Cardiff and Vale University Health Board

Our Purpose:
Caring for People; Keeping People Well

Our Goal:
To provide safe, high quality healthcare to the population of Cardiff and Vale; ensuring that there is minimum risk to patients, relatives and healthcare staff of acquiring an infection as a consequence of the healthcare provided or the healthcare environment.

Our Aims:
• To reduce the incidence of preventable infections associated with the delivery of healthcare across the Health Board.
• To ensure that the prevention and management of healthcare associated infections and antimicrobial resistance is seen as a priority for Cardiff and Vale University Health Board and its Clinical Boards and Staff.
• To integrate the infection prevention and control issues and actions with the broader patient safety challenges and initiatives across the organisation.
• To engender a zero tolerance culture towards infection risks and preventable infections associated with healthcare, from board to ward to primary care and community.
• To support the delivery of effective infection prevention and control within each clinical board, through a specialist infection prevention and control core team working with clinical board IP&C infrastructure.
• To deliver the Welsh Government’s Strategy to eliminate preventable healthcare associated infections 2011 and the “Code of Practice” issued in May 2014.
• To adopt a suitable IT solution that enables more effective surveillance and management of HCAI and antimicrobial resistance and usage.
• To assist and promote antimicrobial stewardship throughout the Health Board through a specialist antimicrobial management group (AMG) working with clearly identified clinical leads from each Clinical Board.
• To deliver the tier 1 targets set in relation to healthcare associated infections for 2014-15 and beyond.
To deliver:

- We will have appropriate management structures for Infection Prevention and Control (IP&C) throughout the organisation. (Code of practice Standard 1)
- The environment will be fit for purpose, effectively cleaned and there will be adequate isolation facilities. (Code of practice Standard 2 and 6)
- Re-usable Medical Devices and Equipment will be correctly and effectively decontaminated. This will be overseen by the Decontamination Group. (Code of practice Standard 2)
- Policies, procedures and tools will be developed and implemented to prevent and control infections and improve antimicrobial management. These will include evidence based care bundles and pathways to standardise practice, reducing harm, waste and variation. (Code of practice Standard 7)
- Patient placement and flow will be optimised to minimise the risks of infection acquisition and transmission. (Code of practice Standard 6)
- There will be a constant drive to improve the quality of our services from the perspective of minimising the risks of infection; quality improvement methodologies will be used and work linked to the Leading Improvement in Patient Safety (LIPS) programme.
- Antimicrobial stewardship, will be promoted and integrated with IP&C to minimise the risks of resistance and C. difficile disease.
- Data on infections will be collected and disseminated in support of improvement. (Code of practice Standard 4)
- Episodes of HCAI that occur will be evaluated through a multi-disciplinary root cause analysis process and lessons learned. (Code of practice Standard 5)
- There will be timely reporting to Welsh Government as required.
- Information about infections will be provided to patients, relatives and healthcare staff, there will be transparency regarding our infection rates across the organisation. (Code of Practice Standard 3)
- There will be a comprehensive communications plan that supports the culture of zero tolerance to preventable infections and that is pro-active in informing and preparing patients, staff and visitors of current issues and engaging a collaborative approach to preventing the spread of infections. (Code of Practice Standard 3 and 4)
- Staff will be provided with education and training in infection prevention and control to protect themselves and their patients. (Code of Practice Standard 5, 8 and 9)
- Prescribers will be provided with education on antimicrobial stewardship at induction and antimicrobial guidelines will be promoted and easily accessible to ensure better antimicrobial management to improve patient care, minimise risks, reduce resistance and reduce costs. (Code of practice Standard 9)
- Staff will be provided with occupational health support and advice and will be expected to take up the offers of recommended vaccination programmes, use personal protective equipment appropriately and to report any illnesses which could be transmitted onto patients in their care. (Code of Practice Standard 8)
Introduction:

With the publication of its strategic document Commitment to Purpose: Eliminating preventable healthcare associated infections (HCAIs) in December 2011, Welsh Government gave a clear steer to the healthcare services in Wales that they should adopt an explicit policy of zero tolerance to preventable healthcare associated infections.

In December 2013 a “Team Wales” meeting focused on the issue of healthcare associated infections. The Chief Medical Officer for Wales reinforced that this is a key priority area for the NHS in Wales. In June 2014 a CMO / CNO letter was issued accompanying the publication of the “Code of Practice for the Prevention and Control of Healthcare Associated Infections”, and announcing the revised tier 1 targets for HCAI for 2014/15 and the final recommendations for the mandatory HCAI surveillance programme in Wales.

Cardiff and Vale University Health Board has made good progress in relation to reducing the burden of *C. difficile* disease and MRSA blood stream infections when compared with the position in 2008, but further improvement is necessary and other healthcare associated infections and antimicrobial resistance issues must also be addressed. To this end this framework aims to refresh the Health Board’s commitment to reducing healthcare associated infections, highlights the need for organisational commitment and sets out clearly the roles and responsibilities throughout the organisation from Board and corporate IP&C and antimicrobial management teams to Ward to Primary and community care. The framework aligns with the clinical board structure put in place under Organising for Excellence (O4E) and the work stream to Lead Improvement in Patient Safety (LIPS). It also addresses well the 3 high level safety drivers for developed by the Clinical Senate in 2013:
To reduce healthcare associated infections and antimicrobial resistance effectively requires a multi-disciplinary approach across the health board and the engagement of all departments. As well as ensuring that our clinical care minimises the risks of HCAI and AMR we must also ensure that our environment, facilities and the planning of any new or refurbished facilities also ensure that the risks of HCAI and AMR are minimised. We must learn from the cases we have to inform interventions to prevent further cases, data and information technology must be used effectively to inform and support improvements.
The Framework

1. Roles and Responsibilities

1.1 Role of the Executive Board:

The Chief Executive Officer is ultimately responsible for Infection Prevention and Control across Cardiff and Vale UHB, the executive responsibility is devolved to the Executive Nurse Director’s portfolio. The organisation is required to have a non-executive patient's champion for cleanliness, hygiene and infection control (Welsh Health Circular 064(2006), this role is currently held by the Independent Member who Chairs the Quality and Safety Committee.

Infection Prevention and Control should not be seen solely as a nursing issue, multi-disciplinary engagement must be evident at Board level as well as elsewhere in the organisation. The Board will identify and support a Director of Infection Prevention and Control and Lead Nurse for IP&C, who will work closely together and with the Executive Nurse Director and report through her to the Board.

The Executive Nurse, with the Director for Infection Prevention and Control, supported by the IP&C team set the standards within this framework. The Board as a whole will lead the culture change required, driving and supporting this framework to eliminate the risks that can lead to healthcare associated infections.

All the Executive Directors have key roles to play in ensuring that reducing HCAI and AMR is a key priority for this organisation:

**Executive Director of Planning** - Ensures appropriate facilities are available to manage the risks of infection; oversees cleaning and communication departments.

**Executive Director of Therapies and Health Science** – Drives the IP&C agenda with the professional groups of therapies and health science. Oversees decontamination agenda.

**Executive Director of Finance** – Oversees Procurement and Information Technology as well as Finance.

**Executive Director of Workforce & Organisational Development / Deputy Chief Executive** - Organisational development to drive cultural change, IP&C responsibilities in job descriptions, training and development, appraisal and revalidation.

**Executive Director of Public Health** – Link with Public Health Agenda, liaison with partners in regard to HCAI and AMR issues, vaccination programme.

**Executive Director of Nursing** - Leads the IP&C agenda across the Health Board, support the IP&C specialist team, link with Leading Improvement for Patient Safety Programme (LIPS), driving the agenda through performance reviews.

**Executive Medical Director** - Leads the Medical profession agenda on IP&C and Antimicrobial Stewardship, supports the Antimicrobial Management Group, Antimicrobial Policy changes and, Antimicrobial Usage Targets. Ensures discussion of AMG agenda at Medicines Management Group.

**Chief Operating Officer** - Delivers the targets through the Clinical Boards, responsible for Patient Flow – planning for improvements in placement of infected patients.
1.2 Role of the Specialist teams:

The Infection Prevention and Control Team

The Specialist IP&C team for C&V UHB currently consists of a Senior Nurse, 3.6 wte band 7 clinical nurse specialists and 2.6 wte band 6 Associate Nurse specialists (0.6 band 6 vacancy). There is a Lead IP&C Doctor, (4 sessions) and a whole time band 7 IP&C scientist provided by Public Health Wales. Operational IP&C and on-call service is provided by the Microbiology service of Public Health Wales Cardiff.

In summary the role of the specialist team is:

- To set the standards required of the organisation in collaboration with the Executive Nurse Director
- To provide expert advice to the Health Board, Clinical Board, Staff and Patients regarding infection prevention and control issues and practice.
- The nursing team is aligned with the Clinical Board structure, thus each clinical board has an identified IP&C nurse to link with.
- To develop, consult on and review policies and procedures for IP&C, ensuring that they are evidence based and up to date.
- To provide education and training on IP&C which supports the implementation of the policies and procedures and best practice in IP&C.
- To set an audit programme and provide audit tools. To conduct validation audits of clinical practice, hand hygiene and environmental audits according to the programme attached and in support of the investigation of outbreaks of infection or periods of increased incidence.
- To support clinical boards with advice on how to collect and monitor surveillance data on HCAI to comply with the mandatory HCAI surveillance programme in Wales and to support the development of clinical board surveillance programmes in relation to surgical site infections or other infections as deemed necessary.
- To conduct alert organism surveillance and monitoring of blood stream infections across specialist units within the health boards and to take action to support the response required of clinical boards in relation to any changes detected in the incidence of HCAI.
- To call incident and outbreak meetings according to the agreed outbreak procedure within the C&V UHB.
- The Director of IP&C chairs the Water Safety Group and is Vice Chair of the Infection Prevention and Control Group. IP&C team members will provide expert IP&C advice to key groups that have links with IP&C issues as appropriate. Examples of these groups are the Water safety Group, Decontamination Group, Clinical Board Q&S meetings, IP&C sub-groups, Bed management group, procurement, health and safety.
- To liaise with the local Health Protection Team, Public Health Wales, Epidemiologists and Consultants in Communicable Disease Control in regard to HCAI incidents and outbreaks and to ensure effective communication of Infection information that assists with the management of communicable diseases across the boundaries of the health board and other organisations that provide healthcare.
The Antimicrobial Management Team:

The organisation has an Antimicrobial Management Group chaired by a Consultant Microbiologist (2 sessions/week), there is also Antimicrobial Pharmacist (5 sessions/week) in post since June 2013. The issues of antimicrobial resistance and antimicrobial stewardship are closely linked with IP&C and the work of both the AMG and the IP&C specialist team must be integrated to achieve the common goal of reducing our population’s risks of acquiring infections associated with the healthcare and treatments received.

In summary the role of the group is:

- To strengthen stewardship of antimicrobial prescribing within the Health Board through the clinical boards IP&C and Antimicrobial stewardship infrastructure.
- To develop and review all antimicrobial guidelines ensuring that they are evidence based and up-to-date, in collaboration with the relevant clinicians for each clinical speciality.
- To identify training needs relating to antimicrobial prescribing, to ensure that education and training on antimicrobial stewardship is in place and provide resources and information where necessary.
- To support financial management of antimicrobial drug expenditure.
- To provide AMG advisory support to the clinical boards via the Clinical Board pharmacists and to prescribers at ward level via Clinical Pharmacists. This support is anticipated to be augmented with the development of an Antimicrobial Pharmacist post for the UHL site and the introduction of dedicated pharmacist antimicrobial sessions for each clinical board as envisaged in the Pharmacy Force reconfiguration plan, currently under evaluation.
- To coordinate antimicrobial prescribing audits in each Clinical Board, at least bi-annually, with results fed back at Clinical Board Quality and Safety meetings and through the use of a 6monthly newsletter (latter under development).

Current arrangements of collaboration with IP&C team include:

- Monthly meetings between the Antimicrobial Group Chair, Antimicrobial Pharmacist, Senior Nurse IP&C and Lead IP&C Doctor.
- A joint 6 monthly newsletter to clinical boards (under development)
- Incorporation of IP&C advice on the Microguide antimicrobial guidance app currently available for use on smartphones and the web version which is available on all CAVUHB computers.
- Joint working and antimicrobial audit support in areas with periods of increased incidence of *C. difficile* / outbreaks.
1.3 Roles of Key Departments / Teams

Communications:

- To support the development of the website to enhance accessibility of IP&C policies and procedures for health board staff and to improve the information available to patients, visitors and the public regarding HCAI and AMR.
- Assist with the development of information leaflets and communications regarding HCAI and AMR as appropriate.
- Develop and support a communications plan with regard to norovirus / winter planning for infections for pre-emptive information and information sharing during outbreaks.
- Communications support for the Hand Hygiene action plan.
- Communications support for antimicrobial stewardship initiatives e.g. Antibiotic August, Annual European Antimicrobial Awareness Day

Capital and Estates:

- Engage with IP&C in relation to refurbishment and new builds at early point in design and planning and at appropriate times during the development and execution of projects.
- Manage Legionella risks across the organisation in collaboration with the DIPC.
- Water Safety.
- Ensure sufficient time for microbiological testing is factored into commissioning of theatres, decontamination facilities etc.

Patient Safety Team:

- Collaborate with IP&C team in relation to serious incidents related to episodes of HCAI.
- Support investigations of serious incidents related to HCAI and AMR.
- Report into Welsh Government as “no surprises” or serious incident reports as required.

Housekeeping:

- Collaborate with IP&C team to ensure that cleaning specifications are increased where there are outbreaks or ongoing infection issues.
- Attend outbreak meetings when called to ensure that housekeeping input is appropriately used and deployed.
- Roll out of Hydrogen Peroxide Vapour (HPC) cleaning protocols.
1.4 Role of the Clinical Boards and their teams:

Minimising the risk of HCAI by practicing effective Infection Prevention and Control and appropriate antimicrobial prescribing is everyone’s responsibility across the organisation. The clinical board’s responsibility will be to ensure that they have the correct infrastructure and leadership in place to deliver the required reductions in HCAI through the engagement of their directorates and staff.

Clinical Board’s will ensure that they have link nurses in place in wards and units and a Lead Doctor for the Board who would be a link for the Health Board Lead IP&C Doctor, IP&C team and Antimicrobial Management Group to liaise and collaborate with.

Clinical Board’s will be expected to have an appropriate infrastructure to deliver Infection Prevention and Control and Antimicrobial Stewardship:

- An IP&C group, which reports to the Quality and Safety Group of the Clinical Board with minutes sent to the IP&C committee of the health board.
- An audit and surveillance programme for HCAI and antimicrobial prescribing, which would include audits of clinical practice, hand hygiene, bare below the elbows and environmental audits as well as surveillance of infections such as surgical site infections, central line infections etc. The extent of the programme will vary between clinical boards and may require the appointment of an audit / surveillance nurse. Support and training would be provided by the specialist IP&C team and by Clinical Board pharmacists in relation to antimicrobial prescribing audits.
- A system for undertaking root cause analysis following all cases of Clostridium difficile infection and MRSA blood stream infection, as well as any deaths identified in the mortality reviews as being due to a healthcare associated infection. RCAs should also be considered for any MSSA blood stream infections or other infections that were deemed to be healthcare associated to support a better understanding of the preventative measures that can be put in place.
- Ensure there is sufficient capacity and capability to deliver necessary improvements using improvement methodology, knowledge of variation and reliability design.
- Appropriate representation on the Health Board’s Water Safety Group, Decontamination Group and Infection Prevention and Control Committee.
- Ensure that all staff are trained in IP&C through the induction e-learning programme and follow up training. Also identifying if there are specialist groups that require additional training for example front line practitioners who need to be fit tested for the use of FFP3 respirators and trained in respiratory precautions.
- Ensure that all prescribers are trained on appropriate antimicrobial prescribing, are adherent to the most up-to-date antimicrobial guidance, are using antimicrobial stickers appropriately and are overall compliant with Cardiff and Vale UHB Policy for the use of antimicrobial agents.
- Ensure that IP&C responsibilities are clearly defined in job descriptions and that they are included in staff objectives.
- A notice board at entrances to all ward areas / units presenting infection data so that there is transparency regarding the issue and easy access to ward level data on infection for patients, staff and visitors.
1.5 Responsibilities of Individual Health Board Staff

Reducing the risk of healthcare associated infections and the incidence of antimicrobial resistance is everybody's business.

Health board staff have a responsibility to ensure that in the course of their work they do not increase the risk of infections, antimicrobial resistance or the spread of infections to patients, themselves or other staff within the health board.

- Staff must ensure that they attend mandatory training in IP&C and are familiar with current policies and procedures and how to access them.
- Prescribers of antimicrobials must ensure that they are trained in antimicrobial stewardship and are familiar with the current policies / formulary. The microguide app has been developed by the antimicrobial management group to support prescribers in the correct prescription of antimicrobials. A “Start Smart then Focus” approach should be followed as recommended by the Department of Health and Surgical prophylaxis guidelines should be followed as agreed with the Antimicrobial Management Group with the aim of single dose antibiotic where deemed to be safe.
- The Health Board Hand Hygiene Procedure requires that staff are bare below the elbows in clinical areas to facilitate hand hygiene. Staff are required to comply with Health Board policies and procedures.
- Staff should ensure that they understand what personal protective equipment is required to protect them from infection in all circumstances, for example if they were required to manage a case of severe respiratory distress syndrome or a patient with C. difficile. The Health Board will provide the PPE and training in its use including fit testing for the use of FFP3 masks, but staff must ensure that they attend these sessions and recognize the risks to themselves and use the PPE appropriately.
- Staff should take all possible measures to protect their patients from infections that the staff themselves may have or be susceptible to. Occupational health support and advice is available to staff and staff will be expected to take up the offers of recommended vaccination programmes and report any illness that could be transmitted onto patients in their care.
- Unnecessary use of medical devices or prescription of antimicrobials can harm patients, staff should consider carefully the need for medical devices; insertion and maintenance of medical devices must be undertaken according to evidence based practices. Inappropriate use of antimicrobials can increase the burden of antimicrobial resistance and the risk of antimicrobial adverse effects.
- Healthcare staff doing the job at the frontline are often in the best position to identify risks and notice practices that can be improved. Staff are encouraged to raise these issues and to seek to improve practices with a view to reducing the risks of HCAI and AMR.
1.6 Public and Patient Engagement and Responsibilities:

It is very important that our patients and the population we support in the Cardiff and Vale area understand the challenges of managing the risks of healthcare associated infections and antimicrobial resistance and are engaged to assist us in reducing the risks to a minimum.

Standard 3 of the Code of Practice requires that “Suitable and accurate information on infections must be available to service users, their visitors and the public”

Information to be provided:

- Development of website to highlight IP&C issues and use to inform ward closures for example during D&V outbreaks and to advise patients, visitors and the public about measures they can take to prevent infections.
- Publication of the monthly dashboard of *C. difficile*, MRSA and MSSA data is already a requirement.
- Provide patients and service users with appropriate information regarding HCAI and AMR in the form of bedside information and web based information. Issue information leaflets with clear contact details for further information and support.
- Develop “ward information boards” that display on each ward information on HCAI incidence including *C. difficile* and MRSA figures, hand hygiene compliance, levels of staff training in IP&C and antimicrobial prescribing and the incidence of infections related to medical devices on the ward.

Patient Engagement:

- Use complaints and concerns relevant to HCAI and AMR issues to learn and improve.
- Patients to be invited to attend IPCG to provide personal experiences of HCAI and AMR.

Patient/ Visitor/ Public Responsibilities:

- Not to bring infectious illnesses into hospital when visiting.
- To take account of advice given on preventing infections in the health care environment.
- To inform healthcare staff of any infectious illness they may be suffering from, be at risk of or have suffered from recently before admission to hospital.
2. Performance Management and Assurance:

The Health Board is held accountable for its performance in relation to tier 1 targets for HCAI by the Welsh Government. Clinical Boards will be held accountable for their performance in relation to reducing HCAIs by the executive board through monthly performance reviews. The Chief Operating Officer will oversee the implementation of this HCAI framework through the clinical boards with support from the Executive Director of Nursing, the Director of IP&C and Lead Nurse IP&C.

Audits of hand hygiene, clinical practice and of the environment conducted by the IP&C team will be fed back to clinical teams and their boards for action. These action plans will be reviewed and monitored by the IP&C team.

Assurance that effective infrastructure and practices are in place in relation to HCAI and AMR will be through the IP&C groups of the Clinical Boards reporting to Quality and Safety and the IP&C committee of the Health Board.

3. National Strategies, Key Documents and References

- Commitment to Purpose: Eliminating preventable healthcare associated infections (HCAIs) Welsh Government December 2011.
- CMO / CNO letter 03.06.2014 (CMO 2014(9)/ CNO 2014(5). Code of practice for the prevention and control of healthcare associated infections; Revised tier 1 national target for reducing *Clostridium difficile* & MRSA bacteraemia; Outcome of the HCAI surveillance programme review.
- Free to Lead, Free to Care – empowering ward sisters WG 2009
- National Standards for Cleaning in NHS Wales WG 2009
- Setting the Direction – WG 2010.
- Standards for health services, Wales – Standard 13
- Putting things Right: Guidance on dealing with concerns about the NHS from 1st April 2011, version 3 November 2013 Welsh Government