

Can 2 become 1?

Novel innovative approach and solution to address GIRFT and SSI using existing technology

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



Kettering General Hospital
 NHS Foundation Trust

Aim:

Quality of data input is challenging and it is important not to under or over-report true SSI (Surgical Site Infection). 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 (Getting it Right First Time) 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: Method of development of bespoke reporting system on ICNet

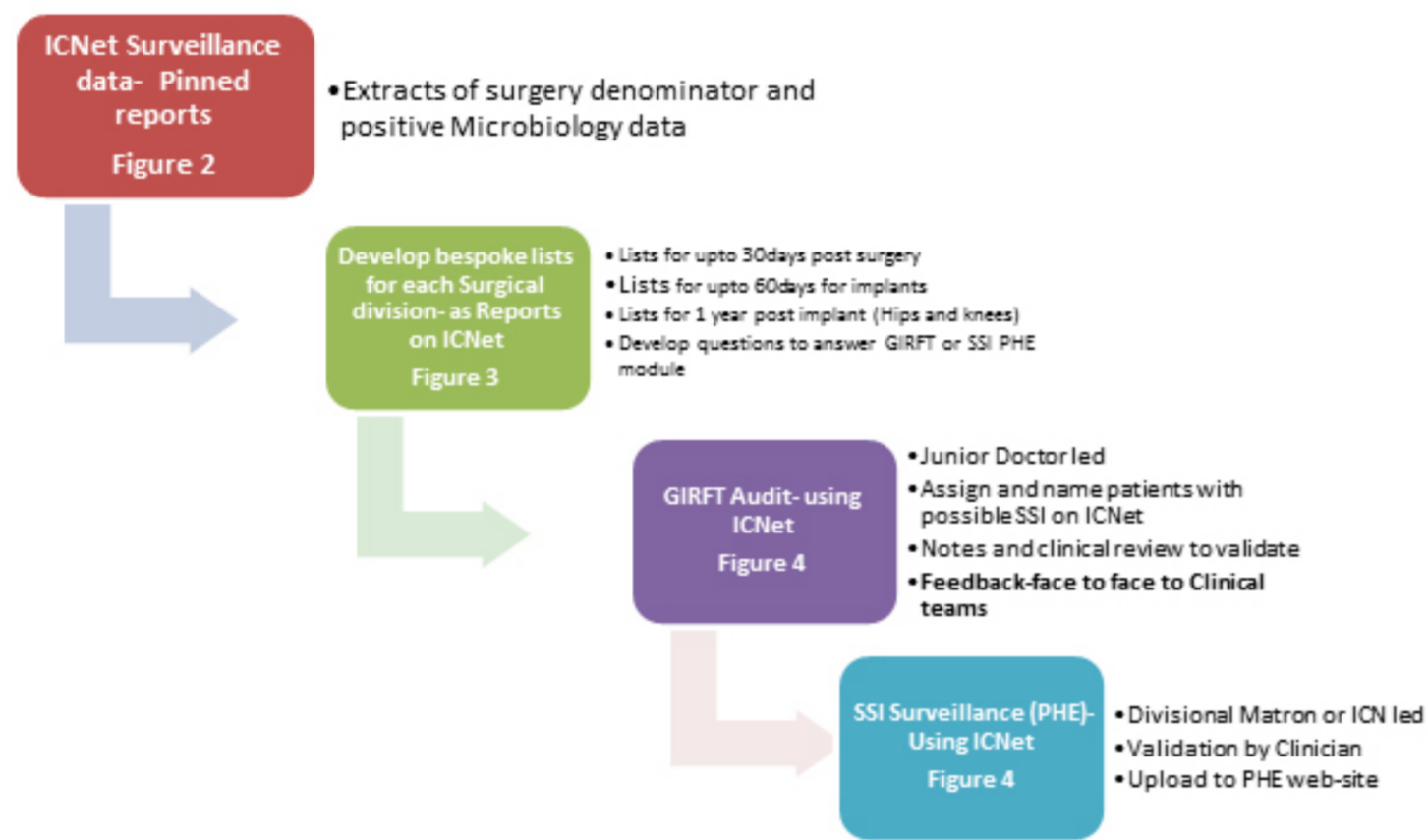
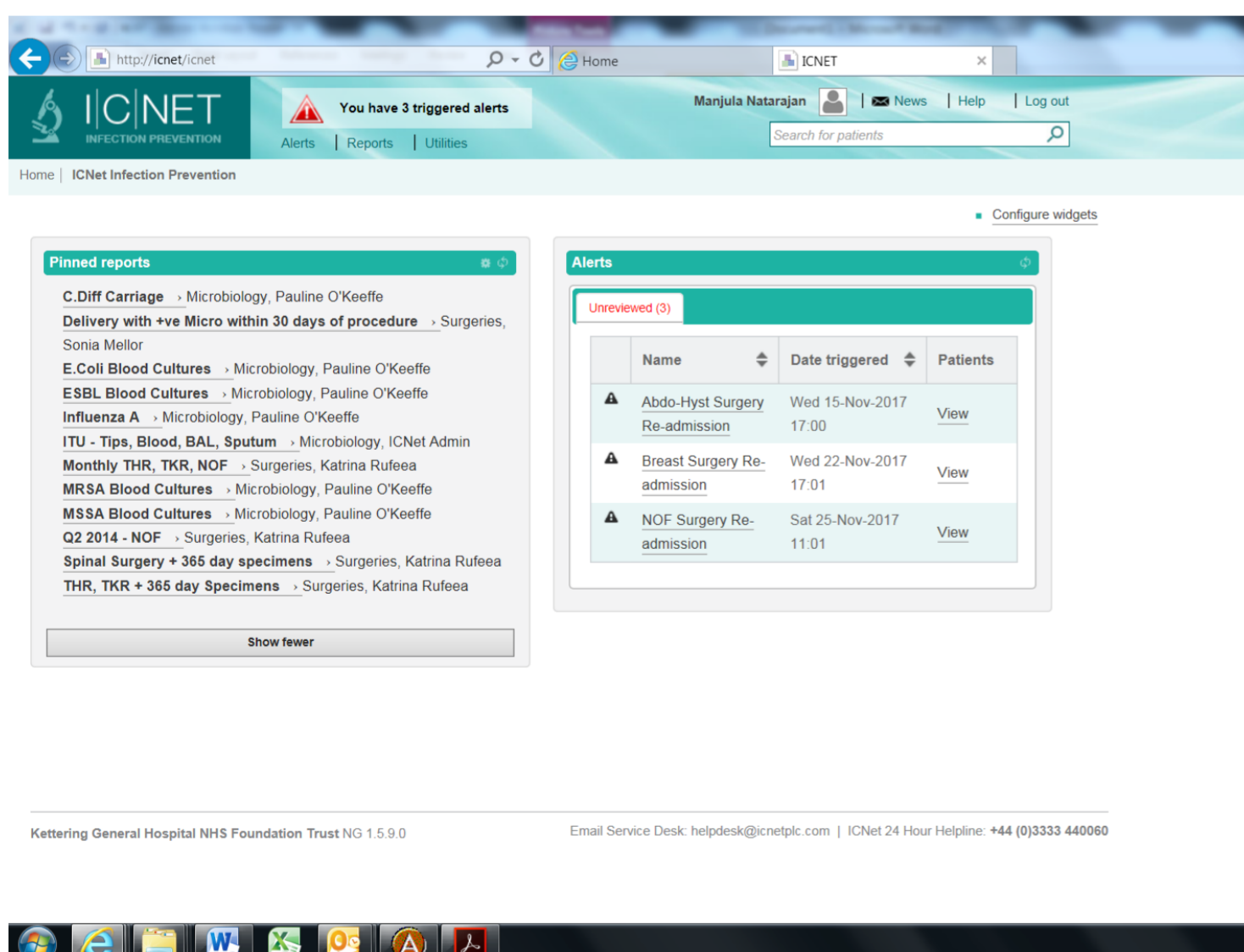


Figure 2: ICNet Pinned report dashboard



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 GIRFT. Junior Doctors (JD) and IPC Nurses use this list to analyse and discuss infections using bed-side laptops. GIRFT SSI data is co-ordinated by Clinical audit team.

Figure 3: Bespoke lists created for each surgery using GIRFT and PHE surveillance codes

Age	Date of operation	Category	Procedure code	Procedure	Ward	Admission Date	Discharge Date	Follow up: Organisms
81	28-Apr-2017 10:03	Hip replacement	W07.1	Primary total prosthetic replacement of shoulder joint not using cement	Day Case Unit	28-Apr-2017 07:09	07-May-2017 14:30	Coiliforms
60	05-Jan-2017 12:08	Knee replacement	W42.3	Revision of total prosthetic replacement of knee joint nec	Ashton Ward	05-Jan-2017 07:00	09-Jan-2017 16:00	Coiliform sp
68	01-Jun-2017 15:30	Hip replacement	W39.1	Primary total prosthetic replacement of hip joint nec	Day Case Unit	01-Jun-2017 07:04	06-Jun-2017 10:00	Anaerobe sp
64	02-May-2017 16:02	Hip replacement	W39.1	Primary total prosthetic replacement of hip joint nec	Day Case Unit	02-May-2017 07:10	08-May-2017 14:30	Coiliform sp
76	05-Oct-2017 15:41	Knee replacement	S57.1	Debridement of skin nec	Barnwell B Ward	01-Oct-2017 18:30	31-Oct-2017 19:00	Staphylococcus epidermidis, Coagulase-negative Staphylococcus
92	15-Aug-2017 00:00	Hip replacement	W37.3	Revision of total prosthetic replacement of hip joint using cement	Ashton Ward	22-Jul-2017 13:01	20-Sep-2017 14:40	Proteus sp
64	05-Jun-2017 16:15	Knee replacement	W40.1	Primary total prosthetic replacement of knee joint using cement	Ashton Ward	05-Jun-2017 07:03	08-Jun-2017 12:40	Kocuria sp

Figure 4a: PHE and GIRFT SSI list

Name	Hospital PID	Age	Operation date	Days	Current Location	SSI
		66y	28-Sep-2017	59	Discharged	
		72y	14-Mar-2017	257	Discharged	
		61y	15-Dec-2016	346	Discharged	
		67y	28-Sep-2017	59	Discharged	
		64y	16-Jun-2017	163	Discharged	
		84y	02-May-2017	208	Discharged	
		70y	28-Mar-2017	243	Discharged	
		67y	19-Oct-2017	38	Discharged	
		71y	08-Nov-2017	18	Discharged	
		81y	13-Apr-2017	227	Discharged	
		55y	26-May-2017	184	Discharged	
		81y	28-Apr-2017	212	Discharged	
		59y	04-May-2017	206	Discharged	
		82y	27-Mar-2017	244	Discharged	

Figure 4b: SSI list for GIRFT

Name	Hospital PID	Age	Operation date	Days	Current Location	SSI
TEST, Dummy	1001001	69y	02-Oct-2017	62	Discharged	✓
		22y	02-Nov-2017	21	Discharged	✓

Validation of SSI: Information on all SSI (orthopaedic) 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 are completed by JD on all positive patients.

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. GIRFT and PHE SSI surveillance modules have been set up and can be by clinicians at bed-side.

Next steps: Develop GIRFT questions and HII4 bundles further to help in continuous surveillance of SSI in all surgical specialities.

Declaration of interest: None

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>