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# Sexual Health in Wales Surveillance Scheme (SWS)

Quarterly Report, April 2017  
(Data to end December 2016)

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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 December 2016, as at 25<sup>th</sup> April 2017.

## Key points

- There was an increase in reports of new diagnoses of chlamydia, first episodes of herpes, syphilis, and hepatitis C across Wales over the last year, and a decrease in reports of HIV (comparing Q3-Q4 2015 and Q3-Q4 2016) (Table 1). However, part of the increase in reported STIs is due to improved reporting from Hywel Dda, with all clinics submitting data to SWS since March 2016. Comparing Q3-Q4 2015 and Q3-Q4 2016:
  - Syphilis increased by 87% from 39 to 73 cases, whilst reports of syphilis testing increased by 11% (Table 1). The syphilis increase is similar (82%), and there is a 4% increase in testing, after excluding Hywel Dda cases.
  - Chlamydia diagnoses increased by 24%, corresponding to a similar increase in testing. Excluding Hywel Dda, chlamydia increased by 12%, with a 15% increase in testing.
  - First episodes of herpes increased by 23% (15% with the exclusion of Hywel Dda).
  - The increase seen in hepatitis C, from 13 to 16 cases, should be taken with caution due to small numbers.
  - Gonorrhoea decreased by 3% whilst gonorrhoea testing increased by 24%. Excluding Hywel Dda the decrease was of 6% with a 15% increase in testing.
  - New diagnoses of HIV fell by 13%, whilst HIV testing increased by 10%. Excluding Hywel Dda, there was a 20% decrease in new HIV diagnoses with testing increasing by 2%.
  - Reports of first episodes of warts remained relatively stable (1% decrease). Excluding Hywel Dda, warts reports decreased by 8%.
  - There were decreases in LGV and hepatitis B remained stable. However, this should be taken with caution due to small numbers.
  - Syphilis, chlamydia, and first episodes of herpes increased both in males and females (Table 2). Whilst the increase in herpes was more marked in males than in females (35% vs. 17%), the increase in chlamydia was similar in both genders. Gonorrhoea increased in females by 15% and decreased in males. The observed increase in syphilis in females should be taken with caution due to small numbers.
  - Syphilis doubled in MSM from 22 to 47 cases, accounting for most of the increase in the general population. In addition, there was a 28% increase of warts in MSM. The increase in chlamydia in MSM was similar to that in the general male population.
  - Amongst 15-24 year olds, syphilis increased from 4 to 16 cases. The increases in chlamydia and herpes were similar to those in the general population.
  - Health board (HB) trends should be taken with caution, as completeness of data varies between clinics and health boards. The case of Hywel Dda mentioned above means that the two periods are not comparable in this health board. Cardiff and Vale has improved reporting from the community clinics, which may have contributed to some of the STI increases seen in the HB.
  - Syphilis reports increased in all health boards except Cwm Taf and Powys Teaching Health board.

## General population

**Table 1. Percentage change in selected diagnoses and screens made in ISH clinics from Q3–Q4 2015 to Q3–Q4 2016 in Wales**

	Diagnoses			Screens		
	Q3-Q4 2015	Q3-Q4 2016	% Change	Q3-Q4 2015	Q3-Q4 2016	% Change
Chlamydia	2528	3137	24%	26337	32675	24%
Warts (1st episode)	1506	1528	1%	-	-	-
Herpes (1st episode)	587	723	23%	-	-	-
Gonorrhoea	478	466	-3%	26291	32664	24%
HIV (new diagnosis)	45	39	-13%	15833	17455	10%
Syphilis	39	73	87%	15302	17061	11%
LGV	3	0	-100%	-	-	-
Hepatitis A (acute)	0	1	-	-	-	-
Hepatitis B (1st diagnosis)	11	11	0%	-	-	-
Hepatitis C (1st diagnosis)	13	16	23%	-	-	-

- 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 2015 to Q3–Q4 2016 by gender and sexuality in Wales**

	Q3-Q4 2015			Q3-Q4 2016			% Change		
	Male*	*of which MSM	Female	Male*	*of which MSM	Female	Male*	*of which MSM	Female
Chlamydia	1141	129	1387	1417	161	1720	24%	25%	24%
Warts (1st episode)	840	46	666	863	59	665	3%	28%	0%
Herpes (1st episode)	207	20	380	280	22	443	35%	10%	17%
Gonorrhoea	320	150	158	285	149	181	-11%	-1%	15%
HIV (new diagnosis)	38	23	7	30	16	9	-21%	-30%	29%
Syphilis	34	22	5	67	47	6	97%	114%	20%
LGV	2	*	1	0	*	0	-100%	*	-100%
Hepatitis A (acute)	0	2	0	0	0	1	-	-100%	-
Hepatitis B (1st diagnosis)	9	3	2	6	2	5	-33%	-33%	150%
Hepatitis C (1st diagnosis)	9	3	4	11	5	5	22%	67%	25%

- 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 Q3–Q4 2015 to Q3–Q4 2016 in 15-24 year olds in Wales**

15-24 year olds	Q3-Q4 2015	Q3-Q4 2016	% Change	% Change in screens
Chlamydia	1761	2251	28%	24%
Warts (1st episode)	840	810	-4%	-
Herpes (1st episode)	296	371	25%	-
Gonorrhoea	235	236	0%	24%
HIV (new diagnosis)	5	3	-40%	4%
Syphilis	4	16	300%	5%
LGV	2	0	-100%	-
Hepatitis A (acute)	0	1	-	-
Hepatitis B (1st diagnosis)	2	2	0%	-
Hepatitis C (1st diagnosis)	1	1	0%	-

- 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 2015 to Q3–Q4 2016, by LHB of residence, gender and sexuality**

LHB	Group	Q3-Q4 2015	Q3-Q4 2016	% Change
Abertawe Bro Morgannwg University	Female	287	370	29%
	Male*	187	277	48%
	*of which MSM	13	21	62%
	Total	474	647	36%
Aneurin Bevan	Female	432	379	-12%
	Male*	316	316	0%
	*of which MSM	33	51	55%
	Total	748	695	-7%
Betsi Cadwaladr University	Female	318	274	-14%
	Male*	263	248	-6%
	*of which MSM	15	15	0%
	Total	581	522	-10%
Cardiff & Vale University	Female	196	345	76%
	Male*	224	275	23%
	*of which MSM	57	61	7%
	Total	420	620	48%
Cwm Taf	Female	125	144	15%
	Male*	127	132	4%
	*of which MSM	11	4	-64%
	Total	252	276	10%
Hywel Dda†	Female	25	197	688%
	Male*	18	161	794%
	*of which MSM	*	*	*
	Total	43	358	733%
Powys Teaching	Female	4	11	175%
	Male*	6	8	33%
	*of which MSM	*	*	*
	Total	10	19	90%
All Wales	Female	1387	1720	24%
	Male*	1141	1417	24%
	*of which MSM	129	161	25%
	Total	2528	3137	24%

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.

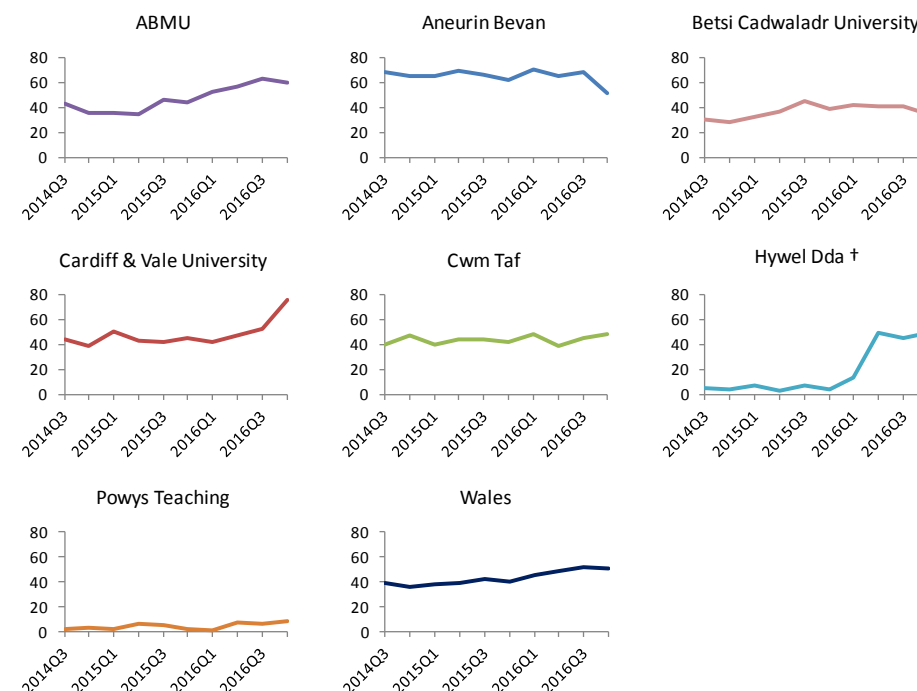
iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.

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 (\*).

**Figure 1. Chlamydia diagnoses in ISH clinics per 100,000 population, from Q3 2014 to Q4 2016, 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).

## Gonorrhoea

**Table 5. Percentage change in gonorrhoea diagnoses made in ISH clinics from Q3–Q4 2015 to Q3–Q4 2016, by LHB of residence, gender and sexuality**

LHB	Group	Q3-Q4 2015	Q3-Q4 2016	% Change
Abertawe Bro Morgannwg University	Female	30	15	-50%
	Male*	57	46	-19%
	*of which MSM	11	22	100%
	Total	87	61	-30%
Aneurin Bevan	Female	43	25	-42%
	Male*	65	48	-26%
	*of which MSM	30	28	-7%
	Total	108	73	-32%
Betsi Cadwaladr University	Female	27	30	11%
	Male*	49	39	-20%
	*of which MSM	19	14	-26%
	Total	76	69	-9%
Cardiff & Vale University	Female	36	96	167%
	Male*	115	113	-2%
	*of which MSM	82	66	-20%
	Total	151	209	38%
Cwm Taf	Female	20	7	-65%
	Male*	26	24	-8%
	*of which MSM	4	10	150%
	Total	46	31	-33%
Hywel Dda†	Female	1	8	700%
	Male*	8	15	88%
	*of which MSM	4	9	125%
	Total	9	23	156%
Powys Teaching	Female	1	0	-100%
	Male*	0	0	-
	*of which MSM	0	0	-
	Total	1	0	-100%
All Wales	Female	158	181	15%
	Male*	320	285	-11%
	*of which MSM	150	149	-1%
	Total	478	466	-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.

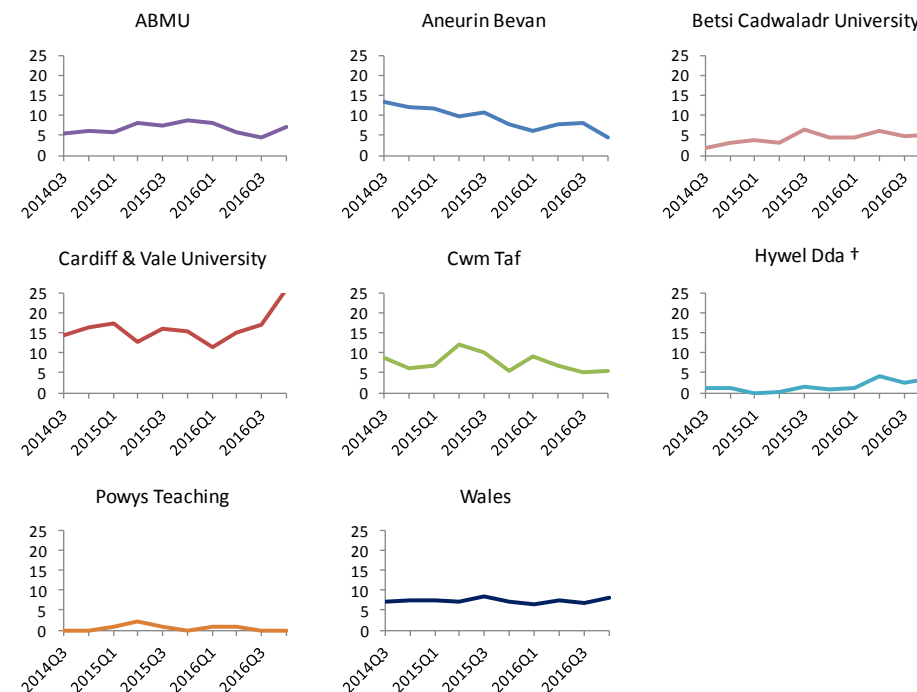
iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.

iv) 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 (\*).

**Figure 2. Gonorrhoea diagnoses in ISH clinics per 100,000 population, Q3 2014 to Q4 2016 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).

## Syphilis

**Table 6. Percentage change in syphilis diagnoses made in ISH clinics from Q3–Q4 2015 to Q3–Q4 2016, by LHB of residence, gender and sexuality**

LHB	Group	Q3–Q4 2015	Q3–Q4 2016	% Change
Abertawe Bro Morgannwg University	Female	1	0	-100%
	Male*	3	12	300%
	*of which MSM	*	*	*
	Total	4	12	200%
Aneurin Bevan	Female	1	1	0%
	Male*	6	11	83%
	*of which MSM	4	9	125%
	Total	7	12	71%
Betsi Cadwaladr University	Female	0	1	-
	Male*	5	14	180%
	*of which MSM	2	5	150%
	Total	5	15	200%
Cardiff & Vale University	Female	0	2	-
	Male*	14	24	71%
	*of which MSM	12	21	75%
	Total	14	26	86%
Cwm Taf	Female	2	1	-50%
	Male*	4	5	25%
	*of which MSM	2	4	100%
	Total	6	6	0%
Hywel Dda†	Female	0	1	-
	Male*	0	1	-
	*of which MSM	*	*	*
	Total	0	2	-
Powys Teaching	Female	1	0	-100%
	Male*	2	0	-100%
	*of which MSM	*	*	*
	Total	3	0	-100%
All Wales	Female	5	6	20%
	Male*	34	67	97%
	*of which MSM	22	47	114%
	Total	39	73	87%

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.

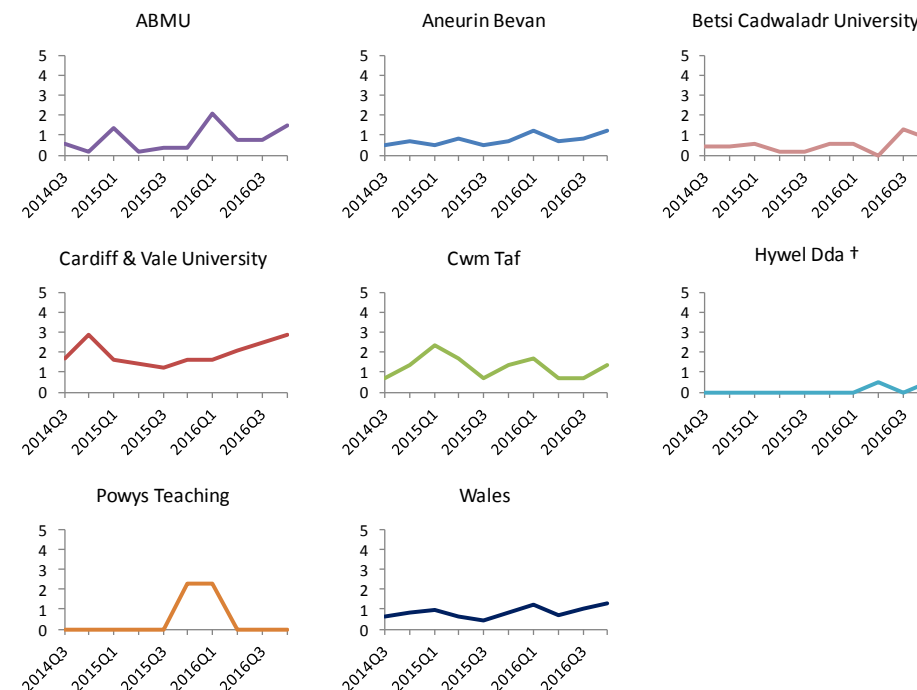
iii) Residents in Wales only. Diagnoses of individuals with unknown residence location have been excluded.

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 (\*).

**Figure 3. Syphilis diagnoses in ISH clinics per 100,000 population, from Q3 2014 to Q4 2016 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).

## 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 96% and 90% respectively for the two periods compared (Q3-Q4 2015 and Q3-Q4 2016).
- Health board trends should be taken with caution, as completeness of data varies between clinics and health boards.
- Between Q3-Q4 2015 and Q3-Q4 2016, eight clinics started reporting, and one clinic closed.
- 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 was just one unmapped attendance with attendance date before the end of December 2016.

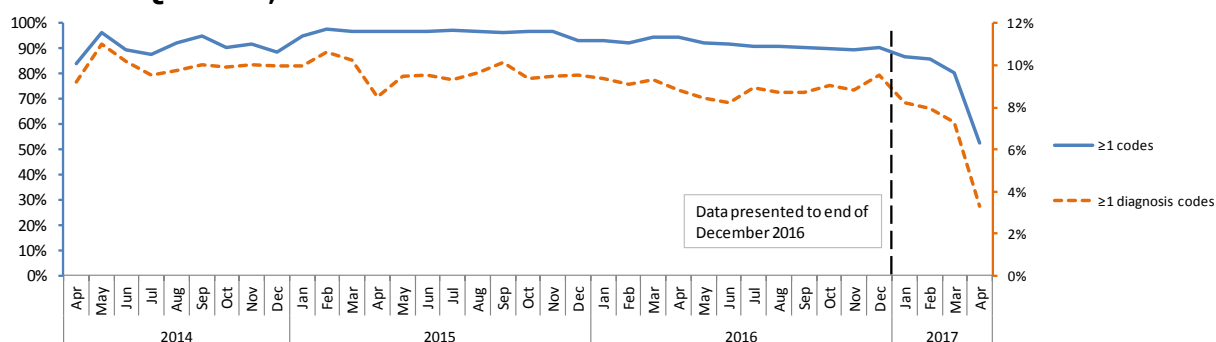
### Coding completeness

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 Q1 2014 to Q4 2016, 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 2015 to Q3-Q4 2016, Wales**

Clinic	Q3-Q4 2015		Q3-Q4 2016	
	Number	% with ≥1 codes	Number	% with ≥1 codes
6	344	95%	268	98%
30	2030	97%	1929	99%
5	7458	96%	7372	97%
27	469	94%	395	97%
10	3905	99%	3348	100%
28	14828	98%	12927	100%
14	667	98%	679	92%
33	534	92%	543	83%
34	58	86%	102	100%
35	229	91%	203	93%
12	203	96%	232	87%
1	145	98%	121	92%
15	191	97%	159	91%
36	187	85%	192	92%
13	1118	99%	1123	99%
22	1121	98%	1104	99%
25	828	99%	855	91%
29	523	85%	528	99%
23	732	100%	700	99%
24	304	97%	269	99%
11	1693	100%	1707	98%
9	5277	89%	10883	80%
7	639	98%	721	97%
43	25	40%	6	50%
37	1018	96%	1052	97%
38	112	84%	84	88%
39	249	92%	255	94%
8	1788	96%	1795	94%
31	1982	98%	2102	97%
40	11	100%	0	-
44	42	95%	18	89%
26	1593	96%	1613	92%
45	2	0%	5	0%
41	128	89%	101	66%
42	319	90%	285	92%
46	17	82%	12	42%
47	2	0%	12	8%
32	787	99%	754	97%
2	435	99%	847	55%
20	96	97%	518	45%
48	0	-	13	0%
19	0	-	786	53%
3	0	-	937	62%
4	0	-	252	93%
17	0	-	1904	61%
16	0	-	1043	74%
49	0	-	38	50%
50	0	-	874	77%
18	0	-	0	-
21	0	-	0	-
<b>Wales</b>	<b>52089</b>	<b>96%</b>	<b>61666</b>	<b>90%</b>

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	-