Infection prevention and control

Annual Report 2017/18

National Infection Prevention and Control Team

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Executive summary

I am delighted to welcome you to the Marie Curie infection prevention and control (IPC) annual report for 2017/18.

It has been four years since I took on the role of Director of Infection Prevention and Control (DIPC) and I am immensely proud of the way our clinical and non-clinical staff continually do their utmost to reduce the risk of patients developing infections.

I would like to thank the clinical teams, the National IPC team and, particularly, the Senior Nurse, Infection Prevention and Control, for all their hard work and continuing commitment over the last year.

The prevention and management of healthcare associated infections (HCAI) are continually evolving. Marie Curie is required to report to both our regulators and our commissioners on how we maintain and improve the application, development and monitoring of IPC standards.

The Marie Curie infection prevention and control annual report, which covers the period 1 April 2017 – 31 March 2018, shows significant progress around the prevention, reporting, surveillance and management of healthcare associated infections.

We care for people with a terminal illness and support their families at very difficult times in their lives. With this in mind, it is our duty to ensure patients and their families receive high-quality care within a clean and safe environment.

Reducing, preventing and managing infections remains a priority for Marie Curie. Building on strong foundations, we have carried out considerable work throughout 2017/18 to strengthen our IPC standards. This report highlights some of our key successes over the last year:

• A Community Link Nurse developed a hand hygiene card, which was circulated to all staff on World Hand Hygiene Day.
• The Marie Curie Hospice, Edinburgh was awarded “excellent”. Health Improvement Scotland particularly commended their IPC practices during their 2017 inspection.
• All nine Marie Curie hospices now test regularly for pseudomonas with a water management plan in place.
• The Marie Curie Hospice, West Midlands introduced staff training and awareness-raising on the signs of sepsis and its treatment pathway.
To build on these successes in 2018/19 we will:

• continue to develop our information library, leaflets and support for patients, families and staff
• carry on developing skills and knowledge around IPC across the workforce
• showcase best practice internally across the organisation and externally at conferences.

Since 2008 there has been a legal requirement on NHS England and other health and social care organisations to meet the standards of infection prevention and control contained within the Health and Social Care Act 2008. In line with best practice, Marie Curie has adopted the World Health Organization (WHO) approach to hand hygiene called the “five moments”.

Marie Curie remains committed to promoting patient safety through the prevention, reduction and management of healthcare associated infections across all four nations. Working in partnership with colleagues, patients and the public, we will continue to develop and implement a wide range of IPC strategies. We have low rates of HCAI and our ambition is to have no avoidable infections.

This report from the DIPC is the annual report to the Marie Curie Board of Trustees on HCAI and the progress of the annual work plan. It provides assurance of the activities and mitigation of risks related to the prevention and control of infections and highlights the continued excellent IPC performance across the organisation. It also outlines how Marie Curie has demonstrated regulatory compliance across all four nations. The regulators are:

• The Care Quality Commission (CQC)
• Healthcare Inspectorate Wales (HIW) and Care Inspectorate Wales (CIW)
• Healthcare Improvement Scotland (HIS)
• The Regulation and Quality Improvement Authority (RQIA)

We are proud of the work we have carried out and the progress we have made in the last year, and will continue to lead IPC in palliative care. We would like to thank all our staff for their commitment to supporting infection prevention and control and best practice, and the continued safety and wellbeing of our patients, their families and our staff.

Dee Sissons
Executive Director of Nursing
1 Governance arrangements

1.1 IPC governance arrangements

The national infection prevention and control management team provides strategic direction on the organisation’s approach to the reporting, monitoring, reduction and management of HCAI. The key roles relating to IPC continued to be fulfilled throughout 2017/18.

A Senior Nurse, Infection Prevention Control (SNIPC) provides expert advice to the organisation. The SNIPC reports directly to the Deputy Director of Nursing. The post is 0.20 whole time equivalent and the SNIPC focuses on:
- maintaining and monitoring the IPC assurance framework
- our HCAI reduction plan
- continuing IPC policy development
- Link Nurse continuing professional development.

Accountability for IPC sits with the Chief Executive, who delegates responsibility to the DIPC. The DIPC reports to the Board of Trustees. This diagram details the lines of accountability and reporting structure.
1.2 Our approach

The National IPC management team continues to provide, clinical and non-clinical staff in the hospices and community services, with specialist advice and support. In 2017/18 the team has:

- provided advice and support to staff in the management and care of patients with infections
- continued to develop effective external networks and strategic partnerships to promote best practice across the organisation
- monitored and reported incidents/outbreaks of infections and, where appropriate, undertaken a post-infection review (PIR).

During 2017/18, the SNIPC has continued to:

- work in collaboration with the Royal College of Nursing supporting the Link Nurse programme
- join forces with the Quality Assurance team to develop tools that support local teams to regularly monitor IPC standards
- work with local teams to develop and implement action plans arising from either incidents, audits or regulatory visits (where applicable)
- actively contribute to the reporting and successful administration of the Infection Prevention and Control Committee (IPCC)
- maintain good relationships and effective working with the Head of Estates and the Health and Safety Manager ensuring an interdisciplinary approach to the prevention, identification and management of infections.

The Registered Manager is locally responsible for IPC and further specialist support is available for hospices through local service level agreements (SLA), microbiologists and IPC specialists. Currently three of our nine hospices do not have a local SLA. In areas where these arrangements do not exist, our staff are supported through our organisational policies and procedures. In the event of an infection, they have access to the DIPC and the SNIPC.

In the event of an outbreak, both hospices and community teams can access support from local Public Health teams. Hospice teams are finding it increasingly difficult to renegotiate viable local SLAs with other providers. We will continue to monitor any potential impact where arrangements are not in place. To date there has been no demonstrable impact where local SLAs are not in place.

Hospice Pharmacists are continuing to work with the Medical Directors to ensure antimicrobial prescribing is in line with national and local guidelines.
1.3 **Frequency and nature of reporting**

The Infection Prevention and Control Committee (IPCC) meets quarterly and has a multi-professional membership that spans both community and hospice teams across all four nations. The committee identifies, mitigates, monitors and manages any IPC risk. Reporting to the Clinical Governance Trustee Committee, they provide assurance to the Trustees that Marie Curie has the correct processes in place on the reporting, surveillance and management of HCAI and IPC.

As well as producing the annual report, the DIPC delivers a quarterly report on IPC to both the Clinical Governance Executive Committee and the Clinical Governance Trustee Committee. These reports are available to staff and commissioners. This report highlights areas of best practice and development and provides assurance for Trustees on all regulators’ standards. Agendas include the development of IPC strategies, identifying, monitoring and mitigating risks, policy development, performance, and surveillance. Examples of agenda items include:

- outbreaks and periods of increased incidence
- antimicrobial stewardship
- standard operating procedures and policy development
- emerging issues
- concerns from hospices and the Marie Curie Nursing Service
- charity feedback.

The revised Terms of Reference 2018 are available on request from the DIPC.

1.4 **Regulatory compliance**

**England**

There were no IPC concerns raised during inspections in our hospices undertaken by the CQC during 2017/18. South West Marie Curie Nursing Service, Central Marie Curie Nursing Service and Eastern Marie Curie Nursing Service were inspected. No areas of concern were identified. The CQC assesses IPC standards against the new Health and Social Care Act 2008: Code of Practice for health and adult social care on the prevention and control of infections and related guidance (Department of Health, 2015). This contains the 10 criteria that healthcare providers are assessed against.
Wales

Healthcare Inspectorate Wales (HIW) inspects Marie Curie Hospices and Care Inspectorate Wales (CIW) inspects the Marie Curie Nursing Service in Wales. No inspections took place during 2017, of either the Marie Curie Hospice, Cardiff and the Vale or the Marie Curie Nursing Services.

HIW and CIW assess IPC standards against the Care Standards Act 2000 and national minimum standards.

Scotland

In 2017, the Healthcare Improvement Scotland (HIS) inspection in the Marie Curie Hospice, Edinburgh rated the hospice as excellent for IPC. HIS also inspected Scotland South Marie Curie Nursing Service and no areas of concern were identified.

HIS assesses IPC standards against the National Health Service (Scotland) Act 1978, Health Improvement Scotland Regulations 2011 (quality statement 2.4 for IPC) and National Care Standards Scotland (standard 7 for IPC), which contain the criteria that healthcare providers are assessed against.

Northern Ireland

The Regulation and Quality Improvement Authority (RQIA) inspection in the Marie Curie Hospice, Belfast during 2017 did not highlight any IPC gaps. The report stated that a review of IPC arrangements indicated very good infection control practices are embedded in the hospice.

The RQIA assesses IPC standards against the Independent Health Care Regulations (NI) 2005, the Regulation and Improvement Authority Regulations (NI) 2011 and the Department of Health, Social Services and Public Safety Minimum Care Standards 2014, which contain the criteria that healthcare providers are assessed against.
1.5 **Infection Prevention and Control Committee**

The IPCC reports directly to the Clinical Governance Executive Committee and is chaired by the DIPC. Meetings take place four times a year and all nations and services are represented. All IPC incidents and outbreaks are routinely reported to the IPCC and the Trustees receive a quarterly report.

1.6 **IPC Link Nurses**

The Link Nurses help create and maintain an environment that ensures the safety of patients, visitors and colleagues. They use their knowledge and skills to support compliance with national standards and help embed IPC theory into everyday practice. Meeting quarterly, they are critical to the successful delivery of our IPC strategy.

Recognised by colleagues for their unique function and contribution, and with support from their managers, these Link Nurses support patient safety strategies through the dissemination of knowledge and best practice in healthcare settings. They effectively educate other staff, distribute information and generate discussion and debate around sharing best practice. For example, a community Link Nurse developed a hand hygiene card based on the WHO “five moments” approach, which was circulated to all staff on World Hand Hygiene Day.

On average, 12 to 15 Link Nurses attended each of our four specialist study days during 2017/18. With a range of speakers, these events develop nurses’ understanding of IPC, as well as providing the latest information and updates. These sessions allow staff to share their learning from root cause analysis and promoting best practice, enabling Link Nurses to challenge poor practice and share best practice.

“When I first became an IPC Link Nurse I felt there was a big gap in my knowledge. Initially, I felt really overwhelmed. However, the meetings have helped give me the confidence to promote and challenge IPC practices across the multi-disciplinary team.”

Marla Muir
Marie Curie Hospice, Cardiff and the Vale

“Being a Link Nurse has allowed the nurses in the community to feel less isolated because they have one person that they can report any IPC problems they come up against to.”

Margaret Reid
Marie Curie Hospice, Glasgow

Link Nurses support the IPC audit programme. More information can be found in section 3.1.
### 1.7 Local IPC groups

All IPC incidents are managed locally. They are reported and monitored through the Divisional Quality and Safety Board. The hospices have local IPC groups.

#### Case study: improving practice – building a positive culture

Following a number of unrelated cases of Clostridium Difficile Infections (CDI), the multi-disciplinary team participated in a post-infection review. They identified a gap in staff knowledge around managing patients with diarrhoea.

The hospice developed an action plan and put in place a local education programme, which was led by Ward Sister Cheryl Brewerton. This included an information folder, IPC seminars hosted by outside speakers, regular news bulletins and microteaching sessions.

The Lead Nurse and Ward Sister undertake spot audits to check that patients with diarrhoea are isolated at the time of symptoms, appropriate and timely specimens are taken, and patients are treated and managed appropriately.

Angela Allsop, Lead Nurse, said:

“We have real evidence that our practice has improved. Staff are proactive rather than reactive and they use their learning and knowledge to recognise and manage patients across all aspects of infection prevention and control.”

Marie Curie Hospice, West Midlands
Local IPC multi-disciplinary team
2 Training and continuing professional development

2.1 Statutory and mandatory training

As can be seen from table 1, we currently have a 92% compliance rate for IPC across our hospices and nursing service. This has been achieved despite access issues to the Skills for Health (SfH) Infection Control modules, which made e-learning unavailable for around eight weeks of the year. These issues have now been resolved. Table 2 provides a more detailed breakdown of the cumulative figures for all hospices and Marie Curie Nursing Service regions up to the end of March 2018.
In addition to the IPC e-learning, local areas also undertake further education to update staff. The topics include hand hygiene, sharps, audit, waste management and practical demonstrations with light boxes. These sessions are provided by IPC Link Nurses and are specific to the hospice within which they are working, informed by incidents, near misses and staff. The IPC Link Nurses have also received professional development on human factors, influencing skills and resilience through their Link Nurse meetings.
3 IPC review of standards

3.1 IPC audits

During 2017/18, the charity introduced regular IPC audits. All hospices and Marie Curie Nursing Service regions undertake bi-annual hand hygiene and personal protective equipment audits. Marie Curie has adopted the WHO approach to hand hygiene called the “five moments”. These audits explore practice and identify resources. The hospices in Glasgow and Edinburgh continue to undertake a robust IPC audit programme as required by their regulators.

The audits are uploaded onto the Meridian database and can be accessed by staff, which means hospices and regions can act on the results in a timely fashion. This systematic review of care against our policies supports staff to improve patient care and outcomes. Services can view the results across the organisation, which promotes cross-organisational learning, the sharing of good practice initiatives and, where appropriate, the development of local action plans.

The Link Nurses are pivotal to the management and reporting of local audits and share the responsibility for using audit data to change practice.

Senior Nurse Denise Barker said: “We use heat maps from audit results as a benchmark to inform our action plans and improve practice. The traffic light system of reporting helps us easily see where we have improved.”

Case study: improving practice – learning from audits

“In the first quarter of 2017/18, the Marie Curie Hospice, Cardiff and the Vale’s first hand hygiene audit only showed a compliance of 84.47%. The IPC Link Nurse has taken the lead in improving hand hygiene standards.

“Work to date has included reinforcement of the WHO ‘five moments’ of hand hygiene. This has been carried out through education sessions and the use of a light box. The IPC Link Nurse has also developed pocket cards for staff and an IPC quiz.

“As well as improving governance boards, which were displayed in the ward area for staff and patients, there was also a ward resource folder. In January 2018, audit results stood at 95%.”

Carolyn Gent, Lead Nurse
Marie Curie Hospice, Cardiff and the Vale
4 Surveillance

4.1 Healthcare associated infections

There is no mandatory requirement for Marie Curie to undertake surveillance of HCAI. However, in line with best practice and Marie Curie policy, we continue to monitor the acquisition of Meticillin-sensitive Staphylococcus Aureus (MSSA), Meticillin-resistant Staphylococcus Aureus (MRSA), E. coli bloodstream infections and toxigenic Clostridium Difficile infection. The local clinical teams are responsible for collecting and reporting the data via Sentinel, the complaints and incidents logging and monitoring tool used by Marie Curie. All reported acquisitions are reviewed by the SNIPC and, where appropriate, a post-infection review is undertaken.

Hospices

Figure 1 shows all IPC reported incidents of HCAI acquired in our care. For information on all IPC reported incidents across Marie Curie Hospices, see Appendix 1.

Fig 1 Incidences of alert organism acquired after admission in our hospices 2017/18

The case of E. coli bacteraemia was considered attributable. This is defined as acquired in our care more than 48 hours post-admission for bacteraemia. In line with best practice, the national IPC management team undertakes post-infection reviews on all attributable cases. It determined there were no lapses in care and this case was unavoidable.
Over a period of months there was a small cluster of unrelated cases of CDI in the Marie Curie Hospice, Cardiff and the Vale. At the same time there was a corresponding drop in both hand hygiene compliance and environmental cleaning scores. This was escalated to the Director of Nursing at the Primary Community and Intermediate Care Clinical Board (PICC) and the Marie Curie DIPC.

Local teams developed and implemented an action plan, which included enhanced training for all clinical and facilities staff. We have now seen improvements in compliance and the Director of Nursing PICC has praised staff for the work they have carried out.

All five diagnosed cases of CDI were attributable to Marie Curie.

Attributable is defined as acquired in our care more than 72 hours post-admission. In line with best practice, the Senior IPC leadership team undertakes post-infection reviews on all attributable cases. It determined there were no lapses in care and all cases were unavoidable.

During 2017/18, the post-infection reviews identified a number of areas of development. These included:

- risk assessment of infection at the time of admission
- prompt isolation of symptomatic patients
- increasing hand hygiene compliance at the point of care
- reviewing enhanced cleaning process
- documentation of stools.

Marie Curie Nursing Service

In the nursing service, we monitor patients with known infections and conditions to ensure our staff take the appropriate actions when caring for these patients.

Of the 132 total reported incidences on Sentinel, Marie Curie Nursing Service reported 45 occasions when personal protective equipment (PPE) was not available for our staff. Table 3 shows the total number of occasions when PPE was not available in 2017/18.

The responsibility for providing personal protective equipment in the home sits with the district nurse. We have recognised that this is not always available in homes. Therefore, we ensure that all our community staff carry personal protective equipment in the event that it is not readily available.

### Table 3 Incidence of unavailable PPE

<table>
<thead>
<tr>
<th>Marie Curie Nursing Service</th>
<th>Infection Control Policy not followed – PPE not available</th>
</tr>
</thead>
<tbody>
<tr>
<td>North East</td>
<td>44</td>
</tr>
<tr>
<td>South West</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
</tr>
</tbody>
</table>
4.2 Evolving healthcare associated infections

Carbapenemase-producing Enterobacteriaceae (CPE) are an emerging group of multidrug-resistant organisms and there are an increasing number of cases, particularly in London and the north-west of England.

Table 4 shows the number of patients with CPE transferred to two of our hospices in 2017/18. In response to an increasing number of patients admitted to our services with CPE, the SNIPC worked in partnership with Public Health England to develop a standard operating procedure for the management of these patients. This has been implemented across the organisation.

Table 4 Incidence of CPE

<table>
<thead>
<tr>
<th>Hospice</th>
<th>CPE cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liverpool</td>
<td>4</td>
</tr>
<tr>
<td>West Midlands</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>5</td>
</tr>
</tbody>
</table>

4.3 Other infections

This year, we have had one confirmed case of flu. In response, we have reviewed the guidance on fit mask testing. Fit masks are only required for patients who require aerosol generating interventions. There are only small numbers of these patients admitted to our services. We have agreed pragmatic, appropriate guidance with clinical teams. The revised guidance was approved by the IPCC and is available on request.
5 Outbreaks/periods of increased incidence in in-patient areas

There have been two reported periods of increased incidence (PII). They are:

1. Marie Curie Hospice, Glasgow reported a PII of suspected viral infection, causing symptoms of diarrhoea and vomiting. There was one patient with symptoms, two staff were off sick with similar symptoms and three relatives (who had visited in the previous 48 hours) were showing symptoms. In line with IPC standard operating procedure for the management of a period of increased incidence, the DIPC was contacted and appropriate action was taken at the time. This included the closure of the ward for one day. The ward reopened following a post-outbreak clean by facilities staff. No causative agent was identified.

2. Marie Curie Hospice, Newcastle reported a PII of suspected viral infection, causing symptoms of diarrhoea and vomiting. There were six patients with symptoms, although the medical team felt that some of the symptoms could have been disease-related. Two staff were off sick with similar symptoms, but no relatives reported any illness. In line with IPC standard operating procedure for management of a period of increased incidence, the DIPC was contacted and appropriate action was taken at the time. This included the closure of the ward for five days. The ward reopened following a post-outbreak clean by facilities staff. No causative agent was identified.
6 Influenza immunisation activity

Marie Curie has multiple ways of delivering the influenza vaccine to our staff. These include:

- partnerships with local Clinical Commissioning Groups who pay for vaccinations that members of staff administer to other staff
- Marie Curie purchases vouchers which are offered free of charge to encourage frontline staff to receive the vaccine
- healthcare staff can receive the vaccine from their GP.

Due to the different ways Marie Curie staff might access the vaccine, we do not have an accurate system to identify the number of staff who received the vaccine.

7 Improvements in the recognition and management of sepsis

Sepsis, also referred to as blood poisoning or septicaemia, is a potentially life-threatening complication of an infection or injury. Patients in the palliative phase of illness are particularly vulnerable to sepsis.

In July 2016, the National Institute for Health and Care Excellence (NICE) introduced guidance covering the recognition, diagnosis and early management of sepsis.

All Marie Curie Hospices are required to demonstrate compliance to the NICE standard on sepsis and the Marie Curie Hospice, West Midlands spearheaded the introduction of staff training and awareness for the signs of sepsis and the treatment pathway. This included:

- Sepsis UK providing training for all staff, including doctors
- information awareness using posters, aides-memoires and “sepsis six” cards
- following the “sepsis six” community guidelines.

All our hospices will be requested to develop local HCAI reduction plans, which will outline their strategy to implement NICE standards on sepsis.
Antimicrobial stewardship

The numbers of patients who are resistant to antibiotics has increased over the last 40 years and the inappropriate use of antimicrobials has been identified as a key contributor. The consequences of antimicrobial resistance include increased treatment failure for common infections and decreased treatment options where antibiotics are vital. Antimicrobial stewardship (AMS) is crucial in combating this and is an important element of the Department of Health’s Five-Year Antimicrobial Resistance Strategy 2013-18.

AMS is a co-ordinated programme that promotes the appropriate use of antimicrobials including antibiotics. It improves patient outcomes, reduces microbial resistance and decreases the spread of infections caused by multidrug-resistant organisms.

The Hospice Manager, as the registered provider, is responsible for the local AMS programme.

The Medical Director and Pharmacist promote and monitor the prudent use of antimicrobials by monitoring and auditing. This involves:

- compliance with local antibiotic guidelines (including prescription in line with culture and sensitivity testing and/or microbiology recommendation)
- indication for treatment written in the patient case notes at the point of antibiotic initiation
- indication for treatment written in the antibiotic section of the prescription chart
- stop date
- case review.

The frequency of AMS audit is determined locally. Eight of our nine hospices have carried out an AMS audit. Where required, the hospice has formulated an action plan to address the audit findings, which is also monitored locally. The remaining hospice has plans in place to ensure the baseline audit is completed.

Case study: improving practice learning from AMS audit

“In Liverpool we have undertaken a point prevalence (snapshot) audit and have recognised that this only gives us a limited picture. We will be moving data collection over a longer period of time in 2018/19.

“However, as a result of our audit, we have seen an improvement in prescribing, which is in line with the acute trust guidelines. Our staff are also better at collecting specimens at the right time and recording the results. Our next step is to improve how we review the length of antibiotic treatments and when to stop them.”

Tracey Taylor, Lead Nurse
Marie Curie Hospice, Liverpool
9 Patient feedback and infection prevention and control

Based on 1,831 surveys between April 2017 to March 2018, the overall score for the cleanliness of the hospices was 98%. Questions which focused on the environment created within the hospices, of which cleanliness is partly relevant, had an overall score of 97.6%. Patients completed 53% of surveys; family members and carers completed the remainder.

Respondents were given the opportunity to provide free text comments in response to the question on the cleanliness of the hospice. In response to this question, 112 people left a comment. These comments can be broken down into the themes shown in figure 2.

- There were seven suggestions for improvement across all our hospices, including in the cleanliness of a relative’s area and a bathroom, and observed cleaning skills of staff. As a result, estates and facilities managers have reinforced good cleaning practice with staff and conversations have taken place with the individuals who raised concerns.
- One hundred responses commented directly on the cleanliness of the hospices. For example, one relative said: “The cleaning is better than any top-class establishment you can find.”
- Other respondents commented on how hardworking the cleaners were, how they paid attention to detail and some talked about the personal qualities of the cleaners. “The cleaning staff were incredibly friendly and play such an important role for patients and family.”

Fig 2 Comments received in response to cleanliness survey
10 Estates department contribution to the IPC work programme

10.1 Legionella compliance with legislation

The control of legionella is covered by:

• the legal requirements of the Health and Safety at Work Act 1974, concerning risks from exposure to legionella
• guidance on compliance with the relevant parts of the Management of Health and Safety at Work Regulations 1999.

Legionella is managed and controlled by the hospice facilities department, following the Marie Curie legionella and water hygiene policy.

A contract is now in place with an Authorising Engineer (Water) to provide expert advice to Marie Curie on water safety issues such as legionella and pseudomonas. Marie Curie continues to employ the services of contractors, who provide professional legionella services and undertake legionella risk assessments on Marie Curie properties.

Written site-specific schemes of control for all hospices are in place. They reflect local risk assessments, and the facilities teams continue to follow written scheme requirements in terms of planned, preventative maintenance and testing.

In 2017, a water safety group was established to draft a new water safety policy that is currently under consultation. Strengthening our policy will improve the organisation’s approach to water hygiene management.

The formation of the water safety group including the Authorising Engineer will ensure:

• a co-ordinated approach with all relevant functions involved in decision-making for water management
• technical advice on the management of complex water-related issues such as pseudomonas
• consistency of management approach across the hospice environment
• advice on sanitary ware and water system design in refurbishment projects to minimise water safety risks
• improved levels of compliance with policy, as the group will carry out some audit and monitoring activities.
10.2 Pseudomonas compliance with legislation

Pseudomonas infections are diseases caused by a bacterium that is found widely in the environment, such as in soil, water and plants. They usually do not cause infections in healthy people. If an infection does occur in a healthy person, it is generally mild.

During 2017/18, Marie Curie introduced a number of risk control measures in relation to pseudomonas. We continued pseudomonas testing during 2017/18. The bacterium was isolated in water sources in three of our nine hospices in 2017 (Belfast, Cardiff and the Vale and Newcastle).

All hospices were supported by the Authorising Engineer (Water) and, where appropriate, local IPC teams and the SNIPC.

Remedial actions were immediately put into place in the three hospices. These included replacing pipework and sanitary ware and reviewing operational procedure changes, including daily flushing of patient-use outlets and the introduction of specific hand washbasin cleaning procedures.

The number of outlets found to be positive in Newcastle and Belfast has reduced due to the remedial works. Both hospices are managing the risk of pseudomonas in a small number of outlets with filters until longer-term refurbishment work can be carried out. The Marie Curie Hospice, Cardiff and the Vale has achieved clear sample results.

Regular reporting on pseudomonas sample results takes place at the Clinical Governance Trustee Committee, IPCC and Health and Safety group. No pseudomonas infections have been recorded or related to those affected areas.

10.3 Cleaning services

Operational cleaning services are currently led by Facilities Managers and facilities leads in all in-patient facilities. The Facilities Managers and facilities leads are responsible for implementing Marie Curie’s cleaning policy.

Facilities teams in each location report through a structure of supervisory staff members, who are responsible for the co-ordination of services and monitoring of standards in all in-patient areas. This is in line with national standards of cleanliness.

Facilities services are predominantly provided in-house, which helps ensure they are linked to the needs of clinical services. The Marie Curie Hospice, West Midlands is the only location where cleaning services are outsourced. The service was re-tendered in 2017 and the contract awarded to City and Kent. Due to their vast experience, City and Kent
demonstrated a greater understanding of infection prevention and control. This was apparent throughout their proposal and was well-reflected in their proposed cleaning systems and associated methodologies. Their proposed equipment, processes and systems to deliver the service demonstrated a high level of innovation. This will not only ensure compliance to cleanliness standards but will also provide the hospice with a higher level of monitoring and insight into cleaning and laundry operations.

10.4 Monitoring arrangements for cleaning service

To monitor compliance to cleaning standards, Marie Curie operates a monitoring system that covers all 49 elements set out in the National Standards of Cleanliness 2007 Approved Code of Practice. Paper audits are completed for all Marie Curie in-patient areas, with written and verbal updates provided via the IPCC.

Building on feedback provided last year, monitoring has been strengthened and an exception reporting process introduced. If there are two consecutive months where either the audit was not undertaken, or the area did not meet standards, this is escalated to the Divisional Governance Board, via local environment and safety meetings. The IPCC also receives an exception narrative as to why this has occurred, with appropriate assurance that the issues have been resolved.

In the first three quarters of 2017/18, the Marie Curie Hospice, Cardiff and the Vale’s high-risk audits showed a compliance of 89.85%. Work to date has included an ongoing review of how the service is delivered and the distribution of hours across the functional areas. Work schedules have been reviewed and weekly audits are being undertaken. In January 2018, high-risk audit results stood at 97% and in February 2018 at 96%.

An electronic monitoring system has been successfully trialled at the Marie Curie Hospice, Liverpool, to carry out monitoring in a more effective and timely manner. The trial was successful and will be rolled out to all hospices. The system will also provide better management information, helping identify failure trends and training requirements and improve reporting processes.

Monitoring cleanliness is the responsibility of the Hospice Managers, supported by the Lead Nurse. This ensures a joined-up approach to identifying and addressing any issues patients or clinicians have with facilities services, including the environment.
Table 5  **Hospice average compliance score 2017/18**

<table>
<thead>
<tr>
<th>Hospice</th>
<th>High Risk</th>
<th>Significant Risk</th>
<th>Low Risk</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Actual</td>
<td>Target</td>
</tr>
<tr>
<td>Belfast</td>
<td>95%</td>
<td>98.94%</td>
<td>85%</td>
</tr>
<tr>
<td>Bradford</td>
<td>95%</td>
<td>97.58%</td>
<td>85%</td>
</tr>
<tr>
<td>Cardiff and the Vale</td>
<td>95%</td>
<td>92.72%</td>
<td>85%</td>
</tr>
<tr>
<td>Edinburgh</td>
<td>95%</td>
<td>96.40%</td>
<td>85%</td>
</tr>
<tr>
<td>Glasgow</td>
<td>95%</td>
<td>97.33%</td>
<td>85%</td>
</tr>
<tr>
<td>Hampstead</td>
<td>95%</td>
<td>97.25%</td>
<td>85%</td>
</tr>
<tr>
<td>Liverpool</td>
<td>95%</td>
<td>98.88%</td>
<td>85%</td>
</tr>
<tr>
<td>Newcastle</td>
<td>95%</td>
<td>97.41%</td>
<td>85%</td>
</tr>
<tr>
<td>West Midlands</td>
<td>95%</td>
<td>97.01%</td>
<td>85%</td>
</tr>
</tbody>
</table>

10.5 **Refurbishments and new builds**

The SNIPC supports and advises teams at the design and planning stage of refurbishments to ensure compliance to all current healthcare building regulations and legislation.

The SNIPC has continued to work in partnership with local IPC specialists and with colleagues from the estates and facilities departments in the refurbishments of the outpatient unit in Bradford and the in-patient unit in Newcastle.
11 IPC work programme

Marie Curie’s IPC work programme (agreed and monitored by the IPCC) details our work around continued reporting, surveillance and management of HCAI and IPC. Any areas of concern are highlighted and escalated where required.

11.1 Progress against work plan

Only two areas of the agreed 2017/18 work programme are outstanding:

1. The development of an IPC intranet page has not been completed due to capacity. This remains on the work plan. The date of the work being completed is dependent on available resources.

2. We aimed to provide patient information leaflets in line with both the NICE guidance and the Information Standard. This work has progressed well. However, the leaflets will not be available until April 2018. The leaflets in production are:
   - Hand hygiene
   - Clostridium Difficile
   - Norovirus
   - Reducing the risk of infection.

You can find the 2018/19 work programme in Appendix 2.

11.2 Programme of policy review

There is an established programme for reviewing the IPC manual and all IPC policies are up-to-date. During 2017/18, the SNIPC has further developed standard operating procedures that support staff to manage patients with specific multi-drug resistant organisms and conditions, for example CRE.
12 Priorities for 2018/19

The key priorities for 2018/19 are to:

• continue to build on the systems we have in place, improving the identification and management of any infection for people with a terminal illness in our care
• ensure that our nurses are fully equipped with the knowledge and skills they require to support antimicrobial stewardship, to participate in a meaningful way to promote better patient outcomes and to manage and reduce the risk of evolving infection.

We will do this by:

• having a zero-tolerance infection prevention and control attitude towards people acquiring a healthcare associated infection while in our care
• developing/commissioning an e-learning AMS programme that is available to all staff
• developing and embedding a model of peer vaccination and increasing the staff take up of the flu vaccine.
Conclusion

This report highlights the progress made during the past year in relation to IPC and the hard work that has taken place. We have continued to provide a clean and safe environment and equipment that supports the avoidance of infection to the 40,000 patients that we have cared for in our hospices.

There are more challenges ahead as we see the number of patients with antibiotic resistant organisms increasing. Patients in the palliative phase of their illness are more prone to sepsis and we have seen our Marie Curie Hospice, West Midlands clinical team develop information and support so that staff are more able to recognise and treat sepsis. We will roll this out to other areas during 2018/19.

As well as consolidating learning, we have improved our training and support to staff, ensuring they have the capacity and skills to care for patients who are either admitted with or acquire an infection. Our Link Nurse network is key to the successful transfer of knowledge and embedding best practice, as demonstrated by the consistently high scores in the hand hygiene audits.

Finally, we have continued and strengthened the partnership with operational teams, estates and facilities management. This ensures we have a truly pan-organisational approach to the reduction, identification and management of healthcare associated infections.
# Appendix 1

## IPC reported incidents 2017/18 – National

<table>
<thead>
<tr>
<th>2017/18</th>
<th>Hospices</th>
<th>Marie Curie Nursing Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clostridium Difficile Antigen (CDA)</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Clostridium Difficile Toxin (CDT)</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>E. coli Bacteraemia</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Gram Negative Multi-Drug Resistant Organism including CRE/CPE</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MRSA Bacteraemia</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MRSA (other than Bacteraemia)</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>MSSA Bacteraemia</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Multi-Drug Resistant Organisms (eg ESBL)</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Norovirus</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other Bacteraemia</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vancomycin Resistant Enterococci</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Infection control policy not followed</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>16</strong></td>
<td><strong>1</strong></td>
</tr>
</tbody>
</table>
## Local – Hospices

<table>
<thead>
<tr>
<th></th>
<th>Belfast</th>
<th>Bradford</th>
<th>Cardiff &amp; the Vale</th>
<th>Edinburgh</th>
<th>Glasgow</th>
<th>Hampstead</th>
<th>Liverpool</th>
<th>Newcastle</th>
<th>West Midlands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clostridium Difficile Antigen (CDA)</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Clostridium Difficile Toxin (CDT)</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>E. coli Bacteraemia</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Gram Negative Multi-Drug Resistant Organism including CRE/CPE</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MRSA Bacteraemia</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MRSA (other than Bacteraemia)</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>MSSA Bacteraemia</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Multi-Drug Resistant Organisms (eg ESBL)</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Norovirus</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other Bacteraemia</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Vancomycin Resistant Enterococci</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other</td>
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<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Infection control policy not followed</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>2</strong></td>
<td><strong>0</strong></td>
<td><strong>4</strong></td>
<td><strong>3</strong></td>
<td><strong>3</strong></td>
<td><strong>0</strong></td>
<td><strong>1</strong></td>
<td><strong>1</strong></td>
<td><strong>2</strong></td>
</tr>
</tbody>
</table>
Appendix 2

Marie Curie infection prevention and control annual work plan 2018/19

This should be considered as our healthcare associated infection (HCAI) reduction programme for 2018/19.

The core activities of the infection prevention and control programme remain focused on ensuring continuing compliance with regulatory requirements and removing the risk of infection. Progress against the Programme will be monitored by the Infection Prevention and Control Committee (IPCC) and the Clinical Governance Executive Committee (CGEC).

Priorities for 2018/19

<table>
<thead>
<tr>
<th>No</th>
<th>Key priorities</th>
<th>Responsible</th>
<th>Contribution to the quality assurance strategy outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>We will continue to identify, manage and monitor the prevention and control of infection for people with a terminal illness in our care, their families and our staff.</td>
<td>Director of Infection Prevention and Control (DIPC)</td>
<td>Healthcare is safe for every person every time</td>
</tr>
<tr>
<td>2</td>
<td>To increase the uptake of the flu vaccine within our staff groups by implementation of a peer vaccination programme.</td>
<td>DIPC</td>
<td>Healthcare is safe for every person every time</td>
</tr>
<tr>
<td>3</td>
<td>Ensure that our staff are fully equipped with the knowledge and skills they require to identify, manage and reduce the risk of infection.</td>
<td>DIPC</td>
<td>Healthcare is safe for every person every time</td>
</tr>
<tr>
<td>4</td>
<td>Continue to promote and support the Link Nurse role and requirement for training and enhancing knowledge and skills.</td>
<td>DIPC</td>
<td>Healthcare is safe for every person every time</td>
</tr>
</tbody>
</table>
## Implementation plan 2018-19

<table>
<thead>
<tr>
<th>Key priorities</th>
<th>Action(s) required</th>
<th>Lead</th>
<th>Date/intervals</th>
<th>Assurance evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1 To continue to identify, manage and monitor the prevention and control of infection for people with a terminal illness in our care, their families and our staff.</strong></td>
<td>All our Hospices will develop local HCAI reduction plans, which will include a programme for IPC audit, and will outline their strategy for both AMS and sepsis</td>
<td>Hospice Manager/Lead Nurse/Medical Director</td>
<td>Quarterly</td>
<td>Discussed and monitored at the local governance group</td>
</tr>
<tr>
<td></td>
<td>Infection risk assessment will be undertaken on referral and admission</td>
<td>Lead Nurse/Medical Director</td>
<td>Ongoing</td>
<td>Patient assessment documentation</td>
</tr>
<tr>
<td></td>
<td>Early identification and treatment of patients with sepsis</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Continuous alert organisms surveillance and generate quarterly report of figure</td>
<td>Lead Nurse/Medical Director</td>
<td>Ongoing</td>
<td>Sentinel/local microbiology systems</td>
</tr>
<tr>
<td></td>
<td>• To monitor bacteraemia caused by MSSA, MRSA, and E. coli</td>
<td>DIPC / Senior Nurse, Infection Prevention and Control (SNIPC)</td>
<td>Quarterly</td>
<td>IPCC quarterly reports and minutes</td>
</tr>
<tr>
<td></td>
<td>• To monitor bacteraemia caused by other Gram-negative organism</td>
<td></td>
<td></td>
<td>Quality and patient safety reports</td>
</tr>
<tr>
<td></td>
<td>• To monitor cases of Clostridium Difficle Toxin (CDT)</td>
<td></td>
<td></td>
<td>Annual report for IPC</td>
</tr>
<tr>
<td></td>
<td>Carry out post-infection review (PIR) on those infections acquired 48hrs/72hrs after admission. Ensure any learning outcomes are shared via the IPCC with wider circulation as required</td>
<td>Deputy Director of Nursing / DIPC / SNIPC / Clinical Lead</td>
<td>Ongoing</td>
<td>Post-infection review documentation</td>
</tr>
<tr>
<td></td>
<td>Review Marie Curie Assurance Framework as required</td>
<td>DIPC / SNIPC</td>
<td>Quarterly</td>
<td>IPCC quarterly reports and minutes</td>
</tr>
<tr>
<td></td>
<td>Provide assurance that standard IPC practices are embedded in practice through agreed IPC rolling audit programme</td>
<td>DIPC / SNIPC / Hospice Manager/Lead Nurse</td>
<td>As required</td>
<td>IPCC audits reported quarterly to IPCC and local quality board minutes</td>
</tr>
</tbody>
</table>
### Key priorities

<table>
<thead>
<tr>
<th>Action(s) required</th>
<th>Lead</th>
<th>Date/ intervals</th>
<th>Assurance evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 <strong>To increase the uptake of the flu vaccine within our staff groups by implementation of a peer vaccination programme.</strong></td>
<td>We will develop a peer vaccination programme</td>
<td>DIPC / SNIPC / Quality Assurance Manager / Lead Nurse / DIPC</td>
<td>April 2019</td>
</tr>
<tr>
<td>3 <strong>Ensure that our staff are fully equipped with the knowledge and skills they require to identify, manage and reduce the risk of infection.</strong></td>
<td>Review and update policies and standard operating procedures, and ensure they are uploaded to the intranet</td>
<td>DIPC / SNIPC</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>All staff receive appropriate IPC education at the time of induction. Updates are in line with statutory and mandatory training policy</td>
<td>Head of Practice Development</td>
<td>Quarterly</td>
</tr>
<tr>
<td></td>
<td>We will implement antimicrobial training across all hospices in line with the learning and development plan</td>
<td>Head of Learning and Development / Hospice Manager / Lead Nurse / Medical Director/ Pharmacist</td>
<td>March 2019</td>
</tr>
<tr>
<td></td>
<td>We will develop a standard operating procedure for the insertion and management of indwelling urinary catheters (including the use of a care bundle for insertion and management of urinary catheters)</td>
<td>IPC Link Nurse / SNIPC / Quality Assurance Manager / Hospice Manager / Lead Nurse / DIPC</td>
<td>March 2019</td>
</tr>
<tr>
<td></td>
<td>Develop the intranet pages to hold all resources and information on IPC and agree a process for updating regularly</td>
<td>DIPC / SNIPC</td>
<td>Ongoing</td>
</tr>
<tr>
<td>4 <strong>Continue to promote and support the Link Nurse role and requirement for training and enhancing knowledge and skills</strong></td>
<td>We will ensure that Link Nurses have access to four learning, training and development events per annum</td>
<td>DIPC / SNIPC Head of Learning and Development / Hospice Manager / Regional Manager / Lead Nurse</td>
<td>Ongoing</td>
</tr>
<tr>
<td></td>
<td>Celebrate achievements and good practice by demonstrating the work of Link Nurses at Marie Cure IPC showcase event</td>
<td></td>
<td>Oct 2018</td>
</tr>
</tbody>
</table>
Abbreviations

**AMS**  Antimicrobial stewardship

**CDI**  Clostridium Difficile Infection

**CPE**  Carbapenemase-producing Enterobacteriaceae

**CRE**  Carbapenem-resistant Enterobacteriaceae

**CQC**  Care Quality Commission

**DIPC**  Director, Infection Prevention and Control

**ESBL**  Extended-spectrum beta-lactamases

**HCAI**  Healthcare associated infections

**HIS**  Healthcare Improvement Scotland

**HIW**  Healthcare Inspectorate Wales

**IPC**  Infection Prevention and Control

**IPCC**  Infection Prevention and Control Committee

**MSSA**  Meticillin-sensitive Staphylococcus Aureus

**MRSA**  Meticillin-resistant Staphylococcus Aureus

**NICE**  National Institute for Health and Care Excellence

**PICC**  Primary Community and Intermediate Care Clinical Board

**PII**  periods of increased incidence

**PIR**  Post-Infection Review

**PPE**  Personal Protective Equipment

**RQIA**  Regulation and Quality Improvement Authority

**SFH**  Skills for Health

**SLA**  Service Level Agreement

**SNIPC**  Senior Nurse, Infection Prevention and Control

**SOP**  Standard Operating Procedure

**WHO**  World Health Organization
For further information contact

Director, Infection Prevention and Control
Marie Curie
89 Albert Embankment
London
SE1 7TP

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