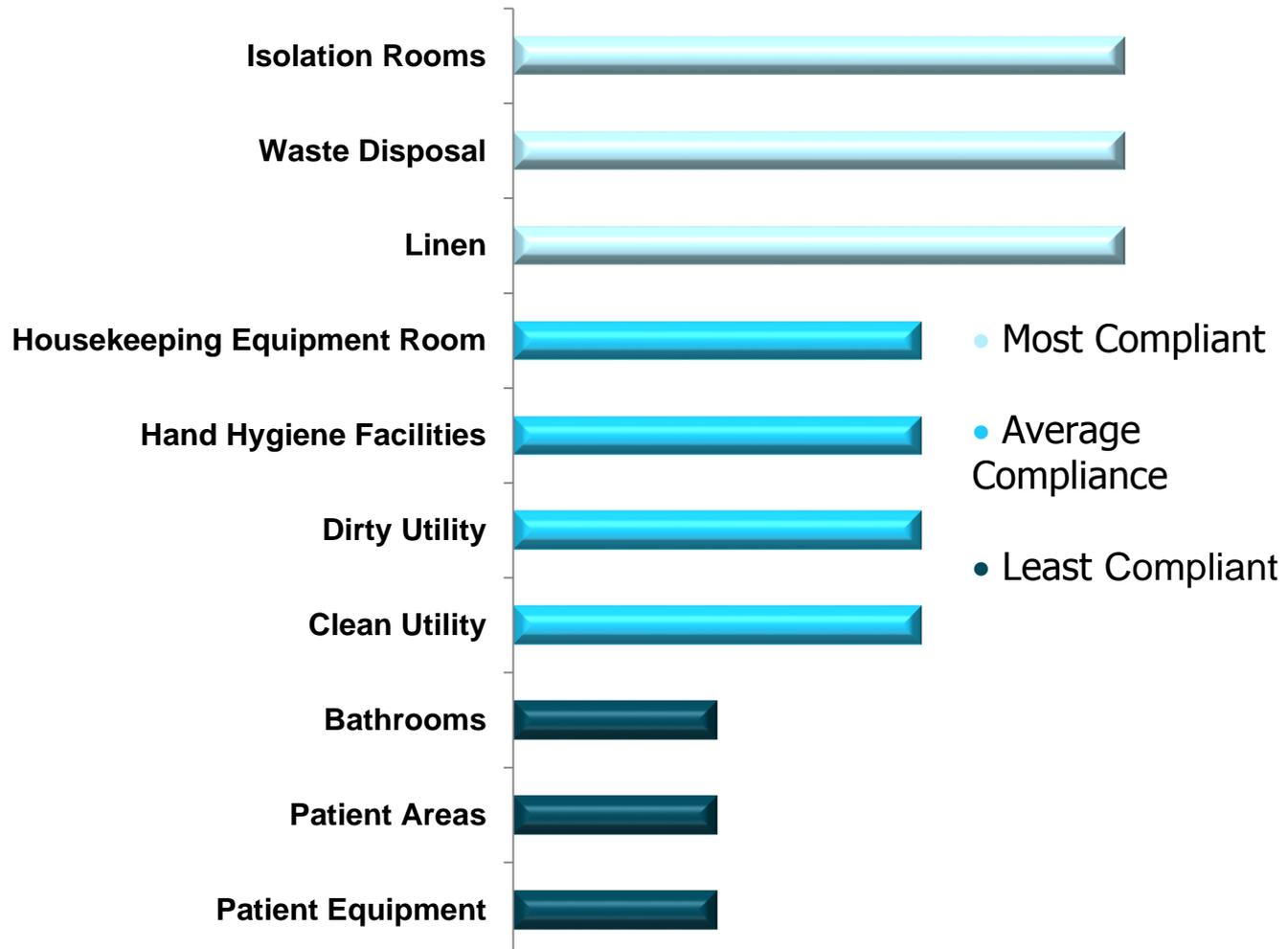
Changes made in June 2015

- Unannounced inspections to continued

- Two changes to the current PCHCAI program

    - Focus on QIPs

    - Monitoring implementation of Infection Prevention Care

      Bundles

Infection Prevention Care Bundles

- Care Bundles – a structured collection of evidence based measures which when implemented together reliably, have been shown to reduce infection rates

- Recommended in various national guidelines dating back to 2009

- Our main focus will be on Peripheral Vascular Catheter Care Bundles, and Urinary Catheter Care Bundles

- May also focus on other care bundles relevant to the setting being inspected eg Central Line Insertion bundles, Ventilator Associated Pneumonia prevention care bundles

Care Bundles – What we are looking to incentivise

- Implementation of evidence based care bundle measures
  - Will explore how hospitals achieve this
- Audit of compliance with the implementation of the care bundle measures
- Feedback on performance in achieving compliance with implementation of these measures at ward level
- Allied to this, the measurement of device related infection
- Feedback of these infection rates at ward level, and also at board level

Additional complementary regulatory work

- In tandem with the unannounced inspection – we are conducting a regulatory assurance review around antimicrobial stewardship in public acute hospitals
  - Self-assessment in all hospitals – Completed
  - Onsite verification through announced inspection in approximately 14 hospitals in Q4 2015
- External advisory group input – guide published on the Authority's website
- Main focus will be on governance, and the widespread implementation of essential stewardship activities in all hospitals
- Aim to publish a single assurance review publication in Q1 2016

Update to the National Standards for the Prevention and Control of Healthcare Associated Infection

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- Review and update of 2009 guidelines now underway by the Authority's Safety and Quality Improvement Directorate

- External Advisory Group has formed and met – extensive representation

- Expect to publish new guidance in 2016

- Preliminary plan still being formulated
    - Will likely include recommendations around procurement
    - May broaden scope to aid application in non-acute settings (eg residential care)
    - Headings may fall in under the 8 themes of the National Standards for Safer Better Healthcare

Overall Conclusions

- The Authority has an established and expanding programme of regulatory activity in the area of infection prevention and control and antimicrobial stewardship

- We are interested in the systems of care provided, and this requires a broad look at what's happening across an organisation, but especially at the top

    - What are patients experiencing?

    - How do middle managers ensure best practice is enacted?

    - How do senior managers assure themselves that quality and safety is optimal?

Aongus Collins. The Irish Times, Health Lifestyle, March 31 2015