OPTIMIZING THE HIV CARE ENVIRONMENT

1. Laws that criminalize the conduct of or exert punitive legal measures against men who have sex with men (MSM), transgender individuals, substance users, and sex workers are not recommended and should be repealed where they have been enacted. [A IV]

2. Laws that criminalize the conduct of people living with HIV (PLHIV) based on perceived exposure to HIV, and without any evidence of intent to do harm, are not recommended and should be repealed where they have been enacted. [A IV]

3. HIV-related restrictions on entry, stay, and residence in any country for PLHIV are not recommended and should be repealed. [A IV]

4. Strategies to monitor for and eliminate stigma and discrimination based on race, ethnicity, gender, age, sexual orientation, and/or behavior in all settings, but particularly in healthcare settings, using standardized measures and evidence-based approaches, are recommended. [B II]

5. Proactive steps are recommended to identify and manage clinical mental health disorders (e.g., anxiety, depression, traumatic stress), and/or mental health issues related to HIV diagnosis, disclosure of HIV status, and/or HIV treatment. [A II]

6. Enabling PLHIV to take responsibility for their care (e.g., self-management, user-driven care) is recommended. [B I]

7. Shifting and sharing HIV testing, dispensing of antiretroviral therapy (ART), and other appropriate tasks among professional and paraprofessional health worker cadres is recommended. [A I]
   
   7a. Use of lay health workers to provide pre-test education and testing and to enhance PLHIV engagement in HIV care is recommended. [B I]
   
   7b. Task shifting/sharing from physicians to appropriately trained healthcare providers, including nurses and associate clinicians, is recommended for ART initiation and maintenance. [B II]

8. Community engagement in every step across the HIV care continuum is recommended. [B II]

INCREASING HIV TESTING COVERAGE AND LINKAGE TO CARE

9. Routinely offering opt-out HIV testing to all individuals who present at health facilities is recommended. [A I]

10. Community-based HIV testing is recommended to reach those who are less likely to attend facility-based HIV testing. [A I]

11. Confidential, voluntary HIV testing in large workplace and institutional settings (military, police, mining/trucking companies, and educational venues) should be considered. [B III]

12. HIV self-testing is recommended with the provision of guidance about the proper method for administering the test and direction on what to do once the results have been obtained. [B II]
13. The use of epidemiological data and network analyses to identify individuals at risk of HIV infection for HIV testing is recommended. [B II]

14. The offer of HIV testing to partners of newly diagnosed individuals is recommended. [A I]

15. Immediate referral to HIV care is recommended following an HIV-positive diagnosis to improve linkage to ART. [A I]

16. For high-risk individuals who test HIV negative, offering PrEP is recommended in addition to the provision of free condoms, education about risk reduction strategies, post-exposure prophylaxis (PEP), and voluntary medical male circumcision. [A I]

17. The use of case managers and patient navigators to increase linkage to care is recommended. [B II]

**INCREASING HIV TREATMENT COVERAGE**

18. The immediate offer of ART after HIV diagnosis, irrespective of CD4 count, is recommended. [A I]

19. First-line ARV regimens with the highest levels of efficacy, lowest adverse event profiles, and delivered in fixed-dose, once-daily dosed combinations are recommended. [B II]

20. Viral load testing at least every six months is recommended as the preferred tool for monitoring ART response. [B II]

21. HIV drug resistance testing is recommended at entry into care or prior to ART initiation, and when virologic failure is confirmed. [B I]

21a. Where routine access to HIV drug resistance testing is restricted, population-based surveillance is recommended. [BII]

22. Community-located ART distribution is recommended. [A II]

22a. The use of community-based pharmacies should be considered. [C III]

**INCREASING RETENTION IN CARE, ART ADHERENCE, AND VIRAL SUPPRESSION**

23. Systematic monitoring of retention in HIV care is recommended for all patients. [A II]

23a. Retention in HIV care should be considered as a quality indicator. [B III]

23b. Measuring retention in HIV care using electronic health record and other health system data is recommended. [BII]

23c. Use of clinic databases/surveillance systems for HIV clinical monitoring and population-level tracking, is recommended. [B II]

24. Routine ART adherence monitoring is recommended in all patients. [A II]

24a. Viral suppression is recommended as the primary adherence monitoring metric. [B II]

24b. Routine collection of self-reported adherence data from patients is recommended. [A II]

24c. Pharmacy refill data are recommended for adherence monitoring. [B II]

25. Information and communication technologies aimed at supporting patient self-care are recommended. [B II]

25a. Mobile health technology using weekly interactive components (e.g., two-way SMS) is recommended. [B I]

25b. Alarm devices are recommended as reminders for PLHIV with memory impairment. [A I]
26. Patient education about and offering support for medication adherence and keeping clinic appointments are recommended. [A I]
   26a. Pillbox organizers are recommended, particularly for HIV-infected adults with lifestyle-related barriers to adherence. [B II]

27. Neither directly administered nor directly observed ART are recommended for routine clinical care settings. [A I]
   27a. Directly administered ART is recommended for people who inject drugs and released prisoners at high risk of ART non-adherence. [B I]

28. Proactive engagement and re-engagement of patients who miss clinic appointments and/or are lost to follow-up, including intensive outreach for those not engaged in care within one month of a new HIV diagnosis, is recommended. [B II]
   28a. Case management to retain PLHIV in care and to locate and re-engage patients lost to follow-up are recommended. [B II]
   28b. Transportation support for PLHIV to attend their clinic visits is recommended. [B II]

ADOLESCENTS

29. Removing adult-assisted consent to HIV testing and counseling is recommended for minor adolescents with the capacity to consent. [B II]

30. Adolescent-centered services are recommended in both clinical and community-based settings. [A IV]

31. Informing an adolescent of her/his HIV-positive diagnosis is recommended as soon after diagnosis as feasible. [B II]

32. A transition plan between pediatric and adult HIV care is recommended. [B II]

METRICS AND MONITORING

33. A standardized method should be used to estimate the total number of PLHIV (diagnosed and undiagnosed) within a jurisdiction. [A IV]

34. The estimated number of PLHIV in the geographic setting should be the overall denominator for the HIV care continuum. [A IV]

35. Collection of a minimum set of five data elements should be considered to populate HIV care continuum. [A IV]
   - Estimated number of HIV-infected persons
   - Number and proportion of HIV-infected persons who are diagnosed as having HIV
   - Number and proportion of people who are diagnosed who are linked to care (optional)
   - Number and proportion of HIV-infected persons on ART
   - Number and proportion of HIV-infected persons on ART who are virally suppressed

36. Where possible, jurisdictions should consider longitudinal cohort measurement of HIV service utilization and treatment outcomes to identify the means to maximize viral suppression through ensuring early access to ART and retention in care. [A IV]
Grading Scales for Quality of the Body of Evidence and Strength of Recommendations

<table>
<thead>
<tr>
<th>Quality of the Body of Evidence</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excellent (I)</td>
<td>Randomized controlled trial evidence without important limitations; overwhelming evidence from observational studies</td>
</tr>
<tr>
<td>High (II)</td>
<td>Randomized controlled trial evidence with important limitations; strong evidence from observational studies</td>
</tr>
<tr>
<td>Medium (III)</td>
<td>Randomized controlled trial evidence with critical limitations; observational study without important limitations</td>
</tr>
<tr>
<td>Low (IV)</td>
<td>Other evidence, including extrapolations from bench research, usual practice, expert opinion, consensus guidelines; observational study evidence with important or critical limitations</td>
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</table>

<table>
<thead>
<tr>
<th>Strength of Recommendation</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong (A)</td>
<td>Almost all patients should receive the recommended course of action.</td>
</tr>
<tr>
<td>Moderate (B)</td>
<td>Most patients should receive the recommended course of action. However, other choices may be appropriate for some patients.</td>
</tr>
<tr>
<td>Optional/Conditional (C)</td>
<td>There may be consideration for this recommendation based on individual patient circumstances. Not recommended routinely.</td>
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