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FY 2020 Houston EMA Ryan White Part A/MAI Service Definition Comprehensive Outpatient Primary Medical Care including Medical Case Management, Service Linkage, Outreach, Emergency Financial Assistance - Pharmacy Assistance and Local Pharmacy Assistance Program (LPAP) Services	
HRSA Service Category Title: RWGA Only	<ol style="list-style-type: none"> 1. Outpatient/Ambulatory Medical Care 2. Medical Case Management 3. AIDS Pharmaceutical Assistance (local) 4. Case Management (non-Medical) 5. Emergency Financial Assistance – Pharmacy Assistance 6. Outreach
Local Service Category Title:	Adult Comprehensive Primary Medical Care - CBO <ol style="list-style-type: none"> i. Community-based Targeted to African American ii. Community-based Targeted to Hispanic iii. Community-based Targeted to White/MSM
Amount Available: RWGA Only	Total estimated available funding: <u>\$0.00</u> (to be determined) Note: The Houston Ryan White Planning Council (RWPC) determines overall annual Part A and MAI service category allocations & reallocations. RWGA has sole authority over contract award amounts.
Target Population:	Comprehensive Primary Medical Care – Community Based: <ol style="list-style-type: none"> i. Targeted to African American: African American ages 13 or older ii. Targeted to Hispanic: Hispanic ages 13 or older iii. Targeted to White: White (non-Hispanic) ages 13 or older Outreach: Services will be available to eligible HIV-infected clients residing in the Houston EMA/HSDA with priority given to clients most in need. Services are restricted to those clients who meet the contractor’s RWGA approved Outreach Inclusion Criteria. The Outreach Inclusion Criteria components must include, at minimum 2 consecutive missed primary care provider and/or HIV lab appointments. Outreach Inclusion Criteria may also include VL suppression, substance abuse, and ART treatment failure components.
Client Eligibility: Age, Gender, Race, Ethnicity, Residence, etc.	PLWHA residing in the Houston EMA (prior approval required for non-EMA clients). Contractor must adhere to Targeting requirements and Budget limitations as applicable.
Financial Eligibility:	<i>See Current Approved Financial Eligibility for Houston EMA/HSDA</i>

Budget Type: RWGA Only	Hybrid Fee for Service
Budget Requirement or Restrictions: RWGA Only	<p>Primary Medical Care: No less than 75% of clients served in a Targeted subcategory must be members of the targeted population with the following exceptions:</p> <p>100% of clients served with MAI funds must be members of the targeted population.</p> <p>10% of funds designated to primary medical care must be reserved for invoicing diagnostic procedures at actual cost.</p> <p>Contractors may not exceed the allocation for each individual service component (Primary Medical Care, Medical Case Management, Local Pharmacy Assistance Program and Service Linkage) without prior approval from RWGA.</p> <p>Local Pharmacy Assistance Program (LPAP): Houston RWPC guidelines for Local Pharmacy Assistance Program (LPAP) services: Contractor shall offer HIV medications from an approved formulary for a total not to exceed \$18,000 per contract year per client. Contractor shall offer HIV-related medications for a total not to exceed \$3,000 per contract year per client. These guidelines are determined by the RWPC. The RWPC determines the subcategories that shall include Ryan White LPAP funding.</p> <p>Medications must be provided in accordance with Houston EMA guidelines, HRSA/HAB rules and regulations and applicable Office of Pharmacy Affairs 340B guidelines.</p> <p>At least 75% of the total amount of the budget for LPAP services must be solely allocated to the actual cost of medications and may not include any storage, administrative, processing or other costs associated with managing the medication inventory or distribution.</p> <p>Emergency Financial Assistance – Pharmacy Assistance Direct cash payments to clients are not permitted. It is expected that all other sources of funding in the community for emergency financial assistance will be effectively used and that any allocation of RWHAP funds for these purposes will be as the payer of last resort, and for limited amounts, uses, and periods of time. Continuous provision of an allowable service to a client should not be funded through emergency financial assistance.</p> <p>Outreach</p>

	<p>Outreach services are restricted to those patients who have not returned for scheduled appointments with Provider as outlined in the RWGA approved Outreach Inclusion Criteria, and are included on the Outreach list.</p>
<p>Service Unit Definition/s: RWGA Only</p>	<ul style="list-style-type: none"> • Outpatient/Ambulatory Medical Care: One (1) unit of service = One (1) primary care office/clinic visit which includes the following: <ul style="list-style-type: none"> • Primary care physician/nurse practitioner, physician's assistant or clinical nurse specialist examination of the patient, and • Medication/treatment education • Medication access/linkage • OB/GYN specialty procedures (as clinically indicated) • Nutritional assessment (as clinically indicated) • Laboratory (as clinically indicated, not including specialized tests) • Radiology (as clinically indicated, not including CAT scan or MRI) • Eligibility verification/screening (as necessary) • Follow-up visits wherein the patient is not seen by the MD/NP/PA are considered to be a component of the original primary care visit. • Outpatient Psychiatric Services: 1 unit of service = A single (1) office/clinic visit wherein the patient is seen by a State licensed and board-eligible Psychiatrist or qualified Psychiatric Nurse Practitioner. This visit may or may not occur on the same date as a primary care office visit. • Nutritional Assessment and Plan: 1 unit of service = A single comprehensive nutritional assessment and treatment plan performed by a Licensed, Registered Dietician initiated upon a physician's order. Does not include the provision of Supplements or other products (clients may be referred to the Ryan White funded Medical Nutritional Therapy provider for provision of medically necessary supplements). The nutritional assessment visit may or may not occur on the same date as a medical office visit. • AIDS Pharmaceutical Assistance (local): A unit of service = a transaction involving the filling of a prescription or any other allowable medication need ordered by a qualified medical practitioner. The transaction will involve at least one item being provided for the client, but can be any multiple. The cost of medications provided to the client must be invoiced at actual cost. • Medical Case Management: 1 unit of service = 15 minutes of direct medical case management services to an eligible PLWHA performed by a qualified medical case manager. • Service Linkage (non-Medical Case Management): 1 unit of service = 15 minutes of direct service linkage services to an

	<p>eligible PLWHA performed by a qualified service linkage worker.</p> <ul style="list-style-type: none"> • Outreach: 15 Minutes = 1 Unit • Emergency Financial Assistance – Pharmacy Assistance: A unit of service = a transaction involving the filling of a prescription or any other allowable HIV treatment medication need ordered by a qualified medical practitioner. The transaction will involve at least one item being provided for the client, but can be any multiple. The cost of medications provided to the client must be invoiced at actual cost.
<p>HRSA Service Category Definition:</p> <p>RWGA Only</p>	<ul style="list-style-type: none"> • Outpatient/Ambulatory medical care is the provision of professional diagnostic and therapeutic services rendered by a physician, physician's assistant, clinical nurse specialist, or nurse practitioner in an outpatient setting. Settings include clinics, medical offices, and mobile vans where clients generally do not stay overnight. Emergency room services are not outpatient settings. Services includes diagnostic testing, early intervention and risk assessment, preventive care and screening, practitioner examination, medical history taking, diagnosis and treatment of common physical and mental conditions, prescribing and managing medication therapy, education and counseling on health issues, well-baby care, continuing care and management of chronic conditions, and referral to and provision of specialty care (includes all medical subspecialties). Primary medical care for the treatment of HIV infection includes the provision of care that is consistent with the Public Health Service's guidelines. Such care must include access to antiretroviral and other drug therapies, including prophylaxis and treatment of opportunistic infections and combination antiretroviral therapies. • AIDS Pharmaceutical Assistance (local) includes local pharmacy assistance programs implemented by Part A or Part B Grantees to provide HIV/AIDS medications to clients. This assistance can be funded with Part A grant funds and/or Part B base award funds. Local pharmacy assistance programs are not funded with ADAP earmark funding. • Medical Case Management services (including treatment adherence) are a range of client-centered services that link clients with health care, psychosocial, and other services. The coordination and follow-up of medical treatments is a component of medical case management. These services ensure timely and coordinated access to medically appropriate levels of health and support services and continuity of care, through ongoing assessment of the client's and other key family members' needs and personal support systems. Medical case management includes the provision of treatment adherence counseling to ensure readiness for, and adherence

	<p>to, complex HIV/AIDS treatments. Key activities include (1) initial assessment of service needs; (2) development of a comprehensive, individualized service plan; (3) coordination of services required to implement the plan; (4) client monitoring to assess the efficacy of the plan; and (5) periodic re-evaluation and adaptation of the plan as necessary over the life of the client. It includes client-specific advocacy and/or review of utilization of services. This includes all types of case management including face-to-face, phone contact, and any other forms of communication.</p> <ul style="list-style-type: none"> • Case Management (non-Medical) includes the provision of advice and assistance in obtaining medical, social, community, legal, financial, and other needed services. Non-medical case management does not involve coordination and follow-up of medical treatments, as medical case management does. • Emergency Financial Assistance provides limited one-time or short-term payments to assist the RWHAP client with an emergent need for paying for essential utilities, housing, food (including groceries, and food vouchers), transportation, and medication. Emergency financial assistance can occur as a direct payment to an agency or through a voucher program. • Outreach Services include the provision of the following three activities: Identification of people who do not know their HIV status and linkage into Outpatient/Ambulatory Health Services, Provision of additional information and education on health care coverage options, Reengagement of people who know their status into Outpatient/Ambulatory Health Services
Standards of Care:	<p>Contractors must adhere to the most current published Part A/B Standards of Care for the Houston EMA/HSDA. Services must meet or exceed applicable United States Department of Health and Human Services (DHHS) guidelines for the Treatment of HIV/AIDS.</p>
Local Service Category Definition/Services to be Provided:	<p>Outpatient/Ambulatory Primary Medical Care: Services include on-site physician, physician extender, nursing, phlebotomy, radiographic, laboratory, pharmacy, intravenous therapy, home health care referral, licensed dietician, patient medication education, and patient care coordination. The Contractor must provide continuity of care with inpatient services and subspecialty services (either on-site or through specific referral to appropriate medical provider upon primary care Physician's order).</p> <p>Services provided to women shall further include OB/GYN physician & physician extender services on-site or by referral, OB/GYN services, colposcopy, nursing, phlebotomy, radiographic, laboratory, pharmacy, intravenous therapy, home health care referral, licensed dietician, patient medication/women's health</p>

education, patient care coordination, and social services. The Contractor must provide continuity of care with inpatient services and subspecialty services (either on-site or through specific referral protocols to appropriate agencies upon primary care Physician's order).

Outpatient/Ambulatory Primary Medical Care must provide:

- Continuity of care for all stages of adult HIV infection;
- Laboratory and pharmacy services including intravenous medications (either on-site or through established referral systems);
- Outpatient psychiatric care, including lab work necessary for the prescribing of psychiatric medications when appropriate (either on-site or through established referral systems);
- Access to the Texas ADAP program (either on-site or through established referral systems);
- Access to compassionate use HIV medication programs (either directly or through established referral systems);
- Access to HIV related research protocols (either directly or through established referral systems);
- Must at a minimum, comply with Houston EMA/HSDA Part A/B Standards for HIV Primary Medical Care. The Contractor must demonstrate on an ongoing basis the ability to provide state-of-the-art HIV-related primary care medicine in accordance with the most recent DHHS HIV treatment guidelines. Rapid advances in HIV treatment protocols require that the Contractor provide services that to the greatest extent possible maximize a patient's opportunity for long-term survival and maintenance of the highest quality of life possible.
- On-site Outpatient Psychiatry services.
- On-site Medical Case Management services.
- On-site Medication Education.
- Physical therapy services (either on-site or via referral).
- Specialty Clinic Referrals (either on-site or via referral).
- On-site pelvic exams as needed for female patients with appropriate follow-up treatment and referral.
- On site Nutritional Counseling by a Licensed Dietitian.

Services for women must also provide:

- Well woman care, including but not limited to: PAP, pelvic exam, HPV screening, breast examination, mammography, hormone replacement and education, pregnancy testing, contraceptive services excluding birth control medications.
- Obstetric Care: ante-partum through post-partum services, child birth/delivery services. Perinatal preventative education and treatment.

- On-site or by referral Colposcopy exams as needed, performed by an OB/GYN physician, or physician extender with a colposcopy provider qualification.
- Social services, including but not limited to, providing women access to child care, transportation vouchers, food vouchers and support groups at the clinic site.

Nutritional Assessment: Services include provision of information about therapeutic nutritional/supplemental foods that are beneficial to the wellness and increased health conditions of clients by a Licensed Dietitian. Services may be provided either through educational or counseling sessions. Clients who receive these services may utilize the Ryan White Part A-funded nutritional supplement provider to obtain recommended nutritional supplements in accordance with program rules. Clients are limited to one (1) nutritional assessment per calendar year without prior approval of RWGA.

Patient Medication Education Services must adhere to the following requirements:

- Medication Educators must be State Licensed Medical Doctor (MD), Nurse Practitioner (NP), Physician Assistant (PA), Nurse (RN, LVN) or Pharmacist. Prior approval must be obtained prior to utilizing any other health care professional not listed above to provide medication education.
- Clients who will be prescribed ongoing medical regimens (i.e. ART) must be assessed for adherence to treatment at every clinical encounter using the EMA's approved adherence assessment tool. Clients with adherence issues related to lack of understanding must receive more education regarding their medical regimen. Clients with adherence issues that are behavioral or involve mental health issues must be provided counseling by the Medical Case Manager, Physician or Physician Extender and/or licensed nursing staff and, if clinically indicated, assessment and treatment by a qualified Psychiatrist or Psychiatric Nurse Practitioner.

Outpatient Psychiatric Services:

The program must provide:

- Diagnostic Assessments: comprehensive evaluation for identification of psychiatric disorders, mental status evaluation, differential diagnosis which may involve use of other clinical and laboratory tests, case formulation, and treatment plans or disposition.
- Emergency Psychiatric Services: rapid evaluation, differential diagnosis, acute treatment, crisis intervention, and referral. Must be available on a 24 hour basis including emergency room referral.

- Brief Psychotherapy: individual, supportive, group, couple, family, hypnosis, biofeedback, and other psychophysiological treatments and behavior modification.
- Psychopharmacotherapy: evaluation and medication treatment of psychiatric disorders, including, but not limited to, anxiety disorders, major depression, pain syndromes, habit control problems, psychosis and organic mental disorders.
- Rehabilitation Services: Physical, psychosocial, behavioral, and/or cognitive training.

Screening for Eye Disorders: Contractor must ensure that patients receive appropriate screening and treatment for CMV, glaucoma, cataracts, and other related problems.

Local Medication Assistance Program (LPAP): LPAP provides pharmaceuticals to patients otherwise ineligible for medications through private insurance, Medicaid/Medicare, State ADAP, SPAP or other sources. Allowable medications are only those on the Houston EMA Ryan White Part A Formulary. Eligible clients may be provided Fuzeon™ on a case-by-case basis with prior approval of Ryan White Grant Administration (RWGA). The cost of Fuzeon™ does not count against a client's annual maximum. HIV-related medication services are the provision of physician or physician-extender prescribed HIV-related medications to prevent serious deterioration of health. Does not include drugs available to the patient from other programs or payers or free of charge (such as birth control and TB medications) or medications available over the counter (OTC) without prescription.

Contractor must offer all medications on the Texas ADAP formulary, for a total not to exceed \$18,000.00 per contract year per client. Contractor must provide allowable HIV-related medications (i.e. non-HIV medications) for a total not to exceed \$3,000 per contract year per client. Contractor may be reimbursed ADAP dispensing fees (e.g. \$5/Rx) in accordance with RWGA business rules for those ADAP clients who are unable to pay the ADAP dispensing fee.

Medical Case Management Services: Services include screening all primary medical care patients to determine each patient's level of need for Medical Case Management services, performing a comprehensive assessment, including an assessment of the patient's health literacy, and developing a medical service plan for each client that demonstrates a documented need for such services, monitoring medical service plan to ensure its implementation, and educating client regarding wellness, medication and health care appointment adherence. The Medical Case Manager serves as an advocate for the client and as a liaison with medical providers on behalf of the client. The Medical Case Manager ensures linkage to

mental health, substance abuse and other client services as indicated by the medical service plan.

Service Linkage: The purpose of Service Linkage is to assist clients with the procurement of needed services so that the problems associated with living with HIV are mitigated. Service Linkage is a working agreement between a client and a Service Linkage Worker for an indeterminate period, based on client need, during which information, referrals and service linkage are provided on an as-needed basis. Service Linkage assists clients who do not require the intensity of Medical Case Management per RWGA Quality Management guidelines. Service Linkage is both office-based and field based. Service Linkage Workers are expected to coordinate activities with referral sources where newly-diagnosed or not-in-care PLWHA may be identified, including 1:1 case conferences with testing site personnel to ensure the successful transition of referrals into Primary Care Services. Such incoming referral coordination includes meeting prospective clients at the referring Provider location in order to develop rapport with individuals prior to the individual's initial Primary Care appointment and ensuring such new intakes to Primary Care services have sufficient support to make the often difficult transition into ongoing primary medical care. Service Linkage also includes follow-up to re-engage lost-to-care patients. Lost-to-care patients are those patients who have not returned for scheduled appointments with Provider nor have provided Provider with updated information about their current Primary Medical Care provider (in the situation where patient may have obtained alternate service from another medical provider). Contractor must document efforts to re-engage lost-to-care patients prior to closing patients in the CPCDMS. Service Linkage extends the capability of existing programs by providing "hands-on" outreach and linkage to care services to those PLWHA who are not currently accessing primary medical care services. Service Linkage includes the issuance of bus pass vouchers and gas cards per published RWGA guidelines. Service Linkage complements and extends the service delivery capability of Medical Case Management services.

Outreach: Providing allowable Ryan White Program outreach and service linkage activities to PLWHA who know their status but are not actively engaged in outpatient primary medical care with information, referrals and assistance with medical appointment setting, mental health, substance abuse and psychosocial services as needed; advocating on behalf of clients to decrease service gaps and remove barriers to services helping clients develop and utilize independent living skills and strategies. Assist clients in obtaining needed resources, including bus pass vouchers and gas cards per published HCPH/RWGA policies. Outreach services must be conducted at times and in places where there is a high probability

	<p>that individuals with HIV infection will be contacted, designed to provide quantified program reporting of activities and outcomes to accommodate local evaluation of effectiveness, planned and delivered in coordination with local and state HIV prevention outreach programs to avoid duplication of effort, targeted to populations known, through review of clinic medical records, to be at disproportionate risk of disengagement with primary medical care services.</p> <p>Emergency Financial Assistance – Pharmacy Assistance provides limited one-time and/or short-term 30-day supply of pharmaceuticals to patients otherwise ineligible for medications through private insurance, Medicaid/Medicare, State ADAP, SPAP or other sources. One refill for up to 30-day supply available with RWGA prior approval. Allowable medications are only those on the Houston EMA Ryan White Part A Formulary. HIV-related medication services are the provision of physician or physician-extender prescribed medications to prevent serious deterioration of health. Does not include drugs available to the patient from other programs or payers or free of charge or medications available over the counter (OTC) without prescription. Contractor must offer all medications on the Texas ADAP formulary.</p>
Agency Requirements:	<p>Providers and system must be Medicaid/Medicare certified.</p> <p>Eligibility and Benefits Coordination: Contractor must implement consumer-friendly, culturally and linguistically appropriate new and ongoing patient eligibility verification and benefit coordination processes that ensure accountability with Ryan White Payer of Last Resort requirements while achieving maximum utilization of eligible benefits. Eligibility processes should provide clients with a meaningful understanding of their benefits, expected out-of-pocket expenses and other information needed to ensure full and continued participation in care.</p> <p>LPAP and EFA – Pharmacy Assistance Services: Contractor must:</p> <p>Provide pharmacy services on-site or through an established contractual relationship that meets all requirements. Alternate (off-site) approaches must be approved prior to implementation by RWGA.</p> <p>Either directly, or via subcontract with an eligible 340B Pharmacy program entity, must:</p> <p>Ensure a comprehensive financial intake application to determine client eligibility for this program to insure that these funds are used as a last resort for purchase of medications.</p>

Ensure the documented capability of interfacing with the Texas HIV Medication Program operated by the Texas Department of State Health Services. This capability must be fully documented and is subject to independent verification by RWGA.

Ensure medication assistance provided to clients does not duplicate services already being provided in the Houston area. The process for accomplishing this must be fully documented and is subject to independent verification by RWGA.

Ensure, either directly or via a 340B Pharmacy Program Provider, at least 2 years of continuous documented experience in providing HIV/AIDS medication programs utilizing Ryan White Program or similar public sector funding. This experience must be documented and is subject to independent verification by RWGA.

Ensure all medications are purchased via a qualified participant in the federal 340B Drug Pricing Program and Prime Vendor Program, administered by the HRSA Office of Pharmacy Affairs. Note: failure to maintain 340B or Prime Vendor drug pricing may result in a negative audit finding, cost disallowance or termination of contract awarded. Contractor must maintain 340B Program participation throughout the contract term. All eligible medications must be purchased in accordance with Program 340B guidelines and program requirements.

Ensure Houston area HIV/AIDS service providers are informed of this program and how the client referral and enrollment processes functions. Contractor must maintain documentation of such marketing efforts.

Implement a consistent process to enroll eligible patients in available pharmaceutical company Patient Assistance Programs prior to using Ryan White Part A funded LPAP resources.

Ensure information regarding the program is provided to PLWHA, including historically under-served and unserved populations (e.g., African American, Hispanic/Latino, Asian, Native American, Pacific Islander) and women not currently obtaining prescribed HIV and HIV-related medications.

Offer, at no charge to the client, delivery options for medication refills, including but not limited to courier, USPS or other package delivery service.

Case Management Operations and Supervision: The Service Linkage Workers (SLW) and Medical Case Managers (MCM) must function within the clinical infrastructure of Contractor and receive ongoing supervision that meets or exceeds published Standards of Care. An MCM may supervise SLWs.

Staff Requirements:	<p>Contractor is responsible for ensuring that services are provided by State licensed internal medicine and OB/GYN physicians, specialty care physicians, psychiatrists, registered nurses, nurse practitioners, vocational nurses, pharmacists, physician assistants, clinical nurse specialists, physician extenders with a colposcopy provider qualification, x-ray technologists, State licensed dieticians, licensed social worker and ancillary health care providers in accordance with appropriate State licensing and/or certification requirements and with knowledge and experience of HIV disease. In addition, Contractor must ensure the following staff requirements are met:</p> <p>Outpatient Psychiatric Services: Director of the Program must be a Board Certified Psychiatrist. Licensed and/or Certified allied health professionals (Licensed Psychologists, Physicians, Psychiatric Nurse Practitioners, Licensed Master Social Workers, Licensed Professional Counselors, Licensed Marriage and Family Therapists, Certified Alcohol and Drug Abuse Counselors, etc.) must be used in all treatment modalities. Documentation of the Director's credentials, licensures and certifications must be included in the proposal. Documentation of the Allied Health professional licensures and certifications must be included in the proposal appendices.</p> <p>Medication and Adherence Education: The program must utilize an RN, LVN, PA, NP, pharmacist or MD licensed by the State of Texas, who has at least two (2) years paid experience in the preceding five (5) years in HIV/AIDS care, to provide the educational services. Licensed social workers who have at least two (2) years paid experience in the preceding five (5) years in HIV/AIDS care may also provide adherence education and counseling.</p> <p>Nutritional Assessment (primary care): Services must be provided by a licensed registered dietician. Dieticians must have a minimum of two (2) years of experience providing nutritional assessment and counseling to PLWHA.</p> <p>Medical Case Management: The program must utilize a state licensed Social Worker to provide Medical Case Management Services. The Contractor must maintain the assigned number of Medical Case Management FTEs throughout the contract term. Contractor must provide to RWGA the names of each Medical Case Manager and the individual assigned to supervise those Medical Case Managers within 30 days of start of grant year, and thereafter within 15 days after hire.</p> <p>Service Linkage: The program must utilize Service Linkage Workers who have at a minimum a Bachelor's degree from an accredited college or university with a major in social or behavioral sciences. Documented paid work experience in providing client</p>
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	<p>services to PLWHA may be substituted for the Bachelor's degree requirement on a 1:1 basis (1 year of documented paid experience may be substituted for 1 year of college). All Service Linkage Workers must have a minimum of one (1) year paid work experience with PLWHA. Contractor must maintain the assigned number of Service Linkage FTEs throughout the contract term.</p> <p>Contractor must provide to RWGA the names of each Service Linkage Worker and the individual assigned to supervise those Service Linkage Workers within 30 days of start of grant year, and thereafter within 15 days after hire.</p> <p>Supervision of Case Managers: The Service Linkage Workers and Medical Case Managers must function within the clinical infrastructure of Contractor and receive ongoing supervision that meets or exceeds Houston EMA/HSDA Part A/B Standards of Care for Service Linkage and Medical Case Management as applicable. An MCM may supervise SLWs.</p>
Special Requirements:	<p>All primary medical care services must meet or exceed current United States DHHS Treatment Guidelines for the treatment and management of HIV disease.</p> <p>Contractor must provide all required program components - Primary Medical Care, Medical Case Management, Service Linkage (non-medical Case Management) and Local Pharmacy Assistance Program (LPAP) services.</p> <p>Primary Medical Care Services: Services funded under this grant cannot be used to supplant insurance or Medicare/Medicaid reimbursements for such services. Clients eligible for such reimbursement may not be billed to this contract. Medicare and private insurance co-payments may be eligible for reimbursement under Ryan White Health Insurance Assistance (HINS) program guidelines. Patients needing such assistance should be referred to the local Ryan White-funded HINS provider for assistance. Under no circumstances may the Contractor bill the County for the difference between the reimbursement from Medicaid, Medicare or Third Party insurance and the fee schedule under the contract. Furthermore, potential clients who are Medicaid/Medicare eligible or have other Third Party payers may not be denied services or referred elsewhere by the Contractor based on their reimbursement status (i.e. Medicaid/Medicare eligible clients may not be referred elsewhere in order that non-Medicaid/Medicare eligible clients may be added to the contract). Failure to serve Medicaid/Medicare eligible clients based on their reimbursement status will be grounds for the immediate termination of contract.</p>

For primary medical care services targeted to the Latino community at least 50% of the clinical care team must be fluent in Spanish.

Diagnostic Procedures: A single Diagnostic Procedure limited to procedures on the approved list of diagnostic procedures (see below) without prior County approval. Approved diagnostic procedures will be reimbursed at invoice cost. Part A and Part A/MAI-funded programs must refer to the RWGA website for the most current list of approved diagnostic procedures and corresponding codes: www.hcphe.org/rwga. **Diagnostic procedures not listed on the website must have prior approval by RWGA.**

Outpatient Psychiatric Services: Client must not be eligible for services from other programs/providers or any other reimbursement source (i.e. Medicaid, Medicare, private insurance) unless the client is in crisis and cannot be provided immediate services from the other programs/providers. In this case, clients may be provided services, as long as the client applies for the other programs/providers, until the other programs/providers can take over services. Program must be supervised by a Psychiatrist and include diagnostic assessments, emergency evaluations and psycho-pharmacotherapy.

Maintaining Referral Relationships (Point of Entry Agreements): Contractor must maintain appropriate relationships with entities that constitute key points of access to the health care system for individuals with HIV disease, including but not limited to, Harris Health System and other Houston EMA-located emergency rooms, Harris County Jail, Texas Department of Criminal Justice incarceration facilities, Immigration detention centers, substance abuse treatment and detoxification programs, adult and juvenile detention facilities, Sexually Transmitted Disease clinics, federally qualified health centers (FQHC), HIV disease counseling and testing sites, mental health programs and homeless shelters. These referral relationships must be documented with written collaborative agreements, contracts or memoranda of understanding between Contractor and appropriate point of entry entities and are subject to audit by RWGA. Contractor and POE entity staff must regularly (e.g. weekly, bi-weekly depending on volume of referrals) meet 1:1 to discuss new referrals to primary medical care services. Such case conferences must be documented in the client record and properly entered into the CPCDMS.

Use of CPCDMS Data System: Contractor must comply with CPCDMS business rules and procedures. Contractor must enter into the CPCDMS all required clinical data, including but not limited to, HAART treatment including all changes in medication

regimens, Opportunistic Infections, screening and treatment for STDs and Hepatitis A, B, C and other clinical screening and treatment data required by HRSA, TDSHS and the County.

Contractor must perform Registration updates in accordance with RWGA CPCDMS business rules for all clients wherein Contractor is client's CPCDMS record-owning agency. Contractor must utilize an electronic verification system to verify insurance/3rd party payer status monthly or per visit (whichever is less frequent).

Bus Pass Distribution: The County will provide Contractor with METRO bus pass vouchers. Bus Pass vouchers must be distributed in accordance with RWGA policies and procedures, standards of care and financial eligibility guidelines. Contractor may only issue METRO bus pass vouchers to clients wherein the Contractor is the CPCDMS record owning Contractor. METRO bus pass vouchers shall be distributed as follows:

Expiration of Current Bus Pass: In those situation wherein the bus pass expiration date does not coincide with the CPCDMS registration update the Contractor must distribute METRO bus pass vouchers to eligible clients upon the expiration of the current bus pass or when a Value-based bus card has been expended on eligible transportation needs. Contractor may issue METRO bus passes to eligible clients living outside the METRO service area in those situations where the Contractor has documented in the client record that the client will utilize the METRO system to access needed HIV-related health care services located in the METRO service area.

Gas Cards: Primary Medical Care Contractors must distribute gasoline vouchers to eligible clients residing in the rural service area in accordance with RWGA policies and procedures, standards of care and financial eligibility guidelines. Gas Cards are only available to Rural primary medical care Contractors without prior approval by RWGA.

FY 2023 RWPC “How to Best Meet the Need” Decision Process

Step in Process: Council		Date: 06/09/2022
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: Steering Committee		Date: 06/02/2022
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: Quality Improvement Committee		Date: 05/03/2022
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: HTBMTN Workgroup #1		Date: 04/19/2022
Recommendations:	Financial Eligibility:	
1.		
2.		
3.		

FY 2020 Houston EMA Ryan White Part A/MAI Service Definition Comprehensive Outpatient Primary Medical Care including Medical Case Management, Service Linkage and Local Pharmacy Assistance Program (LPAP) Services	
HRSA Service Category Title: RWGA Only	<ol style="list-style-type: none"> 1. Outpatient/Ambulatory Medical Care 2. Medical Case Management 3. AIDS Pharmaceutical Assistance (local) 4. Case Management (non-Medical) 5. Emergency Financial Assistance – Pharmacy Assistance 6. Outreach
Local Service Category Title:	Adult Comprehensive Primary Medical Care <ol style="list-style-type: none"> i. Targeted to Public Clinic ii. Targeted to Women at Public Clinic
Amount Available: RWGA Only	<p>Total estimated available funding: <u>\$0.00</u> (to be determined)</p> <ol style="list-style-type: none"> 1. Primary Medical Care: <u>\$0.00</u> (including MAI) <ol style="list-style-type: none"> i. Targeted to Public Clinic: <u>\$0.00</u> ii. Targeted to Women at Public Clinic: <u>\$0.00</u> 2. LPAP <u>\$0.00</u> 3. Medical Case Management: <u>\$0.00</u> <ol style="list-style-type: none"> i. Targeted to Public Clinic: <u>\$0.00</u> ii. Targeted to Women at Public Clinic: <u>\$0.00</u> 4. Service Linkage: <u>\$0.00</u> <p>Note: The Houston Ryan White Planning Council (RWPC) determines annual Part A and MAI service category allocations & reallocations. RWGA has sole authority over contract award amounts.</p>
Target Population:	<p>Comprehensive Primary Medical Care – Community Based</p> <ol style="list-style-type: none"> i. Targeted to Public Clinic ii. Targeted to Women at Public Clinic <p>Outreach:</p> <p>Services will be available to eligible HIV-infected clients residing in the Houston EMA/HSDA with priority given to clients most in need. Services are restricted to those clients who meet the contractor's RWGA approved Outreach Inclusion Criteria. The Outreach Inclusion Criteria components must include, at minimum 2 consecutive missed primary care provider and/or HIV lab appointments. Outreach Inclusion Criteria may also include VL suppression, substance abuse, and ART treatment failure components.</p>

Client Eligibility: Age, Gender, Race, Ethnicity, Residence, etc.	PLWHA residing in the Houston EMA (prior approval required for non-EMA clients). Contractor must adhere to Targeting requirements and Budget limitations as applicable.
Financial Eligibility:	<i>See Current Year Approved Financial Eligibility for Houston EMA/HSDA</i>
Budget Type: RWGA Only	Hybrid Fee for Service
Budget Requirement or Restrictions: RWGA Only	<p>Primary Medical Care: 100% of clients served under the <i>Targeted to Women at Public Clinic</i> subcategory must be female</p> <p>10% of funds designated to primary medical care must be reserved for invoicing diagnostic procedures at actual cost.</p> <p>Contractors may not exceed the allocation for each individual service component (Primary Medical Care, Medical Case Management, Local Pharmacy Assistance Program and Service Linkage) without prior approval from RWGA.</p> <p>Local Pharmacy Assistance Program (LPAP): Houston RWPC guidelines for Local Pharmacy Assistance Program (LPAP) services: Contractor shall offer HIV medications from an approved formulary for a total not to exceed \$18,000 per contract year per client. Contractor shall offer HIV-related medications for a total not to exceed \$3,000 per contract year per client. These guidelines are determined by the RWPC. The RWPC determines the subcategories that shall include Ryan White LPAP funding.</p> <p>Medications must be provided in accordance with Houston EMA guidelines, HRSA/HAB rules and regulations and applicable Office of Pharmacy Affairs 340B guidelines.</p> <p>At least 75% of the total amount of the budget for LPAP services must be solely allocated to the actual cost of medications and may not include any storage, administrative, processing or other costs associated with managing the medication inventory or distribution.</p> <p>Emergency Financial Assistance – Pharmacy Assistance Direct cash payments to clients are not permitted. It is expected that all other sources of funding in the community for emergency financial assistance will be effectively used and that any allocation of RWHAP funds for these purposes will be as the payer of last</p>

	<p>resort, and for limited amounts, uses, and periods of time. Continuous provision of an allowable service to a client should not be funded through emergency financial assistance.</p> <p>Outreach</p> <p>Outreach services are restricted to those patients who have not returned for scheduled appointments with Provider as outlined in the RWGA approved Outreach Inclusion Criteria, and are included on the Outreach list.</p>
<p>Service Unit Definition/s: RWGA Only</p>	<ul style="list-style-type: none"> • Outpatient/Ambulatory Medical Care: One (1) unit of service = One (1) primary care office/clinic visit which includes the following: <ul style="list-style-type: none"> • Primary care physician/nurse practitioner, physician's assistant or clinical nurse specialist examination of the patient, and • Medication/treatment education • Medication access/linkage • OB/GYN specialty procedures (as clinically indicated) • Nutritional assessment (as clinically indicated) • Laboratory (as clinically indicated, not including specialized tests) • Radiology (as clinically indicated, not including CAT scan or MRI) • Eligibility verification/screening (as necessary) • Follow-up visits wherein the patient is not seen by the MD/NP/PA are considered to be a component of the original primary care visit. • Outpatient Psychiatric Services: 1 unit of service = A single (1) office/clinic visit wherein the patient is seen by a State licensed and board-eligible Psychiatrist or qualified Psychiatric Nurse Practitioner. This visit may or may not occur on the same date as a primary care office visit. • Medication Education: 1 unit of service = A single pharmacy visit wherein a Ryan White eligible client is provided medication education services by a qualified pharmacist. This visit may or may not occur on the same date as a primary care office visit. Maximum reimbursement allowable for a medication education visit may not exceed \$50.00 per visit. The visit must include at least one prescription medication being provided to clients. A maximum of one (1) Medication Education Visit may be provided to an individual client per day, regardless of the number of prescription medications provided. • Nutritional Assessment and Plan: 1 unit of service = A single comprehensive nutritional assessment and treatment plan performed by a Licensed, Registered Dietician initiated upon a physician's order. Does not include the provision of Supplements or other products (clients may be referred to the

	<p>Ryan White funded Medical Nutritional Therapy provider for provision of medically necessary supplements). The nutritional assessment visit may or may not occur on the same date as a medical office visit.</p> <ul style="list-style-type: none"> • AIDS Pharmaceutical Assistance (local): A unit of service = a transaction involving the filling of a prescription or any other allowable medication need ordered by a qualified medical practitioner. The transaction will involve at least one item being provided for the client, but can be any multiple. The cost of medications provided to the client must be invoiced at actual cost. • Medical Case Management: 1 unit of service = 15 minutes of direct medical case management services to an eligible PLWHA performed by a qualified medical case manager. • Service Linkage (non-Medical Case Management): 1 unit of service = 15 minutes of direct service linkage services to an eligible PLWHA performed by a qualified service linkage worker. • Outreach: 15 Minutes = 1 Unit • Emergency Financial Assistance – Pharmacy Assistance: A unit of service = a transaction involving the filling of a prescription or any other allowable HIV treatment medication need ordered by a qualified medical practitioner. The transaction will involve at least one item being provided for the client, but can be any multiple. The cost of medications provided to the client must be invoiced at actual cost.
<p>HRSA Service Category Definition: RWGA Only</p>	<ul style="list-style-type: none"> • Outpatient/Ambulatory medical care is the provision of professional diagnostic and therapeutic services rendered by a physician, physician's assistant, clinical nurse specialist, or nurse practitioner in an outpatient setting. Settings include clinics, medical offices, and mobile vans where clients generally do not stay overnight. Emergency room services are not outpatient settings. Services includes diagnostic testing, early intervention and risk assessment, preventive care and screening, practitioner examination, medical history taking, diagnosis and treatment of common physical and mental conditions, prescribing and managing medication therapy, education and counseling on health issues, well-baby care, continuing care and management of chronic conditions, and referral to and provision of specialty care (includes all medical subspecialties). Primary medical care for the treatment of HIV infection includes the provision of care that is consistent with the Public Health Service's guidelines. Such care must include access to antiretroviral and other drug therapies, including prophylaxis and treatment of opportunistic infections and combination antiretroviral therapies. • AIDS Pharmaceutical Assistance (local) includes local pharmacy assistance programs implemented by Part A or Part

	<p>B Grantees to provide HIV/AIDS medications to clients. This assistance can be funded with Part A grant funds and/or Part B base award funds. Local pharmacy assistance programs are not funded with ADAP earmark funding.</p> <ul style="list-style-type: none"> • Medical Case Management services (including treatment adherence) are a range of client-centered services that link clients with health care, psychosocial, and other services. The coordination and follow-up of medical treatments is a component of medical case management. These services ensure timely and coordinated access to medically appropriate levels of health and support services and continuity of care, through ongoing assessment of the client's and other key family members' needs and personal support systems. Medical case management includes the provision of treatment adherence counseling to ensure readiness for, and adherence to, complex HIV/AIDS treatments. Key activities include (1) initial assessment of service needs; (2) development of a comprehensive, individualized service plan; (3) coordination of services required to implement the plan; (4) client monitoring to assess the efficacy of the plan; and (5) periodic re-evaluation and adaptation of the plan as necessary over the life of the client. It includes client-specific advocacy and/or review of utilization of services. This includes all types of case management including face-to-face, phone contact, and any other forms of communication. • Case Management (non-Medical) includes the provision of advice and assistance in obtaining medical, social, community, legal, financial, and other needed services. Non-medical case management does not involve coordination and follow-up of medical treatments, as medical case management does. • Emergency Financial Assistance provides limited one-time or short-term payments to assist the RWHAP client with an emergent need for paying for essential utilities, housing, food (including groceries, and food vouchers), transportation, and medication. Emergency financial assistance can occur as a direct payment to an agency or through a voucher program. • Outreach Services include the provision of the following three activities: Identification of people who do not know their HIV status and linkage into Outpatient/Ambulatory Health Services, Provision of additional information and education on health care coverage options, Reengagement of people who know their status into Outpatient/Ambulatory Health Services
Standards of Care:	<p>Contractors must adhere to the most current published Part A/B Standards of Care for the Houston EMA/HSDA. Services must meet or exceed applicable United States Department of Health and Human Services (DHHS) guidelines for the Treatment of HIV/AIDS.</p>

<p>Local Service Category Definition/Services to be Provided:</p>	<p>Outpatient/Ambulatory Primary Medical Care: Services include on-site physician, physician extender, nursing, phlebotomy, radiographic, laboratory, pharmacy, intravenous therapy, home health care referral, licensed dietician, patient medication education, and patient care coordination. The Contractor must provide continuity of care with inpatient services and subspecialty services (either on-site or through specific referral to appropriate medical provider upon primary care Physician's order).</p> <p>Services provided to women shall further include OB/GYN physician & physician extender services on-site or by referral, OB/GYN services, colposcopy, nursing, phlebotomy, radiographic, laboratory, pharmacy, intravenous therapy, home health care referral, licensed dietician, patient medication/women's health education, patient care coordination, and social services. The Contractor must provide continuity of care with inpatient services and subspecialty services (either on-site or through specific referral protocols to appropriate agencies upon primary care Physician's order).</p> <p>Outpatient/Ambulatory Primary Medical Care must provide:</p> <ul style="list-style-type: none"> • Continuity of care for all stages of adult HIV infection; • Laboratory and pharmacy services including intravenous medications (either on-site or through established referral systems); • Outpatient psychiatric care, including lab work necessary for the prescribing of psychiatric medications when appropriate (either on-site or through established referral systems); • Access to the Texas ADAP program (either on-site or through established referral systems); • Access to compassionate use HIV medication programs (either directly or through established referral systems); • Access to HIV related research protocols (either directly or through established referral systems); • Must at a minimum, comply with Houston EMA/HSDA Part A/B Standards for HIV Primary Medical Care. The Contractor must demonstrate on an ongoing basis the ability to provide state-of-the-art HIV-related primary care medicine in accordance with the most recent DHHS HIV treatment guidelines. Rapid advances in HIV treatment protocols require that the Contractor provide services that to the greatest extent possible maximize a patient's opportunity for long-term survival and maintenance of the highest quality of life possible. • On-site Outpatient Psychiatry services. • On-site Medical Case Management services. • On-site Medication Education. • Physical therapy services (either on-site or via referral). • Specialty Clinic Referrals (either on-site or via referral).
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- On-site pelvic exams as needed for female patients with appropriate follow-up treatment and referral.
- On site Nutritional Counseling by a Licensed Dietitian.

Women's Services must also provide:

- Well woman care, including but not limited to: PAP, pelvic exam, HPV screening, breast examination, mammography, hormone replacement and education, pregnancy testing, contraceptive services excluding birth control medications.
- Obstetric Care: ante-partum through post-partum services, child birth/delivery services. Perinatal preventative education and treatment.
- On-site or by referral Colposcopy exams as needed, performed by an OB/GYN physician, or physician extender with a colposcopy provider qualification.
- Social services, including but not limited to, providing women access to child care, transportation vouchers, food vouchers and support groups at the clinic site;

Nutritional Assessment: Services include provision of information about therapeutic nutritional/supplemental foods that are beneficial to the wellness and increased health conditions of clients by a Licensed Dietitian. Services may be provided either through educational or counseling sessions. Clients who receive these services may utilize the Ryan White Part A-funded nutritional supplement provider to obtain recommended nutritional supplements in accordance with program rules. Clients are limited to one (1) nutritional assessment per calendar year without prior approval of RWGA.

Patient Medication Education Services must adhere to the following requirements:

- Medication Educators must be State Licensed Medical Doctor (MD), Nurse Practitioner (NP), Physician Assistant (PA), Nurse (RN, LVN) or Pharmacist. Prior approval must be obtained prior to utilizing any other health care professional not listed above to provide medication education.
- Clients who will be prescribed ongoing medical regimens (i.e. ART) must be assessed for adherence to treatment at every clinical encounter using the EMA's approved adherence assessment tool. Clients with adherence issues related to lack of understanding must receive more education regarding their medical regimen. Clients with adherence issues that are behavioral or involve mental health issues must be provided counseling by the Medical Case Manager, Physician or Physician Extender and/or licensed nursing staff and, if

clinically indicated, assessment and treatment by a qualified Psychiatrist or Psychiatric Nurse Practitioner.

Outpatient Psychiatric Services:

The program must provide:

- **Diagnostic Assessments:** comprehensive evaluation for identification of psychiatric disorders, mental status evaluation, differential diagnosis which may involve use of other clinical and laboratory tests, case formulation, and treatment plans or disposition.
- **Emergency Psychiatric Services:** rapid evaluation, differential diagnosis, acute treatment, crisis intervention, and referral. Must be available on a 24 hour basis including emergency room referral.
- **Brief Psychotherapy:** individual, supportive, group, couple, family, hypnosis, biofeedback, and other psychophysiological treatments and behavior modification.
- **Psychopharmacotherapy:** evaluation and medication treatment of psychiatric disorders, including, but not limited to, anxiety disorders, major depression, pain syndromes, habit control problems, psychosis and organic mental disorders.
- **Rehabilitation Services:** Physical, psychosocial, behavioral, and/or cognitive training.

Screening for Eye Disorders: Contractor must ensure that patients receive appropriate screening and treatment for CMV, glaucoma, cataracts, and other related problems.

Local Medication Assistance Program (LPAP): LPAP provides pharmaceuticals to patients otherwise ineligible for medications through private insurance, Medicaid/Medicare, State ADAP, SPAP or other sources. Allowable medications are only those on the Houston EMA Ryan White Part A Formulary. Eligible clients may be provided Fuzeon™ on a case-by-case basis with prior approval of Ryan White Grant Administration (RWGA). The cost of Fuzeon™ does not count against a client's annual maximum. HIV-related medication services are the provision of physician or physician-extender prescribed HIV-related medications to prevent serious deterioration of health. Does not include drugs available to the patient from other programs or payers or free of charge (such as birth control and TB medications) or medications available over the counter (OTC) without prescription.

Contractor must offer all medications on the Texas ADAP formulary, for a total not to exceed \$18,000.00 per contract year per client. Contractor must provide allowable HIV-related medications (i.e. non-HIV medications) for a total not to exceed \$3,000 per contract year per client. Contractor may be reimbursed ADAP

dispensing fees (e.g. \$5/Rx) in accordance with RWGA business rules for those ADAP clients who are unable to pay the ADAP dispensing fee.

Medical Case Management Services: Services include screening all primary medical care patients to determine each patient's level of need for Medical Case Management services, performing a comprehensive assessment, including an assessment of the patient's health literacy, and developing a medical service plan for each client that demonstrates a documented need for such services, monitoring medical service plan to ensure its implementation, and educating client regarding wellness, medication and health care appointment adherence. The Medical Case Manager serves as an advocate for the client and as a liaison with medical providers on behalf of the client. The Medical Case Manager ensures linkage to mental health, substance abuse and other client services as indicated by the medical service plan.

Service Linkage: The purpose of Service Linkage is to assist clients with the procurement of needed services so that the problems associated with living with HIV are mitigated. Service Linkage is a working agreement between a client and a Service Linkage Worker for an indeterminate period, based on client need, during which information, referrals and service linkage are provided on an as-needed basis. Service Linkage assists clients who do not require the intensity of Medical Case Management per RWGA Quality Management guidelines. Service Linkage is both office-based and field based. Service Linkage Workers are expected to coordinate activities with referral sources where newly-diagnosed or not-in-care PLWHA may be identified, including 1:1 case conferences with testing site personnel to ensure the successful transition of referrals into Primary Care Services. Such incoming referral coordination includes meeting prospective clients at the referring Provider location in order to develop rapport with individuals prior to the individual's initial Primary Care appointment and ensuring such new intakes to Primary Care services have sufficient support to make the often difficult transition into ongoing primary medical care. Service Linkage also includes follow-up to re-engage lost-to-care patients. Lost-to-care patients are those patients who have not returned for scheduled appointments with Provider nor have provided Provider with updated information about their current Primary Medical Care provider (in the situation where patient may have obtained alternate service from another medical provider). Contractor must document efforts to re-engage lost-to-care patients prior to closing patients in the CPCDMS. Service Linkage extends the capability of existing programs by providing "hands-on" outreach and linkage to care services to those PLWHA who are not currently accessing primary medical care services. Service Linkage includes the issuance of

	<p>bus pass vouchers and gas cards per published RWGA guidelines. Service Linkage complements and extends the service delivery capability of Medical Case Management services.</p> <p>Outreach: Providing allowable Ryan White Program outreach and service linkage activities to PLWHA who know their status but are not actively engaged in outpatient primary medical care with information, referrals and assistance with medical appointment setting, mental health, substance abuse and psychosocial services as needed; advocating on behalf of clients to decrease service gaps and remove barriers to services helping clients develop and utilize independent living skills and strategies. Assist clients in obtaining needed resources, including bus pass vouchers and gas cards per published HCPH/RWGA policies. Outreach services must be conducted at times and in places where there is a high probability that individuals with HIV infection will be contacted, designed to provide quantified program reporting of activities and outcomes to accommodate local evaluation of effectiveness, planned and delivered in coordination with local and state HIV prevention outreach programs to avoid duplication of effort, targeted to populations known, through review of clinic medical records, to be at disproportionate risk of disengagement with primary medical care services.</p> <p>Emergency Financial Assistance – Pharmacy Assistance provides limited one-time and/or short-term 30-day supply of pharmaceuticals to patients otherwise ineligible for medications through private insurance, Medicaid/Medicare, State ADAP, SPAP or other sources. One refill for up to 30-day supply available with RWGA prior approval. Allowable medications are only those on the Houston EMA Ryan White Part A Formulary. HIV-related medication services are the provision of physician or physician-extender prescribed medications to prevent serious deterioration of health. Does not include drugs available to the patient from other programs or payers or free of charge or medications available over the counter (OTC) without prescription. Contractor must offer all medications on the Texas ADAP formulary.</p>
Agency Requirements:	<p>Providers and system must be Medicaid/Medicare certified.</p> <p>Eligibility and Benefits Coordination: Contractor must implement consumer-friendly, culturally and linguistically appropriate new and ongoing patient eligibility verification and benefit coordination processes that ensure accountability with Ryan White Payer of Last Resort requirements while achieving maximum utilization of eligible benefits. Eligibility processes should provide clients with a meaningful understanding of their benefits, expected out-of-pocket expenses and other information needed to ensure full and continued participation in care.</p>

LPAP and EFA – Pharmacy Assistance Services: Contractor must:

Provide pharmacy services on-site or through an established contractual relationship that meets all requirements. Alternate (off-site) approaches must be approved prior to implementation by RWGA.

Either directly, or via subcontract with an eligible 340B Pharmacy program entity, must:

Ensure a comprehensive financial intake application to determine client eligibility for this program to insure that these funds are used as a last resort for purchase of medications.

Ensure the documented capability of interfacing with the Texas HIV Medication Program operated by the Texas Department of State Health Services. This capability must be fully documented and is subject to independent verification by RWGA.

Ensure medication assistance provided to clients does not duplicate services already being provided in the Houston area. The process for accomplishing this must be fully documented and is subject to independent verification by RWGA.

Ensure, either directly or via a 340B Pharmacy Program Provider, at least 2 years of continuous documented experience in providing HIV/AIDS medication programs utilizing Ryan White Program or similar public sector funding. This experience must be documented and is subject to independent verification by RWGA.

Ensure all medications are purchased via a qualified participant in the federal 340B Drug Pricing Program and Prime Vendor Program, administered by the HRSA Office of Pharmacy Affairs. Note: failure to maintain 340B or Prime Vendor drug pricing may result in a negative audit finding, cost disallowance or termination of contract awarded. Contractor must maintain 340B Program participation throughout the contract term. All eligible medications must be purchased in accordance with Program 340B guidelines and program requirements.

Ensure Houston area HIV/AIDS service providers are informed of this program and how the client referral and enrollment processes functions. Contractor must maintain documentation of such marketing efforts.

Implement a consistent process to enroll eligible patients in available pharmaceutical company Patient Assistance Programs prior to using Ryan White Part A funded LPAP resources.

	<p>Ensure information regarding the program is provided to PLWHA, including historically under-served and unserved populations (e.g., African American, Hispanic/Latino, Asian, Native American, Pacific Islander) and women not currently obtaining prescribed HIV and HIV-related medications.</p> <p>Offer, at no charge to the client, delivery options for medication refills, including but not limited to courier, USPS or other package delivery service.</p> <p>Case Management Operations and Supervision: The Service Linkage Workers (SLW) and Medical Case Managers (MCM) must function within the clinical infrastructure of Contractor and receive ongoing supervision that meets or exceeds published Standards of Care. An MCM may supervise SLWs.</p>
Staff Requirements:	<p>Contractor is responsible for ensuring that services are provided by State licensed internal medicine and OB/GYN physicians, specialty care physicians, psychiatrists, registered nurses, nurse practitioners, vocational nurses, pharmacists, physician assistants, clinical nurse specialists, physician extenders with a colposcopy provider qualification, x-ray technologists, State licensed dietitians, licensed social worker and ancillary health care providers in accordance with appropriate State licensing and/or certification requirements and with knowledge and experience of HIV disease. In addition, Contractor must ensure the following staff requirements are met:</p> <p>Outpatient Psychiatric Services: Director of the Program must be a Board Certified Psychiatrist. Licensed and/or Certified allied health professionals (Licensed Psychologists, Physicians, Psychiatric Nurse Practitioners, Licensed Master Social Workers, Licensed Professional Counselors, Licensed Marriage and Family Therapists, Certified Alcohol and Drug Abuse Counselors, etc.) must be used in all treatment modalities. Documentation of the Director's credentials, licensures and certifications must be included in the proposal. Documentation of the Allied Health professional licensures and certifications must be included in the proposal appendices.</p> <p>Medication and Adherence Education: The program must utilize an RN, LVN, PA, NP, pharmacist or MD licensed by the State of Texas, who has at least two (2) years paid experience in the preceding five (5) years in HIV/AIDS care, to provide the educational services. Licensed social workers who have at least two (2) years paid experience in the preceding five (5) years in HIV/AIDS care may also provide adherence education and counseling.</p> <p>Nutritional Assessment (primary care): Services must be provided by a licensed registered dietitian. Dietitians must have a</p>

minimum of two (2) years of experience providing nutritional assessment and counseling to PLWHA.

Medical Case Management: The program must utilize a state licensed Social Worker to provide Medical Case Management Services. The Contractor must maintain the assigned number of Medical Case Management FTEs throughout the contract term.
Contractor must provide to RWGA the names of each Medical Case Manager and the individual assigned to supervise those Medical Case Managers by 03/30/15, and thereafter within 15 days after hire.

Service Linkage: The program must utilize Service Linkage Workers who have at a minimum a Bachelor's degree from an accredited college or university with a major in social or behavioral sciences. Documented paid work experience in providing client services to PLWHA may be substituted for the Bachelor's degree requirement on a 1:1 basis (1 year of documented paid experience may be substituted for 1 year of college). All Service Linkage Workers must have a minimum of one (1) year paid work experience with PLWHA. Contractor must maintain the assigned number of Service Linkage FTEs throughout the contract term.
Contractor must provide to RWGA the names of each Service Linkage Worker and the individual assigned to supervise those Service Linkage Workers by 03/30/15, and thereafter within 15 days after hire.

Supervision of Case Managers: The Service Linkage Workers and Medical Case Managers must function within the clinical infrastructure of Contractor and receive ongoing supervision that meets or exceeds Houston EMA/HSDA Part A/B Standards of Care for Service Linkage and Medical Case Management as applicable. An MCM may supervise SLWs.

<p>Special Requirements: RWGA Only</p>	<p>All primary medical care services must meet or exceed current United States DHHS Treatment Guidelines for the treatment and management of HIV disease.</p> <p>Contractor must provide all required program components - Primary Medical Care, Medical Case Management, Service Linkage (non-medical Case Management) and Local Pharmacy Assistance Program (LPAP) services.</p> <p>Primary Medical Care Services: Services funded under this grant cannot be used to supplant insurance or Medicare/Medicaid reimbursements for such services. Clients eligible for such reimbursement may not be billed to this contract. Medicare and private insurance co-payments may be eligible for reimbursement under Ryan White Health Insurance Assistance (HINS) program guidelines. Patients needing such assistance should be referred to the local Ryan White-funded HINS provider for assistance. Under no circumstances may the Contractor bill the County for the difference between the reimbursement from Medicaid, Medicare or Third Party insurance and the fee schedule under the contract. Furthermore, potential clients who are Medicaid/Medicare eligible or have other Third Party payers may not be denied services or referred elsewhere by the Contractor based on their reimbursement status (i.e. Medicaid/Medicare eligible clients may not be referred elsewhere in order that non-Medicaid/Medicare eligible clients may be added to the contract). Failure to serve Medicaid/Medicare eligible clients based on their reimbursement status will be grounds for the immediate termination of contract.</p> <p>Diagnostic Procedures: A single Diagnostic Procedure limited to procedures on the approved list of diagnostic procedures (see below) without prior County approval. Approved diagnostic procedures will be reimbursed at invoice cost. Part A and Part A/MAI-funded programs must refer to the RWGA website for the most current list of approved diagnostic procedures and corresponding codes: www.hcphe.org/rwga. Diagnostic procedures not listed on the website must have prior approval by RWGA.</p> <p>Outpatient Psychiatric Services: Client must not be eligible for services from other programs/providers or any other reimbursement source (i.e. Medicaid, Medicare, private insurance) unless the client is in crisis and cannot be provided immediate services from the other programs/providers. In this case, clients may be provided services, as long as the client applies for the other programs/providers, until the other programs/providers can take over services. Program must be supervised by a Psychiatrist and</p>
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include diagnostic assessments, emergency evaluations and psycho-pharmacotherapy.

Maintaining Referral Relationships (Point of Entry Agreements): Contractor must maintain appropriate relationships with entities that constitute key points of access to the health care system for individuals with HIV disease, including but not limited to, Harris Health System and other Houston EMA-located emergency rooms, Harris County Jail, Texas Department of Criminal Justice incarceration facilities, Immigration detention centers, substance abuse treatment and detoxification programs, adult and juvenile detention facilities, Sexually Transmitted Disease clinics, federally qualified health centers (FQHC), HIV disease counseling and testing sites, mental health programs and homeless shelters. These referral relationships must be documented with written collaborative agreements, contracts or memoranda of understanding between Contractor and appropriate point of entry entities and are subject to audit by RWGA. Contractor and POE entity staff must regularly (e.g. weekly, bi-weekly depending on volume of referrals) meet 1:1 to discuss new referrals to primary medical care services. Such case conferences must be documented in the client record and properly entered into the CPCDMS.

Use of CPCDMS Data System: Contractor must comply with CPCDMS business rules and procedures. Contractor must enter into the CPCDMS all required clinical data, including but not limited to, HAART treatment including all changes in medication regimens, Opportunistic Infections, screening and treatment for STDs and Hepatitis A, B, C and other clinical screening and treatment data required by HRSA, TDSHS and the County. Contractor must perform Registration updates in accordance with RWGA CPCDMS business rules for all clients wherein Contractor is client's CPCDMS record-owning agency. Contractor must utilize an electronic verification system to verify insurance/3rd party payer status monthly or per visit (whichever is less frequent).

Bus Pass Distribution: The County will provide Contractor with METRO bus pass vouchers. Bus Pass vouchers must be distributed in accordance with RWGA policies and procedures, standards of care and financial eligibility guidelines. Contractor may only issue METRO bus pass vouchers to clients wherein the Contractor is the CPCDMS record owning Contractor. METRO bus pass vouchers shall be distributed as follows:

Expiration of Current Bus Pass: In those situation wherein the bus pass expiration date does not coincide with the CPCDMS registration update the Contractor must distribute METRO bus pass vouchers to eligible clients upon the expiration of the current bus pass or when a Value-based bus card has been expended on eligible

	<p>transportation needs. Contractor may issue METRO bus passes to eligible clients living outside the METRO service area in those situations where the Contractor has documented in the client record that the client will utilize the METRO system to access needed HIV-related health care services located in the METRO service area.</p>
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	<p>Gas Cards: Primary Medical Care Contractors must distribute gasoline vouchers to eligible clients residing in the rural service area in accordance with RWGA policies and procedures, standards of care and financial eligibility guidelines. Gas Cards are only available to Rural primary medical care Contractors without prior approval by RWGA.</p>
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FY 2023 RWPC “How to Best Meet the Need” Decision Process

Step in Process: Council		Date: 06/09/2022
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: Steering Committee		Date: 06/02/2022
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: Quality Improvement Committee		Date: 05/03/2022
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: HTBMTN Workgroup #1		Date: 04/19/2022
Recommendations:	Financial Eligibility:	
1.		
2.		
3.		

FY 2020 Houston EMA Ryan White Part A/MAI Service Definition Comprehensive Outpatient Primary Medical Care including Medical Case Management, Service Linkage and Local Pharmacy Assistance Program (LPAP) Services - Rural	
HRSA Service Category Title: RWGA Only	<ol style="list-style-type: none"> 1. Outpatient/Ambulatory Medical Care 2. Medical Case Management 3. AIDS Pharmaceutical Assistance (local) 4. Emergency Financial Assistance – Pharmacy Assistance 5. Case Management (non-Medical)
Local Service Category Title:	Adult Comprehensive Primary Medical Care - Targeted to Rural
Amount Available: RWGA Only	<p>Total estimated available funding: <u>\$0.00</u> (to be determined)</p> <ol style="list-style-type: none"> 1. Primary Medical Care: <u>\$0.00</u> 2. LPAP <u>\$0.00</u> 3. Medical Case Management: <u>\$0.00</u> 4. Service Linkage: <u>\$0.00</u> <p>Note: The Houston Ryan White Planning Council (RWPC) determines overall annual Part A and MAI service category allocations & reallocations. RWGA has sole authority over contract award amounts.</p>
Target Population:	Comprehensive Primary Medical Care – Targeted to Rural
Client Eligibility: Age, Gender, Race, Ethnicity, Residence, etc.	PLWHA residing in the Houston EMA/HSDA counties other than Harris County (prior approval required for non-EMA clients). Contractor must adhere to Targeting requirements and Budget limitations as applicable.
Financial Eligibility:	<i>See Current Year Approved Financial Eligibility for Houston EMA/HSDA</i>
Budget Type: RWGA Only	Hybrid Fee for Service
Budget Requirement or Restrictions: RWGA Only	<p>Primary Medical Care:</p> <p>No less than 75% of clients served in a Targeted subcategory must be members of the targeted population with the following exceptions:</p> <p>10% of funds designated to primary medical care must be reserved for invoicing diagnostic procedures at actual cost.</p> <p>Contractors may not exceed the allocation for each individual service component (Primary Medical Care, Medical Case Management, Local Pharmacy Assistance Program and Service Linkage) without prior approval from RWGA.</p>

	<p>Local Pharmacy Assistance Program (LPAP):</p> <p>Houston RWPC guidelines for Local Pharmacy Assistance Program (LPAP) services: Contractor shall offer HIV medications from an approved formulary for a total not to exceed \$18,000 per contract year per client. Contractor shall offer HIV-related medications for a total not to exceed \$3,000 per contract year per client. These guidelines are determined by the RWPC. The RWPC determines the subcategories that shall include Ryan White LPAP funding.</p> <p>Medications must be provided in accordance with Houston EMA guidelines, HRSA/HAB rules and regulations and applicable Office of Pharmacy Affairs 340B guidelines.</p> <p>At least 75% of the total amount of the budget for LPAP services must be solely allocated to the actual cost of medications and may not include any storage, administrative, processing or other costs associated with managing the medication inventory or distribution.</p> <p>Emergency Financial Assistance – Pharmacy Assistance</p> <p>Direct cash payments to clients are not permitted. It is expected that all other sources of funding in the community for emergency financial assistance will be effectively used and that any allocation of RWHAP funds for these purposes will be as the payer of last resort, and for limited amounts, uses, and periods of time. Continuous provision of an allowable service to a client should not be funded through emergency financial assistance.</p>
Service Unit Definition/s:	<ul style="list-style-type: none"> • Outpatient/Ambulatory Medical Care: One (1) unit of service = One (1) primary care office/clinic visit which includes the following: • Primary care physician/nurse practitioner, physician’s assistant or clinical nurse specialist examination of the patient, and • Medication/treatment education • Medication access/linkage • OB/GYN specialty procedures (as clinically indicated) • Nutritional assessment (as clinically indicated) • Laboratory (as clinically indicated, not including specialized tests) • Radiology (as clinically indicated, not including CAT scan or MRI) • Eligibility verification/screening (as necessary)

	<ul style="list-style-type: none"> • Follow-up visits wherein the patient is not seen by the MD/NP/PA are considered to be a component of the original primary care visit. • Outpatient Psychiatric Services: 1 unit of service = A single (1) office/clinic visit wherein the patient is seen by a State licensed and board-eligible Psychiatrist or qualified Psychiatric Nurse Practitioner. This visit may or may not occur on the same date as a primary care office visit. • Nutritional Assessment and Plan: 1 unit of service = A single comprehensive nutritional assessment and treatment plan performed by a Licensed, Registered Dietician initiated upon a physician's order. Does not include the provision of Supplements or other products (clients may be referred to the Ryan White funded Medical Nutritional Therapy provider for provision of medically necessary supplements). The nutritional assessment visit may or may not occur on the same date as a medical office visit. • AIDS Pharmaceutical Assistance (local): A unit of service = a transaction involving the filling of a prescription or any other allowable medication need ordered by a qualified medical practitioner. The transaction will involve at least one item being provided for the client, but can be any multiple. The cost of medications provided to the client must be invoiced at actual cost. • Medical Case Management: 1 unit of service = 15 minutes of direct medical case management services to an eligible PLWHA performed by a qualified medical case manager. • Service Linkage (non-Medical Case Management): 1 unit of service = 15 minutes of direct service linkage services to an eligible PLWHA performed by a qualified service linkage worker. • Emergency Financial Assistance – Pharmacy Assistance: A unit of service = a transaction involving the filling of a prescription or any other allowable HIV treatment medication need ordered by a qualified medical practitioner. The transaction will involve at least one item being provided for the client, but can be any multiple. The cost of medications provided to the client must be invoiced at actual cost.
HRSA Service Category Definition:	<ul style="list-style-type: none"> • Outpatient/Ambulatory medical care is the provision of professional diagnostic and therapeutic services rendered by a physician, physician's assistant, clinical nurse specialist, or

RWGA Only	<p>nurse practitioner in an outpatient setting. Settings include clinics, medical offices, and mobile vans where clients generally do not stay overnight. Emergency room services are not outpatient settings. Services includes diagnostic testing, early intervention and risk assessment, preventive care and screening, practitioner examination, medical history taking, diagnosis and treatment of common physical and mental conditions, prescribing and managing medication therapy, education and counseling on health issues, well-baby care, continuing care and management of chronic conditions, and referral to and provision of specialty care (includes all medical subspecialties). Primary medical care for the treatment of HIV infection includes the provision of care that is consistent with the Public Health Service's guidelines. Such care must include access to antiretroviral and other drug therapies, including prophylaxis and treatment of opportunistic infections and combination antiretroviral therapies.</p> <ul style="list-style-type: none"> • AIDS Pharmaceutical Assistance (local) includes local pharmacy assistance programs implemented by Part A or Part B Grantees to provide HIV/AIDS medications to clients. This assistance can be funded with Part A grant funds and/or Part B base award funds. Local pharmacy assistance programs are not funded with ADAP earmark funding. • Medical Case Management services (including treatment adherence) are a range of client-centered services that link clients with health care, psychosocial, and other services. The coordination and follow-up of medical treatments is a component of medical case management. These services ensure timely and coordinated access to medically appropriate levels of health and support services and continuity of care, through ongoing assessment of the client's and other key family members' needs and personal support systems. Medical case management includes the provision of treatment adherence counseling to ensure readiness for, and adherence to, complex HIV/AIDS treatments. Key activities include (1) initial assessment of service needs; (2) development of a comprehensive, individualized service plan; (3) coordination of services required to implement the plan; (4) client monitoring to assess the efficacy of the plan; and (5) periodic re-evaluation and adaptation of the plan as necessary over the life of the client. It includes client-specific advocacy and/or review of utilization of services. This includes all types of case
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	<p>management including face-to-face, phone contact, and any other forms of communication.</p> <ul style="list-style-type: none"> • Case Management (non-Medical) includes the provision of advice and assistance in obtaining medical, social, community, legal, financial, and other needed services. Non-medical case management does not involve coordination and follow-up of medical treatments, as medical case management does. • Emergency Financial Assistance provides limited one-time or short-term payments to assist the RWHAP client with an emergent need for paying for essential utilities, housing, food (including groceries, and food vouchers), transportation, and medication. Emergency financial assistance can occur as a direct payment to an agency or through a voucher program.
Standards of Care:	<p>Contractors must adhere to the most current published Part A/B Standards of Care for the Houston EMA/HSDA. Services must meet or exceed applicable United States Department of Health and Human Services (DHHS) guidelines for the Treatment of HIV/AIDS.</p>
Local Service Category Definition/Services to be Provided:	<p>Outpatient/Ambulatory Primary Medical Care: Services include on-site physician, physician extender, nursing, phlebotomy, radiographic, laboratory, pharmacy, intravenous therapy, home health care referral, licensed dietician, patient medication education, and patient care coordination. The Contractor must provide continuity of care with inpatient services and subspecialty services (either on-site or through specific referral to appropriate medical provider upon primary care Physician's order).</p> <p>Services provided to women shall further include OB/GYN physician & physician extender services on-site or by referral, OB/GYN services, colposcopy, nursing, phlebotomy, radiographic, laboratory, pharmacy, intravenous therapy, home health care referral, licensed dietician, patient medication/women's health education, patient care coordination, and social services. The Contractor must provide continuity of care with inpatient services and subspecialty services (either on-site or through specific referral protocols to appropriate agencies upon primary care Physician's order).</p> <p>Outpatient/Ambulatory Primary Medical Care must provide:</p> <ul style="list-style-type: none"> • Continuity of care for all stages of adult HIV infection;

- Laboratory and pharmacy services including intravenous medications (either on-site or through established referral systems);
- Outpatient psychiatric care, including lab work necessary for the prescribing of psychiatric medications when appropriate (either on-site or through established referral systems);
- Access to the Texas ADAP program (either on-site or through established referral systems);
- Access to compassionate use HIV medication programs (either directly or through established referral systems);
- Access to HIV related research protocols (either directly or through established referral systems);
- Must at a minimum, comply with Houston EMA/HSDA Part A/B Standards for HIV Primary Medical Care. The Contractor must demonstrate on an ongoing basis the ability to provide state-of-the-art HIV-related primary care medicine in accordance with the most recent DHHS HIV treatment guidelines. Rapid advances in HIV treatment protocols require that the Contractor provide services that to the greatest extent possible maximize a patient's opportunity for long-term survival and maintenance of the highest quality of life possible.
- On-site Outpatient Psychiatry services.
- On-site Medical Case Management services.
- On-site Medication Education.
- Physical therapy services (either on-site or via referral).
- Specialty Clinic Referrals (either on-site or via referral).
- On-site pelvic exams as needed for female patients with appropriate follow-up treatment and referral.
- On site Nutritional Counseling by a Licensed Dietitian.

Services for women must also provide:

- Well woman care, including but not limited to: PAP, pelvic exam, HPV screening, breast examination, mammography, hormone replacement and education, pregnancy testing, contraceptive services excluding birth control medications.
- Obstetric Care: ante-partum through post-partum services, child birth/delivery services. Perinatal preventative education and treatment.
- On-site or by referral Colposcopy exams as needed, performed by an OB/GYN physician, or physician extender with a colposcopy provider qualification.

- Social services, including but not limited to, providing women access to child care, transportation vouchers, food vouchers and support groups at the clinic site;

Nutritional Assessment: Services include provision of information about therapeutic nutritional/supplemental foods that are beneficial to the wellness and increased health conditions of clients by a Licensed Dietitian. Services may be provided either through educational or counseling sessions. Clients who receive these services may utilize the Ryan White Part A-funded nutritional supplement provider to obtain recommended nutritional supplements in accordance with program rules. Clients are limited to one (1) nutritional assessment per calendar year without prior approval of RWGA.

Patient Medication Education Services must adhere to the following requirements:

- Medication Educators must be State Licensed Medical Doctor (MD), Nurse Practitioner (NP), Physician Assistant (PA), Nurse (RN, LVN) or Pharmacist. Prior approval must be obtained prior to utilizing any other health care professional not listed above to provide medication education.
- Clients who will be prescribed ongoing medical regimens (i.e. ART) must be assessed for adherence to treatment at every clinical encounter using the EMA's approved adherence assessment tool. Clients with adherence issues related to lack of understanding must receive more education regarding their medical regimen. Clients with adherence issues that are behavioral or involve mental health issues must be provided counseling by the Medical Case Manager, Physician or Physician Extender and/or licensed nursing staff and, if clinically indicated, assessment and treatment by a qualified Psychiatrist or Psychiatric Nurse Practitioner.

Outpatient Psychiatric Services:

The program must provide:

- Diagnostic Assessments: comprehensive evaluation for identification of psychiatric disorders, mental status evaluation, differential diagnosis which may involve use of other clinical and laboratory tests, case formulation, and treatment plans or disposition.

- **Emergency Psychiatric Services:** rapid evaluation, differential diagnosis, acute treatment, crisis intervention, and referral. Must be available on a 24 hour basis including emergency room referral.
- **Brief Psychotherapy:** individual, supportive, group, couple, family, hypnosis, biofeedback, and other psychophysiological treatments and behavior modification.
- **Psychopharmacotherapy:** evaluation and medication treatment of psychiatric disorders, including, but not limited to, anxiety disorders, major depression, pain syndromes, habit control problems, psychosis and organic mental disorders.
- **Rehabilitation Services:** Physical, psychosocial, behavioral, and/or cognitive training.

Screening for Eye Disorders: Contractor must ensure that patients receive appropriate screening and treatment for CMV, glaucoma, cataracts, and other related problems.

Local Medication Assistance Program (LPAP): LPAP provides pharmaceuticals to patients otherwise ineligible for medications through private insurance, Medicaid/Medicare, State ADAP, SPAP or other sources. Allowable medications are only those on the Houston EMA Ryan White Part A Formulary. Eligible clients may be provided Fuzeon™ on a case-by-case basis with prior approval of Ryan White Grant Administration (RWGA). The cost of Fuzeon™ does not count against a client's annual maximum. HIV-related medication services are the provision of physician or physician-extender prescribed HIV-related medications to prevent serious deterioration of health. Does not include drugs available to the patient from other programs or payers or free of charge (such as birth control and TB medications) or medications available over the counter (OTC) without prescription.

Contractor must offer all medications on the Texas ADAP formulary, for a total not to exceed \$18,000.00 per contract year per client. Contractor must provide allowable HIV-related medications (i.e. non-HIV medications) for a total not to exceed \$3,000 per contract year per client. Contractor may be reimbursed ADAP dispensing fees (e.g. \$5/Rx) in accordance with RWGA business rules for those ADAP clients who are unable to pay the ADAP dispensing fee.

Medical Case Management Services: Services include screening all primary medical care patients to determine each patient's level of need for Medical Case Management services, performing a comprehensive assessment, including an assessment of the patient's health literacy, and developing a medical service plan for each client that demonstrates a documented need for such services, monitoring medical service plan to ensure its implementation, and

educating client regarding wellness, medication and health care appointment adherence. The Medical Case Manager serves as an advocate for the client and as a liaison with medical providers on behalf of the client. The Medical Case Manager ensures linkage to mental health, substance abuse and other client services as indicated by the medical service plan.

Service Linkage: The purpose of Service Linkage is to assist clients with the procurement of needed services so that the problems associated with living with HIV are mitigated. Service Linkage is a working agreement between a client and a Service Linkage Worker for an indeterminate period, based on client need, during which information, referrals and service linkage are provided on an as-needed basis. Service Linkage assists clients who do not require the intensity of Medical Case Management per RWGA Quality Management guidelines. Service Linkage is both office-based and field based. Service Linkage Workers are expected to coordinate activities with referral sources where newly-diagnosed or not-in-care PLWHA may be identified, including 1:1 case conferences with testing site personnel to ensure the successful transition of referrals into Primary Care Services. Such incoming referral coordination includes meeting prospective clients at the referring Provider location in order to develop rapport with individuals prior to the individual's initial Primary Care appointment and ensuring such new intakes to Primary Care services have sufficient support to make the often difficult transition into ongoing primary medical care. Service Linkage also includes follow-up to re-engage lost-to-care patients. Lost-to-care patients are those patients who have not returned for scheduled appointments with Provider nor have provided Provider with updated information about their current Primary Medical Care provider (in the situation where patient may have obtained alternate service from another medical provider). Contractor must document efforts to re-engage lost-to-care patients prior to closing patients in the CPCDMS. Service Linkage extends the capability of existing programs by providing "hands-on" outreach and linkage to care services to those PLWHA who are not currently accessing primary medical care services. Service Linkage includes the issuance of bus pass vouchers and gas cards per published RWGA guidelines. Service Linkage complements and extends the service delivery capability of Medical Case Management services.

Emergency Financial Assistance – Pharmacy Assistance provides limited one-time and/or short-term 30-day supply of pharmaceuticals to patients otherwise ineligible for medications through private insurance, Medicaid/Medicare, State ADAP, SPAP or other sources. One refill for up to 30-day supply available with RWGA prior approval. Allowable medications are only those on the Houston EMA Ryan White Part A Formulary. HIV-related

	<p>medication services are the provision of physician or physician-extender prescribed medications to prevent serious deterioration of health. Does not include drugs available to the patient from other programs or payers or free of charge or medications available over the counter (OTC) without prescription. Contractor must offer all medications on the Texas ADAP formulary.</p>
Agency Requirements:	<p>Providers and system must be Medicaid/Medicare certified.</p> <p>Eligibility and Benefits Coordination: Contractor must implement consumer-friendly, culturally and linguistically appropriate new and ongoing patient eligibility verification and benefit coordination processes that ensure accountability with Ryan White Payer of Last Resort requirements while achieving maximum utilization of eligible benefits. Eligibility processes should provide clients with a meaningful understanding of their benefits, expected out-of-pocket expenses and other information needed to ensure full and continued participation in care.</p> <p>LPAP and EFA – Pharmacy Assistance Services: Contractor must:</p> <p>Provide pharmacy services on-site or through an established contractual relationship that meets all requirements. Alternate (off-site) approaches must be approved prior to implementation by RWGA.</p> <p>Either directly, or via subcontract with an eligible 340B Pharmacy program entity, must:</p> <p>Ensure a comprehensive financial intake application to determine client eligibility for this program to insure that these funds are used as a last resort for purchase of medications.</p> <p>Ensure the documented capability of interfacing with the Texas HIV Medication Program operated by the Texas Department of State Health Services. This capability must be fully documented and is subject to independent verification by RWGA.</p> <p>Ensure medication assistance provided to clients does not duplicate services already being provided in the Houston area. The process for accomplishing this must be fully documented and is subject to independent verification by RWGA.</p> <p>Ensure, either directly or via a 340B Pharmacy Program Provider, at least 2 years of continuous documented experience in providing HIV/AIDS medication programs utilizing Ryan White Program or similar public sector funding. This experience must be documented and is subject to independent verification by RWGA.</p>

	<p>Ensure all medications are purchased via a qualified participant in the federal 340B Drug Pricing Program and Prime Vendor Program, administered by the HRSA Office of Pharmacy Affairs. Note: failure to maintain 340B or Prime Vendor drug pricing may result in a negative audit finding, cost disallowance or termination of contract awarded. Contractor must maintain 340B Program participation throughout the contract term. All eligible medications must be purchased in accordance with Program 340B guidelines and program requirements.</p> <p>Ensure Houston area HIV/AIDS service providers are informed of this program and how the client referral and enrollment processes functions. Contractor must maintain documentation of such marketing efforts.</p> <p>Implement a consistent process to enroll eligible patients in available pharmaceutical company Patient Assistance Programs prior to using Ryan White Part A funded LPAP resources.</p> <p>Ensure information regarding the program is provided to PLWHA, including historically under-served and unserved populations (e.g., African American, Hispanic/Latino, Asian, Native American, Pacific Islander) and women not currently obtaining prescribed HIV and HIV-related medications.</p> <p>Offer, at no charge to the client, delivery options for medication refills, including but not limited to courier, USPS or other package delivery service.</p> <p>Case Management Operations and Supervision: The Service Linkage Workers (SLW) and Medical Case Managers (MCM) must function within the clinical infrastructure of Contractor and receive ongoing supervision that meets or exceeds published Standards of Care. An MCM may supervise SLWs.</p>
Staff Requirements:	<p>Contractor is responsible for ensuring that services are provided by State licensed internal medicine and OB/GYN physicians, specialty care physicians, psychiatrists, registered nurses, nurse practitioners, vocational nurses, pharmacists, physician assistants, clinical nurse specialists, physician extenders with a colposcopy provider qualification, x-ray technologists, State licensed dieticians, licensed social worker and ancillary health care providers in accordance with appropriate State licensing and/or certification requirements and with knowledge and experience of HIV disease. In addition, Contractor must ensure the following staff requirements are met:</p> <p>Outpatient Psychiatric Services: Director of the Program must be a Board Certified Psychiatrist. Licensed and/or Certified allied health professionals (Licensed Psychologists, Physicians, Psychiatric Nurse Practitioners, Licensed Master Social Workers,</p>

Licensed Professional Counselors, Licensed Marriage and Family Therapists, Certified Alcohol and Drug Abuse Counselors, etc.) must be used in all treatment modalities. Documentation of the Director's credentials, licensures and certifications must be included in the proposal. Documentation of the Allied Health professional licensures and certifications must be included in the proposal appendices.

Medication and Adherence Education: The program must utilize an RN, LVN, PA, NP, pharmacist or MD licensed by the State of Texas, who has at least two (2) years paid experience in the preceding five (5) years in HIV/AIDS care, to provide the educational services. Licensed social workers who have at least two (2) years paid experience in the preceding five (5) years in HIV/AIDS care may also provide adherence education and counseling.

Nutritional Assessment (primary care): Services must be provided by a licensed registered dietician. Dietitians must have a minimum of two (2) years of experience providing nutritional assessment and counseling to PLWHA.

Medical Case Management: The program must utilize a state licensed Social Worker to provide Medical Case Management Services. The Contractor must maintain the assigned number of Medical Case Management FTEs throughout the contract term. **Contractor must provide to RWGA the names of each Medical Case Manager and the individual assigned to supervise those Medical Case Managers by 03/30/15, and thereafter within 15 days after hire.**

Service Linkage: The program must utilize Service Linkage Workers who have at a minimum a Bachelor's degree from an accredited college or university with a major in social or behavioral sciences. Documented paid work experience in providing client services to PLWHA may be substituted for the Bachelor's degree requirement on a 1:1 basis (1 year of documented paid experience may be substituted for 1 year of college). All Service Linkage Workers must have a minimum of one (1) year paid work experience with PLWHA. Contractor must maintain the assigned number of Service Linkage FTEs throughout the contract term. **Contractor must provide to RWGA the names of each Service Linkage Worker and the individual assigned to supervise those Service Linkage Workers by 03/30/15, and thereafter within 15 days after hire.**

Supervision of Case Managers: The Service Linkage Workers and Medical Case Managers must function within the clinical infrastructure of Contractor and receive ongoing supervision that meets or exceeds Houston EMA/HSDA Part A/B Standards of Care

	for Service Linkage and Medical Case Management as applicable. An MCM may supervise SLWs.
Special Requirements: RWGA Only	<p>All primary medical care services must meet or exceed current United States DHHS Treatment Guidelines for the treatment and management of HIV disease.</p> <p>Contractor must provide all required program components - Primary Medical Care, Medical Case Management, Service Linkage (non-medical Case Management) and Local Pharmacy Assistance Program (LPAP) services.</p> <p>Primary Medical Care Services: Services funded under this grant cannot be used to supplant insurance or Medicaid/Medicare reimbursements for such services. Clients eligible for such reimbursement may not be billed to this contract. Medicare and private insurance co-payments may be eligible for reimbursement under Ryan White Health Insurance Assistance (HINS) program guidelines. Patients needing such assistance should be referred to the local Ryan White-funded HINS provider for assistance. Under no circumstances may the Contractor bill the County for the difference between the reimbursement from Medicaid, Medicare or Third Party insurance and the fee schedule under the contract. Furthermore, potential clients who are Medicaid/Medicare eligible or have other Third Party payers may not be denied services or referred elsewhere by the Contractor based on their reimbursement status (i.e. Medicaid/Medicare eligible clients may not be referred elsewhere in order that non-Medicaid/Medicare eligible clients may be added to the contract). Failure to serve Medicaid/Medicare eligible clients based on their reimbursement status will be grounds for the immediate termination of contract.</p> <p>For primary medical care services targeted to the Latino community at least 50% of the clinical care team must be fluent in Spanish.</p> <p>Diagnostic Procedures: A single Diagnostic Procedure limited to procedures on the approved list of diagnostic procedures (see below) without prior County approval. Approved diagnostic procedures will be reimbursed at invoice cost. Part A and Part A/MAI-funded programs must refer to the RWGA website for the most current list of approved diagnostic procedures and corresponding codes: www.hcphes.org/rwga. Diagnostic procedures not listed on the website must have prior approval by RWGA.</p> <p>Outpatient Psychiatric Services: Client must not be eligible for services from other programs/providers or any other reimbursement source (i.e. Medicaid, Medicare, private insurance) unless the client</p>

is in crisis and cannot be provided immediate services from the other programs/providers. In this case, clients may be provided services, as long as the client applies for the other programs/providers, until the other programs/providers can take over services. Program must be supervised by a Psychiatrist and include diagnostic assessments, emergency evaluations and psycho-pharmacotherapy.

Maintaining Referral Relationships (Point of Entry Agreements):

Contractor must maintain appropriate relationships with entities that constitute key points of access to the health care system for individuals with HIV disease, including but not limited to, Harris Health System and other Houston EMA-located emergency rooms, Harris County Jail, Texas Department of Criminal Justice incarceration facilities, Immigration detention centers, substance abuse treatment and detoxification programs, adult and juvenile detention facilities, Sexually Transmitted Disease clinics, federally qualified health centers (FQHC), HIV disease counseling and testing sites, mental health programs and homeless shelters. These referral relationships must be documented with written collaborative agreements, contracts or memoranda of understanding between Contractor and appropriate point of entry entities and are subject to audit by RWGA. Contractor and POE entity staff must regularly (e.g. weekly, bi-weekly depending on volume of referrals) meet 1:1 to discuss new referrals to primary medical care services. Such case conferences must be documented in the client record and properly entered into the CPCDMS.

Use of CPCDMS Data System: Contractor must comply with CPCDMS business rules and procedures. Contractor must enter into the CPCDMS all required clinical data, including but not limited to, HAART treatment including all changes in medication regimens, Opportunistic Infections, screening and treatment for STDs and Hepatitis A, B, C and other clinical screening and treatment data required by HRSA, TDSHS and the County. Contractor must perform Registration updates in accordance with RWGA CPCDMS business rules for all clients wherein Contractor is client's CPCDMS record-owning agency. Contractor must utilize an electronic verification system to verify insurance/3rd party payer status monthly or per visit (whichever is less frequent).

Bus Pass Distribution: The County will provide Contractor with METRO bus pass vouchers. Bus Pass vouchers must be distributed in accordance with RWGA policies and procedures, standards of care and financial eligibility guidelines. Contractor may only issue METRO bus pass vouchers to clients wherein the Contractor is the CPCDMS record owning Contractor. METRO bus pass vouchers shall be distributed as follows:

Expiration of Current Bus Pass: In those situation wherein the bus pass expiration date does not coincide with the CPCDMS registration update the Contractor must distribute METRO bus pass vouchers to eligible clients upon the expiration of the current bus pass or when a Value-based bus card has been expended on eligible transportation needs. Contractor may issue METRO bus passes to eligible clients living outside the METRO service area in those situations where the Contractor has documented in the client record that the client will utilize the METRO system to access needed HIV-related health care services located in the METRO service area.

Gas Cards: Primary Medical Care Contractors must distribute gasoline vouchers to eligible clients residing in the rural service area in accordance with RWGA policies and procedures, standards of care and financial eligibility guidelines. Gas Cards are only available to Rural primary medical care Contractors without prior approval by RWGA.

FY 2023 RWPC “How to Best Meet the Need” Decision Process

Step in Process: Council		Date: 06/09/2022
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: Steering Committee		Date: 06/02/2022
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: Quality Improvement Committee		Date: 05/03/2022
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: HTBMTN Workgroup #1		Date: 04/19/2022
Recommendations:	Financial Eligibility:	
1.		
2.		
3.		

FY 2020 Houston EMA Ryan White Part A/MAI Service Definition Comprehensive Outpatient Primary Medical Care including Medical Case Management and Service Linkage Services - Pediatric	
HRSA Service Category Title: RWGA Only	1. Outpatient/Ambulatory Medical Care 2. Medical Case Management 3. Case Management (non-Medical)
Local Service Category Title:	Comprehensive Primary Medical Care Targeted to Pediatric
Target Population:	HIV-infected resident of the Houston EMA 0 – 18 years of age. Provider may continue services to previously enrolled clients until the client's 22nd birthday.
Financial Eligibility:	<i>See Current Fiscal Year Approved Financial Eligibility for Houston EMA/HSDA</i>
Budget Type: RWGA Only	Hybrid Fee for Service
Budget Requirement or Restrictions: RWGA Only	Primary Medical Care: 10% of funds designated to primary medical care must be reserved for invoicing diagnostic procedures at actual cost. Contractors may not exceed the allocation for each individual service component (Primary Medical Care, Medical Case Management and Service Linkage) without prior approval from RWGA.
Service Unit Definition/s: RWGA Only	<ul style="list-style-type: none"> • Outpatient/Ambulatory Medical Care: One (1) unit of service = One (1) primary care office/clinic visit which includes the following: • Primary care physician/nurse practitioner, physician's assistant or clinical nurse specialist examination of the patient, and • Medication/treatment education • Medication access/linkage • OB/GYN specialty procedures (as clinically indicated) • Nutritional assessment (as clinically indicated) • Laboratory (as clinically indicated, not including specialized tests) • Radiology (as clinically indicated, not including CAT scan or MRI) • Eligibility verification/screening (as necessary) • Follow-up visits wherein the patient is not seen by the MD/NP/PA are considered to be a component of the original primary care visit. • Outpatient Psychiatric Services: 1 unit of service = A single (1) office/clinic visit wherein the patient is seen by a State licensed and board-eligible Psychiatrist or qualified Psychiatric Nurse Practitioner. This visit may or may not occur on the same date as a primary care office visit. • Medical Case Management: 1 unit of service = 15 minutes of direct medical case management services to an eligible PLWHA performed by a qualified medical case manager. • Service Linkage (non-Medical Case Management): 1 unit of service = 15 minutes of direct service linkage services to an eligible

<p>HRSA Service Category Definition:</p> <p>RWGA Only</p>	<p>PLWHA performed by a qualified service linkage worker.</p> <ul style="list-style-type: none"> <p>Outpatient/Ambulatory medical care is the provision of professional diagnostic and therapeutic services rendered by a physician, physician's assistant, clinical nurse specialist, or nurse practitioner in an outpatient setting. Settings include clinics, medical offices, and mobile vans where clients generally do not stay overnight. Emergency room services are not outpatient settings. Services includes diagnostic testing, early intervention and risk assessment, preventive care and screening, practitioner examination, medical history taking, diagnosis and treatment of common physical and mental conditions, prescribing and managing medication therapy, education and counseling on health issues, well-baby care, continuing care and management of chronic conditions, and referral to and provision of specialty care (includes all medical subspecialties). Primary medical care for the treatment of HIV infection includes the provision of care that is consistent with the Public Health Service's guidelines. Such care must include access to antiretroviral and other drug therapies, including prophylaxis and treatment of opportunistic infections and combination antiretroviral therapies.</p> <p>Medical Case Management services (including treatment adherence) are a range of client-centered services that link clients with health care, psychosocial, and other services. The coordination and follow-up of medical treatments is a component of medical case management. These services ensure timely and coordinated access to medically appropriate levels of health and support services and continuity of care, through ongoing assessment of the client's and other key family members' needs and personal support systems. Medical case management includes the provision of treatment adherence counseling to ensure readiness for, and adherence to, complex HIV/AIDS treatments. Key activities include (1) initial assessment of service needs; (2) development of a comprehensive, individualized service plan; (3) coordination of services required to implement the plan; (4) client monitoring to assess the efficacy of the plan; and (5) periodic re-evaluation and adaptation of the plan as necessary over the life of the client. It includes client-specific advocacy and/or review of utilization of services. This includes all types of case management including face-to-face, phone contact, and any other forms of communication.</p> <p>Case Management (non-Medical) includes the provision of advice and assistance in obtaining medical, social, community, legal, financial, and other needed services. Non-medical case management does not involve coordination and follow-up of medical treatments, as medical case management does.</p>
<p>Standards of Care:</p>	<p>Contractors must adhere to the most current published Part A/B Standards of Care for the Houston EMA/HSDA. Services must meet or</p>

	exceed applicable United States Department of Health and Human Services (DHHS) guidelines for the Treatment of HIV/AIDS.
Local Service Category Definition/Services to be Provided:	<p>Outpatient/Ambulatory Primary Medical Care: Services include on-site physician, physician extender, nursing, phlebotomy, radiographic, laboratory, pharmacy, intravenous therapy, home health care referral, licensed dietician, patient medication education, and patient care coordination. The Contractor must provide continuity of care with inpatient services and subspecialty services (either on-site or through specific referral to appropriate medical provider upon primary care Physician's order).</p> <p>Services provided to women shall further include OB/GYN physician & physician extender services on-site or by referral, OB/GYN services, colposcopy, nursing, phlebotomy, radiographic, laboratory, pharmacy, intravenous therapy, home health care referral, licensed dietician, patient medication/women's health education, patient care coordination, and social services. The Contractor must provide continuity of care with inpatient services and subspecialty services (either on-site or through specific referral protocols to appropriate agencies upon primary care Physician's order).</p> <p>Outpatient/Ambulatory Primary Medical Care must provide:</p> <ul style="list-style-type: none"> • Continuity of care for all stages of adult HIV infection; • Laboratory and pharmacy services including intravenous medications (either on-site or through established referral systems); • Outpatient psychiatric care, including lab work necessary for the prescribing of psychiatric medications when appropriate (either on-site or through established referral systems); • Access to the Texas ADAP program (either on-site or through established referral systems); • Access to compassionate use HIV medication programs (either directly or through established referral systems); • Access to HIV related research protocols (either directly or through established referral systems); • Must at a minimum, comply with Houston EMA/HSDA Part A/B Standards for HIV Primary Medical Care. The Contractor must demonstrate on an ongoing basis the ability to provide state-of-the-art HIV-related primary care medicine in accordance with the most recent DHHS HIV treatment guidelines. Rapid advances in HIV treatment protocols require that the Contractor provide services that to the greatest extent possible maximize a patient's opportunity for long-term survival and maintenance of the highest quality of life possible. • On-site Outpatient Psychiatry services. • On-site Medical Case Management services. • On-site Medication Education. • Physical therapy services (either on-site or via referral).

- Specialty Clinic Referrals (either on-site or via referral).
- On-site pelvic exams as needed for female patients with appropriate follow-up treatment and referral.
- On site Nutritional Counseling by a Licensed Dietitian.

Services for females of child bearing age must also provide:

- Well woman care, including but not limited to: PAP, pelvic exam, breast examination, mammography, hormone replacement and education, pregnancy testing, contraceptive services excluding birth control medications.
- Obstetric Care: ante-partum through post-partum services, child birth/delivery services. Perinatal preventative education and treatment.
- On-site or by referral Colposcopy exams as needed, performed by an OB/GYN physician, or physician extender with a colposcopy provider qualification.
- Social services, including but not limited to, providing women access to child care, transportation vouchers, food vouchers and support groups at the clinic site;

Patient Medication Education Services must adhere to the following requirements:

- Medication Educators must be State Licensed Medical Doctor (MD), Nurse Practitioner (NP), Physician Assistant (PA), Nurse (RN, LVN) or Pharmacist. Prior approval must be obtained prior to utilizing any other health care professional not listed above to provide medication education.
- Clients who will be prescribed ongoing medical regimens (i.e. ART) must be assessed for adherence to treatment at every clinical encounter using the EMA's approved adherence assessment tool. Clients with adherence issues related to lack of understanding must receive more education regarding their medical regimen. Clients with adherence issues that are behavioral or involve mental health issues must be provided counseling by the Medical Case Manager, Physician or Physician Extender and/or licensed nursing staff and, if clinically indicated, assessment and treatment by a qualified Psychiatrist or Psychiatric Nurse Practitioner.

Outpatient Psychiatric Services:

The program must provide:

- Diagnostic Assessments: comprehensive evaluation for identification of psychiatric disorders, mental status evaluation, differential diagnosis which may involve use of other clinical and laboratory tests, case formulation, and treatment plans or disposition.
- Emergency Psychiatric Services: rapid evaluation, differential diagnosis, acute treatment, crisis intervention, and referral. Must be available on a 24 hour basis including emergency room referral.

- Brief Psychotherapy: individual, supportive, group, couple, family, hypnosis, biofeedback, and other psychophysiological treatments and behavior modification.
- Psychopharmacotherapy: evaluation and medication treatment of psychiatric disorders, including, but not limited to, anxiety disorders, major depression, pain syndromes, habit control problems, psychosis and organic mental disorders.
- Rehabilitation Services: Physical, psychosocial, behavioral, and/or cognitive training.

Screening for Eye Disorders: Contractor must ensure that patients receive appropriate screening and treatment for CMV, glaucoma, cataracts, and other related problems.

Medical Case Management Services: Services include screening all primary medical care patients to determine each patient's level of need for Medical Case Management services, performing a comprehensive assessment, including an assessment of the patient's health literacy, and developing a medical service plan for each client that demonstrates a documented need for such services, monitoring medical service plan to ensure its implementation, and educating client regarding wellness, medication and health care appointment adherence. The Medical Case Manager serves as an advocate for the client and as a liaison with medical providers on behalf of the client. The Medical Case Manager ensures linkage to mental health, substance abuse and other client services as indicated by the medical service plan.

Service Linkage: The purpose of Service Linkage is to assist clients with the procurement of needed services so that the problems associated with living with HIV are mitigated. Service Linkage is a working agreement between a client and a Service Linkage Worker for an indeterminate period, based on client need, during which information, referrals and service linkage are provided on an as-needed basis. Service Linkage assists clients who do not require the intensity of Medical Case Management per RWGA Quality Management guidelines. Service Linkage is both office-based and field based. Service Linkage Workers are expected to coordinate activities with referral sources where newly-diagnosed or not-in-care PLWHA may be identified, including 1:1 case conferences with testing site personnel to ensure the successful transition of referrals into Primary Care Services. Such incoming referral coordination includes meeting prospective clients at the referring Provider location in order to develop rapport with individuals prior to the individual's initial Primary Care appointment and ensuring such new intakes to Primary Care services have sufficient support to make the often difficult transition into ongoing primary medical care. Service Linkage also includes follow-up to re-engage lost-to-care patients. Lost-to-care patients are those patients who have not returned for scheduled appointments with Provider nor have provided Provider with updated information about their current Primary Medical Care provider (in the

	<p>situation where patient may have obtained alternate service from another medical provider). Contractor must document efforts to re-engage lost-to-care patients prior to closing patients in the CPCDMS. Service Linkage extends the capability of existing programs by providing “hands-on” outreach and linkage to care services to those PLWHA who are not currently accessing primary medical care services. Service Linkage includes the issuance of bus pass vouchers and gas cards per published RWGA guidelines. Service Linkage complements and extends the service delivery capability of Medical Case Management services.</p>
Agency Requirements:	<p>Providers and system must be Medicaid/Medicare certified.</p> <p>Eligibility and Benefits Coordination: Contractor must implement consumer-friendly, culturally and linguistically appropriate new and ongoing patient eligibility verification and benefit coordination processes that ensure accountability with Ryan White Payer of Last Resort requirements while achieving maximum utilization of eligible benefits. Eligibility processes should provide clients with a meaningful understanding of their benefits, expected out-of-pocket expenses and other information needed to ensure full and continued participation in care.</p> <p>Case Management Operations and Supervision: The Service Linkage Workers (SLW) and Medical Case Managers (MCM) must function within the clinical infrastructure of Contractor and receive ongoing supervision that meets or exceeds published Standards of Care. An MCM may supervise SLWs.</p>
Staff Requirements:	<p>Contractor is responsible for ensuring that services are provided by State licensed internal medicine and OB/GYN physicians, specialty care physicians, psychiatrists, registered nurses, nurse practitioners, vocational nurses, pharmacists, physician assistants, clinical nurse specialists, physician extenders with a colposcopy provider qualification, x-ray technologists, State licensed dietitians, licensed social worker and ancillary health care providers in accordance with appropriate State licensing and/or certification requirements and with knowledge and experience of HIV disease. In addition, Contractor must ensure the following staff requirements are met:</p> <p>Outpatient Psychiatric Services: Director of the Program must be a Board Certified Psychiatrist. Licensed and/or Certified allied health professionals (Licensed Psychologists, Physicians, Psychiatric Nurse Practitioners, Licensed Master Social Workers, Licensed Professional Counselors, Licensed Marriage and Family Therapists, Certified Alcohol and Drug Abuse Counselors, etc.) must be used in all treatment modalities. Documentation of the Director’s credentials, licensures and certifications must be included in the proposal. Documentation of the Allied Health professional licensures and certifications must be included in the proposal appendices.</p> <p>Medication and Adherence Education: The program must utilize an RN, LVN, PA, NP, pharmacist or MD licensed by the State of Texas,</p>

	<p>who has at least two (2) years paid experience in the preceding five (5) years in HIV/AIDS care, to provide the educational services. Licensed social workers who have at least two (2) years paid experience in the preceding five (5) years in HIV/AIDS care may also provide adherence education and counseling.</p> <p>Medical Case Management: The program must utilize a state licensed Social Worker to provide Medical Case Management Services. The Contractor must maintain the assigned number of Medical Case Management FTEs throughout the contract term. Contractor must provide to RWGA the names of each Medical Case Manager and the individual assigned to supervise those Medical Case Managers by 03/30/17, and thereafter within 15 days after hire.</p> <p>Service Linkage: The program must utilize Service Linkage Workers who have at a minimum a Bachelor's degree from an accredited college or university with a major in social or behavioral sciences. Documented paid work experience in providing client services to PLWHA may be substituted for the Bachelor's degree requirement on a 1:1 basis (1 year of documented paid experience may be substituted for 1 year of college). All Service Linkage Workers must have a minimum of one (1) year paid work experience with PLWHA. Contractor must maintain the assigned number of Service Linkage FTEs throughout the contract term. Contractor must provide to RWGA the names of each Service Linkage Worker and the individual assigned to supervise those Service Linkage Workers by 03/30/17, and thereafter within 15 days after hire.</p> <p>Supervision of Case Managers: The Service Linkage Workers and Medical Case Managers must function within the clinical infrastructure of Contractor and receive ongoing supervision that meets or exceeds Houston EMA/HSDA Part A/B Standards of Care for Service Linkage and Medical Case Management as applicable. An MCM may supervise SLWs.</p>
<p>Special Requirements: RWGA Only</p>	<p>All primary medical care services must meet or exceed current United States DHHS Treatment Guidelines for the treatment and management of HIV disease.</p> <p>Contractor must provide all required program components - Primary Medical Care, Medical Case Management and Service Linkage (non-medical Case Management) services.</p> <p>Primary Medical Care Services: Services funded under this grant cannot be used to supplant insurance or Medicare/Medicaid reimbursements for such services. Clients eligible for such reimbursement may not be billed to this contract. Medicare and private insurance co-payments may be eligible for reimbursement under Ryan White Health Insurance Assistance (HINS) program guidelines. Patients needing such assistance should be referred to the local Ryan White-funded HINS provider for assistance. Under no circumstances may the</p>

Contractor bill the County for the difference between the reimbursement from Medicaid, Medicare or Third Party insurance and the fee schedule under the contract. Furthermore, potential clients who are Medicaid/Medicare eligible or have other Third Party payers may not be denied services or referred elsewhere by the Contractor based on their reimbursement status (i.e. Medicaid/Medicare eligible clients may not be referred elsewhere in order that non-Medicaid/Medicare eligible clients may be added to the contract). Failure to serve Medicaid/Medicare eligible clients based on their reimbursement status will be grounds for the immediate termination of contract.

Diagnostic Procedures: A single Diagnostic Procedure limited to procedures on the approved list of diagnostic procedures (see below) without prior County approval. Approved diagnostic procedures will be reimbursed at invoice cost. Part A and Part A/MAI-funded programs must refer to the RWGA website for the most current list of approved diagnostic procedures and corresponding codes: www.hcphes.org/rwga.

Diagnostic procedures not listed on the website must have prior approval by RWGA.

Outpatient Psychiatric Services: Client must not be eligible for services from other programs/providers or any other reimbursement source (i.e. Medicaid, Medicare, private insurance) unless the client is in crisis and cannot be provided immediate services from the other programs/providers. In this case, clients may be provided services, as long as the client applies for the other programs/providers, until the other programs/providers can take over services. Program must be supervised by a Psychiatrist and include diagnostic assessments, emergency evaluations and psycho-pharmacotherapy.

Maintaining Referral Relationships (Point of Entry Agreements): Contractor must maintain appropriate relationships with entities that constitute key points of access to the health care system for individuals with HIV disease, including but not limited to, Harris Health System and other Houston EMA-located emergency rooms, Harris County Jail, Texas Department of Criminal Justice incarceration facilities, Immigration detention centers, substance abuse treatment and detoxification programs, adult and juvenile detention facilities, Sexually Transmitted Disease clinics, federally qualified health centers (FQHC), HIV disease counseling and testing sites, mental health programs and homeless shelters. These referral relationships must be documented with written collaborative agreements, contracts or memoranda of understanding between Contractor and appropriate point of entry entities and are subject to audit by RWGA. Contractor and POE entity staff must regularly (e.g. weekly, bi-weekly depending on volume of referrals) meet 1:1 to discuss new referrals to primary medical care services. Such case conferences must be documented in the client record and properly entered into the CPCDMS.

Use of CPCDMS Data System: Contractor must comply with CPCDMS

business rules and procedures. Contractor must enter into the CPCDMS all required clinical data, including but not limited to, HAART treatment including all changes in medication regimens, Opportunistic Infections, screening and treatment for STDs and Hepatitis A, B, C and other clinical screening and treatment data required by HRSA, TDSHS and the County. Contractor must perform Registration updates in accordance with RWGA CPCDMS business rules for all clients wherein Contractor is client's CPCDMS record-owning agency. Contractor must utilize an electronic verification system to verify insurance/3rd party payer status monthly or per visit (whichever is less frequent).

Bus Pass Distribution: The County will provide Contractor with METRO bus pass vouchers. Bus Pass vouchers must be distributed in accordance with RWGA policies and procedures, standards of care and financial eligibility guidelines. Contractor may only issue METRO bus pass vouchers to clients wherein the Contractor is the CPCDMS record owning Contractor. METRO bus pass vouchers shall be distributed as follows:

Expiration of Current Bus Pass: In those situation wherein the bus pass expiration date does not coincide with the CPCDMS registration update the Contractor must distribute METRO bus pass vouchers to eligible clients upon the expiration of the current bus pass or when a Value-based bus card has been expended on eligible transportation needs. Contractor may issue METRO bus passes to eligible clients living outside the METRO service area in those situations where the Contractor has documented in the client record that the client will utilize the METRO system to access needed HIV-related health care services located in the METRO service area.

FY 2023 RWPC “How to Best Meet the Need” Decision Process

Step in Process: Council		Date: 06/09/2022
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: Steering Committee		Date: 06/02/2022
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: Quality Improvement Committee		Date: 05/03/2022
Recommendations:	Approved: Y: _____ No: _____ Approved With Changes: _____	If approved with changes list changes below:
1.		
2.		
3.		
Step in Process: HTBMTN Workgroup #1		Date: 04/19/2022
Recommendations:	Financial Eligibility:	
1.		
2.		
3.		

FY 2020 PERFORMANCE MEASURES HIGHLIGHTS

RYAN WHITE GRANT ADMINISTRATION

HARRIS COUNTY PUBLIC HEALTH (HCPH)

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Highlights from FY 2020 Performance Measures

Measures in this report are based on the *2021-2022 Houston Ryan White Quality Management Plan, Appendix B. HIV Performance Measures*. The document can be referenced here: <https://publichealth.harriscountytx.gov/Services-Programs/Programs/RyanWhite/Quality>

Medical Case Management

- During FY 2020, 5,416 clients utilized Part A medical case management. According to CPCDMS, 2,704 (50%) of these clients accessed primary care two or more times at least three months apart during this time period after utilizing medical case management.
- Among these clients, 21% of clients accessed mental health services at least once during this time period after utilizing medical case management.
- For clients who have lab data in CPCDMS, 68% were virally suppressed.

Outreach

- During FY 2020, 247 (34%) clients accessed primary care within three months of their first outreach visit.
- 45% to 61% of FY 2019 clients moved from an unsuppressed to suppressed viral load status within six to twelve months after their first outreach visit.

Primary Medical Care

- During FY 2020, 8,609 clients utilized Part A primary medical care. According to CPCDMS, 6,355 (80%) of these clients accessed primary care two or more times at least three months apart during this time period.
- Among clients whose initial primary care medical visit occurred during this time period, 17% had a CD4 < 200 within the first 90 days of initial enrollment in primary medical care.
- Among these clients, 70% had a viral load test performed at least every six months during this time period. Among clients with viral load tests, 79% were virally suppressed during this time period, while 84% of retained-in-care clients were virally suppressed.
- 66% of new clients were engaged in care during this time period.
- During FY 2020, the average wait time for an initial appointment availability to enroll in primary medical care was 9 days, while the average wait time for an appointment availability to receive primary medical care was 6 days.

Service Linkage (Non-Medical Case Management)

- During FY 2020, 8,331 clients utilized Part A non-medical case management / service linkage. According to CPCDMS, 4,048 (49%) of these clients accessed primary care two or more times at least three months apart during this time period after utilizing non-medical case management.
- Among these clients, 50% of clients utilized primary medical care for the first time after accessing service linkage for the first time.
- The median number of days between the first service linkage visit and the first primary medical care visit was 9 days during this time period.

Ryan White Part A
HIV Performance Measures
FY 2020 Report

Local Pharmacy Assistance
All Providers

HIV Performance Measures	FY 2019	FY 2020	Change
80% of clients for whom there is lab data in the CPCDMS will be virally suppressed (<200)	3,537 (79.1%)	3,705 (77.8%)	-1.3%

Ryan White Part A
HIV Performance Measures
FY 2020 Report

Medical Case Management
All Providers

For FY 2020 (3/1/2020 to 2/28/2021), 5,416 clients utilized Part A medical case management.

HIV Performance Measures	FY 2019	FY 2020	Change
A minimum of 85% of clients will utilize Part A/B/C/D primary care two or more times at least three months apart after accessing medical case management	2,644 (49.9%)	2,704 (49.9%)	0.0%
15% of medical case management clients will utilize mental health services	680 (12.8%)	1,117 (20.6%)	7.8%
45% of clients who have third-party payer coverage (e.g. Medicare, Medicaid, private insurance) after accessing medical case management	1,580 (29.8%)	1,459 (26.9%)	-2.9%
80% of clients for whom there is lab data in the CPCDMS will be virally suppressed (<200)	1,996 (72.7%)	1,856 (68.4%)	-4.3%
50% of clients will have at least one medical visit in each six-month period of the 24-month measurement period with a minimum of 60 days between medical visits	801 (35.1%)		
Less than 20% of clients will have more than a six month gap in medical care in the measurement year	605 (23.4%)	628 (22.5%)	-0.9%
Less than 5% of clients will be homeless or unstably housed	760 (14.3%)	680 (12.6%)	-1.7%

According to CPCDMS, 118 (2.2%) clients utilized primary care for the first time and 302 (5.6%) clients utilized mental health services for the first time after accessing medical case management.

Clinical Chart Review Measures	FY 2019
60% of medical case management clients will have a case management care plan developed and/or updated two or more times in the measurement year	2%

Ryan White Part A
HIV Performance Measures
FY 2020 Report

Outreach Services
All Providers

HIV Performance Measures	FY 2019	FY 2020	Change
Percentage of clients who attended a primary care visit within three months of the first Outreach visit	214 (34.2%)	247 (33.6%)	-0.6%
Percentage of clients who attended a primary care visit within three months of the first Outreach visit and a subsequent visit 6 to 12 months thereafter	131 (61.2%)	*N/A	N/A
Percentage of clients who went from an unsuppressed VL (≥ 200 copies/ml) to a suppressed viral load (< 200 copies/ml) within 12 months of the first Outreach visit	182 (44.6%)	*N/A	N/A

*Please note that due to the time parameters for this measure, data can only be produced for the previous fiscal year.

Ryan White Part A
HIV Performance Measures
FY 2020 Report

Primary Medical Care
All Providers

For FY 2020 (3/1/2020 to 2/28/2021), 8,609 clients utilized Part A primary medical care.

HIV Performance Measures	FY 2019	FY 2020	Change
90% of clients will have two or more medical encounters, at least 90 days apart, in an HIV care setting in the measurement year	6,440 (82.4%)	6,355 (80.4%)	-2.0%
Less than 20% of clients will have a CD4 < 200 within the first 90 days of initial enrollment in primary medical care	273 (17.7%)	227 (17.1%)	-0.6%
95% of clients will have Hepatitis C (HCV) screening performed at least once since HIV diagnosis	6,050 (70.2%)	5,577 (64.7%)	-5.5%
30% of clients will receive an oral exam by a dentist at least once during the measurement year	2,179 (25.3%)	1,879 (21.8%)	-3.5%
85% of clients will have a test for syphilis performed within the measurement year	7,127 (82.7%)	7,439 (86.3%)	3.6%
95% of clients will be screened for Hepatitis B virus infection status at least once since HIV diagnosis	7,337 (85.1%)	7,282 (84.5%)	-0.6%
90% of clients will have a viral load test performed at least every six months during the measurement year	4,647 (86.3%)	3,660 (69.5%)	-16.8%
80% of clients for whom there is lab data in the CPCDMS will be virally suppressed (<200)	6,742 (78.2%)	6,804 (78.9%)	0.7%
90% of retained-in-care clients will be virally suppressed (<200)	5,126 (83.2%)	5,045 (83.5%)	0.3%
35% of clients will have at least one medical visit in each six-month period of the 24-month measurement period with a minimum of 60 days between medical visits	2,788 (25.4%)		
Less than 10% of clients will have more than a six month gap in medical care in the measurement year	1,855 (27.7%)	1,810 (27.5%)	-0.2%
90% of newly enrolled clients in the first six months of the measurement year will have at least one medical visit in the second six months of the measurement year	383 (68.5%)	277 (66.3%)	-2.2%

100% of Ryan White Part A program-funded outpatient/ambulatory care organizations in the system/network will have a wait time of 15 or fewer business days for a Ryan White Part A program-eligible patient to receive an initial appointment to enroll in outpatient/ambulatory medical care	Data below
100% of Ryan White Part A program-funded outpatient/ambulatory care organizations in the system/network will have a wait time of 15 or fewer business days for a Ryan White Part A program-eligible patient to receive an appointment for outpatient/ambulatory medical care	Data below

For FY 2020, 67% of Ryan White Part A outpatient/ambulatory care organizations provided a waiting time of 15 or fewer business days for a program-eligible patient to receive an initial appointment to enroll in medical care.

**Average wait time for initial appointment availability to enroll in outpatient/ambulatory medical care:
EMA = 9 Days (some are multi-site providers)**

Agency 1:	16
Agency 2:	5
Agency 3:	12
Agency 4:	6
Agency 5:	18
Agency 6:	7

For FY 2020, 100% of Ryan White Part A outpatient/ambulatory care organizations provided a waiting time of 15 or fewer business days for a program-eligible patient to receive an appointment for medical care.

**Average wait time for appointment availability to receive outpatient/ambulatory medical care:
EMA = 6 Days (some are multi-site providers)**

Agency 1:	6
Agency 2:	3
Agency 3:	10
Agency 4:	3
Agency 5:	10
Agency 6:	5

Clinical Chart Review Measures*	FY 2018	FY 2019
100% of eligible clients will be prescribed Pneumocystis jiroveci pneumonia (PCP) prophylaxis	93.9%	89.5%
100% of pregnant women living with HIV will be prescribed antiretroviral therapy	100%	100%
75% of female clients will have received cervical cancer screening in the past three years	81.6%	82.3%
55% of clients will complete the vaccination series for Hepatitis B	49.3%	51.8%
85% of clients will receive HIV risk counseling within the measurement year	83.9%	81.9%
95% of clients will be screened for substance abuse (alcohol and drugs) in the measurement year	99.4%	99.5%
90% of clients who were prescribed antiretroviral therapy will have a fasting lipid panel during the measurement year	89.9%	88.4%
65% of clients at risk for sexually transmitted infections will have a test for gonorrhea and chlamydia within the measurement year	78.9%	79.7%
75% of clients will have documentation that a TB screening test was performed and results interpreted (for tuberculin skin tests) at least once since HIV diagnosis	71.0%	74.7%
65% of clients seen for a visit between October 1 and March 31 will receive an influenza immunization OR will report previous receipt of an influenza immunization	62.9%	68.2%
95% of clients will be screened for clinical depression using a standardized tool with follow-up plan documented	98.1%	95.1%
90% of clients will have ever received pneumococcal vaccine	83.1%	85.5%
100% of clients will be screened for tobacco use at least one during the two-year measurement period	98.7%	99.8%
Percentage of clients who received cessation counseling intervention if identified as a tobacco user	67.8%	68.0%
95% of clients will be prescribed antiretroviral therapy during the measurement year	99.4%	98.7%
85% of clients will have an HIV drug resistance test performed before initiation of HIV antiretroviral therapy if therapy started during the measurement year	75.0%	71.4%
75% of eligible reproductive-age women will receive reproductive health care (fertility desires assessed and client counseled on conception or contraception)	53.7%	56.1%
90% of clients will be screened for Intimate Partner Violence	93.2%	90.9%
100% of clients on ART will be screened for adherence	100%	100%

* To view the full FY 2019 chart review reports, please visit:
<http://publichealth.harriscountytexas.gov/Services-Programs/Programs/RyanWhite/Quality>

Ryan White Part A
HIV Performance Measures
FY 2020 Report

Service Linkage / Non-Medical Case Management
All Providers

For FY 2020 (3/1/2020 to 2/28/2021), 8,331 clients utilized Part A non-medical case management.

HIV Performance Measures	FY 2019	FY 2020	Change
A minimum of 70% of clients will utilize Part A/B/C/D primary care two or more times at least three months apart after accessing non-medical case management (service linkage)	4,174 (47.9%)	4,048 (48.6%)	0.7%
60% of clients will access RW primary medical care for the first time after accessing service linkage for the first time	462 (49.1%)	344 (49.5%)	0.4%
Mean of less than 30 days between first ever service linkage visit and first ever primary medical care visit:			
Mean	31	33	6.5%
Median	14	9	-35.7%
Mode	1	1	0.0%
60% of newly enrolled clients will have a medical visit in each of the four-month periods of the measurement year	128 (45.2%)	68 (33.8%)	-11.4%

Primary Care Chart Review Report FY 2020

Ryan White Part A Quality Management Program – Houston EMA

December 2021

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PREFACE

EXPLANATION OF PART A QUALITY MANAGEMENT

In 2020, the Houston Eligible Metropolitan Area (EMA) awarded Part A funds for adult Outpatient Ambulatory Medical Services to six organizations. Approximately 13,000 unduplicated individuals living with HIV receive Ryan White-funded services at these organizations.

Harris County Public Health (HCPH) must ensure the quality and cost effectiveness of primary medical care. The medical services chart review is performed to ensure that the medical care provided adheres to current evidence-based guidelines and standards of care. The Ryan White Grant Administration (RWGA) Project Coordinator for Clinical Quality Improvement (PC/CQI) performed the medical services review.

Introduction

On March 30, 2021, the RWGA PC/CQI commenced the evaluation of Part A funded Primary Medical Care Services funded by the Ryan White Part A grant. This grant is awarded to HCPH by the Health Resources and Services Administration (HRSA) to provide HIV-related health and social services to people living with HIV. The purpose of this evaluation project is to meet HRSA mandates for quality management, with a focus on:

- evaluating the extent to which primary care services adhere to the most current United States Department of Health and Human Services (DHHS) HIV treatment guidelines;
- provide statistically significant primary care utilization data including demographics of individuals receiving care; and,
- make recommendations for improvement.

A comprehensive review of client medical records was conducted for services provided between 3/1/20 and 2/28/21. The guidelines in effect during the year the patient sample was seen, *Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents Living with HIV* were used to determine degree of compliance. The current treatment guidelines are available for download at: <http://www.aidsinfo.nih.gov/ContentFiles/AdultandAdolescentGL.pdf>. The initial activity to fulfill the purpose was the development of a medical record data abstraction tool that addresses elements of the guidelines, followed by medical record review, data analysis and reporting of findings with recommendations.

Tool Development

The PC/CQI worked with the Clinical Quality Improvement (CQI) committee to develop and approve data collection elements and processes that would allow evaluation of primary care services based on the most current *Guidelines for the Use of Antiretroviral Agents in Adults and Adolescents Living with HIV* that were developed by the Panel on Antiretroviral Guidelines for Adults and Adolescents convened by the DHHS. In addition, data collection elements and processes were developed to align with the Health Resources and Services Administration (HRSA), HIV/AIDS Bureau's (HAB) HIV/AIDS Clinical Performance Measures for Adults & Adolescents. These measures are designed to serve as indicators of quality care. HAB measures are available for download at: <http://hab.hrsa.gov/deliverhivaidscares/habperformmeasures.html>. An electronic database was designed to facilitate direct data entry from patient records. Automatic edits and validation screens were included in the design and layout of the data abstraction program to "walk" the nurse reviewer through the process and to facilitate the accurate collection, entering and validation of data. Inconsistent information, such as reporting GYN exams for men, or opportunistic infection prophylaxis for patients who do not need it, was considered when designing validation functions. The PC/CQI then used detailed data validation reports to check certain values for each patient to ensure they were consistent.

Chart Review Process

All charts were reviewed by a Master's-level registered nurse experienced in identifying documentation issues and assessing adherence to treatment guidelines. The collected data for each site was recorded directly into a preformatted computerized database. The data collected during this process is to be used for service improvement.

If documentation on a particular element was not found, a “no data” response was entered into the database. For some data elements, the reviewer looked for documentation that the requisite test/assessment/vaccination was performed, e.g., lipid screening or pneumococcal vaccination. Other data elements required that several questions be answered in an “if, then” format. For example, if a Pap smear was abnormal, then was a colposcopy performed? This logic tree type of question allows more in-depth assessment of care and a greater ability to describe the level of quality. Using another example, if only one question is asked, such as “was a mental health screening done?” the only assessment that can be reported is how many patients were screened. More questions need to be asked to evaluate quality and the appropriate assessment and treatment, e.g., if the mental health screening was positive, was the client referred? If the client accepted a referral, were they able to access a Mental Health Provider?

The specific parameters established for the data collection process were developed from national HIV care guidelines.

Tale 1. Data Collection Parameters	
Review Item	Standard
Primary Care Visits	Primary care visits during review period, denoting date and provider type (MD, NP, PA, other). There is no standard of care to be met per se. Data for this item is strictly for analysis purposes only
Annual Exams	Dental exams are recommended annually
Mental Health	A Mental Health screening is recommended annually screening for depression, anxiety, and associated psychiatric issues
Substance Abuse	Clients should be screened for substance abuse potential annually and referred accordingly

Tale 1. Data Collection Parameters (cont.)	
Review Item	Standard
Antiretroviral Therapy (ART) adherence	Adherence to medications should be documented at every visit with issues addressed as they arise
Lab	Viral Load Assays are recommended every 3-6 months. Clients on ART should have a Lipid Profile annually (minimum recommendations)
STD Screen	Screening for Syphilis, Gonorrhea, and Chlamydia should be performed at least annually for clients at risk
Hepatitis Screen	Screening for Hepatitis B and C are recommended at initiation to care. At risk clients not previously immunized for Hepatitis A and B should be offered vaccination.
Tuberculosis Screen	Screening is recommended at least once since HIV diagnosis, either PPD, IGRA or chest X-ray.
Cervical Cancer Screen	Women are assessed for at least one PAP smear during the previous three years
Immunizations	Clients are assessed for annual Flu immunizations and whether they have ever received pneumococcal vaccination.
HIV Risk Counseling	Clients are screened for behaviors associated with HIV transmission and risk reduction discussed
Pneumocystis jirovecii Pneumonia (PCP) Prophylaxis	Labs are reviewed to determine if the client meets established criteria for prophylaxis

The Sample Selection Process

The sample population was selected from a pool of 8,096 clients (adults age 18+) who accessed Part A primary care (excluding vision care) and had at least two visits, at least 90 days apart, between 3/1/20 and 2/28/21. The medical charts of 635 clients were used in this review, representing 7.8% of the pool of unduplicated clients. The number of clients selected at each site is proportional to the number of primary care clients served there. Three caveats were observed during the sampling process. In an effort to focus on women living with HIV health issues, women were over-sampled, comprising 42.2% of the sample population. Second, providers serving a relatively small number of clients were over-sampled in order to ensure sufficient sample sizes for data analysis. Finally, transgender clients were oversampled in order to collect data on this sub-population.

In an effort to make the sample population as representative of the Part A primary care population as possible, the EMA's Centralized Patient Care Data Management System (CPCDMS) was used to generate the lists of client codes for each site. The demographic

make-up (race/ethnicity, gender, age) of clients who accessed primary care services at a particular site during the study period was determined by CPCDMS. A sample was then generated to closely mirror that same demographic make-up.

Characteristics of the Sample Population

Due to the desire to over sample for female clients, the review sample population is not generally comparable to the Part A population receiving outpatient primary medical care in terms of race/ethnicity, gender, and age. No medical records of children/adolescents were reviewed, as clinical guidelines for these groups differ from those of adult patients. Table 2 compares the review sample population with the Ryan White Part A primary care population as a whole.

Table 2. Demographic Characteristics of Clients During Study Period 3/1/20-2/28/21				
	Sample		Ryan White Part A Houston EMA	
Gender	Number	Percent	Number	Percent
Male	328	51.7%	6,050	74.7%
Female	268	42.2%	1,860	23%
Transgender				
Male to Female	39	6.1%	184	2.3%
Transgender				
Female to Male	0	0%	2	.01%
TOTAL	635		8,096	
Race				
Asian	8	1.3%	102	1.3%
African-Amer.	303	47.7%	3,926	48.5%
Pacific Islander	0	0%	8	.1%
Multi-Race	4	.6%	66	.8%
Native Amer.	2	.3%	25	.3%
White	318	50.1%	3,969	49%
TOTAL	635		8,096	
Hispanic				
Non-Hispanic	380	59.8%	4,973	61.4%
Hispanic	255	40.2%	3,123	38.6%
TOTAL	635		8,096	
Age				
<=24	14	2.2%	381	4.7%
25-34	157	24.7%	2,353	29.1%
35-44	190	29.9%	2,311	28.5%
45-49	69	10.9%	971	12%
50-64	198	31.2%	1,947	24%
65 and older	7	1.1%	133	1.6%
Total	635		8,096	

Report Structure

In November 2013, the Health Resource and Services Administration's (HRSA), HIV/AIDS Bureau (HAB) revised its performance measure portfolio¹. The categories included in this report are: Core, All Ages, and Adolescents/Adult. These measures are intended to serve as indicators for use in monitoring the quality of care provided to patients receiving Ryan White funded clinical care. In addition to the HAB measures, several other primary care performance measures are included in this report. When available, data and results from the two preceding years are provided, as well as comparison to EMA goals. Performance measures are also depicted with results categorized by race/ethnicity.

¹ <http://hab.hrsa.gov/deliverhivaidscore/habperformmeasures.html>

Findings

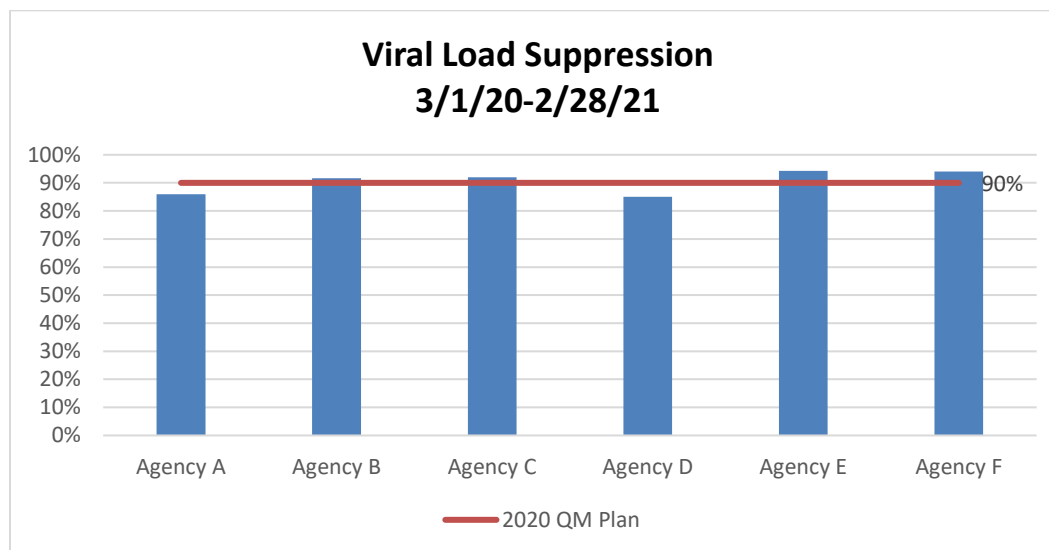
Core Performance Measures

Viral Load Suppression

- Percentage of clients living with HIV with viral load below limits of quantification (defined as <200 copies/ml) at last test during the measurement year

	2018	2019	2020
Number of clients with viral load below limits of quantification at last test during the measurement year	553	559	571
Number of clients who: <ul style="list-style-type: none"> had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year, and were prescribed ART for at least 6 months 	630	625	634
Rate	87.8%	89.4%	90.1%
	2.3%	1.6%	.7%

2020 Viral Load Suppression by Race/Ethnicity			
	Black	Hispanic	White
Number of clients with viral load below limits of quantification at last test during the measurement year	259	235	65
Number of clients who: <ul style="list-style-type: none"> had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year, and were prescribed ART for at least 6 months 	294	254	74
Rate	88.1%	92.5%	87.8%

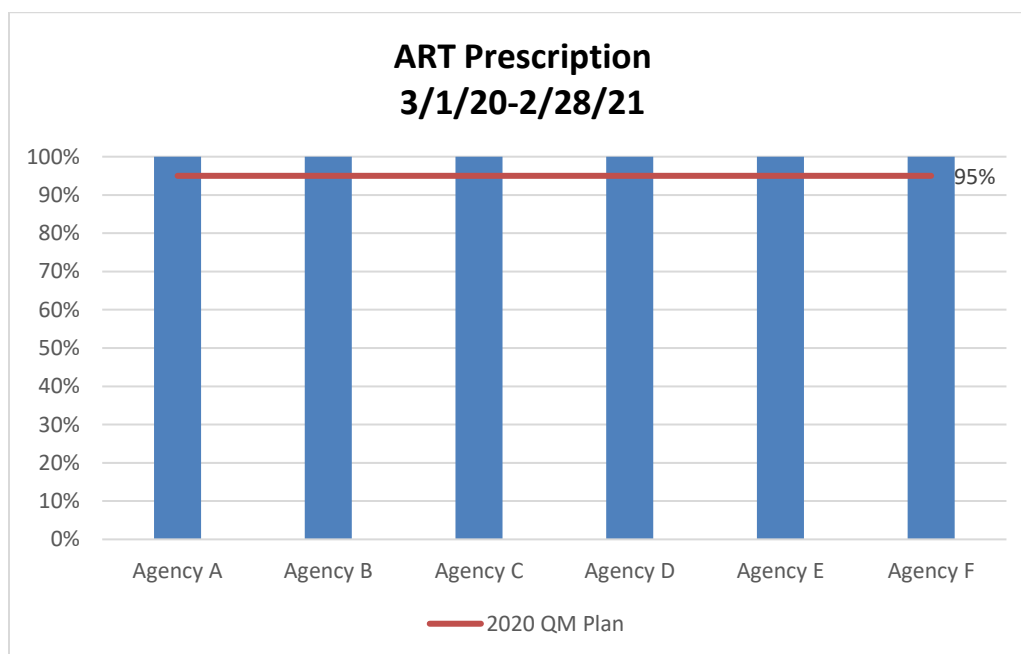


ART Prescription

- Percentage of clients living with HIV who are prescribed antiretroviral therapy (ART)

	2018	2019	2020
Number of clients who were prescribed an ART regimen within the measurement year	631	627	635
Number of clients who: • had at least two medical visit with a provider with prescribing privileges, i.e. MD, PA, NP in the measurement year	635	635	635
Rate	99.4%	98.7%	100%
Change from Previous Years Results	.7%	-.7%	2.3%

2020 ART Prescription by Race/Ethnicity			
	Black	Hispanic	White
Number of clients who were prescribed an ART regimen within the measurement year	294	255	74
Number of clients who: • had at least two medical visit with a provider with prescribing privileges, i.e. MD, PA, NP in the measurement year	294	255	74
Rate	100%	100%	100%

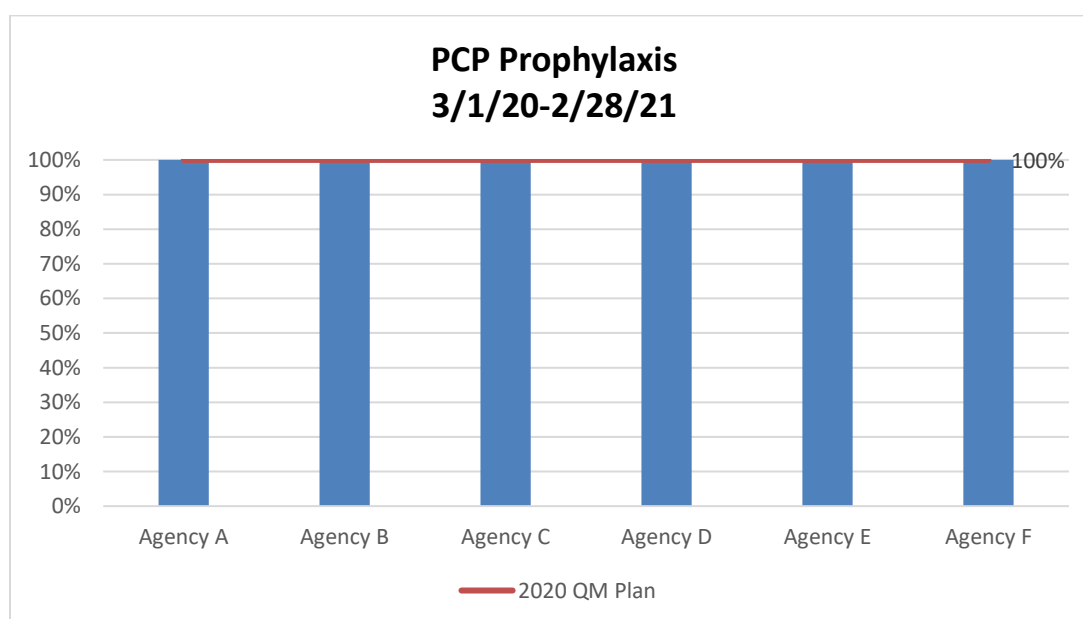


PCP Prophylaxis

- Percentage of clients living with HIV and a CD4 T-cell count below 200 cells/mm³ who were prescribed PCP prophylaxis

	2018	2019	2020
Number of clients with CD4 T-cell counts below 200 cells/mm ³ who were prescribed PCP prophylaxis	62	34	41
Number of clients who: • had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year, and • had a CD4 T-cell count below 200 cells/mm ³ , or any other indicating condition	66	38	41
Rate	93.9%	89.5%	100%
Change from Previous Years Results	.9%	-4.4%	10.5%

2020 PCP Prophylaxis by Race/Ethnicity			
	Black	Hispanic	White
Number of clients with CD4 T-cell counts below 200 cells/mm ³ who were prescribed PCP prophylaxis	16	22	3
Number of clients who: • had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least once in the measurement year, and • had a CD4 T-cell count below 200 cells/mm ³ , or any other indicating condition	16	22	3
Rate	100%	100%	100%



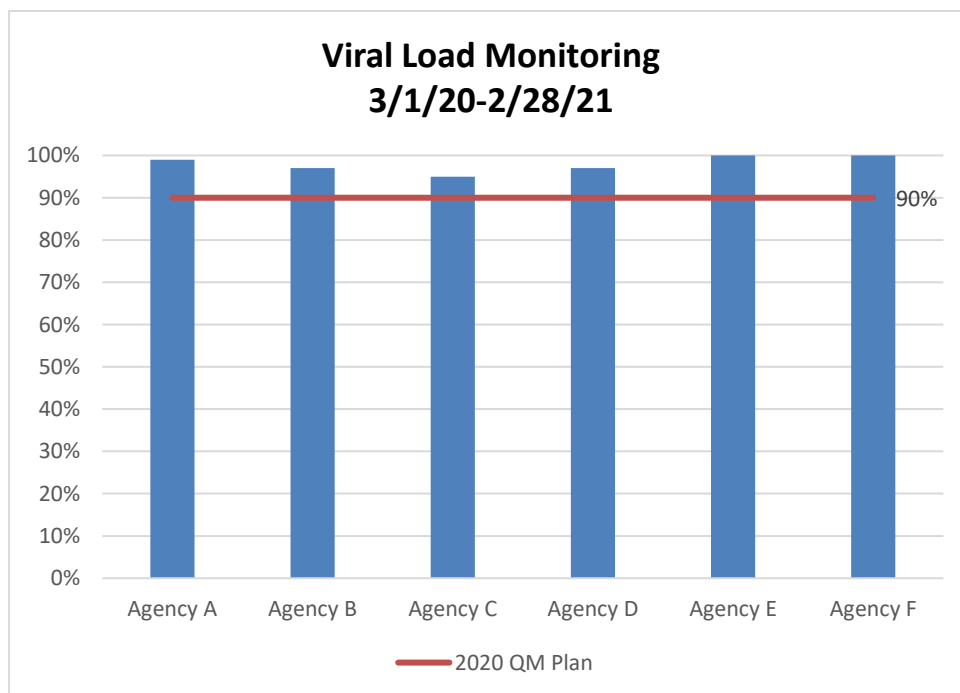
All Ages Performance Measures

Viral Load Monitoring

- Percentage of clients living with HIV who had a viral load test performed at least every six months during the measurement year

	2018	2019	2020
Number of clients who had a viral load test performed at least every six months during the measurement year	624	619	618
Number of clients who had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year	635	635	635
Rate	98.3%	97.5%	97.3%
Change from Previous Years Results	.3%	-0.8%	-0.2%

2020 Viral Load by Race/Ethnicity			
	Black	Hispanic	White
Number of clients who had a viral load test performed at least every six months during the measurement year	290	248	68
Number of clients who had a medical visit with a provider with prescribing privileges ¹ , i.e. MD, PA, NP at least twice in the measurement year	294	255	74
Rate	98.6%	97.3%	91.9%



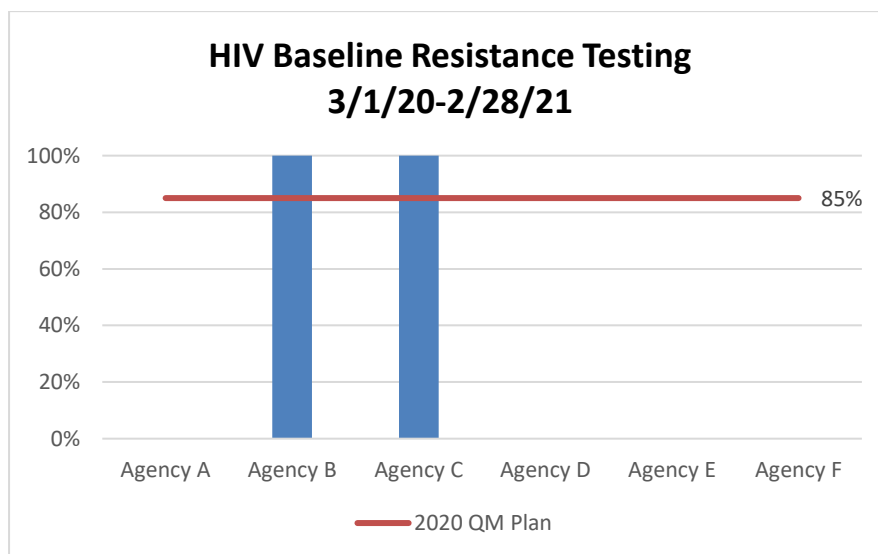
HIV Drug Resistance Testing Before Initiation of Therapy

- Percentage of clients living with HIV who had an HIV drug resistance test performed before initiation of HIV ART if therapy started in the measurement year

	2018	2019	2020
Number of clients who had an HIV drug resistance test performed at any time before initiation of HIV ART	6	5	4
Number of clients who: • had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year, and • were prescribed ART during the measurement year for the first time	8	7	4
Rate	75%	71.4%	100%
Change from Previous Years Results	3.6%	-3.6%	28.6%

2020 Drug Resistance Testing by Race/Ethnicity			
	Black	Hispanic	White
Number of clients who had an HIV drug resistance test performed at any time before initiation of HIV ART	0	1	3
Number of clients who: • had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year, and • were prescribed ART during the measurement year for the first time	0	1	3
Rate		100%	100%

*Agencies A, D, E, & F did not have any clients that met the denominator



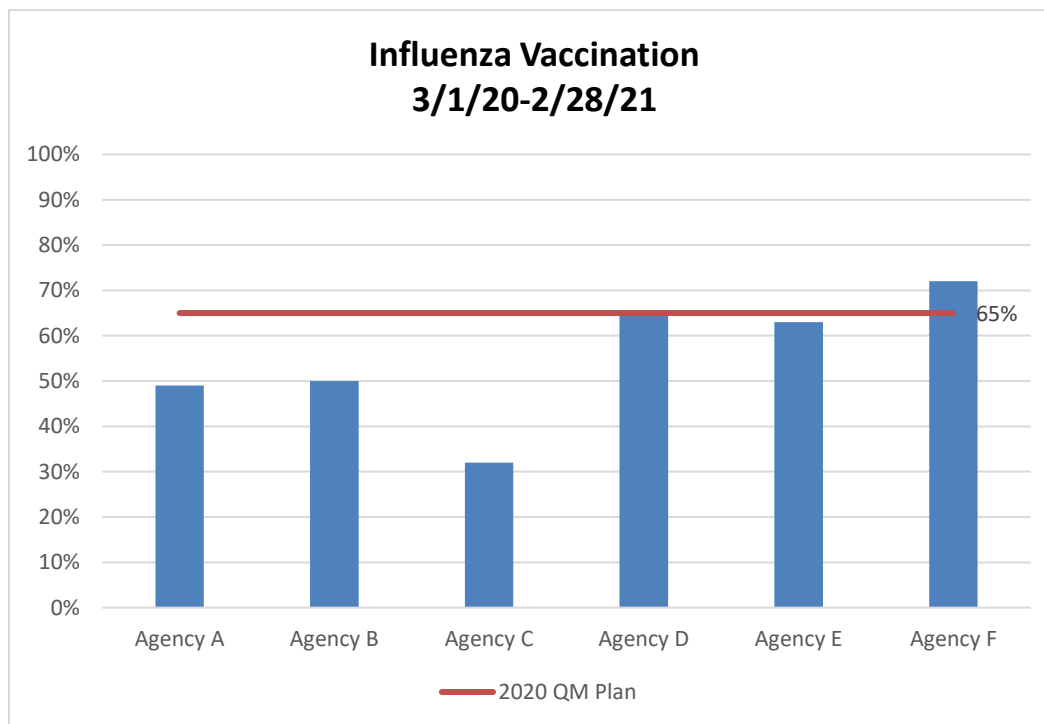
Influenza Vaccination

- Percentage of clients living with HIV who have received influenza vaccination within the measurement year

	2018	2019	2020
Number of clients who received influenza vaccination within the measurement year	336	362	281
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement period	534	531	565
Rate	62.9%	68.2%	49.7%
Change from Previous Years Results	9.4%	5.3%	-18.5%

- The definition excludes from the denominator medical, patient, or system reasons for not receiving influenza vaccination

2020 Influenza Screening by Race/Ethnicity			
	Black	Hispanic	White
Number of clients who received influenza vaccination within the measurement year	122	124	29
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year	250	237	67
Rate	48.8%	52.3%	43.3%

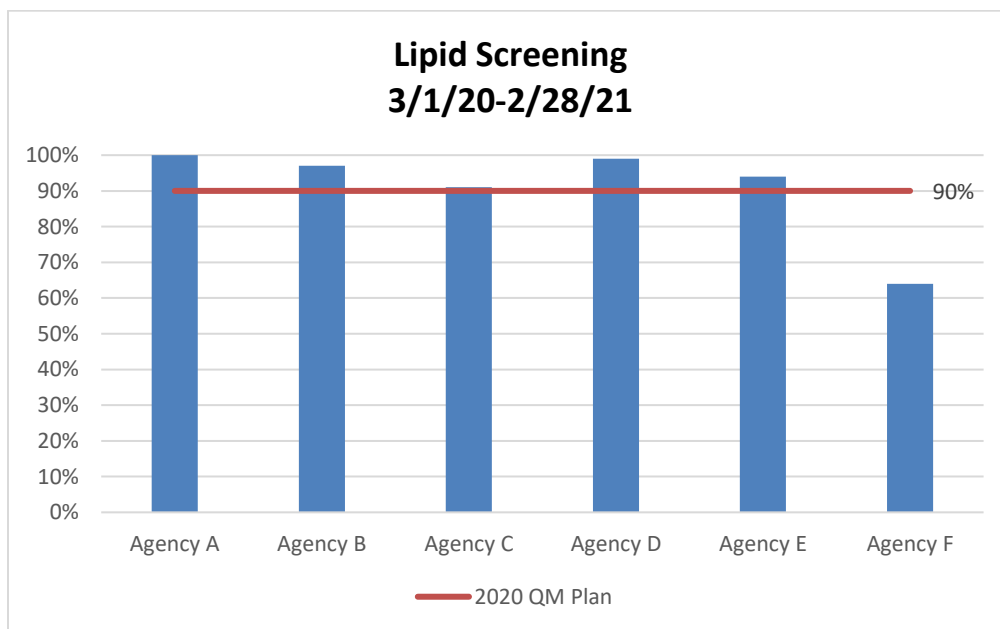


Lipid Screening

- Percentage of clients living with HIV on ART who had fasting lipid panel during measurement year

	2018	2019	2020
Number of clients who: • were prescribed ART, and • had a fasting lipid panel in the measurement year	567	554	594
Number of clients who are on ART and who had a medical visit with a provider with prescribing privileges at least twice in the measurement year	631	627	635
Rate	89.9%	88.4%	93.5%
Change from Previous Years Results	1.1%	-1.5%	5.1%

2020 Lipid Screening by Race/Ethnicity			
	Black	Hispanic	White
Number of clients who: • were prescribed ART, and • had a fasting lipid panel in the measurement year	275	237	71
Number of clients who are on ART and who had a medical visit with a provider with prescribing privileges at least twice in the measurement year	294	255	74
Rate	93.5%	92.9%	95.9%

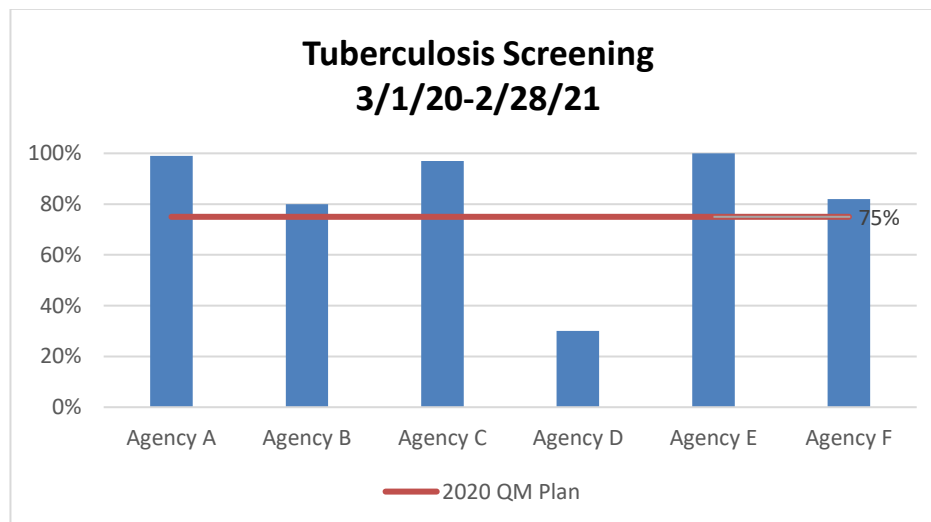


Tuberculosis Screening

- Percent of clients living with HIV who received testing with results documented for LTBI with any approved test (tuberculin skin test [TST] or interferon gamma release assay [IGRA]) since HIV diagnosis

	2018	2019	2020
Number of clients who received documented testing for LTBI with any approved test (tuberculin skin test [TST] or interferon gamma release assay [IGRA]) since HIV diagnosis	401	426	454
Number of clients who: • do not have a history of previous documented culture-positive TB disease or previous documented positive TST or IGRA; and • had a medical visit with a provider with prescribing privileges at least twice in the measurement year.	565	570	567
Rate	71%	74.7%	80.1%
Change from Previous Years Results	3.8%	3.7%	5.4%

2020 TB Screening by Race/Ethnicity			
	Black	Hispanic	White
Number of clients who received documented testing for LTBI with any approved test (tuberculin skin test [TST] or interferon gamma release assay [IGRA]) since HIV diagnosis	204	187	56
Number of clients who: • do not have a history of previous documented culture-positive TB disease or previous documented positive TST or IGRA; and • had a medical visit with a provider with prescribing privileges at least once in the measurement year.	263	224	71
Rate	77.6%	83.5%	78.9%



Adolescent/Adult Performance Measures

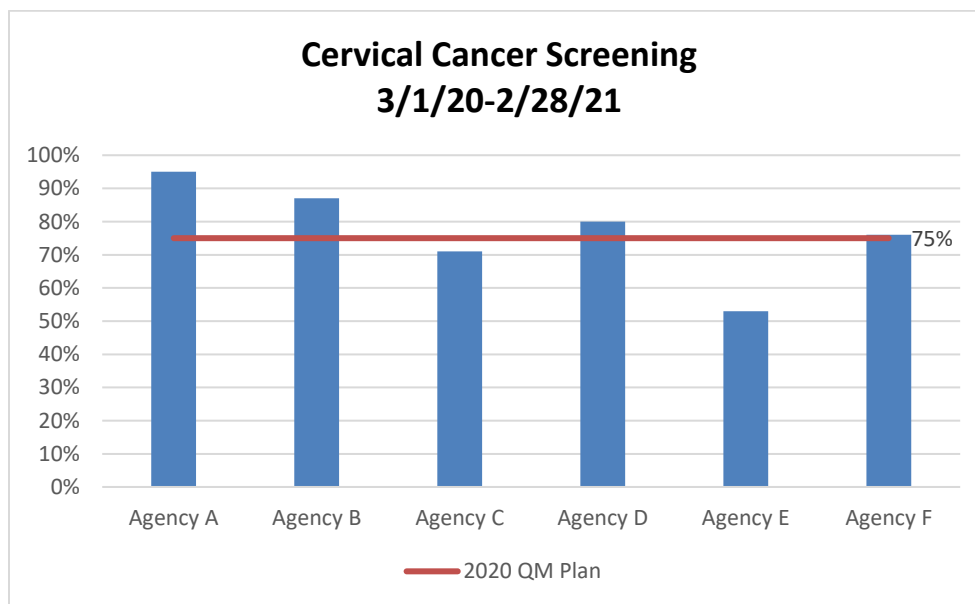
Cervical Cancer Screening

- Percentage of women living with HIV who have Pap screening results documented in the previous three years

	2018	2019	2020
Number of female clients who had Pap screen results documented in the previous three years	199	214	208
Number of female clients: <ul style="list-style-type: none"> for whom a pap smear was indicated, and who had a medical visit with a provider with prescribing privileges at least twice in the measurement year* 	244	260	259
Rate	81.6%	82.3%	80.3%
Change from Previous Years Results	-.9%	.7%	-2%

- 13.9% (29/208) of pap smears were abnormal

2020 Cervical Cancer Screening Data by Race/Ethnicity			
	Black	Hispanic	White
Number of female clients who had Pap screen results documented in the previous three years	122	76	8
Number of female clients: <ul style="list-style-type: none"> for whom a pap smear was indicated, and who had a medical visit with a provider with prescribing privileges at least twice in the measurement year 	155	92	9
Rate	78.7%	82.6%	88.9%



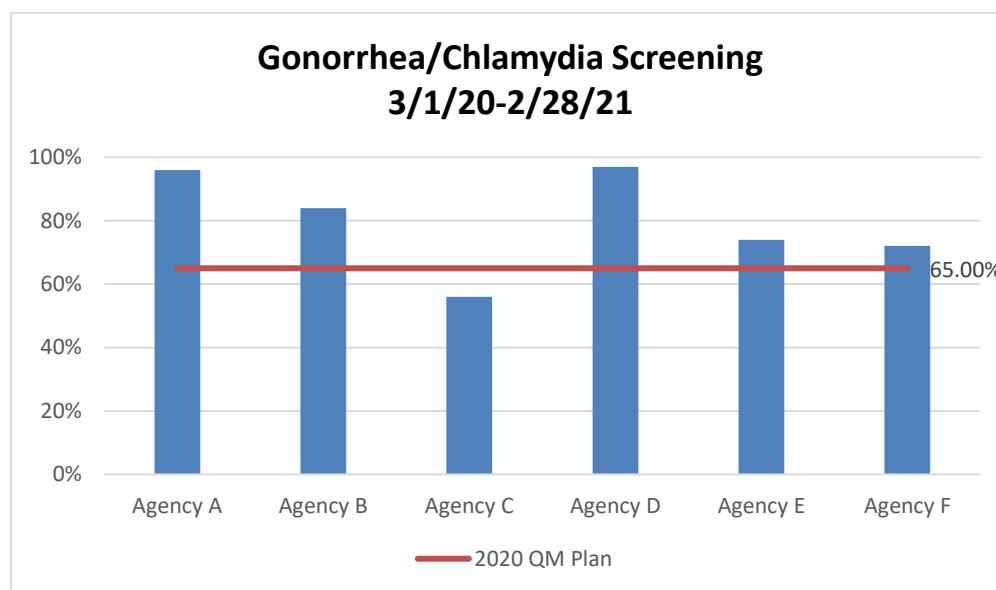
Gonorrhea/Chlamydia Screening

- Percent of clients living with HIV at risk for sexually transmitted infections who had a test for Gonorrhea/Chlamydia within the measurement year

	2018	2019	2020
Number of clients who had a test for Gonorrhea/Chlamydia	501	506	503
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year	635	635	635
Rate	78.9%	79.7%	79.2%
Change from Previous Years Results	1.3%	.8%	-.5%

- 20 cases of chlamydia and 22 cases of gonorrhea were identified

2020 GC/CT by Race/Ethnicity			
	Black	Hispanic	White
Number of clients who had a serologic test for syphilis performed at least once during the measurement year	237	201	57
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year	294	255	74
Rate	80.6%	78.8%	77%



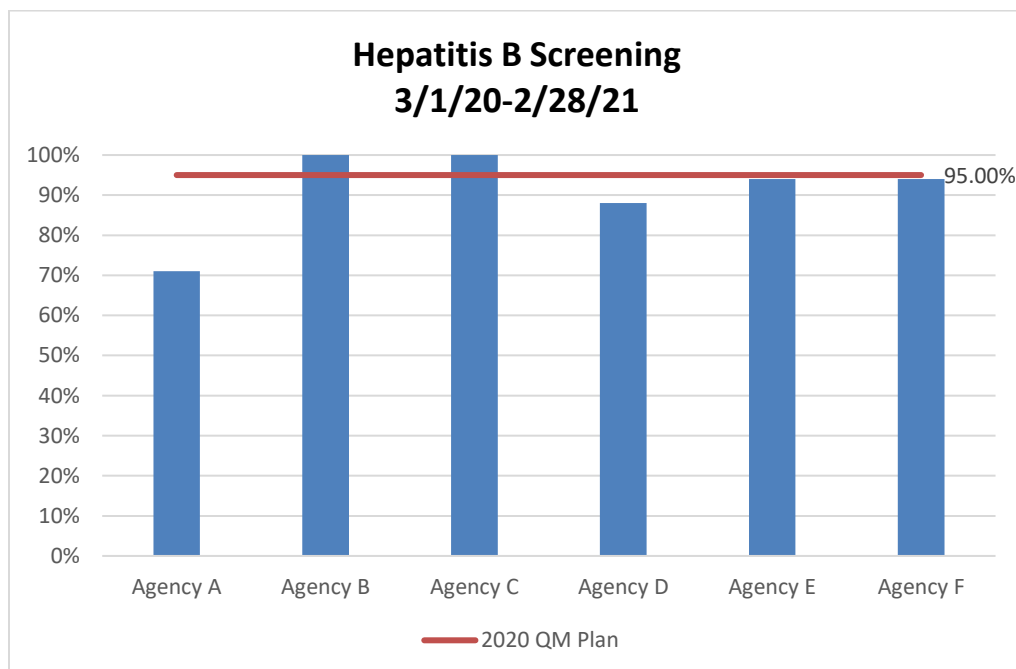
Hepatitis B Screening

- Percentage of clients living with HIV who have been screened for Hepatitis B virus infection status

	2018	2019	2020
Number of clients who have documented Hepatitis B infection status in the health record	577	571	588
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year	635	635	635
Rate	90.9%	89.9%	92.6%
Change from Previous Years Results	3.8%	-1%	2.7%

- 1.4% (9/635) were Hepatitis B positive

2020 Hepatitis B Screening by Race/Ethnicity			
	Black	Hispanic	White
Number of clients who have documented Hepatitis B infection status in the health record	275	231	70
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year	294	255	74
Rate	93.5%	90.6%	94.6%

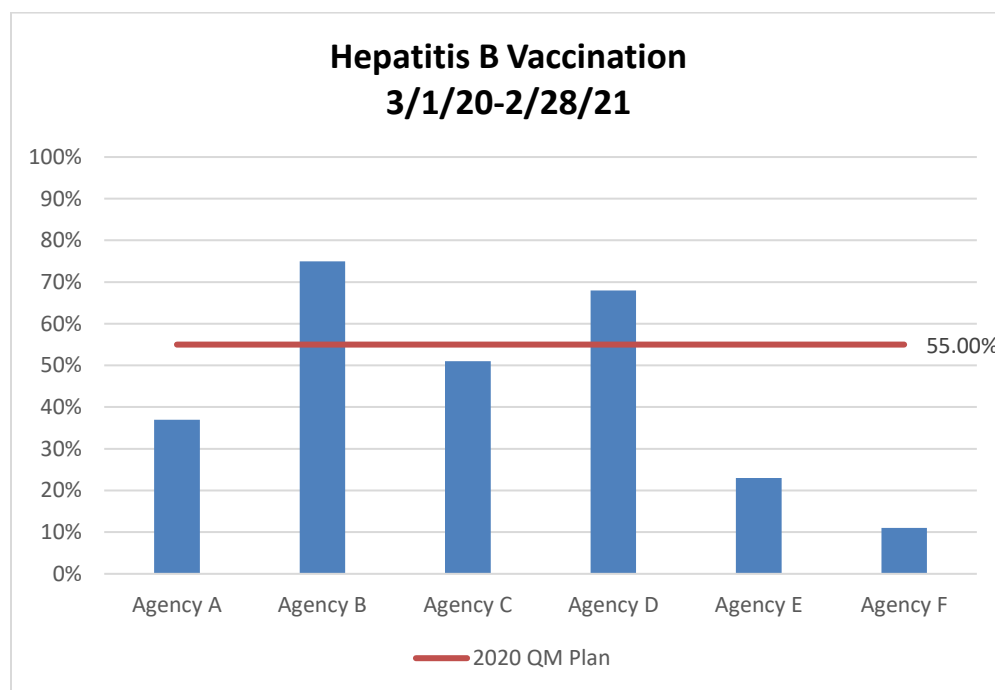


Hepatitis B Vaccination

- Percentage of clients living with HIV who completed the vaccination series for Hepatitis B

	2018	2019	2020
Number of clients with documentation of having ever completed the vaccination series for Hepatitis B	171	177	179
Number of clients who are Hepatitis B Nonimmune and had a medical visit with a provider with prescribing privileges at least twice in the measurement year	347	342	344
Rate	49.3%	51.8%	52%
Change from Previous Years Results	-2.1%	2.5%	.2%

2020 Hepatitis B Vaccination by Race/Ethnicity			
	Black	Hispanic	White
Number of clients with documentation of having ever completed the vaccination series for Hepatitis B	65	94	18
Number of clients who are Hepatitis B Nonimmune and had a medical visit with a provider with prescribing privileges at least twice in the measurement year	132	170	39
Rate	49.2%	55.3%	46.2%



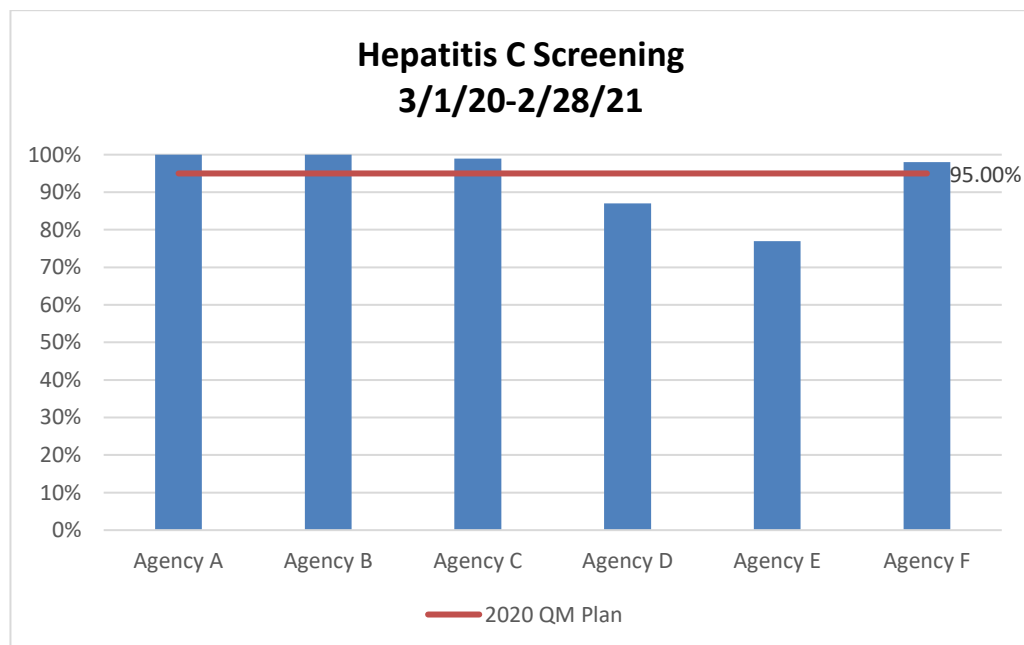
Hepatitis C Screening

- Percentage of clients living with HIV for whom Hepatitis C (HCV) screening was performed at least once since diagnosis of HIV

	2018	2019	2020
Number of clients who have documented HCV status in chart	604	612	611
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year	635	635	635
Rate	95.1%	96.4%	96.2%
Change from Previous Years Results	2.3%	1.3%	-.2%

- 9.1% (58/635) were Hepatitis C positive, including 15 acute infections only and 34 cures (79%)

2020 Hepatitis C Screening by Race/Ethnicity			
	Black	Hispanic	White
Number of clients who have documented HCV status in chart	280	246	73
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year	294	255	74
Rate	95.2%	96.5%	98.6%

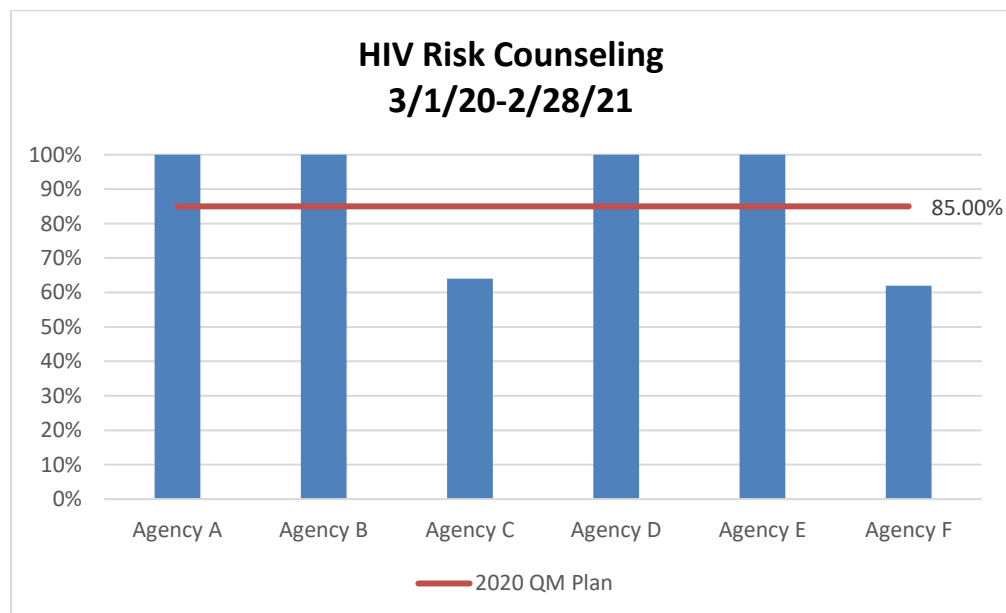


HIV Risk Counseling

- Percentage of clients living with HIV who received HIV risk counseling within measurement year

	2018	2019	2020
Number of clients, as part of their primary care, who received HIV risk counseling	533	520	559
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year	635	635	635
Rate	83.9%	81.9%	88%
Change from Previous Years Results	-6.8%	-2%	6.1%

2020 HIV Risk Counseling by Race/Ethnicity			
	Black	Hispanic	White
Number of clients, as part of their primary care, who received HIV risk counseling	260	222	66
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year	294	255	74
Rate	88.4%	87.1%	89.2%



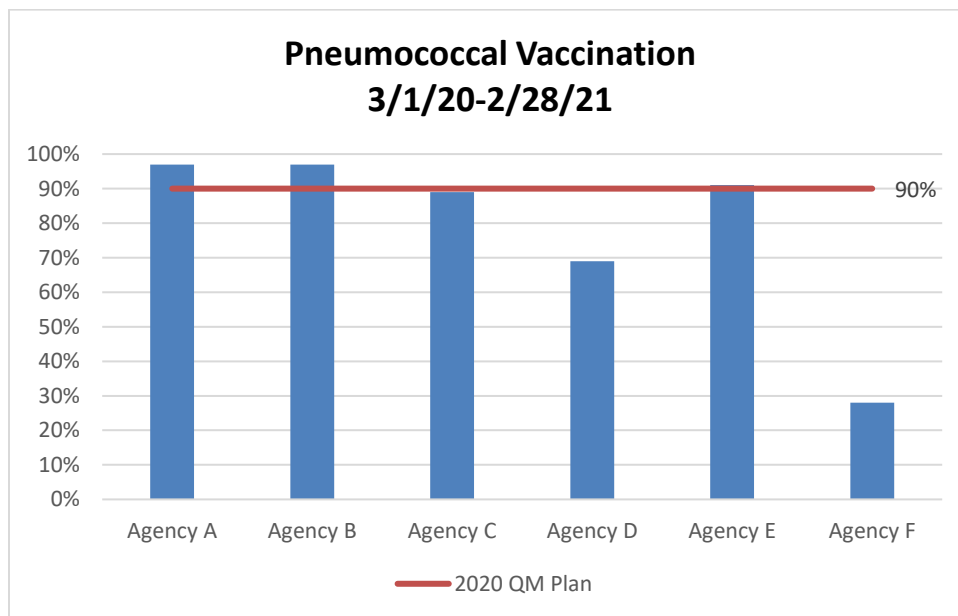
Pneumococcal Vaccination

- Percentage of clients living with HIV who ever received pneumococcal vaccination

	2018	2019	2020
Number of clients who received pneumococcal vaccination	507	523	518
Number of clients who: <ul style="list-style-type: none"> had a CD4 count > 200 cells/mm3, and had a medical visit with a provider with prescribing privileges at least twice in the measurement period 	610	612	608
Rate	83.1%	85.5%	85.2%
Change from Previous Years Results	-.3%	2.4%	-.3%

- 381 clients (62.7%) received both PPV13 and PPV23 (FY19- 59.3%, FY18- 65.1%)

2020 Pneumococcal Vaccination by Race/Ethnicity			
	Black	Hispanic	White
Number of clients who received pneumococcal vaccination	231	223	55
Number of clients who: <ul style="list-style-type: none"> had a CD4 count > 200 cells/mm3, and had a medical visit with a provider with prescribing privileges at least twice in the measurement period 	280	242	74
Rate	82.5%	92.1%	74.3%

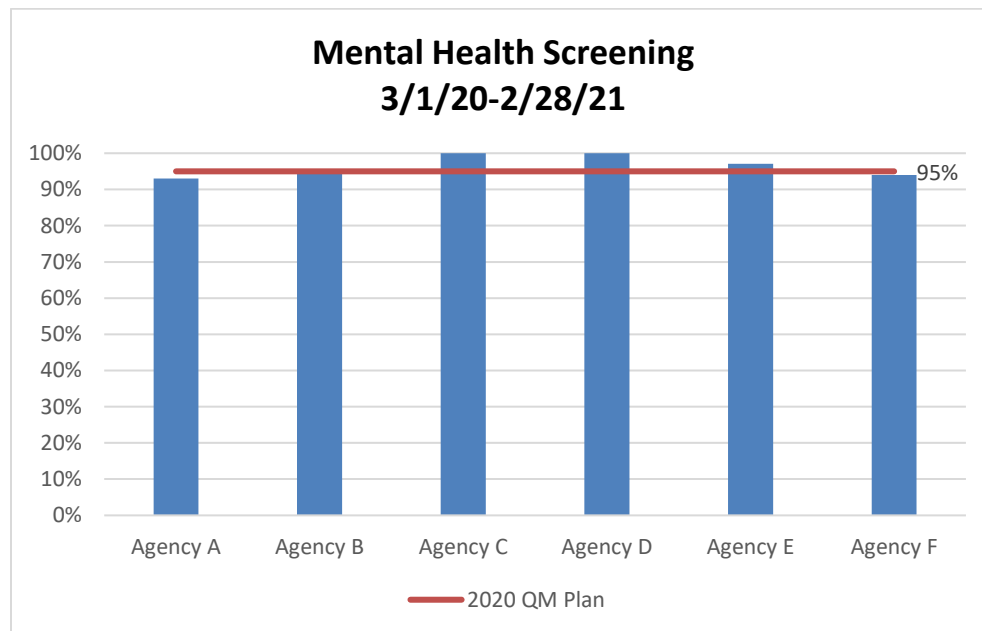


Preventative Care and Screening: Mental Health Screening

- Percentage of clients living with HIV who have had a mental health screening

	2018	2019	2020
Number of clients who received a mental health screening	623	604	614
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement period	635	635	635
Rate	98.1%	95.1%	96.7%
Change from Previous Years Results	1.7%	-3%	1.6%

- 27.6% (175/635) had mental health issues. Of the 64 who needed additional care, 58 (90.6%) were either managed by the primary care provider or referred; 6 clients refused a referral.

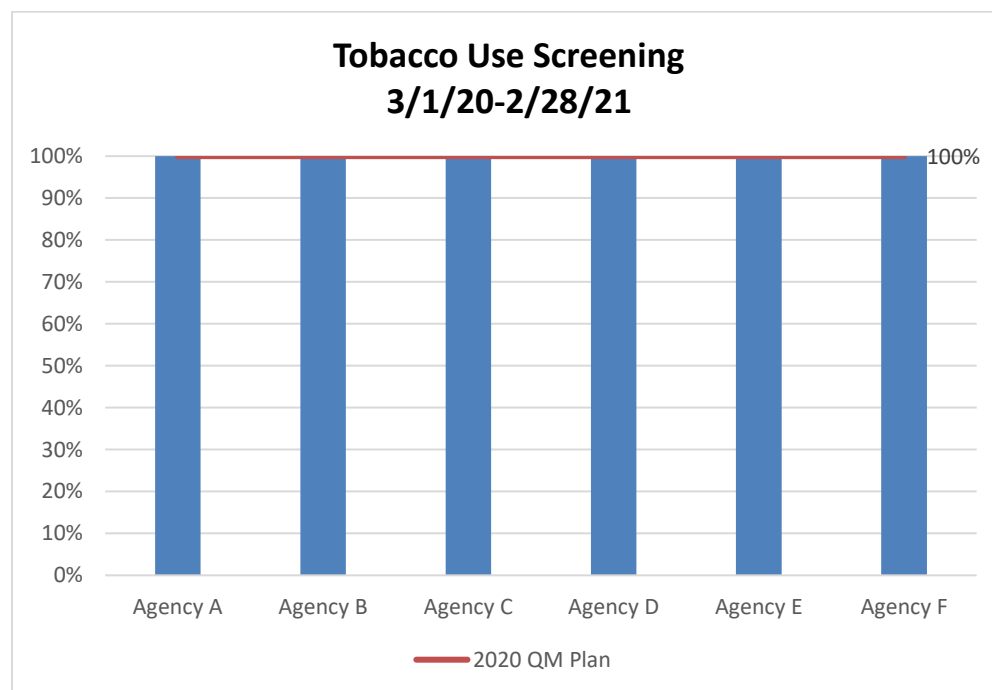


Preventative Care and Screening: Tobacco Use: screening & cessation intervention

- Percentage of clients living with HIV who were screened for tobacco use one or more times with 24 months and who received cessation counseling if indicated

	2018	2019	2020
Number of clients who were screened for tobacco use in the measurement period	627	634	634
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement period	635	635	635
Rate	98.7%	99.8%	99.8%
Change from Previous Years Results	-1.3%	1.1%	0%

- Of the 634 clients screened, 159 (25.1%) were current smokers.
- Of the 159 current smokers, 114 (71.7%) received smoking cessation counseling, and 5 (3.1%) refused smoking cessation counseling



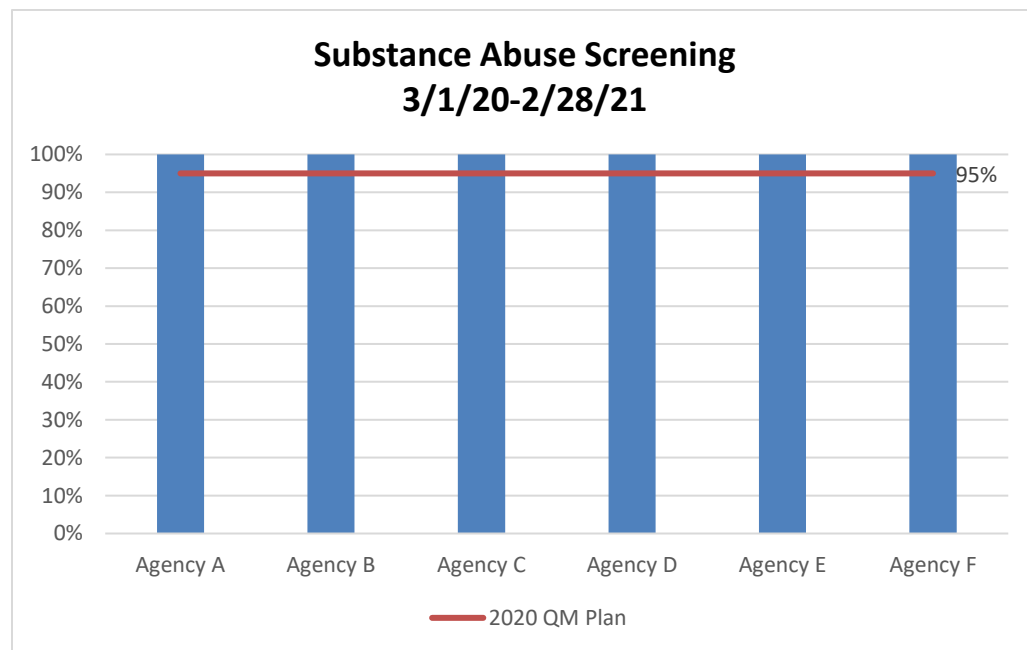
Substance Use Screening

- Percentage of clients living with HIV who have been screened for substance use (alcohol & drugs) in the measurement year*

	2018	2019	2020
Number of new clients who were screened for substance use within the measurement year	631	632	628
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement period	635	635	635
Rate	99.4%	99.5%	98.9%
Change from Previous Years Results	.3%	.1%	-.6%

*HAB measure indicates only new clients be screened. However, Houston EMA standards of care require medical providers to screen all clients annually.

- 4.9% (31/635) had a substance use disorder. Of the 31 clients who needed referral, 24 (77.4%) received one, and 4 (12.9%) refused.

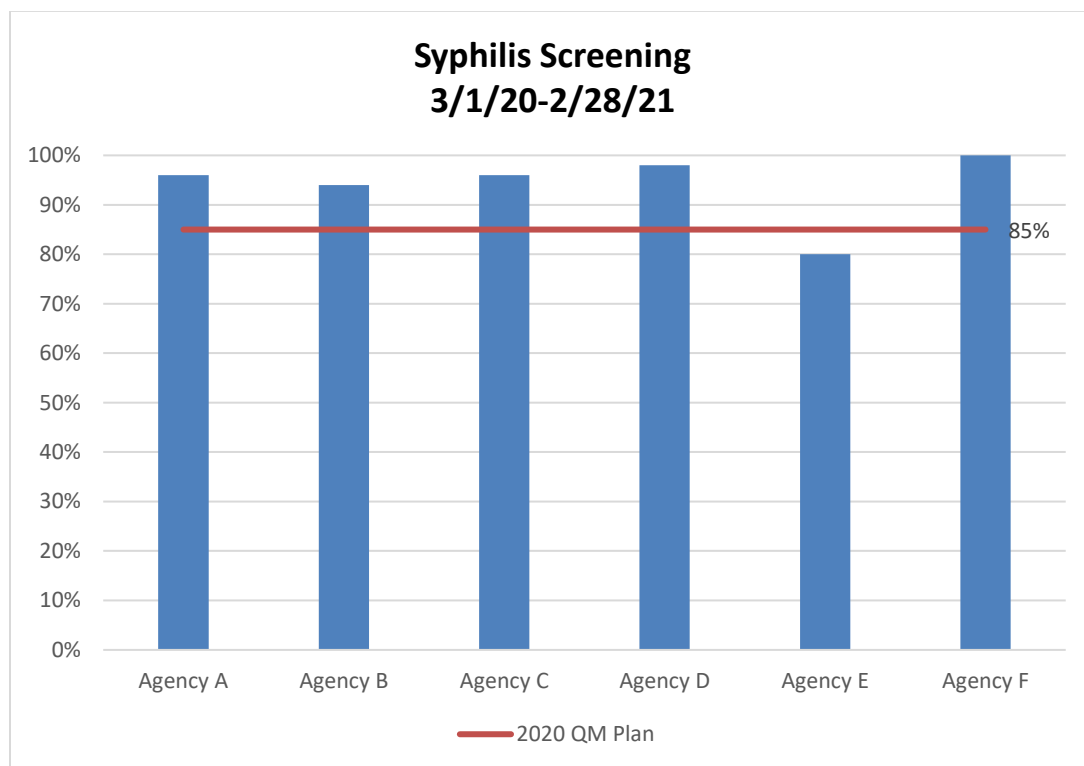


Syphilis Screening

- Percentage of clients living with HIV who had a test for syphilis performed within the measurement year

	2018	2019	2020
Number of clients who had a serologic test for syphilis performed at least once during the measurement year	602	600	604
Number of clients who had a medical visit with a provider with prescribing privileges at least twice in the measurement year	635	635	635
Rate	94.8%	94.5%	95.1%
Change from Previous Years Results	2.4%	-.3%	.6%

- 8.8% (56/635) new cases of syphilis diagnosed

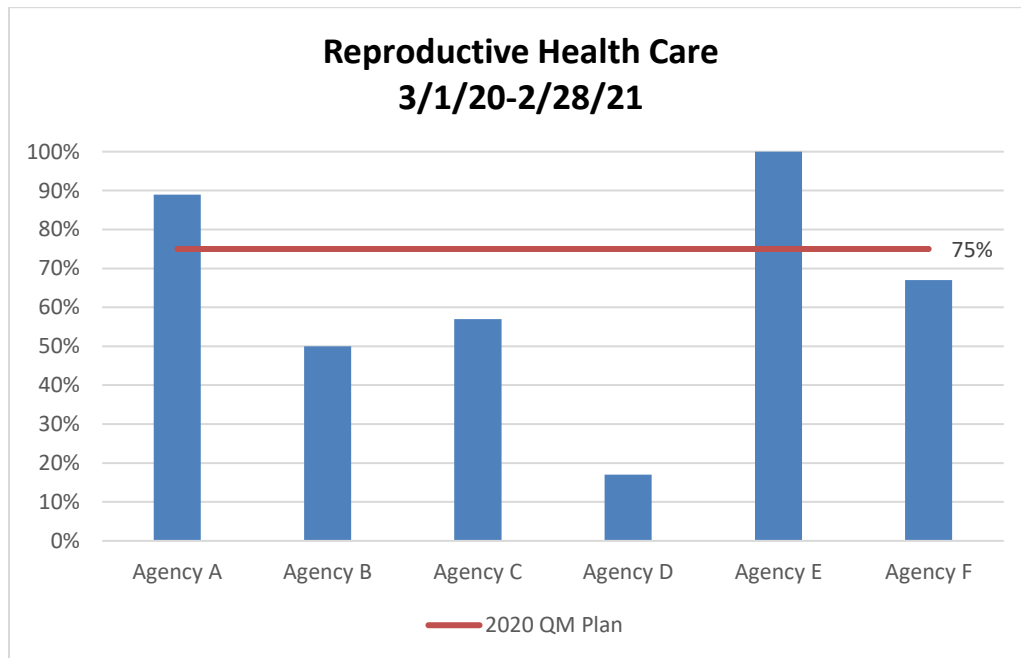


Other Measures

Reproductive Health Care

- Percentage of reproductive-age women living with HIV who received reproductive health assessment and care (i.e, pregnancy plans and desires assessed and either preconception counseling or contraception offered)

	2018	2019	2020
Number of reproductive-age women who received reproductive health assessment and care	29	37	40
Number of reproductive-age women who: <ul style="list-style-type: none"> did not have a hysterectomy or bilateral tubal ligation, and had a medical visit with a provider with prescribing privileges at least twice in the measurement period 	54	66	67
Rate	53.7%	56.1%	59.7%
Change from Previous Years Results	18.8%	2.4%	3.6%

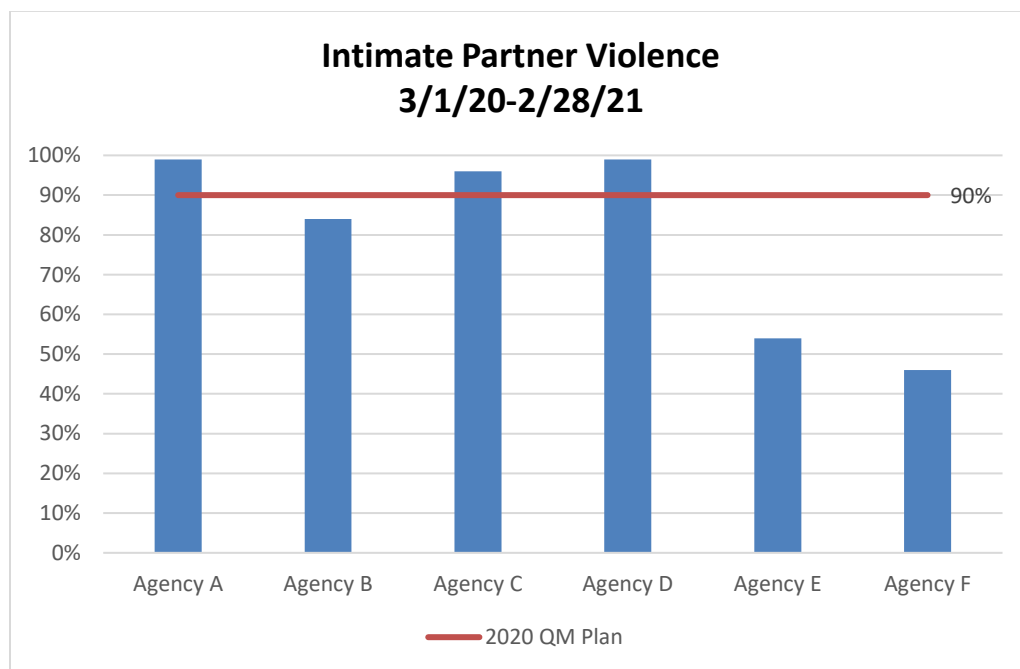


Intimate Partner Violence Screening

- Percentage of clients living with HIV who received screening for current intimate partner violence

	2018	2019	2020
Number of clients who received screening for current intimate partner violence	592	577	553
Number of clients who: <ul style="list-style-type: none"> had a medical visit with a provider with prescribing privileges at least twice in the measurement period 	635	635	635
Rate	93.2%	90.9%	87.1%
	14.6%	-2.3%	-3.8%

* 1/635 screened positive



Adherence Assessment & Counseling

- Percentage of clients living with HIV on ART who were assessed for adherence at least once per year

	Adherence Assessment		
	2018	2019	2020
Number of clients, as part of their primary care, who were assessed for adherence at least once per year	631	627	635
Number of clients on ART who had a medical visit with a provider with prescribing privileges at least twice in the measurement year	631	627	635
Rate	100%	100%	100%
Change from Previous Years Results	0%	0%	0%

ART for Pregnant Women

- Percentage of pregnant women living with HIV who are prescribed antiretroviral therapy (ART)

	2018	2019	2020
Number of pregnant women who were prescribed ART during the 2nd and 3rd trimester	3	2	3
Number of pregnant women who had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year	3	2	3
Rate	100%	100%	100%
Change from Previous Years Results	0%	0%	0%

Primary Care: Diabetes Control

- Percentage of clients living with HIV and diabetes who maintained glucose control during measurement year

	2018	2019	2020
Number of diabetic clients whose last HbA1c in the measurement year was <8%	35	38	55
Number of diabetic clients who had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year	67	65	82
Rate	52.2%	58.5%	67.1%
Change from Previous Years Results	-12.7%	6.3%	8.6%

- 635/635 (100%) of clients were screened for diabetes and 82/635 (12.9%) were diagnosed diabetic

Primary Care: Hypertension Control

- Percentage of clients living with HIV and hypertension who maintained blood pressure control during measurement year

	2018	2019	2020
Number of hypertensive clients whose last blood pressure of the measurement year was <140/90	145	147	157
Number of hypertensive clients who had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year	180	181	179
Rate	80.6%	81.2%	87.7%
Change from Previous Years Results	0%	.6%	6.5%

- 179/635 (28.2%) of clients were diagnosed with hypertension

Primary Care: Breast Cancer Screening

- Percentage of women living with HIV, over the age of 41, who had a mammogram or a referral for a mammogram, in the previous two years

	2018	2019	2020
Number of women over age 41 who had a mammogram or a referral for a mammogram documented in the previous two years	141	142	145
Number of women over age 41 who had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year	164	167	166
Rate	86%	85%	87.3%
Change from Previous Years Results	-1.7%	-1%	2.3%

Primary Care: Colon Cancer Screening

- Percentage of clients living with HIV, over the age of 50, who received colon cancer screening (colonoscopy, sigmoidoscopy, or fecal occult blood test) or a referral for colon cancer screening

	2018	2019	2020
Number of clients over age 50 who had colon cancer screening or a referral for colon cancer screening	127	123	161
Number of clients over age 50 who had a medical visit with a provider with prescribing privileges, i.e. MD, PA, NP at least twice in the measurement year	160	173	192
Rate	79.4%	71.1%	83.9%
Change from Previous Years Results	17.8%	-8.3%	12.8%

Conclusions

The Houston EMA continues to demonstrate high quality clinical care. Overall, performance rates were comparable to the previous year, which is particularly reassuring in light of the COVID-19 pandemic that occurred in FY20. The decreases seen in Influenza Vaccination and IPV screening were likely related to the increase in telehealth services during the measurement year. The increased telehealth services did not appear to impact other performance measures, and in fact, primary care measures such as diabetes and hypertension control improved. Racial and ethnic disparities continue to be seen, particularly for viral load suppression rates. Eliminating racial and ethnic disparities in care are a priority for the EMA, and will continue to be a focus for quality improvement.



Harris County
Public Health
Building a Healthy Community

Ryan White Part A
Quality Management Program- Houston EMA
Case Management Chart Review FY 2020-21
Ryan White Grant Administration

CUMMULATIVE SUMMARY, DE-IDENTIFIED

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Overview

Each year, the Ryan White Grant Administration Quality Management team conducts chart review in order to continuously monitor case management services and understand how each agency implements workflows to meet quality standards for their funded service models. This process is a supplemental complement to the programmatic and fiscal audit of each program, as it helps to provide an overall picture of quality of care and monitor quality performance measures.

A total of 624 medical case management client records were reviewed across seven of the ten Ryan White-Part A funded agencies, including a non-primary care site that provides Clinical Case Management services. The dates of service under review were March 1, 2020- February 28, 2021. The sample selection process and data collection tool are described in subsequent sections.

Case Management is defined by the Ryan White legislation as a, “range of client-centered services that link clients with health care, psychosocial, and other services,” including coordination and follow-up of medical treatment and “adherence counseling to ensure readiness for and adherence to HIV complex treatments.” Case Managers assist clients in navigating the complex health care system to ensure coordination of care for the unique needs of People Living With HIV. Continuous assessment of need and the development of individualized service plans are key components of case management. Due to their training and skill sets in social services, human development, psychology, social justice, and communication, Case Managers are uniquely positioned to serve clients who face environmental and life issues that can jeopardize their success in HIV treatment, namely, mental health and substance abuse, poverty and access to stable housing and transportation, and poor social support networks.

Ryan White Part-A funds three distinct models of case management: Medical Case Management, Non-Medical Case Management (or Service Linkage Work), and Clinical Case Management, which must be co-located in an agency that offers Mental Health treatment/counseling and/or Substance Abuse treatment. Some agencies are also funded for Outreach Services, which complement Case Management Services and are designed to locate and assist clients who are on the cusp of falling out of care in order to re-engage and retain them back into care.

The Tool

A copy of the Case Management Chart Review tool is available in the Appendix of this report.

The Case Management Chart Review tool is a pen and paper form designed to standardize data collection and analysis across agencies. The purpose of the tool is to capture information and quantify services that can present an overall picture of the quality of case management services provided within the Ryan White Part-A system of care. This way, strengths and areas of improvement can be identified and continuously monitored.

The coversheet of the chart abstraction tool captures basic information about the client, including their demographics, most recent appointments, lab results, and any documented psychological, medical, or social issues or conditions that would be documented in their medical record.

The content of the second sheet focuses on coordination of case management services. There is space for the chart abstractor to record what type of worker assisted the client (Medical Case Manager, Service Linkage Worker, Outreach Worker or Clinical Case Manager) and what types of services were provided. It is expected that any notes about case management closure are recorded, as well as any assessments or service plans or documented reasons for the absence of assessments or service plans.

The Sample

In order to conduct a thorough and comprehensive review, a total of 624 client records were reviewed across seven agencies for the 2020-2021 grant year. This included sixty-one (61) Clinical Case Management charts at a non-primary care site. In this Case Management Chart Review Report, any section that evaluated a primary care related measure excludes the sample of the non-primary care site. Minimum sample size was determined in accordance with *Center for Quality Improvement & Innovation* sample size calculator based on the total eligible population that received case management services at each site.

Agency	A	B	C	D	E	F	G
# of Charts Reviewed	79	85	91	105	105	98	61
TOTAL	624 (563 excluding non-Primary Care site)						

For each agency, a randomized sample of clients who received a billable Ryan White- A service under at least one (1) of eleven (11) case management subcategory codes during the March 1, 2020- February 28, 2021 grant year was queried from the Centralized Patient Care Data Management System database. Each sample was determined to be comparable to the racial, ethnic, age, and gender demographics of each site's overall case management patient population.

Cumulative Data Summaries

APPOINTMENTS & ENCOUNTERS

The number of HIV-related primary care appointments and case management encounters in the given year were counted for each client.

HIV-RELATED PRIMARY CARE APPOINTMENTS

For this measure, the number of face-to-face encounters and virtual telehealth visits for an HIV-related primary care appointment with a medical provider was counted. Each encounter was assessed for a minimum of 3 medical appointments. Any Viral Load that accompanied the appointment was also recorded.

HIV MEDICAL # appt

	A	B	C	D	E	F	TOTAL	PERCENT
0	1	4	11	31	8	4	59	10%
1	5	23	9	40	42	10	129	23%
2	18	27	10	26	38	15	134	24%
3	55	31	61	8	17	69	241	43%
<i>Total</i>	<i>79</i>	<i>85</i>	<i>91</i>	<i>105</i>	<i>105</i>	<i>98</i>	<i>563</i>	

The overall sample trends towards a higher number of primary care appointment in the year, with most of the case management review clients having at least 3 appointments in the year (43%), followed by (24%) of the clients having 2 appointments in the year.

CASE MANAGEMENT ENCOUNTERS

Frequency of case management encounters were also reviewed. The number and types of the encounters (face-to-face vs. phone), as well as who provided the service (Clinical, Medical, or Non-Medical Case Manager) were also recorded.

The distribution of frequency of case management encounters could be described as evenly distributed across encounters.

CASE MGMNT

appointments	A	B	C	D	E	F	G	TOTAL	PERCENT
1	19	23	17	35	19	32	8	153	25%
2	21	17	13	12	30	23	6	122	20%
3	9	10	12	12	22	24	15	104	17%
4	17	19	16	22	10	10	13	107	18%
5	13	16	33	24	24	9	19	138	22%
<i>Total</i>	<i>79</i>	<i>85</i>	<i>91</i>	<i>105</i>	<i>105</i>	<i>98</i>	<i>61</i>	<i>624</i>	

VIRAL SUPPRESSION

Any results of HIV Viral Load laboratory tests that accompanied HIV-related primary care appointments were recorded as part of the case management chart abstraction. Up to three laboratory tests could be recorded. Lab results with an HIV viral load result of less than 200 copies per milliliter were considered to be virally suppressed.

Upon coding, clients who were suppressed for all of their recorded labs (whether they had one, two, or three tests done within the year), were coded as “Suppressed.” Clients who were unsuppressed (>200 copies/mL) for all of their labs were coded as “Unsuppressed.” Clients who had more than one laboratory test done and were suppressed for at least one and unsuppressed for at least one were coded as “Mixed Status,” and clients who had no laboratory tests done within the entire year were coded as “Unknown.”

SUPPRESSION STATUS	A	B	C	D	E	F	TOTAL	PERCENT
Suppressed for all labs	32	31	43	72	72	33	283	50%
Mixed status	0	0	0	3	10	0	13	2%
Unknown (no recent labs on file)	44	51	37	21	10	55	218	39%
Unsuppressed for all labs	3	3	11	9	13	10	49	9%
<i>Total</i>	<i>79</i>	<i>85</i>	<i>91</i>	<i>105</i>	<i>105</i>	<i>98</i>	<i>563</i>	

Across all primary care sites, the case management clients reviewed for these samples had a viral load suppression rate of 50%. In contrast, this result is much lower than what is typical for the Ryan White Part A Houston Primary Care Chart review, which has hovered around 85% for the past several years. This difference may be due to several factors, mainly the Covid-19 pandemic and reduction of in-person labs due to telehealth visits. The Primary Care chart review sample is collected from a pool of clients who are considered *in care*, or have at least two medical appointments with a provider with prescribing privileges in the review year. Additionally, “fluctuating viral load” is one of the eligibility criteria for medical case management, so clients who have challenges maintaining a suppressed viral load are more likely to be seen by case management and be included in this sample.

CARE STATUS

The chart abstractor also documented any circumstances in the record for which a client was new, lost, returning to care, or some combination of those care statuses. A client was considered “New to Care,” if they were receiving services for the first time at that particular agency (not necessarily new to HIV treatment or the Houston Ryan White system of care). “Lost to Care” was defined as not being seen for an HIV-related primary care appointment within the last six months and not having a future appointment scheduled, even beyond the review year. “Re-engaged in Care” was defined as any client who was previously lost to care, either during or before the review year, and later attended an HIV-related primary care appointment.

CARE STATUS	A	B	C	D	E	F	TOTAL	PERCENT
New to Care	11	5	11	1	2	5	35	6%
Lost to Care	11	2	1	15	11	2	42	7%
Re-engaged in Care	0	0	0	1	0	0	1	1%
Both New and later Lost to Care in the same review year	8	2	20	3	17	15	65	12%
Re-engaged and later lost again	0	0	0	1	1	0	2	<1%
N/A	49	76	59	84	74	76	418	74%
<i>Total</i>	<i>79</i>	<i>85</i>	<i>91</i>	<i>105</i>	<i>105</i>	<i>98</i>	<i>563</i>	

Overall, 6% of the sample was considered New to Care, 7% was Lost to Care, and <1% was Re-engaged in Care.

When a client’s attendance met one of the above care statuses, their medical record was reviewed to understand if case management or other staff was involved in coordinating their care. Activities that counted as “Coordination of Care” were any actions that welcomed the client into or back into care or attempted to retain them in care, such as: reminder phone calls, follow-up calls, attendance, or introduction at the first appointment, or home visits.

COMORBIDITIES

To understand and document common comorbidities within the Houston Ryan White system of care, co-occurring conditions were recorded, including mental health and substance abuse issues, other medical conditions, and social conditions. This inventorying of co-morbidities may prove particularly helpful for selecting future training topics for case management staff.

MENTAL HEALTH & SUBSTANCE USE DISORDER (history or active)

Any diagnosis of a mental health disorder (MH) or substance use disorder issue (SUD) was recorded in the chart review tool, including a history of mental illness or substance use. All Electronic Medical Records include some variation of a “Problem List” template. This list was often a good source of information for MH and SUD diagnoses, but providers sometimes also documented diagnoses or known histories of illness within progress notes without updating the Problem List. Clients sometimes also self-reported that they had been diagnosed with one of the below conditions by a previous medical provider. Any indication of the presence of mental illness or SUD, regardless of where the information was housed within the medical record, was recorded on the chart abstraction tool. Clients could also have or have had more than one of the MH or SUD issues. Any conditions other than alcohol misuse, other SUD, depression, bipolar disorder, anxiety, or schizophrenia were recorded as “Other.” The most common types of condition coded as “Other” was Post-Traumatic Stress Disorder.

Diagnosis or Issue	A	B	C	D	E	F	G	TOTAL	PERCENT
Alcohol abuse/dependence	3	2	5	1	13	6	20	50	9%
Other Substance dependence	14	1	5	0	15	7	19	61	10%
Depression	16	11	32	14	42	33	37	185	32%
Bipolar disorder	6	5	7	1	5	10	14	48	8%
Anxiety	9	12	14	51	28	22	32	168	29%
Schizophrenia	1	1	0	14	1	2	7	26	4%
Other	2	0	11	2	12	9	10	46	8%

Overall, 93% of the sample had either an active diagnosis or history of a mental health or substance abuse issue documented somewhere within their medical record. This is inclusive of the Clinical Case Management site, for which diagnosis with or clinical indication of a MH or SUD issue is an eligibility criteria.

MENTAL HEALTH & SUBSTANCE USE DISORDER REFERRALS

For clients with an *active* diagnosis of a mental health or SUD issue, the chart abstractor recorded if they were referred or already engaged in MH/SUD services.

MH referral	A	B	C	D	E	F	TOTAL	PERCENT
N/A	75	82	55	100	97	88	497	88%
Yes	3	3	13	5	8	10	42	7%
No	1	0	23	0	0	0	24	4%
Total	82	85	91	105	105	98	563	

Overall, 88% of the sample would not have been appropriate for a MH or SUD referral based on the information available in their medical record. An additional 7% either did receive a referral or were already engaged in treatment and 4% did not receive a referral.

MEDICAL CONDITIONS

Medical conditions other than HIV were also recorded in an effort to understand what co-occurring conditions may be considered commonly managed alongside HIV within the case management population. Sexually Transmitted Infections and Hypertension were common, at 33% and 25% prevalence within the sample, respectively. The site visit tool does not list obesity as a medical condition however, obesity was the most common co-occurring condition that was coded in the “Other” category.

Medical Condition	A	B	C	D	E	F	TOTAL	PERCENT
Smoking (hx or current)	10	7	12	11	33	10	83	16%
Opportunistic Infection	0	0	3	6	0	0	9	2%
STIs	38	16	48	3	39	31	175	33%
Diabetes	5	11	8	4	20	22	70	13%
Cancer	0	3	1	6	0	1	11	2%
Hepatitis	7	5	1	7	9	9	38	7%
Hypertension	12	37	21	11	22	28	131	25%
Other	2	3	5	0	8	1	19	4%

SOCIAL CONDITIONS

Any indication within the medical record that a client had experienced homelessness/housing-related issues, pregnancy/pregnancy-related issues, a release from jail or prison, or intimate partner violence at any point within the review year was recorded in the chart abstraction tool. Homelessness and housing issues were the most commonly identified “Social Condition” within the sample.

Social Issue	A	B	C	D	E	F	G	TOTAL	PERCENT
Homelessness or housing-related issues	5	0	3	4	15	1	10	38	6%
Pregnancy or pregnancy-related issues	6	2	0	0	0	0	0	8	1%
Recently released	0	0	1	0	2	0	0	3	<1%
Intimate Partner Violence	3	0	0	0	5	0	10	18	2%

COMPREHENSIVE ASSESSMENTS

A cornerstone of service provision within case management is the opportunity for the client to be formally assessed at touchpoints throughout the year for their needs, treatment goals, and action steps for how they will work with the case manager or care team to achieve their treatment goals. Agencies need to use an approved assessment tool and service plan, which may either be the sample tools available through Ryan White Grant Administration or a pre-approved tool of the agency’s choosing.

The Ryan White Part-A Standards for medical case management state that a comprehensive assessment should be completed with the client at intake and that they should be re-assessed at least every six months for as long as they are receiving medical case management services. A more formal, comprehensive assessment should be used at intake and annually, and a brief reassessment tool is sufficient at the 6-month mark. In other words, the ideal standard is that every client who receives case management services for an entire year should have at least two comprehensive assessments on file. A service plan should accompany each comprehensive assessment to outline the detailed plan of how the identified needs will be addressed with the client.

# of Comp assessments	A	B	C	D	E	F	G	TOTAL	PERCENT
0	62	85	78	100	89	83	0	497	79%
1	17	0	13	3	16	15	15	79	13%
2	0	0	0	2	0	0	9	11	2%
N/A	0	0	0	0	0	0	37	37	6%
Total	79	85	95	105	105	98	61	624	

The client was considered “N/A” for a comprehensive assessment if they did not work with a medical case manager throughout the year. As outlined above, 6% of the sample did not work with a Medical Case Manager within the year. 79% of the sample received zero comprehensive assessments, 13% received one, and 2% received two.

SERVICE PLANS

As mentioned, each comprehensive assessment should be accompanied by a service plan, otherwise known as a care plan, to outline what action(s) will be taken to address the needs identified on the comprehensive assessment. A service plan can be thought of as an informal, working, contract between client and social worker for accountability of needed actions, and in what order, to meet a client's determined treatment goals. As with the comprehensive assessment, each completed service plan was recorded in the chart abstraction tool, along with any documented justification for why a service plan was missing if it should have been completed.

# of service plans	A	B	C	D	E	F	G	TOTAL	PERCENT
0	65	82	91	102	95	98	7	540	87%
1	14	3	0	2	10	0	10	39	6%
2	0	0	0	1	0	0	7	8	1%
N/A	0	0	0	0	0	0	37	37	6%
Total	79	85	91	105	105	98	61	624	

It is notable that less service plans are completed than comprehensive assessments, even though the two processes are intended to occur together, one right after the other. RWGA experienced a transition in CM chart review auditors midway through the chart review process. As a result, it is unclear what the criteria for determining a client was "N/A" at agency "G".

BRIEF ASSESSMENTS

Like Medical Case Management, Non-Medical Case Management is guided by a continuous process of ongoing assessment, service provision, and evaluation. Clients should be assessed at intake using a Ryan White Grant Administration approved brief assessment form and should be reassessed at six-month intervals if they are still being serviced by a Non-Medical Case Manager.

# of Brief assessments	A	B	C	D	E	F	TOTAL	PERCENT
0	52	73	55	56	30	80	346	61%
1	24	12	34	38	54	18	180	33%
2	3	0	2	7	1	0	13	2%
N/A	0	0	0	4	20	0	24	4%
Total	79	85	91	105	105	98	563	

Completion of brief assessments were recorded. 4% of the sample would not been applicable for a brief assessment, as they did not receive services from a Non-Medical Case Manager. 61% of the sample received zero brief assessments, 33% received one, and 2% received two.

ASSESSED NEEDS

All data from assessment tools was captured in the chart review tool. A total of 624 Comprehensive Assessments and 563 Brief Assessments were reviewed and recorded to quantify the frequency of needs. The count recorded is a raw count of how many times a need was recorded, encompassing both comprehensive and brief assessments and including clients who may have had the same need identified more than once at different points in time.

The most frequently assessed needs were: 1) Medical/Clinical, 2) Dental Care, 3) Vision Care, 4) Medication Adherence Counseling, 5) Mental Health, and (6) Insurance. It should be noted, however, that there are no universal standards or instructions across case management systems on how to use these tools or how these needs are defined. Anecdotally, some case managers reported that they automatically checked “Medical/Clinical” and “Medication Adherence Counseling” as a need, regardless of whether or not the client needed assistance accessing medical care, because it was their understanding that this section *always* needed to be checked in order to justify billing for medical case management services. Therefore, this compilation of comprehensive and brief assessments should not be considered representative of *true need* within the HIV community in Houston, but rather, as representative of issues that case managers are discussing with clients.

Need identified on assessment	A	B	C	D	E	F	G	TOTAL	PERCENT
Medical/Medication	42	12	41	37	24	35	8	199	8%
Vaccinations	10	7	0	44	22	0	6	89	4%
Nutrition/Food Pantry	10	8	16	0	18	1	4	57	3%
Dental	31	11	18	16	29	14	8	127	5%
Vision	19	11	31	12	14	13	5	105	4%
Hearing Care	15	9	26	1	0	12	1	64	3%
Home Health Care	10	3	8	0	1	2	0	24	1%
Basic Necessities/Life Skills	41	9	28	4	5	32	5	124	5%
Mental Health	33	9	45	16	24	44	14	185	7%
Substance Use Disorder	43	12	37	4	5	35	6	142	6%
Abuse	27	11	17	1	12	15	2	85	4%
Housing/Living Situation	41	12	35	9	10	34	8	149	6%
Support Systems	47	12	42	3	3	33	1	141	6%
Child Care	14	6	4	0	0	4	0	28	1%
Insurance	52	11	31	3	9	46	4	156	6%
Transportation	36	12	55	11	6	35	6	161	6%
HIV-Related Legal Assistance	25	8	21	0	1	27	0	82	3%
Cultural/Linguistic	28	1	12	0	0	20	0	61	3%
Self-Efficacy	40	1	12	0	0	40	4	97	4%
HIV Education/Prevention	21	12	40	3	4	36	0	116	5%
Family Planning/Safer Sex	9	11	7	0	4	2	1	34	2%
Employment	39	7	39	0	4	33	4	126	5%
Education/Vocation	35	10	30	0	0	10	0	85	4%
Financial Assistance	8	10	12	21	15	8	13	87	4%
Medication Adherence Counseling	44	9	43	19	27	43	17	182	7%
Client Strengths	1	0	0	1	0	0	3	5	1%

Conclusion

The 2020-2021 Case Management chart review highlighted many trends about the case management client population, strengths in case management performance, and areas identified for future attention and improvement. This report also gives consideration to challenges and barriers related to Covid-19 pandemic.

The most common co-occurring conditions were: Sexually Transmitted Infections (33%), Depression (32%), and Hypertension (25%). Diabetes and Obesity were also relatively common and providing overview information on nutrition counseling may be a useful topic in frontline case management trainings. The prevalence of complex co-morbidities emphasizes the unique benefit that case managers contribute to the HIV treatment setting.

There were also areas of high performance displayed in this chart review. Most (43 %) of the clients in the sample had at least three HIV-related primary care appointments within the review year. Case Management staff demonstrated a high level of coordination of care in areas. For example, 90% of the clients who were New, Lost, or Returning to Care (or some combination) received coordination of care activities from case management to retain them in care.

Appendix (Case Management Chart Review Tool)

CASE MANAGEMENT CHART REVIEW TOOL

Chart Review Date ____/____/____

Agency: ☐ AHF ☐ AH ☐ Ave360 ☐ HHS ☐ Legacy ☐ SHF

Review Period:

3/1/20__ - 2/28/20__

CLIENT INFORMATION

Pt. ID # _____ Race: _____

Client Case Status: ☐ Open/Active ☐ Closed ☐ Unk. Gender: _____

Last OAMC Appts:	Virally Suppressed?	← If No, linked to CM?
1.	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk.	
2.	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk.	
3.	<input type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> Unk.	
<input type="checkbox"/> No appts. during review period		

Last CMngmt. Contact:	Type (F2F/PC/Consult.) + short description	Signed/Dated/Clear?
1.		
2.		
3.		
4.		
5.		

During the review period, was the client: ☐ New to care ☐ Lost to care ☐ Re-engaged in care ☐ NAIf yes.... was there documentation of coordination of care or contact attempts? ☐ Y ☐ N ☐ NA

Does the client have an active diagnosis of the following diagnoses? (Check ALL that apply)

- ☐ Alcohol abuse/dependence
☐ Other substance abuse/dependence: _____
☐ Depression
☐ Bipolar disorders
☐ Anxiety disorders
☐ Schizophrenia
☐ Other: _____

 Was the client referred or already
 engaged with MH/SA services?

☐ N/A ☐ Yes ☐ No

Does the client have any co-morbidity?

- ☐ Opportunistic Infection
☐ Sexually Transmitted Infections (STIs) : _____
☐ Diabetes
☐ Cancer
☐ Hepatitis
☐ Hypertension
☐ Other: _____

Was the client reported to have any of the following conditions?

- ☐ Homelessness
☐ Pregnancy (or other pregnancy-related conditions)
☐ Recently released
☐ IPV

INSURANCE, BENEFITS, AND INCOME INFORMATION

Health Insurance: ☐ Uninsured ☐ Medicaid _____ ☐ Medicare _____ ☐ Commercial _____
☐ VA ☐ Other? _____

Spouse/partner:	Children:	Other Dependents:	TOTAL HOUSEHOLD SIZE 1 2 3 4 5 6 7 8 9 10 Unk
Client Income \$:	Spouse Income \$:	Other Income \$:	TOTAL HOUSEHOLD INCOME \$:

Did the client lose insurance or coverage during the review period? ☐ Y ☐ N ☐ Unk. ☐

If so, were they provided with information/education or assistance? ☐ Y ☐ N ☐ NA ☐

CASE MANAGEMENT SERVICES

What types of services were provided by a Medical Case Manager (MCM)?	What types of services were provided by a Service Linkage Worker (SLW)?	Was the client referred for Clinical Case Management services in the review period?
<input type="checkbox"/> NA (Client not assisted by MCM) <input type="checkbox"/> Comprehensive assessment <input type="checkbox"/> Service Plan <input type="checkbox"/> Medication adherence counseling <input type="checkbox"/> Coordination of medical care <input type="checkbox"/> Transportation <input type="checkbox"/> ADAP/medication assistance <input type="checkbox"/> Eligibility <input type="checkbox"/> Community resource/benefits brokerage <input type="checkbox"/> Other _____ Did client meet criteria for MCM? Y <input type="checkbox"/> N <input type="checkbox"/> Unk. <input type="checkbox"/>	<input type="checkbox"/> NA (Client not assisted by SLW) <input type="checkbox"/> Brief assessment <input type="checkbox"/> SLW referred client to OAMC <input type="checkbox"/> OAMC visit scheduled by SLW <input type="checkbox"/> SLW accompanied client to OAMC <input type="checkbox"/> SLW called client to remind about OAMC visit <input type="checkbox"/> Client did not keep OAMC appt. and SLW contacted them <input type="checkbox"/> ADAP/medication assistance <input type="checkbox"/> Transportation voucher <input type="checkbox"/> Eligibility Were any of the above services provided by an Outreach Worker? Y <input type="checkbox"/> N <input type="checkbox"/> Unk. <input type="checkbox"/>	<input type="checkbox"/> No- not applicable <input type="checkbox"/> No- applicable, but no referral documented <input type="checkbox"/> Yes- and there is evidence of coordination of services <input type="checkbox"/> Yes- and there is <u>no</u> evidence of coordination of services <input type="checkbox"/> Yes- but client refused services or is already engaged in treatment

Was the case discharged/closed for CM during the review period? Y ☐ N ☐ NA ☐ Unk. ☐

If yes..... Client met agency criteria for closure? Y ☐ N ☐ NA ☐ Unk. ☐

Client completed treatment program (CCM) Y ☐ N ☐ NA ☐ Unk. ☐

Date and reason noted? Y ☐ N ☐ NA ☐ Unk. ☐

Summary of services received? Y ☐ N ☐ NA ☐ Unk. ☐

Referrals noted? Y ☐ N ☐ NA ☐ Unk. ☐

Instructions given to client at discharge? Y ☐ N ☐ NA ☐ Unk. ☐

ASSESSMENTS & SERVICE PLANS

		If no assessment or plan:		
Brief Assess. Date 1:	Brief Assess. Date 2:	<input type="checkbox"/> evidence of one just outside of review period	<input type="checkbox"/> reason documented	<input type="checkbox"/> enough info to complete
Comp. Assess. Date 1:	Comp. Assess. Date 2:	<input type="checkbox"/> evidence of one just outside of review period	<input type="checkbox"/> reason documented	<input type="checkbox"/> enough info to complete
Service Plan Date 1:	Service Plan Date 2:	<input type="checkbox"/> evidence of one just outside of review period	<input type="checkbox"/> reason documented	<input type="checkbox"/> enough info to complete

COMPLETED ASSESSMENTS

[illegible]

Sentinel Event Alert

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Addressing health care disparities by improving quality and safety

The Joint Commission considers addressing health care disparities a quality and patient safety imperative, as well as a moral and ethical duty. Our enterprise's mission to continuously improve health care commits us to finding solutions to these inequities.

"Disparities in health care is one of the most studied and researched problems; there are overwhelming evidence and persistence of gaps in virtually all areas of health care," said Dr. Ana McKee, executive vice president, chief medical officer and chief diversity and inclusion officer, The Joint Commission. "This is a problem that is a major patient safety issue; it provides and introduces as much risk of harm as a central line infection or a fall. We encourage all organizations to address disparities as a patient safety concern."¹

This *Sentinel Event Alert* summarizes strategies for health care and human services organizations in all settings as they begin to address health care disparities; it also provides examples of successful initiatives for organizations that are well on their way. This alert can guide organizations as they address disparities as a central part of performance and patient safety improvement and hardwire the pursuit of health equity into their strategic planning.

The Henry J. Kaiser Family Foundation defines health care disparities as "differences between groups in health coverage, access to care, and quality of care."² While these disparities are commonly viewed through the lens of race and ethnicity, they occur across many dimensions, including socioeconomic status, age, location, gender, disability status, and sexual orientation and expression.

According to the Centers for Disease Control and Prevention, non-Hispanic Black women are three times more likely to die from a pregnancy-related cause than white women.³ The COVID-19 pandemic has widened disparity gaps. Non-Hispanic Blacks and Hispanics with COVID-19 experienced nearly three times the rate of hospitalization as whites,⁴ and both demographic groups combined experienced more than half of COVID-19 deaths nationally while representing only a third of the population, according to age-standardized data.⁵ Sexual minority persons in the U.S. also reported a higher prevalence of severe outcomes from COVID-19 than heterosexual persons, both within the overall population and among racial/ethnic minority groups.⁶

In addition, racial and ethnic minorities are less likely to receive treatment for depression, substance abuse, and other behavioral health conditions.⁷ Patients and clients with limited English proficiency face barriers to health care access, experience lower quality care, and suffer worse outcomes.⁸ Disparities relating to gender,⁹ culture,¹⁰ religion,¹¹ disabilities and more abound.

Developing your quality and safety improvement program to address disparities

A practical way to start addressing health care disparities in your organization is to engage your current quality and safety improvement program to identify opportunities for improvement in the communities your organization serves. This requires developing community partnerships to help you to fully understand the root causes that impede access and cause distrust and to uncover other barriers that may exist. Embedding these improvement efforts into your organization's

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quality improvement infrastructure allows you to monitor metrics and progress toward health equity goals along with all other improvement activities.

Addressing disparities on Chicago's West Side

Driven by large life-expectancy gaps in its primary service area compared to other Chicago neighborhoods, Rush University Medical Center in Chicago developed a five-pronged framework to support a health equity strategy focused on applying quality and safety principles to reduce and ultimately eliminate disparities affecting excluded or marginalized groups. The framework includes a commitment to offer employment opportunities to individuals living on Chicago's West Side and to create wealth-building opportunities for employees. This strategy binds governance, leaders and the workforce together in a concerted effort to eliminate racism and health care inequities and to address social and structural determinants of health.¹²

Actions suggested by The Joint Commission

"A robust culture of equity depends on staff and providers recognizing that disparities may exist within a patient population and taking responsibility for reducing them." – "A Roadmap to Reduce Racial and Ethnic Disparities in Health Care," Robert Wood Johnson Foundation¹³

The following actions have been adopted by health care organizations across the nation, as they begin to take responsibility for ensuring that the same quality of care is provided to patients in all settings.

1. Collect and stratify quality and safety performance data specific to the communities your organization serves, and develop communication channels that enable you to listen and learn.

Health care leaders should not assume they understand the drivers of disparities in the communities they serve, including disparities within their workforce. "Communities served by your health care organization may be experiencing health care disparities, but you may not know that," said Dr. McKee. "Gathering data and creating opportunities for communities to give voice to their experiences are among the ways to start the listening and learning process that's so essential to addressing disparities."

Understanding your organization's current quality and safety performance according to the various demographic groups you serve is essential to addressing health care disparities. For this reason, collecting quality and safety data and then stratifying the data according to your organization's patient and workforce demographics are important first steps. Health care organizations commonly stratify these data according to demographics such as race, ethnicity, and language (REaL); sexual orientation/gender identity (SO/GI); disability; social determinants of health; geography; health insurance coverage; access to providers and pharmacies; and other factors that may contribute to health care disparities.¹⁴

Integrating these data into standard workflows and tools, including within the electronic medical record and quality and safety dashboard, will facilitate goal setting, as well as ongoing measurement and progress.¹⁴ Supplementing these data by listening to and giving voice to marginalized communities via personal interviews with patients, workers, advisory councils, or focus groups adds human experience to the numbers. These qualitative methods may also serve as a proxy if your organization lacks stratified data that points out specific disparities in your patient population.¹³

Improving the quality of care of transgender and gender nonconforming patients

Many transgender and gender nonconforming (TGNC) patients choose to delay or not seek health care when necessary because they fear discrimination or mistreatment. In response, the Vanderbilt Program for LGBTQ Health engaged the community of TGNC patients in the creation of a transgender patient advocacy program, a community advisory board, and a transgender health clinic. To support the continuous quality improvement of transgender health care and to make the health care environment more welcoming and inclusive to TGNC patients, the program piloted a monitoring and evaluation system to identify the clinics and health services most used by TGNC patients and assess the level of patient satisfaction in each area. This process supports the identification of high- and low-performing clinics and health services and allows for the development of training programs to improve the quality of culturally competent health care TGNC patients receive systemwide.¹⁵

Developing two-way channels of communication with stakeholders, especially communities experiencing health disparities, and forging working relationships with community leaders lead to informed decision-making of benefit to all parties. These conversations and collaborations will help your organization to build empowering alliances with voices and communities that were previously excluded.¹⁶

2. Analyze stratified data and community feedback to identify health care disparities and opportunities for improvement.

Overcoming health disparities will require understanding social determinants of health that affect the communities your organization serves. It's important to focus on determinants that your organization can affect through actions such as creating better access to care, referring patients or clients to behavioral health or social services, developing "plain language" health education materials, and providing interpreter services. Other determinants – such as food insecurity, housing instability and utility stress – are generally caused by unemployment and poverty, inadequate family/social supports and structures, and other factors; these determinants impact health care outcomes directly but may be challenging for health care organizations to address alone.

The analysis of national data shows health care disparities affecting health outcomes relating to COVID-19, maternal care, influenza and COVID-19 vaccination, cancer screenings, pain management, behavioral health, and chronic medical conditions such as diabetes and hypertension. However, health care disparities depicted by national or regional data may be different than those affecting the population you serve. Having your own data helps your organization to identify disparities that may exist both within your walls and in your community.

Taking the time and effort to understand why disparities exist requires carefully examining potential root causes. Forming a diverse team, including clinicians, patients, and community members, to analyze and investigate your quantitative and qualitative findings will help you to arrive at telling insights.

For example, let's say data show that Black patients with diabetes receive less frequent foot exams than white patients, leading to a higher occurrence of diabetic complications such as

neuropathies and complications secondary to vascular disease. Further investigation determines that under-reporting of foot exams and fewer referrals for foot exams given to Black patients are not contributing factors. However, the team finds that Black patients are less likely to use the referrals because parking at the podiatrists' offices is expensive and there is no access to public transportation. To rectify this problem, the clinic establishes relationships with more conveniently located clinics that are also served by public transportation, encourages patients to ask for referrals to these clinics, and makes new referrals for patients without foot exams.¹³

Over time, improvements in the rate of foot examinations and completed follow-up visits to the podiatrist begin to reduce diabetes-related complications. The disparity in this example begins to shrink due to following a careful step-by-step process to analyze the data, determine root causes, and develop interventions to address them.¹³

Using robust data to find and address disparities relating to COVID-19

Brigham Health, a member of the Mass General Brigham Health System, developed data infrastructure to understand the impact of COVID-19 on its patients and staff. The organization visualized data through dashboards that informed hospital operations and developed strategies to reduce harm associated with racism and other forms of structural discrimination. Brigham Health used data filters to examine the intersectional effect of COVID-19 on groups with multiple identities – for example, women who are also Black – to identify hot-spot neighborhoods where ramped-up testing and masks were required; and to ensure that disadvantaged groups were included in a study evaluating the potential benefit of Remdesivir. Stratified data also discovered that frontline employee groups – including environmental and food services, materials management, and patient care assistants – were tested less often and tested positive at up to 10 times the rate of higher socioeconomic employee groups such as physicians and nurses.¹⁷

3. Commit to achieving diversity and inclusion as an important step toward addressing health care disparities.

Understanding the disparities affecting the population you serve and the challenges your

patients or clients face should drive your organization's diversity and inclusion initiative. The challenge here is to develop a governance structure, leadership team and workforce that reflect the diversity of the community you serve.¹⁴ Making this kind of commitment to diversity and inclusion builds trust in an organization and enables it to extend the trust into the community. Building this trust is necessary to overcome systemic inequities present in virtually all organizations and communities.^{12,18}

An important aspect of a diversity and inclusion initiative is an effort to achieve cultural competency – the ability to provide care to patients having diverse values, beliefs and behaviors and to render this care free of implicit, or unconscious, bias. Culturally competent organizations are able to tailor health care delivery to meet patients' social, cultural and linguistic needs.¹⁴

As a strategy toward reducing health care disparities, health care organizations can intentionally recruit clinicians who reflect the diversity of the populations they serve. In addition, cultural competency training for all staff has become commonplace within health care organizations. Shaping the clinical workforce in these ways intertwines diversity, inclusion and cultural competency in the effort to address disparities.¹⁴

"The best way for an organization to achieve cultural competency is to have staff members who reflect the diversity of the patients it serves and who understand patients' history, concerns, fears, and cultural beliefs," said Dr. David Baker, executive vice president for Health Care Quality Evaluation at The Joint Commission. A lack of cultural understanding may result in harm to a patient, he said. "For example, Muslims typically fast during Ramadan. During this holiday, Muslim patients with diabetes could be at risk of low blood sugar if their health care providers are unaware of the tradition of fasting and do not talk with patients about how best to deal with diabetes medications."

According to the Institute of Medicine's "Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care," there is a strong correlation between clinicians who reflect the communities they serve and their ability to build the trust necessary to achieve treatment

adherence and other positive health behaviors from their patients.¹⁹

4. Undertake initiatives to rectify health care disparities by building sustainable business cases.

Health disparities cause about \$93 billion in excess medical care costs and \$42 billion in lost productivity each year, according to a national analysis.²⁰ Wyatt, et al., 2016, projected the economic burden of health disparities in the U.S. to be \$126 billion in 2020 and \$353 billion in 2050 if the disparities remain unchanged.²¹ Addressing disparities can have financial benefits for health care organizations.

An important way to address disparities is to screen for, identify, and treat conditions such as cancer, diabetes, hypertension, chronic kidney disease, and substance abuse in the early stages, when treatment is more timely and effective for patients or clients and more profitable for health care organizations. Treating patients or clients in this way is rewarded by value-based care models such as risk contracting, accountable care organizations, and bundled payments. Providing screenings and early-stage treatments to populations experiencing disparities also helps your organization avoid having to provide high-cost treatments such as crash dialysis, therapies for advanced cancers that were diagnosed in later stages, and heart procedures made necessary by untreated or undertreated hypertension.

Your chief medical officer or chief nursing officer and clinician colleagues can work together with your chief executive and financial officer to build business cases that measure the impact that addressing disparities will have on your organization's costs, productivity, employee satisfaction, and brand value.²²⁻²⁴ Your business case will inform the time, talent and financial resources required to begin disparities reduction. A series of articles from Optum outlines specific steps CEOs,²² CFOs²³ and CMOs²⁴ can take to address health care disparities. Many organizations have or have begun to search for leaders to fill diversity, equity and inclusion roles, and these officers can lead and participate in these collaborative efforts.

"Leadership's role is to become a champion," Dr. McKee stated. "It's to provide appropriate resourcing and staffing to set the strategies, to

set culture, and to do that with a data- and metric-driven mindset." She also recommends focusing your initiative on a few key actionable measures aligned with organizational priorities to keep efforts manageable and not overwhelming to staff.

When building a business case, your organization can determine feasibility and importance by considering factors such as:

- Existing resources and infrastructure—How much of what we will need is already in place?
- Reach—What portion of the priority population is affected?
- Urgency—Is immediate action necessary?
- Cost—How much funding is needed to address root causes and reduce disparities? Is a financial gain possible?
- Effort—Are there enough labor and time to address the issue?
- Sustainability—Can the initiative sustain itself financially through cost reduction or increased revenues?¹³

Further strengthening the importance of reducing health care disparities to improve financial performance, the Centers for Medicare and Medicaid Services has communicated its intentions to rely much more on value-based direct contracting models, which it calls "the next evolution of risk-sharing arrangements." This approach promises to improve quality of care for beneficiaries while reducing costs. Under this approach, health care providers coordinate the care of beneficiaries as Direct Contracting Entities (DCEs), taking full financial risk along with shared savings or losses.²⁵ During the pandemic, value-based contracts enabled organizations to maintain revenue when volumes and fee-for-service payments dropped.²⁶

As stated in its [statement on racial justice and equity](#), "The Joint Commission is committed to safe, high-quality health care for *all*. We require our accredited organizations to protect the rights of individuals and prohibit discrimination. Our [patient-centered communication standards](#) guide providers to assure that people of all races, backgrounds, disabilities and income levels receive care that is free of prejudice. But none of us acting alone can solve this problem. This is a challenge that dates to our country's founding. The only way to overcome it will be to work together."

Reducing racial disparities in severe maternal morbidity from hemorrhage

A quality improvement collaborative in California reduced racial disparities in severe maternal morbidity from hemorrhage by implementing national safety bundles consisting of 17 evidence-based recommendations known to improve outcomes. The collaborative reduced morbidity rates in all races while decreasing disparities between Black and white women.²⁷

[Related Joint Commission requirements](#)

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These publications were drawn upon to develop this alert and serve as excellent resources to gain further information about leading practices in addressing disparities.

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-
- Patient Safety Advisory Group**
 The Patient Safety Advisory Group informs The Joint Commission on patient safety issues and, with other sources, advises on topics and content for *Sentinel Event Alert*.

Joint Commission Requirements Addressing Health Equity Issues

The following table presents the health equity issues (e.g., race, ethnicity, language, culture, religion, spirituality) addressed in Joint Commission accreditation requirements across programs.

Requirement	Program
Collect Race and Ethnicity Data	Ambulatory (Primary Care Medical Home) Behavioral Health (Behavioral Health Home) Critical Access Hospital (Primary Care Medical Home) Hospital (RC.02.01.01, EP 25)
Collect Language Data, including: <ul style="list-style-type: none"> Language and Communication Needs Preferred Language Data 	Ambulatory Behavioral Health Critical Access Hospital Home Care Hospital (RC.02.01.01, EP 1) Nursing Care Center
Address Language Needs: <ul style="list-style-type: none"> Respect the Need for Effective Communication Identify and Address Communication Needs Meet Communication Needs Provide Interpreter and Translation Services Address Vision, Speech, Hearing Needs 	Ambulatory Behavioral Health Critical Access Hospital Home Care Hospital (PC.02.01.21, EPs 1-2; PC.02.03.01, EP 1; RI.01.01.01, EP 5; RI.01.01.03, EPs 1-3) Nursing Care Center
Address Health Literacy Needs	Ambulatory (Primary Care Medical Home) Behavioral Health (Behavioral Health Home) Critical Access Hospital (Primary Care Medical Home) Hospital (Primary Care Medical Home) (PC.02.03.01, EPs 30-31)
Address Cultural Needs	Ambulatory Behavioral Health Critical Access Hospital Home Care Hospital (PC.02.03.01, EP 1; RI.01.01.01, EPs 6) Nursing Care Center
Address Religious and Spiritual Needs	Behavioral Health Critical Access Hospital Home Care Hospital (PC.02.03.01, EP 1; RI.01.01.01, EPs 9) Nursing Care Center
Qualifications for Language Interpreters and Translators	Hospital (HR.01.01.01, EP 1, Note 4)
Access to Support Individual	Critical Access Hospital Hospital (RI.01.01.01, EPs 2, 28)
Prohibit Discrimination	Critical Access Hospital Hospital (RI.01.01.01, EP 29)



ID specialists or PCPs: Who should manage HIV primary care?

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When antiretroviral therapy first arrived in the mid-1990s, people living with human immunodeficiency virus (HIV) required highly specialized care that demanded an awareness of the latest treatment agents, common drug-drug interactions and other HIV-associated complications and infections. This complex care was best handled by infectious diseases specialists, who had the specialty training and knowledge needed to give each patient the best chance at survival.

Today, a typical HIV clinic visit in the U.S. for a person living with HIV involves few decisions regarding specialized therapy and infections associated with HIV. In fact, most patients present with concerns that aren't related to HIV or even infectious diseases.

With [more than 85%](#) of people in the U.S. who are receiving HIV medical care now having viral loads that are undetectable thanks to the success of antiretroviral therapy, the question becomes: Who can provide the best care for these patients, especially when it comes to primary care?

According to a [2018 study](#) published in [AIDS Care](#), 75% of ID specialists who reported treating people with HIV acted as their primary care physician. In a [2020 survey](#) of U.S. primary care providers (PCPs), only about 1% reported providing care to people living with HIV, but more than

half indicated that they could feel ready to manage HIV care with additional training.

The answer to this debate may never be straightforward, but there are factors to consider when thinking about the best route of care for individuals living with HIV.

CHALLENGES FOR ID SPECIALISTS

While people with HIV now have a life expectancy that's similar to people without HIV, this population is more likely to develop (at an earlier onset) other chronic conditions, such as hypertension, cardiovascular disease, mood disorders and chronic kidney disease, compared to people of a similar age who don't have an HIV diagnosis. This can present a challenge for ID specialists, who may have a low volume of primary care experience and who don't focus on general medicine during their subspecialty training. For this reason, generalists may be better versed in screening, prevention and management of non-ID-related conditions.

"One of the biggest challenges for ID doctors who do HIV primary care is staying up to date in general medicine. How many of us can really provide state-of-the-art care for adult-onset diabetes, given all that's changed in the past decade?," said [Paul Sax, MD](#), clinical director of the [Division of Infectious Diseases](#) at [Brigham and Women's Hospital](#) and professor of Medicine at [Harvard Medical School](#). "Increasingly, it's diseases of aging we need to manage, not complexities of ART or HIV-related opportunistic infections. This makes the task very different from the way it used to be."

As with providers in most specialties, lack of time to manage non-ID-related conditions is also a factor. ID specialists are frequently involved in other activities, including hospital-based ID, infection control, global health and antimicrobial stewardship and may not have the time to provide the full spectrum of care. Having PCPs with the experience needed to treat primary concerns for patients with HIV frees up time in ID clinics. This allows ID specialists to see a higher volume of complex cases, including those with multidrug resistance or advanced HIV disease with chronic non-adherence to treatments.

CHALLENGES FOR PCPS

While PCPs are up to date on the latest general medicine guidelines, HIV-specific primary care guidelines sometimes differ from those of the general population. Because people living with HIV are at increased risk of earlier onset of certain conditions, screenings may need to be performed more frequently than for people without an HIV diagnosis.

For example, [guidelines from IDSA/HIVMA](#) recommend a cervical PAP smear annually, while the [U.S. Preventive Services Task Force](#) recommends a PAP smear every three years for the general population. This presents a challenge for PCPs, who need to stay aware of changes in recommendations for both populations to provide the best care.

Because they weren't trained in infectious diseases, PCPs may also lack the awareness to quickly identify and manage opportunistic infections, which could lead to delayed diagnosis and care. Providers in rural areas may also lack access to specialists with whom they can consult when necessary.

"I think that providers in solo practice, especially those who are somewhat geographically isolated, can struggle with finding a community of like-minded providers to bounce ideas, concerns or challenges off of," said [Jeanne Marrazzo](#), MD, MPH, FACP, FIDSA, director of the [Division of Infectious Diseases](#) at [UAB Medicine](#) in Birmingham, Ala. "That's one of the benefits of organizations like HIVMA, which encourages involvement from all types of providers who provide care for people with HIV – not just ID specialists."

REDUCING BARRIERS

ID specialists in general are in short demand, and not all of them provide care for people living with HIV. In 2019, the patient demand for HIV care outpaced the number of new specialists entering the field.

Expanding the pool of knowledgeable HIV providers among PCPs could help alleviate this shortage and make it easier for people living with HIV to make appointments. This is one reason why the IDSA Foundation offers its [HIVMA Clinical Fellowship Program](#), which provides non-ID trained physicians with the most updated best practices for treating patients living with HIV.

“By virtue of training, I think ID physicians are the best qualified to provide HIV primary care. However, well-trained MDs or advanced practice medical providers such as PAs and NPs can certainly supplement the pool of HIV providers, especially in areas of shortage,” said [Vladimir Berthaud](#), MD, MPH, CPH, FACP, FIDSA, DTMH, an HIV clinician at [Meharry Medical Group](#) and executive director of the [Meharry Community Wellness Center](#).

“Rural communities are disproportionately affected by the unequal distribution of ID physicians,” he continued. “PCPs who practice there are dedicated to these underserved populations. Training them to provide HIV care would meet a great need, especially in the rural South.”

For more complex cases, PCPs could establish a line of communication with ID specialists via telemedicine, Dr. Berthaud added.

Managing HIV care in a primary care setting can also help reduce the stigma that has long plagued people with HIV by helping to “normalize” the condition.

“Empowering PCPs to effectively manage HIV care goes a long way toward ‘mainstreaming’ the condition of HIV,” said Dr. Marrazzo. “It becomes another medical problem that requires management, albeit with some special considerations.”

COLLABORATION IS KEY

While there are many factors to consider when it comes to where people with HIV might receive the best care, the consensus among ID specialists seems to be this: The best HIV care providers are the ones with experience and interest in treating this population, regardless of their training background.

“Not all generalists want to be HIV PCPs, and not all ID doctors want to be HIV PCPs either,” said Dr. Sax. “We need everyone to embrace care of people with HIV in a high-quality way – the same as for people without HIV.”

The answer to the debate may also lie with whomever the patient feels most comfortable. Many patients trust their ID physicians because they’ve often been caring for the patient for several years. However, some patients may prefer the relative anonymity of receiving care in a primary care setting. Others simply don’t have the choice because they don’t have easy access to an ID specialist.

Quality treatment also may not be black and white – it may simply be that a combination of providers who have respective experience in ID and general medicine can provide the best care.

“Viewing this as a community of providers dedicated to optimizing care for HIV patients makes the most sense to me,” said Dr. Marrazzo, who noted that the relationship between the patient and provider is the most important consideration.

“At some level, we are all trying to do our best for our patients, and knowing that we are part of a like-minded group that recognizes the unique challenges people with HIV have faced – certainly historically, but unfortunately, persistently in many places and settings – can really help. Of course, it helps for knowledge sharing. But even more, it’s the spirit of taking care of people with HIV that is a shared honor.”

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Social Prescribing | Alliance for Healthier Communities

Moving from “What’s the matter with you?” to asking “What matters to you?”

What is Social Prescribing?

Social Prescribing is a holistic approach to healthcare that brings together the social and medical models of health and wellness. It provides a formal pathway for health providers to address the diverse determinants of health, using the familiar and trusted process of writing a prescription.

Social prescribing bridges the gap between clinical and social care by referring patients to local, non-clinical services that are chosen according to the client’s interests, goals, and gifts. It allows doctors, nurse practitioners, and interprofessional health providers to formally refer patients through to community-based programs. It empowers clients to improve their health by developing new skills participating in meaningful activities, and becoming more connected to their communities. What does a social prescription look like? It could be participating in an exercise group, receiving a Good Food Box to support food security, taking an art or dance class, joining a bereavement network, getting one’s hands dirty in a community garden, exploring a local hiking trail with a group of peers, volunteering to visit older adults in the communities and much more.

Health equity is a cornerstone of effective social prescribing. It is not enough to simply refer a client to a recreational program or encourage them to visit an art gallery. Successfully implementing a social prescribing program means removing the barriers clients experience to doing these things. These barriers may be economic, geographical, interpersonal, or psychological. Social prescribing is about listening deeply, providing necessary supports, and empowering people to be co-creators in improving their own health and wellbeing.

Responding to the Social Determinants of Health and an Epidemic of Social Isolation

For the Alliance, transformative change in people- and community-centred care, health equity, and community vitality have always been guiding principles according to our Model of Health and Wellbeing ([MHWB](#)). Ensuring the best possible health and wellbeing of everyone in Ontario are key aspects of our foundational living document: the [Health Equity Charter](#).

Beginning in the 1960s and 1970s, well before social prescribing, Alliance members championed these values through their strong focus on the social determinants of health in their community development initiatives and social programs. We have seen how these social factors affecting health – income, employment, self-confidence, housing, nutrition, education, the environment – all play strong roles in people’s overall wellbeing.

Increasingly, studies are recognizing social isolation and loneliness as significant risk factors that affect people’s physical and mental health. Public health measures during COVID-19, such as restrictions on gathering with friends and closures of community spaces, have been necessary to control the pandemic, but they have had unintended consequences. In two 2020 Angus Reid studies, a third of the population in Canada reported experiences of [loneliness and social isolation\(link is external\)](#), and half reported a [decline in their mental health\(link is external\)](#) since the start of the COVID-19 pandemic. This mental toll has continued into 2021, where recent research published by The Public Health Agency of Canada has shown that the number of Canadians with [major depressive disorder\(link is external\)](#) has more than doubled. And more concerning, people reporting a weak sense of community belonging were 10 times more likely to screen positive for depression.

On the other hand, having strong social ties in your community and being actively engaged in community-based programs contributes to increased self-esteem. Developing expertise through cultivating new skills and hobbies also gives people the chance to feel steady improvement in their lives. By integrating social support and care across the health system, we can help people safely reconnect to their communities and reverse some of the health impacts of the pandemic.

How Does Social Prescribing Work?

Social prescribing is a specially structured way of referring people to a range of local, non-clinical services. It complements clinical treatments and seeks to address people’s social needs through community partnerships that align with clients’ interests and goals. As an asset-based approach, social prescribing recognizes people as not just patients with needs, but as community members with gifts to share. It supports participating clients as they engage with and give back to their communities. The goal of integrated healthcare and social prescribing is to go beyond treating illness to focus on advancing wellness.

Social prescribing may look differently depending on the community, their local needs and capacity. Five essential components have emerged as the foundation of an impactful model of social prescribing: the individual or client, the prescriber, the navigator, the social prescriptions, and the data pathway.

The 5 Key Components of Social Prescribing at a Glance

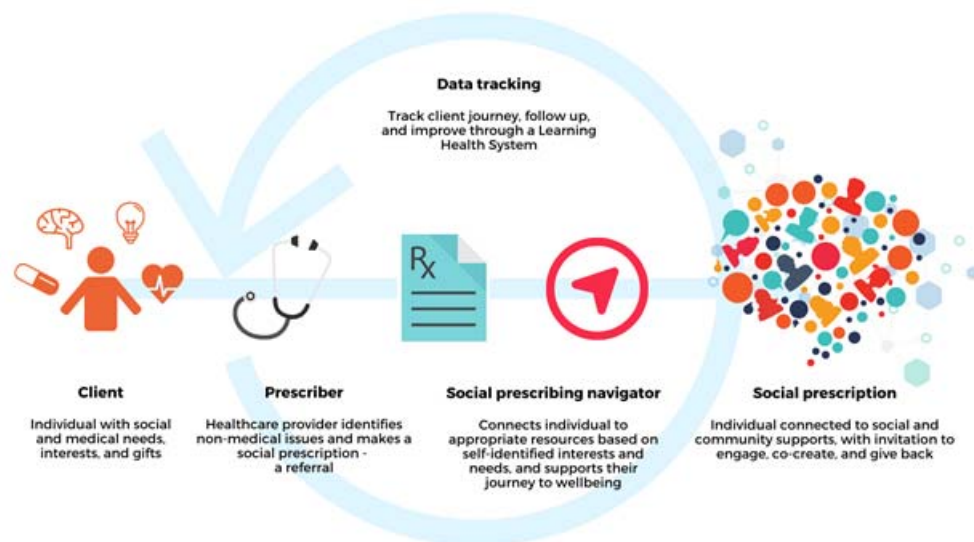
Social prescribing is centred on the **client**, an individual with social and medical needs, as well as interests, goals, and gifts (such as skills or their own resources).

The **prescriber**, a healthcare provider with trusted relationship with the client, is key to leveraging healthcare appointments as an opportunity to identify underlying non-medical issues and making a social prescribing referral.

The **social prescribing navigator** catches the referral and connects the client to appropriate resources based on self-identified interests and needs, and supports their journey to full wellbeing.

Social prescriptions can include a diverse range of non-clinical interventions, such as educational classes food subsidy, housing navigation, arts and culture engagement, peer-run social groups, and nature-based activities. These prescriptions are most powerful when they include an invitation for clients to engage, co-create, and give back to their community.

Finally, a **data tracking** pathway follows the client's journey throughout the social prescribing process. This enables the integration of meaningful data and lessons learned in real time to enhance quality of care delivery and monitor outcomes.



Watch This Introductory Video on Social Prescribing

Social prescribing has gained widespread recognition in the UK with prominent figures in their healthcare system pioneering the change. Hear from the “godmother of social prescribing in the UK” – General Practitioner Dr. Marie Anne Essam in the video below about her experiences with social prescribing, and how she suggests healthcare providers can get involved:

Watch the full [Summit Preview Keynote: What is Social Prescribing?\(link is external\)](#) webinar here.

Rx: Community: Research pilot on Social Prescribing

From 2018 to 2020, the Alliance for Healthier Communities implemented **Rx: Community – Social Prescribing**, the first-in-Canada social prescribing research project. This pilot project included 11 Alliance member organizations, including urban, rural, and Francophone centres from across Ontario. This project emphasized the importance of an asset-based approach. Social prescribing navigators connected clients to their social prescriptions through a co-design process that highlighted the clients' goals and gifts.

Key findings from Rx: Community speak to the deep impacts social prescribing can bring. Participating clients reported feelings of loneliness decreasing by 49%, with self-reported mental health improving by 12% and sense of community belonging increasing by 16%. They noted that being supported to connect with non-medical interventions reduced stress and anxiety, increased sense of self-confidence and purpose, and gave them the knowledge and tools to better manage their own health.

Participating health providers saw social prescribing improve their clients' health and wellbeing, and decreased the number of inappropriate repeat visits over time. These positive changes also extended to strengthening collaboration across health and community service providers and making communication easier – in turn, making delivery of care more effective.

Find more details by visiting our [Rx: Community project page](#), and other related resources and publications:

- **Read the final report** ([EN\(link is external\)](#) | [FR\(link is external\)](#))
- **Read the [social prescribing guidebook for teambased primary care providers\(link is external\)](#)**

Links2Wellbeing: Social Prescribing for Older Adults

In partnership with the Older Adult Centers' Association of Ontario (OACAO), the Alliance is building on the success of Rx:Community with a new project, **Links2Wellbeing (L2W)** ([EN](#) | [FR](#)). OACAO supports a network of 200 community-based older adults' centers and seniors-serving organizations across the province. Participating Community Health Centers (CHCs) and clinicians will be able to prescribe social programs offered at participating Seniors Active Living Centers (SALCs). By increasing access to social prescribing for older adults and creating new links to social interaction, L2W aims to reduce barriers and rebuild capacity in local communities. These ongoing efforts to revitalize wellbeing and empower individuals will continue as the Alliance pushes forward to ensure no one is left behind throughout a post-pandemic recovery.

Key Resources

- [Social Prescribing Guidebook for Team-based Primary Care Providers in Ontario\(link is external\)](#), September, 2020
- Poster: [Social Prescribing as a tool for building climate resilience](#), OPHA Fall Forum, November 23, 2019
- [Connected Communities: Healthier Together\(link is external\)](#), Annual Report of the Chief Medical Officer of Health of Ontario, February 2019
- Fact Sheet: Spotlight on Reducing Social Isolation ([English](#) | [French](#))
- [International: Social prescribing stimulus paper](#) by the Royal Australian College of General Practitioners and Consumer Health Forum of Australia, November 2019

Publications

- [Social prescribing: A call to action\(link is external\)](#), Canadian Family Physician, February 2021
- [Using Self-Determination theory to understand the social prescribing process: a qualitative study\(link is external\)](#), British Journal of General Practice, January 2021
- [Social Prescribing: Creating Pathways Towards Better Health and Wellness\(link is external\)](#), Journal of the American Geriatrics Society, December 2019

In the Media

- [Dr. Nowak: Sometimes the most important prescription has nothing to do with medication\(link is external\)](#), Healthing, February 17, 2022

Presentations and Webinars

- Webinar: Summit Preview Keynote: What is Social Prescribing? (with Sonia Hsiung), October 21, 2021 - [Recording\(link is external\)](#)
- Event: Meeting Social Needs in an Integrated Health System: Social Prescribing During COVID-19 and Beyond, May 27, 2020 - [Slides\(link is external\)](#) | [Recording\(link is external\)](#)
 - Follow-up webinar: Social Prescribing in Practice, June 17, 2020 - [Slides\(link is external\)](#) | [Recording\(link is external\)](#)
 - Follow-up webinar: Social Prescribing in Research, June 25, 2020 - [Slides\(link is external\)](#) | [Recording\(link is external\)](#)
- Webinar: Arts on Prescription: Improving health and wellbeing through arts participation, October 6, 2019 - [Recording\(link is external\)](#) | [Slides\(link is external\)](#) | [Resources\(link is external\)](#)
- Webinar: [Connectedness, Purpose, and Belonging: Role of Social Prescribing in Integrating Health Care and Social Supports for Older Adults\(link is external\)](#), April 29, 2020
- Webinar: [Lunch 'n' Learn: Social Prescribing - Collaborating for Systems Change\(link is external\)](#), December 6, 2019
- Presentation: [Social Prescribing Boot Camp\(link is external\)](#) presentation, Community Health Connections Conference, June 11, 2019

If you would like to learn more, please contact:

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The HIV Treat Pillar: An Update and Summary of Promising Approaches



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The Treat pillar of the Ending the HIV Epidemic in the U.S. plan calls for comprehensive strategies to enhance linkage to, and engagement in, HIV medical care to improve viral suppression among people with HIV and achieve the goal of 95% viral suppression by 2025. The U.S. has seen large increases in the proportion of people with HIV who have a suppressed viral load. Viral suppression has increased 41%, from 46% in 2010 to 65% in 2018. An additional increase of 46% is needed to meet the Ending the HIV Epidemic in the U.S. goal. The rate of viral suppression among those in care increased to 85% in 2018, highlighting the need to ensure sustained care for people with HIV. Greater increases in all steps along the HIV care continuum are needed for those disproportionately impacted by HIV, especially the young, sexual and racial/ethnic minorities, people experiencing homelessness, and people who inject drugs. Informed by systematic reviews and current research findings, this paper describes more recent promising practices that suggest an impact on HIV care outcomes. It highlights rapid linkage and treatment interventions; interventions that identify and re-engage people in HIV care through new collaborations among health departments, providers, and hospital systems; coordinated care and low-barrier clinic models; and telemedicine-delivered HIV care approaches. The interventions presented in this paper provide additional approaches that state and local jurisdictions can use to reach their local HIV elimination plans' goals and the ambitious Ending the HIV Epidemic in the U.S. Treat pillar targets by 2030.

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BACKGROUND

Prevention, care, and treatment efforts to end the American HIV epidemic by 2030 are guided by the Ending the HIV Epidemic (EHE) in the U.S. Initiative¹ and the recently released HIV National Strategic Plan: A Roadmap to End the Epidemic (HIV Plan).² The EHE plan includes 4 strategies visualized as pillars: Diagnose, Treat, Prevent, and Respond. The Treat pillar, summarized as “Treat people with HIV rapidly and effectively to reach sustained viral suppression,” calls for comprehensive strategies to enhance linkage to, and engagement in, HIV medical care; expand re-engagement and retention in care; and improve viral suppression among people with HIV (PWH). This paper describes the progress to date to reach the Treat pillar goal of 95% viral suppression by 2025 and summarizes recent interventions, promising practices, and new

approaches that state and local health departments (HDs) and providers can utilize to reach EHE goals.

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Progress in Treat Indicators in the U.S

Indicators used to measure national progress on the Treat pillar are derived from data reported to the National HIV Surveillance System. Based on historical data from the Centers for Disease Control and Prevention (CDC) HIV Prevention Progress Report (2019)³ and recent data from the Monitoring Selected National HIV Prevention and Care Objectives report,⁴ this paper describes progress made in the following indicators relevant to the Treat pillar: linkage to care (measured by having ≥ 1 CD4 or viral load test within 1 month of diagnosis), receipt of HIV medical care (measured by documentation of ≥ 1 CD4 or viral load test in a calendar year), retention in care (measured by having ≥ 2 CD4 or viral load tests ≥ 3 months apart in a calendar year), and viral suppression (measured by a viral load result of < 200 copies/mL at the most recent viral load test).

Overall, linkage to HIV care increased considerably between 2010 and 2018 (14%, from 70% in 2010 to 80% in 2018). Although the U.S. is close to achieving the linkage to care goal of 85% by 2020, a further 18% relative increase is needed to meet the 2025 and 2030 target of 95%. Far greater increases are needed to reach the target for disproportionately affected groups, such as racial/ethnic minorities. Based on 2018 data, linkage to care data range from 82% to 84% for Asians, Whites, and Hispanics/Latinos to 77% for Blacks/African Americans. In general, linkage to HIV medical care increased as age at time of diagnosis increased, suggesting that more attention is needed for individuals diagnosed at younger ages.⁴

Considerably less progress has been made in both receipt of, and retention in, HIV medical care, essential steps toward ensuring people reach and sustain viral suppression. Receipt of care was relatively stable, with a 3% increase between 2016 (74%) and 2018 (76%). Retention in care increased a modest 5%, from 55% in 2010 to 58% in 2018. Although there are no specific 2030 targets for retention in care, the 90% 2020 retention in care target has still not been achieved. Far greater increases are needed for disproportionately affected groups, especially among male individuals who inject drugs (51% in 2018).⁴

Most relevant and encouraging are the large increases observed in viral suppression, the end goal of the Treat pillar. Between 2010 and 2018, the proportion of PWH (both in and out of care) who are virally suppressed increased 41%, from 46% in 2010 to 65% in 2018. Despite significant progress in viral suppression for all PWH, a 46% increase is still needed to reach the 2025 and 2030 targets of 95%. Far greater increases are needed for disproportionately affected groups, and reaching the 2030 target will depend on improvements in linkage to,

receipt of, and retention in care. Disparities are observed among male individuals who inject drugs, who have lower viral suppression rates than those with infection attributed to male-to-male sexual contact (53% vs 67% in 2018). Disparities by race/ethnicity were also large, with viral suppression ranging from 70% to 71% for Asians and Whites to 64% for Hispanics/Latinos and 60% for Blacks/African Americans. In general, viral suppression increased as age increased.⁴ Higher viral suppression percentages are seen among those who received care (85% in 2018). A similar rate, 88% in 2019, is found among in-care Ryan White HIV/AIDS Program (RWHAP) participants.⁵

The path to reaching EHE goals and the resources to do so for all PWH also vary considerably from state to state. According to the 2019 CDC progress report that examined progress in key indicators, among the 38 states with 2016 data available, 32% met and 39% made progress toward the intermediary 2020 national linkage to care target of 85%. The 2020 retention in care target of 90% was not met by any state, but more than half (55%) had made progress. Similarly, the viral suppression target of 80% was not met, but 68% of the states had made progress.³

To reach the ambitious Treat pillar target that 95% of PWH achieve viral suppression by 2030, carefully crafted and targeted strategies are needed to address the complex challenges that are fueling HIV disparities. States and local jurisdictions are actively working on this, and > 46 states, counties, and cities have developed their own EHE plans that address the individual-, community-, and policy-level factors that affect the health and well-being of those most affected by HIV in their jurisdiction.⁶

NOVEL APPROACHES FOR STATE AND LOCAL PLANS TO END THE HIV EPIDEMIC

Although progress has been made in the EHE indicators, the aforementioned data show that considerable work is still needed to achieve the 2030 targets, especially for populations disproportionately affected by HIV. The HIV Plan highlights the importance of reducing HIV-related disparities and health inequities and calls for the development and scale-up of evidence-based and evidence-informed interventions and best practices to address the well-documented challenges to HIV prevention, care, and treatment.⁷

Through multiple systematic reviews conducted over the last decade, there is a robust and burgeoning collection of effective U.S.-based interventions and best practices that can lead to significant improvements in linkage, re-engagement, retention, adherence, and viral

suppression.^{8–12} For example, Risher and colleagues¹² 2017 comprehensive systematic review of linkage, retention, re-engagement, and adherence studies published through June 2015 identified 152 studies, most of which focused on adherence (77%) and retention (22%), with few focusing on linkage and re-engagement. Another important ongoing systematic literature review is CDC's Compendium of Evidence-Based Interventions and Best Practices for HIV Prevention, which evaluates individual interventions for efficacy. It currently presents >40 domestic evidence-based and evidence-informed interventions that impact linkage, retention, and re-engagement outcomes.¹³ These sources form a rich resource from which state and local jurisdictions can identify interventions most suitable to address the EHE Treat pillar and the HIV Plan's goal to improve HIV-related health outcomes of PWH. This paper provides background on current interventions and highlights more recent promising practices; enhancements to existing interventions; and new approaches selected from systematic reviews, recent publications, and conference proceedings that had statistically significant results in linkage, retention, or re-engagement outcomes. These more current interventions were selected specifically for HDs and providers to inform novel directions they could consider using to address the strategies in the HIV Plan and its objectives to link people to care rapidly and provide low-barrier access to HIV treatment; identify, engage, or re-engage people not in care or not virally suppressed; and increase retention in care and adherence to HIV treatment.

Interventions to Support Prompt Linkage to Care and Treatment

Interventions with prompt action shortly after HIV diagnosis are more likely to link people to care.^{14,15} Specifically, interventions focusing on rapid treatment initiation show promise in decreasing time to viral suppression and increased retention.¹⁶ Retrospective and historical control studies of combined rapid linkage or referral and rapid antiretroviral therapy (ART) initiation that streamline intake processes and provide navigation services around the clock and enhance support to access medication regardless of payer source show promising findings.

The New Orleans–based CrescentCare Start Initiative, which offers enhanced navigation, expedited clinic intake, and immediate ART initiation at time of diagnosis throughout a network of HIV testing sites, sexually transmitted disease clinics, and a clinic referral network, found a substantial reduction in mean time to linkage (1.3 vs 30 days in historical cohort, $p<0.0001$) and time to viral suppression (30 vs 68 days in historical control,

$p<0.0001$).¹⁷ Likewise, the Rapid Entry and ART in Clinic for HIV (REACH) program in the Atlanta Grady Health System, which removes institutional barriers to initial provider visit and ART, found significant decreases in the median time to viral suppression from beginning clinic enrollment, from 77 days in pre-REACH patients to 57 days in post-REACH patients ($p=0.0022$).¹⁸ Early referral to a clinic-based RAPID ART program in San Francisco found that viral suppression was achieved by 96% of those in the program within 1 year, and the median time from the start of ART to viral load suppression was 41 days, with no statistically significant difference between those referred early to the program (within 30 days) and those with delayed referrals (between 30 days and 6 months).¹⁹ In this special issue, Coffey et al. describe the citywide expansion of the RAPID ART program.

Interventions to Identify and Re-engage People Who are Out of Care or Not Virally Suppressed

Health department–based re-engagement interventions designed to identify PWH who are not in care are referred to as Data-to-Care (D2C) programs. These interventions use HIV surveillance data (the absence of lab results, indicating a gap in care, or persistent viremia, indicating ineffective treatment) to assign clients to dedicated staff to locate them and assist with linkage to, or re-engagement in, HIV care. D2C programs have been implemented in different ways over the years and vary in the data sources used to identify out-of-care status and the approaches taken to reach clients and re-engage them in care.²⁰ D2C approaches that are HD–based and rely solely on surveillance data may be less likely to have a significant impact. Findings from a cluster randomized evaluation of a D2C program in King County, Washington found no significant effect of the intervention, highlighting the need for locally tailored and optimized D2C approaches.²¹

Recent studies suggest that D2C programs that entail close collaboration between both the HD and providers for identification of people out of care and re-engagement activities may increase efficiency and improve re-engagement outcomes.^{22–24} Preliminary findings from CDC-funded randomized control cooperative re-engagement clinical trial (CoRECT) study, which was designed to evaluate effectiveness of a collaborative HD/provider re-engagement intervention in 3 U.S. cities, found significant improvements at all 3 sites in 2 of the 4 primary outcomes, time to re-engagement and proportion re-engaged, compared with usual services.²⁵ Final results recently presented from the Connecticut site show significantly higher re-engagement in care at 90 days in the intervention versus the usual care arm,

but no statistically significant differences in long term retention in care and viral suppression.²⁶ Sachdev and colleagues²⁷ compared 3 different D2C strategies and data sources to identify people out of care: healthcare providers, HD HIV surveillance, and a combination list derived by matching an electronic medical record registry to HIV surveillance. They found that PWH identified as being out of care by providers were more likely to be located and enrolled in navigation linkage (40%) than PWH identified by surveillance (9%) or combination lists (24%). Nevertheless, PWH from all 3 sources who enrolled in navigation linkage showed improvements in viral suppression.

Other novel uses of data to identify and re-engage people in care have emerged in recent years and are showing promising results. Frequent and routine linking of clinic or surveillance data with jail booking rosters,²⁸ electronic alerts from emergency department and hospital electronic medical records,²⁹ or pharmacy discharge databases^{30,31} facilitate prompt identification of people recently lost to care or at risk of ART discontinuation and offer the opportunity for rapid delivery of re-engagement strategies. Findings from the Link-Up Rx pilot program in Michigan, which used prescription refill data to trigger a 3-tiered pharmacist–provider–HD re-engagement in care response over a 3-week period, suggest faster re-engagement than traditional D2C programs and improved service delivery for PWH.³² In this supplement, Thompson et al. describe another pharmacist-based medication adherence approach to promote viral suppression.

Interventions to Increase Retention in Care to HIV Treatment

Effective retention interventions address the many factors associated with decreased engagement in care using multiple strategies, including case management, cognitive behavioral approaches, colocation of services, and appointment accompaniment.^{11,33} An observational cohort study of New York City's HIV Care Coordination program, which combines outreach, case management, multidisciplinary clinical care, patient navigation, and ART adherence support, found significant improvements in engagement in care and viral suppression from pre- to post-enrollment among people with lower mental health functioning, unstable housing, or hard drug use.³⁴

Clinical care models tailored to the needs of the out-of-care population have also shown effectiveness. The Max Clinic in Seattle/King County, Washington was designed specifically to engage virally unsuppressed PWH who do not engage in conventional HIV care.^{35,36} The clinic includes walk-in access to care, high-intensity

case management, and incentives for clinic visits and viral suppression and is integrated with other HD efforts to identify virally unsuppressed PWH. The clinic has engaged >200 PWH to date and, among those enrolled, *viral suppression* (defined as ≥ 1 viral load <200 copies/mL) quadrupled from 20% in the year before enrollment to 82% in the year after enrollment. The clinic was instrumental in engaging PWH who were part of a cluster outbreak of HIV among people who inject drugs.³⁷ Other low-threshold clinic models are emerging that address the complex needs of specific populations, such as San Francisco's Ward 26 clinic for PWH who are experiencing homelessness or are unstably housed³⁸ and the CIRCLE Clinic in Jackson, Mississippi.^{39,40}

Financial incentive strategies can be incorporated in interventions offering a package of services to promote linkage, re-engagement, and retention in care. Although few studies have been designed to measure the direct contribution of financial incentives on prevention and care outcomes, the data show promising results for engaging the hardest-to-reach patients.^{41–44} The TLC+ site RCT in New York and the District of Columbia evaluated the efficacy of financial incentives and found a significant impact on viral suppression, with the largest effect seen in clinics with lower viral suppression at baseline.⁴⁵ Successful implementation scale-up of financial incentive strategies will require addressing concerns of patients and providers, in particular negative attitudes toward the concept of paying people for health behaviors and sustainability. To examine this, Shelus and colleagues⁴³ conducted a qualitative study of patients, staff, and site investigators involved in the TLC+ study. Overall, patients thought the intervention was beneficial and that the financial incentives were sufficient to encourage linkage and retention. However, nearly half of participants were opposed to the concept of paying people to link to care and thought it should be self-motivated. Staff and site investigators had varying opinions. Although many had positive attitudes toward financial incentives and recognized the value to clients, others were concerned with implementation challenges, including timing of the intervention immediately after an HIV diagnosis, negative attitudes toward paying people for health behaviors, the existence and strength of existing linkage programs, and financial sustainability. Addressing these perspectives and challenges will contribute to the successful scale-up of future financial incentive–based strategies.

Telemedicine-delivered HIV approaches have expanded considerably in recent years to provide HIV care and prevention services.^{46–48} Although the conceptual basis for such models to improve care engagement is strong, relatively few studies have evaluated their

impact on retention in care and viral suppression. Results to date support the feasibility and acceptability of this model.^{49,50} A community-based collaborative model in Alabama enrolled 240 patients and retained 76% over the first year.⁵¹ Successful implementation and scale-up of telemedicine approaches require that they be acceptable and accessible to clients. A survey of outpatient HIV clinic clients in Houston found that more than half (57%) of participants were more likely to use telehealth for their HIV care if available compared with in-person care, and 37% would use it frequently or always as an alternative to clinic visits.⁵² Concerns with this new care delivery approach included the ability of physicians to perform a good physical examination (37%), the safety of their personal information online (28%), and their ability to communicate effectively (17%). Lack of a personal computer or smartphone and not knowing enough about computers and smartphones were considered a barrier for 30% of respondents. Such concerns must be addressed to ensure uptake does not contribute to disparities in access to care.⁵³ In this supplemental issue, Salgado et al. describe Georgia's state-wide telehealth program, including direct patient care via telemedicine and telementoring education for primary care providers, to offer specialized HIV care in underserved and rural areas.

CONCLUSIONS

A wide variety of interventions discussed in this paper suggest a positive impact on care-related outcomes that can be used by HDs and service providers to achieve the goals of the EHE Treat pillar. To date, HIV prevention research has focused on the effectiveness of HIV interventions, but relatively few studies evaluate implementation strategies needed to effectively bring them to scale in multiple settings and populations.⁵⁴ Federal agency funding for implementation research collaborations among academic institutions, HDs, clinics, and community-based organizations, such as the NIH-funded EHE initiatives,⁵⁵ facilitate the exploration of these questions and can further contribute to the design, evaluation, and effective implementation of interventions that are most relevant for public health practice and local HIV priorities.

The 30-year-old RWHAP serves as a model for how to reach sustainable viral suppression.⁵⁶ This program has achieved steadily increasing rates of viral suppression. Many of the interventions described here were carried out in RWHAP clinics, were funded at least in part through RWHAP-funds, and have manuals to guide implementation in HIV clinics and other settings.⁵⁷

Although a robust collection of interventions exist that can be implemented to address the Treat pillar,

further research, using shared outcome measures and well-designed controlled studies, is needed to better understand how and what aspects of the interventions contributed to their effectiveness. Many of the intervention evaluations lack an adequate control group, thereby impacting internal validity and resulting in limited generalizability. Several of the interventions involve multiple components, which collectively show efficacy, but are not designed or powered to shed light on the contributions that each of these components have on significant changes in patient outcomes. Further, findings from several systematic reviews of linkage, retention, and care interventions observe that the lack of standard measures across studies make it difficult to compare the relative impact of interventions designed to address the same focus area.^{11,12,58} Ultimately, viral suppression must be the central focus of efforts to improve the HIV care continuum because it extends the lives of PWH and prevents HIV transmission. Interventions that improve HIV clinic visit attendance that have a clear impact on viral suppression are needed to end the HIV epidemic and should be prioritized for implementation. All contemporary evaluations of HIV care continuum interventions need to include viral suppression as an outcome measure, even if it is not the primary outcome targeted by the intervention.

The coronavirus disease 2019 (COVID-19) pandemic has created new barriers to care linkage, treatment adherence, and care retention. This public health crisis has catalyzed rapid implementation of telemedicine and other technology-based communication approaches to support the needs of PWH.⁵⁹ Federal and local policies changed rapidly to support implementation of remote care.^{60,61} Telemedicine in particular was rapidly scaled-up in RWHAP-funded clinics throughout the country,⁶² and many states made changes to their prescription drug policies⁶³ to allow dispensation of >1 month of medication at a time, which may have supported treatment continuity compared with pre-COVID-19 conditions. However, the pandemic has highlighted deep-rooted health inequities for communities of color in the U.S.,⁶⁴ reflecting many of the same factors underpinning disparate HIV outcomes.^{65,66}

Reaching the ambitious EHE Treat targets by 2030 will be especially challenging in the context of decentralized health care and the complex social factors that result in profound health injustice. Interventions need to address health equity, variability in adequate health insurance, unstable housing, food insecurity, substance abuse, and mental health challenges, especially affecting the young, sexual and racial/ethnic minorities, those with criminal justice experience, and people experiencing poverty. These populations each face unique

healthcare needs as well as unique structural barriers affecting their ability to link to and adhere to care and treatment. As such, it is imperative to implement interventions designed, tested, and tailored to specific populations.¹³ However, there are still relatively few interventions designed to address disparities in specific populations, such as racial/ethnic or sexual minorities. Furthermore, disparities are even more profound when examined at the intersections of race, age, gender, and sexual orientation, and interventions rarely address multiple and intersecting social identities that, when taken together, produce disparate health outcomes. The combination of interventions and best practices selected to address the EHE goals will vary for different state, county, and city jurisdictions and will need to be adapted to address the needs of local communities and populations. Significant progress has been made; however, the remaining work required to achieve the EHE 2030 Treat targets is clearly outlined for the large community of committed individuals and institutions who are needed to realize these goals.

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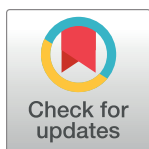
RESEARCH ARTICLE

Practice transformations to optimize the delivery of HIV primary care in community healthcare settings in the United States: A program implementation study

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Data Availability Statement: A de-identified copy of the organizational assessment data is available at the Open Science Framework public repository (<https://osf.io/u5xh8>). The Ryan White HIV/AIDS Program Services Report (RSR) client-level data are not available due to client privacy and confidentiality. HRSA makes aggregate data available in the Ryan White HIV/AIDS Program Annual Client-Level Data Report: <https://hab.hrsa.gov/>.

Abstract

Background

The United States HIV care workforce is shrinking, which could complicate service delivery to people living with HIV (PLWH). In this study, we examined the impact of practice transformations, defined as efficiencies in structures and delivery of care, on demonstration project sites within the Workforce Capacity Building Initiative, a Health Resources and Services Administration (HRSA) Ryan White HIV/AIDS Program Special Projects of National Significance (SPNS).

Methods and findings

Data were collected at 14 demonstration project sites in 7 states and the District of Columbia. Organizational assessments were completed at sites once before and 4 times after implementation. They captured 3 transformation approaches: maximizing the HIV care workforce (efforts to increase the number of existing healthcare workforce members involved in the care of PLWH), share-the-care (team-based care giving more responsibility to midlevel providers and staff), and enhancing client engagement in primary HIV care to reduce emergency and inpatient care (e.g., care coordination). We also obtained Ryan White HIV/AIDS Program Services Reports (RSRs) from sites for calendar years (CYs) 2014–2016, corresponding to before, during, and after transformation. The RSR include data on client retention in HIV care, prescription of antiretroviral therapy (ART), and viral suppression. We used generalized estimating equation (GEE) models to analyze changes among sites implementing each practice transformation approach. The demonstration projects had a mean of 18.5 prescribing providers (SD = 23.5). They reported data on more than

[gov/data/data-reports](https://www.hrsa.gov/data/data-reports). Requests for aggregate data can be made to: RWHAPdata@hrsa.gov.

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Competing interests: The authors have declared that no competing interests exist.

Abbreviations: aOR, adjusted odds ratio; ART, antiretroviral therapy; BBPCA, Building Blocks of Primary Care Assessment; CCHHS, Cook County Health & Hospitals System; CI, confidence interval; CTL, Clinical Transition Liaison; CY, calendar year; eUCI, encrypted unique client identifier; FQHC, federally qualified health center; GEE, generalized estimating equation; HIPAA, Health Insurance Portability and Accountability Act; HRSA, Health Resources and Services Administration; IQR, interquartile range; IRB, Institutional Review Board; PLWH, people living with HIV; REDCap, Research Electronic Data Capture; RCT, randomized controlled trial; RSR, Ryan White HIV/AIDS Program Services Report; RWHAP, Ryan White HIV/AIDS Program; SHRT, Special Health Resources for Texas; SPNS, Special Projects of National Significance; STROBE, Strengthening the Reporting of Observational Studies in Epidemiology; UCSF, University of California San Francisco; UPMC, University of Pittsburgh Medical Center.

13,500 clients per year (mean = 969/site, SD = 1,351). Demographic characteristics remained similar over time. In 2014, a majority of clients were male (71% versus 28% female and 0.2% transgender), with a mean age of 47 (interquartile range [IQR] 37–54). Racial/ethnic characteristics (48% African American, 31% Hispanic/Latino, 14% white) and HIV risk varied (31% men who have sex with men; 31% heterosexual men and women; 7% injection drug use). A substantial minority was on Medicaid (41%). Across sites, there was significant uptake in practices consistent with maximizing the HIV care workforce (18% increase, $p < 0.001$), share-the-care (25% increase, $p < 0.001$), and facilitating patient engagement in HIV primary care (13% increase, $p < 0.001$). There were also significant improvements over time in retention in HIV care (adjusted odds ratio [aOR] = 1.03; 95% confidence interval [CI] 1.02–1.04; $p < 0.001$), ART prescription levels (aOR = 1.01; 95% CI 1.00–1.01; $p < 0.001$), and viral suppression (aOR = 1.03; 95% CI 1.02–1.04; $p < 0.001$). All outcomes improved at sites that implemented transformations to maximize the HIV care workforce or improve client engagement. At sites that implemented share-the-care practices, only retention in care and viral suppression outcomes improved. Study limitations included use of demonstration project sites funded by the Ryan White HIV/AIDS Program (RWHAP), which tend to have better HIV outcomes than other US clinics; varying practice transformation designs; lack of a true control condition; and a potential Hawthorne effect because site teams were aware of the evaluation.

Conclusions

In this study, we found that practice transformations are a potential strategy for addressing anticipated workforce challenges among those providing care to PLWH. They hold the promise of optimizing the use of personnel and ensuring the delivery of care to all in need while potentially enhancing HIV care continuum outcomes.

Author summary

Why was this study done?

- The study aimed to enhance the capacity and readiness of Ryan White HIV/AIDS Program (RWHAP)-funded clinics to adapt and realign their workforce and practices to improve the provision of quality HIV care.
- The study aimed to identify practice transformation approaches that can improve HIV care continuum outcomes.

What did the researchers do and find?

- We conducted organizational assessments with clinics at 14 demonstration projects to assess changes in practices and procedures before and after implementation of practice transformations.

- We analyzed Ryan White HIV/AIDS Program Services Report (RSR) data from clinics affiliated with all demonstration projects to examine the impact of practice transformations on client retention in HIV care, prescription of antiretroviral therapy (ART), and viral suppression.
- We found that demonstration project clinics made significant changes in their practices in line with practice transformation approaches to maximize the healthcare workforce involved in the care of people living with HIV (PLWH), promote team-based care, and enhance reliable engagement of clients in primary HIV care.
- We also found that all three practice transformation approaches were associated with improved client retention in HIV care and viral suppression outcomes.

What do these findings mean?

- Practice transformation approaches, particularly those that maximize the HIV care workforce and enhance reliable client engagement in primary HIV care, are of potential benefit for any clinic or healthcare facility that is straining to meet the demands for HIV care with its existing workforce.

Introduction

The workforce that provides care to people living with HIV (PLWH) (henceforth referred to as the “HIV care workforce”) is at the forefront of the US response to the HIV epidemic. Given the substantial therapeutic and preventive benefits of antiretroviral therapy (ART) [1,2], engaging PLWH in high-quality care is considered key to ending the epidemic [3–5]. The US has made important strides against the HIV epidemic, with new infection rates remaining constant and deaths related to the virus falling in recent years [6]. However, there continue to be ongoing challenges. Nearly 40% of PLWH have not achieved viral suppression, due primarily to failures of linking to and remaining in HIV care [7]. The challenges are made worse by substantial HIV-related disparities seen across demographic characteristics (e.g., race/ethnicity, socioeconomic status) and geographic regions of the country [6,7].

The Ryan White HIV/AIDS Program (RWHAP) is a crucial component of the ongoing US response to the HIV epidemic. Since its inception, the program has ensured that the most vulnerable PLWH have some form of access to care, treatment, and support services [8]. Favorable outcomes among clients in RWHAP-supported settings consistently exceed national statistics, even though the program disproportionately serves the safety net populations least likely to be engaged in HIV care overall [9]. Over 80% of all RWHAP clients are reliably and consistently receiving care, and 86% have achieved viral suppression [9].

Maintaining and improving upon these successes is threatened, however, by projected trends in the healthcare workforce. The US is experiencing a shortage of primary care providers that is expected to increase [10,11]. At the same time, the size of the HIV care workforce is in decline [12] as retirements outpace new entrants into the field. If HIV clinical care delivery continues unchanged, then it will mean that a smaller number of HIV providers and clinical staff—limited by the capacity inherent to current protocols and workflows for care delivery—will face the growing and sustained demand for services, as more PLWH are engaged in care, live longer, and require continuous ART treatment and monitoring. A failure to respond to

these dynamics could potentially result in deleterious outcomes, such as reductions in the quality of care (e.g., difficulties securing a timely appointment, less than ideal frequency of medical visits) or burnout and high turnover among the providers and staff who remain.

In 2014, the Health Resources and Services Administration (HRSA) RWHAP Special Projects of National Significance (SPNS) program introduced the System-Level Workforce Capacity Building for Integrating HIV Primary Care in Community Health Care Settings Initiative (henceforth referred to as the Workforce Capacity Building Initiative). Its purpose was to enhance the capacity and readiness of demonstration projects to adapt and realign their workforce and/or practices to improve the provision of quality HIV care. All demonstration projects had existing grants, contracts, or cooperative agreements from the RWHAP to deliver HIV-related medical care and support services. The grants from the SPNS initiative specifically supported efforts to implement practice transformations, which were defined as efficiencies in structures and delivery of care to optimize human resources and improve HIV-related health outcomes. Demonstration projects had broad flexibility in the design of their transformations, potentially tackling workforce challenges by increasing the supply of providers, improving the efficiency of HIV service delivery, and/or facilitating clients' effective use of care (thereby reducing the need for intensive services to address poorly controlled HIV). In this study, we sought to characterize the practice transformations that were ultimately implemented by the initiative's demonstration projects and to examine the association of the transformations with retention in HIV care, ART prescription levels, and viral suppression.

Methods

The details of the methods and findings are presented according to the Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) checklist for cohort studies ([S1 Text](#)). The Workforce Capacity Building Initiative issued grants to 15 demonstration projects. [Table 1](#) describes each project and its practice transformation components. Further information about—and lessons learned from—the demonstration project sites can be found in resources prepared by the initiative and posted at HRSA's TargetHIV website [[13–15](#)]. Fourteen of the projects were implemented across an entire agency or at specific clinics within an agency and were intended to shape the way that care is delivered to all HIV clients. A 15th demonstration project, based in Puerto Rico, was focused on ensuring continuity of care by linking clients leaving prisons or jails to community clinics across the island. The unique design of this last project necessitated that it be evaluated differently from the other 14 sites. Therefore, it is not included in the cross-site analyses presented in the rest of this paper.

The University of California San Francisco (UCSF) received a cooperative agreement to conduct a comprehensive evaluation of the demonstration projects' practice transformations. At the time the application for funding was written, the UCSF team provided a general overview of the procedures we anticipated we would deploy (in the absence of knowing which demonstration projects would be funded or the nature of their practice transformations) and listed the major evaluation goals. Among these was to determine which types of practice transformations would most strongly be associated with changes in key HIV care continuum outcomes, including retention, ART prescription, and viral suppression. In the first year of funding, the exact procedures for the evaluation were further specified. We did not have a pre-specified analysis plan.

The finalized cross-site evaluation plan involved multiple components that captured practice transformation implementation and care outcomes and examined changes over time. For the analyses presented here, we focus on 2 specific evaluation components: (1) an organizational assessment that allowed us to characterize structures and practices at the demonstration project

Table 1. Description of practice transformation interventions.

Site Name	Setting	Project Description
ACCESS Community Health Network (Chicago, IL)	Community health centers specialized in HIV (a subset of the larger ACCESS network)	Empanel patients to both an infectious disease specialist and a primary care provider to reduce demands on the specialists. Use care coordinators to support clients' engagement in care. Implement team-based care and huddles to strategize care planning.
Brightpoint Health (New York, NY)	Network of community health centers	Implement case conferences and provider huddles. Provide self-management courses for patients. Integrate primary care and behavioral healthcare plans through an electronic health record.
Coastal Bend Wellness Foundation (Corpus Christi, TX)	Community health center	Train primary care providers to offer HIV care. Implement multidisciplinary care team meetings and preclinic huddles.
Family Health Centers of San Diego (San Diego, CA)	Multisite network of community health centers, with HIV specialty clinic	Train family medicine providers through a residency program to offer HIV care. Provide care coordination for patients.
Florida Department of Public Health (Osceola County, FL)	Primary care FQHCs located throughout the county and one centralized specialty HIV clinic	Train primary healthcare providers at the county's FQHCs to be able to manage HIV care patients. Provide ad hoc HIV specialty consultation to primary care providers at FQHCs. Provide opportunity for patients with stable HIV disease to transition care from the HIV specialty clinic to a more conveniently located primary care FQHC.
FoundCare (West Palm Beach, FL)	Community health center with specialty HIV clinic	Provide "warm hand-offs" for patients receiving care in different departments. Implement a care model featuring huddles and team consultation for each patient. Add capacity for psychiatric care and social work.
La Clinica del Pueblo (Washington, DC)	Community health center	Formative assessment to determine highest process and outcome needs in care provision. Continuous quality improvement and iterative internal evaluation cycles to maximize efficient and effective care. Improve cultural competency of clinic staff and providers, particularly with regards to transgender patient population.
MetroHealth (Cleveland, OH)	HIV specialty clinic in academic medical center	Routinely screen and reassess for depression. Treatment and management of depression to be led by care coordinator and consulting psychiatrist.
New York Presbyterian (New York, NY)	HIV clinic in large academic medical center/hospital	Implement panel-based clinical care teams. Facilitate coordination across settings via nurse clinical care coordinators. Implement electronic dashboard to summarize key client outcomes and indicators. Adjust patient flow to be more user friendly and ensure more efficient use of space.
Ruth M. Rothstein CORE Center, CCHHS (Chicago, IL)	Hospital with HIV specialty care clinic; part of a county health and hospitals system	Conduct workflow mapping to address gaps and inefficiencies. Hire CTL to identify and link PLWH to care, help them navigate insurance and the CCHHS health system, as well as health systems outside of CCHHS.
San Ysidro Health (San Diego, CA)	Network of community health centers	HIV 101 trainings across departments in the health center. Patient navigation to assist with referrals. Care team meetings. Residency program to train providers to deliver HIV care.
SHRT (Tyler, Texarkana, and Paris, TX)	Community health centers specialized in HIV	Add family nurse practitioners to HIV clinics so that clinics have the capacity to offer primary care and HIV care. Change helps reduce demands on HIV specialists.
University of Miami (Miami, FL)	HIV clinic in large academic medical center/hospital	Facilitate transitions for patients arriving for appointments or moving from one appointment to another. Link newly diagnosed HIV patients to comprehensive sociomedical support services.
UPMC (site in McKeesport, PA)	Family medicine primary care clinic	Train staff and providers in a family medicine clinic to provide HIV care. Implement a residency training program for family medicine with HIV specialty track.

(Continued)

Table 1. (Continued)

Site Name	Setting	Project Description
New York City Health and Hospitals Correctional Health Services (project activities based in Puerto Rico)**	Jails, prisons, community health centers, service agencies	Link PLWH with community-based HIV care and case management directly upon release from incarceration.

**The project based in Puerto Rico was focused at a systems levels, linking clients leaving prisons and jails to community clinics across the island. It did not involve the transformation of practices and personnel within a facility. Because of the project's unique design, its evaluation had to be structured differently than the methods used at the other demonstration project sites. As such, it is not included in the cross-site analyses presented in this paper.

Abbreviations: CCHHS, Cook County Health & Hospitals System; CTL, Clinical Transition Liaison; FQHC, federally qualified health center; PLWH, people living with HIV; SHRT, Special Health Resources for Texas; UPMC, University of Pittsburgh Medical Center.

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sites and (2) Ryan White HIV/AIDS Program Services Report (RSR) data capturing key HIV care engagement and clinical outcomes. Procedures for the cross-site evaluation were reviewed and approved by the UCSF Institutional Review Board (IRB; Protocol #15–16326). The organizational assessment was used to gather data only about organizations, not individuals, and was thus deemed by the UCSF IRB not to be research with human participants. As such, a formal consent process was not required. Nonetheless, we opted to obtain verbal consent from the project lead at each demonstration site to collect data about their organization. The RSR data were supplied as a limited dataset as defined under the Health Insurance Portability and Accountability Act (HIPAA). The files contained exact dates and locations of clinical services but did not contain other personal health identifiers. In alignment with the governing provisions of HIPAA, the UCSF IRB allows a limited dataset to be used for research purposes without obtaining verbal or written consent from the clients who contributed information to the dataset.

Organizational assessment

The organizational assessments were conducted with each of the 14 demonstration sites at baseline—immediately prior to the launch of the site's practice transformation—and then twice annually for 2 years following implementation, for a total of 5 assessments. Team leads from each of the demonstration project sites completed the assessments in consultation with other team members as needed. All responses were entered into a Research Electronic Data Capture (REDCap) database hosted at the university [16]. Demonstration project team leads also independently completed a short REDCap survey for each assessment wave through which they reported basic information about their clinical sites, including the number of patients served and number of prescribing providers.

The organizational assessment consisted primarily of the Building Blocks of Primary Care Assessment (BBPCA), which was developed by the UCSF Center for Excellence in Primary Care [17]. It focuses on 10 aspects of patient-centered care. Because the BBPCA covers general primary care, we created supplemental items to assess practices specific to HIV care. Where possible, the wording of these items mirrored language used in comparable items of the original BBPCA. For the analyses presented here, we focus on 3 of the HIV-specific “blocks.” These blocks were developed to capture changes consistent with major approaches for addressing workforce shortages. At the outset of the initiative (prior to implementation or evaluation activities), the UCSF team reviewed demonstration project plans and determined that the proposed practice transformations fell into 3 approaches that were not mutually exclusive. First, there was a set of transformations intended to maximize the HIV care workforce. Because demonstration projects received RWHAP money to deliver care, they already had some providers and staff who served PLWH. Transformations to maximize the HIV care workforce

thus focused on increasing the number of existing providers and staff who could contribute to the care of PLWH. This generally took 2 forms: (a) the expansion of HIV services to a larger number of clinical facilities within a regional care network that previously had most HIV services housed in a limited number of clinics or (b) expansion of the number of providers serving PLWH in an individual facility. In both cases, sites began their projects with an existing care model in which HIV specialists were responsible for delivering almost all medical care to PLWH. The local practice transformations thus included efforts to increase the involvement of general primary care providers and other relevant providers in the services that PLWH received. A second set of transformations promoted share-the-care, which involved enhancing capacities and responsibilities of midlevel providers and clinical staff to handle more routine aspects of care, thereby freeing up primary HIV care providers to deal with more complex situations. These transformations frequently involved the initiation or augmentation of team-based care models. Finally, a third group of transformations were designed to facilitate more efficient, effective, and reliable use of HIV primary care by clients through services like care coordination. This last approach was intended to address workforce challenges indirectly. By increasing clients' use of primary HIV care, the need for resource- and time-intensive urgent, emergency, and/or inpatient care should ideally be reduced.

Each of the HIV-specific blocks of the organizational assessment captured a specific transformation approach. The first block consisted of 2 items related to maximizing the HIV care workforce: (1) whether a practice is able to offer advanced HIV care and (2) whether HIV services are integrated into general primary care clinics. The second block contained 3 items assessing share-the-care, capturing information about (1) the utilization of team-based care, including workflows for clinical teams, (2) routine assessment of training needs for both providers and staff, and (3) use of standing orders. The third block contained 4 items focused on efforts to reliably engage clients in care, capturing procedures related to (1) population management and coordination of care practices, including tracking and intervention with PLWH who are referred to the site but who do not enroll, (2) tracking and follow-up with enrolled clients who are overdue for care, (3) linking PLWH to supportive wraparound services, and (4) clinical care management services for high-risk PLWH. It should be noted that the items within each block were grouped conceptually based on their intent and captured strategies that would mutually support and reinforce a particular practice transformation if deployed together. A clinic could strive toward the goal of a transformation strategy, however, by deploying changes reflected in only a subset of the relevant block's items.

For each item, the demonstration projects teams were presented with 4 descriptions that characterized potential practices pertaining to a facet of care delivery. See Fig 1 for an example of the layout for 2 of the items. The complete set of organizational assessment items used in the analyses can be found in Supporting Information (S2 Text). The descriptions in each item always ranged from one indicative of low capacity or limited integration of HIV care to one indicative of high capacity or strong integration of HIV care into general practice. The other two descriptions captured intermediary practices between the two extremes. Site personnel selected a numerical score aligned with the description that best characterized the current practices at their site. Numerical responses could range from 1 to 12, with three numbers grouped under each of the four descriptions. The four descriptions provided a guide for the respondents when selecting an answer. Our analyses worked only with the continuous 12-point response scale. Higher numbers reflected greater capacity or stronger integration of HIV care into primary care. This setup, which was part of the original BBPCA's design, allowed for tracking not only major changes in practices but also more minor ones (e.g., gradual expansion of practice transformation changes to more clinics within a facility).

Block A1: Provision of HIV Care

Components	Level D	Level C	Level B	Level A
1. The practice as a whole (Note: if clinic offers less than basic HIV screening and diagnosis, then score = 0)	...offers basic HIV screening and diagnosis. Services are limited to prevention counseling, HIV testing, post-test counseling, and referral to care post-diagnosis.	...offers intermediate HIV clinical care. Services include primary care, HIV treatment/care, lab monitoring, with referral to or consultation with experts as needed for advanced care services.	...offers advanced HIV clinical care. This includes a full range of clinical care services with referral or consultation with HIV-expert clinicians as needed for complicated cases. It also includes consultation and acceptance of referrals from other clinicians.	...offers expert HIV clinical care and education. This involves expert leadership to improve comprehensive care PLWH in multiple areas.
Score	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>			
2. Within the organization, the delivery of HIV clinical care (Note: if Q1 = level D, then score on Q2 = 0)	...occurs only in its own specialized unit or clinic that is separate from general primary care.	...could potentially be offered in general primary care. But in practice, most HIV patients are still seen in an HIV specialty unit or clinic that is separate from primary care.	...is delivered by providers working in a general primary care clinic. HIV patients with complex cases are referred to specialists working in a separate unit or clinic.	...is delivered by providers working in a general primary care clinic. Patients with complex cases continue to be seen in primary care because the providers either have HIV specialty expertise or are able to seek consultations with a specialist.
Score	0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/> 11 <input type="checkbox"/> 12 <input type="checkbox"/>			

Fig 1. Example of HIV-specific supplemental items from the organizational assessment. PLWH, people living with HIV.

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To ensure comparability in the use of the response scale and to guard against inflation of the scores, all organizational data were collected by UCSF investigators during scheduled data collection calls with each demonstration project team. At the time of an assessment, a project team gave its initial score for each item and then was asked to explain the logic behind the score. UCSF investigators were able to provide common guidance on how to decide among different score options for the items. Furthermore, UCSF separately conducted site visits and collected additional forms of data (not featured in this report), including detailed qualitative interviews with project personnel, to understand and characterize the kinds of changes made at each site. These independent forms of observation reduced the incentive for a site to misrepresent or otherwise overstate its project's progress on the organizational assessment.

RSR data

Client-level outcomes were assessed using data from the RSR for each site. The RSR consists of demographic, HIV care, and treatment information. Each year, all recipients and subrecipients of RWHAP grants, contracts, and cooperative agreements are required to submit an RSR to HRSA. Prior to 2015, the RSR captured information only on people who had received services that were paid for by the RWHAP. Starting in 2015, it captured information on all of an agency's clients who are living with HIV, including those whose care and services were supported by other entities, such as Medicaid, Medicare, or private insurance. UCSF established a data-sharing agreement with HRSA to obtain copies of the RSR data from the demonstration sites. Three calendar years (CYs) of RSR data were included: CY2014 reflected clinical services and outcomes before practice transformations were implemented, CY2015 captured outcomes as transformations were ongoing, and CY2016 captured outcomes in the year following transformations. All data were securely transferred using a university-hosted, HIPAA-compliant

data portal. The files contained the standard de-identified encrypted unique client identifier (eUCI) that is created for each RSR record following rules established by HRSA.

The RSR data files contained information on all clients reported by an organization for each year. These records potentially included a broader set of individuals than those affected by a project's practice transformations (e.g., some RSR records were submitted by an agency on behalf of its full consortium of clinics, but the local demonstration project was being implemented in only a couple of the clinics). To ensure that the right set of client records were used for analyses, UCSF obtained lists of eUCIs directly from each demonstration site for clients who were receiving care in facilities where practice transformation activities were occurring. These eUCIs allowed us to subset the relevant clients from the RSR data files sent by HRSA.

Analyses

Individual items within each block of the organizational assessment were averaged to create a total score for the block. If a demonstration project had multiple clinics with differing scores for an item, the average response across clinics was calculated before generating the total block score. Generalized estimating equation (GEE) models, clustered by site with repeated measures, were used to analyze the change over time from baseline to the final assessment. Prior to estimating changes over time, the scores were rescaled from 1–12 to 0–100 so that all change estimates reflected the total percent change in scores. For example, a 25% change estimate would indicate a 3-point increase on the original 12-point scale. We separately examined to what degree individual items in each block correlated with the overall scores for the block. This step allowed us to determine whether specific practice changes were particularly influential in changes observed in the block scores.

We used responses from the organizational assessment to determine which practice transformation approaches were effectively implemented by each demonstration site. For each block, a site was categorized as having or not having transformed relevant clinical workflows and practices based on whether scores for the block changed significantly over time. The categorizations were not mutually exclusive, as practices within a site could potentially be transformed in more than one block. We based the categorizations on observed changes, as opposed to assigning sites to categories based on their plans at project start, because the sites were permitted to use iterative, quality improvement approaches to enact practice changes. As a result, the specifics of the transformations at each site potentially evolved over the course of the initiative.

For the RSR data, we assessed changes over time for 3 key outcomes: retention in care (proportion of clients with at least one medical visit in each 6-month period of the CY, with at least 60 days between visits), prescription of ART (proportion of clients prescribed ART at any point during the year), and viral suppression (proportion of clients with <200 copies/mL at last test). These outcomes correspond to major milestones of the HIV care continuum [4]. We did not utilize 2 other common milestones of the continuum—diagnosis and initial linkage to care—as the practice transformations at the sites were principally intended to shape the care of those who were already engaged in care. Our definitions for the outcomes were aligned with HRSA performance measures [18], with the exception that the retention measure was based on data from a 12-month period rather than a 24-month period to facilitate the examination of changes across CYs. GEE with repeated measures clustered by client were used to model differences and estimate proportions of each outcome over time. These multivariate models included inverse probability weights to adjust for demographic differences between and within sites from year to year. Demographic variables used to create the inverse probability weights included age, race, insurance type, and HIV risk factors. A population weight was also included to adjust for eligible clinic population size relative to the number of eligible patients

reported by the demonstration site. The models allowed us to assess changes over time for the 3 outcomes across all sites, as well as for the set of sites that implemented each specific practice transformation approach. All data management and analyses were conducted using SAS version 9.4 (SAS Institute, Cary, NC). An alpha level of 0.05 was used for all comparisons.

Results

The 14 demonstration project sites reported a mean of 3,089 clients (SD = 2,932; median 2,333; interquartile range [IQR] 1,729–4,021) in the 6-month period preceding their baseline organizational assessment. Of these, a mean of 916 (SD = 1,167; median 465; IQR 237–1,400) were PLWH. The project sites had a mean of 18.5 prescribing providers (SD = 23.5; median 9; IQR 5–25). At most sites, at least some of the providers were part-time employees. As a result, the total amount of provider personnel time, when expressed as an equivalent number of full-time positions, was lower (mean 7.7; SD = 7.5, median 5.25; IQR 3–13.2). The only near significant change over time in demonstration project characteristics was the average number of clinics per site (baseline assessment wave: mean 2.1; SD = 1.5; median 1; IQR 1–3; final assessment wave: mean 1.9; SD = 1.5; median 1; IQR 1–3; $p = 0.051$).

There were 13,571 clients reflected in the RSRs across sites in CY2014 (mean 969/site; SD = 1,351; median 459.5; IQR 134–1,186). This number rose to 15,083 for CY2015 (mean 1,077; SD = 1,265; median 742; IQR 257–1,009) and 15,738 for CY2016 (mean 1,124; SD = 1,243; median 844; IQR 301–1,018). In CY2014, clients were 71% male, 28% female, and 0.2% transgender. A plurality (48%) were African American. Almost one-third (31%) were Hispanic/Latino, and 14% were white. The mean age was 47 (IQR 37–54). Equal proportions were heterosexual men or women, or men who have sex with men (39% each), while 7% were injection drug users. Forty-one percent were on Medicaid, 11% were on Medicare, and 29% had no insurance. There were no significant differences over time in either the population size or the client demographics, even though the reporting instructions for the RSR changed from CY2014 to CY2015 (shifting from including only clients receiving RWHAP-supported services to including all clients living with HIV). The lack of difference is likely due to the fact that most patients living with HIV were already included in the RSR reports prior to the change in reporting instructions (e.g., because they were receiving RWHAP-funded, nonmedical support services).

Fig 2 displays the changes over time in block scores for the organizational assessments. There were significant increases in capacities and practices consistent with maximizing the HIV care workforce (18% change, $p < 0.001$), share-the-care (25% change, $p < 0.001$), and facilitating clients' reliable engagement in HIV primary care (13% change, $p < 0.001$). Overall, 6 of the sites reported significant changes intended to maximize the HIV care workforce, 9 had significant changes in share-the-care practices, and 4 significantly changed practices to facilitate client engagement in primary HIV care. Across the 14 sites, 36% ($n = 5$) had changes in scores in 2 or more of the blocks while 43% ($n = 6$) had changes in 1 block only. There were 3 sites that had no significant change in any of the 3 organizational assessment blocks.

Inspection of the individual items that composed each block suggested there were differences in whether practice changes consistent with a transformation strategy were implemented together or individually. Transformations to enhance client engagement showed the most robust evidence of being implemented consistently as a package. The overall scores for this block were strongly correlated with the block's individual items assessing systematic tracking and follow-up of patients newly referred to a practice for HIV care ($r = 0.761$), linking HIV clients to wraparound services ($r = 0.840$), and systematic provision of clinical management services for high-risk clients ($r = 0.774$). The fourth item in the block measuring tracking and intervening with clients overdue for HIV care showed a smaller, albeit still strong, association

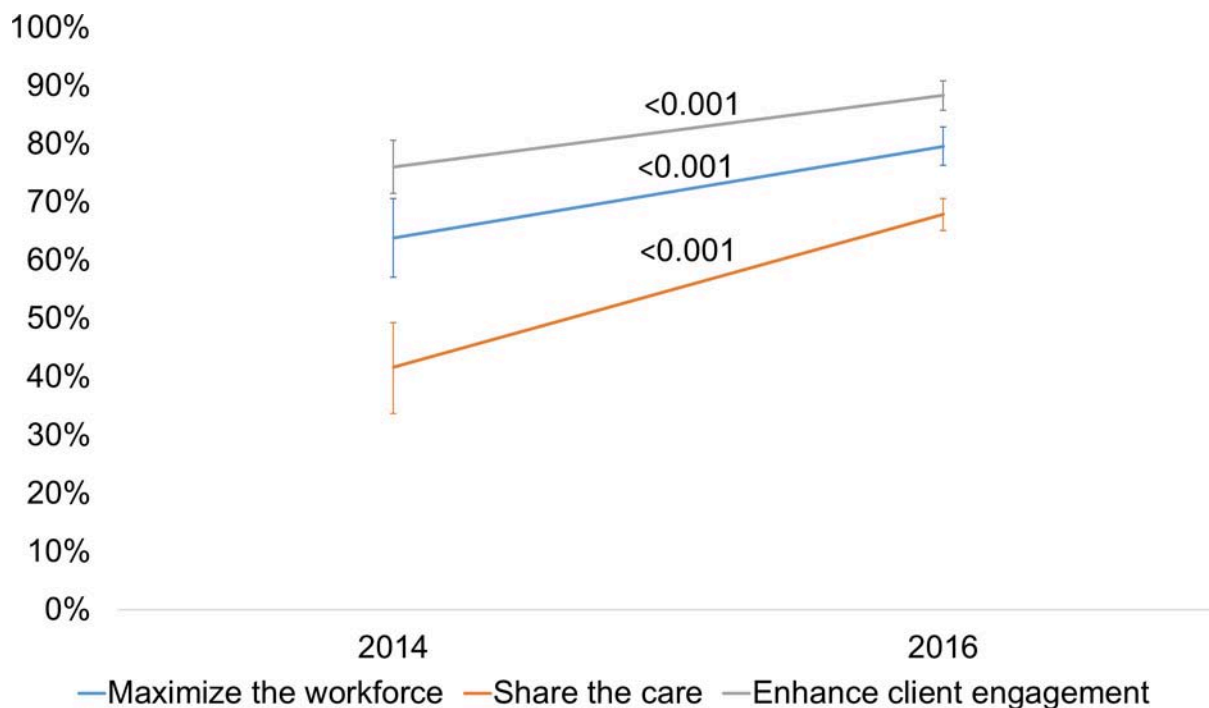


Fig 2. Changes in organizational assessment block scores from baseline to final assessment wave.

<https://doi.org/10.1371/journal.pmed.1003079.g002>

with the overall score ($r = 0.547$). By contrast, the findings for share-the-care transformations suggested that the block's scoring was driven heavily by one particular kind of practice change. Specifically, the item assessing whether a clinic was routinely monitoring and responding to provider and staff training needs was correlated more strongly with the overall block score ($r = 0.539$) than the items assessing deployment of HIV clinical workflows ($r = 0.126$) or use of standing orders ($r = 0.267$). Finally, the data pertaining to transformations to maximize the workforce suggested the use of several successful approaches. The 2 items for this block correlated only moderately with one another ($r = 0.193$), with sites differing in the degree of focus they placed upon enhancing HIV expertise among providers versus integration of HIV care and primary care.

Across sites, there were significant improvements from CY2014 to CY2016 in the 3 major outcomes assessed using RSR data. Retention in HIV care increased from 78.5% to 81.4% (adjusted odds ratio [aOR] = 1.03; 95% confidence interval [CI] 1.02–1.04; $p < 0.001$), ART prescription levels increased from 90.6% to 91.4% (aOR = 1.01; 95% CI 1.00–1.01; $p = 0.006$), and viral suppression increased from 80.1% to 83.1% (aOR = 1.03; 95% CI 1.02–1.04; $p < 0.001$). Fig 3 displays the outcomes for the subsets of sites that implemented each type of practice transformation. Among those sites that maximized the HIV care workforce, there were significant improvements in retention in care (CY2014: 79.5%; CY2016: 84.0%; aOR = 1.05; 95% CI 1.02–1.07; $p < 0.001$), ART prescription levels (CY2014 91.4%; CY2016: 95.6%; aOR = 1.04; 95% CI 1.03–1.05; $p < 0.001$), and viral suppression (CY2014: 78.6%; CY2016: 83.8%; aOR = 1.05; 95% CI 1.04–1.07; $p < 0.001$). Similarly, at project sites that changed client engagement practices, there were significant improvements in retention in care (CY2014: 76.3%; CY2016: 83.6%; aOR = 1.08; 95% CI 1.03–1.12; $p < 0.001$), ART prescription levels (CY2014: 83.9%; CY2016: 94.7%; aOR = 1.11; 95% CI 1.08–1.14; $p < 0.001$), and viral suppression (CY2014: 77.0%; CY2016: 83.7%; aOR = 1.07; 95% CI 1.03–1.10; $p < 0.001$). By

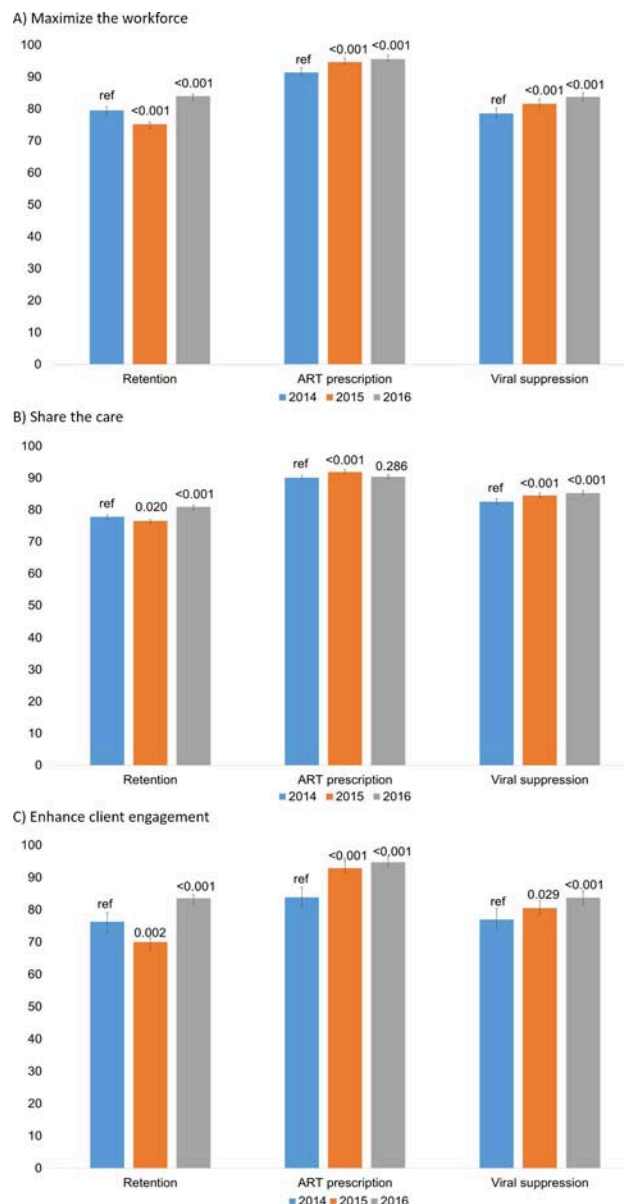


Fig 3. Changes in care continuum outcomes over time for demonstration project sites implementing each practice transformation approach. ART, antiretroviral therapy.

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contrast, at the demonstration projects that altered share-the-care practices, there were smaller but still significant improvements in retention in care (CY2014: 77.8%; CY2016: 80.9%; aOR = 1.03; 95% CI 1.02–1.04; $p < 0.001$) and viral suppression (CY2014: 82.6%; CY2016: 85.3%; aOR = 1.03; 95% CI 1.02–1.04; $p < 0.001$). There were no statistically significant changes in ART prescription levels at these sites (CY2014: 90.1%; CY2016: 90.4%; aOR = 1.00; 95% CI 0.99–1.01; $p = 0.280$). At the small number of demonstration project sites that did not successfully implement any of the 3 practice transformation strategies, there were statistically significant improvements in viral suppression only (CY2014: 75.2%; CY2016: 78.3%; aOR = 1.03; 95% CI 1.01–1.05; $p = 0.002$). There were no changes in retention or ART prescription levels ($p = 0.142$ and $p = 0.381$, respectively).

Discussion

Our cross-site evaluation of the SPNS Workforce Capacity Building Initiative showed that RHWAP-supported demonstration project sites were able to implement practice transformations that addressed workforce challenges using 3 major approaches: (1) maximizing the existing healthcare workforce involved in the care of PLWH, (2) adopting share-the-care practices to optimize the use of midlevel providers and clinical staff, and (3) implementing client engagement strategies to improve the reliable use of primary HIV care services. Approaches to maximize the HIV care workforce and enhance client engagement in care were associated with significant improvements over time in 3 major HIV care continuum outcomes: retention in HIV care, ART prescription levels, and viral suppression. By contrast, share-the-care transformations were associated with smaller improvements in retention and viral suppression, and with no changes in ART prescription levels.

Share-the-care transformations were adopted by the largest number of sites. The largest increase in the overall block score measuring practice transformation-related changes was also seen with this approach. By contrast, client engagement transformations were implemented at the fewest sites and involved the smallest change in the overall block score measuring practice transformation. These observed differences in frequency and magnitude of changes are likely due in part to the nature of the different transformations themselves. For sites that face substantial shortfalls in their workforce capacity, maximizing the HIV care workforce and share-the-care transformations are arguably more logical choices. These approaches tackle workforce challenges directly by expanding capacity through increased supply or efficiency of care. They are also intended to have wide impact, with all clients potentially experiencing direct or indirect improvements in care as a result of the changes. By contrast, programs to enhance client engagement tackle workforce challenges more indirectly. They seek to enhance clients' use of primary HIV care in order to avert the need for resource-intensive urgent or emergency care as a result of poorly controlled HIV. The changes in this type of transformation are also more targeted, with new services being directed primarily at PLWH who are at higher risk of falling out of care or who have not successfully engaged in care. Furthermore, in order for client engagement approaches to be effective, a site must first ensure that there is adequate supply of care to which a client can be directed.

Inspection of the individual items used to measure each type of practice transformation provide important information about the kinds of changes that demonstration projects used to achieve their successes. Two items, one measuring HIV expertise among providers and one measuring integration of HIV and primary care, contributed to the assessment of transformations to maximize the HIV workforce. Their scores were correlated only modestly. This is likely a reflection of the different strategies pursued by the demonstration projects that successfully implemented relevant transformations. Some focused on raising capacity to deliver HIV care at new clinics within a regional health system, a goal more aligned with improving HIV-related skill and expertise, whereas others already had HIV specialty practices and sought to expand patients' utilization of other types of providers (e.g., use of primary care providers for more routine HIV care needs), a goal more heavily focused on integration of HIV and primary care services. Our data suggest that both strategies can successfully contribute to expanding the proportion of the overall care workforce able to serve patients living with HIV. By contrast, we found that observed changes in share-the-care transformations were driven heavily by the deployment of strategies to monitor and respond to training needs among a clinic's providers and staff. This finding highlights the critical role that training plays in practice changes that involve task shifting. Such approaches fundamentally seek to increase the responsibilities of clinical staff and midlevel providers, and it is vital that they be equipped

fully with the capacity to succeed in their enhanced role. Share-the-care transformations were less heavily driven by deployment of HIV care workflows and use of standing orders. The lower association with HIV care workflows may simply reflect relatively lower usage of this strategy among our demonstration projects. The lower association with standing orders is possibly due to multiple demonstration projects being located in jurisdictions where the use of some or all standing orders was precluded by law. Finally, our findings for transformations to enhance client engagement suggest that implementation success involves a focus on multiple strategies. Tracking newly referred patients, providing clinical care management for high-risk patients, and linking patients to supportive services all strongly contributed to changes in measured scores. These findings speak to the importance of providing comprehensive support for patients who struggle to remain in care.

The observed associations among practice transformation approaches and HIV care outcomes should be considered in the context of national trends. During the same time period (CY2014 to CY2016), there were increases in retention in care (80.4% to 81.7%) and viral suppression (81.4% to 84.9%) among all clients in RWHAP settings across the country [9]. In our study, the observed changes in these 2 outcomes exceeded the national trends at the demonstration projects that implemented transformations to maximize the HIV care workforce or enhance client engagement, with an increase of nearly 5 percentage points or more for each outcome at clinics implementing each transformation strategy. By contrast, at sites implementing share-the-care transformations, the change in retention in care exceeded the national trend, while the change in viral suppression did not (approximately 3-percentage-point increase in each outcome). It is also worth noting that, among sites that did not successfully implement any of the major practice transformation approaches, the change in viral suppression was of similar magnitude to the change reported nationally [9]. These observations suggest, but do not allow us to definitively conclude, that transformations to maximize the HIV care workforce and enhance client engagement substantively improved multiple HIV care outcomes over and above any contemporaneous temporal trends, while share-the-care approaches were more limited to improvements in retention in care.

We recognize that the overall magnitude of the observed improvements remains small. But it is important to note that outcomes at our demonstration projects, like outcomes in the RWHAP more generally, were strong at the project outset. Statistically, this creates a ceiling effect that makes increasingly desirable outcomes harder to achieve (i.e., one is working against regression to the mean). In the context of this study, such a pattern is best understood by considering who benefits most from a practice transformation. The patients who require the least intervention to stay engaged in care were likely the ones already successfully engaged when the project began. Thus, the demonstration projects were striving to improve outcomes among those patients who are relatively harder to engage. This group inevitably requires more effort just to achieve smaller improvements because the highest-risk patients may face numerous structural, interpersonal, and individual barriers to successful engagement in care. Although large changes in outcomes with this group can be harder to demonstrate, a failure to meet their needs would result in them being left behind in efforts to control and end the HIV epidemic.

Within the context of our study, the generally weaker changes in care continuum outcomes for share-the-care transformations may be due to the nature of the transformations themselves. Approaches to maximize the HIV care workforce or implement client engagement strategies are potentially targeting known gaps in the services being delivered. By contrast, share-the-care transformations shift responsibility for tasks. These transformations set the stage for a clinic to deliver care more efficiently, which potentially allows for more clients to be served. But at the time a share-the-care transformation is implemented, it is possible that there

is no change in whether a service is delivered to each client, just in how and by whom it is delivered. Importantly, the unchanged ART prescription level outcomes and the small improvements in retention and viral suppression at sites implementing share-the-care transformations suggest that shifting responsibilities away from primary HIV care providers and toward midlevel providers and clinical staff did not compromise the quality of HIV care.

The absence of a statistically significant change in ART prescription levels at sites implementing share-the-care transformations is not necessarily surprising given high ART prescription levels among these sites at the start of the project. The finding may also be due to the way that the ART prescription outcome is defined. The indicator reflects the presence of any ART prescription for each client over the course of a year [18] rather than capturing ongoing and reliable use of ART throughout the year. Future studies of practice transformation that use ART adherence as an outcome may show changes more in line with those observed for the retention and viral suppression outcomes in the current study.

Temporal trend data (reflected in Fig 3) consistently showed a small dip in retention in CY2015, which corresponds to right after practice transformations were initiated. In 2016, the outcome then rebounded and substantially improved upon 2014 performance. This U-shaped pattern may be the byproduct of the complex, iterative implementation processes deployed at sites. Given the complexity of some of the practice changes, demonstration projects did not necessarily launch all transformation components at once. Even once launched, some aspects took time to reach their full potential (e.g., monitoring and addressing training needs). And, at some sites, there were tweaks to protocols and workflows in response to unanticipated challenges. Collectively, these iterations could have led to temporary decreases in performance until the transformed practices were fully implemented, after which an increase in performance was seen.

Our results have important implications for RWHAP-supported and other healthcare settings in the US. The country has placed concerted effort on reducing HIV-related disparities and ensuring that the vast majority of PLWH are in care and are virally suppressed. This can be seen in efforts to meet the goals of the National HIV/AIDS Strategy [5] and in the release of the Department of Health and Human Services' new "Ending the HIV Epidemic Initiative: A Plan for America" [19]. The latter intends to bring down new infections by first focusing on the highest-impacted regions of the country and subsequently expanding efforts to the nation as a whole [19]. Achieving the goals of the Ending the HIV Epidemic Initiative will not be possible (or will be short-lived) if there are increasing shortfalls in the availability of high-quality HIV care. Importantly, the practice transformation approaches implemented in this SPNS project build on strategies that are being used in other contexts. For example, training components of the maximizing the HIV care workforce transformations align with longstanding efforts to ensure quality care by existing HIV providers [20,21]. The trainings implemented in this initiative were novel primarily because of their audience (providers and staff at the demonstration project sites who historically were not involved in delivering care to PLWH) and because of where the programs were implemented (e.g., new tracks in family medicine residencies). Share-the-care transformations are consistent with efforts to implement task shifting or task sharing [22,23]. Client engagement strategies are aligned in spirit and practice with increasingly popular interventions like patient navigation [24,25]. What was unique and of value in this initiative was demonstration project sites' flexibility to mix and match practice transformation approaches to achieve significant improvements in outcomes. Widespread and flexible use of such strategies could potentially enable high-quality HIV care to be delivered to more PLWH. Practice transformations may also help to blunt any deleterious effects resulting from declining numbers of HIV and primary care providers [10,12].

Our results are tempered by several limitations. First, all demonstration projects were being supported by the RWHAP to deliver HIV care and support services (in addition to receiving grants for this specific project). RWHAP clinics are known to achieve better-than-average HIV care continuum outcomes [9] and to offer more comprehensive support services than other settings [26]. As such, it is possible that some of our observed outcomes may not generalize to non-RWHAP settings. Second, the use of a demonstration project design for the initiative limited the amount of control we had over which practice transformations were implemented. Most sites implemented more than one practice transformation approach. They also varied considerably in the exact procedures used to achieve the different approaches. Although we were able to examine outcomes at sites that implemented each transformation approach, the comparisons are less rigorous than they would be in a randomized controlled trial (RCT) in which each site is assigned to use only one approach and to follow tightly specified protocols for achieving the desired changes. Third, although we are able to compare our findings against national data [9], we cannot draw rigorous conclusions about the role of contemporaneous temporal trends in our findings because we did not have true control condition as a point of comparison. Finally, there is the possibility of a Hawthorne effect, whereby clinical personnel who knew that they were under study were more motivated to make their projects a success.

Practice transformation is a potentially useful strategy for addressing anticipated workforce challenges among those providing care to PLWH. It holds the promise of optimizing the use of personnel and ensuring the delivery of care to all who need it, while not compromising—and potentially even enhancing—HIV care continuum outcomes. Approaches that maximize the HIV care workforce and enhance reliable client engagement in primary HIV care are of potential benefit for a clinic or healthcare facility that is straining to meet the demands for HIV care with its existing workforce. Approaches that promote share-the-care may have more limited impact on HIV care outcomes, specifically by improving retention in care. Future research should examine the use of practice transformations to address other areas of healthcare delivery affected by workforce shortages and to further optimize the potential benefits of such transformations for the delivery of HIV care.

Supporting information

S1 Text. STROBE statement—checklist of items that should be included in reports of cohort studies. STROBE, Strengthening the Reporting of Observational Studies in Epidemiology. (DOC)

S2 Text. Organizational assessment addendum items used in the analyses. (DOCX)

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