

REPORT TO:	BOARD OF DIRECTORS
DATE:	10th FEBRUARY 2017
SUBJECT:	MEDICAL DIRECTOR'S REPORT
BOARD SPONSOR:	MEDICAL DIRECTOR
PAPER AUTHOR:	MEDICAL DIRECTOR
PURPOSE:	DISCUSSION
APPENDICES	NONE

BACKGROUND AND EXECUTIVE SUMMARY

The purpose of this report is to update the Board in certain key areas of the Medical Director's work and responsibility not addressed in other Board Reports. Areas covered by this report include:

1. Infection control common organisms
2. Infection control incidents
3. Medical appraisal
4. NHS England Implantable Cardioverter Defibrillators (ICD) audit
5. National Emergency Laparotomy Audit (NELA)
6. Mortality steering group progress

IDENTIFIED RISKS AND MANAGEMENT ACTIONS:

Risks

1. Risk to patients from acquisition of multi-resistant bacteria
2. Lack of medical appraisal may lead to loss of GMC licensed consultants
3. Failure to comply with ICD criteria and standards may lead to performance penalties
4. Poor performance in the NELA may lead to reputational difficulties and affect recruitment
5. Failure to implement recommendations from the Mazar's report risks loss of learning and worsening of mortality outcomes

Actions

1. Infection prevention and control actions to identify, inform and screen possible patient contacts for acquisition of CPO together with incident reporting to relevant agencies; general improvement in infection control procedures Trust wide.
2. Robust arrangements to ensure completion of timely medical appraisal throughout the organisation.
3. Newly appointed electrophysiology cardiologist has drawn up an action plan which will be incorporated into cardiology services strategic planning.
4. Overall Trust performance in the NELA in terms of outcomes is good but delivery of process requires action in pre-assessment and availability of ITU support.
5. Mortality steering group has been established to take forward the necessary actions to implement the requirements of the Mazar's Report of 2015 and

	the CQC's Learning, Candour and Accountability review, published December 2016	
LINKS TO STRATEGIC OBJECTIVES:	Patients: Help all patients take control of their own health. People: Identify, recruit, educate and develop talented staff. Provision: Provide the services people need and do it well. Partnership: Work with other people and other organisations to give patients the best care.	
LINKS TO STRATEGIC OR CORPORATE RISK REGISTER	CRR 1 - Precipitate loss of acute medicine from the K&C site CRR 4 - Failure to recognise or treat Patients with sepsis in a timely way CRR 6 - Ineffective Clinical Audit Programme (including National Audits, Audit of the implementation of NICE guidance, compliance of NCEPOD recommendations and key local audits) CRR 18 - Failure to comply with the recommendations in the Mazar's report which include case note review of each and every patient death SRR 8 - Inability to attract, recruit and retain high calibre staff to the Trust	
RESOURCE IMPLICATIONS:	There are potential resource implications relating to actions 3 & 5 which are chiefly related to manpower requirements and remain to be adequately determined. Action 4 requires increased provision of critical care resource.	
COMMITTEES WHO HAVE CONSIDERED THIS REPORT	n/a	
PRIVACY IMPACT ASSESSMENT: NO* * <i>Delete as appropriate</i>		EQUALITY IMPACT ASSESSMENT: NO* * <i>Delete as appropriate</i>

RECOMMENDATIONS AND ACTION REQUIRED:

The Board is asked to note, review and discuss the risks and required actions as necessary.

1. Infection Control – common organisms

The figures reported below are crude numbers and do not take account of occupied bed days per 100,000 population, which is an important consideration. To afford some perspective as an organisation in Q2 this year (the latest national data) EKHUFT had 965 acute beds occupied (1012 acute beds in total, 95.4% occupancy). In comparison nationally acute bed occupancy was 89.1%.

1.1 Methicillin resistant Staphylococcus aureus (MRSA)

This is the organism commonly referred to as a superbug. In the last 2 calendar years (up to 5th February 2017) there have been a total of 7 Trust assigned MRSA bacteraemias, 5 of these have occurred in the last 12 months and 4 in the last 6 months.

1.2 Methicillin sensitive Staphylococcus aureus (MSSA)

Although not technically a superbug MSSA is every bit as dangerous as MRSA, what distinguishes it from MRSA is that it is susceptible to a wider spectrum of antibiotic treatment. In the last 2 calendar years there have been a total of 242 MSSA bacteraemias recorded by the microbiology laboratory of which 49 are Trust apportioned, 28 in the last 12 months.

1.3 Clostridium difficile

In the last 2 calendar years there have been a total of 73 Trust apportioned C. difficile, 42 of which have occurred in the last 12 months, 29 in the last 6 months.

1.4 Escherichia coli

Escherichia coli (E. coli) bacteria normally live in the intestines of people and animals. Most are harmless and actually are an important part of a healthy human intestinal tract. E. coli is one of the most diverse bacterial species and only 20% of the genes in a typical E. coli genome is shared among all strains. Virulent strains can cause gastroenteritis, urinary tract infections, and neonatal meningitis, together with less common conditions such as haemolytic uraemic syndrome. E. coli will be the next focus for prevention of healthcare associated infections.

In the last 2 calendar years there have been a total of 1143 E. coli bacteraemias recorded by the microbiology laboratory, 634 in the last 12 months, 354 in the last 6 months. Although these are again crude numbers EKHUFT has the second highest recorded number in the South of England (Frimley Health NHS Foundation Trust recorded 648 in the last 12 months. When corrected for occupied acute beds we record the 6th highest rate of E.coli bacteraemia in the south of England.

The purpose of reporting these figures separately from, and in addition to, the integrated performance report is to raise awareness of what I believe is an emergent problem and to highlight that in the future it is likely that E. coli will come under similar scrutiny to MRSA. Bed occupancy and individual patient length of stay within the acute Trust are just two of the factors contributing to healthcare associated infection (HAI), patient demography, associated co-morbidity and urethral catheterisation are examples of others. Prevention of HAI is complex and not solely restricted to the acute Trust. Patients acquire MRSA and C. difficile in the community as well as in hospital and many of the E. coli bacteraemias

recorded are the reason for non-elective admission of patients from the community. The increased attention that HAI demands needs to be both within the acute Trust and in the community. The growing prevalence of antimicrobial resistance underscores the importance increased vigilance and compliance with infection control procedures.

2. Infection control incidents

2.1 Carbapenemase resistant organism (CPO) outbreak

This incident remains active. In total 7 CPO cases with recent hospital admission to the Cambridge wards at WHH have been identified and additional actions are to be undertaken. These include:

- Sharing the patient contact tracing method with the Field Epidemiology Service, Colindale for their input and advice
- Identifying all patients admitted to Cambridge M2 ward between 1 Oct 2016 to 30 Dec 2016 and flag them up as possible CPO contacts so that they are promptly identified on readmission for CPO screening
- Consider environmental sampling of sinks and showers
- Discussion with Estates regarding descaling and cleaning of all taps, sinks and showers on CM2 ward
- Review and improve staff hand hygiene compliance on CM2 ward
- Regular enhanced cleaning schedules for CM2 ward
- Review passive surveillance data (number of clinical specimens from CM2 ward and identify all coliforms isolated from CM2 patients)
- Consider planned hydrogen peroxide decontamination of Cambridge M2 ward.

2.2 Parvovirus

In January a midwife had a confirmed diagnosis of infection with a virus known as Parvovirus. Parvovirus B19 infection is a common viral infection usually acquired in childhood and is also known as fifth disease or slapped cheek syndrome. School teachers, day-care workers, and mothers of young children are particularly likely to be exposed to this virus. It is transmitted in the much the same way as the common cold viruses and usually is of little consequence. This disease is usually not a problem for pregnant women and their babies. About half of pregnant women are immune to parvovirus, so they and their babies are usually protected from getting the virus and fifth disease. Pregnant women who are not immune usually experience only mild illness if they are exposed to the virus. Also, their babies usually do not have any problems. Rarely, a baby will develop severe anaemia caused by its mother's infection with the virus, and the woman may have a miscarriage. But this is not common. It happens less than 5% of the time among all pregnant women with parvovirus infection, and it happens more commonly during the first half of pregnancy.

We identified a total of 52 possible contacts of the midwife during the period when she would have been infective. All patients were contacted by letter and by telephone to seek verbal consent to test their antenatal booking blood sample to identify previous exposure to parvovirus. 34 patients were found to be immune, 10 patients were found to be not immune and they will be offered a further blood test to check if they have acquired infection. 6 patients did not respond to either the letter or telephone call and

further attempts will be to contact them via their midwife or GP. 2 patients required retesting due to an inconclusive result or missing antenatal booking blood sample.

A follow up incident meeting is scheduled for late February.

3. Medical Appraisal

Completion of annual appraisal is a condition of a doctor's license to practice medicine. As part of an escalating process to ensure timely medical appraisal all doctors who are >3 months overdue medical appraisal now have a Review Form 6 submitted to the GMC. This is a notification of non-engagement following which the GMC formally place the individual doctor on notice of non-engagement. Continued non-compliance automatically brings forward the date of revalidation and further non-compliance would result in removal of that doctor's license to practice. To date all doctors have completed their appraisal following receipt of non-engagement notices. A total of 6 notices were issued during the last quarter.

4. NHS England Implantable Cardioverter Defibrillators (ICD) audit

In July 2016 NHS England undertook an audit of the Trust's ICD practise to audit the Trust against NICE criteria for implantable cardioverter defibrillators and cardiac resynchronisation therapy for arrhythmias and heart failure (Technology appraisal guidance TA314). That audit resulted in the issue of a contract performance notice and a further audit was undertaken at the end of January 2017 to gauge progress.

The lead for the Trust in this area of practice is now a newly appointed cardiologist (Dr James Rosengarten) who undertook the January audit jointly with NHS England. His reflection of the 1st audit was that although site specific changes were made following that audit ideas for best practice were not shared and no agreed action plan was put into practice. As yet no penalty is has been levied for non-compliance with NICE TA314, implantation of non-compliant devices do not (yet) need prior approval but need exception reporting and clinical justification.

The January 2017 audit has demonstrated overall good compliance, but with some exceptions, mostly due to missing data. Dr Rosengarten has communicated proposals and an action plan following this audit to his East Kent cardiology colleagues, highlighting that whilst this audit has only looked at compliance with NICE criteria, in the future NHS England will consider compliance with the commissioning contract standards which specify minimum criteria for implant numbers, competency, staffing and follow up. In the future the East Kent cardiology service will need to ensure that on each site where ICD activity takes place the operator and physiologist is supported to deliver minimum implant numbers. As tertiary centres seek to retain/regain implant numbers lost to the provinces, we will attract increasing scrutiny if we are unable to demonstrate compliance. Establishing a centre for this specialised activity in East Kent should form part of strategy planning.

5. National Emergency Laparotomy Audit (NELA)

This national audit is now reporting 3 year data and the surgical division have been actively involved in this audit since inception. I wanted to highlight here the improved performance at the William Harvey Hospital and the continued excellent performance at the Queen Elizabeth the Queen Mother Hospital. In particular at QEQMh in the 3 years there have been 490 emergency laparotomies, crude mortality overall in this high risk group is 7.5% and the QEQMh adjusted mortality is the 4th best in the country, another significant statistic is the

reduction in surgical site infections in emergency colonic surgery from 29% to 15.3% pre-versus post-participation in NELA.

In the last year of complete data (2015/16) the comparisons of length of stay and mortality (crude and fully adjusted) are shown in the table below.

Site	Length of stay (days)	30 day Crude Mortality (%)	30 day Fully Adjusted Mortality (%)
QEQMH	12.1	4.0	1.2
WHH	15.1	11.9	6.5
Regional	17.9	10.4	6.9
National	18.4	9.7	5.7

6. Mortality steering group

The mortality steering group was set up under the chairmanship of the medical director to respond to the requirements outlined in the Mazar's Report of 2015 and more recently the CQC's Learning, Candour and Accountability review, published December 2016.

6.1 In the last calendar year there were 2847 deaths (data in the year up to 30th January 2017). 39% of deaths were at the William Harvey Hospital, 32% at the Queen Elizabeth the Queen Mother Hospital and 28% at the Kent and Canterbury Hospital. Within the Urgent Care & Long Term Conditions division the majority of deaths occur in older people (1419/2434), in surgical services deaths were predominantly in General Surgery (161/344) and Trauma & Orthopaedics (125/344). Deaths in Specialist Services were predominantly related to renal services (31/69) and paediatrics (22/69).

6.2 Analysed against the 140 disease codes used in the Summary of Hospital Mortality Index (SHMI), which is reported 6 months in arrears and also includes deaths occurring 30 days after discharge from hospital, the top ten high risk diagnosis categories where observed mortality exceeds expected are septicaemia (except in labour), acute myocardial infarction, cancer of the bronchus (lung), other gastrointestinal disorders (this actually relates to hernia repair), heart failure, cancer of the pancreas, biliary tract disease, cancer of stomach, stroke and lymphoma.

6.3 The Mortality Information Group have discussed and agreed the deaths which should be prioritised for review and these include any unexpected deaths, learning disabilities and vulnerable adults, unexpected admissions to ITU, deteriorating patients who had not been adequately responded to, all cardiac arrests and deaths in diagnostic codes that are alerting in the SHMI data, in particular septicaemia.

6.4 The national data collection tool for mortality reviews has now been made available and a working group has been convened to undertake a review of a sample set of 12 sepsis case notes using the tool. In addition to the questions asked by the tool we will also take the opportunity to review compliance with the Academy of Royal Colleges 4 priority standards for 7 day working (time from admission to consultant review, access to diagnostics, access to consultant-directed Interventions and frequency of on-going senior review).