Worcestershire NHS
Acute Hospitals NHS Trust

Date of Trust Board: 31 October 2012 **Enclosure Number: I**

SUMMARY OF REPORT TO PUBLIC TRUST BOARD

NAME OF DIRECTOR:	**Professor Julian Bion, Associate Non-Executive Director**
SUBJECT:	**IGC Report on Clostridium Difficile**

SUMMARY

This paper will update the Trust Board on the current position with regard to Clostridium *Difficile* Incidents (CDIs)s

RISKS AS IDENTIFIED IN THE BOARD ASSURANCE FRAMEWORK (BAF)

This report is a source of assurance for risks 2272 and 2280

RECOMMENDATIONS

The Trust Board is asked to:

- **Note** the **level of scrutiny** the Committee has applied in order to provide assurance to the Board.

Approval Process		
Meeting: IGC	*Approved*: Yes	*Date:* 18 October 2012

✓ Please tick box to confirm that the report takes account of the NHS Constitution

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REPORT TO TRUST BOARD

Subject: Integrated Governance Committee Report - Clostridium d*ifficile* Infections

Report by: Professor Julian Bion, Associated Non-Executive Director/Chair

Author:

Nature of Item
For action
For decision
For assurance ✓

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1. Background

1.1 The Trust Chairman has charged the IGC with providing assurance to the Trust Board that appropriate actions are being taken to investigate and minimise hospital-acquired Clostridium *difficile* infections (CDIs) and risks to patients.

1.2 A report was prepared for the IGC by Dr Chris Catchpole and Dr Claire Constantine (consultant microbiologists) and Mrs Helen Blanchard, Chief Nurse, and presented by Dr Constantine at the meeting of the IGC on October 18th.

2. Purpose of the Report

2.1 All Trusts in England are set a maximum permitted number of hospital-acquired CDIs, which is based on a locally-negotiated reduction on the previous year's performance. For Worcestershire Acute Hospitals Trust (WAHT), the limit was set at 52 cases for the financial year 2012-13. The current number of cases to the end of September 2012 is already 45. The current trajectory therefore makes it very likely that the Trust will exceed the maximum limit well before March 2013. We understand that the financial cost to the Trust of exceeding the maximum permitted number of CDIs could be up to £450,000 per case.

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3. Strategic Objective

3.1 This report supports achievement of Strategic Priorities 1, 2, 3. 4 & 5.

4. Executive Summary

4.1 Case mix and Causation

4.1.1 For the 45 cases this year, risk factors for CDI included:

- emergency admission to hospital (96%),
- prior exposure to antimicrobials (84%),
- age over 65 yrs (83%),
- healthcare facility admission within previous 3 months (71%),
- concurrent use of proton-pump inhibitors (gastric acid suppression) (40%)
- previous CDI (22%).

4.1.2 Other risk factors included operative surgery (number not provided), and severe concurrent illness such as renal failure or chemotherapy. The great majority (41, 91%) patients had multiple risk factors. These are all well recognised features of CDI.

4.2 Diagnosis

4.2.1 CDI is diagnosed using a combination of clinical symptoms (diarrhoea) and several laboratory tests focussed on toxin detection. The diagnosis of hospital-acquired CDI was made appropriately in 26 (58%) patients. The diagnosis was delayed in 4 patients because other clinical diagnoses were being considered.

4.2.2 In 15 patients the attributability of infection specifically to the hospital environment could have been erroneous. In 9 patients who had diarrhoea on admission, initial tests for CDI toxin were negative and then became positive later. Three patients were symptomatic on admission but no faecal samples were taken within the first 48 hours. Three patients had suffered CDI, had been treated, and then symptoms had recurred with persistent toxin-positivity after 28 days; reporting criteria require that these cases are classed as new (hospital-acquired) infections, even though they were clearly suffering from a continuation of the original infection.

4.3 **Discussion of epidemiology**

4.3.1 The organism can survive for months in the environment, and is a normal soil organism, which is carried asymptomatically in the bowel. There was no evidence to suggest any casual links between cases based on typing and sub-typing results of the strains being detected – thus, no evidence of patient-to-patient transmission. However, this does not exclude the possibility of acquisition of the infection from the hospital environment. Widespread community use of antimicrobials will exert selection pressure and increase the risks of patients being admitted with an increased risk of developing CDI.

4.3.2 The majority of CDIs reported as hospital-acquired cases may well have been incubating the infection for some time. The toxin can persist in faecal samples for a considerable time despite effective treatment, and it is clearly inappropriate that persistence or recurrence of symptoms should be classed as new infections.

4.4 **Contextual Factors**

4.4.1 The IGC noted that a recent unannounced external inspection of standards of hygiene in clinical areas across the Trust's three main sites had demonstrated considerable improvement from previous visits.

4.4.2 Community antimicrobial prescribing was a potential driver of CDI which lay outside the control of the acute Trust, but which had ann impact on infections which were then inappropriately attributed to the hospital environment

5. Action Required

5.1 The mitigation plan discussed and approved at the last IGC meeting in September was reviewed, and the actions have been enhanced with additional measures. The entire package includes the following:

- The introduction of hydrogen peroxide vapour system (HPV) decontamination of high-risk environments – this has started already.
- Timely testing of all symptomatic patients, which a particular focus on those with the risk factors defined above, including

emergency admissions.

- Heads of Nursing and members of the Infection Control team to raise awareness through daily reviews in all clinical areas.
- Infection control audits of hand hygiene (currently circa 95%)
- Emphasis in clinical areas on hand washing as well as alcohol hand rub.
- Antimicrobial stewardship, with 5-day limited prescribing policy with the introduction of antimicrobial prescription chart. Senior review of antimicrobial prescriptions 7 days a week.
- Surgical prophylaxis limited to a single dose unless infection present.
- Training of senior frontline staff to conduct audits of cleanliness standards
- Review meetings held between executive directors, clinicians and ward mangers.

Unannounced inspections to confirm continued improvements in ward hygiene

6. Implications

6.1 The ICG considered what impact these actions might have on CDI rates. A substantial proportion of patients have unmodifiable risk factors, and a proportion of hospital-attributable cases may well have been community-acquired. The conclusion reached was that the improved processes of care outlined above would probably result in a further small reduction in hospital-acquired CDIs, and might take 1-2 months to become evident.

7. *Financial*

7.1 The financial cost to the Trust of exceeding the maximum permitted number of CDIs is up to £450,000 per case.

8. Conclusions

8.1 The members of the IGC, including the non-executive directors, were satisfied that appropriate actions were being taken by the Trust. Previous concerns about hygiene in clinical areas were being addressed effectively, and the report from the recent unannounced external review was reassuring.

7.2 Intense vigilance is required from all hospital staff on standards of hygiene, antimicrobial stewardship, and patient protection.

7.3 Recurrent cases of CDI should not be classed as new infections. This requires discussion with the SHA, and probably with the Health Protection Agency.

7.4 Monthly reports will be examined by the IGC in conjunction with microbiology and infection control. The next meeting is on Nov 15th.

8. Recommendation(s)

The Trust Board is asked to:

- **Note the level of scrutiny the Committee** has applied in order to provide assurance to the Board.

Professor Julian Bion
Chairman, IGC