LOS ANGELES COUNTY
COMMISSION ON HIV

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STANDARDS AND BEST PRACTICES COMMITTEE

Virtual Meeting

Tuesday, November 1, 2022

10:00AM-12:00PM (PST)

Agenda + Meeting Packet will be available on the Commission's website at:

http://hiv.lacounty.gov/Standards-and-Best-Practices-Committee

REGISTER VIA WEBEX ON YOUR COMPUTER OR SMART PHONE:

https://lacountyboardofsupervisors.webex.com/lacountyboardofsupervisors/j.php?RGID=rc90c383a83dce6846b578cdf0b525261

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PUBLIC COMMENTS

Public Comments will open at the time referenced on the meeting agenda. For those who wish to provide live public comment, you may do so by joining the WebEx meeting through your computer or smartphone and typing PUBLIC COMMENT in the Chat box. You may also provide written public comments or materials by email to hivcomm@lachiv.org. Please include the agenda item and meeting date in your correspondence. All correspondence and materials received shall become part of the official record.

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LOS ANGELES COUNTY
COMMISSION ON HIV

AGENDA FOR THE VIRTUAL MEETING OF THE
LOS ANGELES COUNTY COMMISSION ON HIV (COH)

STANDARDS AND BEST PRACTICES COMMITTEE

TUESDAY, NOVEMBER 1, 2022, 10:00 AM – 12:00 PM

******WebEx Information for Non-Committee Members and Members of the Public Only******

https://tinyurl.com/4wb8e95m

or Dial

1-415-655-0001

Event Number/Access code: 2593 341 2439

(213) 738-2816 / Fax (213) 637-4748
HIVComm@lachiv.org http://hiv.lacounty.gov

Standards and Best Practices (SBP) Committee Members			
Erika Davies *Co-Chair*	Kevin Stalter *Co-Chair* (LoA)	Michael Cao, MD	Mikhaela Cielo, MD
Wendy Garland, MPH	Thomas Green	Mark Mintline, DDS	Paul Nash, PhD, CPsychol, AFBPsS, FHEA
Mallery Robinson	Harold Glenn San Agustin, MD		
QUORUM: 5			

AGENDA POSTED: October 26, 2022

VIRTUAL MEETINGS: Assembly Bill (AB) 361 amends California's Ralph M. Brown Act Section 54953 to allow virtual board meetings during a state of emergency. Until further notice, all Commission meetings will continue to be held virtually via WebEx. For a schedule of Commission meetings, visit https://hiv.lacounty.gov/meetings

ATTENTION: Any person who seeks support or endorsement from the Commission on any official action may be subject to the provisions of Los Angeles County Code, Chapter 2.160 relating to lobbyists. Violation of the lobbyist ordinance may result in a fine and other penalties. For information, call (213) 974-1093.

ACCOMMODATIONS: Interpretation services for the hearing impaired and translation services for languages other than English are available free of charge with at least 72 hours-notice before the meeting date. To arrange for these services, please contact the Commission Office at (213) 738-2816 or via email at HIVComm@lachiv.org.

Servicios de interpretación para personas con impedimento auditivo y traducción para personas que no hablan inglés están disponibles sin costo. Para pedir estos servicios, póngase en contacto con Oficina de la Comisión al (213) 738-2816 (teléfono), o por correo electrónico a HIVComm@lachiv.org, por lo menos setenta y dos horas antes de la junta.

SUPPORTING DOCUMENTATION can be obtained at the Commission on HIV Website at: http://hiv.lacounty.gov. The Commission Offices are at 510 S. Vermont Ave. 14th Floor, one block North of Wilshire Blvd on the eastside of Vermont just past 6th Street. Free parking is available.

NOTES on AGENDA SCHEDULING, TIMING, POSTED and ACTUAL TIMES, TIME ALLOTMENTS, and AGENDA ORDER: Because time allotments for discussions and decision-making regarding business before the Commission's standing committees cannot always be predicted precisely, posted times for items on the meeting agenda may vary significantly from either the actual time devoted to the item or the actual, ultimate order in which it was addressed on the agenda. Likewise, stakeholders may propose adjusting the order of various items at the commencement of the committee meeting (Approval of the Agenda), or times may be adjusted and/or modified, at the co-chairs' discretion, during the course of the meeting.

If a stakeholder is interested in joining the meeting to keep abreast of or participate in consideration of a specific agenda item, the Commission suggests that the stakeholder plan on attending the full meeting in case the agenda order is modified or timing of the items is altered. All Commission committees make every effort to place items that they are aware involve external stakeholders at the top of the agenda in order to address and resolve those issues more quickly and release visiting participants from the obligation of staying for the full meeting. External stakeholders who would like to participate in the deliberation of discussion of a posted agenda item, but who may only be able to attend for a short time during a limited window of opportunity, may call the Commission's Executive Director in advance of the meeting to see if the scheduled agenda order can be adjusted accordingly. Commission leadership and staff will make every effort to accommodate reasonable scheduling and timing requests - from members or other stakeholders - within the limitations and requirements of other possible constraints.

Call to Order, Introductions, Conflict of Interest Statements 10:00 AM – 10:03 AM

I. ADMINISTRATIVE MATTERS 10:03 AM – 10:07 AM

1. Approval of Agenda **MOTION #1**

2. Approval of Meeting Minutes **MOTION #2**

II. PUBLIC COMMENT 10:07 AM – 10:10 AM

3. Opportunity for members of the public to address the Commission on items of interest that are within the jurisdiction of the Commission

III. COMMITTEE NEW BUSINESS ITEMS 10:10 AM – 10:15 AM

4. Opportunity for Commission members to recommend new business items for the full body or a committee level discussion on non-agendized Matters not posted on the agenda, to be discussed and (if requested) placed on the agenda for action at a future meeting, or matters requiring immediate action because of an emergency situation, or where the need to take action arose subsequent to the posting of the agenda.

IV. REPORTS

5. Executive Director/Staff Report 10:15 AM – 10:30 AM
- a. Operational Updates
- b. Comprehensive HIV Plan 2022-2026
- c. Co-Chair nominations

6. Co-Chair Report 10:30 AM – 10:40 AM
- a. 2022 SBP Committee Workplan

7. Division of HIV & STD Programs (DHSP) Report 10:40 AM – 10:50 AM

V. DISCUSSION ITEMS

8. Transitional Case Management- Incarcerated/Post-Release 10:50 AM – 11:30 AM
a. Continue review of recommendations

9. Oral Healthcare Service Standards 11:30 AM – 11:50 AM
a. Conduct initial review of 2017 standards

VI. NEXT STEPS 11:50 AM – 11:55 AM

10. Tasks/Assignments Recap

11. Agenda development for the next meeting

VII. ANNOUNCEMENTS 11:55 AM – 12:00 PM

12. Opportunity for members of the public and the committee to make announcements

VIII. ADJOURNMENT 12:00 PM

13. Adjournment for the virtual meeting of November 1, 2022.

PROPOSED MOTIONS	
MOTION #1	**Approve the Agenda Order, as presented or revised.**
MOTION #2	**Approve the Standards and Best Practices Committee minutes, as presented or revised.**

DRAFT

LOS ANGELES COUNTY
COMMISSION ON HIV

510 S. Vermont Ave. 14th Floor • Los Angeles, CA 90020 • TEL (213) 738-2816 • FAX (213) 637-4748
HIVCOMM@LACHIV.ORG • http://hiv.lacounty.gov • *VIRTUAL WEBEX MEETING*

Presence at virtual meetings is recorded based on the attendance roll call. Only members of the Commission on HIV are accorded voting privileges and must verbally acknowledge their attendance in order to vote.
Approved meeting minutes are available on the Commission's website; meeting recordings are available upon request.

STANDARDS AND BEST PRACTICES (SBP)
COMMITTEE MEETING MINUTES

October 4, 2022

COMMITTEE MEMBERS P = Present | A = Absent					
Erika Davies, *Co-Chair*	P	Wendy Garland, MPH	EA	Mallery Robinson	A
Kevin Stalter, *Co-Chair*	EA	Thomas Green	P	Harold Glenn San Agustin, MD	P
Michael Cao, MD	P	Mark Mintline, DDS	P		
Mikhaela Cielo, MD	EA	Paul Nash, PhD, CPsychol, AFBPsS, FHEA	EA		
COMMISSION STAFF AND CONSULTANTS					
Cheryl Barrit, Jose Rangel-Garibay, Catherine Lapointe					
DHSP STAFF					

**Some participants may not have been captured electronically. Attendance can be corrected by emailing the Commission.*
**Members of the public may confirm their attendance by contacting Commission staff at hivcomm@lachiv.org.*
**Meeting minutes may be corrected up to one year from the date of Commission approval.*
***LOA: Leave of absence*

Meeting agenda and materials can be found on the Commission's website at
https://hiv.lacounty.gov/standards-and-best-practices-committee/

CALL TO ORDER-INTRODUCTIONS-CONFLICT OF INTEREST STATEMENTS
The meeting was called to order at 10:04 am. Erika Davies led introductions.

I. ADMINISTRATIVE MATTERS

1. APPROVAL OF AGENDA
MOTION #1: Approve the agenda order, as presented ***(✓Passed by consensus)***.

2. APPROVAL OF MEETING MINUTES
MOTION #2: Approve the 9/6/2022 SBP Committee meeting minutes, as presented ***(✓Passed by consensus).***

II. PUBLIC COMMENT

3. OPPORTUNITY FOR PUBLIC TO ADDRESS COMMISSION ON ITEMS OF INTEREST WITHIN COMMISSION JURISDICTION: There were no public comments.

III. COMMITTEE NEW BUSINESS ITEMS

4. OPPORTUNITY FOR COMMISSIONERS TO RECOMMEND ITEMS FOR FUTURE AGENDAS, OR ITEMS REQUIRING IMMEDIATE ACTION DUE TO AN EMERGENCY, OR IF NEED FOR ACTION AROSE AFTER POSTING AGENDA: There was no committee new business items.

IV. REPORTS

5. EXECUTIVE DIRECTOR/STAFF REPORT

a. Operational Updates

- Cheryl Barrit, Executive Director, thanked committee members for their committed to the Commission and participation in the Standards and Best Practices Committee**.**
- C. Barrit introduced the newest Commission staff member, Lizette Martinez. She will lead the Planning, Priorities, and Allocations (PP&A) Committee, the Prevention Planning Workgroup (PPW), and will assist with monitoring the implementation of the Comprehensive HIV Plan (CHP).
- C. Barrit reported that the Board of Supervisors (BOS) voted on 9/27/22 to allow for the continuation of virtual meetings for Commissions, Advisory Boards, and Task Forces under their authority for another 30 days in accordance with AB 361. This bill allows governing bodies to have the flexibility to meet virtually depending on the course of the pandemic. She added that the full Commission body will vote on 10/13/22 to determine if the body will continue to meet virtually, which includes the full Commission and the standing Committees. Caucuses, Workgroups, and Taskforces will continue to meet virtually. She advised the Committee to prepare to meet in person pending the results of the full Commission vote on 10/13/22. There was a public comment from an attendee expressing support of continuing a hybrid format to allow members of the public to participate virtually who may not be ready to return to in person meetings due to health concerns related to the COVID-19 pandemic.

b. Comprehensive HIV Plan 2022-2026

- C. Barrit reported that the first draft of the CHP was sent to Commission staff, the PPA committee, and the Division on HIV and STD Programs (DHSP) with a request to provide feedback by 10/3/22. The next iteration will be available for public comment once it is ready. AJ King, consultant, and the PPA committee co-chairs will provide highlights of the CHP during the Annual meeting on 11/10/22.

c. Special Populations Best Practices Project Updates

- Jose Rangel-Garibay provided an update on the changes made to the Special Populations Best Practices document which include the following: Added a section referring the Target HIV Best Practices compilation webpage and included instructions for how to navigate the online resource; Added best practices and resources relevant to the Transgender Caucus and included links to the original intervention and a “Lessons Learned” section for each.
- Dr. Glenn San Agustin posed a question in the chat: Any significant update from the PACHA meeting? Or will there be an update at the general meeting next week? C. Barrit noted there is an agenda item on the 10/13 full Commission meeting in which attendees can debrief and share their experience participating in the PACHA meeting. C. Barrit attended in-person and shared that for her the highlights from the PACHA meeting were the local presentations by DHSP Director Mario Perez and local providers who shared local challenges affecting their ability to meet the goals of the End the HIV Epidemic (EHE) initiative. On day two, there was a panel with a dedicated discussion on HIV and Aging and an update on the recently released National HIV/AIDS Strategy (NHAS) Implementation Plan. The Implementation Plan articulates the Federal agencies that are responsible for implementation activities and introduced 5 new measures for Quality of Life which take into consideration indicators outside of viral suppression that contribute to overall health and wellness for people living with HIV. The recordings for the presentations are available and Commission staff will include a link in the post-meeting follow-up email.

6. CO-CHAIR REPORT

a. 2022 Workplan Updates

- E. Davies provided a review of the 2022 workplan and noted the following:
  -Commission staff draft Transmittal Letters for the Benefits Specialty Services and the Home-based Case Management Service Standards to send to DHSP.
  -The completion date for the Dental Implants Addendum to the Oral Healthcare Service Standards is now October 2022 due to the Executive Committee not having quorum at their September meeting.
  -The Committee will begin review of the Oral Healthcare Service Standards with a completion date of early 2023. The last time the document was reviewed was in 2017.

7. DIVISION ON HIV AND STD PROGRAMS (DHSP) REPORT

- Wendy Garland was not able to attend the meeting but sent a designee. There was no DHSP report.

V. DISCUSSION ITEMS

8. SERVICE STANDARDS DEVELOPMENT

a. Transitional Case Management- Incarcerated/Post-Release (TCM-I/PR)

- J. Rangel-Garibay noted that the meeting packet included the written public comment submitted by Cajetan Luna, Executive Director at the Centers for Health Justice regarding the Transitional Case Management (TCM) Service Standards. The packet also includes the TCM service utilization summary report for Ryan White Program Years 29-30 developed and previously shared by DHSP.
- J. Rangel-Garibay noted that the minutes for the 9/6/22 committee meeting which include a summary of the recommendations for improving service delivery shared during the community presentations. E. Davies led the committee in a review of the recommendations to consider for the TCM service standards review.
- Dr. Glenn San Agustin commented that in practice, he does not see the comprehensive assessment completed for patients referred to him for care post-release. He recommended to include a note in the service standards that describes where the comprehensive assessment documentation is located when referring clients to care post-release.
- E. Davies suggested to include the note under the Individual Release Plan section and have it state to include the Comprehensive Assessment in the client file when referring to a partner agency for care.
- Sona Oksuzyan, DHSP, added that having the Comprehensive Assessment included in a client file when they are referred to care post-release describes an ideal situation; However, in practice the Transitional Case Manager does not always receive a notification that a client will be released/the Transitional Case Manager does not know the client and there is not enough time to conduct the assessment which resulting in clients referred to partner agencies without documented comprehensive assessment. There are a variety of circumstances that contribute to this issue including Transitional Case Managers not having access to clients while they are in jail, and changes in jail staff (may not understand the TCM program).
- E. Davies reminded the committee of the recommendation to have 2-3 iterations of the Individual Release Plans due to the various circumstances (early release, no notification of release).
- C. Barrit added that the Commission staff requested the current TCM contract from DHSP to review the Staffing Requirement section. She also reminded the committee that the TCM service category is not a medical model. The point of transition (linkage to care) to a medical service happens when the client is released. S. Oksuzyan added that TCM service does not require agencies to have a Nurse Case Manager however there is one Nurse Case Manager that is assigned to work and liaise with all the Transitional Case Managers for the agencies contracted to provide TCM services. C. Barrit noted that any mention of a Nurse Case Manager within the TCM Service Standards is reference to the Sherriff's Department Nurse Martha Tadesse. She is the sole nurse within the Los Angeles County jail system who oversees the care of people living with HIV while they are in the custody of the Sherriff's Department.
- C. Barrit suggested to invite Nurse Martha Tadesse to a future meeting to gain further insight in the

process within the jails and recommendations for improving service delivery.

- The following changes were made to the document:
  - Changing the word "Incarcerated" to "justice-involved" with a footnote that defines the term
  - Edit the 5th item listed under "Service description" to reduce redundancy. The updated phrasing is "Services to facilitate retention in care, viral suppression, and overall health and wellness"
  - Add the following training topics: Trauma-informed care; Person-first Language
  - The Comprehensive Assessment should be entered into DHSPs data management system within 15 days of the initiation of services
  - Add to the client assessment areas: HIV/HCV dual-diagnosis, History of physical or emotional trauma
  - Add to Individual Release Plan: document discharge viral load; Document Discharge Medications ordered
  - Add to the Monitoring and Follow-up section: submit applications to obtain health benefits
  - Edit the Staffing Requirements and Qualifications section: knowledge of and sensitivity to lesbian, gay, bisexual, transgender, and gender fluid persons; add prioritize caseload, patience, and multitasking skills
  - Clarify the language around the nurse case manager (DHS) referenced in the service standards. Include a description of the position and discuss how the Transitional Case Manager would interact with the nurse case manager and understanding the relationship.

b. Oral Healthcare Service Standards

J. Rangel-Garibay provided a first-glace review of the service standards and noted that in the next iteration he will condense the information in the document and reformat it to match the more recent revised service standards. E. Davies added that the next iteration should include the Dental Implants addendum developed earlier this year. Mark Mintline noted that the HIV statistics in throughout the document need to be updated and recommended reviewing the educational requirements listed for dental staff.

VI. NEXT STEPS

9. **TASK/ASSIGNMENTS RECAP**:
   - COH staff will send the links to the PACHA meeting recordings
   - COH staff will send the Dental Implants Addendum to the Oral Healthcare Service Standards to the Executive Committee for approval
   - COH staff will request contract requirements for TCM services from the DHSP

10. **AGENDA DEVELOPMENT FOR NEXT MEETING**:
    - Continue to update the Committee workplan with progress notes
    - Continue review of the Transitional Case Management- Jails service standards
    - Continue review of the Oral Healthcare Service Standards

VII. ANNOUNCEMENTS

11. **OPPORTUNITY FOR PUBLIC AND COMMITTEE TO MAKE ANNOUNCEMENTS**: E. Davies shared that the City of Pasadena will have their Annual National Coming Out Day Celebration on 10/11 at Pasadena City Hall starting at 5:30pm. There will be COVID-19 booster and Monkeypox vaccination and will feature performance of the first LGBT Mariachi Band.

VIII. ADJOURNMENT

12. **ADJOURNMENT**: The meeting adjourned at 11:33 am.

SAVE THE DATE

Planning for Action: 2023 and Beyond

Thursday, Nov. 10, 2022
9:00 AM - 4:30 PM (PST)

DISCUSSION TOPICS

- HIV and STDs in LA County Update
- Comprehensive HIV Plan 2022-2026
- Transgender Empathy Training
- Real Talk: The Effects of Trauma on People Living with HIV
- Undetectable=Untransmittable (U=U): Moving from Awareness to Full Integration in HIV Care
- Dreaming Big: Community Wishlist for a Better and Modernized Ryan White Care System

REGISTER TODAY!

Scan the QR code below or click here.

For technical assistance contact:
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(213) 509-9199

Meeting will be held virtually
Agenda and meeting materials will be available HERE
Spanish interpretation will be provided

LOS ANGELES COUNTY
COMMISSION ON HIV

LOS ANGELES COUNTY COMMISSION ON HIV

LOS ANGELES COUNTY COMMISSION ON HIV 2022
STANDARDS AND BEST PRACTICES WORKPLAN (Updates in RED)

Co-Chairs: Erika Davies, Kevin Stalter

Approval Date: 2/1/22

Purpose of Work Plan: To focus and prioritize key activities for COH Committees and subgroups for 2022.

#	TASK/ACTIVITY	DESCRIPTION	TARGET COMPLETION DATE	STATUS/NOTES/OTHER COMMITTEES INVOLVED
1	Review and refine 2022 workplan	COH staff to review and update 2021 workplan monthly	Ongoing	Workplan revised/updated on: 12/22/21, 1/6/2022, 1/19/22, 1/26/22; 2/1/22; 2/24/22; 3/30/22; 4/27/22, 6/24/22, 7/26/22, 8/30/22, **9/28/22,** 11/1/22
2	Update Substance Use Outpatient and Residential Treatment service standards	Continuation of SUD service standards review from 2021.	Jan 2022 COMPLETED	During the 11/2021 meeting, the committee placed a temporary hold on approving the SUD service standards pending further review of the implications of CalAIM. COH staff will provide CalAIM updates and allow the committee to determine to approve or extend the hold on approving the SUD service standards. At the 12/7/21 meeting, the committee approved the SUD service standards and moved them to the Executive Committee for approval. Approved by the Executive Committee on 12/9/21 and on the Commission agenda for approval on 1/13/22 Approved by Commission on 1/13/22. COH staff sent transmittal letter to DHSP on 1/26/22.
3	Update Benefits Specialty service standards	Continuation of BSS service standards review from 2021.	~~Early 2022~~ October 2022 COMPLETED	Committee extended the public comment period and now ends on January 21, 2022. The Committee reviewed public comments received at the February 2022 meeting. Committee placed a temporary hold on additional review of the BSS standards pending further instruction from DHSP. Approved by the Executive Committee on 8/29/22. Executive Committee approved the BSS standards and moved them to the Full Commission for approval. The Full Commission approved the BSS standards on 9/8/22. COH staff sent the Transmittal letters to DHSP staff on 10/28/22.
4	Update Home-based Case Management service standards	SBP prioritized HBCM for 2022 based on	~~July 2022~~ October 2022	DHSP presented a HBCM service utilization summary document at the January 2022 SBP Committee meeting Committee will announced a 30-

		recommendations from ATF and DHSP. 84% of HBCM clients are ages 50+	COMPLETED	day Public Comment period starting on 5/4/22 and ending on 6/3/22. Approved by the Executive Committee on 8/29/22. Executive Committee approved the HBCM standards and moved them to the Full Commission for approval. The Full Commission approved the HBCM standards on 9/8/22. COH staff sent the transmittal letters to DHSP staff on 10/28/22.
5	Conduct a targeted review of the oral health service standards and developing guidance for specialty dental providers related to dental implants.	Mario Perez (DHSP) recommended that the SBP committee conduct this specific addendum to the oral health standards for 2022	~~July 2022~~ ~~October 2022~~ December 2022	COH staff scheduled a planning meeting to elaborate details for an expert panel. The meeting is scheduled January 11, 2022. COH staff to identified Jeff Daniels as facilitator for Subject Matter Expert (SME) panel. COH staff requested service utilization summary document for Oral Health service standards from Wendy Garland [DHSP]. Dr. Younai provided literature review materials and COH staff will prepare an annotated bibliography. Paulina Zamudio provided list of dental providers contracted with DHSP. COH staff will draft SME panel invite letter. SME panel to convene in late February 2022. The COH convened an oral healthcare subject matter expert panel to support Commission staff in drafting a dental implant addendum to the current Ryan White Part A oral healthcare service standard. The addendum will provide clarification and guidance to the Commission's current oral healthcare service standard regarding to dental implants Commission staff will work with the panel facilitator Jeff Daniel, to compile a meeting summary to share with the panelists and will begin drafting an outline for the addendum. The plan is to have a draft addendum ready for the SBP committee to review for the April SBP meeting. Committee will vote to approve the addendum at the September meeting and move to the Executive Committee for approval.

LOS ANGELES COUNTY COMMISSION ON HIV

LOS ANGELES COUNTY COMMISSION ON HIV 2022
STANDARDS AND BEST PRACTICES WORKPLAN (Updates in RED)

				The Executive Committee approved the addendum on 10/27/22 and moved it to the full Commission for approval at their December meeting.
6	Update Oral healthcare Service Standards	Recommendation from DHSP	Mid 2023	COH staff will provide an overview of the 2017 Oral Healthcare Service Standards at the November 2022 meeting to initiate the review process.
7	Update Transitional Case Management service standards	Recommendation from DHSP	~~November 2022~~ December 2022	Committee will begin the review process at the March 2022 meeting. Committee will continue review process at November 2022 meeting.
8	Provide feedback on and monitor implementation of the local Ending the HIV Epidemic (EHE) plan	Develop strategies on how to engage with private health plans and providers in collaboration with DHSP	Ongoing, as needed	
9	Collaborate with the Planning, Priorities and Allocations Committee and AJ King (consultant) to shape the Comprehensive HIV Plan (CHP)	Contribute to the development of the CHP and advance the goals of the Comprehensive HIV Plan and Los Angeles County HIV/AIDS Strategy	Ongoing/ Late 2022	Added "CHP discussion" item for all SBP Committee meetings in 2022. COH staff and AJ King to provide updates on CHP progress and submit requests for information for the SBP Committee to address.
10	Engage private health plans in using service standards and RW services		TBD	
11	Update the Medical Case Management service standards	Committee received a public comment requesting for a review and update of the MCC services standards.	2023	
12	Update Consumer Bill of Rights	Committee received feedback during the oral healthcare dental implants subject matter expert panel to consider reviewing the Consumer Bill of Rights.	2023	

LOS ANGELES COUNTY
COMMISSION ON HIV

Standards & Best Practices Committee
Standards of Care Definition[1]

- Service standards are written for service providers to follow
- Service standards establish the minimal level of service or care that a Ryan White funded agency or provider may offer
- Service standards are essential in defining and ensuring consistent quality care is offered to all clients
- Service standards serve as a benchmark by which services are monitored and contracts are developed
- Service standards define the main components/activities of a service category
- Service standards do not include guidance on clinical or agency operations

[1]Retrieved from https://targethiv.org/library/service-standards-guidance-ryan-white-hivaids-program-granteesplanning-bodies. December 2015.

Standards of Care Review
Guiding Questions

1. Are the standards up-to-date and consistent with national standards of high quality HIV and STD prevention services?

2. Are the standards reasonable and achievable for providers?

3. Will the services meet consumer needs? Are the proposed standards client-centered?

4. What are the important outcomes we expect for people receiving this service? How can we measure whether or not the service is working for them?

5. Is there anything missing from the standards related to HIV prevention and care?

6. Is there anything missing in regard to other topics such as reducing stigma, social determinants of health, immigration issues, support around insurance and housing, etc.?

7. Are the references still relevant?

From: Paulina Zamudio
To: Garibay, Jose
Cc: Maria Orozco
Subject: RE: Transitional Case Management Contact Requirements
Date: Wednesday, October 5, 2022 10:14:06 AM
Attachments: image001.png
image002.png
image003.png

Hi Jose

Here is what the contract says:

STAFF REQUIREMENTS:

A. HIV/AIDS Transitional Case Manager Qualifications: Contractor shall ensure that, at hire, HIV/AIDS case managers possess the appropriate training and skills to complete the Transitional Case Management activities within their job description. At a minimum, each HIV/AIDS Transitional Case Manager shall possess requirements as outlined below in number 1, OR number 2, OR number 3; AND number 4:

(1) A Bachelor's Degree from an accredited institution in: Criminal Justice, Social Work, Psychology, Health Education, Social Services, Human Services, Human Development Sociology, or Counseling **AND** have completed a minimum of eight (8) hours of course work on the basics of HIV/AIDS prior to providing services to clients;

OR:

(2) An Associate's Degree plus one year direct case management experience in criminal justice, or health or human services. Case management experience shall encompass the functions of intake, assessment, reassessment, service planning, case coordination, case conferencing, service plan implementation, crisis intervention, monitoring and follow-up of

services provided and case transition.

OR:

(3) A high school diploma or GED **AND** a minimum of three (3) years experience providing direct social services to inmates in a correctional facility; patients within a medical setting; or clients in the field of HIV/AIDS. For the purposes of this Agreement, provision of direct services includes meeting directly with clients/patients on an ongoing basis to provide interventions that encompass conducting assessments, developing service plans, coordinating care, and/or providing behavior change interventions;

AND:

(4) **All** HIV transitional case managers shall have at least the minimum qualifications described above **AND** at least the following skills: ability to develop and maintain written documentation (assessments, service plans, progress notes, and other documentation related to goals, barriers and provision of services); skills in crisis intervention; knowledge of HIV risk behaviors, human sexuality, substance use, STDs, and HIV behavior change principles and strategies; ability to advocate on behalf of the client; experience working with formerly incarcerated individuals, and cultural and linguistic competence. Additionally, HIV case managers funded under this agreement shall be knowledgeable about HIV/AIDS and current resources available. Transitional Case Managers providing services hereunder shall have completed a minimum of eight (8) hours of course work on the basics of HIV/AIDS prior to providing services to clients.

A. Clinical Supervisor: Clinical Supervisor shall possess at minimum a Master's degree in Social Work, Psychology, or Counseling; **AND** a minimum of two years of supervisory experience, **AND** a minimum of two years experience providing direct case management experience working with HIV+ persons, persons with a history of mental illness, incarcerated, homelessness, and/or chemical dependence.

Let me know if you have any additional questions.

From: Garibay, Jose <JGaribay@lachiv.org>
Sent: Tuesday, October 04, 2022 11:23 AM
To: Paulina Zamudio <pzamudio@ph.lacounty.gov>
Subject: Transitional Case Management Contact Requirements

Good morning Paulina,

I hope you are doing well. The Standards and Best Practices (SBP) Committee is currently reviewing the Transitional Case Management-Incarcerated/Post-Release service standards and had a couple questions regarding staffing requirements for contracted agencies. Would you be able to share the current contract requirements for this service to aid in the committee's review? Thank you!

Warm regards,
Jose

Jose L. Rangel-Garibay, MPH (he/him/his) Why this matters?
Health Program Analyst I
Los Angeles County Commission on HIV
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DRAFT UNDER REVIEW

SERVICE STANDARDS FOR TRANSITIONAL CASE MANAGEMENT: INCARCERATED/POST-RELEASE

LOS ANGELES COUNTY
COMMISSION ON HIV

Under review by the SBP Committee. Current draft as of 11/1/22

Approved by the Commission on HIV on 4/13/2017

DRAFT

SERVICE STANDARDS: TRANSITIONAL CASE MANAGEMENT- INCARCERATED/POST-RELEASE

IMPORTANT: The service standards for Incarcerated/Post-Release Transitional Case Management Services adhere to requirements and restrictions from the federal agency, Health Resources and Services Administration (HRSA). The key documents used in developing standards are as follows:

Human Resource Services Administration (HRSA) HIV/AIDS Bureau (HAB) Policy Clarification Notice (PCN) # 16-02 *(Revised 10/22/18)*: Ryan White HIV/AIDS Program Services: Eligible Individuals & Allowable Uses of Funds

HRSA HAB Policy Clarification Notice (PCN) # 18-02: The use of Ryan White HIV/AIDS Program Funds for Core Medical Services and Support Services for People Living with HIV Who Are Incarcerated and Justice Involved

HRSA HAB, Division of Metropolitan HIV/AIDS Programs: National Monitoring Standards for Ryan White Part A Grantees: Program – Part A

INTRODUCTION

Service standards for the Ryan White HIV/AIDS Part A Program outline the elements and expectations a service provider should follow when implementing a specific service category. The standards are written for providers for guidance on what services may be offered when developing their Ryan White Part A programs. The standards set the minimum level of care Ryan White funded agencies offer to clients, however, providers are encouraged to exceed these standards. The Los Angeles County Commission on HIV (COH) developed the Incarcerated and Post-Release Transitional Case Management Services standards to establish the minimum services necessary to coordinate care for incarcerated/post-release individuals who are living with HIV and are transitioning back to the community. The development of the standards includes guidance from service providers, people living with HIV, the Los Angeles County Department of Public Health, Division of HIV and STD Programs (DHSP), members of the Los Angeles County Commission on HIV, Standards & Best Practices Committee, caucuses, and the public-at-large.

SERVICE DESCRIPTION

Transitional Case Management-Incarcerated/Post-Release (TCM-IPR) is a client-centered activity that coordinates care for justice-involved individuals who are living with HIV and are transitioning back to the community. TCM services include:

- Intake and assessment of available resources and needs
- Periodic reassessment of status and needs
- Development and implementation of Individual Release Plans
- Appropriate referrals to housing, community case management, medical, mental health, and substance use treatment, dental health
- Services to facilitate retention in care, viral suppression, and overall health and wellness
- Access to HIV and STI information, education, partner services, and behavioral and biomedical interventions (such as pre-exposure prophylaxis (PrEP)) to prevent acquisition and transmission of HIV/STIs)

RECOMMENDED TRAINING TOPICS FOR TRANSITIONAL CASE MANAGEMENT STAFF

Transitional Case Management staff should complete ongoing training related to the provision of TCM services. Staff development and enhancement activities should include, but not be limited to:

- HIV/AIDS Medical and Treatment Updates
- Risk Behavior and Harm Reduction Interventions
- Addiction and Substance Use Treatment
- HIV Disclosure and Partner Services
- Trauma-informed Care
- Person First Language
- Mental health and HIV/AIDS including Grief and Loss
- Legal Issues, including Jails/Corrections Services
- Alternatives to Incarceration Training
- Integrated HIV/STI prevention and care services including Hepatitis C screening and treatment
- Sexual identification, gender issues, and provision of trans-friendly services
- Stigma and discrimination and HIV/AIDS
- Health equity and social justice
- Motivational interviewing
- Knowledge of available housing, food, and other basic need support services

The following are resources to assist agencies the health and social needs of this community:
https://wdacs.lacounty.gov/justice-involved-support-services/
https://careacttarget.org/sites/default/files/JailsLinkageIHIPPocketCard.pdf
https://www.cdc.gov/correctionalhealth/rec-guide.html
http://www.enhancelink.org/

SERVICE STANDARDS

All contractors must meet the Universal Standards of Care approved by the COH in addition to the following Incarcerated/Post-Release Transitional Case Management Services standards. The Universal Standards of Care can be accessed at: https://hiv.lacounty.gov/service-standards

SERVICE COMPONENT	STANDARD	DOCUMENTATION
Outreach	Transitional case management programs will conduct outreach to educate potential clients and HIV and STI services providers and other supportive service organizations about the availability and benefits of TCM services for justice-involved persons living with HIV.	Outreach plan on file at provider agency.
	Transitional case management programs will provide information sessions to incarcerated people living with HIV that facilitate enrollment into TCM services.	Record of information sessions at the provider agency. Copies of flyers and materials used. Record of referrals provided to clients.
	Transitional case management programs establish appointments (whenever possible) prior to release date.	Record of appointment date.
Client Intake	Initiate a client record	Client record to include: • Client name and contact information including: address, phone, and email • Written documentation of HIV/AIDS diagnosis • Proof of LAC Residency or documentation that client will be released to LAC residency • Verification of client's financial eligibility for services • Date of intake • Emergency and/or next of kin contact name, home address, and telephone number • Signed and dated Release of Information, Limits of

		Confidentiality, Consent, Client Rights and Responsibilities, and Grievance Procedures forms
Comprehensive Assessment	Comprehensive assessment and reassessment are completed in a cooperative process between the TCM staff and the client and entered into DHSP's data management system within 15 days of the initiation of services. Perform reassessments at least once per year or when a client's needs change or they have re-entered a case management program. Comprehensive assessment is conducted to determine the: • Client's needs for treatment and support services including housing and food needs • Client's current capacity to meet those needs • Client's Medical Home post-release and linkage to Medical Case Management (MCC) team prior to release to ensure continuity of care • Ability of the client's social support network to help meet client need • Extent to which other agencies are involved in client's care	Comprehensive assessment or reassessment on file in client chart to include: ○ Date of assessment/reassessment ○ Signature and title of staff person conducting assessment/reassessment ○ Client strengths, needs and available resources in the following areas: ○ Medical/physical healthcare ○ Medications and Adherence issues ○ Mental health ○ Substance use and substance use treatment ○ HCV/HIV dual diagnosis ○ Nutrition/food ○ Housing and living situation ○ Family and dependent care issues ○ Access to hormone replacement therapy, gender reassignment procedures, name change/gender change clinics and other transition-related services. ○ Transportation ○ Language/literacy skills ○ Religious/spiritual support ○ Social support system ○ Relationship history

		○ Domestic violence/Intimate Partner Violence (IPV) ○ History of physical or emotional trauma ○ Financial resources ○ Employment and Education ○ Legal issues/incarceration history ○ HIV and STI prevention issues
Individual Release Plan (IRP)	IRPs will be developed in conjunction with the client within two weeks of completing the assessment or reassessment The IRP should address, at minimum, the following: • Document discharge viral load • Document discharge medications ordered • Reasons for incarceration and prevention of recidivism • Transportation • Housing/shelter • Food • Primary health care • Mental health • Substance use treatment • Community-based case management IRPs will be updated on an ongoing basis.	IRP on file in client chart to includes: • Name of client and case manager • Date and signature of case manager and client • Date and description of client goals and desired outcomes • Action steps to be taken by client, case manager and others • Customized services offered to client to facilitate success in meeting goals, such as referrals to peer navigators and other social or health services. • Goal timeframes • Disposition of each goal as it is met, changed, or determined to be unattainable
Monitoring and Follow-up	Implementation, monitoring, and follow-up involve ongoing contact and interventions with (or on behalf of) the client to ensure that IRP goals are addressed, and that the client is linked to and appropriately access and maintains primary health care	Signed, dated progress notes on file that detail (at minimum): • Description of client contacts and actions taken • Date and type of contact • Description of what occurred • Changes in the client's condition

	and community-based supportive services identified on the IRP. Case managers will: • Provide referrals, advocacy and interventions based on the intake, assessment, and IRP • Monitor changes in the client's condition • Update/revise the IRP • Provide interventions and linked referrals • Ensure coordination of care • Help clients submit applications and obtain health benefits and care • Conduct monitoring and follow-up to confirm completion of referrals and service utilization • Advocate on behalf of clients with other service providers • Empower clients to use independent living strategies • Identify available familial or partner resources • Help clients resolve barriers • Follow up on IRP goals • Maintain/attempt contact at a minimum of once every two weeks and at least one face-to-face contact monthly • Follow up missed appointments by the end of the next business day • Collaborate with the client's community-based case manager for coordination and follow-up when appropriate • Transition clients out of incarcerated transitional case management at six month's post-release. Transitioning may include sharing assessment	or circumstances • Progress made toward IRP goals • Barriers to IRPs and actions taken to resolve them • Linked referrals and interventions and current status/results of same • Barriers to referrals and interventions/actions taken • Time spent with, or on behalf of, client • Case manager's signature and title

	documents and other documents that were collected with the receiving provider agency	
Staffing Requirements and Qualifications	Case managers will have: • Knowledge of HIV//STIs and related issues • Knowledge of and sensitivity to incarceration and correctional settings and populations • Knowledge of and sensitivity to lesbian, gay, bisexual, and transgender and gender-fluid persons • Effective motivational interviewing and assessment skills • Ability to appropriately interact and collaborate with others • Effective written/verbal communication skills • Ability to work independently • Effective problem-solving skills • Ability to respond appropriately in crisis situations • Effective organizational skills • Prioritize caseload • Patience • Multitasking skills Refer to list of recommend training topics for Transitional Case Management Staff	Resume, training certificates, interview assessment notes, reference checks, and annual performance reviews on file.
	Case managers will hold a bachelor's degree in an area of human services; high school diploma (or GED equivalent) and at least one year's experience working as an HIV case manager or at least two years' experience working within a related	Resumes on file at provider agency documenting experience. Copies of diplomas on file.

	health services field. Prior experience providing services to justice-involved individuals is preferred. Personal life experience with relevant issues is highly valued and should be considered when making hiring decisions.	
	All staff will be given orientation prior to providing services.	Record of orientation in employee file at provider agency.
	Case management staff will complete DHSP's required case management certifications/training within three months of being hired. Case management supervisors will complete DHSP's required supervisor's certification/training within six months of being hired.	Documentation of certification completion maintained in employee file.
	Case managers will participate in recertification as required by DHSP and in at least 16 hours of continuing education annually. Management, clerical, and support staff must attend a minimum of eight hours of HIV/ AIDS/STIs training each year.	Documentation of training maintained in employee files to include: • Date, time, and location of function • Function type • Staff members attending • Sponsor or provider of function • Training outline, handouts, or materials • Meeting agenda and/or minutes
	Case management staff will receive a minimum of four hours of client care-related supervision per month from a master's degree-level mental health professional.	All client care-related supervision will be documented as follows (at minimum): • Date of client care-related supervision • Supervision format • Name and title of participants • Issues and concerns identified • Guidance provided and follow-up plan • Verification that guidance and plan have been implemented • Client care supervisor's name, title, and signature.

	Clinal Supervisor will provide general clinical guidance and follow-up plans for case management staff.	Documentation of client care-related supervision for individual clients will be maintained in the client's individual file.

ORAL HEALTH CARE SERVICES 2017
EXECUTIVE SUMMARY

SERVICE INTRODUCTION

Oral health care services should be an integral part of primary medical care for all people living with HIV. Most HIV-infected patients can receive routine, comprehensive oral health care in the same manner as any other person. All treatment will be administered according to published research and available standards of care.

Services shall include (but not be limited to):

Identifying appropriate clients for HIV oral health care services through eligibility screening

Obtaining a comprehensive medical history and consulting primary medical providers as necessary

Providing educational, prophylactic, diagnostic and therapeutic dental services to patients with a written confirmation of HIV disease

Providing medication appropriate to oral health care services, including all currently approved drugs for HIV related oral manifestations

Providing or referring patients, as needed, to health specialists including, but not limited to, periodontists, endodontists, oral surgeons, oral pathologists, oral medicine practitioners and registered dietitians

Maintaining individual patient dental records in accordance with current standards

Complying with infection control guidelines and procedures established by the California Occupation Safety and Health Administration (Cal-OSHA)

The following are priorities for HIV oral health treatment:

1. Prevention of oral and/or systemic disease where the oral cavity serves as an entry point
2. Elimination of presenting symptoms
3. Elimination of infection
4. Preservation of dentition and restoration of functioning

SERVICE/ORGANIZATIONAL LICENSURE CATEGORY

HIV/AIDS oral health care services shall be provided by dental care professionals who have applicable professional degrees and current California State licenses. Dental staff can include: dentists, dental assistants and dental hygienists. Clinical supervision shall be performed by a licensed dentist responsible for all clinical operations.

SERVICE CONSIDERATIONS

General Considerations: There is no justification to deny or modify dental treatment based on the fact that a patient has tested positive for HIV. Further, the magnitude of the viral load is not an indicator to withhold dental treatment for the patient. If, however, a patient's medical condition is compromised, treatment adjustments, as with any medically compromised patient, may be necessary.

Evaluation: When presenting for dental services, people living with HIV should be given a comprehensive oral evaluation. When indicated, diagnostic tests relevant to the evaluation of the patient should be performed and used in diagnosis and treatment planning. In addition, full medical status information from the patient's medical provider, including most recent lab work results, should be obtained and considered by the dentist

Treatment Planning: In conjunction with the patient, each dental provider shall develop a comprehensive, multidisciplinary treatment plan. The patient's primary reason for the visit should be considered by the dental professional when developing the dental treatment plan. Treatment priority should be given to the management of pain, infection, traumatic injury or other emergency conditions.

Informed Consent: Patients will sign an informed consent document for all dental procedures. This informed consent process will be ongoing as indicated by the dental treatment plan.

Treatment Standards: All treatment will be administered according to published research and available standards of care.

Medical Consultation: The dental provider should consult with the patient's primary care physician when additional information is needed to provide safe and appropriate care.

Encouraging Primary Care Participation: Dentists can play an important part in reminding patients of the need for regular primary medical care (cluster designation 4 (CD4) and viral load tests every three to six months depending on the past history of HIV infection and level of suppression achieved) and encouraging patients to adhere to their medication regimens. If a patient is not under the regular care of a primary care physician, he or she should be urged to seek care and a referral to primary care will be made.

Prevention/Early Intervention: Dental professionals will emphasize prevention and early detection of oral disease by educating patients about preventive oral health practices, including instruction in oral hygiene. In addition, dental professionals may provide counseling regarding behaviors (e.g., tobacco use, unprotected oral sex, body piercing in oral structures) and general health conditions that can compromise oral health. The impact of good nutrition on preserving good oral health should be discussed.

Program Records: HIV oral health providers will maintain adequate health records consistent with good dental and professional practice in accordance with the California Code of Regulations on each individual patient.

Triage/Referral/Coordination: It is incumbent upon dental health providers to refer appropriate patients to additional providers including: periodontists, endodontists, oral surgeons, oral pathologists and oral medicine practitioners. Also vital is the coordination of oral health care with primary care medical providers.

Linkages and Marketing: Programs providing dental care for people living with HIV will market their services through known linkages and direct outreach.

Client Retention: Programs shall strive to retain patients in oral health treatment services.

A broken appointment policy and procedure to ensure continuity of service and retention of patients is required.

STAFFING REQUIREMENTS AND QUALIFICATIONS

Prior to performing HIV/AIDS oral health care services, all dental staff will be oriented and trained in policies and procedures of the general practice of dentistry and, specifically, the provision of dental services to people living with HIV.

These training programs shall include (at minimum):

- Basic HIV information
- Orientation to the office and policies related to the oral health of people living with HIV
- Infection control and sterilization techniques
- Methods of initial evaluation of the patient living with HIV disease
- Education and counseling of patients regarding maintenance of their own health
- Recognition and treatment of common oral manifestations and complications of HIV disease
- Recognition of oral signs and symptoms of advanced HIV disease, including treatment and/or appropriate referral

ORAL HEALTH CARE SERVICES

SERVICE INTRODUCTION

Oral health care services should be an integral part of primary medical care for all people living with HIV. Most HIV-infected patients can receive routine, comprehensive oral health care in the same manner as any other person.

Oral health services include:

- Obtaining a comprehensive medical history and consulting primary medical providers as necessary
- Providing educational, prophylactic, diagnostic and therapeutic dental services to patients with a written confirmation of HIV disease
- Providing medication appropriate to oral health care services, including all currently approved drugs for HIV related oral manifestations
- Providing or referring patients, as needed, to health specialists including, but not limited to, periodontists, endodontists, oral surgeons, oral pathologists and oral medicine practitioners

All interventions must be based on proven clinical methods and in accordance with legal and ethical standards. Maintaining confidentiality is critical, and its importance cannot be overstated. All programs must comply with the Health Insurance Portability and Accountability Act (HIPAA) standards for information disclosure.

Our expert panel agreed upon the following priorities for HIV oral health treatment:

1. Prevention of oral and/or systemic disease where the oral cavity serves as an entry point
2. Elimination of presenting symptoms
3. Elimination of infection
4. Preservation of dentition and restoration of functioning

Recurring themes in this standard include:

- Good oral health is an important factor in the overall health management of people living with HIV.
- Treatment modifications should only be used when a patient's health status demands them.
- Comprehensive evaluation is a critical component of appropriate oral health care services.
- Treatment plans should be made in conjunction with the patient.
- Collaboration with primary medical providers is necessary to provide comprehensive dental treatment.
- Prevention and early detection should be emphasized.

The Los Angeles County Commission on HIV (COH) and the Division of HIV and STD Programs (DHSP)— formerly referred to as the Office of AIDS Programs and Policy (OAPP)— have developed this standard of care to set minimum quality expectations for service provision and to guarantee clients consistent care, regardless of where they receive services in the County.

This document represents a synthesis of published standards and research, including:

Oral Health Care Exhibit, Office of AIDS Programs and Policy, 2004

Practice Guidelines for the Treatment of HIV Patients in General Dentistry, LA County Commission on HIV Services, 2002

Oral Health Care for People with HIV Infection, AIDS Institute, New York State Department of Health, 2001
Standards of care developed by several other Ryan White Title 1 Planning Councils. Most valuable in the drafting of this standard were Florida Community Planning Group (2002); Denver, CO (2004); and Chicago, IL (2002)

SERVICE/ORGANIZATIONAL LICENSURE CATEGORY
HIV/AIDS oral health care services shall be provided by dental care professionals who possess the applicable professional degrees and current California state licenses. Dental staff can include: dentists, dental assistants and dental hygienists. Clinical supervision shall be performed by a licensed dentist responsible for all clinical operations.

Dentists: A dentist must complete a four-year dental program and possess a Doctor of Dental Surgery (DDS) degree. Additionally, dentists must pass a three-part examination as well as the California jurisprudence exam and a professional ethics exam. Dentists are regulated by the California Dental Board (please see **(http://www.dbc.ca.gov/index.html)** for further information).

Registered Dental Assistants (RDA): RDAs must possess a diploma or certificate in dental assisting from an educational program approved by the California Dental Board, or 18 months of satisfactory work experience as a dental assistant. RDAs are regulated by the California Dental Board (please see **(http://www.dbc.ca.gov/index.html)** for further information).

Registered Dental Hygienists (RDH): RDHs must have been granted a diploma or certificate in dental hygiene from an approved dental hygiene educational program. RDHs are regulated by the California Dental Board (please see **(http://www.dbc.ca.gov/index.html)** for further information).

DEFINITIONS AND DESCRIPTIONS
Client registration and intake is the process that determines a person's eligibility for oral services.

CARE SERVICES
Registered Dental Assistant (RDA) is a licensed person who may perform all procedures authorized by the provisions of these regulations and in addition may perform all functions which may be performed by a dental assistant under the designated supervision of a licensed dentist.

Registered Dental Hygienist (RDH) is a licensed person who may perform all procedures authorized by the provisions of these regulations and in addition may perform all functions which may be performed by a dental assistant and RDA under the designated supervision of a licensed dentist.

Oral prophylaxis is a preventive dental procedure that includes the complete removal of calculus, soft deposits, plaque and stains from the coronal portions of the tooth. This treatment enables a patient to maintain healthy hard and soft tissues.

Direct supervision is supervision of dental procedures based on instructions given by a licensed dentist who must be physically present in the treatment facility during performance of those procedures.

General supervision is the supervision of dental procedures based on instructions given by a licensed dentist, but not requiring the physical presence of the supervising dentist during the performance of those procedures.

Basic supportive dental procedures are the fundamental duties or functions which may be performed by an unlicensed dental assistant under the supervision of a licensed dentist because of their technically elementary characteristics, complete reversibility and inability to precipitate potentially hazardous conditions for the patient being treated.

Standard precautions are an approach to infection control that integrates and expands the elements of universal precautions (human blood and certain human body fluids treated as if known to be infectious for HIV, Hepatitis B Virus (HBV) and other blood-borne pathogens). Standard precautions apply to contact with all body fluids, secretions and excretions (except for sweat), regardless of whether they contain blood, and to contact with non-intact skin and mucous membranes.

HOW SERVICE RELATES TO HIV

At the end of 2013, approximately 60,050 people were estimated to be living with HIV infection in Los Angeles County. Los Angeles County comprises 40% of the total AIDS cases in the State of California (Epidemiologic Profile of HIV in Los Angeles County, 2013).

Many new HIV infections occur in populations whose oral health is among the poorest in the nation (Marcus, et al., 2000; Zabos, 1999). Shiboski, et al., 1999 and the Agency for Healthcare Research and Quality, 2000, have documented the unmet oral health needs of people living with HIV. People who experience more HIV symptoms have a greater need for dental care than those with fewer symptoms, though their more pressing needs for primary medical and mental health care limit their access to appropriate oral health services (Dobalian, et al., 2003). Although great progress has been made in providing dental services to people living with HIV, educating oral health professionals to ensure appropriate, non-judgmental care continues to be a critical priority.

Good dental care is an important factor in the overall health management of people living with HIV infection. Poor oral health can negatively impact quality of life, create nutritional and psychosocial problems, complicate the management of other medical conditions, and negatively impact medication treatment adherence (U.S. Department of Health and Human Services, 2000). Access to dental evaluation, prophylaxis and care significantly improves oral health and quality of life for people living with HIV (Brown, et al., 2002).

SERVICE COMPONENTS

HIV/AIDS oral health care services are provided by fully registered dental health care professionals authorized to perform dental services under the laws and regulations of the state of California. Components include educational, prophylactic, diagnostic and therapeutic services. These services will be provided to medically indigent (uninsured and/ or ineligible for health care coverage) people living with HIV residing within Los Angeles County.

Services will include (but not be limited to):

- Identifying appropriate clients for HIV oral health care services through eligibility screening
- Obtaining a comprehensive medical history and consulting primary medical providers as necessary
- Providing educational, prophylactic, diagnostic and therapeutic dental services to patients with a written confirmation of HIV disease
- Providing medication appropriate to oral health care services, including all currently approved drugs for HIV related oral manifestations
- Providing or referring patients, as needed, to health specialists including, but not limited to, periodontists, endodontists, oral surgeons, oral pathologists, oral medicine practitioners and registered dietitians
- Maintaining individual patient dental records in accordance with current standards
- Complying with infection control guidelines and procedures established by the California Occupation Safety and Health Administration (Cal-OSHA)

INTAKE

Client intake determines eligibility and includes demographic data, emergency contact information, next of kin and eligibility documentation. When possible, client intake will be completed in the first contact with the potential client. Programs will assess individuals in crisis to determine what other interventions are appropriate, either within the agency, or by immediate referral.

In the intake process and throughout oral health services, client confidentiality will be strictly maintained and enforced. All programs will follow HIPAA guidelines and regulations for confidentiality. As needed, Release of Information forms will be gathered. These forms detail the specific person/s or agencies to or from whom information will be released as well as the specific kind of information to be released. New forms must be added for individuals not listed on the most current Release of Information (specification should indicate the type of information that can be released).

As part of the intake process, the client file will include the following information (at minimum):

- Written documentation of HIV status
- Proof of Los Angeles County residency
- Verification of financial eligibility for services
- Date of intake
- Client name, home address, mailing address and telephone number
- Emergency and/or next of kin contract name, home address and telephone number

Required Forms: Programs must develop the following forms in accordance with State and local guidelines. Completed forms are required for each client and will be kept on file in the client chart:

- Release of Information (must be updated annually). New forms must be added for those individuals not listed on the existing Release of Information (specification should be made about what type of information can be released),
- Limits of Confidentiality (confidentiality policy)
- Consent to Receive Services

- Client Rights and Responsibilities
- Client Grievance Procedures

STANDARD	MEASURE
Intake process will begin during first contact with client.	Intake tool in client file to include (at minimum): Documentation of HIV status Proof of LA County residency Verification of financial eligibility Date of intake Client name, home address, mailing address and telephone number Emergency and/or next of kin contract name, home address and telephone number
Confidentiality policy and Release of Information will be discussed and completed.	Release of Information signed and dated by client on file and updated annually.
Consent for Services will be completed.	Signed and dated Consent in client file.
Client will be informed of Rights and Responsibility and Grievance Procedures.	Signed and dated forms in client file.

GENERAL CONSIDERATIONS

There is no justification to deny or modify dental treatment due to a patient testing positive for HIV. Further, the magnitude of the viral load is not an indicator to withhold dental treatment for the patient. If, however, a patient's medical condition is compromised, treatment adjustments for that individual, as with any medically compromised patient, may be necessary

There is no evidence to support the need for routine antibiotic coverage to prevent bacteremia or septicemia arising from dental procedures for the HIV-infected patient. When indicated, the American Heart Association guidelines for antibiotic prophylaxis for bacterial endocarditis should be followed when working with HIV-infected patients. The primary care physician should be consulted before utilizing procedures likely to cause bleeding and bacteremia in HIV-infected patients with neutrophil counts below 500 cells/ mm3, who are not already taking antibiotics as prophylaxis against opportunistic infections.

STANDARD	MEASURE
Routine antibiotic treatment for bacteremia or septicemia is not indicated in working with the HIV-infected patient.	Signed, dated progress note and/or treatment plan to detail treatment.

If clinically indicated, the American Heat Association guidelines for antibiotic prophylaxis for bacterial endocarditis should be followed.	Signed, dated progress note and/or treatment plan to detail treatment.
When a patient who is not already taking antibiotic prophylaxis, has a neutrophil count below 500 cells/ mm3, the primary care physician will be consulted before initiating procedures likely to cause bleeding or bacteremia.	Signed, dated progress note and/or treatment plan to detail treatment.

EVALUATION

When presenting for dental services, people living with HIV should be given a comprehensive oral evaluation including:
Documentation of patient's presenting complaint
Caries charting
Full mouth radiographs or panoramic and bitewings and selected periapical films,
Complete periodontal exam or PSR (periodontal screening record)
Comprehensive head and neck exam
Complete intra-oral exam, including evaluation for HIV-associated lesions
Pain assessment

When indicated, diagnostic tests relevant to the evaluation of the patient should be performed and used in diagnosis and treatment planning. Biopsies of suspicious oral lesions should be taken; patients should be informed about the results of such tests.
In addition, full medical status information from the patient's medical provider, including most recent lab work results should be obtained and considered by the dentist. This information may assist the dentist in identifying conditions that may affect the diagnosis and management of the patient's oral health. The medical history and current medication list should be updated regularly to ensure all medical and treatment changes are noted.

STANDARD	MEASURE
A comprehensive oral evaluation will be given to people with HIV presenting for dental services. The evaluation will include: Documentation of patient's presenting complaint Caries charting Radiographs or panoramic and bitewings and selected periapical films Complete periodontal exam or PSR (periodontal screening record) Comprehensive head and neck exam	Signed, dated oral evaluation on file in patient chart.

Complete intra-oral exam, including evaluation for HIV-associated lesions Pain assessment	
As indicated, diagnostic tests relevant to the evaluation will be used in diagnosis and treatment planning. Biopsies of suspicious oral lesions will be taken.	Signed, dated evaluation in patient chart to detail additional tests.
Full medical status information will be obtained from the patient's medical provider and considered in the evaluation. The medical history and current medication list will be updated regularly to ensure all medical and treatment changes are noted.	Signed, dated evaluation in patient chart to detail medical status information. Signed, dated progress note to detail updated medical information in patient chart

CARE SERVICES
TREATMENT PLANNING

In conjunction with the patient, each dental provider shall develop a comprehensive, multidisciplinary treatment plan. Treatment plans including the above-listed information will be reviewed with and signed by the patient. The behavioral, psychological, developmental and physiologic strengths and limitations of the patient should be considered by the dental professional when developing the treatment plan. The patient's ability to withstand treatment for an extended amount of time or return for sequential visits should be determined when a treatment plan is prepared or a dental procedure initiated.

The patient's primary reason for the visit should be considered by the dental professional when developing the dental treatment plan. Treatment priority should be given to the management of pain, infection, traumatic injury or other emergency conditions. The dentist should attempt to manage the patient's pain, anxiety and behavior during treatment to facilitate safety and efficiency. The goal of treatment should be to maintain the most optimal functioning possible.

When developing a treatment plan, the dentist should consider:

Tooth and/or tissue supported prosthetic options

Fixed prostheses, removable prostheses or a combination of these options

Soft and hard tissue characteristics and morphology, ridge relationships, occlusion and occludal forces, aesthetics and parafunctional habits

Restorative implications, endodontic status, tooth position and periodontal prognosis

Craniofacial, musculosketal relationships, including the clinically apparent status of the temporomandibular joints

Treatment plans will include appropriate recall/follow-up schedules. A six-month recall schedule is necessary to monitor any oral changes. If the patient's CD4 count is below 100, a three-month recall schedule should be considered. Treatment plans will be updated as necessary as determined by the dental provider or director of the dental program.

STANDARD	MEASURE
A comprehensive, multidisciplinary treatment plan will be developed in conjunction with the patient.	Treatment plan dated and signed by both the provider and patient in patient file.
Patient's primary reason for dental visit should be addressed in treatment plan.	Treatment plan dated and signed by both the provider and patient in patient file to detail.
Patient strengths and limitations will be considered in development of treatment plan.	Treatment plan dated and signed by both the provider and patient in patient file to detail.
Treatment priority will be given to pain management, infection, traumatic injury or other emergency conditions.	Treatment plan dated and signed by both the provider and patient in patient file to detail.
Treatment plan will include consideration of following factors: Tooth and/or tissue supported prosthetic options Fixed prostheses, removable prostheses or combination Soft and hard tissue characteristics and morphology, ridge relationships, occlusion and occludal forces, aesthetics and parafunctional habits Restorative implications, endodontic status, tooth position and periodontal prognosis Craniofacial, musculosketal relationships	Treatment plan dated and signed by both the provider and patient in patient file to detail.
Six-month recall schedule will be used to monitor any changes. If a patient's CD4 count is below 100, a three-month recall schedule will be considered.	Signed, dated progress note in patient file to detail.
Treatment plans will be updated as deemed necessary.	Updated treatment plan dated and signed by both the provider and patient in patient file.

INFORMED CONSENT

As part of the informed consent process, dental professionals will discuss with the patient:
Appropriate diagnostic information
Recommended treatment
Alternative treatment and sources of funding
Costs (if any)
Benefits and risks of treatment
Limitations of treatment based on health status and available resources

Dental providers will describe all options for dental treatment (including cost considerations), and allow the patient to be part of the decision-making process. After the informed consent discussion, patients will sign an informed consent document for all dental procedures. This informed consent process will be ongoing as indicated by the dental treatment plan.

STANDARD	MEASURE
As part of the informed consent process, dental professionals will provide the following before obtaining informed consent: Diagnostic information Recommended treatment Alternative treatment and sources of funding Costs (if any) Benefits and risks of treatment Limitations of treatment	Signed, dated progress note or informed consent in patient file to detail.
Dental providers will describe all options for dental treatment (including cost considerations), and allow the patient to be part of the decision-making process.	Signed, dated progress note or informed consent in client file to detail.
After the informed consent discussion, patients will sign an informed consent for all dental procedures.	Signed, dated informed consent in client file.
This informed consent process will be ongoing as indicated by the dental treatment plan.	Ongoing signed, dated informed consents in client file (as needed).

TREATMENT STANDARDS

All treatment will be administered according to published research and available standards of care, including the following:
The New York AIDS Institute Oral Health Guidelines, 2001 (available at: http://www.hivguidelines.org/public_html/center/clinical-guidelines/oral_care_guidelines/oral_health_book/oral_health.htm)
The LA County Commission on HIV Practice Guidelines for the Treatment of HIV Patients in General Dentistry
Dental Management of the HIV-infected Patient, Supplement to JADA, American Dental Association, Chicago, 1995
Clinician's Guide to Treatment of HIV-infected Patients, Academy of Oral Medicine, 3rd Edition, Ed. Lauren L. Patton, Michael Glick, New York, 2002
Principles of Oral Health Management for the HIV/AIDS Patient, A *Course for Training the Oral Health Professional,* Department of Human Services, Rockville, Maryland, 2001

STANDARD	MEASURE
Treatment will be administered according to published research and available standards of care.	Signed, dated progress notes in patient chart to detail treatment.

MEDICAL CONSULTATION

The dental provider should consult with the patient's primary care physician when additional information is needed to provide safe and appropriate care. This consultation is:
To obtain the necessary laboratory test results
When there is any doubt about the accuracy of the information provided by the patient
When there is a change in the patient's general health, do determine the severity of the condition and the need for treatment modifications
If after evaluating the patient's medical history and the laboratory tests, the oral health provider decides that treatment should occur in a hospital setting
New medications are indicated to ensure medication safety and prevent drug/drug interactions
Oral opportunistic infections are present

ENCOURAGING PRIMARY CARE PARTICIPATION

Dentists can play an important role in encouraging patients to seek regular primary medical care (CD4 and viral load tests every three to six months) and adhere to their medication regimens. If a patient is not under the regular care of a primary care physician, he or she should be urged to seek care and a referral to primary care will be made. If, after six months, a patient has not become engaged in primary medical care, programs may decide to discontinue oral health services. Patients should be made aware of this policy at time of intake into the program. Under certain circumstances, dental professionals may require further medical information or laboratory results to determine the safety and appropriateness of contemplated dental care. In that case, the dentist may require the information before going forward to offer the care.

STANDARD	MEASURE
Primary care physicians will be consulted when providing dental treatment.	Signed, dated progress note to detail consultations.
Consultation with medical providers will be: To obtain the necessary laboratory test results When there is any doubt about the accuracy of the information provided by the patient When there is a change in the patient's general health, do determine the severity of the condition and the need for treatment modifications If after evaluating the patient's medical history and the laboratory tests, the oral health provider decides that treatment should occur in a hospital setting New medications are indicated to ensure medication safety and prevent drug/drug interactions Oral opportunistic infections are present	Signed, dated progress note to detail consultations.
Dentists will encourage consistent medical care in their patients and provide referrals as necessary. Under certain circumstances, dental professionals may require further medical information to determine safety and appropriateness of care.	Signed, dated progress notes to detail referrals and discussion.
Programs may decide to discontinue oral health services if a client has not engaged in primary medical care. Patients will be made aware of this policy at time of intake into the program.	Signed, dated progress notes to detail referrals and discussion. Policy on file at provider agency. Intake materials will also state this policy.
Under certain circumstances, dental professionals may require further medical information to determine safety and appropriateness of care.	Signed, dated progress notes to detail discussion.

PREVENTION/EARLY INTERVENTION

Dental professionals will emphasize prevention and early detection of oral disease by educating patients about preventive oral health practices, including instruction in oral hygiene. In addition, dental professionals may provide counseling regarding behaviors (e.g., tobacco use, unprotected oral sex, body piercing in oral structures) and general health conditions that can compromise oral health. The impact of good nutrition on preserving good oral health should be discussed. Basic nutritional counseling may be offered to assist patients in maintaining oral health; when appropriate, a referral to an RD or other qualified person should be made. Patients will be scheduled for routine examinations and regular prophylaxis twice a year. Other procedures, such as root planning/scaling will be offered as necessary, either directly or by periodontal referral.

STANDARD	MEASURE
Dental professionals will educate patients about preventive oral health practices.	Signed, dated progress note in patient file to detail education efforts.
Routine examinations and regular prophylaxis will be scheduled twice a year.	Signed, dated progress note or treatment plan in patient file to detail schedule.
Dental professionals will provide basic nutritional counseling to assist in oral health maintenance. Referrals to an RD and others will be made, as needed.	Signed, dated progress note to detail nutrition discussion and referrals made.
Root planning/scaling will be offered as necessary, either directly or by referral.	Signed, dated progress note or treatment plan in patient file to detail.

SPECIAL TREATMENT CONSIDERATIONS

Most HIV patients can be treated safely in a typical dental office or clinic. Under certain circumstances, however, modifications of dental therapy should be considered:

Bleeding tendencies may determine whether or not to recommend full mouth scaling and root planning or multiple extractions in one visit. A tooth-by tooth approach is recommended to evaluate risk of hemorrhage.

In severe cases, patients may be treated more safely in a hospital environment where blood transfusions are available.

Deep block injections should be avoided in patients with a recent history or laboratory results indicating bleeding tendencies.

A pre-treatment antibacterial mouth rinse will reduce intraoral bacterial load, especially for those patients with periodontal disease.

When salivary hypofunction is present, the patient should be closely monitored for caries, periodontitis, soft tissue lesions and salivary gland disease.

Fluoride supplements, in the form of a rinse and/or toothpaste, should be prescribed for those with increased caries and salivary hypofunction. In severe cases of xerostomia, appropriate referral should be made to a dental professional experienced in dealing with oral mucosal and salivary gland diseases.

STANDARD	MEASURE
As indicated, the following modifications to standard dental treatment should be considered: Bleeding tendencies may determine whether or not to recommend full mouth scaling and root planning or multiple extractions in one visit. In severe cases, patients may be treated more safely in a hospital environment where blood transfusions are available. Deep block injections should be avoided in patients with bleeding tendencies. A pre-treatment antibacterial mouth rinse should be used for those patients with periodontal disease. Patients with salivary hypofunction should be closely monitored for caries, periodontitis, soft tissue lesions and salivary gland disease. Fluoride supplements should be prescribed for those with increased caries and salivary hypofunction. Referral to a dental professional experienced in oral mucosal and salivary gland diseases should be made in severe cases of xerostomia.	Signed, dated progress note or treatment plan in patient file to detail treatment modifications and referrals,
Routine examinations and regular prophylaxis will be scheduled twice a year.	Signed, dated progress note or treatment plan in patient file to detail schedule.
Root planning/scaling will be offered as necessary, either directly or by referral.	Signed, dated progress note or treatment plan in patient file to detail

PROGRAM RECORDS

HIV oral health providers will maintain adequate health records consistent with good dental and professional practice in accordance with the California Code of Regulations on each individual patient.
Individual patient records will include (but not be limited to):
Documentation of HIV disease
Complete dental assessment signed by a licensed dental care professional
Current and appropriate treatment/management plan
Progress notes detailing patient status, condition and response to interventions, procedures and medications
Documentation of all contacts with client including date, time, service provided, referrals given and signature and professional title of person providing services
Documentation of consultations with and referrals to other health care providers

STANDARD	MEASURE
Providers will maintain adequate health records consistent with good dental and professional practice in accordance with the California Code of Regulations on each individual patient. Records will include: Documentation of HIV disease Complete dental assessment signed by a licensed dental care professional Current and appropriate treatment/management plan Progress notes detailing patient status, condition and response to interventions, procedures and medications Documentation of all contacts with client including date, time, service provided, referrals given and signature and professional title of person providing services Documentation of consultations with and referrals to other health care providers	Required documentation on file in patient chart.

TRIAGE/REFERRAL/COORDINATION

On occasion, patients will require a higher level of oral health treatment services than a given agency is able to provide. In such cases, dental health providers should refer these patients to additional oral care providers, including: periodontists, endodontists, oral surgeons, oral pathologists and oral medicine practitioners. Coordinating oral health care with primary care medical providers is vital. Regular contact with a client's primary care clinic will ensure integration of services and better client care.

STANDARD	MEASURE
As needed, dental providers will refer patients to full range of oral health care providers, including: Periodontists Endodontists Oral surgeons Oral pathologists Oral medicine practitioners	Signed, dated progress note to document referrals in patient chart.

Providers will attempt to make contact with a client's primary care clinic at a minimum of once a year, or as clinically indicated, to coordinate and integrate care.	Documentation of contact with primary medical clinics and providers to be placed in progress notes.

LINKAGES AND MARKETING

Programs providing dental care for people living with HIV will market their services through known linkages and direct outreach.

STANDARD	MEASURE
Programs will market dental services for people living with HIV through linkages or outreach.	Marketing/outreach plan on file at provider agency.

CLIENT RETENTION

Programs shall strive to retain patients in oral health treatment services. To ensure continuity of service and retention of clients, programs will be required to establish a broken appointment policy. Follow-up can include telephone calls, written correspondence and/or direct contact, and strives to maintain a client's participation in care. Such efforts shall be documented in the progress notes within the client record.

STANDARD	MEASURE
Programs shall develop a broken appointment policy to ensure continuity of service and retention of clients.	Written policy on file at provider agency
Programs shall provide regular follow-up procedures to encourage and help maintain a client in oral health treatment services	Documentation of attempts to contact in signed, dated progress notes. Follow-up may include: Telephone calls Written correspondence Direct contact

STAFFING REQUIREMENTS AND QUALIFICATIONS

HIV/AIDS oral health care services will be provided by dental care professionals possessing applicable professional degrees and current California state licenses. Dental care staff can include dentists, dental assistants and dental hygienists. A dentist will be responsible for all clinical operations, including the clinical supervision of other dental staff.

Prior to performing HIV/AIDS oral health care services, all dental staff will be oriented and trained in policies and procedures of the general practice of dentistry, and specifically, the provision of dental services to persons living with HIV.

These training programs will include (at minimum):
Basic HIV information
Orientation to the office and policies related to the oral health of people living with HIV
Infection control and sterilization techniques
Methods of initial evaluation of the patient living with HIV disease
Education and counseling of patients regarding maintenance of their own health
Recognition and treatment of common oral manifestations and complications of HIV disease
Recognition of oral signs and symptoms of advanced HIV disease, including treatment and/or appropriate referral

Providers are encouraged to continually educate themselves about HIV disease and associated oral health treatment considerations.

STANDARD	MEASURE
Provider will ensure that all staff providing oral health care services will possess applicable professional degrees and current California state licenses.	Documentation of professional degrees and licenses on file.
Providers shall be trained and oriented before providing oral health care services to include policies and procedures both in general dentistry and HIV specific oral health services. Training will include: Basic HIV information Office and policy orientation Infection control and sterilization techniques Methods of initial evaluation of the patient living with HIV disease Health maintenance education and counseling Recognition and treatment of common oral manifestations and complications of HIV disease Recognition of oral signs and symptoms of advanced HIV disease	Training documentation on
Oral health care providers will practice according to California state law and the ethical codes of their respective professional organizations,	Chart review will ensure legally and ethically appropriate practice.
Dentist in charge of dental operations shall provide clinical supervision to dental staff.	Documentation of supervision on file,
Dental care staff will complete documentation required by program,	Periodic chart review to confirm,
Providers will seek continuing education about HIV disease and associated oral health treatment considerations.	Documentation of trainings in employee files.

UNITS OF SERVICE

Unit of service: Units of service defined as reimbursement for oral health treatment services are based on number of diagnostic, prophylactic procedures, dental procedures and dental visits.
Diagnostic dental procedure units: calculated in number of procedures
Prophylactic dental procedure units: calculated in number of procedures
Dental procedure units: calculated in number of procedures

Number of clients: Client numbers are documented using the figures for unduplicated clients within a given contract period.

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ACRONYMS

AIDS Acquired Immune Deficiency Syndrome
CAL-OSHA California Occupation Safety and Health Administration
CD4 Cluster Designation 4
DDS Doctor of Dental Surgery
DHSP Division of HIV and STD Programs
HBV Hepatitis B Virus
HIPAA Health Insurance Portability and Accountability Act
HIV Human Immunodeficiency Virus
RDA Registered Dental Assistant
RDH Registered Dental Hygienists
STD Sexually Transmitted Disease

ORAL HEALTH CARE SERVICE STANDARD ADDENDUM

I. INTRODUCTION

The purpose of the addendum is to provide specific service delivery guidance to Los Angeles County HIV (LACHIV) program's current Oral Healthcare Service Standard regarding the provision of dental implants. The service expectations are aimed at creating a standardized set of service components, specifically for dental implants. Subrecipients funded by the Los Angeles County Division of HIV and STD Programs (DHSP) must adhere to all service category definitions and service standards for which they are funded.

II. BACKGROUND

On February 24th, 2022, the Los Angeles County Commission on HIV convened an Oral Health Care subject matter expert panel to discuss an addendum to the Eligible Metropolitan Area (EMA')s Oral Health Care service standard specifically to address dental implants. The panel consisted of dental providers and dental program administrators from agencies contracted by the Division on HIV and STD Programs (DHSP) to provide dental and specialty dental services under the Ryan White Program Part A. Among the participating agencies, there were the UCLA School of Dentistry, USC School of Dentistry, Western University, AIDS Healthcare Foundation, and Watts Health.

III. SUBJECT MATTER EXPERT PANEL FINDINGS AND RECOMMENDATIONS

Recommendations for improving dental implant services for Ryan White Part A specialty dental providers:

a. Support and reinforce patient understanding, agreement, and education in the patient's treatment plan.
b. Ensure patient understanding that dental implants are for medical necessity (as determined by the dental provider through assessments and evaluation) and would lead to improved HIV health outcomes.
c. Reinforce that RW funds cannot be used to provide dental implants for cosmetic purposes.
d. The treatment plan should be signed by both patient and doctor.
e. Engage and collaborate with the Consumer Caucus to revisit and strengthen the "Consumer Bill of Rights" document and consider reviewing the client responsibilities section to ensure it addresses the client's service expectations and the service provider's capacity to meet them within the limits of the contractual obligations as prescribed by DHSP.
f. Review the referral form(s) providers use to refer patients to specialty dental services
g. Develop a standard form/process referring providers can complete when referring
h. Train referring dental providers on how to adequately complete referral forms to allow more flexibility in treatment planning for receiving specialty dental providers.
i. Recommend that dental providers complete training modules and access training resources available on the Pacific AIDS Education and Training (PAETC) website.

IV. HEALTH RESOURCES SERVICE ADMINISTRATION (HRSA) SERVICE CATEGORY DEFINITION FOR ORAL HEALTH CARE SERVICES[1]

Oral Health Care activities include outpatient diagnosis, prevention, and therapy provided by dental health care professionals, including general dental practitioners, dental specialists, dental hygienists, and licensed dental assistants.

V. PROGRAM SERVICE CATEGORY DEFINITION FOR ORAL HEALTH CARE SERVICES

Service Considerations (as listed on 2015 Oral Healthcare Service Standards) Oral health care services should be an integral part of primary medical care for all people living with HIV. Most HIV-infected patients can receive routine, comprehensive oral health care in the same manner as any other person. All treatment will be administered according to published research and available standards of care. (for additional information please see: *Oral Health Care Standards of Care.pdf (kc-usercontent.com)*

VI. PROPOSED ORAL HEALTHCARE SERVICE ADDENDUM REGARDING DENTAL IMPLANTS

General Consideration: There is no justification to deny or modify dental treatment based on the fact that a patient has tested positive for HIV. Further, the magnitude of the viral load is not an indicator to withhold dental treatment for the patient. If, however, a patient's medical condition is compromised, treatment adjustments, as with any medically compromised patient, may be necessary.

SERVICE COMPONENT	STANDARD	DOCUMENTATION
EVALUATION/ASSESSMENT	Obtain a thorough medical, dental, and psychosocial history to assess the patient's oral hygiene habits and periodontal stability and determine the patient's capacity to achieve dental implant success.	Client Chart/Treatment Plan/Provider Progress Notes
	Clinicians, after patient assessment, will make necessary referrals to specialty programs including, but not limited to: smoking cessation programs; substance use treatment; medical nutritional therapy, thereby increasing patients' success rate for receiving dental implants.	
	The clinicians referring patients to specialty Oral Healthcare services will complete a referral form and include a proposed treatment plan and indicate treatment plan alternatives.	
TREATMENT PLANNING AND ORAL HEALTH EDUCATION	The receiving clinician will review the referral, consider the patient's medical, dental, and psychosocial history to determine treatment plan options that	Referral in Client Chart/Treatment Plan/Provider Progress Notes

[1] *HRSA Policy Clarification Notice (PCN) #16-02*

	offer the patient the most successful outcome based on published literature. The clinician will discuss with patient dental implant options with the goal of achieving optimal health outcomes	
	The clinician will consider the patient's perspective in deciding which treatment plan to use.	Client Chart/Treatment Plan/Provider Progress Notes
	The clinician will discuss treatment plan alternatives with the patient and collaborate with the patient to determine their treatment plan.	Client Chart/Treatment Plan/Provider Progress Notes
	The clinician and the patient will revisit the treatment plan periodically to determine if any adjustments are necessary to achieve the treatment goal.	Client Chart/Treatment Plan/Provider Progress Notes
	The clinician will educate patients on how to maintain dental implants.	Client Chart/Treatment Plan/Provider Progress Notes

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PRACTICE GUIDELINES FOR THE TREATMENT OF HIV PATIENTS IN GENERAL DENTISTRY

(4th Edition)

Endorsed by
Oral Health Advisory Group of the Pacific AIDS Education and Training Center
formerly the Dental Steering Committee

Last updated: June 30, 2015

TABLE OF CONTENTS

Foreword

We wish to thank Roseann Mulligan, DDS, MS, Chair, Oral Health Advisory Group of the Pacific AIDS Education and Training Center, for her help and guidance in collaborating to update this current revision of Practice Guidelines for the Treatment of HIV Patients in General Dentistry.

This document is an update to three previously published versions of guidelines and is intended to supplement the following resource related to the dental treatment of HIV-infected patients:

American Academy of Oral Medicine Clinician's Guide to
Treatment of Patients with HIV & Other Communicable Diseases
Fourth Edition. 2013
Brian C Muzyka, DMD, MS, MBA, Editor
Lauren L Patton, DDS, Editor

The Oral Health Advisory Group of the Pacific AIDS Education and Training Center approved the adoption of this document as general guide for treatment of HIV-infected patients. The field of HIV therapy undergoes constant change. Therefore, the Los Angeles Commission on HIV has requested that the Oral Health Advisory Committee of the Pacific AIDS Education & Training Center regularly update this supplement

Our knowledge of HIV manifestations, diagnosis and treatment will continue to grow and change over time. It is for this reason that dental care providers are encouraged to continually educate themselves about HIV disease and associated oral health treatment considerations.

Disclaimer

This executive summary is not intended to set out any standards of care. It is intended to serve as a helpful source of up-to-date information to assist dental practitioners in making informed decisions about the care they provide. Dentists should always exercise their own professional judgment in any given situation, with any given patient. No information contained in this document should be construed as legal advice. Dentists must consult with their own lawyers for legal advice.

Oral Health Advisory Group

These recommendations for treatment were assembled and reviewed by the Pacific AIDS Education & Training Center's Oral Health Advisory Group. The members of this committee are individuals professionally involved with ensuring the best possible dental care for HIV infected patients. This group includes faculty and administrators from dental schools, Pacific AIDS Education and Training Center faculty and staff, dental and medical clinic directors, and attorneys all involved in providing service to individuals who are HIV positive.

Members of the Oral Health Advisory Group are:

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Consultant

Brad Sears, Roberta A. Conroy Scholar of Law and Policy & Executive Director, The Williams Institute. Assistant Dean of Academic Programs and Centers, UCLA School of Law

Patient Assessment

A. Medical Assessment

In general, the medical assessment of a patient with HIV infection includes the same elements as any other patient. It is the standard of care to ask about all health conditions and to collect information about the status of each condition at baseline (first visit) and periodically thereafter, especially during annual updates. The patient's medication list should also be completed and updated as well, listing dosages and regimens that are subject to change during the course of HIV disease management.

When to Contact the Patient's Physician? The decision on when to contact the patient's physician is up to the dental care provider, based on his or her assessment of the patient's medical conditions and oral treatment needs, and whether additional information is needed from the patient's physician prior to initiating treatment. This is handled the same way as for any other medical condition. Some examples are:

- To obtain the necessary laboratory test results

-When there is any doubt about the accuracy of the information provided by the patient (i.e. inconsistent or illogical answers to questions about medical history) and more accurate information is needed to ensure patient's safety in the course of dental treatment

- If patient reports a change in his/her general health or signs and symptoms and considering the nature and severity of the condition and any impending medical treatments, it is necessary to determine the need for dental treatment modifications.

- The dental health provider should use the medical history and the laboratory test results to decide if treatment should occur in a hospital setting. Such a decision should be made in consultation with the patient's physician

B. Oral Health Assessment

Oral Health Assessment of the HIV sero-positive patient is the same as any other dental patient. Every patient must undergo a baseline dental and periodontal assessment even if they do not occur on the same first visit. The dental record must clearly indicate the patient's chief complaint and its history. In addition, the patient's previous dental history, including all past treatments, complications and frequency of recall and hygiene visits should be obtained. A full mouth series of radiographs is necessary for diagnosis and treatment planning. If the patient is edentulous or impacted teeth are noted, a panoramic radiograph should be taken. A complete head and neck and extra oral examination including the cutaneous tissues, the regional lymph nodes, all major salivary glands, the cranial nerves, the temporomandibular joints and the muscles of mastication should be performed. This should be followed with an intraoral assessment of all oral and pharyngeal mucosal tissues, gingivae and the dentition. A full record of decayed and missing teeth as well as all existing restorations and prostheses and their time of placement should be documented. Periodontal charting should include examination and recording of the following: measurements of pocket depths, attachment loss, mobility, bleeding on probing and suppuration.

A comprehensive treatment plan should be formulated based on the collected information and phased in terms of priority of care (addressing pain, eliminating infections, restoration of diseased teeth and periodontal tissues and oral hygiene instruction and education). The plan should be reviewed with the patient presenting different treatment options and signed by both the doctor and the patient. The patient has the right to refuse the dental care provider's recommendations; risks of non-treatment should be explained and patient's refusal should be documented and signed by the patient. The patient's treatment plan should be updated on an annual basis even if care is still ongoing and the original plan has not been completed.

In the course of dental treatment, the dentist should prescribe all the necessary medications that address the patient's dental and periodontal needs. For oral conditions that require care by a specialist in a particular dental field (i.e., oral and maxillofacial surgery, periodontics, prosthodontics, orofacial pain, oral medicine, etc.), the dental care provider should make the necessary referral and follow-up.

If at any point during the dental treatment, the dental care provider notices oral soft tissue lesions or salivary gland conditions that directly or indirectly indicate HIV disease progression, a referral should be made to the oral health specialist who can assist in diagnosing and treating the oral condition and at the same time the patient's physician should be notified of the referral, the reasons for the referral, the possible implications related to the HIV infection (if any) and the need for follow-up.

The dental care provider must have a contingency plan for responding to patients with emergencies that occur after office hours, on weekends, during holidays or office vacation schedules.

Diagnostic Tests in the Evaluation of the HIV Infected Patient

The CD4 cell count and the viral load are the two laboratory markers that are used to monitor HIV infection. The CD4 cells are a subset of lymphocytes (synonyms are the T4 cell count or helper cells), which correlates with the patient's immune status. The normal value for adults is 750 – 1000 cells/ml. Patients with values less than 200 cells/ml are considered to have advanced immunosuppression and are defined as having AIDS. Those with a value of less than 50 cells/ml are considered to be in a very advanced stage and are usually symptomatic. Patients with low CD4 cell counts (less than 200 cells/ml are at risk for developing the diseases associated with AIDS (opportunistic infections and cancers.) Those with high counts (greater than 350 cell/ml) usually manifest no AIDS related illnesses.

The viral load is a test, which measures the amount of viral RNA in a milliliter of plasma. It represents how much the virus is replicating and the magnitude of the viral burden in the body. The viral load test is also used as a prognostic indicator: the higher the value, the higher the risk of a declining CD4 count and clinical progression. With lower values, one expects a slower progression of disease.

Depending on the test kit used, the minimum viral load value is 20 – 50 c/ml. Below this value, the test is usually reported as "undetectable." The goal of therapy with antiviral drugs is to reduce the viral load to an "undetectable" value. The significance of an "undetectable" viral load is that very little viral replication is occurring. This means that there is little risk of the virus being able to mutate which can result in drug resistance and treatment failure. Reduction of the viral load to "undetectable" levels usually results in an improvement in the immune system (the CD4 cell count rises). Many patients are unable to reduce their viral load to undetectable. For these patients the goal is to reduce the viral load as much as possible.

In interpreting the viral load, it is important to know that patient fluctuation plus lab variation can be as much as three fold. So a value of 50,000 c/ml followed by a value of 70,000c/ml may be within the lab variation. But a value of 5,000 c/ml followed by a value of 50,000 c/ml shows a significant increase. This might indicate drug failure or that the patient has stopped taking medications.

For the dentist, the CD4 cell count indicates the immune status of the patient. The magnitude of the viral load is not an indicator to withhold dental treatment for the patient. High viral loads may be present in a patient with early asymptomatic disease, while low viral loads can be seen in very advanced patients on suppressive antiviral therapy. Knowledge of these markers can tell the dentist the general health of the patient and the risk of progression. The dentist can play an important part in reminding patients of the need for regular follow up and monitoring of these markers.
Most commonly, the CD4 cell count and viral load determinations are to be performed every three to six months depending on the past history of HIV infection and level of suppression achieved.

Lab Values to Track HIV/AIDS Progression

CD4 Cell Count: Assesses the level of CD4 or T-helper cells, which help the immune system to fight infections. Decreases in this number indicate an increased risk of infection. The CD4 can be listed as CD4 or the number may be listed as T4 (CD3+CD4) count. In children under age 5 years, CD4 percentage is

preferred for monitoring immune status because of age related changes in absolute CD4 count in this age group; however, CD4 count can be used in older children.

Viral load (VL) or HIV-1RNA: This represents the copies/ml of the virus in the blood plasma. The goal is to reach an undetectable level of copies. Increasing viral load levels while on antiviral therapy can indicate the development of resistance. The level of viral load does not determine dental care treatment modifications. Treatment modifications are based on the clinical presentation and laboratory indicators. The CD4 cell count correlates with the immune status of the patient

Platelets: Platelets are necessary, along with other factors, for blood to clot. If thrombocytopenia occurs, the risk of bleeding may be so severe as to delay elective and even some emergency therapy until the platelets can be replaced. There is a critical value (see below) which, if not reached, places the patient at risk for severe bleeding.

Absolute neutrophils: Neutrophils may be reported as segmented cells, granulocytes, polymorphonuclear cells, polys, or PMNs. The neutrophils are a special class of white cells that are important for fighting infections. If their numbers decrease, the risk of infection increases.

Critical Laboratory Test Values

Critical laboratory test values are the values that necessitate a change in dental management. It is essential to monitor the lab values that have a direct impact on the ability to safely treat dental patients. All of the HIV/AIDS patients require monitoring of their neutrophils and platelets for invasive treatment, but comorbidities may require monitoring of other labs such as those for liver function or diabetes.

Absolute Neutrophil Count (ANC)
Less than 500 cells/mm^3 (Normal values 1,800 – 8,000 cells/mm^3): An ANC below 500 cells/mm^3 (<about 20 % Neutrophils) represents a risk of infection due to severe neutropenia and necessitates prophylactic antibiotics prior to invasive procedures that will precipitate bacteremia using the AHA guidelines. Consider a therapeutic regimen of post-treatment antibiotics concurrent with invasive procedures and after consultation with the physician.

Platelets
For most care, the platelet count should be above 50,000 cells/ml^3.(Normal adult values: 150,000-450,000 cells/mm^3). A low value represents thrombocytopenia. **Less than 50,000 for adult patients or less than 75,000 for pediatric patients.** When an extensive and/or invasive procedure is planned with risk of bleeding, consult with the physician and recommend intervention to boost platelets prior to such procedures. The physician may elect to give a platelet infusion to increase the platelet count. **The dentist must receive laboratory confirmation of the platelet count immediately (1-2 days) before invasive procedure.** Delay elective dental procedures until the platelet count improves.

CD4 T-Lymphocytes (Helper cells) (absolute)
Less than 50 cells/mm^3 (normal values 590-1120 cells/mm^3) **or less than 15% CD4 percentage for children under 5 years (normal value is CD4 percentage > 25%)**: Evaluate patient for severe opportunistic disease and treatment plan them realistically considering their degree of disease. Even

patients with severely diminished CD4 levels may tolerate definitive dental care rather than only palliative treatment; this must be individually considered for each patient with close consultation with the physician to determine stage of disease. At or below 200 cells/mm^3: the patient is considered to have AIDS due to the increased risk of opportunistic infections. Emphasize good oral care and have them contact you immediately if oral problems start.

Viral Load

The viral load does not have an impact on dental treatment planning. The number of viral copies is indicative of disease, but any modification of dental treatment would be based on the other laboratory test results (discussed previously) and not on the viral load. A significantly high viral load is taken as a predictor of more rapid disease progression and should be correlated with the patient's CD4 count. However, for a very high viral load (eg. 1 million), a consult is warranted and treatment deferred until it improves.

Suggested Frequency of Obtaining Lab Reports

The issue of how frequently laboratory tests need to be obtained is primarily dependent upon the patient's CD4 T-helper cell count, whether the patient is on antiretroviral therapy (cART), and the length of time of viral suppression during cART.

Laboratory tests are important to monitor the patient's health. The suggested frequency of tests is listed below and is based on the patient's prior CD4 test results and medical stability. cART can independently play havoc with blood values regardless of the CD4 count so the patients who are taking this therapy require frequent monitoring: usually every six months or less, depending upon critical values that may need more follow-up. Current laboratory test results are very important for invasive dental procedures. At the same time, clinical judgment is necessary as most dental procedures need not be delayed just because the laboratory results are older than ideal.

Additional Tests Based on Clinical Scenario

Like any patient, the clinical scenario may direct the provider to order additional tests. The indication and interpretation of these laboratory tests would not differ in HIV infected patients. The following are some examples of labs that may be ordered in specific situations:

- complete blood count (CBC) including red blood cell count (RBC), white blood cell count (WBC) and differential count (Diff), platelet count (PLT), hemoglobin level (Hb) and hematocrit (Hct) in patients with history of anemia, thrombocytopenia, advanced HIV disease and prior to surgical procedures to determine if the patient is at risk for post-operative complications such as infection or poor healing
- metabolic panel in patients with a history of kidney disease, hepatitis B/C or other liver diseases as the dentist may need to adjust the dosage of analgesics or antibiotics prescribed
- INR or prothrombin time (PT) and partial thromboplastin time (PTT) for patients with advanced liver disease, those who are taking prescription anticoagulants or when history or physical findings indicate a need to assess bleeding potential
- Hemoglobin A-1C in diabetic patients to determine the patient's level of glycemic control and their risk for post-operative complications such as infection or poor healing

- Assessment of tuberculosis status in patients with a history of recent exposure to or symptoms of TB, they may include skin PPD testing, blood Quantiferon Assay or chest x-ray

It should be emphasized that although having access to laboratory tests for HIV positive patients is helpful to the dental provider, it is not always necessary for many routine procedures.

The dentist can also be instrumental in encouraging the patient to adhere to their medication regimen. The most common cause for drug failure is the patient taking his/her medications inconsistently. Missing just a few doses a month can result in the virus becoming resistant.

Antibiotic Prophylaxis

For the HIV-infected patient, there are no data supporting the need for routine antibiotic coverage to prevent bacteremia or septicemia arising from dental procedures. In fact, patients with AIDS have shown a higher incidence of allergic reactions to antibiotics and other medications, so it may endanger the patient's health by over-prescribing antibiotics.

Prophylactic antibiotics should not be prescribed routinely for the dental visit when the HIV infection is well controlled. Routine antibiotic coverage prior to procedures likely to cause bleeding and bacteremia is not recommended. Many patients at an advanced stage of HIV disease are already taking antibiotics to prevent opportunistic infection, so the dentist should not prescribe additional medications without contacting the physician.

- If a patient with a neutrophil count below 500 cells/mm^3 requires procedures likely to cause bleeding and bacteremia and is not already taking antibiotics for prophylaxis against opportunistic infections, the physician should be contacted regarding the need for antibiotic prophylaxis for dental procedures. Therefore, it is important to check with the physician for the most current CBC with differential.

- The regimen for prevention of bacterial endocarditis is the same in HIV patients as it is for non-infected patients. The American Heart Association guidelines for antibiotic prophylaxis should be followed as with any patient. Consult the patient's physician to determine the need for antibiotic prophylaxis for the patient with multiple co-morbidities and with prosthetic joint replacements or intravascular devices.

- As with any patient, it is the standard of care to investigate all possible drug interactions before prescribing antibiotics or any other medications for patients with HIV infections.

Treatment Considerations

Modifications of Dental Therapy

There is no justification to modify dental treatment based on the fact that the patient is infected with the HIV virus. However, if the patient's medical status is complex, treatment adjustments may be necessary as would be the case with any medically compromised patient. After performing a thorough assessment the dentist should determine any needed treatment modifications. **IT IS ESSENTIAL FOR ALL PRACTITIONERS TO UNDERSTAND THAT MOST HIV PATIENTS, EVEN IF SYMPTOMATIC, CAN BE TREATED SAFELY IN A TYPICAL DENTAL OFFICE OR CLINIC.**

- Bleeding tendencies may determine whether or not to recommend full mouth scaling and root planning or multiple extractions in one visit. In conjunction with establishing a history of excessive bleeding and the appropriate laboratory tests, a tooth-by tooth approach to assess bleeding tendencies could be used as a clinical method to evaluate the patient's risk of hemorrhage.

- In patients who are at risk for increased bleeding, deep block injections should be avoided. In these patients intraligamentary or local infiltration may be an appropriate alternative.

- When performing dental extractions on patients who are at risk for increased bleeding, local measures such as primary closure after surgery and the use of local thrombotic agents such as gelfoam or topical thrombin are helpful in controlling the bleeding.

- In patients who are taking oral anti-platelet drugs or anticoagulants, the decision to discontinue these agents prior to dental procedures must be made in conjunction with the patient's physician and after careful consideration of the patient's risk of bleeding versus their risk for thromboembolism.

- For patients who are taking antiplatelet agents such as aspirin, clopidogrel (Plavix), ticlopidine (Ticlid), and dipyridamole/aspirin (Aggrenox) there is no need to discontinue the anticoagulant for dental and most surgical procedures. For extensive surgical procedures, consult the patient's physician to see if these agents may be discontinued prior to the planned procedure. Typically these drugs must be withheld one week before the procedure.

- Restorative and simple tooth extractions may be performed on patients who take warfarin anticoagulant (Coumadin) with INR values of 3.5 or lower. For extensive surgical procedures or when the INR values are higher, consult with the patient's physician to see if warfarin may be discontinued. It should be noted that many patients who take warfarin are at risk for a thromboembolic event and therefore, it is preferred to discontinue warfarin in conjunction with heparin bridging. This is accomplished by stopping warfarin 5 days before the scheduled surgery and replacing it with low molecular weight heparin (Lovenox). In extreme cases, where the patient's risk of thromboembolism is very high, hospitalization, warfarin reversal and heparinization may be necessary.

    - For patients who are taking the increasingly popular novel anticoagulants such as Dabigatran (Pradaxa), rivaroxiban (Xarelto) and apixaban (Eliquis), there is no need to discontinue these agents for dental procedures or routine dental prophylaxis. For extractions and surgical procedures, discontinuation of these agents 24 hours before the planned procedure is adequate to reduce the risk of bleeding.

- In severe cases of profound thrombocytopenia (platelets < 50,000) or anemia (Hb < 10 g/dL), depending on the invasiveness and extent or treatment needed, patients may be treated more safely in a hospital environment where blood or platelet transfusions are available.

- The ability to withstand treatment for an extended amount of time should be ascertained.

- The ability to return for sequential visits should be determined when a treatment plan is prepared or when a dental procedure is being initiated.

- A pre-treatment antibacterial mouth rinse will reduce intraoral bacterial load, especially for those patients with periodontal disease.

- A six-month recall schedule should be instituted to monitor any oral changes. If the patient is severely immunosuppressed i.e. (CD-4 count of <100), a shorter recall period such as a three-month interval should be considered.

- Patients exhibiting oral lesions should be assessed in a timely manner.

- When salivary hypofunction is present, the patient should be closely monitored for caries, periodontitis, soft tissue lesions and salivary gland disease.

- Fluoride supplements in the form of a rinse and/or toothpaste should be encouraged for those with increased caries and salivary hypofunction.

- Oral hygiene is important in a medically compromised patient, as poor hygiene may be responsible for more rapid progression of oral disease. A proactive attitude and an emphasis on prevention should be encouraged. Dental treatment should also be prioritized based on the patient's health and circumstances (e.g. ability to tolerate long appointments, ability to perform oral hygiene etc.).

Nutrition Counseling

Because of certain oral conditions, the HIV patient may have difficulty consuming a balanced diet. The patient may suffer from changes in taste and decreased ability to chew and swallow because of drug-induced salivary hypofunction. Medications can also lead to GI upset and nausea, further inhibiting the intake of a balanced diet. It is the role of the dentist to recognize oral manifestations that are associated with nutritional deficiencies resulting in intraoral manifestations due to low levels of vitamin B 12, folic acid, etc. Nutritional supplements or referral to the patient's physician or a registered dietitian may be necessary. Some areas to be aware of include:

- Poor oral intake of food or fluid
- Difficulty chewing and swallowing due to continuous mouth sores resulting from candidiasis, herpes simplex, aphthous ulcers, etc.

- Severe dental caries
- Changes in perception of taste or smell
- Patient complaints of economic inability to meet caloric and nutrient needs

Patient education and Referrals for Substance Abuse including Tobacco Usage
As part of patient education about oral self-care and the importance of regular dental and maintenance visits, the dental care provider should provide information to the patient about the negative impact of smoked and smokeless tobacco, e-cigarettes, marihuana and illicit substances such as crystal methamphetamine on oral tissues. As necessary, the patient should be provided with the appropriate referrals for recovery, counseling and risk reduction programs.

HIV Testing

Just like the materials and processes used in dentistry have improved in the past decade, so too has the testing and treatment for HIV. In fact, the field of HIV testing has improved dramatically in recent years. Using the same premise of screening using a sensitive test and reflexing to a more specific test, the HIV tests currently recommended by the CDC are extremely sensitive and specific because these tests ascertain both antibody (IgM and IgG) and antigen (p24). This makes these tests far more accurate and allows detection of HIV earlier in the disease process. The 4th generation tests allow detection of infection at the acute stage of infection, between 2-3 weeks, well before the former standard Western Blot test would detect infection. The 4th generation tests also have a far shorter processing time, and can be run in most lab settings in 60 minutes, for a preliminary result. For these reasons, the Western Blot is no longer considered a confirmatory test.

It is important to refer to the CDC's website for the most current recommendations; currently the latest were released in 2014 and can be found at
http://www.cdc.gov/hiv/pdf/HIVtestingAlgorithmRecommendation-Final.pdf

The current testing recommendations call for the use of a 4th generation test, reflexed if positive to HIV 1/2 antibody differentiation test and an RNA/Nucleic Acid Test (NAT).

If people test positive, it is important to assure they are linked to medical care. Early detection of HIV infection provides many opportunities for health professionals to intervene and help prevent further transmission to others. Use of antiretroviral medications shortly after infection can reduce the viral load set point, reduce the onset of opportunistic infections and assure connection to medical care. Physicians who regularly care for HIV patients also will have access to community resources, including testing for partners, Pre-Exposure Prophylaxis for partners, and medication assistance. The Affordable Care Act has made insurance more widely available, so that more people can get tested for HIV. The US Preventive Services Task Force has given HIV testing a Grade A, which means insurance providers will reimburse it.

Hepatitis B and C

Hepatitis B

According to the CDC, Division of Oral Health, National Center for Chronic Disease Prevention and Health Promotion, October 25, 2013, if one has been vaccinated and has developed immunity, there is virtually no risk for infection following an exposure. For an unvaccinated person, the range of infection varies from 6% to 30% and depends on the hepatitis B e antigen (HBeAg) status of the source individual. If this person is both e antigen positive and surface antigen (HBsAg) positive, he or she will have more virus in the blood and are more likely to transmit HBV.

Standard Precautions, formerly known as Universal Precautions, are now the minimum infection prevention processes to be followed in the dental operatory as many patients and their healthcare providers may be unaware of their HBV status. It is important to consistently follow routine barrier precautions and safely handle needles and other sharps. Blood contains the highest HBV titer of all body fluids. It is the most important vehicle of transmission in the health-care setting. In the dental setting, the gingival sulcus has the greatest concentration of hepatitis B. The hepatitis B virus is also found in other body fluids, including saliva. However, saliva is not an efficient vehicle of transmission because it contains low quantities of infectious HBV. HBV has been demonstrated to survive in dried blood on surfaces for at least one week when at room temperature.

All healthcare providers must be offered the hepatitis B vaccine by their employer, free of charge within 10 days of potentially being exposed to body fluids. (Title 8 Cal OSHA) The vaccine is indicated for people who have an occupational risk of exposure to blood or other blood-contaminated body fluids. The employee has the right to refuse the hepatitis B vaccine. A hepatitis B declination statement must be signed and witnessed. The vaccine consists of three doses. The second dose is given 1-2 months after the first; and the third dose is 4-6 months after the first. A blood test to determine antibody titers should be done 30-60 days after the last dose. A titer lever >150 indicates that the person is immune for life. A person must have a titer >10 to be immune. If a person has a titer level <10 after immunization, the entire series must be repeated. If the person continues to have a low titer level, they are considered primary non-responders. If this person has an exposure, counseling is advised, as the person should get an immunoglobulin injection to help boost immunity.

Hepatitis B is 100 times more infectious than HIV. Prior to the introduction of the HBV vaccine, healthcare providers had a prevalence of HBV infection approximately 10 times higher than the general population.

For more information go to: http://www.cdc.gov/hepatitis/HBV/HBVfaq.htm#overview

Hepatitis C

According to the CDC (May 30, 2015), approximately 3.2 million people in the United States have chronic hepatitis C virus (HCV), with those born during 1945-1965 having the highest prevalence. It is the most common chronic blood borne infection in the United States. HCV is spread in the dental office by percutaneous or mucosal exposures to infected blood. **For HCV, the risk of infection after**

a needlestick or cut is approximately 1.8%. The risk following a blood splash is unknown; however, HCV infection from such an exposure has been reported. Injection drug users have the highest risk of HCV and account for 60% of cases. Sexual exposure accounts for approximately 15% of cases, whereas an additional 5% of exposures are from a combination of hemodialysis patients, those employed as a health care workers (HCW), or infants infected by their mother during birth. 20% have no known recognized source. Co-infection with HIV and HCV is common (50% to 90%) among HIV-infected injection drug users. Co-infection is also common among persons with hemophilia who received clotting factor concentrates before 1987.

It is important to note that percutaneous exposure to blood through tattooing; body piercing and acupuncture can transmit HCV. There are a number of serologic tests currently approved by the FDA that can measure antibodies to HCV. Though these tests cannot distinguish between acute, chronic or resolved infections.

Health care workers (HCWs) are at occupational risk for acquisition of HCV through a blood exposure. About 25-50% of HIV-infected individuals in the United States are also infected with hepatitis C virus. The latest Centers for Disease Control and Prevention and the U.S. Public Health Service/Infectious Disease Society of America recommendations are to screen all HIV-infected persons for HCV infection.

According to the CDC guidelines, post-exposure prophylaxis should not be used after occupational exposure to HCV. The guideline (http://www.cdc.gov/hepatitis/HCV/HCVfaq.htm#section1) recommendations are:

- Serologic testing of source patient
- Determination of baseline values of HCV for the person exposed (anti-HCV and ALT activity) AND
- Follow-up testing four-six months after exposure for anti-HCV and ALT
- Confirmation of all anti-HCV results reported as positive by enzyme immunoassay

In the United States the therapeutic regimens that have been approved for treatment of chronic hepatitis C include: alpha interferon, pegylated interferon, and the combination therapy of interferon and ribavirin with possible addition of boceprevir and telaprevir. In 2013 two new drugs for treatment of HCV were approved by the FDA. These drugs, simprevir and sofosbuvir in combination with other medications depending on the HCV genotypes involved, may reduce the treatment time but are very expensive.

There are no current recommendations to restrict an individual who is infected with HCV from working. Universal precautions and strict aseptic techniques, which include hand washing, use of personal protective barriers and proper care in the use and disposal of needles and sharps, should be employed.

Medications Used in Patients with HIV

Knowledge of antiretroviral drugs is constantly growing, but it should be emphasized that long-term clinical data on drug interactions does not exist for many of the newer medications. Patients taking some of these drugs are likely to suffer from salivary hypofunction. Use of prescription medications such as pilocarpine, cevimeline, and bethanechol as salivary gland stimulants should be considered. Excellent oral hygiene home care, topical fluoride and frequent hygiene recall visits, as well as nutritional counseling and saliva enhancers (sugarless gum, water, saliva substitutes) will be critical for prevention of periodontal disease and dental caries. Patients should also be assessed for consumption of unexpected sources of sugar such as over the counter medications including products like antacids (e.g. Tums, Rolaids); cough drops; suspensions (e.g. Nystatin); and, fungal troches (e.g. Mycelex). All of these may contribute to dental caries.

Currently, there are no known drug interactions between antiretrovirals and local anesthetics used in general dentistry. There are, however, several drugs that are prescribed by dentists or used in the office that may be contraindicated in patients taking antiretroviral medications. It is recommended that the dental care provider consult a reference that thoroughly discusses drug side effects and interactions prior to prescribing any medications or dispensing in the dental office. Combination anti-retroviral therapy (cART) regimens can change rapidly and constant updating of the patient's medication list is necessary. As with most medications, cART can often result in salivary hypofunction.

See Appendix A—Antiretroviral Drugs

Post-Exposure Prophylaxis (PEP)

Most occupational HIV exposures do not result in the transmission of HIV. There have been no documented reports of occupational transmission from a dentist to a patient. Documentation of the event and assessment of risk remain important. The person who is exposed should be referred immediately to a physician who can provide counseling, testing and appropriate medications. The interval within which PEP should be initiated for optimal efficacy is not known, however, "as soon as possible" is recommended. This exposure should be treated as a medical emergency.

For updated recommendations: see the October 2014 New York State Department AIDS Institute, www.aidsinstitute.org.

Management of Occupational Blood Exposure

- Wash wounds and skin with soap and water
- Flush mucous membranes with water
- The incident should be reported to a supervisor if applicable and should be documented in an injury/exposure log
- Report to a medical provider for testing, and access to post-exposure protocol
- New testing algorithms include the combo Antibody/Antigen test with confirmation by Multispot.

Basic Overview:

Determine whether high or low risk depending on source

- Low titer exposure
- Higher titer exposure

Medications

- Start within hours of exposure (as soon as possible)
- Triple therapy for 4 weeks

Baseline Labs to Monitor for Adverse Reactions

- Pregnancy test if applicable
- Complete Blood Count with differential and platelets
- Urinalysis
- Renal Function Tests (BUN and Serum Creatinine)
- Liver Function Tests (Aspartate and Alanine Aminotransferase, Alkaline Phosphatase, Total Bilirubin)

Monitor

- Baseline
- If fourth generation testing is used, blood should be tested every 6 weeks and 16 weeks.
- If third generation testing is used, test at 6 weeks, 12 weeks and 24 weeks. (Note: fourth generation testing is generally used now)

The National Clinicians' Post-Exposure Prophylaxis Hotline is the PEP line. This is an excellent resource for questions and it is open 24 hours a day, 7 days a week. Their number is (888) 448-4911.

Legal and Privacy Issues

Testing for HIV infection and reporting HIV test results are governed by California statute. Protection of information regarding HIV status, handling of public health records containing information about HIV or AIDS and personally identifying information, and federal and state rules governing protected health information and medical records, all limit disclosure by medical care providers. Additionally, people living with HIV ("PLWH") are entitled to a host of legal protections. Both federal and state constitutions promise a right to privacy which applies to HIV status. These laws, in addition to federal and state laws prohibiting discrimination against PLWH, are key considerations when serving this community.

Informed Consent for HIV Testing[1]
Before a medical care provider, including a dentist, may test a patient for HIV infection, the provider must inform the patient that the test is planned. Medical care providers must also provide information about the test, inform the patient that there are numerous treatment options available for a patient who tests positive for HIV and that a person who tests negative for HIV should continue to be routinely tested. The medical care provider must also inform the patient that he or she has the right to decline the test. If a patient declines the test, the medical care provider shall note that fact in the patient's medical file.

HIV Testing for Occupational Exposure[2]
In some limited instances, healthcare workers, including dentists, may be exposed to blood borne pathogens as part of their occupation. Thus, occupational exposure may give rise to HIV testing. In these cases, the law requires following strict protocols that balance the needs of the healthcare workers with the privacy interests of PLWH. Even in the context of occupational exposure, HIV testing of a patient cannot be mandated by a healthcare worker. Post-exposure prophylaxis for HIV exposure is available for occupational exposure and should be considered where appropriate.

Notification of HIV Test Results[3]
A patient who is tested for HIV infection should receive timely information and counseling from the medical care provider. An explanation of the results as well as the implications of those results to the patient's health should be explained.

If the patient tests positive for HIV infection, the medical care provider shall inform the patient that there are numerous treatment options available and identify follow-up testing and care that may be recommended. That information must also include contact information for medical and psychological services to ensure proper linkages to HIV care. If the patient tests negative for HIV infection and is known to be at high risk for HIV infection, the medical care provider shall advise the patient of the

[1] California Health and Safety Code § 120990.
[2] California Health and Safety Code § 120262.
[3] California Health and Safety Code § 120990(h).

need for periodic retesting due to limitations of testing technology and the six month "window period" for verification of results.[4] Medical care providers may also offer prevention counseling or a referral to prevention counseling to the patient.

Electronic notification of test results for HIV infection is only permitted if requested by the patient and the medical care provider considers such notification "most appropriate."[5] Prior consent from the patient must be obtained for any electronic notification and the medical care provider must view the results prior to the patient accessing such results. Telephone communication is not considered electronic communication. Regardless of the type of notification, protocol with regard to dispensing post-test information, as described above, still applies.

HIV Reporting[6]

In 2006, California, along with a number of other states, moved from codes-based reporting to names-based reporting for HIV/AIDS. This was in response to new funding requirements of the Ryan White CARE Act, requiring federal funding allocations to states be calculated according to the number of HIV-positive individuals identified by name. Surveillance data from previously identified individuals living with HIV could not be imported to the new system and had to be re-identified and validated under the new system.

Dentists, as health care providers, are required to report cases of HIV infection to the local health officer using patient names on a form developed by the state Department of Public Health. Laboratories are also required to submit HIV case report forms to the local health officer. Once the local health officer is able to eliminate duplicate reports, they are submitted to the state Department of Public Health. The state, in turn, removes any personally identifying information and submits required reporting to the federal Centers for Disease Control.

Confidential Public Health Records[7]

Because HIV reporting has shifted to a names-based reporting system, there are legal protections that generally prohibit disclosure of public health records containing information regarding HIV or AIDS and personally identifying information, either developed or acquired by the local public health agency, the state, or an agent thereof. A few exceptions do apply, including written authorization of the person who is the subject of the record or a guardian or conservator of that person or use of public health records containing such information by state and local health officers in conducting research in the investigation, control and surveillance of the disease.[8] Unauthorized disclosure, ranging from negligent to willful, may result in civil penalties up to $25,000 per actionable offense.[9]

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[4] *See* California Department of Public Health, *HIV Testing Information and Resources for California Clinicians*, http://www.cdph.ca.gov/programs/aids/documents/ctthivtestinfoforclinicians.pdf (last accessed March 17, 2015) (explaining "window period").
[5] California Health and Safety Code § 123148.
[6] California Health and Safety Code § 121022(a).
[7] California Health and Safety Code § 121025.
[8] California Health and Safety Code § 121025 (a)-(b).
[9] California Health and Safety Code § 121025 (e).

Disclosure of HIV Test Results[10]

Unauthorized disclosure of HIV test results linked to individually-identifying information is generally prohibited from disclosure. Including the results of an HIV test in a patient's medical records is not considered disclosure. Written authorization is required for each separate disclosure of HIV test results and must identify to whom such disclosure can be made. Unauthorized disclosure, ranging from negligent or willful, may result in civil penalties up to $25,000 per actionable offense.

Privacy and Confidentiality of Medical Records[11]

Federal law governing protected health information under the Health Insurance Portability and Accountability Act also protects records containing information regarding HIV or AIDS and personally identifying information. Unauthorized disclosure is generally prohibited unless it falls within specific permitted use such as coordinating care and treatment of the patient, as part of administrative processes to obtain payment for care provided, for public health purposes, and in response to criminal justice processes, including specific circumstances where court orders or warrants demand disclosure. Unauthorized disclosure is subject to administrative penalties and criminal penalties for anyone who knowingly obtains or discloses individually identifiable personal health information. This law offers individuals no private right to legal action.

State law governing confidential medical information under the Confidentiality of Medical Information Act applies to any licensed or certified health care provider, which includes dentists. Medical records include charts, records, notes, laboratory results, and pharmacy and prescription histories. Unauthorized disclosure is generally prohibited unless it falls within specific exceptions such as coordinating care, treatment, payment of services for the patient, for public health purposes, and in response to legal processes, including specific circumstances where court orders or warrants demand disclosure. Unauthorized disclosure is subject to a private right of action including provisions for civil penalties (including nominal damages and actual damages) as well as administrative fines up to $250,000 per violation.

Legal Standards for Treating PLWH[12]

Federal and state constitutions protect the fundamental right to privacy. In California, that fundamental right extends to HIV status.[13] In addition to these constitutional rights, PLWH are protected by non-discrimination mandates which can be found in the federal Americans with Disabilities Act[14], Section 504 of the federal Rehabilitation Act, and California's Unruh Civil Rights Act and Disabled Person's Act.[15] These laws prohibit discrimination against all PLWH in public accommodations.

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[10] California Health and Safety Code § 120980.

[11] Health Insurance Portability and Accountability Act, HIPAA Privacy Rule, 45 CFR § 164.500 et. seq. (2000); Confidentiality of Medical Information Act, California Civil Code § 56.10 et seq. (1981).

[12] U.S. Const. amend. IV.

[13] CA Const. art. I, § 1.

[14] *Bragdon v. Abbott*, 524 U.S. 624 (1998) (finding that the Americans with Disabilities Act applies to all people living with HIV, regardless of their stage of infection).

[15] Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12181-12189 (1990); Rehabilitation Act of 1973, § 504 (1973); Unruh Civil Rights Act, California Civil Code § 51 et. seq. (2003); California's Disabled Persons Act, California Civil Code § 54.1 (1996).

Dentists, as medical care providers providing health services to the public, are required to comply with non-discrimination provisions applying to public accommodations. This means dentists must serve PLWH and any considerations when making exceptions to serving a patient living with HIV must be based on reasonable judgments informed by current medical knowledge and not based on stereotypes or irrational fears. Given that the risk of HIV infection to dental staff or other patients is remote and can be further reduced by implementing already required universal safety precautions applying to all blood borne pathogens, any argument which relies on this particular risk will be legally insufficient.[16]

The community standard of practice requires that dentists be as familiar with basic HIV medical care as they are with other common medical conditions. A referral to other general practitioners because the dentist is ignorant about basic HIV medical care is a violation of community dental practice norms. Referrals to a specialist or to a hospital setting must always be based on the clinical needs of the patient, not the ignorance or fear of the dentist, staff or other patients. The legal obligation of the dental provider is to refer patients for testing and follow-up. For example, a dentist may be held legally liable if a patient who has a lesion with unknown etiology needs a referral in order to rule out possible HIV etiology, and the referral for testing and counseling is not done.

Ethical Standards for Treating PLWH

Ethical standards of the California Dental Association, American Dental Association, and World Dental Federation also make clear that it is unethical to refuse to care for PLWH because of fear of the risk of infection.

Best Practices for Treating PLWH

Any decision to deny dental services to PLWH should be done with an abundance of caution. Typically, any policies and practices that result in differential treatment and care of HIV-positive patients, including blanket refusals to treat HIV-positive patients and blanket referrals of all HIV-positive patients to "specialists" have been found to be scientifically unwarranted, and courts have found such blanket practices and policies to constitute unlawful discrimination against PLWH.

PLWH have reported facing discrimination in accessing dental services.[17] Given this particular history, dentists must understand that some PLWH may choose not disclose their HIV status. For this reason, any effort to help patients feel comfortable and confident in disclosing their HIV status is vital to serving this vulnerable population.

Staff must receive appropriate training on the specific protections which apply to the privacy and confidentiality of HIV status. Because patient information must be kept confidential to the extent possible, unauthorized disclosures of HIV or AIDS-related information coupled with personally identifiable information, or medical records of patients living with HIV, should be monitored. Given that unauthorized disclosures can lead to significant awards for damages, utilizing a uniform written authorization form that includes specific mention of HIV/AIDS-related information, the party with

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[16] *See* United States Department of Justice, Civil Rights Division, *DOJ HIV/AIDS Enforcement*, http://www.ada.gov/aids/ada_aids_enforcement.htm (last accessed March 17, 2015)(citing two recent dental discrimination cases settled on behalf of PLWH).

[17] *See* Brad Sears, Christian Cooper, Fariba S. Younai, and Tom Donohoe. HIV Discrimination in Dental Care: Results of a Discrimination Testing Study In Los Angeles County (2011), http://williamsinstitute.law.ucla.edu/wp-content/uploads/Sears-HIV-Discrimination-Dental-Care-Dec-2011.pdf (last accessed March 17, 2015).

whom such information can be shared, and the patient's signed consent would help to safely facilitate any necessary exchange in information.

Selected Websites for HIV/AIDS Information for Dentists

General Sites of Particular Interest to Dentists:

- American Dental Association – legal, regulatory, ethical issues, evidence-based dentistry http://www.ada.org/

- California Dental Association – extensive resources on practice management http://www.cda.org

- HIVdent – extensive information on oral manifestations, infection control, medications, picture gallery, and other resources: http://www.hivdent.org

Federal Government-Sponsored Websites:

- Aids.gov – overview of federal resources—http://www.aids.gov

- Centers for Disease Control and Prevention (CDC) (www.cdc.gov):
  National Center for HIV/AIDS, Viral Hepatitis, STD and TB Prevention
  http://www.cdc.gov/nchstp/hiv-aids/dhap.htm
  CDC National Prevention Information Network (NPIN)--http://cdcnpin.org

- Health Resources and Services Administration (HRSA):
  HRSA Target Center – Tools for the Ryan White Community
  http://careacttarget.org/library/guide-hivaids-clinical-care-oral health
  AIDS Education Training Centers (AETCs) – HIV Education for Healthcare Professionals, with listing of regional AETC's resources and training opportunities—http://aidsetc.org/

- National Institutes of Health (NIH)
  AIDS Info – Guidelines in use of antiretroviral agent—http://aidsinfo.nih.gov
  National Institute for Dental and Craniofacial Research—http://www.nidcr.nih.gov/

Clinical Resources for Dentists:

- HIVdent – Comprehensive site with resources for oral healthcare—http://www.hivdent.org
- American Academy of Oral Medicine – Publisher of Clinicians Guides Series, which includes "Clinician's Guide to Treatment of Patients with HIV & Other Communicable Diseases, 4th ed, 2013." https://maaom.memberclicks.net/clinicians-guides

- Mountain Plains AETC – publications include "Oral Health Care for the HIV-Infected Patient" http://www.mpaetc.org/Products

General Clinical Resources:

- HIV Insite (UCSF) – comprehensive up-to-date information on HIV/AIDS
  http://hivinsite.ucsf.edu/

- HIV Insite Database of Antiretroviral Drug Interactions
  http://hivinsite.ucsr.edu/insite?page=ar-00-02

- John Hopkins AIDS Guide – available for mobile devices and web
  http://www.hopkinsguides.com/Hopkins.up

- University of Liverpool –free drug interaction apps for HIV and Hepatitis C
  http;//www.hiv-druginteractions.org/
  http://www.hep-druginteractions.org/

- Infectious Disease Society of America - HIVMA/IDSA Primary Care Guidelines for the Management of Persons Infected with Human Immunodeficiency Virus
  http://www.hivma.org/home

- DrugBank – comprehensive database with over 6,800 drug entries—http://www.drugbank.ca/

Infection Control:

- Organization for Safety, Asepsis and Prevention (OSAP) – mission is safe and infection-free delivery of oral healthcare – http://www.osap.org

- American Nursing Association Safe Needles Save Lives – many resources on needlestick safety and prevention – www.needlestick.org

Post-Exposure Prophylaxis:

- The National Clinician's Hotlines:
  Post-Exposure Prophylaxis Hotline – http://www.nccc.ucsf.edu/about_nccc/pepline/
  PEPline 888-448-4911 – national clinician's PEP telephone hotline
  Warmline 800-933-3413 – national HIV telephone consultation service

- Florida Caribbean AETC – resources include printed summary guidelines for PEP and many other topics, http://fcaetc.org/treatment-guidelines.php

International Issues in HIV/AIDS:

- AIDS Education Global Information System (AEGIS) – information and resources for global AIDS epidemic – **http://www.aegis.com/**

- World Dental Federation (FDI)http://www.fdiworlddental.org

APPENDIX A

Known Antiretroviral Drug Interactions In General Dentistry

NOTE: The information here may serve as a guideline, but it only represents some of the known drugs and the adverse drug reactions *at this time* (2015). New drugs and drug interactions are being discovered constantly, so dentists are encouraged to check the latest information before prescribing drugs. For more complete information about all drug interactions and contraindications, please consult information provided by the drug manufacturer or a recently published drug reference. **Some good sources include**: **American Academy of Oral Medicine 2012, and Medical Management of HIV Infection 2013. Latest updates can also be found on various websites-see Selected Websites for HIV/AIDS information as a guide. Summary information on antiretroviral drug interactions is available in a free app for Apple and Android devices from the University of Liverpool. This app can be downloaded from the website: hiv-druginteractions.com.**

The human immunodeficiency virus (HIV) must insert its genetic material into a susceptible cell to replicate and release more virions. This process involves a number of steps that present opportunities for therapeutic intervention. HIV mutates rapidly in response to single drug therapy and quickly develops resistance to individual drugs. Antiretroviral (ARV) drugs delivered in combination therapy were found to be far more effective in suppressing HIV replication. This is now the standard of care for anti-HIV drug therapy and it allows those who respond favorably to therapy to have a more normal life span. However, this comes with a price. There is direct toxicity from the drugs themselves and drug-drug interactions are frequent. These effects can have serious consequences, and can be difficult to predict. The current ARV drugs are far more effective and easier to tolerate than earlier drugs, but they are all toxic to varying degrees. Clinicians prescribing these drugs always have to weigh hoped-for benefits against potential negative consequences from adverse effects of the individual drugs and unintended interactions between all the medications a given patient is taking.

Six major classes of ARV drugs have been developed to treat HIV/AIDS, however no drugs have been developed to date that cure the HIV infection. The drugs currently available in each of these classes are discussed below. ARV drugs may be cited by an abbreviation, a pharmaceutical name, and/or a brand name, so all these names are presented. Many drugs, including a number of ARVs and other commonly prescribed drugs, interact with the Cytochrome P450 (CYP450) enzyme system in the liver and intestine that is responsible for much drug metabolism. An individual drug may be a substrate (i.e. be metabolized by) these enzymes; it may also inhibit or induce the metabolism of another drug. An individual drug may be a substrate, inhibitor, and/or inducer all at the same time depending on the individual CYP450 enzymes it interacts with and how these affect other involved drugs. This can greatly complicate the spectrum of drug-drug interactions and make them difficult to predict.

Drug interactions in dental practice are not as voluminous as they are in medical practice because most dental-related drug therapy is short-term and the number of drug classes is small in comparison. Dentists do need to be aware of the potential for interaction between drugs they may prescribe and the

ARV and other drugs that patients are taking concurrently. There may be interactions involving drugs not prescribed by the dentist that can have clinical consequences for dental practice. As an example, drugs that inhibit the metabolism of warfarin could increase bleeding tendency and dentists should have recent INR values for such patients before performing invasive procedures. The app for mobile devices from the University of Liverpool that gives information on potential ARV drug interactions with other drugs is particularly easy to access and understand. This app is a free download from the website: hiv-druginteractions.com.

Fortunately for dentists, their most commonly used drugs are local anesthetics, which have very low potential for drug-drug interactions with ARVs. Commonly used amide anesthetics are metabolized by the CYP450 system but adverse drug-drug interactions with ARVs have not been noted. Systemic toxicity from local anesthetics can occur from excessive dosage or inadvertent intravascular injection. Care should be taken when administering local anesthetics to patients with compromised liver function because toxic dose levels may be lower in such persons. Other drugs that dentists may prescribe, including some antibiotics, antifungals, anxiolytics, sedatives and topical steroids, have the potential for interactions with certain ARVs. In the following list of currently-approved ARVs (with FDA approval dates), each drug has a section on Contraindications with potential drug-drug interaction concerns for general dentists listed first, followed by other potential interactions that dentists should be aware of, and then a summary of adverse reactions to the drugs themselves.

Regarding the adverse reactions listed, the more common ones are abbreviated with the key as follows: D – diarrhea, F – fever, GI – gastrointestinal, HA – headache, N – nausea, R – rash, V – vomiting.

1. NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NRTI)

NRTIs prevent the conversion of viral RNA into double-stranded DNA so it can insert into the genome of the cell. This was the first class of ARV medications discovered. These drugs are the backbone of antiretroviral therapy, and are commonly prescribed in three-drug regimens that contain two NRTIs and a third drug chosen from one of the NNRTI, PI, or INSTI classes. NRTIs are not extensively metabolized before being eliminated by the kidneys. Therefore, significant interaction with enzymes involved in drug metabolism are unlikely. However, drug-drug interactions from other causes can occur. Adverse effects from NRTI drugs themselves are common and can be severe. These include mitochondrial toxicity, lactic acidosis, hepatic steatosis, myelosuppression with cytopenia, cardiomyopathy, and many others.

ABBREVIATION	BRAND NAME	CONTRAINDICATIONS
AZT Zidovudine Approved 1987	Retrovir	Dental - Fluconazole increases AZT serum levels General – Do not prescribe with other drugs that cause bone marrow suppression Adverse reactions - GI side effects, bone marrow suppression and anemia, N, V, HA, F, R, malaise, bleeding gingiva, oral ulcers, taste perversion
ddI Didanosine Approved 1991	Videx	Dental - Metronidazole and nitrous oxide may increase risk of peripheral neuropathy, so use with caution. Avoid

			tetracycline as it may increase risk of pancreatitis and absorption may be decreased. Separate dosing of other drugs for 2 hours, especially ketoconazole, quinolones. Adverse reactions - peripheral neuropathy, cardiovascular risk, anemia, leucopenia, xerostomia, sialadenitis
d4T Approved 1994	Stavudine	Zerit	Dental - Metronidazole and nitrous oxide may increase risk of peripheral neuropathy, so use with caution. Adverse reactions – peripheral neuropathy, which may range in severity from mild to disabling, pancreatitis, anemia, neutropenia, thrombocytopenia
3TC Approved 1995	Lamivudine	Epivir	Dental - interactions unlikely, possible exception is midazolam General – clinically significant drug interactions with lamivudine appear to be uncommon. Adverse reactions – HA, N, V, stomatitis
ABC Approved 1998	Abacavir	Ziagen	Dental – interactions unlikely General - Clinically significant drug-drug interactions uncommon. However, simultaneous initiation of abacavir with drugs likely to cause systemic reactions or rash (such as sulfonamides, other NRTIs, or fosamprenavir) may complicate the evaluation of possible hypersensitivity reactions Adverse reactions – hypersensitivity reaction, R, N, V, D, fatigue, pharyngitis, oral ulcers
TDF Approved 2001	Tenofovir	Viread	Dental – interactions unlikely General – Clinically significant drug-drug interactions unlikely Adverse reactions - renal toxicity, possible effects on bone metabolism, N, V, flatulence.
FTC Approved 2003	Emtricitabine	Emtriva	Dental – interactions unlikely General - Clinically significant drug-drug interactions unlikely. Adverse reactions – HA, N, V, nasopharyngitis

<u>FIXED DOSE COMBINATIONS WITH NRTIs ONLY:</u>

For drug-drug interaction potential and adverse reactions, see discussion of individual drugs

AZT-3TC Approved 1997	Combivir (zidovudine + lamivudine)

AZT+3TC+ABC Approved 2000	Trizivir (zidovudine + lamivudine + abacavir)
ABC+3TC Approved 2004	Epzicom (abacavir + lamivudine)
TFD+FTC Approved 2012	Truvada (tenofovir + emtricitabine)

2. NON-NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NNRTI)

NNRTIs prevent the conversion of viral RNA into DNA similar to the NRTIs, but they have a different mechanism of action. These drugs have an affinity for the CYP450 enzyme system. NNRTIs may be metabolized by these enzymes as well as inhibit or induce them whether or not they are a substrate for metabolism. These properties greatly increase the potential of NNRTIs for serious drug-drug interactions. Serious adverse effects of the drugs themselves include drug hypersensitivity (including Stevens-Johnson Syndrome), lipid disorders, serious skin rash, and liver toxicity.

ABBREVIATION		BRAND NAME	CONTRAINDICATIONS
NVP Approved 1996	Nevirapine	Viramune	Dental - NVP is both a substrate and inducer of CYP450 enzymes, affecting the levels of many co-administered drugs, and those that inhibit CYP3A activity, such as ketoconazole, cimetidine, and macrolide antibiotics, can increase NVP levels. Risk of hepatotoxicity with fluconazole General – increases metabolism of warfarin and may decrease INR below therapeutic levels. Adverse reactions - hepatotoxicity, R, stomatitis
DLV Approved 1997	Delviradine	Rescriptor	Dental - avoid co-administration with Phenobarbital and ketoconazole, increases plasma concentrations of clarithromycin, midazolam, alprazolam, and triazolam. General – DLV inhibits metabolism by CYP450 enzymes, affecting the levels of many co-administered drugs. Adverse reactions – R, F, HA, fatigue, conjunctivitis, muscle aches, changes in fat distribution in the body (lipodystrophy), stomatitis, oral ulcers, xerostomia, taste perversion
EFV Approved 1998	Efavirenz	Sustiva	Dental - increases plasma concentrations of midazolam, triazolam. Serum levels of EFV are increased by fluconazole. EFV interacts with CYP450 enzymes, affecting the hepatic metabolism of many co-administered drugs, including many antiretrovirals.

			Adverse reactions – CNS effects, hypersensitivity reaction (including Stevens-Johnson Syndrome), lipodystrophy, D, V, R, hyperlipidemia, insomnia, vivid dreams, stomatitis
ETV Approved 2008	Etravirine	Intelence	Dental - antifungal agents increase ETV concentrations, whereas ETV decreases itraconazole and ketoconazole concentrations. It increases serum levels of alprazolam, diazepam, and warfarin, which may increase INR. Erythromycin increases ETV concentration. General - ETV may act as a substrate, inhibitor, or inducer of multiple CYP450 enzymes. It has therapeutically significant interactions with many medications, including a number of antiretroviral agents, and may have effects that are difficult to predict. Adverse reactions – erythema multiforme, N, R, HA, stomach pain, blurred vision, dizziness, mouth ulcers
RPV Approved 2011	Rilpivirine	Edurant	Dental - macrolide antibiotics and azole antifungals may increase RPV levels. RPV may affect the levels of other medications. It decreases serum levels of ketoconazole. General - An acidic gastric environment is necessary for absorption of RPV. Medications that increase gastric pH substantially reduce serum RPV concentrations. It is a substrate of CYP450 enzymes, so drugs that induce or inhibit this system may alter serum RPV levels. Adequate pharmacokinetic data and clinical correlates are not yet available for many potential interactions. Adverse reactions – CNS effects, depressive disorders, HA, insomnia, R, increased lipids, hepatotoxicity

FIXED DOSE COMBINATIONS WITH NRTIs and NNRTIs:

For drug-drug interaction potential and adverse reactions, see discussion of individual drugs

TDF+FTC+EFV Approved 2006	Atripla (tenofovir + emtricitabine + efavirenz)
TDF+FTC+RPV Approved 2011	Complera (tenofovir + emtricitabine + rilpivirine)

3. PROTEASE INHIBITORS (PI)

PIs block the enzyme necessary to produce mature virions that propagate the HIV infection. PIs have a high barrier to development of drug resistance, but also have a propensity to bad metabolic effects,

including GI disturbances, dyslipidemia, insulin resistance, and changes in fat distribution in the body (lipodystrophy). Similar to NNRTIs, PIs have a strong affinity to CYP450 enzymes and consequently a strong potential for serious drug-drug interactions. All PIs inhibit the most prominent CYP enzyme. The strong inhibitory properties of ritonavir are actually exploited by combining it with other PIs so that the other PI drug can be effective when administered in smaller doses.

ABBREVIATION	BRAND NAME	CONTRAINDICATIONS
SQV Saquinavir Approved 1995	Invirase	Dental - increased plasma levels of clindamycin, itraconazole, ketoconazole, triazolam, midazolam. Increased metabolism of dexamethasone. General - SQV is metabolized by the CYP450 enzyme system, and alters the concentrations of other drugs metabolized by this pathway. Similarly, drugs that induce or inhibit these enzymes, such as ketoconazole, may cause therapeutically significant alterations in SQV levels. Drug formulation of SQV is boosted with ritonavir. Adverse reactions – D, N, V, dizziness, hyperlipidemia, lipodystrophy, neutropenia, thrombocytopenia,
IDV Indinavir Approved 1996	Crixivan	Dental - contraindicated with triazolam, midazolam. Increased blood levels of clarithromycin. Reduce dose when given with ketoconazole. General - IDV is an inhibitor of CYP450 enzyme system and may alter serum concentrations of other drugs metabolized by this pathway. Because IDV is also metabolized by CYP450 enzymes, drugs that affect this enzyme system, such as ketoconazole, may significantly affect IDV levels. Adverse reaction – increased insulin resistance, kidney stones, hyperbilirubinemia, N, HA, V, D, stomach pain
RTV Ritonavir Approved 1996	Norvir	Dental - contraindicated with sedative hypnotics (alprazolam, diazepam, midazolam), meperidine, propoxyphene. Increases plasma levels of clarithromycin, fluconazole. Decreased plasma levels of ritonavir may occur with dexamethasone. Changes levels of NSAID's, antihistamines, antifungals. General - In current practice, ritonavir is used almost exclusively at subtherapeutic doses solely to maintain therapeutic serum levels of other protease inhibitors used in combination, i.e., as a pharmacokinetic enhancer of other protease inhibitors. Ritonavir is a potent inhibitor of CYP450 enzymes. Coadministration with ritonavir therefore causes clinically significant serum alterations of a variety of drugs.

			Adverse reactions – D, N, V, hepatotoxicity, pancreatitis, hyperlipidemia, taste perversion, may cause perioral paresthesia
LPV/r	Lopinavir/r	Kaletra	Dental – it may increase metabolism of warfarin and thereby decrease INR. Items listed above for ritonavir apply for this combination drug as well. General - The ritonavir component of lopinavir/ritonavir is a potent inhibitor of CYP450 enzymes. Coadministration with lopinavir/ritonavir therefore causes clinically significant alterations in serum levels of a variety of drugs. Adverse reactions – D, N, V, hyperlipidemia, glucose intolerance, hepatotoxicity, GI intolerance, xerostomia
NLF	Nelfinavir	Viracept	Dental – coadministration with some benzodiazepines can alter serum levels (alprazolam, diazepam, flurazepam). Should not be administered with midazolam. Drugs that affect the CYP450 enzyme system (e.g. ketoconazole) affects NLF levels. General - NLF is a substrate and inhibitor of CYP450 enzymes and significantly interacts with many drugs. Adverse reactions – D, flatulence, GI disturbances, R, fatigue, liver effects, oral ulcers, pharyngitis
FPV	Fosamprenavir	Lexiva	Dental – co-administration with some benzodiazepines can alter serum levels (alprazolam, diazepam, flurazepam). Should not be administered with midazolam. General - FPV is both a substrate and inhibitor of CYP450 enzymes and alters the concentrations of other drugs metabolized by this pathway Adverse reactions – increased lipids, cardiovascular disease, R, D, N, V, HA, fatigue, itching of face and mouth
ATV	Atazanavir	Reyataz	Dental – coadministration with azoles could increase ATV and also increase itraconazole and ketoconazole. Could reduce efficacy of codeine and increase serum concentration of alprazolam, diazepam, midazolam. General - ATV is a substrate and inhibitor of certain CYP450 enzymes, and alters serum concentrations of other drugs metabolized by this pathway. Adverse reactions – heart rhythm changes, renal changes, increased bilirubin, depression, dizziness, SOB, N, V R, oral ulcers
Approved 2000			
Approved 1997			
Approved 2003			
Approved 2003			

TPV Approved 2005	Tipranavir	Aptivus	Dental – increases concentration of benzodiazepines, and should not be administered with midazolam or triazolam. Increases serum concentrations of macrolide antibiotics, including erythromycin. It can inhibit metabolism of warfarin and increase bleeding General - TPV both inhibits and induces CYP450 enzymes. It must be coadministered with ritonavir, and its net effect is inhibition. TPV also induces other metabolic processes. Thus, TPV alters the concentrations of many other drugs metabolized by these pathways, in ways that may be complex and difficult to predict. Adverse reactions – D, N, V, HA, fatigue, hyperglycemia, increase lipids
DRV Approved 2006	Darunavir	Prezista	Dental - DRV increases metabolism of warfarin thereby decreasing INR. It increases serum concentrations of the benzodiazepines midazolam and triazolam, and antifungals itraconazole and ketoconazole. General - Darunavir is a substrate for and inhibits CYP450 enzymes, and it must be coadministered with ritonavir. Darunavir has clinically significant interactions with many medications, including other antiretrovirals. Adverse reactions – hyperlipidemia, lipodystrophy, stomach pain, N, V, D, R, HA, xerostomia, pharyngitis

FIXED DOSE COMBINATIONS WITH PROTEASE INHIBITORS AND DRUG METABOLISM INHIBITOR:

For drug-drug interaction potential and adverse reactions, see discussion of individual drugs

ATV + COBI Approved 2015	Atazanivir + Cobisistat
DRV + COBI Approved 2015	Darunivir + Cobisistat

4. FUSION AND ENTRY INHIBITORS

Entry inhibitors interfere with the viral ability to enter the cell. The two currently available entry inhibitors are in different drug classes and have markedly different metabolic profiles as discussed below.

ABBREVIATION	BRAND NAME	CONTRAINDICATIONS
T-20 (Fusion inhibitor)	Enfuvertide	Fuzeon	General - Enfuvirtide is catabolized by proteolytic enzymes; it is not metabolized by CYP450 enzymes.

Approved 2003		There are no known clinically significant interactions between enfuvirtide and other medications. Adverse reactions – It must be injected and pain, redness, itchiness at injection sites are common. Other common reactions are F, R, dizziness, anxiety, abdominal pain, myalgia, xerostomia, taste perversions
MVC (Entry Inhibitor) Approved 2007	Maraviroc	Selzentry	Dental – concurrent azole antifungals (itraconazole and ketoconazole) and erythromycin may increase MVC serum concentrations. General – MVC is a substrate of CYP450 enzymes and p-glycoprotein, and has therapeutically significant interactions with many medications. It neither induces nor inhibits CYP450 enzymes, thus MVC does not appear to cause significant changes in concentrations of other drugs. Adverse reactions – liver dysfunction, N, R, dizziness, stomach pain, loss of appetite

5. INTEGRASE STRAND TRANSFER INHIBITORS (INSTI) -

Integrase strand transfer inhibitors (INSTI) block the enzyme necessary to integrate the viral DNA into the DNA of the cell. They are generally well tolerated, although they are also prone to development of drug resistance and cause insomnia and headaches.

ABBREVIATION		BRAND NAME	CONTRAINDICATIONS
RAL Approved 2007	Raltegravir	Isentress	Dental – Not clinically significant with drugs commonly prescribed by dentists are noted. General - RAL does not interact with the CYP450 enzyme system and thus has a lower risk of significant drug-drug interactions. It is metabolized primarily by glucuronidation and inducers or inhibitors of this system may affect serum levels of RAL. Adverse effects – skin reaction, R, liver problems, allergic reaction, muscle pain, D, HA, dizziness
EVG Approved 2012	Elvitegravir	Vitekta	Dental – Coadministration with many drugs used by dentists has not been studied with EVG. Azole antifungal drugs appear to increase EVG concentrations. General - Elvitegravir is primarily metabolized by CYP450 enzymes, so drugs that induce or inhibit the actions of these enzymes may affect serum levels of EVG. Elvitegravir is only available coadministered with other drugs (such as Stribild) and the formulation will have the effects of all its pharmaceutical components.

			Adverse effects – These are still being studied but appear to be few. D and R have been noted.
DTG Approved 2013	Dolutegravir	Tivicay	Dental – Coadministration with many drugs used by dentists has not been studied. General - Dolutegravir is metabolized primarily by glucuronidation, and CYP450 enzymes. Inducers or inhibitors of these enzymes affect serum levels of dolutegravir. It needs to be taken with a pharmacologic booster. Adverse reactions – dolutegravir appears to have a more favorable adverse effects profile but has been noted to cause N, D, HA, R, insomnia, fatigue and has the potential for allergic reactions.

FIXED DOSE COMBINATION WITH NRTI AND INSTI ARVs:

For drug-drug interaction potential and adverse reactions, see discussion of individual drugs

ABC + DTG + 3TC Approved 2014	Abacavir + Dolutegravir + Lamivudine	

6. PHARMACOKINETIC ENHANCERS

Pharmacokinetic enhancers have no activity against HIV but they enhance the activity of ARV medications that are given concurrently. One drug in this class is approved as of 2014.

ABBREVIATION	BRAND NAME	CONTRAINDICATIONS
COBI Cobisistat Approved 2012	Tybost	COBI is a pharmacokinetic enhancer that has no activity against HIV. COBI is a substrate and inhibitor of CYP450 enzymes and other metabolic systems. It is intended to boost the antiretroviral effects of ARVs that are metabolized by these enzymes. Thus, COBI causes clinically significant alterations in serum levels of a variety of other drugs that are metabolized by or are substrates of these systems. Management of most of these interactions has not been established. Azole antifungals and clarithromycin may increase serum COBI concentrations (and COBI may simultaneously increase serum levels of the coadministered antimicrobial). Adverse reactions – D, N, HA, lipidemia, decreases kidney function

FIXED DOSE COMBINATION WITH ARV INHIBITORS AND DRUG METABOLISM INHIBITOR:

For drug-drug interaction potential and adverse reactions, see discussion of individual drugs

EVG+FTC+TDF+ COBI Approved 2012	Stribild	EVG (Elvitegravir) – integrase inhibitor FTC & TDF – NRTIs COBI (Cobicistat) – ARV drug metabolism inhibitor

It is best to consult a drug reference before prescribing any medications to determine if there are any contraindications.

A NOTE ON HEPATITIS C:

Hepatitis C (HCV) is a viral infection that has many of the same risk factors as HIV. Approximately one-fourth of the HIV-positive individuals in the US are believed to be coinfected with both viruses (i.e. about 250,000-300,000 persons). Older HCV drug regimens did not have high cure rates and did not contain direct acting antiretroviral drugs. Direct-Acting Antiviral agents (termed DAAs) for HCV were introduced in 2011 and are much more effective at curing the disease in shorter time frames. However, drug interactions in the coinfected are very complex and will become more so as more HCV drugs are released. A major concern for dentists is the infectivity of HCV from an occupational blood borne exposure. HCV is considered to be approximately 10 times more infective than HIV from a blood borne exposure and no post-exposure prophylaxis (PEP) has been available to date (2015). The current hope is that the advent of DAAs for HCV will result in an effective PEP for HCV to be developed in the near future. The University of Liverpool has also developed an app for mobile devices that identifies drug interactions with HCV drugs. It can be downloaded at **hep-druginteractions.com**.