Can 2 become 1?

Novel innovative approach and solution to address GIRFT and Public Health England Surgical Site Infection (SSI) rates using existing technology

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Infection Prevention and Control Team
'Our Vision is to provide safe, high quality care to our communities'

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Aim:

Quality of data input is challenging and it is important not to under or over-report true Surgical site Infection (SSI) rates. In KGH, we developed an innovative method using existing software (ICNet) to extract data from theatre and lab systems and now extended to cover most of the modules required by GIRFT to measure SSI rates. GIRFT audit is Junior Doctor led and using ICNet will enable uniform accurate data collection for all SSI.

Method:

KGH Infection Prevention and Control team (IPC) use ICNet (web-based) on a daily basis to do alert organism surveillance. (Figure 1). Pinned reports for GIRFT SSI are created as a dashboard (Figure 2).

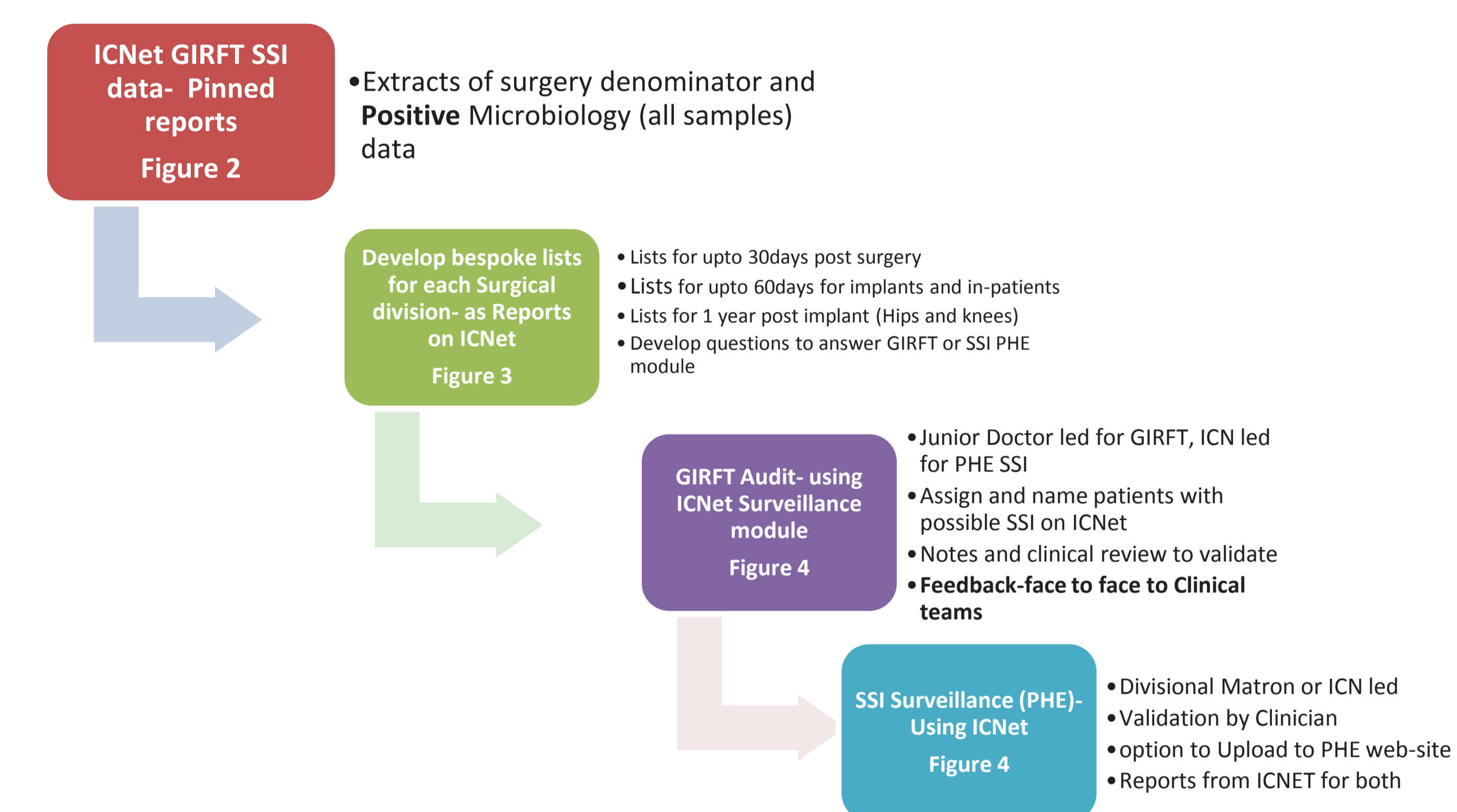**Figure 1:** Method of development of bespoke reporting system on ICNet

- **ICNet GIRFT SSI data- Pinned reports** Figure 2
  - Extracts of surgery denominator and **Positive** Microbiology (all samples) data
- **Develop bespoke lists for each Surgical division- as Reports on ICNet** Figure 3
  - Lists for upto 30days post surgery
  - Lists for upto 60days for implants and in-patients
  - Lists for 1 year post implant (Hips and knees)
  - Develop questions to answer GIRFT or SSI PHE module
- **GIRFT Audit- using ICNet Surveillance module** Figure 4
  - Junior Doctor led for GIRFT, ICN led for PHE SSI
  - Assign and name patients with possible SSI on ICNet
  - Notes and clinical review to validate
  - **Feedback-face to face to Clinical teams**
- **SSI Surveillance (PHE)- Using ICNet** Figure 4
  - Divisional Matron or ICN led
  - Validation by Clinician
  - option to Upload to PHE web-site
  - Reports from ICNET for both

Figure 2 : ICNet- GIRFT Surgical Site Infection (SSI) Surveillance pinned reports

Creating list:

A bespoke list extracting positive results was created for each Surgery, i.e. SSI within 30 days or 90 days (without and with implants), including theatre details required for routine SSI surveillance and extended details required for GIRFT (Figures 3a, 3b and 3c). Junior Doctors (JD) and IPC Nurses use this list to analyse and discuss infections using bed-side laptops. GIRFT SSI data is collated and discussed in Orthopaedic Infection MDT. A master list on ICNet Surveillance module (Figure 4) indicates those with SSI.

Figure 3: Bespoke lists created for each surgery using GIRFT and PHE surveillance codes. Database contains SSI data and some GIRFT data.

Figure 3b: GIRFT SSI list (continued…)

Figure 3c: GIRFT SSI list (continued…)

Figure 4: Master GIRFT list on ICNet Surveillance module

Validation of SSI: Information on all SSI (orthopaedic and breast) is discussed at fortnightly Infection MDT, and SSI in other categories is checked with IPC, notes and Consultant in-charge to enable accurate reporting. Notes and clinical review will be completed by JDs on all positive patients when commencing GIRFT audit.

Results and Conclusions: ICNET has allowed easy access for accurate SSI data to be analysed in real-time by IPC team and Junior Doctors, allowing clinicians to access data at bed-side. Bespoke lists created for GIRFT provide easy, accurate and standardised method for collection and analysis of SSI in all surgical specialties.

Next steps: Embed GIRFT audit in key specialities as prospective method of data collection to support Infection MDT in all surgical specialties.

Declaration of interest: None. Our thanks to ICNet team for setting up GIRFT audit details for KGH.

References:
1) https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/577418/Surgical_site_infections_NHS_hospitals_2015_to_2016.pdf
2) https://www.nice.org.uk/guidance/qs49/resources/surgical-site-infection-pdf-2098675107781
3) http://gettingitrightfirsttime.co.uk/wp-content/uploads/2018/07/GIRFT-National-Report-Mar15-Web.pdf