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Sexual Health in Wales Surveillance Scheme (SWS)

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(Data to end June 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. Data are presented to end of June 2017, as at 16th October 2017, and with reviewed HIV data from a clinic reporting group.

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 first episode of warts, herpes and hepatitis B (comparing Q1 2016-Q2 2016 and Q1 2017-Q2 2017) (Table 1). Comparing Q1 2016-Q2 2016 and Q1 2017-Q2 2017:
 - Syphilis increased by 61% from 61 to 98 cases, whilst reports of syphilis testing increased by 4% (Table 1).
 - Gonorrhoea increased by 31% whilst gonorrhoea testing increased by 10%.
 - Chlamydia diagnoses increased by 9%, corresponding to a similar increase in testing.
 - Reports of first episodes of warts decreased by 9% and those of first episodes of herpes by 7%.
 - First diagnoses of hepatitis B decreased by 43%, from 14 to 8 cases.
 - New diagnoses of HIV remained relatively stable, with 33 and 32 cases respectively in the two periods compared. HIV testing also remained stable.
 - Hepatitis C diagnosis remained relatively stable, with 14 and 15 cases respectively in the two periods compared.
 - Hepatitis A and LGV diagnoses remained infrequent, with a maximum of one diagnose within each period.
 - Gonorrhoea and chlamydia increased both in males and females (Table 2). The increase in gonorrhoea was more marked in males (34% vs 26% in females), whilst the chlamydia increase was similar in both genders. All of the increase in syphilis was due to an increase in cases in males. There was an increase in new diagnoses of HIV in females, from 4 to 8 cases, which should be interpreted with caution due to small numbers.
 - In men who have sex with men (MSM), syphilis increased by 84% and gonorrhoea by 46%, accounting for most of the increase in the general male population. No increase was detected in new diagnoses of HIV in this population.
 - Amongst 15-24 year olds, the trends were similar to those in the general population. However, in this group syphilis fell from 13 to 10 cases.
 - Health board (HB) trends should be taken with caution, as completeness of data varies between clinics and health boards. Improved reporting from Hywel Dda means that the two periods are not comparable in this HB. Cardiff and Vale has improved reporting from its community clinics, which may have contributed to some of the STI increases seen in the HB and in Wales.
 - The latest available trends indicate that gonorrhoea is on the increase in Aneurin Bevan and Cardiff and Vale University HB, and syphilis has been on the increase across most Welsh HBs since mid-2016.

General population

Table 1. Percentage change in selected diagnoses and screens made in ISH clinics from Q1 2016–Q2 2016 to Q1 2017–Q2 2017 in Wales

	Diagnoses			Screens		
	Q1 2016-Q2 2016	Q1 2017-Q2 2017	% Change	Q1 2016-Q2 2016	Q1 2017-Q2 2017	% Change
Chlamydia	2881	3132	9%	29190	32169	10%
Warts (1st episode)	1576	1432	-9%	-	-	-
Herpes (1st episode)	708	657	-7%	-	-	-
Gonorrhoea	426	559	31%	29175	32143	10%
HIV (new diagnosis)	33	32	-3%	16819	17314	3%
Syphilis	61	98	61%	16349	16938	4%
LGV	0	1	-	-	-	-
Hepatitis A (acute)	1	0	-100%	-	-	-
Hepatitis B (1st diagnosis)	14	8	-43%	-	-	-
Hepatitis C (1st diagnosis)	14	15	7%	-	-	-

- 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 Q1 2016–Q2 2016 to Q1 2017–Q2 2017 by gender and sexuality in Wales

	Q1 2016-Q2 2016			Q1 2017-Q2 2017			% Change		
	Male*	*of which MSM	Female	Male*	*of which MSM	Female	Male*	*of which MSM	Female
Chlamydia	1300	145	1581	1384	152	1748	6%	5%	11%
Warts (1st episode)	851	57	725	760	52	672	-11%	-9%	-7%
Herpes (1st episode)	244	19	464	225	20	432	-8%	5%	-7%
Gonorrhoea	274	141	152	367	206	192	34%	46%	26%
HIV (new diagnosis)	29	15	4	24	14	8	-17%	-7%	100%
Syphilis	51	37	10	88	68	10	73%	84%	0%
LGV	0	*	0	0	*	1	-	-	-
Hepatitis A (acute)	1	*	0	0	*	0	-100%	-	-
Hepatitis B (1st diagnosis)	8	*	6	4	*	4	-50%	-	-33%
Hepatitis C (1st diagnosis)	10	5	4	9	3	6	-10%	-	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) 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 from Q1 2016–Q2 2016 to Q1 2017–Q2 2017 in 15-24 year olds in Wales

15-24 year olds	Q1 2016-Q2 2016	Q1 2017-Q2 2017	% Change	% Change in screens
Chlamydia	2036	2252	11%	8%
Warts (1st episode)	907	785	-13%	-
Herpes (1st episode)	354	316	-11%	-
Gonorrhoea	226	286	27%	8%
HIV (new diagnosis)	7	5	-29%	-2%
Syphilis	13	10	-23%	-2%
LGV	0	0	-	-
Hepatitis A (acute)	1	0	-100%	-
Hepatitis B (1st diagnosis)	5	1	-80%	-
Hepatitis C (1st diagnosis)	4	1	-75%	-

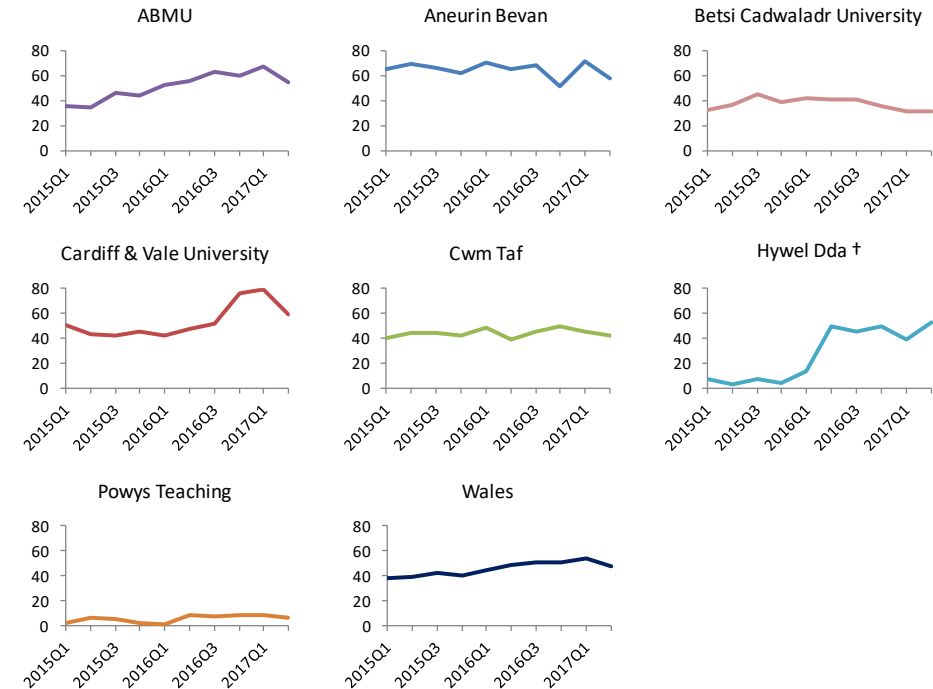
- i) Diagnoses reported to SWS clinic have been deduplicated within predefined time windows ("episode periods"), shown in Appendix B.
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Chlamydia

Table 4. Percentage change in chlamydia diagnoses made in ISH clinics from Q1 2016–Q2 2016 to Q1 2017–Q2 2017, by LHB of residence, gender and sexuality

LHB	Group	Q1 2016– Q2 2016	Q1 2017– Q2 2017	% Change
Abertawe Bro Morgannwg University	Female	333	368	11%
	Male*	240	274	14%
	*of which MSM	25	23	-8%
	Total	573	642	12%
Aneurin Bevan	Female	458	431	-6%
	Male*	331	322	-3%
	*of which MSM	36	43	19%
	Total	789	753	-5%
Betsi Cadwaladr University	Female	299	233	-22%
	Male*	277	204	-26%
	*of which MSM	17	13	-24%
	Total	576	437	-24%
Cardiff & Vale University	Female	229	384	68%
	Male*	204	292	43%
	*of which MSM	46	55	20%
	Total	433	676	56%
Cwm Taf	Female	120	127	6%
	Male*	138	131	-5%
	*of which MSM	*	*	*
	Total	258	258	0%
Hywel Dda†	Female	134	195	46%
	Male*	107	153	43%
	*of which MSM	12	12	0%
	Total	241	348	44%
Powys Teaching	Female	8	10	25%
	Male*	3	8	167%
	*of which MSM	*	*	*
	Total	11	18	64%
All Wales	Female	1581	1748	11%
	Male*	1300	1384	6%
	*of which MSM	145	152	5%
	Total	2881	3132	9%

Figure 1. Chlamydia diagnoses in ISH clinics per 100,000 population, from Q1 2015 to Q2 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).

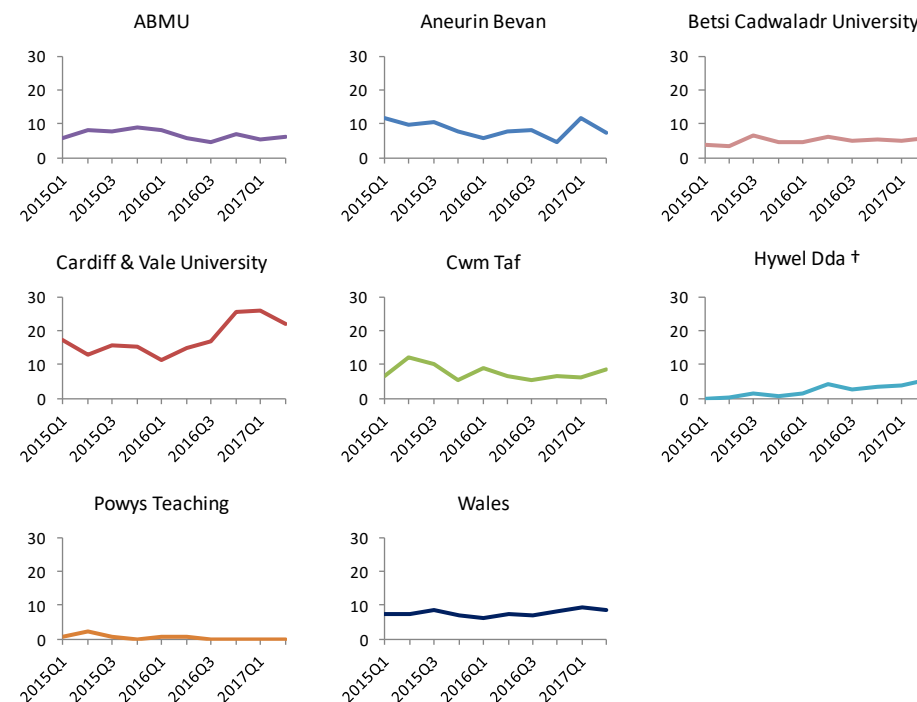
vi) Small numbers with potential for indirect disclosure of person identifiable information (*).

Gonorrhoea

Table 5. Percentage change in gonorrhoea diagnoses made in ISH clinics from Q1 2016–Q2 2016 to Q1 2017–Q2 2017, by LHB of residence, gender and sexuality

LHB	Group	Q1 2016– Q2 2016	Q1 2017– Q2 2017	% Change
Abertawe Bro Morgannwg University	Female	29	24	-17%
	Male*	44	37	-16%
	*of which MSM	15	16	7%
	Total	73	61	-16%
Aneurin Bevan	Female	22	36	64%
	Male*	58	74	28%
	*of which MSM	30	44	47%
	Total	80	110	38%
Betsi Cadwaladr University	Female	33	32	-3%
	Male*	42	44	5%
	*of which MSM	13	15	15%
	Total	75	76	1%
Cardiff & Vale University	Female	42	78	86%
	Male*	86	157	83%
	*of which MSM	64	106	66%
	Total	128	235	84%
Cwm Taf	Female	16	10	-38%
	Male*	31	33	6%
	*of which MSM	*	*	*
	Total	47	43	-9%
Hywel Dda†	Female	9	12	33%
	Male*	12	22	83%
	*of which MSM	11	13	18%
	Total	21	34	62%
Powys Teaching	Female	1	0	-100%
	Male*	1	0	-100%
	*of which MSM	*	*	*
	Total	2	0	-100%
All Wales	Female	152	192	26%
	Male*	274	367	34%
	*of which MSM	141	206	46%
	Total	426	559	31%

Figure 2. Gonorrhoea diagnoses in ISH clinics per 100,000 population, Q1 2015 to Q2 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).

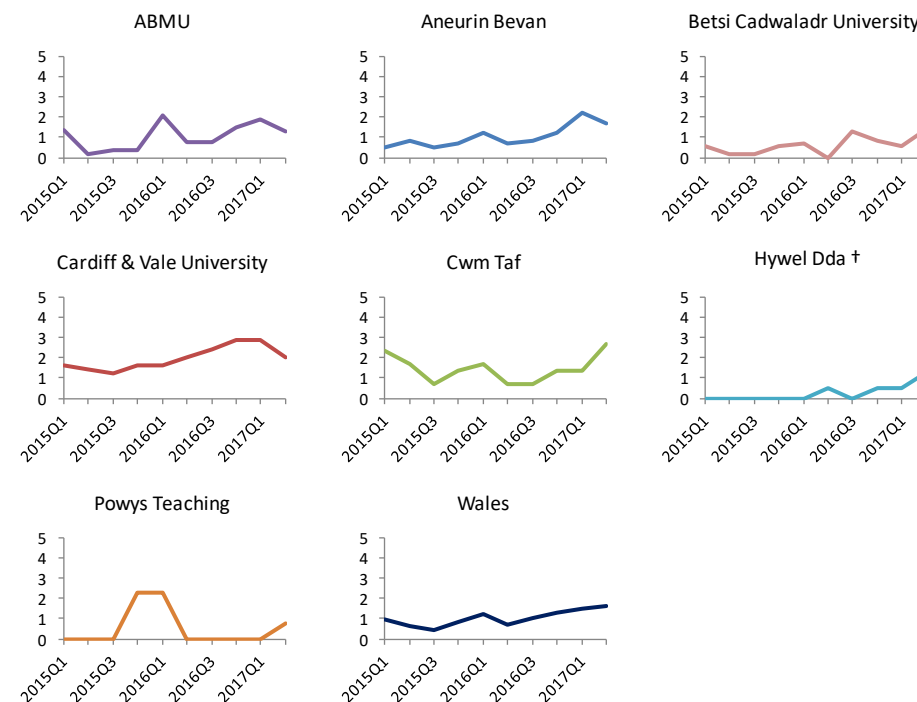
vi) Small numbers with potential for indirect disclosure of person identifiable information (*).

Syphilis

Table 6. Percentage change in syphilis diagnoses made in ISH clinics from Q1 2016–Q2 2016 to Q1 2017–Q2 2017, by LHB of residence, gender and sexuality

LHB	Group	Q1 2016- Q2 2016	Q1 2017- Q2 2017	% Change
Abertawe Bro Morgannwg University	Female	4	2	-50%
	Male*	11	15	36%
	*of which MSM	6	5	-17%
	Total	15	17	13%
Aneurin Bevan	Female	3	0	-100%
	Male*	8	23	188%
	*of which MSM	6	19	217%
	Total	11	23	109%
Betsi Cadwaladr University	Female	0	0	-
	Male*	5	14	180%
	*of which MSM	5	13	160%
	Total	5	14	180%
Cardiff & Vale University	Female	1	0	-100%
	Male*	17	24	41%
	*of which MSM	16	23	44%
	Total	18	24	33%
Cwm Taf	Female	1	5	400%
	Male*	6	7	17%
	*of which MSM	*	*	*
	Total	7	12	71%
Hywel Dda†	Female	1	3	200%
	Male*	1	4	300%
	*of which MSM	*	*	*
	Total	2	7	250%
Powys Teaching	Female	0	0	-
	Male*	3	1	-67%
	*of which MSM	*	*	*
	Total	3	1	-67%
All Wales	Female	10	10	0%
	Male*	51	88	73%
	*of which MSM	37	68	84%
	Total	61	98	61%

Figure 3. Syphilis diagnoses in ISH clinics per 100,000 population, from Q1 2015 to Q2 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 93% and 89% respectively for the two periods compared (Q1 2016-Q2 2016 and Q1 2017-Q2 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.
- A discrepancy has been found for a clinic group between the completeness data at CDSC level and at clinic level. This is being investigated in preparation for the next quarterly report.

Unmapped attendances

When SWS receives attendances with unrecognised codes, these attendances are not accepted into the system and are stored in "holding tables". The CDSC is working to map as many of these codes as possible. At the time of this report there were 11 unmapped attendances with attendance date before the end of June 2016.

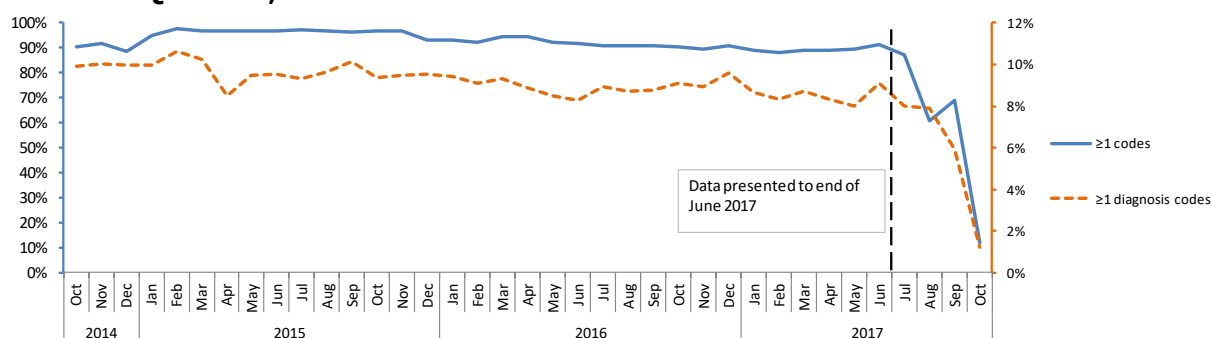
Coding completeness

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 Q3 2014 to Q3 2017, 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, Q1 2016–Q2 2016 to Q1 2017–Q2 2017, Wales

Clinic	Q1 2016-Q2 2016		Q1 2017-Q2 2017	
	Number	% with ≥1 codes	Number	% with ≥1 codes
6	336	98%	285	99%
30	2056	99%	2006	99%
5	7955	98%	7746	98%
27	410	98%	346	98%
10	3809	98%	3713	100%
28	16061	96%	15432	100%
14	744	96%	810	89%
33	655	91%	540	78%
34	138	97%	129	88%
35	274	87%	234	91%
12	212	93%	235	77%
1	153	97%	126	71%
15	147	88%	190	83%
36	186	95%	202	92%
13	1003	100%	1082	93%
22	1153	99%	1262	96%
25	909	100%	850	70%
29	517	99%	535	84%
23	706	99%	688	93%
24	327	100%	244	97%
11	1642	100%	1509	97%
9	8264	74%	10350	82%
7	772	96%	665	92%
43	26	100%	23	30%
37	1309	98%	969	89%
38	132	89%	76	70%
39	298	98%	266	82%
8	1788	96%	714	89%
31	2308	95%	1945	93%
44	55	95%	17	35%
26	1564	91%	2234	86%
45	3	0%	0	-
41	121	93%	77	23%
42	427	96%	305	98%
46	16	100%	13	0%
47	3	0%	3	33%
32	748	98%	704	93%
2	751	84%	823	60%
48	13	0%	18	0%
20	308	81%	548	49%
19	459	72%	851	53%
3	581	74%	1142	56%
4	132	94%	320	82%
17	1102	75%	2020	59%
16	613	85%	1024	69%
49	173	86%	0	-
50	513	83%	840	78%
40	0	-	2	86%
51	0	-	42	40%
18	0	-	0	-
21	0	-	0	-
Wales	61872	93%	64167	89%

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	-