**Supplementary Table 1.** Sources and time estimates for tasks comprising STD partner services activities1

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Task** | **Number of cases** | **Unique staff observed** | **Minimum (minutes)** | **Maximum (minutes)** | **Mean (minutes)** | **Median (minutes)[IQR]** |
| **Case tracking reports** | **Observations** |
| **Data entry**2 |
| Print lab results and sort | - | 4 | Data entry (n=2) | 2 | 5 | 4 | 3 [3 – 4]  |
| Stamp records for filing | - | 2 | 1 | 2 | 2 | 2 [2 – 2] |
| Chlamydia case entry | - | 23 | 1 | 6 | 3 | 2 [1 – 3] |
| Gonorrhea case entry | - | 25 | 1 | 6 | 3 | 3 [1 – 4] |
| Syphilis case entry | - | 16 | 1 | 7 | 3 | 3 [1 – 5] |
| **Eligible case identification** |
| Activity 13 | Lab file sent to epidemiologist | *Reported verbally by epidemiologist (n=1)* |  |  | 5 |  |
| Identify MSM cases with chlamydia or gonorrhea; or male cases with rectal or pharyngeal chlamydia or gonorrhea | - | 4 | Epidemiologist (n=1) | 2 | 13 | 5 | 3 [2 – 6] |
| Match with eHARS to identify HIV-negative cases | - | 4 | 3 | 6 | 5 | 5 [4 – 6] |
| Check laboratory system for negative HIV test | - | 3 | 5 | 67 | 33 | 26 [16 – 47] |
| Initiate field record for HIV negative cases with chlamydia or gonorrhea | 38 | 7 | RM (n=1)DS (n=1) | 1 | 10 | 2 | 1 [1 – 2] |
| Activity 2 | Merge PRISM and eHARS to get line list | - | 2 | Epidemiologist (n=1) | 12 | 16 | 14 | 14 [13 – 15] |
| Manually check cases on the list | - | 2 | 5 | 13 | 9 | 9 [7 – 11] |
| Transmit line list to RM | - | 2 | 2 | 4 | 3 | 3 [3 – 4] |
| **Case assignment** |
| RM Case review | 42 | 18 | RM (n=1)DS (n=1) | 1 | 15 | 3 | 1 [1 – 4] |
| RM assigns cases to DS | 38 | 7 | 1 | 10 | 2 | 1 [1 – 2] |
| DS assigns to DIS | 38 | 7 | 1 | 10 | 2 | 1 [1 – 2] |
| **Case review and record search** |
| Case review | 12 | 27 | DIS (n=8) | 1 | 253 | 12 | 5 [3 – 14] |
| Record search4 | 7 | - | - | 7 | 90 | 23 | 10 [10 – 15] |
| **Verification of linkage to care** |
| Complete acuity scale | *Reported verbally by DIS (n=6)* | 3 | 15 | 8 | 6 [4 – 14] |
| Complete linkage to care tab | 4 | 15 | 9 | 6 [4 – 14] |
| Contact patients5 | 44 | 33 | DIS (n=7) | 1 | 15 | 4 | 2 [1 – 5] |
| Contact providers6 | 22 | 38 | DIS (n=8) | 1 | 90 | 10 | 6 [4 – 11] |
| Case review | 12 | 27 | DIS (n=8) | 1 | 253 | 12 | 5 [3 – 14] |
| **Patient and provider contact** |
| Contact provider7 | 22 | 38 | DIS (n=8) | 1 | 90 | 10 | 6 [4 – 11] |
| Contact patient8 | 44 | 33 | DIS (n=7) | 1 | 15 | 4 | 2 [1 – 5] |
| Travel time9 | 30 | 5 | DIS (n=2) | 1 | 90 | 27 | 21 [10 – 40] |
| **Interview**10 | 13 | 2 | DIS (n=2) | 8 | 90 | 34 | 24 [15 – 45] |
| **Partner contact and interview (per partner)** |
| Record search3 | 7 | - | - | 7 | 90 | 23 | 10 [10 – 15] |
| Contact partner4 | 44 | 33 | DIS (n=7) | 1 | 15 | 4 | 2 [1 – 5] |
| Travel time8 | 30 | 5 | DIS (n=2) | 1 | 90 | 27 | 21 [10 – 40] |
| Interview9 | 13 | 2 | DIS (n=2) | 8 | 90 | 34 | 24 [15 – 45] |
| **PrEP referral and documentation** |
| Offer PrEP referral during interview | *Reported verbally by DIS (*n=*6)* | 8 | 15 | 11 | 10 [9 – 12] |
| Document PrEP referral form | 1 | 3 | 3 | 3 [2 – 3] |
| Contact patient11 | 44 | 33 | DIS (n=7) | 1 | 15 | 4 | 2 [1 – 5] |
| Contact provider12 | 22 | 38 | DIS (n=8) | 1 | 90 | 10 | 6 [4 – 11] |
| **Documentation** | 12 | 54 | DIS (n=8) | 1 | 7 | 11 | 6 [4 – 13] |
| **Case closure** | - | 18 | RM (n=1) | 2 | 12 | 5 | 5 [3 – 5] |

eHARS, enhanced HIV/AIDS Reporting System; DIS, disease intervention specialist; DS, DIS supervisor; IQR, interquartile range; MSM, men who have sex with men, PRISM, Patient Reporting Investigating Surveillance Manager; RM = regional manager

1All observed and reported times were recorded as whole minutes. The mean is rounded up to the nearest whole minute.

2Time from preparation and finalizing tasks (i.e., print lab results and sort and stamp records for filing) was divided equally between cases (n=64).

3These steps were necessary to case identification because at the time of these observations there was no direct method to identify MSM without HIV who were diagnosed with gonorrhea or chlamydia.

4According to case tracking, this is done an average of .5 times per case

5According to DIS, this is done an average of 1.83 times per case

6According to DIS, this is done an average of 1.33 times per case

7According to case tracking, this is done an average of .3 times per case

8 According to case tracking, this is done an average of 1.3 times per case

9According to case tracking, this is done an average of 1.1 times per case

10According to case tracking, this is done an average of .6 times per case

11According to DIS, patients are contacted an average of 2.17 times per case

12According to DIS, providers are contacted an average of 2 times per case

13Done once for patient and once for partner.