NHS

COULD YOU BE INFECTION PREVENTION'S PLAYER OF THE SEASON?

Go back to basics to play your part

#TACKLINGINFECTION

Care to Share

Infection prevention and Control special edition

Issue 19
Autumn / Winter 2023

Working in partnership:

The Royal Wolverhampton NHS Trust

Walsall Healthcare NHS Trust

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Gold award joy
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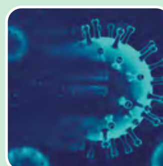

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IP United – sign up to our league!

The Infection Prevention and Control Teams across Walsall and Wolverhampton have been busy sharing key updates and resources with Trust staff in readiness for winter. We're asking staff to support 'IP United' and familiarise yourselves with these messages under the banner of this new, joint campaign running across our two organisations.

We're taking infection prevention and control 'back to basics' – with a football-inspired twist.

It's #TacklingInfection one step at a time, so help us 'kick things off' with a commitment to prevent the spread of infection and harm to others.

Keep it simple, keep it clean

Getting cleaning right is essential to keep our patients safe from transmitting infections through contaminated medical equipment.

A clean sheet for IP United

Follow Trust guidance when handling used linen and managing clean linen. This helps to keep the space safe for the next patient.

Get your kit on!

The correct personal protective equipment (PPE) and uniform is important to protect yourself and your patients – and remember, different scenarios/ procedures require different forms of PPE.

Don't let infection strike – go bare below the elbow

In clinical areas sleeves should be rolled up above elbow and all jewellery and watches removed. Compliance with hand hygiene cannot be achieved otherwise.

You're in safe hands

Hand hygiene is an essential part of working in healthcare – clean hands can help prevent the spread infection.

It takes just 15-20 seconds and is one of the most effective ways to prevent your patients from harm.

Don't score an own goal with inappropriate glove use

The use of non-sterile medical gloves has been associated with a significant potential for cross-contamination and transmission of healthcare-associated infections.

Hand hygiene is a highly effective way of protecting yourself and others from viruses such as COVID-19, which means you can reduce glove use safely in line with Trust guidance. ▶

Debra Hickman | Lisa Carroll | Matt Reid | Amy Boden

Don't take your team mates out!

As we approach winter, the season of coughs and colds, it's important to carry tissues and use them to catch coughs or sneezes, then to bin the tissues and to kill the germs by washing our hands.

Don't forget to grab your 2023 booster vaccine for COVID-19 and flu via vaccinator engagement stands and peer vaccinators.

Sharpen your game – dispose of sharps correctly

Ensure you are using sharps safe devices where possible and prepare for any procedure with a sharp by having a sharps container with you to dispose of the sharp immediately after use.

In the event of injury:

BLEED IT – WASH IT – COVER IT – REPORT IT

Ask Infection Prevention and Control (IPC) colleagues for supporting resources. #TacklingInfection

Message from our IPC Teams

Key lessons learned through an era defined by unprecedented global health challenges should not be forgotten but used to maximise future preparedness. Pausing to reflect on the challenges of recent years provides an opportune moment for us to review, reassess, and reinvigorate our approach to Infection Prevention and Control (IPC) and patient safety. The partnership working between The Royal Wolverhampton NHS Trust (RWT) and Walsall healthcare NHS Trust (WHT) enables us to pave the way for new approaches to IPC that capitalise on technology, innovation, and inter-Trust collaboration.

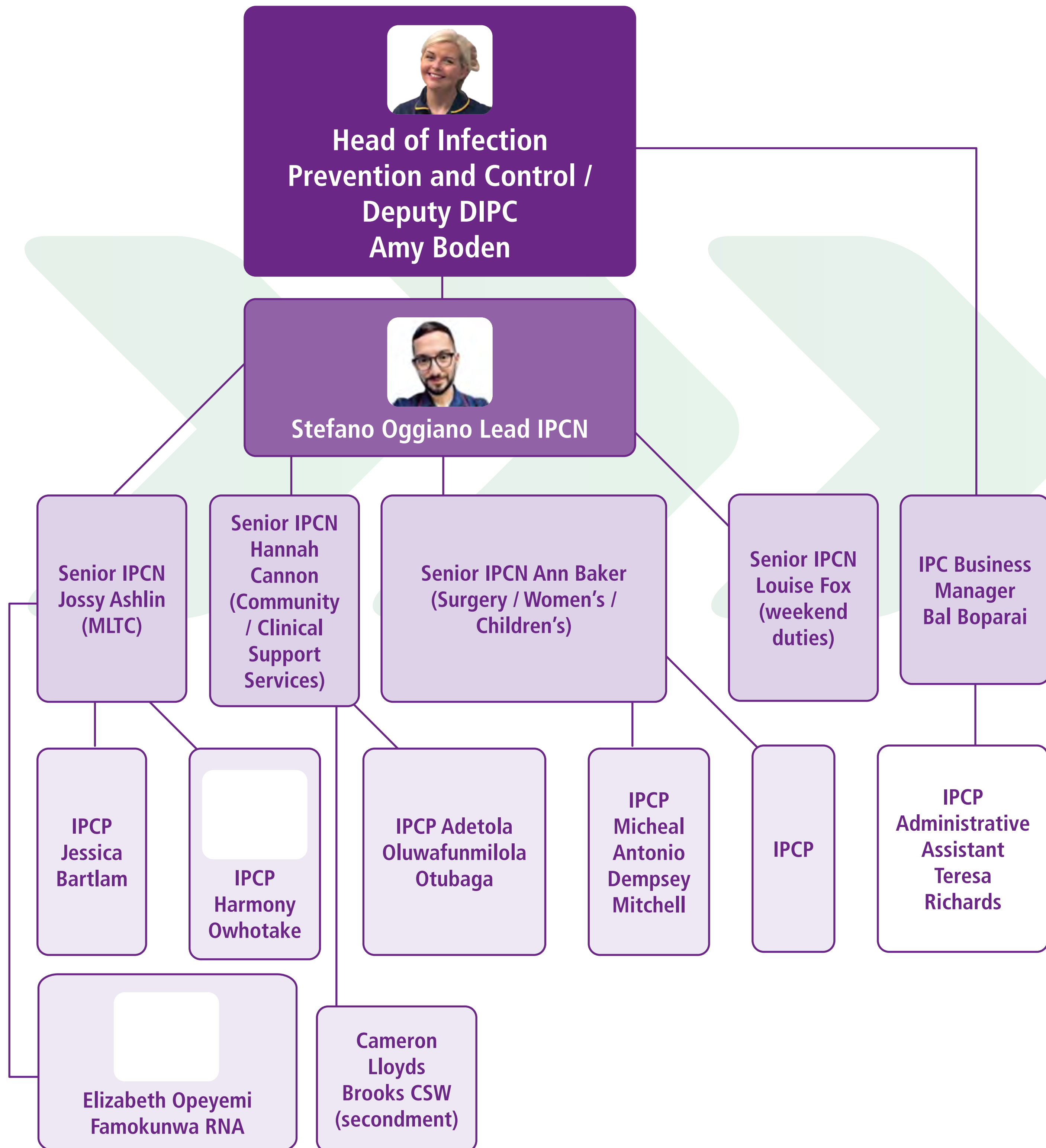
Fundamental to this, however, is re-emphasising the basics of IPC. It is as simple as complying with clinical uniform requirements through to maintaining rigorous hand hygiene, adequate personal protective equipment, environmental cleaning, antimicrobial stewardship, and robust surveillance of healthcare-associated infections. These are the bedrock of any effective IPC programme. But beyond that, we need to build a more resilient, adaptable, and comprehensive plan, capable of minimising harm to patients now and in the face of any future health threats.

The COVID-19 pandemic has highlighted the crucial role of technology and innovation in mitigating infectious disease transmission and enhancing patient care. By integrating these tools into our IPC strategies, we can significantly strengthen our defences.

By working together, our Trusts can not only boost our own IPC capabilities but also set a standard for collaborative efforts across the broader NHS network.

Embracing research opportunities will also be vital for our future IPC efforts. Therefore, we hope to participate in and promote research activities aimed at improving quality, safety, and patient experience further. This will be achieved through our joint IPC Delivery Plan which links to our joint organisational Quality and Safety Enabling Strategy (2023-26). All represent exciting opportunities and steps towards an evidence-based, safer and more resilient future in healthcare.

Our Walsall IPC Team structure



#WalsallandProud of Gold award

Walsall's IPC Team has enjoyed some national Gold award glory thanks to an innovative project.

The Little Voices initiative sees children acting as "inspectors" to help Walsall Healthcare better understand young patients' experience and make improvements.

The project scooped the Gold IPS Impact Award for Patient Experience at the recent Infection Prevention Society's annual Infection Prevention Conference in Liverpool, to the delight of staff involved.

The Trust has partnered with Pelsall Village School to work with pupils to review paediatric services for children and young people. This approach was pioneered by the Trust's Patient Relations & Experience Team.

As part of this work, the young inspectors developed a new method of observing standards of hand hygiene from a patient perspective.

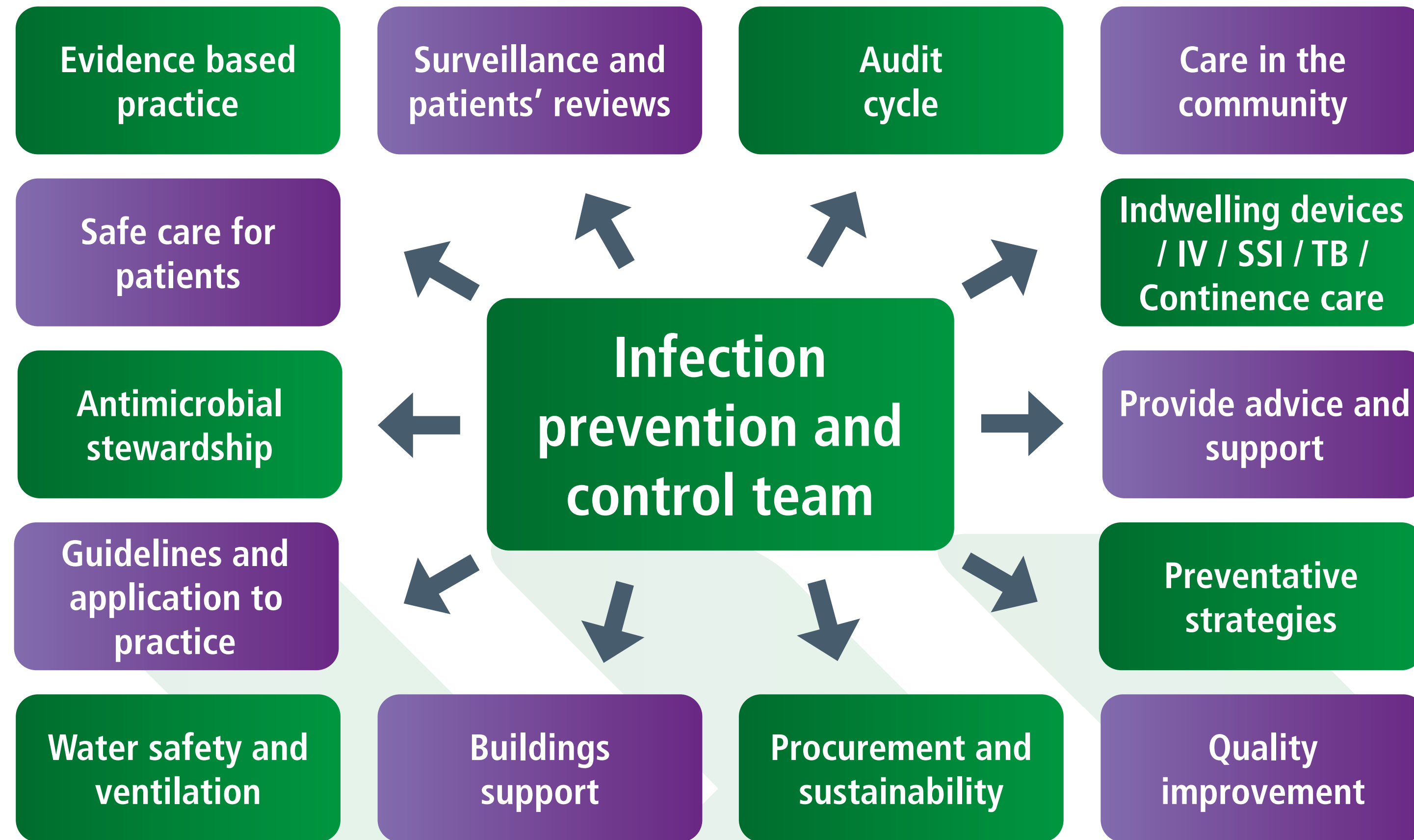
Amy Boden Associate Director - Nursing Operations and Deputy Director Infection Prevention and Control, said: "It is so important for organisations to incorporate patient observations to give an accurate 24-hour picture of hand hygiene compliance.

"Thanks to Little Voices we have been able to introduce a hand cleaning observation sheet into Paediatrics and this has made a real impact. It better supports our audits and helps staff to have a much greater awareness of what happens at the bedside from our patients and families' perspectives.

"It was an honour to present about this collaborative initiative at the conference and we are thrilled to have come away with the Gold award. Aside from being able to spread the word about Walsall's innovation more widely, we have all thoroughly enjoyed working with a super group of children who have really opened our eyes within healthcare services. This award is thanks to them and their enthusiasm and brilliant ideas."

Vikki Harrison, Matron on Children's Ward, said: "Nothing has made such an impact as a child asking if you have cleaned your hands before examining them! It allows the child and the family to be really involved in their care."

Infection prevention and control teams: What do they do?



Let's see what our Microbiologists do…

Dr Joanna Macve acts as the lead Infection Prevention Doctor on the IPC team at RWT.

She leads on the surveillance of infection, key performance indicators (KPIs) and local/national mandatory reporting. Dr Macve, also collates detailed monthly reports to ensure that the Executive and Non-Executive members of Trust Board are aware of all infection prevention issues needing attention.

Dr Donald Dobie assists in Dr Macve's absence and is the Clinical Lead for Microbiology at Black Country Pathology Services (BCPS) on site at New Cross Hospital. Both have an interest in infection prevention and are involved in advising and teaching on IPC precautions and incident investigation/s.

They can be seen out and about on the wards when on clinical duty as Consultant Microbiologists as well as on C. difficile ward rounds and antimicrobial stewardship rounds.

This work is headed up by Dr Kate French and she works closely with our antimicrobial stewardship Pharmacists. Infection prevention precautions for antimicrobial-resistant pathogens such as CPE,(Carbapenemase Producing

Dr Joanna Macve Dr Donald Dobie

Enterobacteriaceae) MRSA, (Methicillin- resistant Staphylococcus) ESBLs (Extended Spectrum beta-lactamase), for example, are very important to ensure that these organisms do not spread in our hospitals. We must also use the antimicrobials that we have wisely to ensure that they are useful for as long as possible against these deadly bacteria.

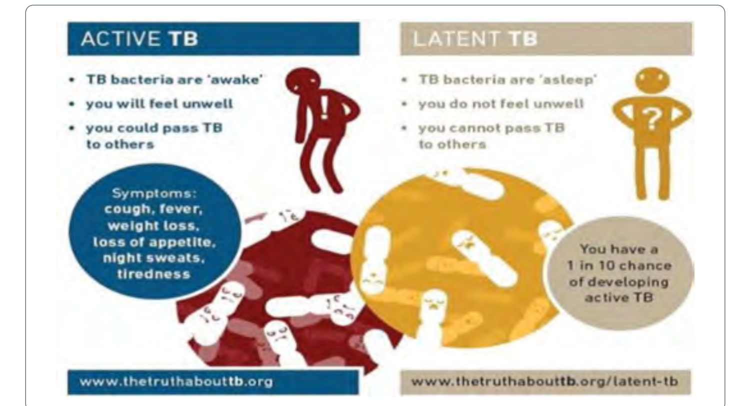
The TB Service at RWT

Tuberculosis (TB) is an infectious disease that is treatable and curable but continues to be a major public health issue globally. It can be serious and a potentially fatal disease.

It requires prolonged and complex treatment. It is also an infection risk to close contacts, posing a significant burden on the patient, family, and NHS.

Those in under-served-populations (which include migrants, refugees, asylum seekers and those with social risk factors - homelessness, imprisonment, and drug use and alcohol misuse) are at higher risk of acquiring TB.

Nationally, the highest rates of TB are seen in London, with the West Midlands having the highest rates outside of London. The activity of the TB Service ensures that TB cases in Wolverhampton are well managed according to NICE guidance and reduce the threat of spread in the city. Where active (infectious) cases are identified there is a swift response to contact tracing with appropriate education (e.g. in workplaces and with family members) to reduce anxiety.



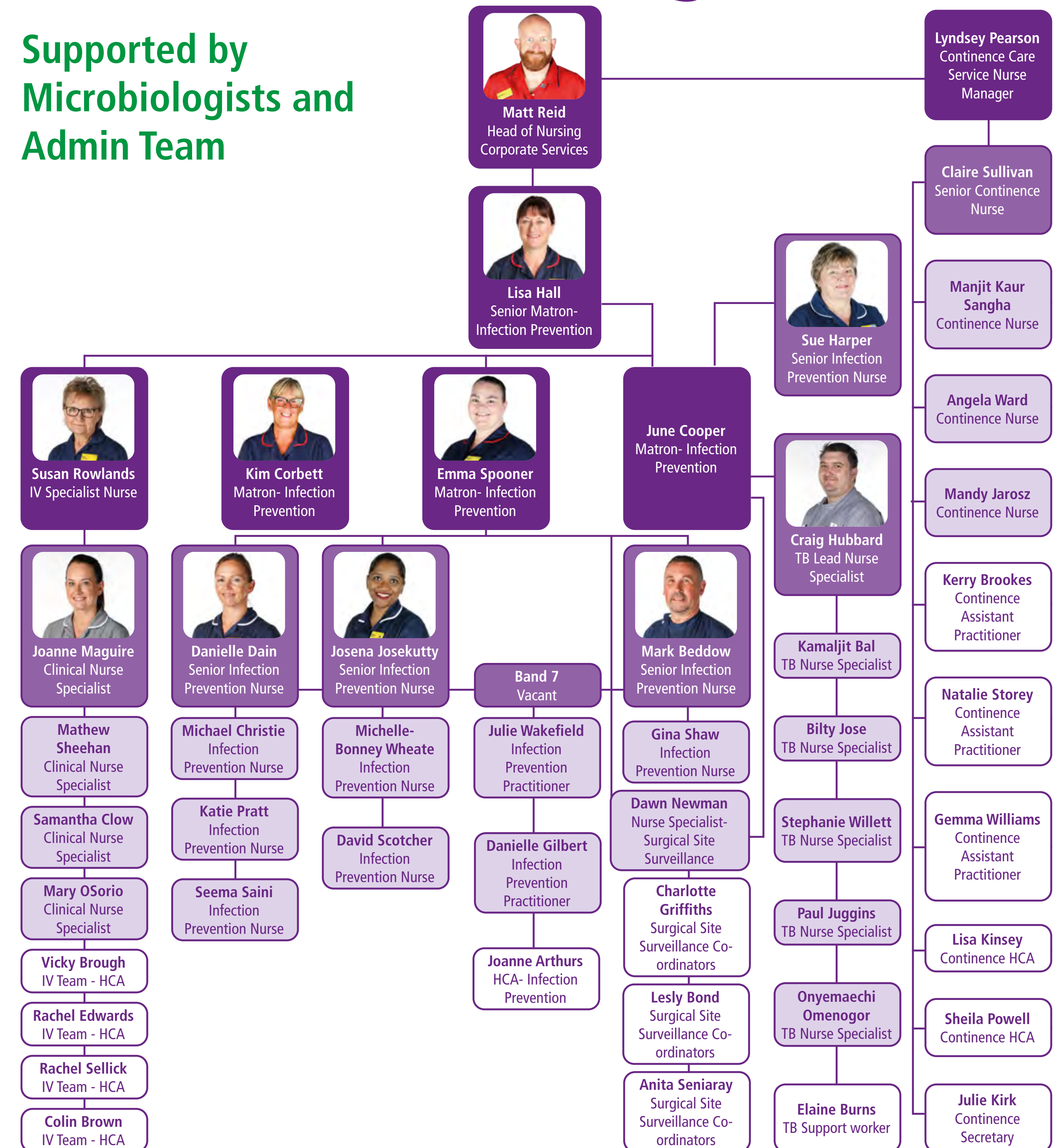
Stephanie Willett, Craig Hubbard, Kamaljit Bal, Bilty Jose and Elaine Burns

NHS

SCAN TO READ THE INFECTION PREVENTION AND CONTROL DELIVERY PLAN (23-26)

Care Colleagues
Collaboration Communities

Corporate Services structure including IPC



A day in the life of C.diff

C. diff is a spore-forming anaerobic organism found in the environment in soil and human stools.

Multiple courses of antimicrobials make C. diff more likely. The fact that C. diff forms a spore means that in dry conditions in the environment the organism can survive and, unless full decontamination with appropriate agents takes place, it can infect other people in hospital.

We use vaporised hydrogen peroxide as a decontamination agent. It is very important that these patients are isolated in a side room to contain the contamination and prevent ongoing transmission. In some patients C. diff can cause a severe, life-threatening diarrhoea and it is important that these patients are monitored and escalated according to the C. diff treatment algorithm found in the Micro guide and within adult medical guidelines.

Dr Donald Dobie
Consultant Microbiologist

Infection in the elderly can be deadly, and for many patients leads to an increased length of hospital stay (with associated risks) plus excess healthcare costs – persistent isolation in side rooms can lead to patient isolation and de-conditioning.

Clinician awareness of the impact of C. difficile-associated disease is essential. Appropriate antimicrobial and proton pump inhibitor prescribing and regular review may prevent the acquisition of C. diff, whilst prompt sampling and awareness of antimicrobial risks can prevent relapse and severe disease.

Dr Aiden J Plant, FRCPath, RCPathME
Consultant Medical Microbiologist, Antimicrobial Stewardship & Outpatient Antimicrobial Treatment Clinical Lead, Infection Control Doctor & Medical Examiner.

If a patient develops C.diff within their hospital stay this can mean that the ward has to consider allocation of a side room. At times, due to other infections, this is not always possible on the same ward.

PPE has to be ensured as well as making sure all of the MDT is aware of requirements when attending to C.diff positive patients. Staff also have to work together with the MDT to ensure that the positive patient continues to receive the rehabilitation they require which can also be limited due to room-based activities.

Nursing and medical staff have to work closely with IPC and Microbiology to ensure the patient is on the correct treatment and there is a clear plan for isolation.

Christina Layton
Senior Sister, Fairoak Ward, RWT

Our service treats a small number of people a year who are unfortunate enough to have recurrent C.difficile infection for the third time or chronic infection that they cannot recover from.

It is often referred to as faecal microbiota transplant or FMT. FMT is a fantastic, life-changing treatment.

A super donor donates a stool full of good bacteria to a lab at the University of Birmingham. The stool and the donor are screened for infectious diseases to make sure the stool is safe to use, and the sample is turned into a liquid and frozen.

When a patient needs it, we order it from the lab and a courier delivers it to us on a day and time that we choose. We place a nasogastric tube into the stomach and then flush the transplant down the tube and remove the tube. Some people can get diarrhoea, cramps or nausea afterwards, but since we started doing the procedure that has only happened on one occasion and the patient rated it as mild and did not need any medical attention.

Not many people meet the criteria for a faecal transplant, and we usually carry out two or three FMTs each year.

Professor Helen Steed
Director of Postgraduate Medical Education

"I was nervous about having the faecal microbiota-transplant, but everyone was reassuring and explained it to me, and I thought anything is better than this.

"It was easy, much easier than I thought it would be. On the day my son came with me. It did not take long and within three days I noticed an improvement.

"By the end of the week my toilet habits were back to normal, and I was just going once a day, what a difference! I'm so grateful and I would have the transplant again if the infection came back."

Patient

Innovative IPC initiatives

As an organisation, RWT is unusual in the surveillance of bacteraemia relating to all indwelling medical devices. This has been ongoing for more than a decade and was started by Dr Mike Cooper, Consultant Microbiologist, as part of a Quality Improvement initiative relating to high numbers of healthcare associated infections.

Incident reviews take place to identify and share learning among teams. Benefits associated with monitoring bloodstream infection include reducing harm to patients associated with indwelling devices, reducing mortality and reducing patient stay.

The RWT IV Team continues to work with many other Trusts to further the development of quality improvement projects relating to vascular access. Of note is the development of a standardised benchmarking line infection surveillance system for use both across the NHS and further afield, which has been well received and is to be endorsed by NHS England.

Team Lead Sue Rowlands has achieved silver winner status in the annual British Journal of Nursing Awards for heading this work, which is planned for development into a freely accessible electronic app of benefit to healthcare services both within the UK and beyond.

Urinary catheter insertion packs

Sue Harper, Senior Infection Prevention Nurse, RWT

An exciting development to improve our management of indwelling urinary catheters (IUC) was launched in September 2023.

A one stop resource for inserting peripheral cannula using a dedicated pack has been in use in RWT since 2006 and was key to reducing bloodstream infections linked to insertion of devices.

A plan going forward is to implement a similar concept using a catheter insertion pack for introducing IUC on the RWT acute site following training in key areas and following successful implementation at WHT earlier in 2023.

Urine infections are responsible for one in five healthcare associated infections – annually, of these, 50% are linked to an IUC.

The new tray system includes all items needed for catheterisation in one standardised order. In the system the catheter and drainage bag are sealed for insertion and remain sealed. The red seal remains unbroken as long as drainage is needed before removal of the catheter with a bag change at 14 days. The unbroken seal protects the channel of urine to drainage bag from disconnection and contamination until the catheter is removed in as short a timescale as possible, the ideal situation. Each day the IUC is in situ the risk of developing an infection increases by 5%.

Catheterisation should only be used when alternative methods for managing continence have been explored.

There are a range of alternative devices available to minimise or eliminate the use of an indwelling device for bladder drainage which we aim to explore soon to reduce the device burden for our patients.

We plan to introduce further innovations involving our IUC services which includes use of an electronic and patient held Catheter passport. This innovation will improve the sharing of information between primary and secondary care managed by an dashboard.

Are you Glove aware?

Clinical gloves are used to reduce the risk of hand contamination to blood and bodily fluids. They also reduce the potential cross-contamination of vulnerable sites on a patient's body and of invasive devices patients may have inserted.

Non-sterile gloves should only be worn where direct contact with body fluids and non-intact skin or mucous membranes is anticipated. Wilson & Loveday (2014)

The use of non-sterile gloves has been associated with a significant potential for cross-contamination and transmission of healthcare-associated infections.

This is because gloves are often used when:

- They are not needed
- Put on too early
- Taken off too late
- Not changed at critical points

The impact on patients

Gloves can be a barrier to providing comfort and empathy to our patients.

Patients' feedback:

"I just want to see the nurses clean their hands in front of me before they give me anything."

"If patients understand and are told why gloves do not need to be worn then I'd be ok with it".

Research suggests that patients often feel uncomfortable with inappropriate use of gloves for personal tasks.

The impact on staff

Reducing glove use can have a positive impact on staff, including their own skin health. Organisations which have implemented the "Gloves Off" campaign have noted a reduction in occupational health referral as skin health improved with no more dry, cracked hands.

The environmental impact

Gloves are produced from crude oil. Supporting the "Gloves Off" campaign could significantly reduce the environmental impact and help us become more sustainable.

Here you can see the equivalent use of gloves compared to the weight of a hippopotamus.

In one-year, WHT used the equivalent of 32 hippos in weight from gloves' use.

Impact on environment - Walsall Glove Usage

PPE Item	FY 19/20	FY 20/21	FY 21/22	YTD 22/23 (Apr-Nov)
Examination Gloves S (pairs)	1,288,600	1,499,513	1,546,450	922,000
Examination Gloves M (pairs)	1,998,050	2,184,914	2,363,000	1,401,200
Examination Gloves L (pairs)	1,113,500	1,427,240	1,470,400	894,100
Examination Gloves XL (pairs)	54,470	71,460	65,795	38,684
2021/22: Gloves used = 38,166kg				

When should you wear gloves?

- "If it's wet or sticky and not yours, then wear gloves!"

Glove use in clinical practice		
Gloves not indicated	Gloves indicated	
	Clean	Sterile
Taking patient observations	Touching / handling blood or body fluids	Insertion of invasive devices (e.g. urine catheters)
Subcutaneous / Intramuscular injections	Contact with mucous membranes	Surgical procedures
Administration / preparation of IV drugs	Insertion / removal peripheral cannula	Preparation of TPN
Bathing / dressing patient (unless visible BBF)	Contact with non-intact skin	Dressing wounds
Handing used linen (unless soiled with BBF)	Removal of invasive devices (e.g. urine catheters)	
Manipulation of vascular lines (using aseptic technique)	Taking a blood sample	
Giving oral medications	Oral / tracheal suctioning	
Feeding a patient	Handling hazardous chemicals e.g. chemo	
Transporting a patient	Handling instruments, equipment of items contaminated with BBF	
Writing on charts	Handling waste contaminated with BBF	
	Handling sharp instruments, contaminated with BBF	

Antimicrobial Stewardship (AMS)

Parmjit Kang, Antimicrobial Pharmacist RWT
Karamjit Badyal and Kitty Dhingra, Antimicrobial Pharmacists, WHT

In England, 22% of NHS patients are being treated with IV antibiotics at any one time. While IV antimicrobials are important for the treatment of infections where there is a need to achieve high concentrations of antimicrobials in the bloodstream, RWT Audits have revealed 29% of IV prescriptions were continued beyond the point that met the local switch criteria.

Good Antimicrobial Stewardship

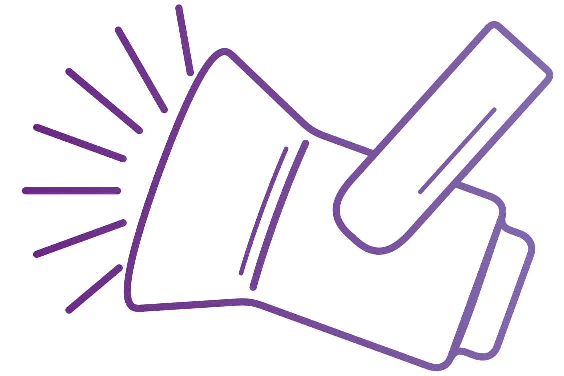
1. Review all patients on IV antibiotics within 48 hours and daily thereafter.
2. Review patient's clinical signs and symptoms of infection for improvement.
3. Reviewing infection markers, temperature in the last 24 hours, early warning scores, white cell count and C-Reactive Protein.
4. Assess the patient's ability to take oral medication, possible interactions or patient allergies considered.
5. Consider infections that require longer IV treatment.

The antibiotics in the Access group are narrow spectrum antibiotics, they target specific bacteria. Antibiotics in the Watch and Reserve groups are broad spectrum antibiotics, they target a wide range of bacteria, many of them also have more adverse effects than the narrow spectrum group. Broad spectrum antibiotics while treating the infection, also kill many good bacteria which work to keep us healthy. Antibiotic prescriptions should be prescribed in-line with the Trust Guidelines and/or chosen based on any microbiology cultures that are available. If required discuss antibiotic choices with your pharmacist or the duty microbiologist.

Examples of antibiotics from the three groups within the AWaRe list

Access	Watch	Reserve
Amoxicillin	Co-amoxiclav	Ceftazidime/avibactam
Benzylpenicillin	Ciprofloxacin	Ceftobiprole
Cefalexin	Clarithromycin	Colistin
Ceftriaxone	Clindamycin	Dalbavancin
Co-trimoxazole	Levofloxacin	Daptomycin
Doxycycline	Moxifloxacin	Ertapenem
Flucloxacillin	Piperacillin / Tazobactam	Linezolid
Gentamicin	Teicoplanin	Meropenem
Metronidazole	Vancomycin	Tigecycline
Nitrofurantoin		
Trimethoprim		

Putting IPC in the spotlight



The theme for **International Nurses Day** 2023 was 'Our Nurses, Our Future'.

Our focus was the history of the Nurse's role in preventing infections, how this has evolved and how it will inform our future. While influential figures such as Florence Nightingale and Mary Seacole established the importance of hygiene and antisepsis in the 1800s, it took until 1959 for the first Infection Control Nurse to be appointed.

It is clear from the evolution of IPC, that a team should be built to provide the optimal service for the priorities created by the healthcare system it supports to improve the overall quality of healthcare delivery.

The Children's Ward at RWT provided some amazing artwork to display.

And **World Hand Hygiene Day** gave another opportunity to raise awareness of the importance of handwashing to prevent the spread of infections.

Our IPC Teams across both Trusts celebrated and promoted this important date.

At RWT, the team created a colourful and informative notice display board which demonstrated important relevant. There was also a chance to take part in a Hand Hygiene Wordsearch devised by Infection Prevention Practitioner Danielle Gilbert.

In Walsall, as well as a display at the Manor Hospital, teams at Hollybank House and Walsall Palliative Care Centre played their part in sharing key messages and practices to #Accelerate ActionTogether.

Protecting ourselves and our patients

Staff across RWT and Walsall Healthcare are strongly encouraged to get vaccinated in an effort to protect themselves from serious illness, while also protecting patients – particularly those who are vulnerable and with long-term health conditions – and their colleagues.

See the latest timetable on the Trusts' intranet sites to find out where you can get your flu vaccine and COVID-19 booster.

If you work in a clinical area, ask your manager for details of peer vaccinators in your area/division – this way you can tick vaccination off the 'to-do' list without even needing to leave the department! Please remember to have your NHS number and assignment number (this can be found on your payslip) to hand.

Please let us know if you've been vaccinated at your GP, by another employer or at a community pharmacy against flu or COVID-19 by emailing: wht.occupational.health@nhs.net / rwh-tr.Flu@nhs.net

Seasonal infection on the rise

COVID-19 cases in the community, as well as in healthcare settings, are rising. COVID-19 can lead to severe illness and complications (particularly in those who are clinically vulnerable).

But this is just one of the viruses that tend to surge during the winter months, which is why we are now preparing ourselves for managing seasonal infections – including norovirus, respiratory syncytial virus (known as RSV) and flu.

You can help us by:

- Advising colleagues and patients to not visit our Trust sites with symptoms of a cold, flu, fever, diarrhoea, and vomiting
- Refraining from attending site if you are experiencing any of these symptoms (and contacting your manager)
- Washing your hands with soap and water before and after visiting wards and using hand sanitisers across our hospitals

Face masks are available at the entrances if you wish to wear one to help protect yourself and others.

Editorial Board

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Josena Josekutty and the IPC teams at Walsall and Wolverhampton

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We want to know what our colleagues across Walsall and Wolverhampton think of Care to Share and will be talking to teams across both sites over the next few weeks.

A survey is also being developed for you to have your say and tell us which communications channels work best for you - printed publications, digital newsletters, social media posts, intranet items, Dose or Trust Brief.

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