

# **Building Safer Hospitals:**

How Clinicians and Engineers  
can work together for patient  
safety.

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## HAI SCRIBE

“Collaboration among Capital Planners, Infection Prevention & Control Teams, Clinical staff, Design Teams and Estates & Facilities Teams is the **key** to ensuring that infection control risks are highlighted, managed and mitigated”



# Challenges

- Availability of IPC and clinicians for projects.
- Experience/competence of IPC and clinical colleagues to support projects.
- Project management – IPC and clinical input not always seen as required at early strategic planning, IA or OBC.
- IPC considered to be only for HAISCRIBE and not wider project input.
- IPC and clinicians not provided enough time to review documents/plans for comment.

## Old process

- Board project team would work with designers and clinicians regarding the proposed requirements for the facility.
- No requirement for IPC involvement in the design or planning of new healthcare facilities or refurbishment works.
- Once design was agreed construction would proceed with minimal involvement of clinical team.
- Project teams focus would be delivery of the facility as designed to a high standard and preferably on time and under budget.
- Risk was delivery of facilities or refurbishments which may have patient safety risks (including HAI) due to the lack of clinical input from board clinicians or IPC teams.



# HAI & HBE risk identified

## HAI SCRIBE – SHFN 30

- First published 2002 to provide guidance regarding IPC risks and the healthcare built environment.
- Watt Report 2002 - Recommended SHFN 30 to be promoted by the then SEHD and to be incorporated to the development of standards relating to new builds and refurbishment projects as best practice.
- Promoted collaboration among capital planners, IPCTs, clinical staff, designers and estates to ensure IPC risks are highlighted, managed and mitigated.“
- Unintended consequence – IPC teams expected to lead on HAISCRIBE and “sign off” on design and IPC risks.



# HAI SCRIBE – SHFN 30

**“To manage or mitigate the risks highlighted through use of HAI-SCRIBE requires knowledge from many sources.”**

- No one group possess full knowledge or experience of another’s discipline.
- Ongoing liaison expected during each stage of development.
- Appropriate specialist knowledge from all sources of relevant expertise should be incorporated into;
  - - the project briefing
  - - contract conditions
  - - design specification and
  - - quality control of construction and maintenance of the facility



# New Process - NHS Scotland Assure



- **NHS National Services Scotland** was commissioned by **Scottish Government** to establish **NHS Scotland Assure**
- Launched in **June 2021**
- Incorporates services previously hosted by **National Facilities Scotland** and **Health Protection Scotland**, including the ARHAI (antimicrobial resistance and healthcare-associated infection) Scotland team
- Hosts eight services: IPC and engineering specialists particularly collaborate within the NHS Scotland Assure - Assurance Service



# Assurance service

- **Focus is on new builds and major refurbishments.**
- **Ventilation, water and drainage, electrical, fire, medical gases** installations and how they relate to **IPC** are reviewed with a strong focus on project governance.
- **Integration** of built environment professionals, IPC and clinical colleagues through collaboration is imperative to the success of board projects and Assurance service team function.
- **Support** for health boards at strategic points during project to demonstrate their compliance with guidance throughout the full lifecycle of a healthcare build.



# Leading by example

- Assurance service developed by all disciplines collaborating internally and externally with stakeholders from the HBE and IPC.
- Promote collaborative working through Assurance service reviews as expected by SHFN 30
- Respect for team members and the value of their expertise.
- Providing a supportive and collaborative working environment – internally and externally
- Talk a common language across the HBE Professionals, Infection Prevention & Control and Clinicians
- Promote a learning environment across all disciplines – “there are no daft questions!” Shared learning.

# IPC Role

- Expert IPC support to review process as part of Assurance review team.
- Expert IPC support to board IPC teams.
- Communicate IPC risks within built environment to technical experts.
- Communicate clinical challenges of built environment to designers and contractors.
- Facilitate relationships across organisation/s (soft skills).
- Deliver IPC content for KSAR submission/KSAR report.



# Stakeholder Engagement

- Presentations and Q&A to NHS boards through the NHS Scotland Assure Learning Network. Invitations to HBE & IPC colleagues.
- Presentation and Q&A with IPC colleagues across Scotland on KSAR process and IPC role.
- Board specific sessions (IPC & project teams) on KSAR process.
- Follow up IPC workshop facilitated by Assurance team focussing on IPC challenges in construction projects.
- Collaboration with NES to plan educational requirements for the HBE for clinical, IPC, estates and construction colleagues.



# What have we learned so far?

- Feedback has been positive overall. IPC teams who have been supported *“felt it gave a platform for them to be heard.”* Assure raised issues we had been raising but were not progressing.
- IPC still feel “they are seen as obstructive by project teams,” usually due to being invited to project too late.
- The need for earlier engagement with our IPC colleagues pre KSAR.
- Further Information sessions for IPC colleagues regarding KSAR specific stages, the role of the IPC team and KSAR workbooks are planned.
- Improved board relations as a result of KSAR process with capital project teams, 3<sup>rd</sup> party contractors, IPC teams and clinicians.
- IPC teams concerned regarding resource to support all construction/ refurbishment projects. This has been escalated with the HAI policy unit.

# Education requirements

- IPC training for project teams and contractors who will work on site.
- Technical training for IPC and clinical staff who will be involved in projects.
- Roles and responsibilities for IPC teams in construction projects.
- Collaboration with NES to develop training packages for the built environment.



# Next steps

- Development of education workplan for 2023/24 with NES
- Awareness raising sessions across NHS Scotland on Assurance service and the role of IPC.
- Continue to develop poster/oral submissions/publications to promote the importance of collaborative working across disciplines.
- Initiation of Clinical Assurance working group which will provide governance and strategic direction/support to the programme.

# Notes for IPC specialists supporting projects

- Get involved early
  - the more you know about what's going on, the fewer surprises and the easier it is to plan for
- Work out what resources are likely to be required for any existing and upcoming projects
  - Include in Annual Programme
  - Develop business cases where existing resources are insufficient (and push for necessary resources to come from the budget for the project)
- Develop and upskill the individuals involved
  - Additional courses where required
  - Less experienced staff to shadow those leading on projects
  - Develop familiarity with relevant guidance documents

# Notes for IPC specialists supporting projects

- Ask questions!
- Get architects and designers to talk through plans with you, and explain how key systems are expected to work

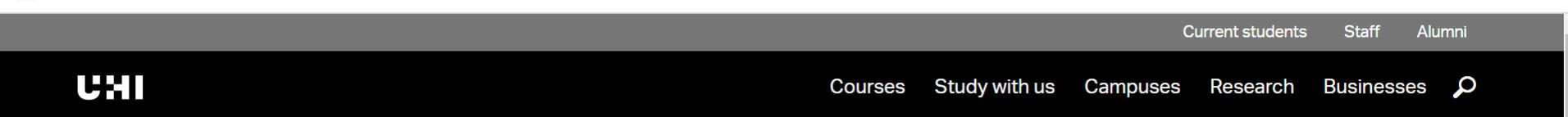
# Notes for engineers on IPC for projects

- Get IPC involved early
  - It's a lot easier **and cheaper** to incorporate IPC views at an early stage than try to rectify problems later
- Acknowledge that IPC has to be resourced
  - allocate resources appropriately – don't just assume that the Board IPCT can accommodate the demands of the project
  - Discuss resource requirements with the Board ICM **at the start of the project**
- Adapt to the level of knowledge of your IPC lead
  - Some will be familiar with building projects, others less so

# Notes for engineers on IPC for projects

- Ask questions!
- Work collaboratively with your IPC specialists and clinicians to identify and mitigate potential risks
- Take the opportunity to increase your own knowledge of infection risks from the built environment

# Notes for engineers on IPC for projects



## The Built Environment (Infection Prevention and Control) CPD Award

Course code B99B

- Summary
- Content
- Study mode
- Fees/funding
- Career
- Apply

### What is special about this course?

The design of healthcare environments is very topical in Scotland following the challenges identified in two newly built hospitals.

### Entry requirements

- + 2:1 Degree in a relevant healthcare subject and at least 3 years professional experience in a related field OR
- + Evidence of study at SCQF level 10 in a healthcare subject and employment in related field



## Example

- New build elective surgical ward
- Designer elected to use air admittance valves on foul drainage from patients' en suite bathrooms
- Access for maintenance was through patient's bedroom

## Issues

- No recognition that AAVs in this setting could pose an infection risk
- No discussion/risk assessment with IPC Team
- IPC Team knew nothing about AAVs
- No discussion with clinical staff re: access for maintenance

# Summary

## Early engagement really helps!

- Builds relationships
- Engages project team
- Promotes regular discussions/enquiries
- Promotes collaborative working across all disciplines
- Promotes learning across disciplines
- Establishes resource requirements throughout the project and any risks to supporting project.
- Ensures early risk with project

**For further information  
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