

Report to the NHS Somerset Clinical Commissioning Group on 22 July 2021

Title: Infection Prevention Control Annual Report 1 April 2020 to 31 March 2021	Enclosure M
--	--------------------

Version Number / Status:	Draft for Endorsement
Executive Lead	Val Janson, Director of Quality and Nursing, Director of Infection Prevention and Control
Clinical Lead:	Lisa Eastmead- Hoare Infection Prevention and Control Manager/
Author:	Marjorie Gunzvenzve, Infection Prevention and Control Specialist Nurse

Summary and Purpose of Paper

The Director of Infection Prevention and Control (DIPC) Annual Report provides a summary of infection prevention and control activities within Somerset Clinical Commissioning Group (CCG) from April 2020 to March 2021.

The report also provides assurance that high quality and safe processes and systems are in place for patients, visitors and staff to minimise the risk of infection in the Somerset population. Somerset CCG is assured that the providers are meeting expected requirements according to The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance (July 2015).

Recommendations and next steps

The Somerset CCG Governing Body is asked to Endorse the report and to support the infection prevention and control agenda.

Impact Assessments – key issues identified

Equality	Somerset CCG is fully committed to the Public Sector Equality Duty as set out in the Equality Act (2010). This ensures all services commissioned are equitable and comply with the principles of 'Due regard'. We will also ensure that service providers are aware of their responsibility to patients and service users under the FREDAs principles (Fairness, Respect, Equality, Dignity & Autonomy) of the Human Rights Act 1998.
Quality	The CCG continuously seek assurance from providers that infection prevention and control policies in place ensure patient safety and quality improvement.
Privacy	This report does not contain any identifiable Information; there are no breaches of privacy expected.
Engagement	The CCG uses feedback from a variety of routes including healthcare professional feedback, incidents, complaints and patient outcomes to inform specific learning from organisations and stakeholders.
Financial / Resource	Any costs associated with infection prevention and control are agreed as appropriate with NHS England/Improvement Regional and Finance Directors.

Governance or Legal	Legislation and Regulations related to the roles and responsibilities involved in The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance, DH, July 2015			
Risk Description	Infection prevention and control risk assessment are carried out against The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance, July 2015.			
Risk Rating	Consequence	Likelihood	RAG Rating	GBAF Ref
	Major	4	Red	428
	Minor	4	Orange	60 – N14
	Moderate	3	Orange	283 – QS08

**ANNUAL INFECTION PREVENTION
AND CONTROL REPORT
1 APRIL 2020 TO 31 MARCH 2021**

July 2021

**ANNUAL INFECTION, PREVENTION AND CONTROL REPORT
1 APRIL 2020 to 31 MARCH 2021**

CONTENTS

1	EXECUTIVE SUMMARY	3
2	MANAGEMENT OF RESPIRATORY VIRAL INFECTIONS.....	3
3	RECOMMENDATIONS.....	4
4	INFECTION PREVENTION AND CONTROL GOVERNANCE MONITORING AND ASSURANCE	4
5	MANDATORY SURVEILLANCE OF HEALTHCARE ASSOCIATED INFECTIONS TO PUBLIC HEALTH ENGLAND.....	5
6	METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) BACTERAEMIA	7
7	METHICILLIN-SENSITIVE STAPHYLOCOCCUS AUREUS (MSSA) BACTERAEMIA	8
8	CLOSTRIDIODES DIFFICILE.....	11
9	GRAM NEGATIVE BLOODSTREAM INFECTIONS	15
10	CARBAPENEMASE-PRODUCING ENTEROBACTERIACE (CPE).....	15
11	INVESTIGATION OF INFECTION PREVENTION AND CONTROL INCIDENTS AND OUTBREAKS	158
12	ANTIMICROBIAL STEWARDSHIP (AMS).....	18
13	ICNET	18
14	CONCLUSION	18
15	REFERENCES	19

ANNUAL INFECTION, PREVENTION AND CONTROL REPORT

1 APRIL 2020 to 31 MARCH 2021

1 EXECUTIVE SUMMARY

- 1.1 The Director of Infection Prevention and Control (DIPC) Annual Report provides a summary on infection prevention and control activities within Somerset Clinical Commissioning Group (CCG) from 1 April 2020 to 31 March 2021.
- 1.2 The report covers Infection Prevention and Control (IPC) Commissioned Services, Somerset NHS Foundation Trust, Yeovil District Hospital NHS Foundation Trusts, Weston General Hospital NHS Trust, and Shepton Mallet NHS Treatment Centre, Primary and Secondary and Independent Care Providers.
- 1.3 The CCG continues to work collaboratively with a number of agencies as part of its IPC and governance and takes a zero tolerance approach towards all avoidable Healthcare Associated Infections (HCAIs). To ensure best practise is maintained and is consistently applied, the CCG IPC and Quality Teams met regularly with providers to get assurance that all patients and residents are receiving safe and effective care.
- 1.4 The CCG participated in the national mandatory surveillance reporting of the following organisms to Public Health England portal:
- Methicillin-resistant Staphylococcus aureus (MRSA) Bacteraemia
 - Methicillin-sensitive Staphylococcus aureus (MSSA) Bacteraemia
 - Clostridiodes difficile infection
 - Escherichia coli Bacteraemia
 - Klebsiella species Bacteraemia
 - Pseudomonas aeruginosa Bacteraemia
- 1.5 Significant challenges remain across health and social care in addressing health care associated infections and Somerset CCG's prioritises focus on ensuring that Infection Prevention and Control is consistently part of patient safety wherever care is delivered and adapts a zero tolerance to preventable infections.

2 MANAGEMENT OF RESPIRATORY VIRAL INFECTIONS

- 2.1 The work of the IPC team was significantly impacted by the COVID-19 pandemic from mid-January 2020, initially with the management of potential cases of SARSCoV-2 infection, and then as significant numbers of cases were reported in Primary and Secondary Care settings and community.
- 2.2 The COVID-19 was declared as a pandemic on 11 March 2020. Somerset CCG swiftly put together an Emergency Planning Team conducting daily

operational and strategic meetings and the diversion of Infection Prevention and Control Team resources to support incident response.

- 2.3 The CCG works in agreement with the Somerset Memorandum of Understanding (MOU) (2015) that outlines how key partners work together to reduce morbidity and mortality associated with outbreaks. The CCG team worked closely with Somerset Public Health Team, Public Health England (South West) and Primary, and Secondary care providers communicating the infection prevention and control messages and engaging with Primary and Secondary care providers to apply national guidance to protect the population against transmission of the virus.
- 2.4 Preventing and controlling the spread of COVID-19 became the CCG Infection Prevention and Control priority throughout 2020-2021. The support to Primary and Secondary care providers came in the form of regular phone calls, meetings, visits and constantly reviewing the situation on the ground and advising on required actions to minimise or prevent the spread of infections.

3 RECOMMENDATIONS

- 3.1 The Governing Body is asked to Endorse the Infection Prevention and Control Annual Report for 2020/21.

4 INFECTION PREVENTION AND CONTROL GOVERNANCE MONITORING AND ASSURANCE

- 4.1 The Somerset Clinical Commissioning Group Governing Board of Directors collectively work within the Governance Framework to ensure and seek assurance that high quality and safe services are in place for patients, visitors and staff to prevent and minimise the risk of infection.
- 4.2 Overall responsibility for infection prevention and control is held by the Chief Executive Officer (CEO) with the Director of Infection Prevention and Control (DIPC) providing strategic direction and leadership on all infection prevention and control matters. The DIPC role is undertaken by the Director of Quality and Nursing with the deputy Director of Quality and Nursing delivering the annual Infection Prevention and Control report and Annual Plan to the CCG Governing Body based on the national and local quality goals. The DIPC is supported by Consultant Microbiologists, Quality Team and Infection Prevention and Control Nurses.

The CCG Infection Control Committee, Somerset Infection Prevention, Control and Antimicrobial Assurance Committee (SIPAAC)

- 4.3 SIPAAC meets quarterly and receives IPC and Antimicrobial Resistance (AMR) assurance reports and updates from providers, which includes Yeovil District Hospital NHS Foundation Trust, Somerset NHS Foundation Trust, Weston General Hospital NHS Trust, and Shepton Mallet Treatment Centre and independent contractors as required.
- 4.4 SIPAAC's key role is to ensure that effective systems and processes are in place to reduce the risk of health care associated infections and provide assurance of such to the board. As part of the governance and assurance

framework, a quarterly IPC report is submitted to the Patient Safety and Clinical Quality Committee. SIPAAC is also responsible for the strategic planning and monitoring of providers' IPC programmes.

5 MANDATORY SURVEILLANCE OF HEALTHCARE ASSOCIATED INFECTIONS TO PUBLIC HEALTH ENGLAND

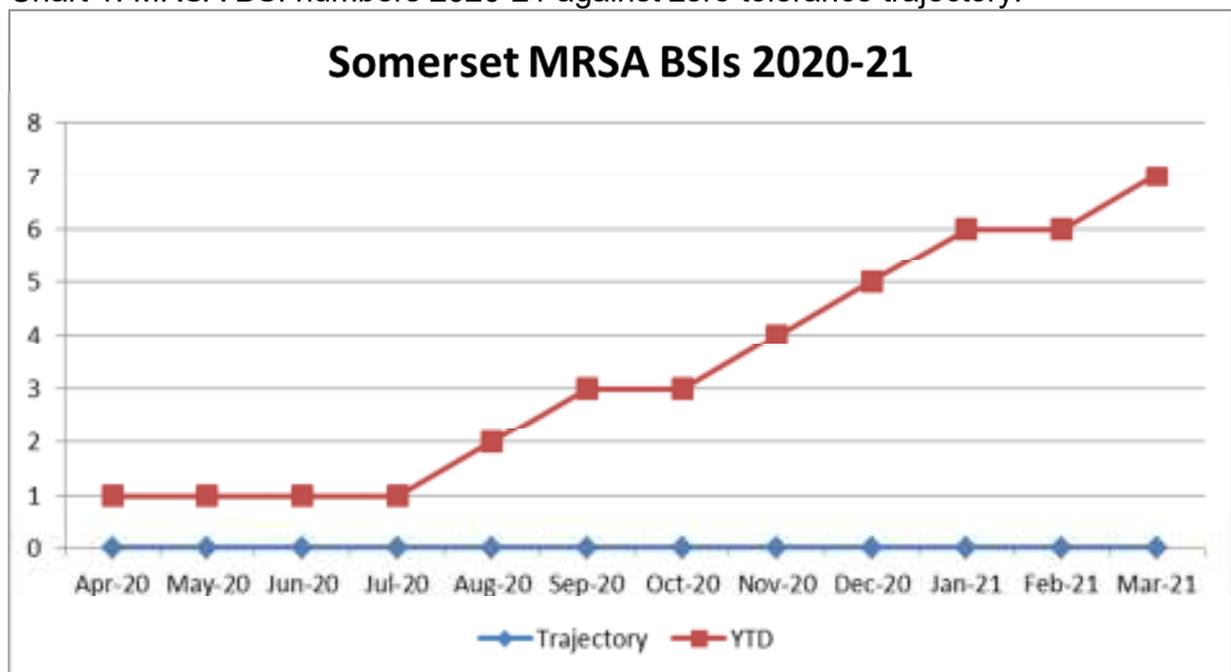
Methicillin-Resistant Staphylococcus Aureus (MRSA) Bacteraemia

5.1 The bacteria Staphylococcus aureus is commonly found colonising the skin and mucous membranes of the nose and throat. It is capable of causing a wide range of infections from minor boils to serious wound infections – however, most people carry this organism harmlessly. Nationally there continues to be a zero tolerance approach to MRSA BSI. In hospitals, it can cause surgical wound infections and bloodstream infections. Cases where the infection onset is two or more days after admission will be considered hospital onset cases; all other cases will be considered to be community onset.

5.2 Table 1:

MRSA BSI attribution and number of cases			
Financial Year	Community Origin	Hospital Origin (on or after day 2)	Total
2020-2021	3	4	7
2019-2020	2	0	2
2018-2019	8	4	12

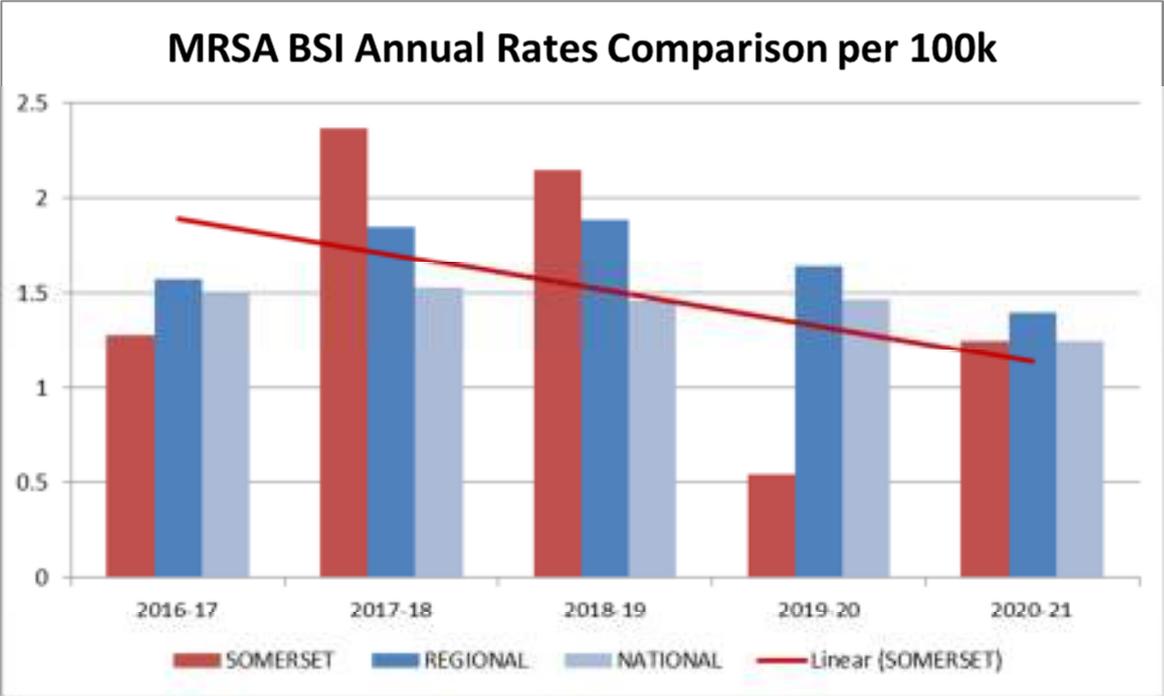
5.3 Chart 1: MRSA BSI numbers 2020-21 against zero tolerance trajectory.



5.4 All MRSA BSI cases were subject to a thorough post infection review undertaken with clinicians, in both Primary and Secondary care.

- 5.5 No lapses in care were identified in the Primary Care attributed cases. The secondary Care cases highlighted the need to improve on in-dwelling devices management.
- 5.6 The total MRSA rate for Somerset CCG per 100,000 population for 2020/21 was 1.25. This was the 3rd highest rate regionally compared to the other eight CCGs in the Public Health England South West reporting region. It was lower than the regional rate of 1.4, but equal to the national average 1.25. A year-on-year comparison of MRSA BSI rates per 100,000 population is shown in Chart 2 below.

Chart 2



- 5.7 The breakdown of MRSA BSIs by Organisation is shown in Table 2.

Table 2:

Health Care provider	No. of cases 2020/21	Trajectory
Somerset Clinical Commissioning Group	3	0
Somerset NHS Foundation Trust	3	0
Yeovil District Hospital NHS Foundation Trust	1	0
Weston general hospital NHS Trust (non-Somerset patients)*	0	0
Royal United Hospital NHS Foundation Trust (non-Somerset patients)*	0	0
TOTALS	7	0

6 METHICILLIN-SENSITIVE STAPHYLOCOCCUS AUREUS (MSSA) BACTERAEMIA

6.1 The bacteria *Staphylococcus aureus* is commonly found colonising the skin and mucous membranes of the nose and throat. It is capable of causing a wide range of infections from minor boils to serious wound infections, however most people carry this organism harmlessly. In hospitals, it can cause surgical wound infections and bloodstream infections.

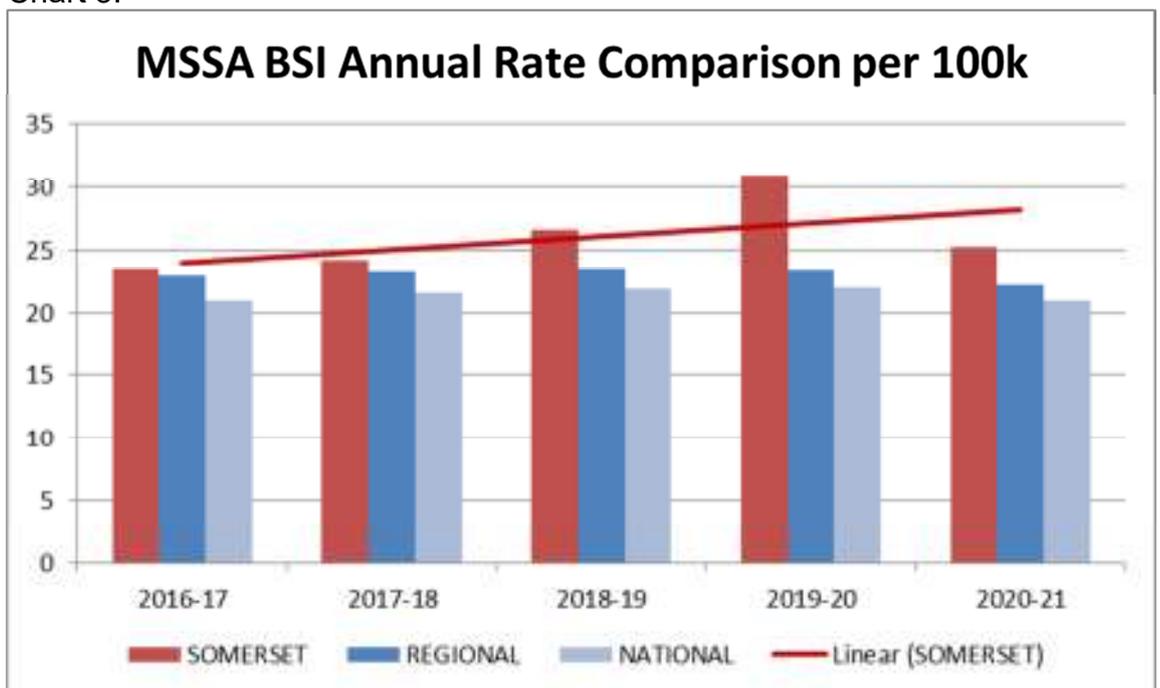
6.2 Table 3:

MSSA BSI attribution and number of cases			
Financial Year	Community Onset	Hospital Onset (on or after day 2)	Total
2020-21	102	40 (8*)	142
2019-20	134	39 (10)*	173
2018-19	105	44 (20)*	149

* number of cases reported by Trusts outside Somerset CCG area for Somerset patients

6.3 In 2020-21, the rate for MSSA bloodstream infections per 100,000 population was 25.26. This was the 3rd highest rate of the nine CCGs in the South West region, and was higher than both the regional average (22.18) and national average (20.99). The acute providers carried out post infection reviews, and the main learning is improving in-dwelling devices. The CCG IPC plans to carry out a deep dive into community cases. A year on year comparison of MSSA BSI rates per 100,000 population is shown in Chart 3 below.

Chart 3:



6.4 The breakdown of MSSA BSIs by Organisation is shown in Table 4:

Table 4:

Health Care provider	No. of cases 2020/21
Somerset Clinical Commissioning Group	106*
Somerset NHS Foundation Trust	18
Yeovil District Hospital NHS Foundation Trust	7
Weston general hospital NHS Trust (Somerset patients)	4
Royal United Hospital NHS Foundation Trust (Somerset patients)	7
TOTALS	142

* including 4 hospital onset cases declared by Trusts outside Somerset CCG area

7 CLOSTRIDIODES DIFFICILE

7.1 C difficile can be carried asymptotically and may be present prior to admission becoming apparent when the toxin production is triggered by administration of antibiotics. Possible sources are asymptomatic colonisation prior to admission or via cross infection in a healthcare setting eg. from contaminated equipment or hands of staff. Risk factors for CDI include antibiotic use, proton pump inhibitors, use of laxatives, medication and bowel procedures along with age 65 and over, presence of co-morbidities such as malignancy, diabetes, kidney and liver disease and immunosuppression from treatment.

7.2 In 2018, new categories were introduced which re-assigned C difficile attribution for 2019/20:

Acute providers:

- Hospital onset healthcare associated (HOHA):
 - Cases that are detected in the hospital two or more days after admission.
- Community onset healthcare associated (COHA):
 - Cases that occur in the community (or within two days of admission), when the patient has been an inpatient in the trust reporting the case in the previous four weeks.

Community

- Community onset indeterminate association (COIA):
 - Cases that occur in the community (or within two days of admission) when the patient has been an inpatient in the trust

reporting the case in the previous 12 weeks but not the most recent four weeks.

Community onset community associated (COCA):

- Cases that occur in the community (or within two days of admission), when the patient has not been an inpatient in the trust reporting the case in the previous 12 weeks.

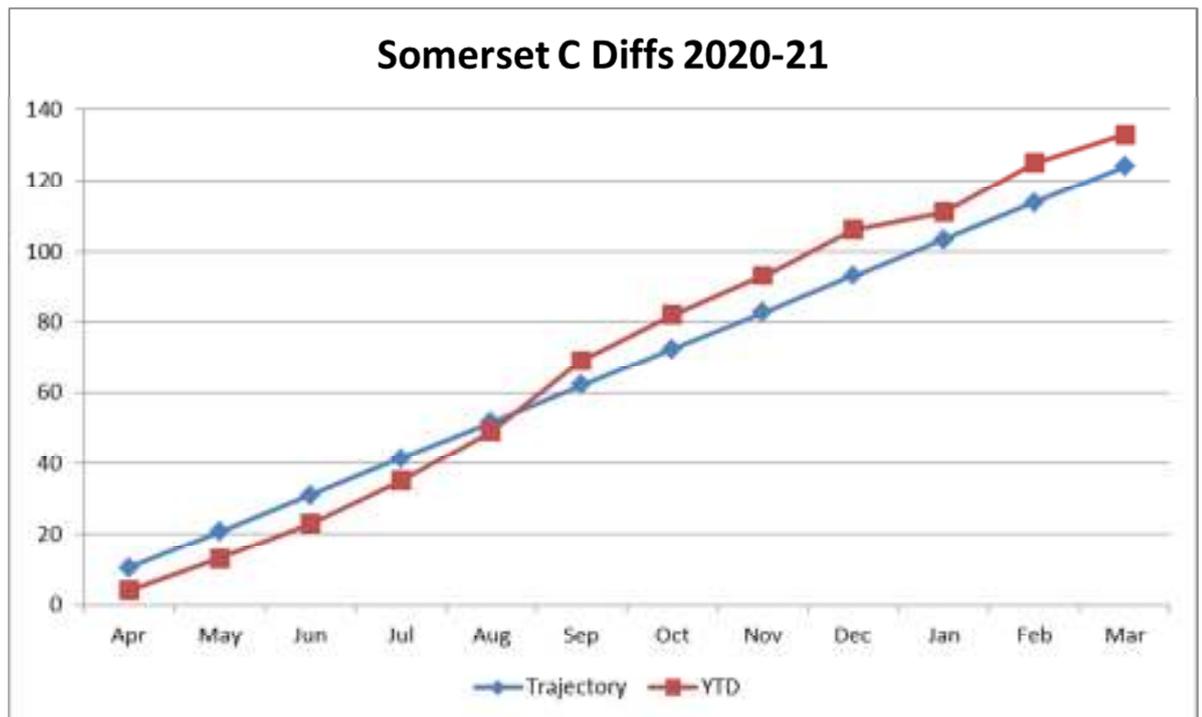
7.3 Table 5:

Somerset Performance for Clostridioides Difficile					
Financial Year	Objective	Community Attributed	Hospital Attribution		Total Cases
			HOHA	COHA	
2020-21	124*	65	50	18	133
2019-20	124	12	10	7	29
2018-19	130	34	23	20	77

* no objective set for 2020-21

7.4 C. diff case numbers for 2020-21 against the last official trajectory received are shown in Chart 4 below.

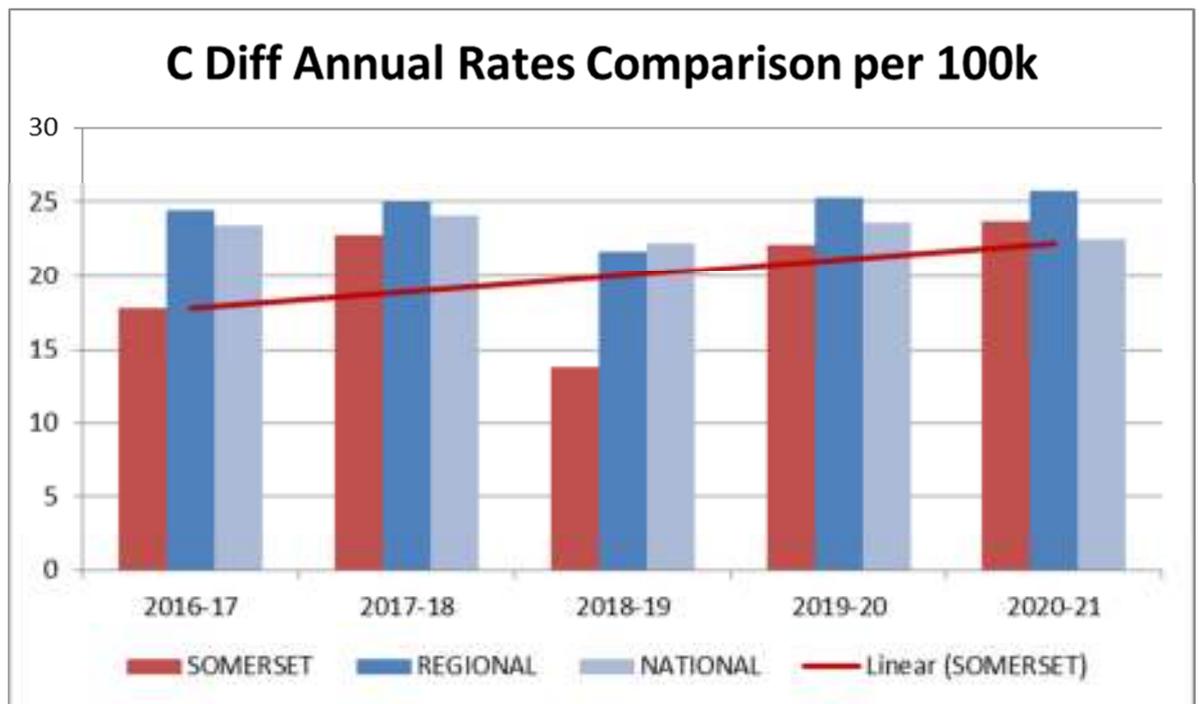
Chart 4:



7.5 In acute settings, a clinical team responsible for the patient care and the IPC team reviews each CDI case to determine if there were lapses in and treatment of the patients and identify any patient safety issues or learning. Completed post-infection reviews (PIRs) are then peer reviewed quarterly by the CCG IPC team, the CCG Infection Control Doctor and representatives from the acute trusts (IPC and antimicrobial pharmacists) who make the final decision as to whether there have been any lapses in care. Any learning or good practice is shared system-wide.

- 7.6 In the community, the GP completes the PIR and the IPC team reviews the reports and decides if there were any learning actions.
- 7.7 The overall C. diff rate for Somerset CCG per 100,000 population for 2020/21 was 23.66. This was the 3rd lowest rate in the region - lower than the South West regional average of 25.7 but slightly higher than the national average of 22.53. A year-on-year comparison of C. diff case rates per 100,000 population is shown in Chart 5 below.

Chart 5:



- 7.8 The breakdown of C. diff cases by Organisation is shown in Table 6.

Table 6:

Health Care provider	Year end figures 2020/21	Trajectory for 2020/21	Lapse in care that could have contributed to the case
Somerset Clinical Commissioning Group	65	83*	N/A
Somerset NHS Foundation Trust	47	32*	10
Yeovil District Hospital NHS Foundation Trust	12	9*	1
Royal United Hospital NHS Foundation Trust	7*	-	-
Weston General hospital NHS Trust	2*	-	-
TOTALS	133	124	11

* data relates to Trust attributed cases for 2020/21 for Somerset patients only.

7.9 Learning from C. Diff infections the Acute settings are working on include:

- delays in specimens collection from symptomatic patients which translate to delays in isolation and commencing treatment where required
- delays or failure to use stool chart
- prescribing of antibiotics when potentially not required, and duration of others where prescribed appropriately
- reduced cleaning scores
- reduced hand hygiene compliance rates.

7.10 Due to the national increase of C. Diff, there is a regional Collaborative Health Care Associated Infections (HCAI), including C. Diff, working group event planned by NHSIE in July 2021 which the CCG IPC Team will attend.

8 GRAM NEGATIVE BLOODSTREAM INFECTIONS

8.1 In 2017, the government set an ambition of reducing healthcare associated Gram negative bloodstream infections (BSI) by 50% across the whole healthcare economy by March 2021. The target of halving healthcare associated Gram negative bloodstream infections has now been moved to 2023/24, however this is challenging as more than 80% of the cases have a community origin and there has been little progress nationally to meeting the targets. The GNBSI reduction plan is included in the CCG Annual Infection Prevention and Control plan.

8.2 The gram negative includes the following:

- Escherichia coli (E. coli)
- Klebsiella species
- Pseudomonas aeruginosa

Escherichia Coli

8.3 Often referred to as E coli, this is part of the normal gut flora and can commonly cause urinary, biliary or gastrointestinal tract related infection leading to bloodstream infection (E coli bloodstream infection). Some E coli are enzyme producers known as extended spectrum beta lactamase (ESBL) which increase the resistance to multiple antibiotics. E coli bloodstream infections represented 68.7% of all GNBSIs in Somerset during 2020-21. Three-quarters of E coli BSIs occur before people are admitted to hospital and half of all community onset cases have had some healthcare interventions either from acute, primary or community care.

8.4 Attention to insertion and care of urinary catheters, audits, education and reporting of catheter associated urinary tract infection are directed to further reduce HCAI E. coli BSI. Somerset CCG has been working collaboratively to find ways of reducing urinary tract infections (UTI's), which are the commonest source of E coli BSI.

8.5 Work has included reviewing the guidance on when and how to sample urine and a review of patient information so that there is continuity within the healthcare providers. This remains a CCG priority for the forthcoming years.

8.6 In 2020/21, there were 593 GNBSI which had a community onset, and 85 GNBSI which occurred 48 hours or more after the patient’s admission (see Tables 7, 8 and 9).

8.7 The majority of community onset (pre-48) GNBSI is Escherichia coli.

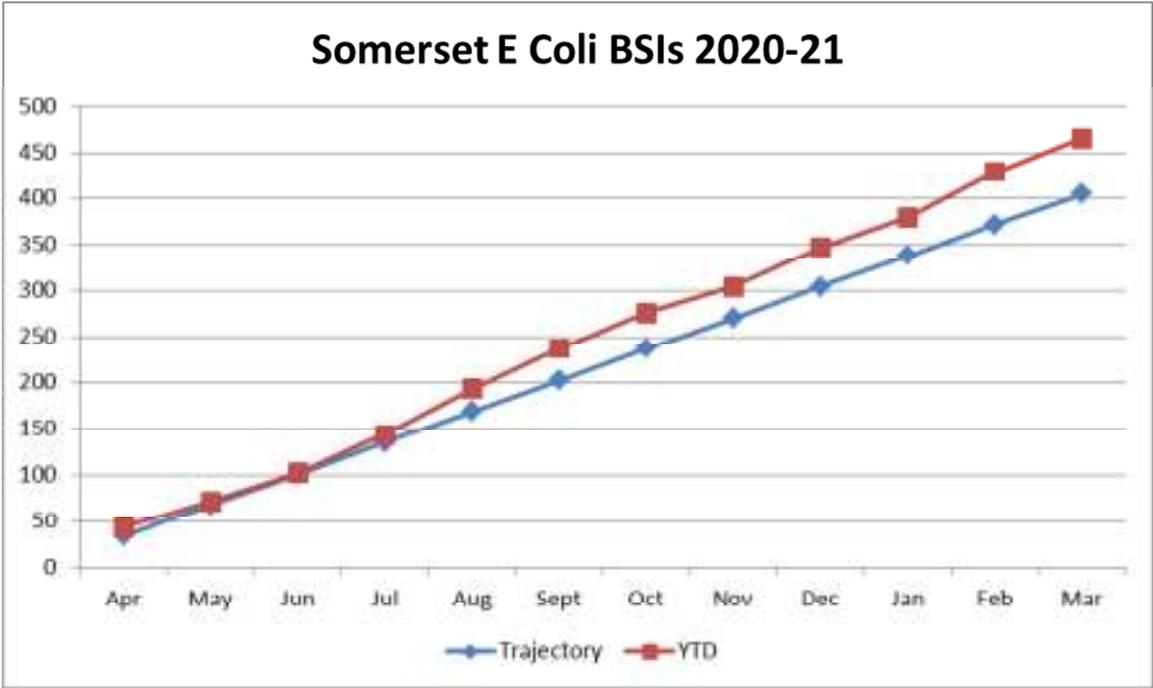
8.8 Table 7:

Somerset Performance for E. Coli BSI - number of cases			
Financial Year	Community Attributed	Hospital Onset (on or after day 2)	Total Cases
2020-21	406	58 (6)*	466
2019-20	434	85 (8)*	519
2018-19	426	85 (10)*	511

* including hospital onset cases declared by Trusts outside Somerset CCG area

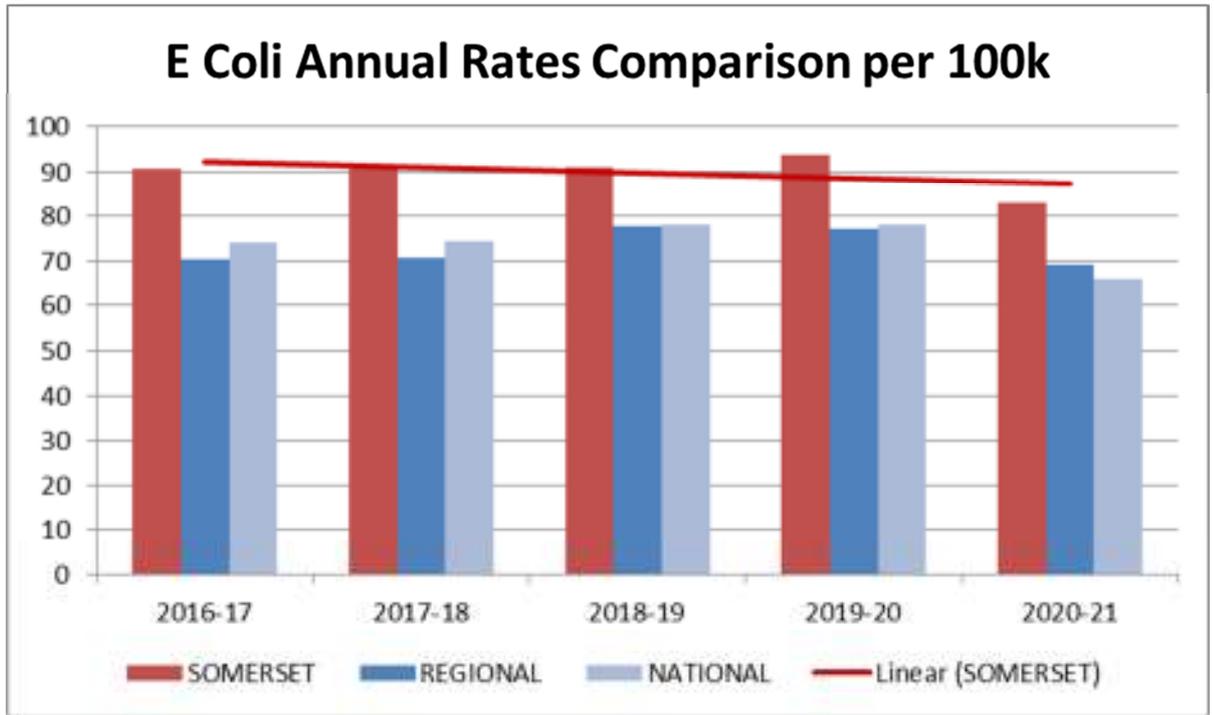
8.9 E coli case numbers for 2020-21 against an internal trajectory are shown in Chart 6 below.

Chart 6:



8.10 In 2020-21 the rate of E coli blood stream infections in Somerset per 100,000 population was 82.88, which was the 2nd highest rate in the South West region and was a decrease on the previous year (93.67) when Somerset had been the highest rate regionally. The rate for 2020-21 was higher than both the regional average (69.22) and national average (65.86). A year-on-year comparison of E coli BSI rates per 100,000 population is shown in Chart 7 below.

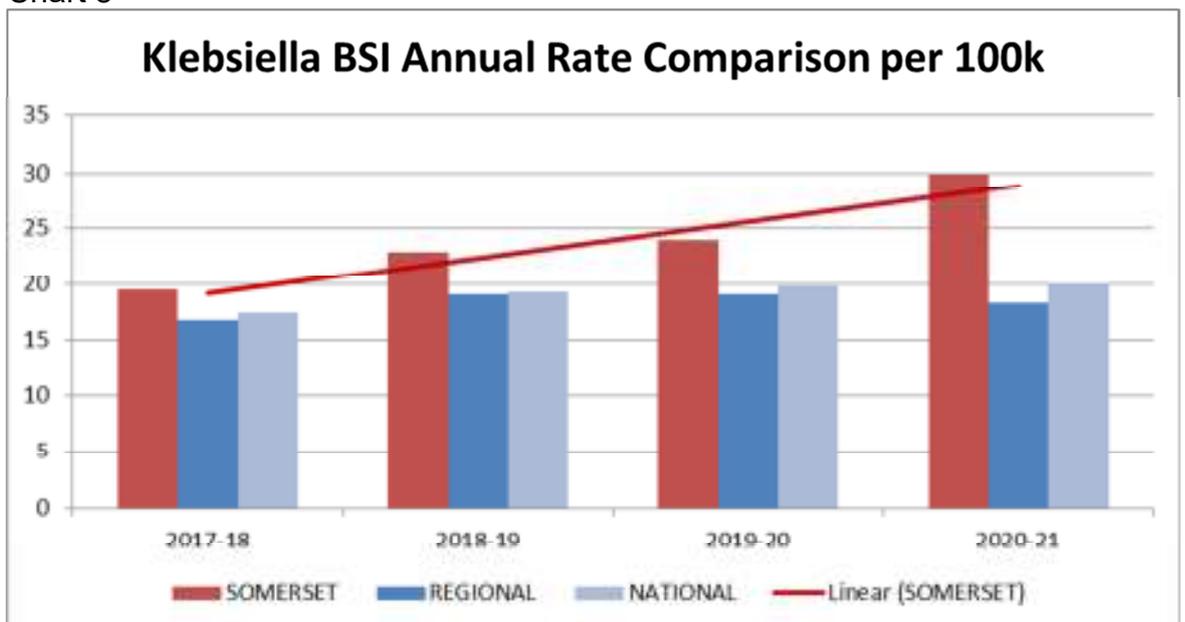
Chart 7:



Klebsiella Species

8.11 Klebsiella species are commonly associated with a range of healthcare-associated infections, including pneumonia, bloodstream infections, wound or surgical site infections and meningitis. In 2020-21 the Somerset rate of Klebsiella per 100,000 population was 29.88, and was the highest rate in the South West region. This was an increase from the previous year when Somerset had been the 3rd highest rate regionally (23.95). The rate for 2020-21 was higher than both the regional average (18.33) and national average (19.97). A year on year comparison of Klebsiella BSI rates per 100,000 population is shown in Chart 8 below.

Chart 8



8.12 Table 8:

Somerset Performance for Klebsiella BSI – number of cases			
Financial Year	Community Attributed	Hospital Onset (on or after day 3)	Total Cases
2020-21	140	28 (13)*	168
2019-20	114	21 (3)*	135
2018-19	97	31 (6)*	128

* number of those reported by Trusts outside Somerset CCG area

Pseudomonas Aeruginosa

8.13 Pseudomonas is a type of bacteria that is found commonly in the environment, including soil and in water. Of the many different types of Pseudomonas, the one that most often causes infections in humans is called Pseudomonas aeruginosa, which can cause infections in the blood, lungs (pneumonia), or other parts of the body after surgery.

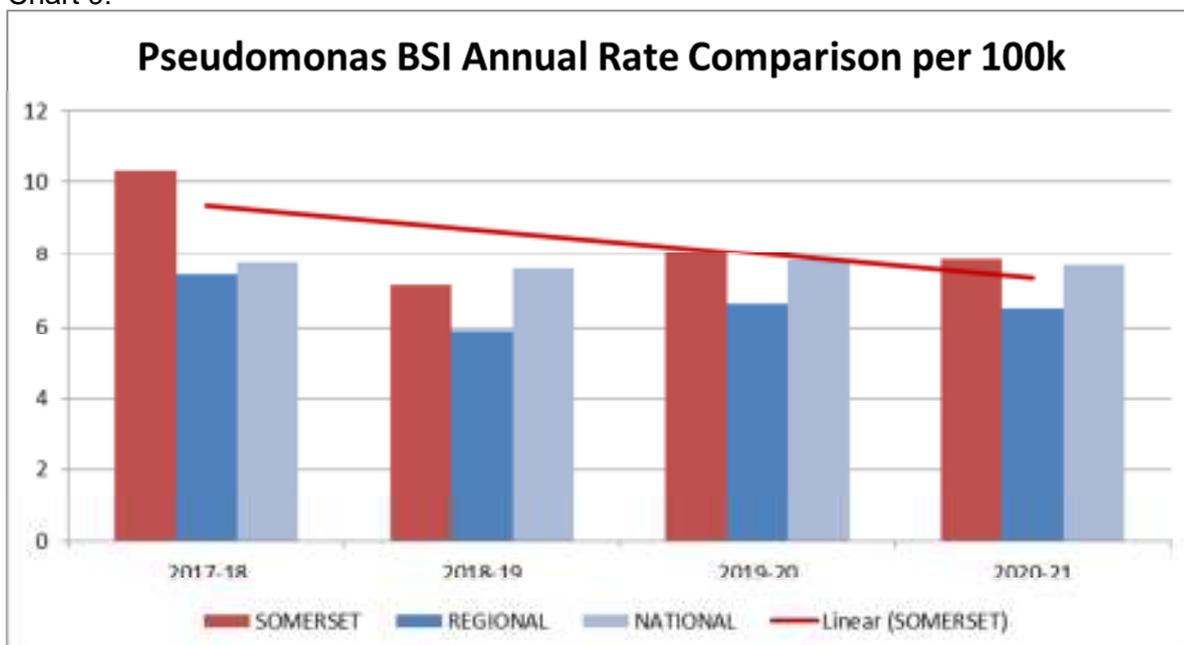
8.14 Table 9:

Somerset Performance for Pseudomonas BSI – number of cases			
Financial Year	Community Attributed	Hospital Onset (on or after day 3)	Total Cases
2021-21	31	13 (4)*	44
2019-20	32	13 (2)*	45
2018-19	28	12 (4)*	40

* number of those reported by Trusts outside Somerset CCG area

In 2020-21 the Somerset rate of Pseudomonas per 100,000 population was 7.83 and was the 2nd highest rate in the South West Region (9 CCGs overall), higher than both the regional average (6.5) and slightly higher than the national average (7.69). A year on year comparison of Pseudomonas BSI rates per 100,000 population is shown in Chart 9 below.

Chart 9:



9 CARBAPENEMASE-PRODUCING ENTEROBACTERIACE (CPE)

- 9.1 Carbapenemes-producing enterobacteriace (CPE) are multiple antibiotic resistant strains of bacteria which are carried harmlessly in the bowel. These bacteria can cause infections if transferred to another site on the body such as urinary tract or blood stream. The antibiotics available to treat such infections are limited, which increases the risk of treatment failure.
- 9.2 Over the last decade, there has been a rapid rise in the incidence of infection and colonisation by multi-drug resistant carbapenemase-producing organisms with an increase in the number of clusters and outbreaks reported in England. Acute providers continue screening for CPE based on the PHE CPE Tool Kit.
- 9.3 The number of new colonised patients identified per year from 2018-19 to 2020-2021 is shown in Table 10. The number of new positive cases has increased over the last year in the Somerset Population.

Table 10:

Carbapenemase-producing Enterobacteriaceae - Cases identified	
2020-2021	9 new CPE cases overall: 4 tested in the community 4 tested on admission 1 not tested on admission, confirmed positive during inpatient stay
2019-2020	2 new CPE case tested on admission 1 new cases in the community
2018-2019	2 new CPE case tested on admission 0 new cases in the community

10 INVESTIGATION OF INFECTION PREVENTION AND CONTROL INCIDENTS AND OUTBREAKS

Sessional Influenza Vaccine

- 10.1 The influenza campaign season ran from September to February with a vaccination compliance rate for Health and Social Care staff in Somerset for 2020-2021 of more than 80%. To enable such compliance a combination of 'peer vaccinators' and 'drop in' clinics were operating around the county.

COVID-19

- 10.2 On 12 January 2020 it was announced by the World Health Organization that a novel coronavirus had been identified in samples obtained from Wuhan City, Hubei Province, China. Since then the name has been reclassified as SARS Coronavirus-2 (SARS-CoV-2) and as of 29 March 2020, 638,000 cases had been identified in 206 countries and areas. Public Health England (PHE) set out guidelines for IPC for both Primary and Secondary Care.
- 10.3 Since the work of the IPC team was significantly impacted by the Covid-19 pandemic, the CCG formed the incident management group, Incident Control Centre, supported by sub cells including the Personal Protective

Equipment (PPE) Cell, Testing Cell, Primary Care Cell and the Transport Cell. This led to collaborative working with colleagues across all health care settings from different organisations with a wide range of experience including Public Health England (SW), Public Health Somerset, Adult Social Care, NHSIE, local NHS Primary and Secondary care providers and the LARCH Team.

- 10.4 Somerset's shared commitment and responsibility united all health care stakeholders as never before, enabling the safety of care of both Primary and Secondary care through active communication, collaboration and rapid adoption of patient safety practices. The IPC team provided guidance and recommendations on best practices and policies to prevent and minimise all health care-associated infections.
- 10.5 In rapid response to provide the support required and share best practice across the system, DIPC and IPC specialist nurse meetings were co-ordinated by the CCG - initially weekly, fortnightly and monthly - in response to the Covid-19 picture across Somerset. These collaborative networks are continuing as this has enhanced relationships between all providers across the system.
- 10.6 The CCG IPC team provided Infection Prevention and Control training for care settings in the first wave and instigated support visits during the second wave of the Covid-19 pandemic to support care providers with significant outbreaks of Covid-19 within their care setting. This enabled the team to provide assurance, support and strengthened relationships across the system and with providers. These support visits are continuing and branching out into primary care as requested.
- 10.7 The IPC Team were also involved in supporting providers in the circulation and interpretation of national guidelines relating to Covid-19. The team also developed a Good Practice Guide aimed at giving the primary care teams a simplified resource to ensure compliance with the Health and Social Care Act 2008 (updated 2015).
- 10.8 At the beginning of the pandemic the IPC team consisted of 2.1 Whole Time Equivalents (WTE) specialist nurses with 0.5 WTE administration support. To strengthen the IPC team in response to the pandemic, the team was increased to 6.0 WTE through redeployment from within the CCG and fixed term contracts of specialist nurses. The team has now settled to its current position of 4.6 WTE specialist nurses with 1.5 WTE administrative support.
- 10.9 During the first COVID-19 wave, Somerset had lower rates of infection compared to other areas of the country. In the second wave, Somerset had higher rates of infection, but remains around the South West average rate of infection. Almost 1,000 outbreaks were reported in healthcare settings between March 2020 and April 2021.
- 10.10 The IPC team also supported CCG Primary Care Colleagues and GP practices by attending CCG Primary Care Cell meetings, providing advice and recommending appropriate infection prevention and control practice and guidance. The Primary Care Infection Prevention and Control Link Practitioner Programme was established to provide advice and guidance, and worked as a support network to GP practices in Somerset. The main

area of work has been to support Infection Prevention and Control GP Practice Leads during the COVID 19 pandemic to ensure practices are aware of COVID 19 guidance enabling patient and staff safety within primary care.

10.11 The IPC team provided support, guidance and training to reduce the risk of healthcare transmission of COVID 19. Due to the amount of preparation and management required for COVID19, the CCG enacted the business continuity plans, postponing the following priorities:

- post infection reviews for attributed MSSA cases
- monitor and review the GNBSIs with a focus of a 10% reduction of E Coli bacteraemia
- creating a Somerset Care Homes infection prevention and Control Link Practitioner Group

Vaccination

10.12 The Somerset Mass Vaccination Programme is led by the NHS locally with significant input from Somerset County Council, District Councils and other local organisations. The Mass Vaccination Programme Board meets weekly and vaccination is an indirect tool for local outbreak management.

10.13 The COVID-19 vaccination was not designed to prevent transmission, as all vaccines in use were developed to prevent serious illness and death. However, evidence has emerged that the vaccines do lead to a population-level reduction in transmission. Vaccinated individuals may still transmit and contract the virus, and may not prevent outbreaks, but should mitigate the impact of COVID-19.

10.14 As of March 2021, the programme in Somerset is progressing well and at one point was identified nationally as having the highest uptake in the country. A sustainable plan to continue delivery has been put in place and all milestones have so far been met.

10.15 The emergence of variants of SARS-CoV-2, the virus that causes COVID-19, serves as a powerful reminder that viruses, by their very nature, mutate, and that the scientific response may need to adapt if they are to remain effective against them.

Learning from outbreaks

10.16 Learning from outbreaks across the county, as well as learning being brought in from outside the county, is captured and considered at the Health Protection Board. This learning has been invaluable to shape our local response and, in particular, informs the support and communications that have been provided locally. There has been an open culture of learning across organisation, enabling people to share their experiences in order to benefit the county as a whole.

11 GASTROINTESTINAL OUTBREAKS (CONFIRMED OR SUSPECTED NOROVIRUS)

11.1 No Norovirus outbreaks were reported within healthcare environments during 2020-21.

11.2 In November 2020 there was a single short-lived Norovirus outbreak identified in a care home which affected four residents and one staff member.

12 ANTIMICROBIAL STEWARDSHIP (AMS)

12.1 Antimicrobial Stewardship CQUINS for 2020-2021 were suspended due to COVID-19. However, antimicrobial monitoring practice continued in the area where the CQUINS were focused. The Somerset Antimicrobial Steward Group met twice in 2020-2021 and finalised the Antimicrobial Steward Strategy.

12.2 There was a 76.5% reduction in the use of Trimethoprim in the over 70s age-group compared with the baseline. Also, the use of Trimethoprim items/astro PU (all ages) continued on a downward trend and within annual reduction target. The percentage of Coamoxiclav, cephalosporins and quinolones use slightly increased; however, this was well within the target and the national average. There has been a reduction in the number of antimicrobials prescribed, and so the CCG is within target for further reduction.

13 ICNET

13.1 The Infection Prevention and Control Team uses a commercial software system, called ICNet, which allows the team access to years of historical infection data. In addition the system enables the team to follow up patients in the community by advising the infection prevention and control measures. This enables early intervention and risk reduction eg. MRSA positive patients who may require decolonisation.

14 CONCLUSION

14.1 The CCG IPC team will continue taking a system wide approach in ensuring patient safety by supporting and monitoring the infection prevention and control measures in place, which in turn will be monitored through the IPC Annual plan at SIPAAC Quarterly meetings. The key priorities for 2021-2022 include:

- a deep dive on the MSSA community attributed cases
- post infection reviews for all Trust attributed MSSA cases
- to monitor and review the GNBSIs cases' source, Somerset wide hydration campaign, reconvening the Gram Negative Blood stream Infections Working Group
- continuing the implementation of the Antimicrobial Stewardship five year plan

- continuing to improving infection prevention and control support for care homes by creating a Somerset Care Homes infection prevention and Control Link Practitioner Group
- to prompt for information, analyse trends/issues and share lessons learned in a timely way, fostering ownership and engagement system-wide

15 REFERENCES

- 15.1 Clostridium difficile infection objectives for NHS organisations in 2019/20 and guidance on the intention to review financial sanctions and sampling rates from 2020/21, NHSI February 2019, available at: https://improvement.nhs.uk/documents/808/CDI_objectives_for_NHS_organisations_in_2019_12March.pdf
- 15.2 Guidance on the reporting and monitoring arrangements and post infection review process for MRSA bloodstream infections from March 2018, NHS England, March 2018, available at: https://improvement.nhs.uk/documents/2512/MRSA_post_infection_review_2018_changes.pdf
- 15.3 Infection Prevention and Control Commissioning Toolkit Guidance and information for nursing and commissioning staff in England, RCN and IPS, January 2016, available at: <https://www.rcn.org.uk/professional-development/publications/pub-005375>
- 15.4 Preventing healthcare associated Gram-negative bloodstream infections: an improvement resource, PHE, May 2017 available at: https://improvement.nhs.uk/documents/984/Gram-negative_IPCresource_pack.pdf
- 15.5 Saving Lives: reducing infection, delivering clean and safe care, DH, June 2007, available at: http://webarchive.nationalarchives.gov.uk/+http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_078134
- 15.6 The Health and Social Care Act 2008 Code of Practice on the prevention and control of infections and related guidance, DH, July 2015 available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/449049/Code_of_practice_280715_acc.pdf
- Update on the reporting and monitoring arrangements and post-infection review process for MRSA bloodstream infections (BSI). NHS Improvement March 2018, available at: <https://www.england.nhs.uk/2018/03/provider-bulletin-28-march-2018>