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Sexual Health in Wales Surveillance Scheme (SWS)

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(Data to end December 2017)

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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 July to December 2017 (Q2-Q3 2017) with the same period of the previous year. Data are presented as at 18th April 2018.

Key points

- There was an increase in reports of new diagnoses of syphilis, gonorrhoea, and chlamydia across Wales over the last year, and a decrease in reports of HIV, first episode of warts, herpes, hepatitis B and hepatitis C (comparing Q3-Q4 2016 and Q3-Q4 2017) (Table 1). Please note some of these changes may be due to small numbers, and should be taken with caution. Comparing Q3-Q4 2016 and Q3-Q4 2017:
 - Syphilis increased by 32% from 76 to 100 cases, whilst reports of syphilis testing increased by 8% (Table 1).
 - Gonorrhoea increased by 17% whilst gonorrhoea testing increased by 4%.
 - Chlamydia diagnoses increased by 4%, corresponding to a similar increase in testing.
 - New diagnoses of HIV have decreased from 34 to 26 cases across the two periods. HIV testing has increased by 8%.
 - Reports of first episodes of warts decreased by 7% and those of first episodes of herpes by 6%.
 - First diagnoses of hepatitis B decreased from 13 to 10 cases.
 - Hepatitis C diagnoses decreased from 18 to 15 cases.
 - One case of Hepatitis A was reported for the second period.
 - The increase in syphilis cases in males was more than double the increase seen in females (33% vs. 14% respectively) (Table 2). Gonorrhoea has increased both in males and females (19% vs. 14%), whilst the increase in chlamydia was only observed in females (7%). Most of the decrease in new HIV diagnoses was due to a decrease in females, from 8 to 1 cases. The decrease in first episodes of herpes was mostly due to a 14% decrease in males.
 - In men who have sex with men (MSM), syphilis increased by 34%, accounting for most of the increase in male population. New diagnoses of HIV remained relatively stable. The increase in gonorrhoea from Q3-Q4 2016 to Q3-Q4 2017 was more marked in males not reporting as MSM.
 - Amongst 15-24 year olds, the trends were similar to those in the general population. However, in this group syphilis fell from 17 to 14 cases. New diagnoses of HIV remained stable in this group, with 2 cases per period.
 - Health board (HB) trends should be interpreted with caution, as completeness of data varies between clinics and health boards. Improved reporting from Hywel Dda means that data collected prior to March 2016 are not comparable to recent data from this HB. Cardiff and Vale improved the reporting systems from its community clinics during 2016, which may have contributed to some of the STI increases seen in the HB and in Wales.
 - The latest available trends indicate that chlamydia is increasing in Cardiff and Vale University health board, and gonorrhoea and syphilis have increased across many Welsh HBs between the periods compared.

General population

Table 1. Percentage change in selected diagnoses and screens made in ISH clinics from Q3–Q4 2016 to Q3–Q4 2017 in Wales

	Diagnoses			Screens		
	Q3 2016-Q4 2016	Q3 2017-Q4 2017	% Change	Q3 2016-Q4 2016	Q3 2017-Q4 2017	% Change
Chlamydia	3317	3450	4%	34014	35247	4%
Warts (1st episode)	1554	1447	-7%	-	-	-
Herpes (1st episode)	751	708	-6%	-	-	-
Gonorrhoea	487	570	17%	34002	35236	4%
HIV (new diagnosis)	34	26	-24%	17933	19316	8%
Syphilis	76	100	32%	17517	18919	8%
LGV	0	1	-	-	-	-
Hepatitis A (acute)	0	1	-	-	-	-
Hepatitis B (1st diagnosis)	13	10	-23%	-	-	-
Hepatitis C (1st diagnosis)	18	15	-17%	-	-	-

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) 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 Q3–Q4 2016 to Q3–Q4 2017 by gender and sexuality in Wales

	Q3 2016-Q4 2016			Q3 2017-Q4 2017			% Change		
	Male*	*of which MSM	Female	Male*	*of which MSM	Female	Male*	*of which MSM	Female
Chlamydia	1490	169	1827	1492	161	1958	0%	-5%	7%
Warts (1st episode)	880	64	674	814	50	633	-8%	-22%	-6%
Herpes (1st episode)	290	23	461	250	15	458	-14%	-35%	-1%
Gonorrhoea	303	155	184	360	169	210	19%	9%	14%
HIV (new diagnosis)	26	14	8	25	15	1	-4%	7%	-88%
Syphilis	69	50	7	92	67	8	33%	34%	14%
LGV	0	0	0	1	*	0	-	-	-
Hepatitis A (acute)	0	0	0	0	0	1	-	-	-
Hepatitis B (1st diagnosis)	6	*	7	6	*	4	0%	-	-43%
Hepatitis C (1st diagnosis)	13	7	5	9	*	6	-31%	-	20%

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) 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 (*).

Young people (15-24 year olds)

Table 3. Percentage change in selected diagnoses made in ISH clinics Q3 2016–Q4 to Q3–Q4 2017 in 15-24 year olds in Wales

15-24 year olds	Q3 2016-Q4 2016	Q3 2017-Q4 2017	% Change	% Change in screens
Chlamydia	2381	2447	3%	1%
Warts (1st episode)	822	741	-10%	-
Herpes (1st episode)	383	344	-10%	-
Gonorrhoea	241	277	15%	1%
HIV (new diagnosis)	2	2	0%	4%
Syphilis	17	14	-18%	4%
LGV	0	0	-	-
Hepatitis A (acute)	0	0	-	-
Hepatitis B (1st diagnosis)	3	3	0%	-
Hepatitis C (1st diagnosis)	1	2	100%	-

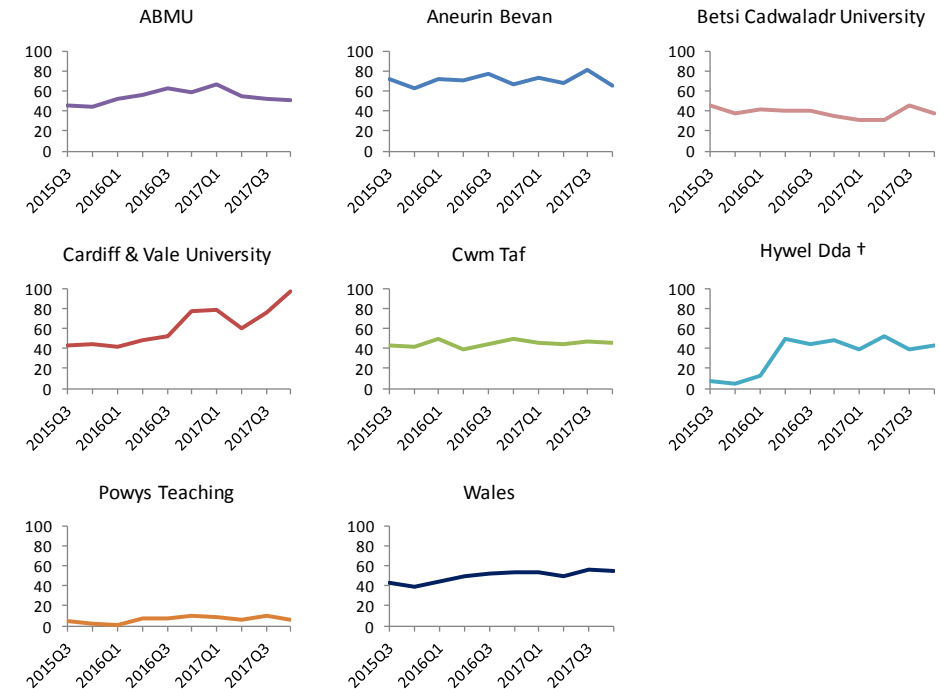
- i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.
 ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level.
 iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.
 iv) 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).

Chlamydia

Table 4. Percentage change in chlamydia diagnoses made in ISH clinics from Q3–Q4 2016 to Q3–Q4 2017, by LHB of residence, gender and sexuality

LHB	Group	Q3 2016–Q4 2016	Q3 2017–Q4 2017	% Change
Abertawe Bro Morgannwg University	Female	371	323	-13%
	Male*	277	229	-17%
	*of which MSM	16	10	-38%
	Total	648	552	-15%
Aneurin Bevan	Female	467	488	4%
	Male*	372	374	1%
	*of which MSM	59	44	-25%
	Total	839	862	3%
Betsi Cadwaladr University	Female	280	311	11%
	Male*	251	265	6%
	*of which MSM	13	22	69%
	Total	531	576	8%
Cardiff & Vale University	Female	352	492	40%
	Male*	282	354	26%
	*of which MSM	68	63	-7%
	Total	634	846	33%
Cwm Taf	Female	148	142	-4%
	Male*	136	137	1%
	*of which MSM	*	*	*
	Total	284	279	-2%
Hywel Dda†	Female	197	193	-2%
	Male*	161	121	-25%
	*of which MSM	9	12	33%
	Total	358	314	-12%
Powys Teaching	Female	12	9	-25%
	Male*	11	12	9%
	*of which MSM	*	*	*
	Total	23	21	-9%
All Wales	Female	1827	1958	7%
	Male*	1490	1492	0%
	*of which MSM	169	161	-5%
	Total	3317	3450	4%

Figure 1. Chlamydia diagnoses in ISH clinics per 100,000 population, from Q3 2015 to Q4 2017, 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) Hywel Dda reporting has improved greatly recently, with all clinics submitting data to SWS since March 2016 (†).

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

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

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

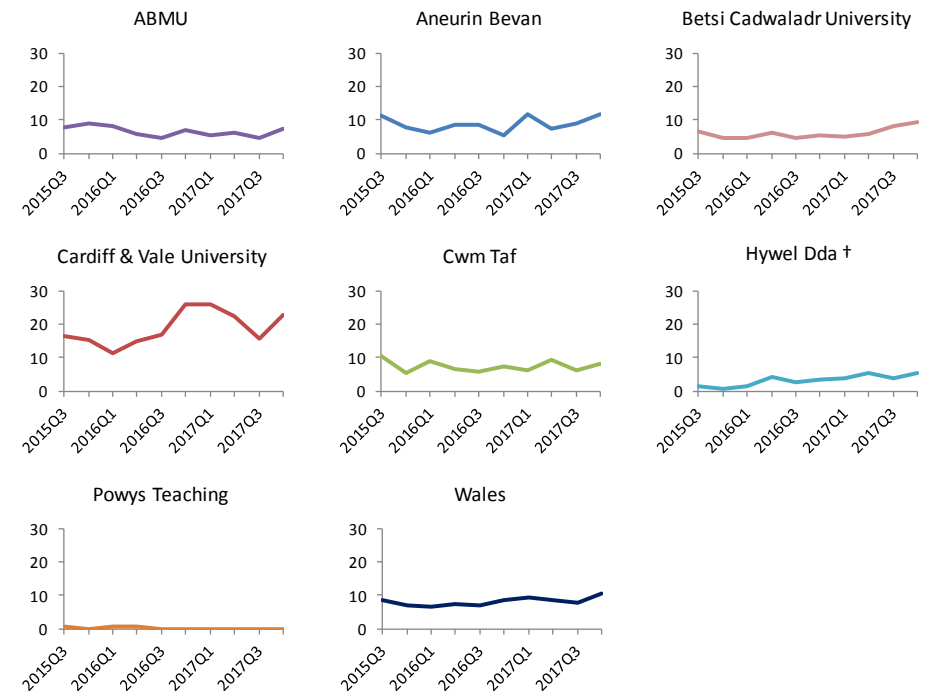
vi) Small numbers with potential for indirect disclosure of person identifiable information (*).

Gonorrhoea

Table 5. Percentage change in gonorrhoea diagnoses made in ISH clinics from Q3–Q4 2016 to Q3–Q4 2017, by LHB of residence, gender and sexuality

LHB	Group	Q3 2016- Q4 2016	Q3 2017- Q4 2017	% Change
Abertawe Bro Morgannwg University	Female	15	27	80%
	Male*	46	36	-22%
	*of which MSM	13	15	15%
	Total	61	63	3%
Aneurin Bevan	Female	26	42	62%
	Male*	56	79	41%
	*of which MSM	36	44	22%
	Total	82	121	48%
Betsi Cadwaladr University	Female	31	49	58%
	Male*	40	71	78%
	*of which MSM	12	21	75%
	Total	71	120	69%
Cardiff & Vale University	Female	96	68	-29%
	Male*	115	120	4%
	*of which MSM	70	73	4%
	Total	211	188	-11%
Cwm Taf	Female	8	10	25%
	Male*	31	33	6%
	*of which MSM	15	8	-47%
	Total	39	43	10%
Hywel Dda†	Female	8	14	75%
	Male*	15	21	40%
	*of which MSM	9	8	-11%
	Total	23	35	52%
Powys Teaching	Female	0	0	-
	Male*	0	0	-
	*of which MSM	0	0	-
	Total	0	0	-
All Wales	Female	184	210	14%
	Male*	303	360	19%
	*of which MSM	155	169	9%
	Total	487	570	17%

Figure 2. Gonorrhoea diagnoses in ISH clinics per 100,000 population, Q3 2015 to Q4 2017, 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) Hywel Dda reporting has improved greatly recently, with all clinics submitting data to SWS since March 2016 (†).
- v) The following KC60/SHHAPT codes were used: gonorrhoea (B, B1, B2).

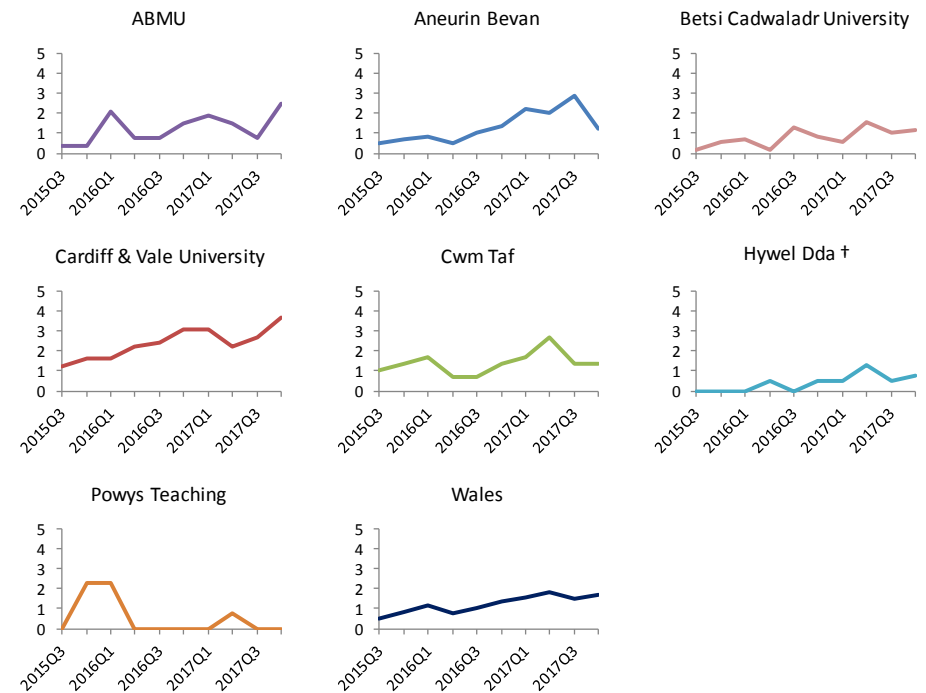
- i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.
- ii) Recent figures may be incomplete due to delays in reporting and to incomplete mapping at CDSC level.
- iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.
- iv) Hywel Dda reporting has improved greatly recently, with all clinics submitting data to SWS since March 2016 (†).
- v) The following KC60/SHHAPT codes were used: gonorrhoea (B, B1, B2).
- vi) Small numbers with potential for indirect disclosure of person identifiable information (*).

Syphilis

Table 6. Percentage change in syphilis diagnoses made in ISH clinics from Q3–Q4 2016 to Q3–Q4 2017, by LHB of residence, gender and sexuality

LHB	Group	Q3 2016– Q4 2016	Q3 2017– Q4 2017	% Change
Abertawe Bro Morgannwg University	Female	0	1	-
	Male*	12	16	33%
	*of which MSM	7	7	0%
	Total	12	17	42%
Aneurin Bevan	Female	2	1	-50%
	Male*	12	23	92%
	*of which MSM	10	22	120%
	Total	14	24	71%
Betsi Cadwaladr University	Female	1	4	300%
	Male*	14	11	-21%
	*of which MSM	7	7	0%
	Total	15	15	0%
Cardiff & Vale University	Female	2	0	-100%
	Male*	25	31	24%
	*of which MSM	22	28	27%
	Total	27	31	15%
Cwm Taf	Female	1	1	0%
	Male*	5	7	40%
	*of which MSM	*	*	*
	Total	6	8	33%
Hywel Dda†	Female	1	1	0%
	Male*	1	4	300%
	*of which MSM	*	*	*
	Total	2	5	150%
Powys Teaching	Female	0	0	-
	Male*	0	0	-
	*of which MSM	0	0	-
	Total	0	0	-
All Wales	Female	7	8	14%
	Male*	69	92	33%
	*of which MSM	50	67	34%
	Total	76	100	32%

Figure 3. Syphilis diagnoses in ISH clinics per 100,000 population, from Q3 2015 to Q4 2017, 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) Hywel Dda reporting has improved greatly recently, with all clinics submitting data to SWS since March 2016 (†).
- v) The following KC60/SHHAPT codes were used: primary, secondary and early latent syphilis (A1, A2, A3).

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

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 91% and 92% respectively for the two periods compared (Q3-Q4 2016 and Q3-Q4 2017).
- Health board trends should be taken with caution, as completeness of data varies between clinics and health boards.
- Hywel Dda reporting has improved greatly recently, 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 24 unmapped attendances with attendance date before the end of December 2017.

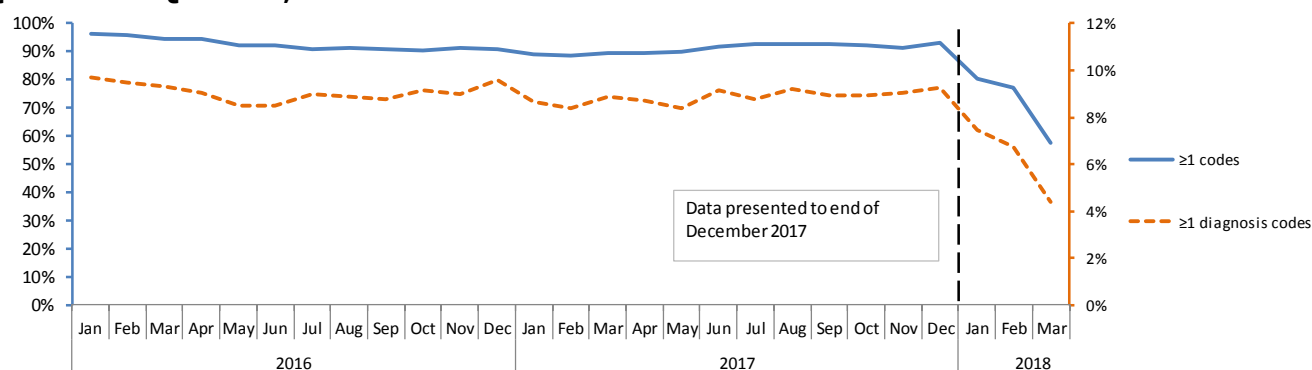
Coding completeness

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 Q1 2016 to Q2 2018, 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 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

Table A1. Number of new and rebook attendances and percentage with at least one diagnosis/ service code (of any kind) by clinic, Q3–Q4 2016 to Q3–Q4 2017, Wales

Clinic	Q3 2016-Q4 2016		Q3 2017-Q4 2017	
	Number	% with ≥1 codes	Number	% with ≥1 codes
6	268	98%	250	99%
30	1929	99%	1961	99%
5	7372	97%	7371	97%
27	395	97%	305	98%
10	3856	100%	4010	100%
28	14965	100%	15547	100%
14	679	93%	723	82%
33	544	83%	691	81%
34	102	100%	80	83%
35	203	93%	232	90%
12	232	87%	218	74%
1	121	92%	142	79%
15	159	91%	190	91%
36	192	92%	151	87%
13	1123	99%	1206	99%
22	1104	99%	1154	97%
25	860	94%	902	98%
29	528	99%	712	99%
23	701	99%	775	99%
24	269	99%	196	98%
11	1707	98%	1564	98%
9	10883	80%	10631	90%
7	722	97%	648	96%
43	6	50%	8	75%
37	1052	97%	956	97%
38	84	93%	73	95%
39	255	95%	210	98%
8	1797	97%	251	96%
31	2102	97%	1824	95%
44	18	89%	25	100%
26	1613	95%	2931	96%
45	5	0%	1	100%
41	101	66%	88	36%
42	285	93%	297	97%
46	12	42%	5	0%
47	12	8%	5	80%
32	754	97%	701	93%
2	848	56%	717	72%
48	14	0%	21	0%
20	518	45%	444	57%
19	787	52%	877	55%
3	938	62%	1088	61%
4	252	93%	367	77%
17	1905	61%	2305	55%
16	1043	74%	933	80%
49	38	50%	0	-
50	874	77%	963	89%
52	0	-	40	80%
40	0	-	7	86%
51	0	-	207	57%
18	0	-	0	-
21	0	-	0	-
Wales	64227	91%	65003	92%

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	-
T2	Chlamydia and gonorrhoea tests	42 days	-
T3	Chlamydia, gonorrhoea and syphilis tests	42 days	-
T4	Full sexual health screen including HIV antibody test	42 days	-
T7	Syphilis & HIV test	42 days	-