NHSScotland's

Infection Intelligence Platform (IIP)

an integrated resource for healthcare associated infection surveillance and research

IIP Newsletter

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Progress Update from the Chair of IIP Operational Delivery Team

The importance of linkage of infection datasets, through the continued development of the NHSScotland Infection Intelligence Platform (IIP) was highlighted in the Scottish Management of Antimicrobial Resistance Action Plan 2 (ScotMARAP2). The IIP programme will support clinical staff to improve outcomes for patients, reduce harm from infections and help preserve effective antibiotics for infection prevention and treatment for future generations.

The early focus has been on delivering the necessary governance and technical infrastructure to integrate national datasets. This work continues but the key focus is now on the delivery of exemplar clinical studies to realise and demonstrate the clinical benefits of the IIP. Two of these studies have been completed. The IIP team continue with their engagement with clinical stakeholders to help identify potential future IIP studies.

I am grateful to the members of the IIP Operational Delivery Team and the wider IIP team for helping to get us to this point and I look forward to making further progress in the months ahead.

William Malcolm | Pharmaceutical Adviser, HAI and Infection Control Group
Chair of IIP Operational Delivery Team

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IIP is part of Scottish Government Initiative, ScotMARAP2

IIP was funded by the Scottish Government Healthcare Associated Infection Task Force in 2013 for a three-year period. The importance of data linkage and the role IIP will play in supporting clinicians to improve patient outcomes is a key component of the Scottish Government's recently-published ScotMARAP2 document. Ensuring timely identification of emerging issues such as antimicrobial resistance and unintended

consequences supports the broader aim to reduce antimicrobial resistance over the next 5 years. ScotMARAP2 builds on the progress already made in the reduction in the use of high-risk antibiotics for treatment in primary and secondary care.

The ScotMARAP2 document can be found here: www.scotland.gov.uk/Publications/2014/07/9192/downloads.

Further information on IIP, as mentioned on Scottish Government sites, can be found at the below links:

- www.scotland.gov.uk/Publications/2014/07/9192
- news.scotland.gov.uk/News/Scotland-takes-action-on-antibiotic-resistance-f38.aspx.

IIP Progress to Date

Although the work to secure the required governance arrangements and technical infrastructure will continue, the focus within IIP is now on the delivery of clinical studies to generate a clinical evidence base for policy and practice in infection prevention and antimicrobial stewardship. Below are summaries of two exemplar studies completed to date:

Reporting Methicillin-resistant Staphylococcus aureus (MRSA) and Clostridium difficile deaths from routine data

We have established the methodology and computer programming for routine reporting of the number of deaths where MRSA or Clostridium difficile was designated as the underlying cause or a contributory cause of death. The number of such deaths has decreased between 2008 and 2012.

I am a member of the public or a patient: why does this reporting matter to me?

- I want reassurance that the risks to me or my family members associated with infections in hospital are decreasing.
- I want healthcare teams and NHS managers to find out if deaths associated with these infections start to increase so they can do something about it.

I am a healthcare professional: why does this reporting matter to me?

- I want to be reassured that actions we are taking to tackle these healthcare-associated infections have led to improvements in patient outcomes.
- I want to know if the numbers start to increase so we can take further action to protect patients.

I am a health services researcher: why does this reporting matter to me?

- Changes in these outcomes over time or in relation to specific interventions are amenable to investigation within IIP.

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Use of routine administrative data to detect surgical site infections after hip arthroplasty

We assessed the feasibility of using linked routine data (from the Scottish Morbidity Record, SMR01 dataset) to identify surgical site infections in order to replace the need for the manual data collection currently done by infection control teams for the Scottish Surgical Site Infection Reporting System (SSIRS). We linked hip arthroplasty procedures and subsequent infections coded in SMR01, then compared this dataset to hip arthroplasty infection data recorded in SSIRS. The SMR01 dataset detected most of the infections recorded in SSIRS and identified additional infections not detected by SSIRS, showing promise as an alternative method. However, national SMR01 data are not currently suitable for infection surveillance due to the delay in the information being available. Effective infection surveillance, allowing teams to respond to problems, requires timely data.

I am a member of the public or a patient: why does this matter to me?

- A reliable method of monitoring post-operative infections from routine data would allow nurses to spend less time collecting data and more time looking after patients.

I am a healthcare worker (e.g. orthopaedic surgeon, infection control nurse) or health services researcher: why does this matter to me?

- We now understand the coding and have developed the methods to detect these infections from routine data, so this is ready to use if/when SMR01 provision becomes more timely.

- We identified infections not currently recorded by SSIRS for further investigation to inform future surveillance by either method.

I am a manager within an NHS Board: why does this matter to me?

- Timely provision of (SMR01) data to national systems could improve patient care and reduce the need for manual data collection by healthcare workers.

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What can IIP do for you?

The IIP team is keen to hear from you with ideas for future IIP studies. These do not need to be developed study proposals—your idea and/or what you are trying to achieve is enough to start with. If you are thinking about an infection related question to which the answer might be found by linking data, please send an email to the IIP mailbox at NSS.iip@nhs.net and a member of the team will be in touch to discuss your idea.

When and where can you hear more about IIP in the coming months?

In addition to ongoing work to communicate and engage with stakeholders, we will present at the following events in the first half of 2015:

- IC (Infection Control) Network
  3 March 2015

- European Congress of Clinical Microbiology and Infectious Diseases (ECCMID), Copenhagen, Denmark
  25–28 April 2015

- Royal College of Physicians
  12 June 2015

- Scottish Antimicrobial Prescribing Group (SAPG) Event
  16 June 2015

Contact

If you would like to find out more about IIP you can visit our website at:
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