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NHS DORSET CLINICAL COMMISSIONING GROUP

GOVERNING BODY MEETING

ANNUAL REPORT FOR INFECTION PREVENTION AND CONTROL

Date of the meeting	15/05/2019
Author	T Arnold, Infection Prevention and Control Advanced Nurse Specialist
Sponsoring Governing Body Member	Dr S Yule, Locality Lead for North Dorset
Purpose of Report	The IPC annual report provides an overview of Infection Prevention and Control activity of the CCG during 2018/19
Recommendation	The Governing Body is asked to **Note** the report.
Stakeholder Engagement	All health partners sit on the post infection review group and lay members sit on the Quality Group to represent the CCG population.
Previous GB / Committee/s, Dates	N/A

Monitoring and Assurance Summary

This report links to the following Assurance Domains	• Services designed around people • Preventing ill health and reducing inequalities • Sustainable healthcare services • Care closer to home

I confirm that I have considered the implications of this report on each of the matters below, as indicated:	**Yes** [e.g. ✓]	**Any action required?**	
		Yes Detail in report	**No**
All three Domains of Quality (Safety, Quality, Patient Experience)	✓		✓
Board Assurance Framework / Risk Register	✓		✓
Budgetary Impact	✓		✓
Legal / Regulatory	✓		✓
People / Staff	✓		
Financial / Value for Money / Sustainability	✓		✓
Information Management &Technology	✓		✓
Equality Impact Assessment	✓		✓
Freedom of Information	✓		✓
I confirm that I have considered the implications of this report on each of the matters above, as indicated	✓		

Initials: TA

1. Introduction

1.1 This report provides a summary of Infection Prevention and Control (IPC) activity for NHS Dorset Clinical Commissioning Group (CCG) for the 2018/19 financial year.

1.2 Good Infection Prevention and Control (IPC) is essential to ensure that people who use the services receive safe and effective care. Our aim is to ensure that IPC is embedded in all parts of everyday practice and is applied consistently by everyone.

1.3 The commitment to deliver safe and best quality of care for patients remains pivotal in the goal to reduce healthcare associated infections to an absolute minimum of non-preventable cases.

1.4 The report comprises of a short overview report and detailed appendix can be found at the end of the report relating to healthcare associated infection (HCAI) date (Appendix 1)

1.5 The role of an IPC specialist is primarily to monitor infection rates, with providers and across the wider community and to support the CCG's strategic lead on IPC across corporate and commissioned services. The IPC team is comprised of a part time (26.5 hours weekly) Infection Prevention and Control Advanced Nurse Specialist.

1.6 The secretary of State for Health has launched an important ambition to reduce healthcare assocated Gram-negative bloodstream infections by 50% by 2021. Therefore this year our focus was to help to achieve the ambition for reduction of healthcare associated Gram-negative bloodstream infections in order to benefit patients and the whole population, with initial focus on *Escherichia coli (E.coli)* bloodstream infections because they represent 55% of all Gram-negative bloodstream infections.

1.7 A thorough root cause analysis is performed for any reported community or hospital onset meticillin-resistant *Staphylococcus aureus* (MRSA) bacteraemia, as well as monitoring and reviewing cases of community acquired *Clostridium difficile* Infection (CDI) and any outbreaks (including Norovirus and Influenza). The CCG works closely with partners including health providers, Local Authorities, Public Health England and Public Health Dorset.

1.8 Root causes identified and subsequent learning has been shared with partners across the health community to reduce the risk of future occurrence.

1.9 The IPC and Patient Safety teams continue to provide an advice and support service to health and social care providers including:

- General Practices;
- Care Homes;
- Nursing Homes;

- Local Authorities;
- Safeguarding Teams;
- Care Quality Commission.

2. Overview

2.1 The CCG IPC team continue to provide support and advice for primary care in ensuring compliance with national standards and Code of Practice on the prevention and control of infections and related guidance (2008). The team have visited several practices to confirm compliance and recommended changes or improvements where necessary. The visits also identified areas a good practice and provided specialist advice, which is based on the best available evidence and in line with local and national guidelines.

2.2 Quarterly meetings continue to be held for Practice Nurses in the east and west side of the county which provide a forum for progress towards compliance with standards in primary care. These meetings are well attended and are an excellent place for the sharing of good work regarding infection control. The meetings have engaged practice staff in reviewing policies and IPC practices, supporting reviews and changes in practice and methods of audit, sharing lessons learnt and innovations.

2.3 Requests for IPC environmental and practice assessments for care homes are received from members of the Care Home Quality Assurance Team, Local Authorities and other healthcare professionals in response to any concerns raised during their visits or following reported incidents. Reports are compiled to provide feedback and opportunities for action planning to ensure that high quality care is provided that meets with national recommended standards.

2.4 Results from visits and recomendations are shared with the providers and commissioners with review visits taking place as necessary, to support any required change in practice or environment and provide assurances for patient quality and safety.

3. Pan-Dorset IPC Group

3.1 The name of the group has been re-named to Integrated Care System Infection Prevention and Control (ICS) (IPC) Network. All NHS organisations and local councils within Dorset are joining forces to intergrate services to prevent healthcare associated infections and to agree system wide priorities and to plan collectively as one system for Dorset.

3.2 The network meets quarterly to ensure a multiagency approach to IPC, overseeing, supporting and discussing the work of the IPC teams collectively as one system. The network attendance includes Directors of Nursing, Infection Prevention and Control Leads, Consultant Medical Microbiologists, Senior Infection Prevention Teams from all Dorset Trusts, Public Health England, NHS England, Primary Care, and Dorset Public Health. Within the next 12 months the network hopes to extend membership to the independent sector as well as GP leads who have expressed an interest in attending.

3.3 The network is currently setting its strategy for the next 3 years (2019-2021) clearly identifying key work streams for driving quality improvements in key areas within Infection prevention and control within Dorset, examples include development of Dorset wide policies and procedures and a focus on E Coli infection prevention.

3.4 The network is also supporting the Dorset CCG IPC team in developing a dorset intranet information page for Infection Prevention and Control, enabling faster access to support tools for all teams in Dorset.

4. Pan-Dorset PIR and HCAI Review Group

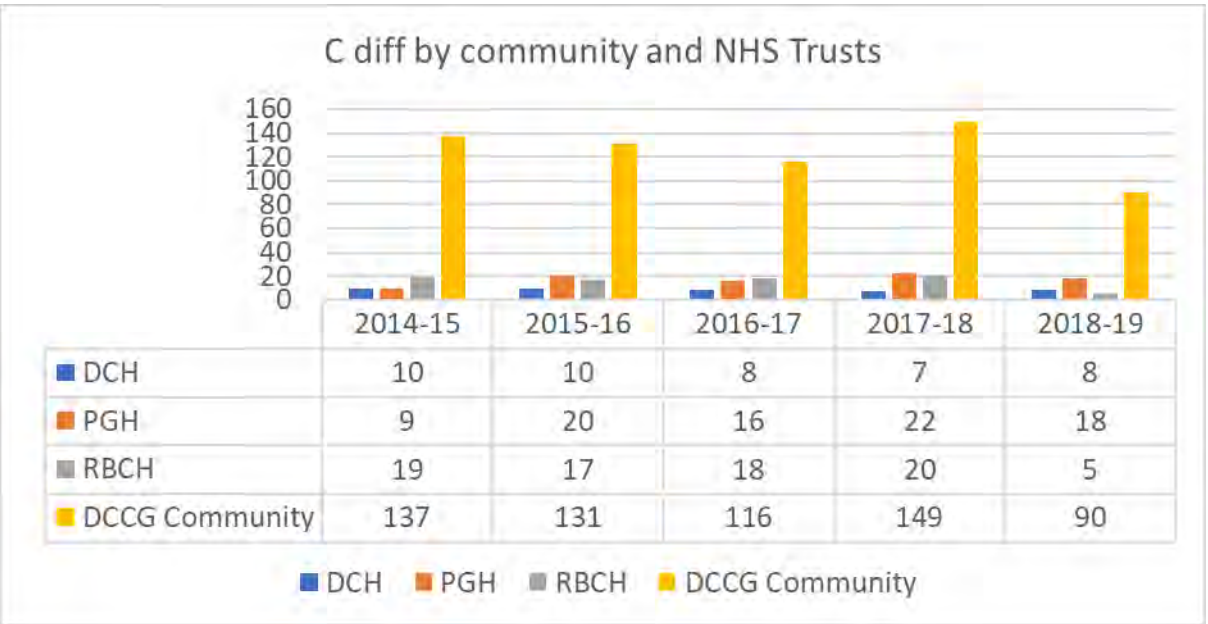
4.1 The Pan-Dorset Post Infection Review (PIR) and HealthCare Associated Infection (HCAI) Group continues to meet monthly, supported by IPC Dorset Clinical Commissioning Group. The group consists of all IPC locality leads from each Trust, Dorset HealthCare IPC, Consultant Microbiologist, Pharmacist and Public Health England. This review provides a framework for sharing information and learning, to inform on improvements and changes in practice to avoid preventable HCAIs and outbreaks.

4.2 The root cause analysis reviews take place in relation to meticillin resistant *Staphylococcus aureus* (MRSA), *Clostridium difficile* infections (CDI), meticillin susceptible *Staphyloccocus aureus*, *E.coli* bacteraemias and other specific infections and outbreaks, to ensure that incidence of healthcare associated infections receive robust review and that any learning is widely disseminated within Integrated Care System.

4.3 A lot of work has taken place to identify if any lapses in care occurred in quality of care provided and if so, to address any problems identified to continuously improve patient safety. The reporting provider completes root cause analysis and is assessed by the reporting provider and relevant coordinating commissioners to see if any aspect of care could been done differently and therefore may have led to a different outcome. The aim is to determing whether it was linked to any lapse in care related to the care and treatment of the patient in or out of hospital setting and identify any patient safety issues or learning. It also identifies good practice or areas for improvement. A lapse in care would be indicated by evidence that the provider did not follow policies and procedures consistent with local guidance, written in line with national guidance and standards.This process relies on strong partnership working by all organisations involved in the patients care pathway, to jointly identify and to agree possible causes of , or factors that contributed to the patient infection..

4.4 Regards to *Clostridium difficile* infection cases the group agrees for removal against trust trajectory targets, and fosters an open and honest platform for discussion and consideration.

5. *Clostridium difficile* infection (CDI)

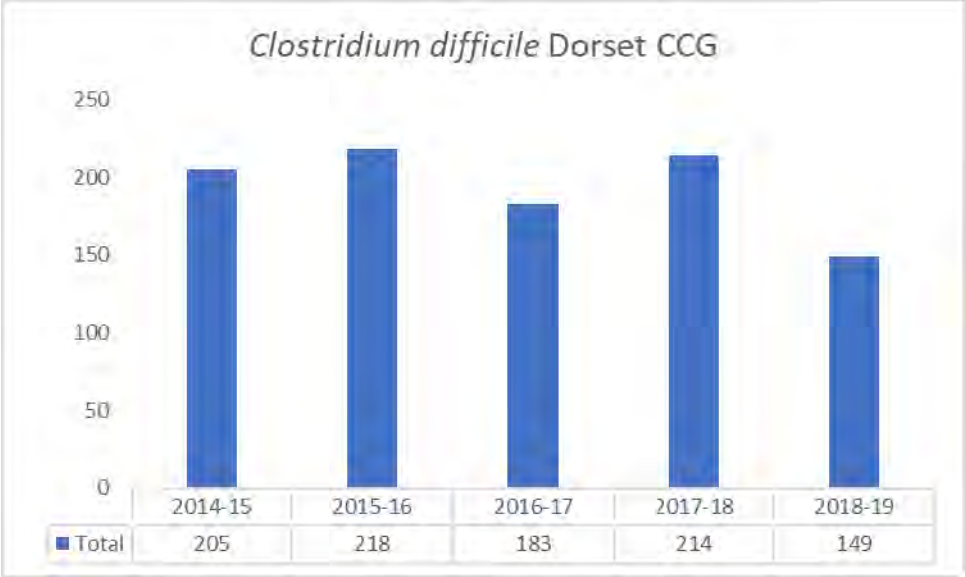


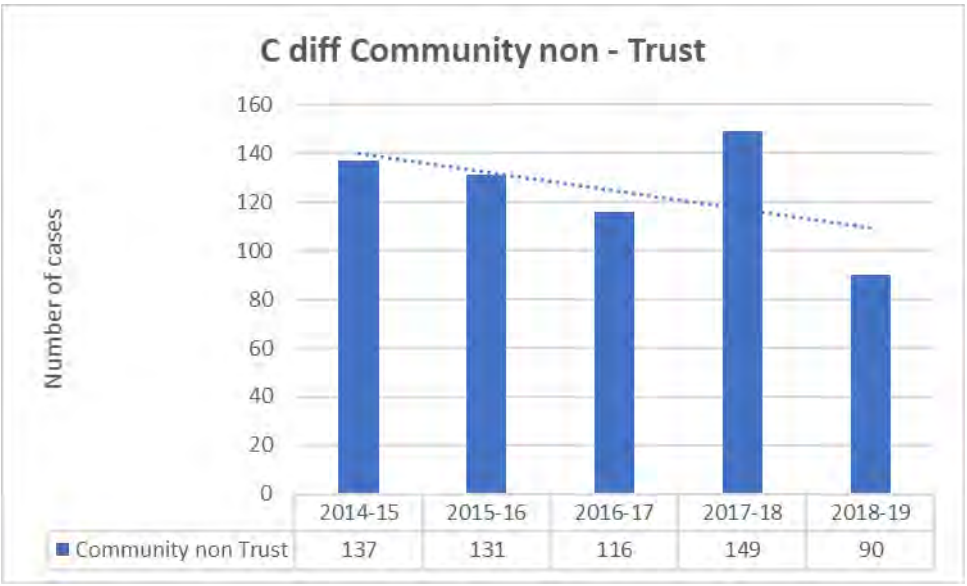
	2014-15	2015-16	2016-17	2017-18	2018-19
DCH	10	10	8	7	8
PGH	9	20	16	22	18
RBCH	19	17	18	20	5
DCCG Community	137	131	116	149	90

5.1 The graph above demonstrates total *Clostridium difficile* cases exluding "no lapse in care" cases, which are considered as not applicable against trajectory targets. This means that the case was not as a result of any process that led to acquisition or that may have placed other patients at risk of acquisition. All cases identified as non-trajectory (no lapse in care) have been reviewed by the Dorset PIR and RCA Review Group using the national objectives and guidance from NHS Improvement.

5.2 Only one acute trust exceeded *Clostridium difficile* targets for 2018/19 taking into consideration no lapse in care (non-trajectory) cases. Learning shared included delay in sampling and isolation.

5.3 The number of total *Clostridium difficile* cases reported was 149 compared to 214 in the corresponding year, therefore there have been a significant reduction of cases from the same period last year. The CCG Dorset have been significantly below the trajectory of 203.



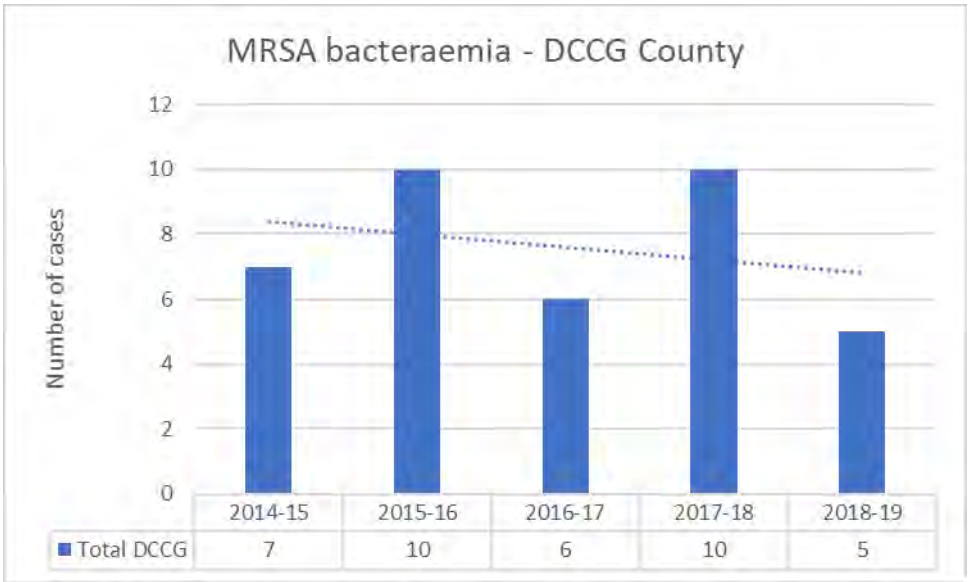


5.4 The community onset *Clostridium difficile* cases had also significant decrease in comparison with last year.

5.5 In addition, a community *Clostridium difficile* infection (CDI) death case was identified in Quarter 1 2018/19. A thorough root cause analysis has taken place with the evidence suggesting that the case was unavoidable due to a several risk factors that may have contributed to acquiring infection and no evidence of any signs or symptoms identified prior to CDI diagnoses

5.6 Recruitment of part time IPC staff will enable a full quarter review of cases for 2019/20, to provide assurance of good management across the system.

6. Meticillin resistant *Staphylococcus Aureus* (MRSA) bacteraemia



Note: The MRSA bacteraemia graph includes all cases including those attributed to a trusts outside of Dorset.

6.1 In total, five MRSA bacteraemia cases were reported with one case attributed to a trust outside of the county, one to acute Trust within Dorset and three community onset cases.

6.2 All four cases had a thorough root cause analysis investigated to prevent future harm. It was deemed that all three community onset MRSA cases were unavoidable. Even though it is not always clear what the route of infection or contributing factors are, the group looked at the entire process and all support system involved to minimize overall risk and the recurrence of the incident.

6.3 The case from an acute Trust was formally examined and led by the Infection Prevention Team at the Trust. The RCA identified that it was thought that the route of infection was associated with peripheral intravenous cannula. An action plan has been implemented for the staff to address the prevention of further cases. The learning and action plan was presented at the Pan-Dorset PIR and HCAI Review Group for discussion and dissemination of learning.

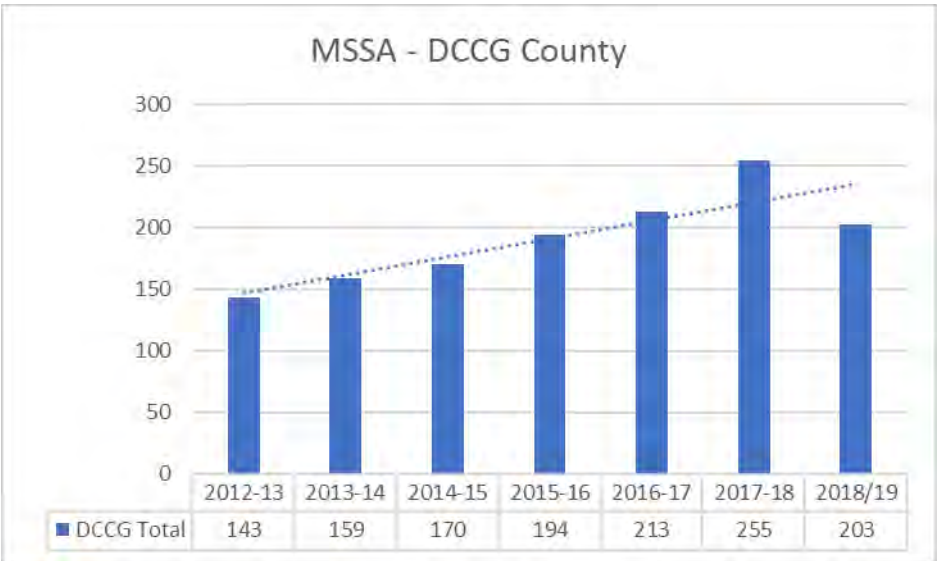
6.4 NHS Improvement (2018) published new guidance on post-infection review of blood stream infection (BSI) caused by MRSA consisting a list of Trusts and CCGs that will need to carry out post-infection reviews. The mandatory reporting of MRSA BSI will continue as before with the only change to the PIR process. The IPC team will continue to lead on all Post Infection Reviews (PIRs) that will be presented at the monthly PIRs meetings conducted by a multidisciplinary clinical team that review the BSI event and identifies the factors that contributed to it. Even though the NHS Dorset CCG is not included in the group with the highest rates of infection, to ensure that patients receive the very best quality of care and sustain the significant reductions in the MRSA BSI, the Pan-Dorset PIR and HCAI Review Group have decided to

continue the process as previously. The zero tolerance approach remains a priority for the NHS and for the ICS IPC Dorset.

7. Meticillin sensitive *Staphylococcus aureus* (MSSA)

7.1 There is currently no trajectory for MSSA bacteraemia, but surveillance continues. Cases of MSSA bacteraemia remain to be reported and root cause analysis carried out with action plans implemented when poor practice is found to be a contributing factor

7.2 The number of MSSA cases has decreased in Dorset in comparison with last year figures therefore remain at a significantly better position than we were in 2017/18.



8. *Escherichia coli* (E.coli) bacteraemia

8.1 From April 2017 mandatory surveillance of *Klebsiella* species and *Pseudomonas aeruginosa* commenced to provide more detailed data on Gram-negative bacteraemia as these are associated with the growing problem of antimicrobial resistance.

8.2 The national ambition to reduce healthcare Gram-negative bloodstream infections (GNBSI) by 50% by March 2021 continues. Gram-negative blood stream infections cases can occur either in the community or hospital settings however, half of all community cases have had some healthcare interventions either from acute, primary or community care. Therefore, we can only achieve reductions by working together across the whole health and social care sector. *E. coli* is one of the largest Gram-negative bloodstream infection group. In order to reduce *E. coli* bacteraemia, the local Trusts and IPC CCG are reviewing cases to determine any common themes that could help to identify areas for action. The majority of cases are community onset.

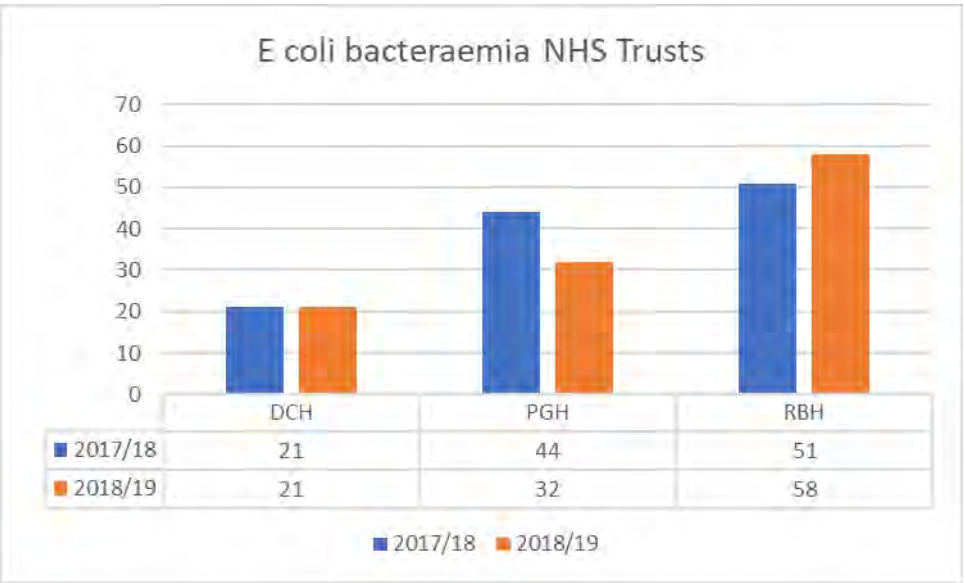
8.3 Local data is reviewed to understand up-to-date surveillance activity. The Dorset IPC performed a three months enhanced surveillance for Quarter one 2017/18 to collect risk factor information and further details on the underlying source of infection of *E. coli* identified from blood cultures. A total 97 cases on community onset *E. coli* bacteraemia were reviewed to determine whether there are any common themes that could help to identify priority areas for action. Frailty accounted for more than half of the cases with Urinary Tract Infections found to be the most common source. It was clear that the incidence of cases were higher in males to females, with majority of cases being over 65 years of age. Further surveillance is taking place for Quarter 2 and Quarter 3 2018/19, which will enable us to compare the themes and identify areas for improvement.

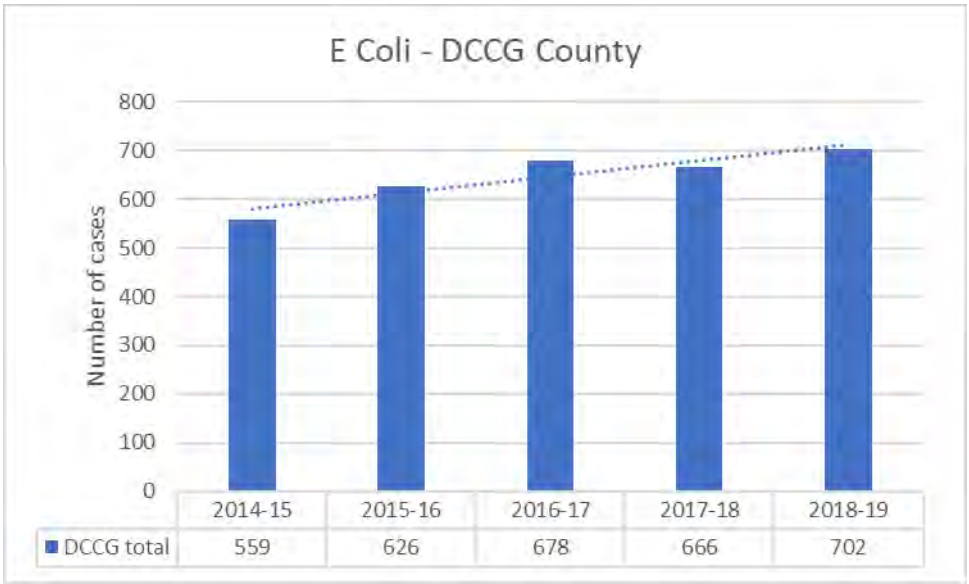
8.4 The population within Dorset 787,000 is expected to grow to above 800,000 by 2023, with 70% age over 70. More people are living longer with long-term conditions.

8.5 NHS Dorset Clinical commissioning group is leading on achieving the Quality Premium (from April 2017, for two years), aiming to reduce all *E. coli* BSIs by 10%. The focus was set around improved antimicrobial stewardship: a reduction of catheter associated urinary tract infections (CAUTI) by means of education on the issue and improvement management of hydration.

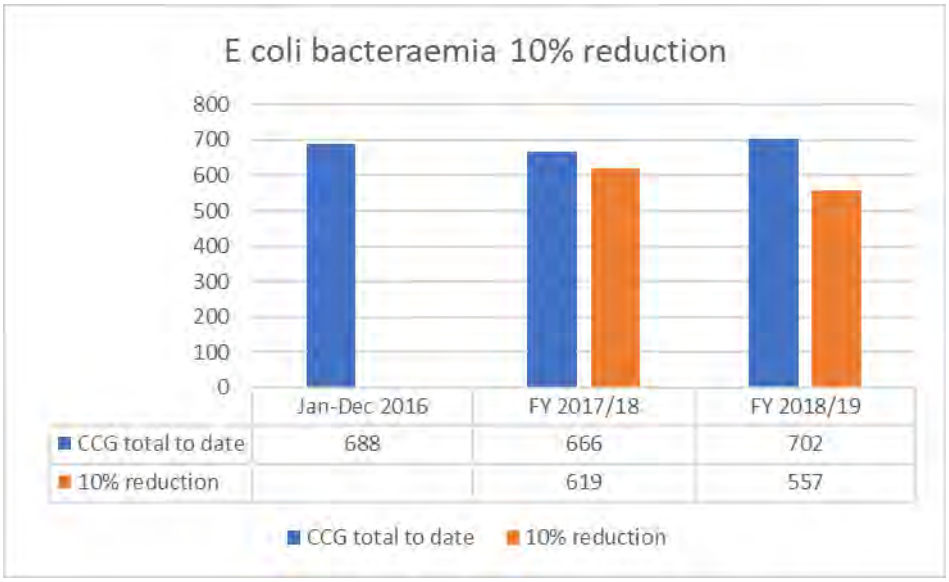
8.6 The Dorset Local Action Plan – Preventing Healthcare Associated Gram-negative Bloodstream Infections (BSIs) - the action plan has been developed taking a system wide approach utilising work already in hand and identifying and taking action on themes that could lead to improvement. A newly developed *E coli* Steering Group has been utilised to support the progress and to strenghten our approach as an Integrated System.

8.7 The graph below illustrates comparison of *E. coli* bacteraemia cases from previous financial year.





8.8 There have been a slight increase in the number of E. coli cases of 36 from last year. Even though we have not been able to achieve the overall ambition of 10% reduction in the first financial years 2017-19, we believe we have identified learning to improve on hydration within acute and primary care settings.



9. Outbreaks and Incidents.

9.1 All incidents and outbreaks in NHS organisations were reported and reviewed at the the Pan-Dorset PIR and HCAI Review Group.

9.2 Norovirus and Influenza: Oubreaks of Norovirus and Influenza has been reported at the Trusts as well as in Nursing Homes and Schools, causing a number of closures. All managed as per guidelines and reported at the Pan-Dorset PIR and HCAI Review Group meetings to share any lessons learned.

9.3 An outbreak of Extended Beta Spectrum Lactamse (ESBL) Klebsiella pneumoniae (KP) – K2 strain was identified in Poole General Hospital Foundation Trust likely to have commenced in October 2017 and was detected in March 2018 when two clinical cases were identified on the same ward. An Outbreak Control Team was formed, and immediate control measures were put in place. To enhance patient safety and quality, the IPC CCG Dorset supported the trust during the months of May, June and August and performed several infection prevention and control inspections on affected wards to identify issues and provide education to staff and recommendations to the Trust as per local and national guidelines. The outbreak was officially closed on 22nd November 2018, where all screening was stopped other than critical care that continued for a further week. The outbreak was brought under control through specific and non-specific measures such as reinforcement of the cornerstones of infection prevention; hand hygiene, cleaning of environment and clinical equipment, replacement of equipment and staff/patient education. A final Outbreak Report has been written by the Trust.

9.4 The incidents were investigated by the assigned organisation, and the report, lessons learned and action plans were reviewed by the Pan-Dorset PIR and HCAI Review Group.

10. IPC Link Practice Nurse Network

10.1 The IPC Link Practice Nurse Network meets quarterly to meet the function of the IPC team and is an important and effective means of disseminating a good practice guidance and improve standards within the team. The meetings continue to be held for Practice Nurses in both east and west side of the county, which provides a forum for progress with compliance with standards in primary care. The structure of the meetings has recently changed as a result of the feedback from nurses. To actively participate in reducing healthcare associated infections, the IPC CCG provide a presentation on various infections and its prevention. Speakers are invited to each of the meeting, where various healthcare professionals talk about their roles, expertise, education and responsibilities. This method of education and awareness is felt to be received greatly by the group, who then share their knowledge within practice.

11. Other actions

11.1 NHS Dorset Clinical Commissioning Group continues to support the following tools for use across the county by all healthcare staff :

- The Primary Care Bulletin is sent each week to practice staff across the county including General Practitioners, Practice Managers and Practice Nurses. It provides an opportunity to update colleagues with current most up to date information, published guidance and best practice to provide safety for our patients and staff.

- To enhance patient safety and quality within Primary Care, the IPC CCG Dorset provide a 'critical friend' infection prevention and control review within General Practice Surgeries. The findings and recommendations are shared with the practice, locality leads as well as at IPC Link Practice Nurse forum for further discussion of good practice and IPC standards.

12. Conclusion

12.1 The role of IPC within the CCG prioritises monitoring and surveillance of healthcare associated infections, develops links with partners in Public Health England (PHE), local public health teams and other CCG members within South West.

12.2 The focus will remain on preventing and reducing healthcare associated infections and to continuously work as one system to provide safe and best quality of care for all people in Dorset cared for in a safe environment and protected from avoidable harm

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Date: **30th April 2019**
Telephone Number: **01305 368925**

APPENDICES	
Appendix 1	**HCAI Data**

APPENDIX 1

APRIL 2018 TO MARCH 2019

MRSA (Provider Based) (Monthly)

	Trust apportioned -Hospital onset	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Performance YTD	HCAI Reported Performance YTD
DCH	Number of cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RBH	Target Number of Cases	0	0	1	0	0	0	0	0	0	0	0	0	1	1
PGH	Number of cases	0	0	0	0	0	0	0	0	0	0	0	0	0	0

MRSA (Commissioner Based) (Monthly)

All cases by CCG

Trust	Cases/Target	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Performance YTD	HCAI Reported Performance YTD
Dorset CCG	Number of cases for county	0	1	1	0	0	1	0	0	1	1	0	0	5	1 case May attributed to Salisbury Hospital, 1 case RBH in June, 1 case CCG Dorset in September, 1 case CCG Dorset in December, 1 case CCG Dorset January
	Cases assigned to DCCG	0	0	0	0	0	0	0	0	0	0	0	0		
	Third party arbitration	0	0	0	0	0	0	0	0	0	0	0	0		

APPENDIX 1

Trust apportioned cases - Hospital onset

Trust	Cases/Target	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Year to Date	
DCH	Number of cases	0	0	0	0	1	0	1	3	2	1	2	0	10	HCAI Reported Performance YTD
	Agreed Non Trajectory Cases:	0	0	0	0	0	0	1	1	2	0	0	0	4	Target 13
	Total cases for Trajectory	0	0	0	0	1	0	0	2	0	1	2	0	6	Performance YTD against target
PGH	Number of cases	0	3	3	0	3	2	0	1	2	0	2	1	17	HCAI Reported Performance YTD
	Agreed Non Trajectory Cases:	0	0	0	0	0	0	0	1	0	0	0	0	1	Target 14
	Total cases for Trajectory	0	3	3	0	3	2	0	0	2	0	2	1	16	Performance YTD against target
RBH	Number of cases	2	0	1	3	3	0	1	0	1	1	0	0	12	HCAI Reported Performance YTD
	Agreed Non Trajectory Cases:	0	0	1	3	1	0	1	0	0	0	0	0	6	Target 13
	Total cases for Trajectory	2	0	0	0	2	0	0	0	1	1	0	0	6	Performance YTD against target
DHCUFT	Number of cases	1	0	1	1	1	1	0	1	1	0	2	0	9	HCAI Reported Performance YTD
	Agreed Non Trajectory Cases:	0	0	0	0	0	0	0	0	0	0	0	0	0	Target 12
	Total cases for Trajectory	1	0	1	1	1	1	0	1	1	0	2	0	9	Performance YTD against target

C DIFF (Commissioner Based - Provider and Community)

All cases by CCG

Trust	Cases/Target	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Performance YTD	Target
CLUSTER	Number of cases	17	11	18	14	17	16	9	10	9	6	10	12	149	203
Non acute	Number of cases not apportioned to acute trusts	15	8	14	11	10	14	7	6	4	4	6	0	99	
DCCG community cases only without acute trust cases and community	Number of community	14	8	13	10	9	13	7	5	3	4	4	0	90	

E.coli - Trust apportioned cases - Hospital Onset

Trust	Cases/Target	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total
DCH	Number of cases	2	0	1	4	4	1	0	2	2	0	1	4	21
PGH	Number of cases	4	2	3	3	1	3	1	2	1	4	4	4	32
RBCH	Number of cases	3	6	7	7	7	7	3	5	2	4	3	4	58
Salisbury	Number of cases	1	0	1	3	2	0	3	1	2	1	1	0	15
Yeovil	Number of cases	3	1	1	2	1	4	2	1	2	3	2	0	22

E.coli Commissioner Based - Cluster and Primary Care Provider

Trust	Cases/Target	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total
CCG Total for Dorset	Number of cases	50	63	61	68	63	65	61	61	55	59	47	49	702
Community onset	Number of cases	41	55	50	54	51	54	57	52	50	51	39	37	591

Methicillin Senstivie Staphylococcus aureus

MSSA (Provider Reported - All Cases by Trust)

Trust	Cases/Target	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total
DCH	Number of cases	2	5	3	1	5	3	4	4	1	2	3	3	36
PGH	Number of cases	4	5	6	4	6	5	6	9	6	9	5	11	76
RBCH	Number of cases	6	7	4	10	8	4	6	10	7	12	4	8	86
Salisbury	Number of cases	6	3	4	3	2	2	3	3	3	3	2	0	34
Yeovil	Number of cases	1	1	2	4	2	4	5	3	6	4	5	0	37

MSSA Provider Based - Trust apportioned - Hospital onset

Trust	Cases/Target	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total
DCH	Number of cases	0	1	0	0	0	0	2	0	0	1	0	0	4
PGH	Number of cases	2	4	3	1	2	1	2	4	0	2	4	2	27
RBCH	Number of cases	1	3	1	0	3	0	1	1	1	2	1	0	14
Salisbury	Number of cases	3	1	1	1	0	0	0	0	1	1	1	0	9
Yeovil	Number of cases	0	0	0	0	2	1	2	0	2	1	1	0	9

MSSA (Commissioner Based - Provider and Community) All cases by CCG

Trust	Cases/Target	Apr-18	May-18	Jun-18	Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Total
CLUSTER	Number of cases	14	18	14	13	19	10	16	25	15	23	12	24	203