**Parameter:** Proportion immediately treated following diagnosis

**Value:**

* If disaggregating by stage, use estimates from Chen et al (Ref 2 below)
* If combining all stages (probably not the best idea as the values vary by stage in Chen et al):
  + Proportion treated within 7 days = 67% (Robinson et al; Ref 1 below)
  + Proportion treated within 14 days = 80% (Robinson et al; and Liroff et al [Ref 3 below] have similar estimates)

**Reference (1):** Robinson CL, Young L, Bisgard K, Mickey T, Taylor MM. Syphilis time to treatment at publicly funded sexually transmitted disease clinics versus non–sexually transmitted disease clinics—Maricopa and Pima Counties, Arizona, 2009–2012. Sexually transmitted diseases. 2016 Jan 1;43(1):30-3.

<https://journals.lww.com/stdjournal/fulltext/2016/01000/syphilis_time_to_treatment_at_publicly_funded.7.aspx>

**Summary:**

* Reports time to treatment among syphilis cases reported in Maricopa and Pima counties from 2009-12
* “Among all patients, 592 (67%) were treated 7 days or less after evaluation; 711 (80%) were treated 14 days or less after evaluation; 764 (86%) were treated 21 days or less after evaluation; 786 (89%) were treated 30 days or less after evaluation; 809 (92%) patients were treated 90 days or less after evaluation; 3 (<1%) were treated more than 90 days after evaluation; and 72 (8%) had no reported treatment.”
  + **🡪 Proportion immediately treated =** 
    - **67% (if assuming 0-7 days)**
    - **80% (if assuming 0-14 days)**

**Reference (2):** Chen SY, Johnson M, Sunenshine R, England B, Komatsu K, Taylor M. Missed and delayed syphilis treatment and partner elicitation: a comparison between STD clinic and non-STD clinic patients. Sexually transmitted diseases. 2009 Jul 1;36(7):445-51.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC6785738/>

**Summary:**

* Reports time to treatment among syphilis cases reported in Maricopa county from 2006-7; disaggregated by stage and STD clinic vs non-STD clinic
* (Same data as reference 1; older; but disaggregated by stage/clinic site)
* See all data reported in Table 2 (screenshot below)
  + Primary
    - STD clinic: 92% had 0 days between screening and treatment; 4% had 1-7 days
    - Non-STD clinic: 19% had 0 days; 32% had 1-7 days
  + Secondary
    - STD: 76% 0 days; 15% 1-7 days
    - Non-STD: 9% 0 days; 47% 1-7 days
  + EL
    - STD: 67% 0 days; 23% 1-7 days
    - Non-STD: 7% 0 days; 29% 1-7 days
  + LL
    - STD: 30% 0 days; 22% 1-7 days
    - Non-STD: 6% 0 days; 24% 107 days
  + Unknown Latent
    - STD: 22% 0 days 39%; 1-7 days
    - Non-STD: 10% 0 days; 43% 1-7 days
* Also reports % 8-14 days; 15-30 days; >30 days; didn’t include all data here

A table of diseased symptom

Description automatically generated

* Treatment of early syphilis for persons who were not known to be HIV infected was usually a single dose of benzathine penicillin G, including 84 (79.2%) of 106 with primary, 92 (71.3%) of 129 with secondary, and 86 (45.3%) of 190 infections listed by the sites as early latent. In contrast, persons with documented HIV infection were less likely to receive a single dose of benzathine penicillin G for early syphilis, including only 17 (40.5%) of 42 with primary, 37 (41.6%) of 89 with secondary, and 18 (30.0%) of 60 with infections listed by the sites as early latent https://journals.lww.com/stdjournal/fulltext/2005/03000/A\_Randomized,\_Comparative\_Pilot\_Study\_of.2.aspx?casa\_token=4mPNKNhhmREAAAAA:AiWQyixseAeBeivp7IAoqM9YHGgcu3FXj4-13d249wfRFmApi7AalfKz-2AIQP3R3ZAITOZ3SVQWzza4T2HteSM

**Reference (3):** Liroff K, Kassaye SG, Spence AB, Kumar PN, Natarajan M, Harold R, Dorsey K, Doshi RK, Visconti AJ. The Tenacious Treponema: A Retrospective Examination of Syphilis Treatment Disparities in Washington, DC. Sexually Transmitted Diseases. 2023 Jan 5:10-97.

<https://journals.lww.com/stdjournal/fulltext/2024/01000/the_tenacious_treponema__a_retrospective.1.aspx>

**Summary:**

* Reports time to treatment among syphilis cases reported in DC from 2015-2019; includes ORs for delayed treatment (>14 days) for early latent (vs. p/s) and by treatment provider (private, clinic, public health department, hospital, etc.)
* 19.5% had delayed treatment (>14 days after diagnosis)
  + 🡪 **Proportion immediately treated =** 
    - **80.5% (if assuming 0-14 days)**