

Iechyd Cyhoeddus MRU Cymru HS Public Health Wales

Sexual Health in Wales Surveillance Scheme (SWS) Quarterly Report, July 2019 (Data to end March 2019)

Author: Communicable Disease Surveillance Centre

Date: July 2019

Version: v0

Status: Approved

Intended audience: Health professionals

Publication/ Distribution:

- Publication on Public Health Wales intranet and internet
- E-mail notification of publication to stakeholders

Purpose and Summary of Document:

This report presents the latest observed trends on the rates of sexually transmitted infections and other infections diagnosed in Integrated Sexual Health clinics in Wales and highlights quality issues in the data. This report compares the 6-month period October 2018 to March 2019 (Q4 2018-Q1 2019) with the same period of the previous year. Data are presented as at 31st July 2019.

Key points

Comparing Q4 2017- Q1 2018 and Q4 2018- Q1 2019 integrated sexual health clinics in Wales diagnosed:

- More syphilis (22% increase), gonorrhoea (14%), and first episode herpes (7%).
- Fewer new diagnoses of HIV (43%).
- Chlamydia and first episode warts remained relatively stable.
- There was no increase in LGV (lymphogranuloma venereum) noted when comparing quarters (Table 1), although in 2018 there were 13 laboratory-confirmed reports of LGV in Wales (not shown), compared to an average of 3 per year between 2013-2017, the highest incidence since national LGV surveillance started in 2003.
- Syphilis diagnoses continued to increase, with similar increases detected in both heterosexual males (21%) and MSM (27%). Female cases were less frequent and remained stable. (Table 2).
- Of concern is the 76% increase in syphilis diagnoses in people aged less than 25 years (Table 3).
- The increase in gonorrhoea diagnoses is predominantly in males (18%), with similar increases seen in both heterosexual men and MSM. There was also a 6% increase in chlamydia diagnoses in MSM.
- Health board (HB) trends should be interpreted with caution, as completeness of data varies between clinics and health boards.
- The latest available trends indicate that compared to the same period for the previous year, chlamydia increased in Abertawe Bro Morgannwg University and Powys Teaching HBs. An increase in chlamydia in MSM is seen in 4 out of 7 HBs (Table 4).
- Recent gonorrhoea and syphilis increases are seen in most health boards. Syphilis reports appeared to fall in the first quarter of 2019, although more reports may be received in the following weeks.
- In July 2017, Integrated Sexual Health clinics began prescribing Pre-exposure prophylaxis (PrEP) medication to patients at risk of HIV infection. This may have altered the population attending clinics for STI screening and diagnoses.

Date: 31/07/2019	Version: v0	Page: 2 of 10

General population

Table 1. Percentage change in selected diagnoses and screens made in ISH clinics
from Q4 2017- Q1 2018 to Q4 2018-Q1 2019 in Wales

		Diagnoses			Screens		
	Q4 2017-Q1	Q4 2017-Q1 Q4 2018-Q1 % Change Q4		Q4 2017-Q1 Q4 2018-Q1		% Change	
	2018	2019	70 Change	2018	2019	% Change	
Chlamydia	3549	3454	-3%	36911	40074	9%	
Warts (1st episode)	1368	1329	-3%	-	-	-	
Herpes (1st episode)	761	814	7%	-	-	-	
Gonorrhoea	663	754	14%	36895	40056	9%	
HIV (new diagnosis)	35	20	-43%	20032	20905	4%	
Syphilis	98	120	22%	19651	20576	5%	
LGV	5	5	0%	-	-	-	
Hepatitis A (acute)	0	4	-	-	-	-	
Hepatitis B (1st diagnosis)	9	8	-11%	-	-	-	
Hepatitis C (1st diagnosis)	12	13	8%	-	-	-	

i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.

ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level.

iii) Includes all diagnoses made in ISH clinics in Wales. Diagnoses of individuals with unknown residence location and those resident outside of Wales have also been also included.

iv) The following KC60/SHHAPT diagnoses codes were used: chlamydia (C4, C4A, C4C), first episode of genital warts (C11A), first episode of genital herpes (C10A), gonorrhoea (B, B1, B2), new diagnosis of HIV (E1A, E2A, E3A1,H1,H1A,H1B), primary, secondary and early latent syphilis (A1, A2, A3), LGV (C2), acute hepatitis A infection (C15), first diagnosis of hepatitis B (C13, C13A, C13B), first diagnosis of hepatitis C (C14).

v) Screen codes are collected only for chlamydia, gonorrhoea, HIV and syphilis. The following KC60/SHHAPT services codes were used: chlamydia tests (S1,S2,T1,T2,T3,T4), gonorrhoea tests (S1,S2,T2,T3,T4), HIV antibody tests (S2,T4,T7,P1A), syphilis tests (S1,S2,T3,T4,T7).

Gender and sexuality

Table 2. Percentage change in selected diagnoses made in ISH clinics from Q42017- Q1 2018 to Q4 2018-Q1 2019 by gender and sexuality in Wales

	Q4	Q4 2017-Q1 2018		Q4 2018-Q1 2019			% Change		
	Male*	*of which MSM	Female	Male*	*of which MSM	Female	Male*	*of which MSM	Female
Chlamydia	1559	197	1990	1573	209	1881	1%	6%	-5%
Warts (1st episode)	752	53	616	729	44	600	-3%	-17%	-3%
Herpes (1st episode)	270	17	491	283	18	531	5%	6%	8%
Gonorrhoea	441	240	222	522	286	232	18%	19%	5%
HIV (new diagnosis)	31	21	4	17	10	3	-45%	-52%	-25%
Syphilis	88	60	10	110	76	10	25%	27%	0%
LGV	5	*	0	5	*		0%	*	-
Hepatitis A (acute)	0	0	0	3	0	1	-	-	-
Hepatitis B (1st diagnosis)	6	*	3	6	*	2	0%	*	-33%
Hepatitis C (1st diagnosis)	6	*	6	10	*	3	67%	*	-50%

i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B. ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level.

iii) Includes all diagnoses made in ISH clinics in Wales. Diagnoses of individuals with unknown residence location and those resident outside of Wales have also been also included.

iv) The following KC60/SHHAPT diagnoses codes were used: chlamydia (C4, C4A, C4C), first episode of genital warts (C11A), first episode of genital herpes (C10A), gonorrhoea (B, B1, B2), new diagnosis of HIV (E1A, E2A, E3A1,H1,H1A,H1B), primary, secondary and early latent syphilis (A1, A2, A3), LGV (C2), acute hepatitis A infection (C15), first diagnosis of hepatitis B (C13, C13A, C13B), first diagnosis of hepatitis C (C14).

v) Small numbers with potential for indirect disclosure of person identifiable information (*).

Date:	31	/07	/2019	
-------	----	-----	-------	--

Young people (15-24 year olds)

Table 3. Percentage change in selected diagnoses made in ISH clinics Q4 2017- Q12018 to Q4 2018-Q1 2019 in 15-24 year olds in Wales

15-24 year olds	Q4 2017-Q1 2018	Q4 2018-Q1 2019	% Change	% Change in screens
Chlamydia	2562	2375	-7%	7%
Warts (1st episode)	739	678	-8%	-
Herpes (1st episode)	390	372	-5%	-
Gonorrhoea	326	323	-1%	6%
HIV (new diagnosis)	1	1	0%	1%
Syphilis	17	30	76%	1%
LGV	0	0	-	-
Hepatitis A (acute)	0	1	-	-
Hepatitis B (1st diagnosis)	2	1	-50%	
Hepatitis C (1st diagnosis)	2	1	-50%	-

i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.

ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level.

iii) Includes all diagnoses made in ISH clinics in Wales. Diagnoses of individuals with unknown residence location and those resident outside of Wales have also been also included.

iv) The following KC60/SHHAPT diagnoses codes were used: chlamydia (C4, C4A, C4C), first episode of genital warts (C11A), first episode of genital herpes (C10A), gonorrhoea (B, B1, B2), new diagnosis of HIV (E1A, E2A, E3A1,H1,H1A,H1B), primary, secondary and early latent syphilis (A1, A2, A3), LGV (C2), acute hepatitis A infection (C15), first diagnosis of hepatitis B (C13, C13A, C13B), first diagnosis of hepatitis C (C14).

Date: 31/07/2019	Version: v0	Page: 4 of 10

Chlamydia

Table 4. Percentage change in chlamydia diagnoses made in ISH clinics from Q4 2017- Q1 2018 to Q4 2018-Q1 2019, by LHB of residence, gender and sexuality

3	· · · · · · · · · · · · · · · · · · ·	04 2047	04 2040	
LHB	Group	Q4 2017- Q1 2018	Q4 2018- Q1 2019	% Change
Abertawe Bro	Female	351	361	3%
Morgannwg	Male*	231	278	20%
University	*of which MSM	12	22	83%
	Total	582	639	10%
Aneurin Bevan	Female	434	399	-8%
	Male*	315	313	-1%
	*of which MSM	41	51	24%
	Total	749	712	-5%
Betsi Cadwaladr	Female	294	273	-7%
University	Male*	227	230	1%
	*of which MSM	17	20	18%
	Total	521	503	-3%
Cardiff & Vale	Female	518	463	-11%
University	Male*	424	407	-4%
	*of which MSM	97	91	-6%
	Total	942	870	-8%
Cwm Taf	Female	135	137	1%
	Male*	150	120	-20%
	*of which MSM	8	7	-13%
	Total	285	257	-10%
Hywel Dda [†]	Female	201	179	-11%
	Male*	130	140	8%
	*of which MSM	16	11	-31%
	Total	331	319	-4%
Powys Teaching	Female	6	11	83%
	Male*	9	10	11%
	*of which MSM	*	*	*
	Total	15	21	40%
All Wales	Female	1939	1823	-6%
	Male*	1486	1498	1%
	*of which MSM	191	204	7%
	Total	3425	3321	-3%

i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.

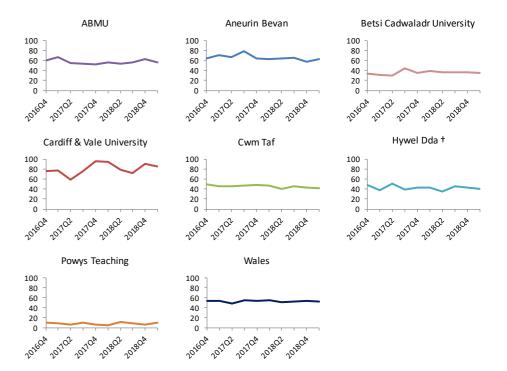
ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level.
 iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.
 iv) Data shown by local health board of residence. This may not necessarily reflect the local health board of

clinic attended.

v) The following KC60/SHHAPT codes were used: gonorrhoea (C4, C4A, C4C).

vi) Small numbers with potential for indirect disclosure of person identifiable information (*).

Figure 1. Chlamydia diagnoses in ISH clinics per 100,000 population, from Q4 2016 to Q1 2019, by LHB of residence



i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.

ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level.

iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.

iv) Data shown by local health board of residence. This may not necessarily reflect the local health board of clinic attended.

v) Hywel Dda reporting has improved greatly recently, with all clinics submitting data to SWS since March 2016 (†).

vi) The following KC60/SHHAPT codes were used: chlamydia (C4, C4A, C4C).

Date: 31/07/2019	Version: v0	Page: 5 of 10

Gonorrhoea

Table 5. Percentage change in gonorrhoea diagnoses made in ISH clinics from Q4 2017- Q1 2018 to Q4 2018-Q1 2019, by LHB of residence, gender and sexuality

LHB	Group	Q4 2017- Q1 2018	Q4 2018- Q1 2019	% Change
Abertawe Bro	Female	32	51	59%
Morgannwg	Male*	54	85	57%
University	*of which MSM	19	39	105%
-	Total	86	136	58%
Aneurin Bevan	Female	40	53	33%
	Male*	85	110	29%
	*of which MSM	53	67	26%
	Total	125	163	30%
Betsi Cadwaladr	Female	48	34	-29%
University	Male*	65	61	-6%
	*of which MSM	24	10	-58%
	Total	113	95	-16%
Cardiff & Vale	Female	74	57	-23%
University	Male*	157	178	13%
	*of which MSM	115	140	22%
	Total	231	235	2%
Cwm Taf	Female	10	10	0%
	Male*	37	39	5%
	*of which MSM	10	13	30%
	Total	47	49	4%
Hywel Dda [†]	Female	14	16	14%
	Male*	23	22	-4%
	*of which MSM	11	8	-27%
	Total	37	38	3%
Powys Teaching	Female	0	1	-
	Male*	0	3	-
	*of which MSM	*	*	*
	Total	0	4	-
All Wales	Female	218	222	2%
	Male*	421	498	18%
	*of which MSM	232	279	20%
	Total	639	720	13%

i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.

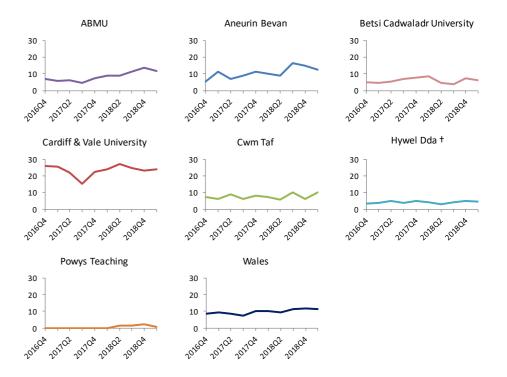
ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level. iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.

iv) Data shown by local health board of residence. This may not necessarily reflect the local health board of clinic attended.

v) The following KC60/SHHAPT codes were used: gonorrhoea (B, B1, B2).

vi) Small numbers with potential for indirect disclosure of person identifiable information (*).

Figure 2. Gonorrhoea diagnoses in ISH clinics per 100,000 population, Q4 2016 to Q1 2019, by LHB of residence



i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.

ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level.

iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.

iv) Data shown by local health board of residence. This may not necessarily reflect the local health board of clinic attended.

v) Hywel Dda reporting has improved greatly recently, with all clinics submitting data to SWS since March 2016 (†).

vi) The following KC60/SHHAPT codes were used: gonorrhoea (B, B1, B2).

Date: 31/07/2019	Version: v0	Page: 6 of 10

Syphilis

Table 6. Percentage change in syphilis diagnoses made in ISH clinics from Q4 2017- Q1 2018 to Q4 2018- Q1 2019, by LHB of residence, gender and sexuality

LHB	Group	Q4 2017- Q1 2018	Q4 2018- Q1 2019	% Change
Abertawe Bro	Female	1	2	100%
Morgannwg	Male*	21	15	-29%
University	*of which MSM	9	8	-11%
	Total	22	17	-23%
Aneurin Bevan	Female	1	3	200%
	Male*	17	15	-12%
	*of which MSM	13	11	-15%
	Total	18	18	0%
Betsi Cadwaladr	Female	4	2	-50%
University	Male*	10	17	70%
	*of which MSM	8	10	25%
	Total	14	19	36%
Cardiff & Vale	Female	1	1	0%
University	Male*	27	44	63%
	*of which MSM	25	40	60%
	Total	28	45	61%
Cwm Taf	Female	1	0	-100%
	Male*	7	13	86%
	*of which MSM	2	4	100%
	Total	8	13	63%
Hywel Dda †	Female	2	2	0%
	Male*	5	2	-60%
	*of which MSM	*	*	*
	Total	7	4	-43%
Powys Teaching	Female	0	0	-
	Male*	1	1	0%
	*of which MSM	*	*	*
	Total	1	1	0%
All Wales	Female	10	10	0%
	Male*	88	107	22%
	*of which MSM	60	74	23%
	Total	98	117	19%

i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.

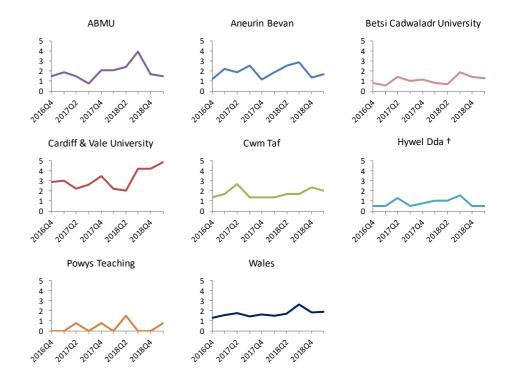
ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC.

iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded. iv) Data shown by local health board of residence. This may not necessarily reflect the local health board of clinic attended.

v) The following KC60/SHHAPT codes were used: primary, secondary and early latent syphilis (A1, A2, A3).

vi) Small numbers with potential for indirect disclosure of person identifiable information (*).

Figure 3. Syphilis diagnoses in ISH clinics per 100,000 population, from Q4 2016 to Q1 2019, by LHB of residence



i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.

ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC. iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.

iv) Data shown by local health board of residence. This may not necessarily reflect the local health board of clinic attended.

v) Hywel Dda reporting has improved greatly recently, with all clinics submitting data to SWS since March 2016 (†).

vi) The following KC60/SHHAPT codes were used: primary, secondary and early latent syphilis (A1, A2, A3).

Date: 31/07/2019	Version: v0	Page: 7 of 10

Appendix A: Data completeness

Key points

- •The percentage of new and rebook attendances with at least one code (SHHAPT, SRHAD, KC60, or local code) was 93%, the same for the two periods compared (Q4 2017- Q1 2018 and Q4 2018- Q1 2019).
- •Health board trends should be taken with caution, as completeness of data varies between clinics and health boards.
- •Hywel Dda reporting has improved in recent years, with all clinics submitting data to SWS since March 2016. Following this change, the number of clinics reporting from Hywel Dda health board has increased from 2 clinics at the beginning of 2016, to 10 clinics in Q1-Q2 2017.

Unmapped attendances

When SWS receives attendances with unrecognised codes, these attendances are not accepted into the system and are stored in "holding tables". CDSC is working to map as many of these codes as possible. At the time of this report, there were 1676 unmapped attendances with attendance date before the end of March 2019.

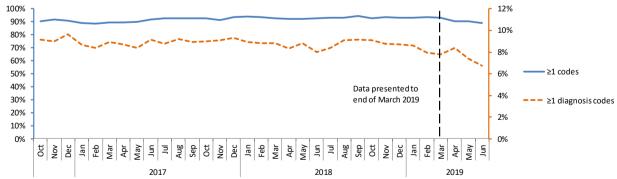
Coding completeness

Attendances which are received in SWS may or may not have diagnosis or service codes associated with them, as most of the time there is a lag between the attendance and the diagnosis or service codes being introduced in the system.

As there are codes to report "no service and/or treatment required" and "other conditions requiring treatment", in time, virtually all new patient and rebook patient attendances should have at least one code (rebook patient attendances are those where patients who are known to the clinic return for an unrelated episode of care). We use the percentage of these attendances with at least one code as an indicator to estimate the completeness of the data received.

Another indicator is the percentage of new patient and rebook patient attendances with at least one diagnosis code. Not all attendances need to have a diagnosis code. However, this indicator can help detect a decrease in sensitivity in recent weeks due to the time lag between the attendance and the diagnosis codes being sent to SWS (Figure 1A). This time lag can be longer for diagnoses than for services, as service codes are often recorded on the attendance date.

Figure A1. Percentage of new and rebook attendances with at least one diagnosis/ service code (of any kind), and percentage with at least one diagnosis code*, from Q4 2016 to Q2 2019, Wales



i) Only new patient and rebook patient attendances reported to SWS clinic are included. Rebook patient attendances are those where patients who are known to the clinic return for an unrelated episode of care.
 ii) * Including KC60/SHHAPT diagnoses codes for: chlamydia (C4, C4A, C4C), first episode of genital warts (C11A), first episode of genital berres (C10A) generates (B, B1, B2) new diagnosis of HIV (E1A, E2A, E3A1, H1, H1B), primary, secondary and early

genital herpes (C10A), gonorrhoea (B, B1, B2), new diagnosis of HIV (E1A, E2A, E3A1,H1,H1A,H1B), primary, secondary and early latent syphilis (A1, A2, A3), LGV (C2), acute hepatitis A infection (C15), first diagnosis of hepatitis B (C13, C13A, C13B), first diagnosis of hepatitis C (C14). iii) Missing values for new and rebook patient attendances in November and December 2016 were replaced by a 3-month rolling average for one clinic group

Date: 31/07/2019	Version: v0	Page: 8 of 10

Public Health Wales	SWS Quarterly report

Table A1. Number of new and rebook attendances and percentage with at least one diagnosis/ service code (of any kind) by clinic, Q4 2017- Q1 2018 to Q4 2018-Q1 2019, Wales

Clinic Number % with ±1 codes Number % with ±1 codes 6 238 99% 201 95% 30 1827 98% 202 99% 5 77 284 96% 8503 97% 27 284 96% 311 95% 10 15340 100% 15535 100% 28 4017 100% 4280 100% 14 822 89% 630 92% 34 71 92% 0 - 35 210 89% 183 96% 15 174 91% 46 89% 16 99% 102 91% 13 1166 99% 1303 96% 22 1011 99% 839 90% 23 732 99% 545 99% 24 199 98% 269 97% 11		Q4 20	Q4 2017-Q1 2018		Q4 2018-Q1 2019	
30 1827 98% 2202 99% 5 7781 96% 8503 97% 27 284 96% 311 95% 10 15340 100% 4280 100% 28 4017 100% 4280 100% 14 822 89% 982 86% 33 598 84% 630 92% 34 71 92% 0 - 35 210 89% 118 87% 12 204 77% 220 85% 13 1166 99% 1303 96% 22 1011 99% 1303 96% 23 732 99% 839 90% 24 199 98% 249 97% 11 1576 98% 1575 97% 9 11720 92% 11977 99% 33 98% <t< th=""><th>Clinic</th><th>Number</th><th>% with ≥1 codes</th><th>Number</th><th>% with ≥1 codes</th></t<>	Clinic	Number	% with ≥1 codes	Number	% with ≥1 codes	
5 7781 96% 8503 97% 27 284 96% 311 95% 10 15340 100% 15535 100% 28 4017 100% 4280 100% 14 822 89% 982 86% 33 552 884% 630 92% 34 71 92% 0 - 35 210 89% 183 96% 12 204 77% 220 85% 15 174 91% 46 89% 36 121 90% 102 91% 13 1166 99% 1303 96% 22 1011 99% 993 78% 23 732 99% 545 99% 24 199 98% 1575 97% 9 11720 92% 1575 97% 14 1576 98% 1575 97% 33 9 89% 10 70%	6	238	99%	201	95%	
27 284 96% 311 95% 10 15340 100% 15535 100% 28 4017 100% 4280 100% 14 822 89% 982 86% 33 598 84% 630 92% 34 71 92% 0 - 35 210 89% 183 96% 12 204 77% 220 85% 1 140 89% 118 87% 15 174 91% 46 89% 13 1166 99% 1303 96% 22 1011 99% 993 78% 23 732 99% 732 99% 24 199 98% 249 97% 11 1576 98% 1575 97% 9 11720 92% 11977 99% 7 646 96% 751 97% 38 52 94% 26 69%	30	1827	98%	2202	99%	
10 15340 100% 15535 100% 28 4017 100% 4280 100% 14 822 89% 982 86% 33 598 84% 630 92% 34 71 92% 0 - 35 210 89% 183 96% 12 204 77% 220 85% 1 140 89% 118 87% 15 174 91% 46 89% 36 121 90% 102 91% 22 1011 99% 993 78% 25 825 99% 839 90% 26 825 99% 839 90% 23 732 99% 752 97% 24 199 98% 1575 97% 31 1576 98% 1575 97% 38 52 94%	5	7781	96%	8503	97%	
28 4017 100% 4280 100% 14 822 89% 982 86% 33 598 84% 630 92% 34 71 92% 0 - 35 210 89% 183 96% 12 204 77% 220 85% 1 140 89% 118 87% 15 174 91% 46 89% 36 121 90% 102 91% 13 1166 99% 1303 96% 22 1011 99% 933 78% 23 732 99% 732 99% 24 199 98% 1575 97% 9 11720 92% 11977 99% 7 646 96% 751 97% 33 52 94% 26 69% 39 224 97%	27	284	96%	311	95%	
14 822 89% 982 86% 33 598 84% 630 92% 34 71 92% 0 - 35 210 89% 183 96% 12 204 77% 220 85% 1 140 89% 118 87% 15 174 91% 46 89% 36 121 90% 102 91% 13 1166 99% 1303 96% 22 1011 99% 933 78% 23 732 99% 545 99% 24 199 98% 249 97% 11 1576 98% 1575 97% 9 11720 92% 11977 99% 7 646 96% 751 97% 34 9 89% 10 70% 35 924 97%	10	15340	100%	15535	100%	
33 598 84% 630 92% 34 71 92% 0 - 35 210 89% 183 96% 12 204 77% 220 85% 1 140 89% 118 87% 15 174 91% 46 89% 36 121 90% 102 91% 13 1166 99% 1303 96% 22 1011 99% 933 78% 25 825 99% 839 90% 29 727 99% 545 99% 24 199 98% 1575 97% 11 1576 98% 1575 97% 14 170 92% 11977 99% 7 646 96% 751 97% 43 9 89% 10 70% 37 983 97%	28	4017	100%	4280	100%	
34 71 $92%$ 0 $ 35$ 210 $89%$ 183 $96%$ 12 204 $77%$ 220 $85%$ 1 140 $89%$ 118 $87%$ 15 174 $91%$ 46 $89%$ 36 121 $90%$ 102 $91%$ 13 1166 $99%$ 1303 $96%$ 22 1011 $99%$ 993 $78%$ 25 825 $99%$ 839 $90%$ 23 732 $99%$ 732 $99%$ 24 199 $98%$ 249 $97%$ 11 1576 $98%$ 1575 $97%$ 9 11720 $92%$ 11977 $99%$ 7 646 $96%$ 751 $97%$ 43 9 $89%$ 10 $70%$ 37 983 $97%$ 983 $99%$ 38 52 $94%$ 26 $69%$ 39 224 $97%$ 244 $100%$ 8 236 $98%$ 139 $94%$ 31 1840 $98%$ 1855 $98%$ 40 4 $75%$ 3 $100%$ 44 20 $100%$ 47 $98%$ 42 318 $98%$ 384 $99%$ 44 20 $100%$ 0 $ 47$ 6 $83%$ 5 $80%$ 42 318 $98%$ 670 $99%$ 51 18	14	822	89%	982	86%	
35 210 89% 183 96% 12 204 77% 220 85% 1 140 89% 118 87% 15 174 91% 46 89% 36 121 90% 102 91% 13 1166 99% 1303 96% 22 1011 99% 993 78% 25 825 99% 839 90% 23 732 99% 732 99% 24 199 98% 249 97% 11 1576 98% 1575 97% 9 11720 92% 11977 99% 38 52 94% 26 69% 39 89% 10 70% 38 52 94% 26 69% 39 224 97% 244 100% 8 236 98% 139	33	598	84%	630	92%	
12 204 $77%$ 220 $85%$ 1140 $89%$ 118 $87%$ 15 174 $91%$ 46 $89%$ 36121 $90%$ 102 $91%$ 131166 $99%$ 1303 $96%$ 221011 $99%$ 993 $78%$ 25 825 $99%$ 839 $90%$ 29 727 $99%$ 545 $99%$ 23 732 $99%$ 732 $99%$ 24199 $98%$ 249 $97%$ 11 1576 $98%$ 1575 $97%$ 9 11720 $92%$ 11977 $99%$ 7 646 $96%$ 751 $97%$ 439 $89%$ 10 $70%$ 37 983 $97%$ 983 $99%$ 38 52 $94%$ 26 $69%$ 39 224 $97%$ 244 $100%$ 8 236 $98%$ 139 $94%$ 31 1840 $98%$ 1855 $98%$ 40 4 $75%$ 3 $100%$ 44 20 $100%$ 0 $-$ 45 $100%$ 0 $-$ 46 5 $100%$ 0 $-$ 47 6 $83%$ 5 $80%$ 32 710 $93%$ 670 $99%$ 51 187 $60%$ 237 $64%$ 2 780 $71%$ 2156 $62%$ 48 29	34	71	92%	0	-	
114089%11887%15 174 91% 4689%36121 90% 102 91% 13 1166 99% 1303 96% 22 1011 99% 993 78% 25 825 99% 839 90% 23 732 99% 732 99% 24 199 98% 249 97% 11 1576 98% 1575 97% 9 11720 92% 11977 99% 7 646 96% 751 97% 439 89% 10 70% 37 983 97% 983 99% 38 52 94% 26 69% 39 224 97% 244 100% 8 236 98% 139 94% 31 1840 98% 1855 98% 40 4 75% 3 100% 44 20 100% 47 98% 45 100% 0 $-$ 46 5 100% 0 $-$ 47 6 83% 584 99% 48 29 0% 0 $-$ 20 530 58% 602 68% 19 844 57% 1150 63% 19 844 57% 1150 63% 19 844 57% 1150 63% 19 844 <	35	210	89%	183	96%	
15 174 91% 46 89% 36121 90% 102 91% 13 1166 99% 1303 96% 22 1011 99% 993 78% 25 825 99% 839 90% 29 727 99% 545 99% 23 732 99% 732 99% 52 45 98% 85 99% 24 199 98% 249 97% 9 11720 92% 11977 99% 7 646 96% 751 97% 439 89% 10 70% 37 983 97% 244 100% 38 52 94% 26 69% 39 224 97% 244 100% 8 236 98% 139 94% 31 1840 98% 1855 98% 40 4 75% 3 100% 44 20 100% 47 98% 26 3088 93% 2777 93% 41 71 96% 53 98% 42 318 98% 384 99% 46 5 100% 0 $-$ 47 6 83% 5 80% 32 710 93% 670 99% 51 187 60% 237 64% 2 780 71% 2156 62% <td>12</td> <td>204</td> <td>77%</td> <td>220</td> <td>85%</td>	12	204	77%	220	85%	
3612190%10291%13116699%130396%22101199%99378%2582599%83990%2972799%54599%2373299%73299%524598%8599%2419998%24997%11157698%157597%91172092%1197799%764696%75197%43989%1070%385294%2669%3922497%244100%823698%13994%31184098%185598%40475%3100%4420100%4798%26308893%277793%417196%5398%4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%4<	1	140	89%	118	87%	
13116699%130396%22101199%993 78% 25 825 99% 839 90%2972799% 545 99%23 732 99% 732 99%52 45 98% 85 99%2419998%24997%11157698%157597%91172092%1197799%764696%75197%43989%1070%3798397%98399%385294%2669%3922497%244100%823698%13994%31184098%185598%40475%3100%4420100%4798%26308893%277793%417196%5398%4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%<	15	174	91%	46	89%	
22101199%99378% 25 825 $99%$ 839 $90%$ 29 727 $99%$ 545 $99%$ 23 732 $99%$ 732 $99%$ 52 45 $98%$ 85 $99%$ 24 199 $98%$ 249 $97%$ 11 1576 $98%$ 1575 $97%$ 9 11720 $92%$ 11977 $99%$ 7 646 $96%$ 751 $97%$ 43 9 $89%$ 10 $70%$ 37 983 $97%$ 983 $99%$ 38 52 $94%$ 26 $69%$ 39 224 $97%$ 244 $100%$ 8 236 $98%$ 139 $94%$ 31 1840 $98%$ 1855 $98%$ 40 4 $75%$ 3 $100%$ 44 20 $100%$ 47 $98%$ 26 3088 $93%$ 2777 $93%$ 41 71 $96%$ 53 $98%$ 42 318 $98%$ 384 $99%$ 46 5 $100%$ 0 $ 47$ 6 $83%$ 5 $80%$ 32 710 $93%$ 670 $99%$ 51 187 $60%$ 237 $64%$ 2 780 $71%$ 2156 $62%$ 48 29 $0%$ 0 $ 20$ 530	36	121	90%	102	91%	
25 825 99% 839 90% 29 727 99% 545 99% 23 732 99% 732 99% 52 45 98% 85 99% 24 199 98% 249 97% 11 1576 98% 1575 97% 9 11720 92% 11977 99% 7 646 96% 751 97% 43 9 89% 10 70% 37 983 97% 983 99% 38 52 94% 26 69% 39 224 97% 244 100% 8 236 98% 139 94% 31 1840 98% 1855 98% 40 4 75% 3 100% 44 20 100% 47 98% 26 3088 93% 2777 93% 41 71 96% 53 98% <	13	1166	99%	1303	96%	
2972799%54599%2373299%73299%524598%8599%2419998%24997%11157698%157597%91172092%1197799%764696%75197%43989%1070%3798397%98399%385294%2669%3922497%244100%823698%13994%31184098%185598%40475%3100%4420100%4798%26308893%277793%417196%5398%4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%50 <td>22</td> <td>1011</td> <td>99%</td> <td>993</td> <td>78%</td>	22	1011	99%	993	78%	
2373299%73299%524598%8599%2419998%24997%11157698%157597%91172092%1197799%764696%75197%43989%1070%3798397%98399%385294%2669%3922497%244100%823698%13994%31184098%185598%40475%3100%4420100%4798%26308893%277793%417196%5398%4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185% <td>25</td> <td>825</td> <td>99%</td> <td>839</td> <td>90%</td>	25	825	99%	839	90%	
524598%8599%2419998%24997%11157698%157597%91172092%1197799%764696%75197%43989%1070%3798397%98399%385294%2669%3922497%244100%823698%13994%31184098%185598%40475%3100%4420100%4798%26308893%277793%417196%5398%4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	29	727	99%	545	99%	
2419998%24997%11157698%157597%91172092%1197799%764696%75197%43989%1070%3798397%98399%385294%2669%3922497%244100%823698%13994%31184098%185598%40475%3100%4420100%4798%26308893%277793%417196%5398%4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	23	732	99%	732	99%	
111576 98% 1575 97% 911720 92% 11977 99% 7646 96% 751 97% 439 89% 10 70% 37 983 97% 983 99% 38 52 94% 26 69% 39 224 97% 244 100% 8 236 98% 139 94% 31 1840 98% 1855 98% 404 75% 3 100% 4420 100% 47 98% 26 3088 93% 2777 93% 41 71 96% 53 98% 42 318 98% 384 99% 46 5 100% 0 $-$ 47 6 83% 5 80% 32 710 93% 670 99% 51 187 60% 237 64% 2 780 71% 2156 62% 48 29 0% 0 $ 20$ 530 58% 602 68% 19 884 57% 1150 63% 3 1125 63% 1337 63% 4 313 79% 199 71% 17 2250 58% 2528 56% 16 1047 82% 1305 73% 50 987 89% 1241 85% <	52	45	98%	85	99%	
9 11720 92% 11977 99% 7 646 96% 751 97% 439 89% 10 70% 37 983 97% 983 99% 38 52 94% 26 69% 39 224 97% 244 100% 8 236 98% 139 94% 31 1840 98% 1855 98% 404 75% 3 100% 4420 100% 47 98% 26 3088 93% 2777 93% 41 71 96% 53 98% 42 318 98% 384 99% 465 100% 0-476 83% 5 80% 32 710 93% 670 99% 51 187 60% 237 64% 2 780 71% 2156 62% 48 29 0% 0-20 530 58% 602 68% 19 884 57% 1150 63% 3 1125 63% 1337 63% 4 313 79% 199 71% 17 2250 58% 2528 56% 16 1047 82% 1241 85%	24	199	98%	249		
7 646 96% 751 97% 439 89% 10 70% 37 983 97% 983 99% 38 52 94% 26 69% 39 224 97% 244 100% 8 236 98% 139 94% 31 1840 98% 1855 98% 404 75% 3 100% 4420 100% 47 98% 26 3088 93% 2777 93% 41 71 96% 53 98% 42 318 98% 384 99% 465 100% 0-476 83% 5 80% 32 710 93% 670 99% 51 187 60% 237 64% 2 780 71% 2156 62% 48 29 0% 0-20 530 58% 602 68% 19 884 57% 1150 63% 3 1125 63% 1337 63% 4 313 79% 199 71% 17 2250 58% 2528 56% 16 1047 82% 1305 73% 50 987 89% 1241 85%	11	1576	98%	1575	97%	
439 $89%$ 10 $70%$ 37 983 $97%$ 983 $99%$ 38 52 $94%$ 26 $69%$ 39 224 $97%$ 244 $100%$ 8 236 $98%$ 139 $94%$ 31 1840 $98%$ 1855 $98%$ 40 4 $75%$ 3 $100%$ 44 20 $100%$ 47 $98%$ 26 3088 $93%$ 2777 $93%$ 41 71 $96%$ 53 $98%$ 42 318 $98%$ 384 $99%$ 46 5 $100%$ 0 $ 47$ 6 $83%$ 5 $80%$ 32 710 $93%$ 670 $99%$ 51 187 $60%$ 237 $64%$ 2 780 $71%$ 2156 $62%$ 48 29 $0%$ 0 $ 20$ 530 $58%$ 602 $68%$ 19 884 $57%$ 1150 $63%$ 3 1125 $63%$ 1337 $63%$ 4 313 $79%$ 199 $71%$ 17 2250 $58%$ 2528 $56%$ 16 1047 $82%$ 1305 $73%$ 50 987 $89%$ 1241 $85%$	9	11720	92%	11977	99%	
3798397%98399% 38 52 94%2669% 39 22497%244100% 8 23698%13994% 31 184098%185598% 40 475%3100% 44 20100%4798%26308893%277793% 41 7196%5398% 42 31898%38499% 46 5100%0- 47 683%580% 32 71093%67099% 51 18760%23764% 2 78071%215662% 48 290%0- 20 53058%60268% 19 88457%115063% 3 112563%133763% 4 31379%19971%17225058%252856%16104782%130573%5098789%124185%	7	646	96%	751	97%	
385294%2669%3922497%244100%823698%13994%31184098%185598%40475%3100%4420100%4798%26308893%277793%417196%5398%4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	43	9	89%	10	70%	
3922497%244100%823698%13994%31184098%185598%40475%3100%4420100%4798%26308893%277793%417196%5398%4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	37	983	97%	983	99%	
8 236 98% 139 94% 31 1840 98% 1855 98% 40 4 75% 3 100% 44 20 100% 47 98% 26 3088 93% 2777 93% 41 71 96% 53 98% 42 318 98% 384 99% 46 5 100% 0 - 47 6 83% 5 80% 32 710 93% 670 99% 51 187 60% 237 64% 2 780 71% 2156 62% 48 29 0% 0 - 20 530 58% 602 68% 19 884 57% 1150 63% 3 1125 63% 1337 63% 4 313 79% 199 71% 17 2250 58% 2528 56%	38	52	94%	26	69%	
31184098%185598%40475%3100%4420100%4798%26308893%277793%417196%5398%4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	39	224	97%	244	100%	
40475%3100%4420100%4798%26308893%277793%417196%5398%4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	8	236	98%	139	94%	
4420100%4798%26308893%277793%417196%5398%4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	31	1840	98%	1855	98%	
26308893%277793%417196%5398%4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	40	4	75%	3	100%	
417196%5398%4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	44	20	100%	47	98%	
4231898%38499%465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	26	3088	93%	2777	93%	
465100%0-47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	41	71	96%	53		
47683%580%3271093%67099%5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	42	318	98%	384	99%	
32 710 93% 670 99% 51 187 60% 237 64% 2 780 71% 2156 62% 48 29 0% 0 - 20 530 58% 602 68% 19 884 57% 1150 63% 3 1125 63% 1337 63% 4 313 79% 199 71% 17 2250 58% 2528 56% 16 1047 82% 1305 73% 50 987 89% 1241 85%	46	5	100%	0	-	
5118760%23764%278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	47	6	83%	5	80%	
278071%215662%48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	32	710	93%	670	99%	
48290%0-2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	51	187	60%	237	64%	
2053058%60268%1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	2	780	71%	2156	· · · · · · · · · · · · · · · · · · ·	
1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	48	29	0%	0	-	
1988457%115063%3112563%133763%431379%19971%17225058%252856%16104782%130573%5098789%124185%	20	530	58%	602		
3 1125 63% 1337 63% 4 313 79% 199 71% 17 2250 58% 2528 56% 16 1047 82% 1305 73% 50 987 89% 1241 85%	19	884		1150		
17225058%252856%16104782%130573%5098789%124185%		1125	63%	1337		
17225058%252856%16104782%130573%5098789%124185%	4	313	79%	199		
<u>50 987 89% 1241 85%</u>	17		58%	2528		
<u>50 987 89% 1241 85%</u>	16	1047	82%	1305		
	50	987	89%	1241		
	Total	66,172	93%	70313	93%	

i) Diagnoses made in new patient and rebook patient attendances reported to SWS clinic. Rebook patient attendances are those where patients who are known to the clinic return for an unrelated episode of care.

ii) Green: >=90% attendances with at least one code; Orange: >=80% and <90% attendances with at least one code; Red: <80% attendances with at least one code; Grey: Not in service. iii) Some clinics are reporting sexual and reproductive health through the SWS-STI system using the new patient and rebook patient

attendance types, and therefore attendance numbers are not always comparable across clinics.

Appendix B: Episode periods

Table B1: Episode periods within which KC60/SHHAPT codes are deduplicated

KC60/SHHAPT Code and description		Episode period	Further cleaning
A1	Primary infectious syphilis	42 days	42 days between A1 and A3
A2	Secondary infectious syphilis	182 days	42 days between A2 and A3
A3	Early latent syphilis	728 days	42 days between A1 or A2 and A3
B, B1, B2	Gonorrhoea (SHHAPT) / Uncomplicated gonorrhoea infection	42 days	-
C2	LGV	42 days	-
C4, C4A, C4C	Chlamydia (SHHAPT) / Uncomplicated chlamydial infection	42 days	-
C10A	Anogenital herpes simplex - first attack	Patient's lifetime	Subsequent episodes replaced by recurrence code
C11A	Anogenital warts - first attack	Patient's lifetime	Subsequent episodes replaced by recurrence code
C13, C13A, C13B	Hepatitis B – 1st diagnosis	Patient's lifetime	-
C14	Viral hepatitis C: first diagnosis	Patient's lifetime	-
C15	Viral Hepatitis A: Acute Infection	Patient's lifetime	-
E1A	New HIV diagnosis: asymptomatic	Patient's lifetime	Only one code new HIV diagnosis code
E2A	New HIV diagnosis: symptomatic (not AIDS)	Patient's lifetime	Only one code new HIV diagnosis code
E3A1	AIDS: first presentation - new HIV diagnosis	Patient's lifetime	Only one code new HIV diagnosis code
H1	New HIV diagnosis	Patient's lifetime	Only one code new HIV diagnosis code
H1A	New HIV diagnosis: Acute	Patient's lifetime	Only one code new HIV diagnosis code
H1B	New HIV diagnosis: Late	Patient's lifetime	Only one code new HIV diagnosis code
P1A	HIV antibody test (no sexual health screen)	42 days	-
S1	Sexual health screen (no HIV antibody test)	42 days	-
S2	HIV antibody test and sexual health screen	42 days	-
T1	Chlamydia test	42 days	-
Т2	Chlamydia and gonorrhoea tests	42 days	-
Т3	Chlamydia, gonorrhoea and syphilis tests	42 days	-
Τ4	Full sexual health screen including HIV antibody test	42 days	-
Т7	Syphilis & HIV test	42 days	-