Service Category Definition - DSHS State Services Grant
September 1, 2015 - August 31, 2016

Local Service Category:	**Mental Health Services**
Amount Available**:**	**To be determined**
Unit Cost	
Budget Requirements or Restrictions **(TRG Only)**:	Maximum of 10% of budget for Administrative Cost.
DSHS Service Category Definition	Mental Health Services include psychological and psychiatric treatment and counseling services offered to individuals with a diagnosed mental illness, conducted in a group or individual setting, based on a detailed treatment plan, and provided by a mental health professional licensed or authorized within the State to provide such services, typically including psychiatrists, psychologists, and licensed clinical social workers. Mental health counseling services includes outpatient mental health therapy and counseling (individual and family) provided solely by Mental Health Practitioners licensed in the State of Texas. Mental health services include: • Mental Health Assessment • Treatment Planning • Treatment Provision • Individual psychotherapy • Family psychotherapy • Conjoint psychotherapy • Group psychotherapy • Psychiatric medication assessment, prescription and monitoring • Psychotropic medication management • Drop-In Psychotherapy Groups • Emergency/Crisis Intervention General mental health therapy, counseling and short-term (based on the mental health professionals judgment) bereavement support is available for non-HIV infected family members or significant others.
Local Service Category Definition:	**Individual Therapy/counseling** is defined as 1:1 or family-based crisis intervention and/or mental health therapy provided by a licensed mental health practitioner to an eligible HIV positive or HIV/AIDS affected individual. **Support Groups** are defined as professionally led (licensed therapists or counselor) groups that comprise HIV positive individuals, family members, or significant others for the purpose of providing emotional support directly related to the stress of caring for an HIV positive person.
Target Population (age, gender, geographic, race, ethnicity, etc.):	HIV/AIDS infected and affected individuals living within the Houston HIV Service Delivery Area (HSDA).
Services to be Provided:	Agencies are encouraged to have available to clients all modes of counseling services, i.e., crisis, individual, family, and group. Sessions may be conducted in-home. Agency must provide professional support group sessions led by a licensed counselor.

Service Category Definition - DSHS State Services Grant
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Service Unit Definition(s) **(TRG Only)**:	**Individual and Family Crisis Intervention and Therapy:** A unit of service is defined as an individual counseling session lasting a minimum of 45 minutes. **Group Therapy:** A unit of service is defined as one (1) eligible client attending 90 minutes of group therapy. The minimum time allowable for a single group session is 90 minutes and maximum time allowable for a single group session is 120 minutes. No more than one unit may be billed per session for an individual or group session. A minimum of three (3) clients must attend a group session in order for the group session to eligible for reimbursement. **Consultation:** One unit of service is defined as 15 minutes of communication with a medical or other appropriate provider to ensure case coordination.
Financial Eligibility:	Income at or below 300% Federal Poverty Guidelines.
Client Eligibility:	For individual therapy session, HIV positive or the affected significant other of an HIV positive person, resident of Houston HSDA. HIV positive client must have a current DSM diagnosis eligible for reimbursement under the State Medicaid Plan. Client must not be eligible for services from other programs or providers (i.e. MHMRA of Harris County) 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. Medicaid/Medicare, Third Party Payer and Private Pay status of clients receiving services under this grant must be verified by the provider prior to requesting reimbursement under this grant. For support group sessions, client must be either an HIV positive person or the significant other of an HIV positive person. Affected significant other is eligible for services only related to the stress of caring for an HIV positive significant other.
Agency Requirements **(TRG Only)**:	Agency must provide assurance that the mental health practitioner shall be supervised by a licensed therapist qualified by the State to provide clinical supervision. This supervision should be documented through supervision notes. Keep attendance records for group sessions. Must provide 24-hour access to a licensed counselor for current clients with emotional emergencies. Clients eligible for Medicaid or 3rd party payer reimbursement may not

	be billed to grant funds. Medicare Co-payments may be billed to the contract as ½ unit of service. Documentation of at least one therapist certified by Medicaid/Medicare on the staff of the agency must be provided in the proposal. All funded agencies must maintain the capability to serve and seek reimbursement from Medicaid/Medicare throughout the term of their contract. Potential clients who are Medicaid/ Medicare eligible may not be denied services by a funded agency based on their reimbursement status (Medicaid/Medicare eligible clients may not be referred elsewhere in order that non-Medicaid/Medicare eligible clients may be added to this grant). Failure to serve Medicaid/Medicare eligible clients based on their reimbursement status will be grounds for the immediate termination of the provider's contract. Must comply with the State Services Standards of Care. Must provide a plan for establishing criteria for prioritizing participation in group sessions and for termination from group participation. Providers and system must be Medicaid/Medicare certified to ensure that Ryan White funds are the payer of last resort.
Staff Requirements:	It is required that counselors have the following qualifications: Licensed Mental Health Practitioner by the State of Texas (LCSW, LMSW, LPC PhD, Psychologist, or LMFT). At least two years experience working with HIV disease or two years work experience with chronic care of a catastrophic illness. Counselors providing family sessions must have at least two years experience in family therapy. Counselors must be covered by professional liability insurance with limits of at least $300,000 per occurrence.
Special Requirements **(TRG Only)**:	All mental health interventions must be based on proven clinical methods and in accordance with legal and ethical standards. The importance of maintaining confidentiality is of critical importance and cannot be overstated unless otherwise indicated based on Federal, state and local laws and guidelines (i.e. abuse, self or other harm). All programs must comply with the Health Insurance Portability and Accountability Act (HIPAA) standards for privacy practices of protected health information (PHI) information. Medicare and private insurance co-payments are eligible for reimbursement under this grant (in this situation the agency will be reimbursed the client's co-payment only, not the cost of the session which must be billed to Medicare and/or the Third party payer). Extensions will be addressed on an individual basis when meeting the criteria of counseling directly related to HIV illness. Under no circumstances will

	the agency be reimbursed more than two (2) units of individual therapy per client in any single 24-hour period. Agency should develop services that focus on the Special Populations identified in the *2012 Houston Area Comprehensive Plan for HIV Prevention and Care Services* including Adolescents, Homeless, Incarcerated & Recently Released (IRR), Injection Drug Users (IDU), Men who Have Sex with Men (MSM), and Transgender populations. Additionally, services should focus on increasing access for individuals living in rural counties. Must comply with the Houston EMA/HSDA Standards of Care. The agency must comply with **the DSHS Mental Health Services Standards of Care**. The agency must have policies and procedures in place that comply with the standards ***prior*** to delivery of the service.

Service Category Definition - DSHS State Services Grant
September 1, 2015 - August 31, 2016

FY 2017 RWPC "How to Best Meet the Need" Decision Process

Step in Process: **Council**		Date: **06/09/2016**
Recommendations:	Approved: Y:_____ No: _____ Approved With Changes:_____	If approved with changes list changes below:
1.		
2.		
3.		

Step in Process: **Steering Committee**		Date: **06/02/2016**
Recommendations:	Approved: Y:_____ No: _____ Approved With Changes:_____	If approved with changes list changes below:
1.		
2.		
3.		

Step in Process: **Quality Improvement Committee**		Date: **05/19/2016**
Recommendations:	Approved: Y:_____ No: _____ Approved With Changes:_____	If approved with changes list changes below:
1.		
2.		
3.		

Step in Process: **HTBMTN Workgroup #2**	Date: **04/26/2016**
Recommendations:	Financial Eligibility:
1.	
2.	
3.	

Health Care: Current Reviews

Carvalhal, Health Care Current Reviews 2015, 3:1
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Commentary Open Access

Integrating Mental Health Care for People Living with HIV

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Introduction

While mortality from AIDS has been largely controlled in many countries through the use of antiretroviral therapy (ART), many physical and neuropsychiatric complications remain the focus of serious health concerns [1]. For over a decade, research has shown that rates of mental health problems may be as high as 50% in people living with HIV (PHAs) [2]. Despite the high prevalence of mental illness, psychiatric disorders are commonly under-diagnosed and under-treated in this population [3].

The relationship between HIV and psychiatric disorders is complex. HIV can stress the already compromised coping skills of the mentally ill; conversely, mental illness can affect risk behaviours and increase the likelihood of someone contracting HIV. HIV-positive individuals must also face the prospect of social stigma, long-term physical discomfort, illness and death [4]. Antiretroviral therapy has transformed the reality of HIV by reducing morbidity and mortality, but optimal results require close follow-up with providers and strict adherence to medication [3]. Psychiatric comorbidities are associated with poorer adherence to ART, leading to virologic and immunologic failure; co-morbidities may also impede the use of medical services and increase the physical and emotional demands on formal and informal caregivers [5].

The care of PHAs is increasingly complex and demands an innovative model of care delivery involving multidisciplinary teams and inter-professional collaboration [6]. In particular, patients with triple diagnoses of HIV, substance use and psychiatric disorders pose a challenge to treatment, especially in initiation and adherence to antiretroviral treatment due to a plethora of complex biological and psychosocial consequences [7]. In order to illustrate the complex world of co-morbidities in HIV patients, we will present the story of "Susan" (a pseudonym). We will then describe an integrated mental health care for people living with HIV at St. Michael's Hospital in Toronto, Canada. Integrated models of care are patient-centered, and they not only involve the psychiatrist as a consult with co-location of psychiatric and medical services, but also involve a shared responsibility for the care of all patients within a service [8]. Integrated models of care involving mental health and other health care professionals have demonstrated improved medical and mental health outcomes in medical complex patients including HIV-infected patients [8-11].

Susan's story

Susan was 35 year-old female patient when she arrived at the Emergency Department (ED) of St. Michael's Hospital. Originally from a small town in northern Ontario, she was staying with friends in Toronto. She sought help at the ED due to chronic abdominal pain. When Susan was told by the triage nurse about the wait time to see the doctor, she became quite upset and began to scream. Security was called, while Susan began to demand painkillers and refused to answer questions. After an extensive workup, the medical team discovered that Susan was experiencing liver failure. At this point, she began to cry and disclosed that she was HIV-positive and also had hepatitis C. She had known about these conditions for years, but had not sought treatment to avoid public knowledge of her conditions in her hometown. At St. Michael's Hospital, Susan was also diagnosed with disseminated *mycobacterium avium* complex infection, and with HIV-associated lymphoma and end-stage liver disease. Susan revealed that she had a long history of mental health problems, with previous diagnoses of Bipolar Disorder and Substance-related Disorder. She also revealed a history of childhood sexual abuse, injection drug use and prostitution. It became clear that Susan did not want to return to her small town. She had two small children under the care of her parents, and she was afraid to lose access to the children. Her family was not aware of her HIV-related problems.

This case can clearly illustrate the complexity of many HIV-infected patients. We would like to reflect on what could happen with Susan's case in many centers across Canada.

- Should her depressive symptoms increase during the hospital admission a Consultation-Liaison (CL) psychiatrist would be asked to provide consultation to the HIV team. However, the psychiatrist would likely have little experience with HIV.
- There could be a recommendation to start a specific medication. However, the CL psychiatrist would not be fully familiar with the antiretroviral therapy that Susan would soon be starting and potential drug-drug interactions.
- The HIV team would know that Susan would need psychiatric follow up upon discharge from the hospital. The discharger planner for the HIV inpatient unit would contact the psychiatry outpatient clinic and learn that wait times would be several months and in many center, only consultation would be provided and no guarantee of follow-ups.
- The HIV team probably would have serious concerns about how well Susan would adhere to ART. The team would also be worried about Susan's lack of social support and inability to navigate in a complex health care system.

An integrated model of psychiatric care

Over the last 10 years, the literature in the field of CL Psychiatry has been describing different models of mental health care delivery that were developed to meet the needs of medically ill patients. These models range from a more traditional approach in which psychiatric consultation is provided upon request (also known as "reactive") and the psychiatrist has no primary patient responsibility to more integrative models, in which there is a 'proactive' case finding and more systemic mental health involvement. The integrative model of care in

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CL includes also an important educational component that is executed formally and informally to build capacity within the medical team to better recognize and manage psychiatric disorders over time [8-12].

In our recent article "*Journeying with HIV Patients Across the Healthcare Spectrum – An Examination of a Seamless Model of HIV Psychiatry of a Large Urban General Hospital*" [13], we describe a model used in a large urban-setting tertiary hospital in Toronto, Canada, that offers an HIV Psychiatry service. St Michael's Hospital is an academic and research hospital with 467 acute inpatient beds and strong partnerships with more than 65 community organizations to provide care and ensure health equity to the marginalized and disadvantaged communities situated in the inner city of downtown Toronto. This integrative model of psychiatric care was implemented in this inner-city hospital to provide psychiatric care for some of the hardest to reach HIV patients (Figure 1). This model also was developed to improve access to psychiatric care and includes a terciary team based in the hospital, two family practices and three key community partners. After 2 years of implementation, the program has been increasing the number of referrals and early recognition of psychiatric disorders in the HIV population served by the hospital reducing also waiting time and increasing the number of patients receiving on going care. The model also has been providing a more effective working relationship with and strong support from all stakeholders to provide better care for complex patients. Ultimately, the model has been increasing engagement in the HIV care cascade and improved adhrence to antiretroviral treatment.

Let's go back to Susan

What happened with 'Susan' in the integrated model described in the recent article of General Hospital Psychiatry [13]? After Susan arrives at St. Michael's Hospital, (the following day), the team met and a psychiatrist (integrated to the HIV team) was assigned to assess the patient since she had a long history of Bipolar Disorder. The HIV team considered a trial with opiates to treat abdominal pain but they had concerns about her previous history of Substance-related Disorder. The nurse that admitted Susan the day before shared with the team that patient could sometimes be verbally abusive to staff. The team requested some guidance from Psychiatry on how to manage any anger outbursts and the best way to support the patient.

Susan was born in Toronto and moved to north of Ontario when she was 8 years old. She described her father as being verbally, physically, and sexually abusive. She got involved in prostitution from a young age and was further placed in foster care. She was adopted at age of 13 and ran away from home when she turned 18. She met the father of her children in a bar where she used to exchange sex for drugs. They moved in together and, at that point, he became emotionally manipulative and physically violent. Child protection became involved with her family during an episode of violence. Her parents had been supportive but, as described by Susan, they do it "the way they can, but they don't understand my life".

The team discussed Susan's pharmacological treatment in order to develop a safe, effective plan since many of the drugs used to treat Bipolar Disorder have important drug-drug interactions with ART. At same time, the social worker and one of the nurses were at Susan's room along with her parents that recently arrived at the Hospital. As per Susan's request, they provided some education regarding HIV after she had disclosed her HIV status to her family members.

After a long admission, Susan was ready to be discharged. At that point in time, she required nurse support for daily activities including bathing and was taking over 30 pills per day. The team came to a decision that she could not live independently yet and needed support to increase adherence to ART. She would be transferred to Casey House. Casey House is one of the community partners from St. Michael's Hospital that provides community programs including home nursing care and outreach. Founded initially as a hospice that provided palliative care for those in need of end of life support. As HIV

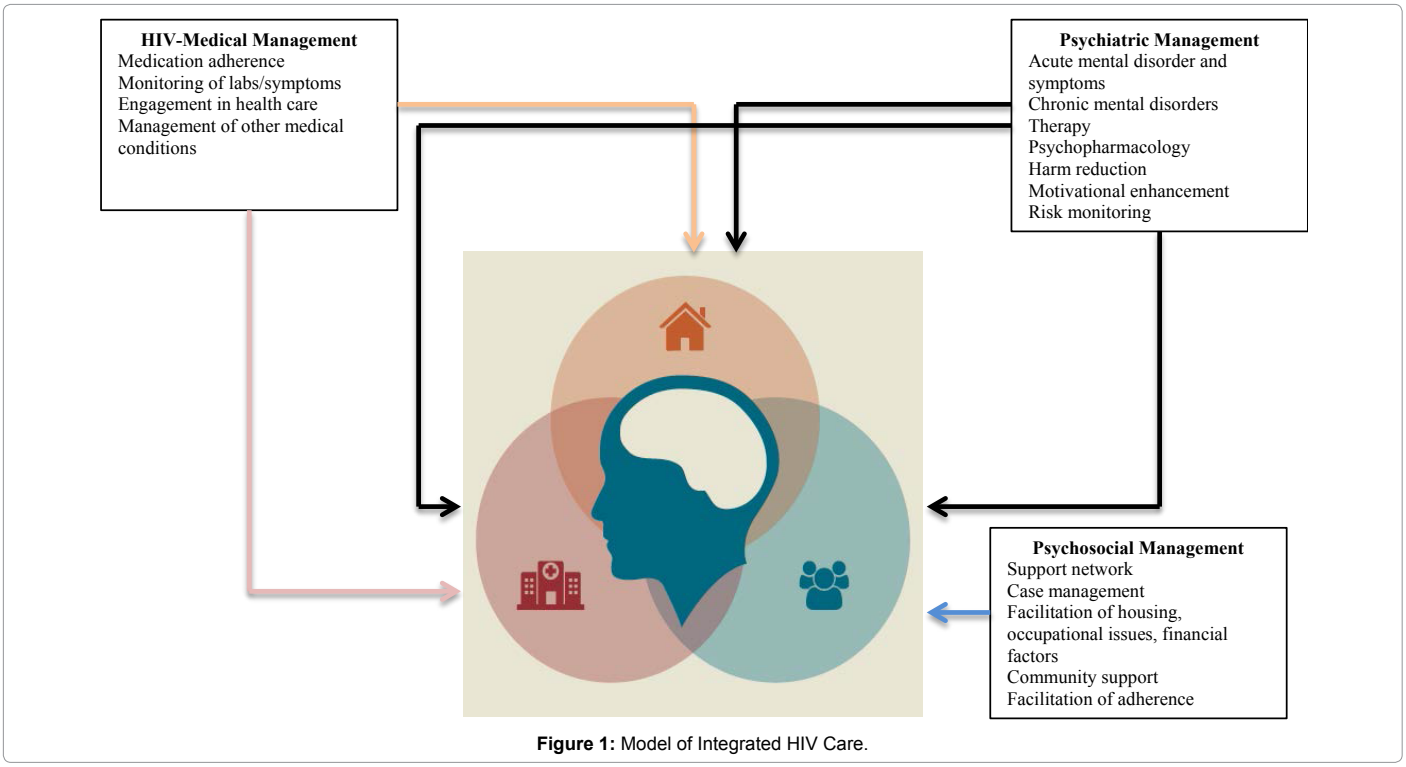

Figure 1: Model of Integrated HIV Care.

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evolved from a disease with high mortality to a chronic illness, Casey House has also changed the population served, currently provides care for patients with addiction and mental health, cognitive problems, and for those in need of community support. During her 6 months stay at Casey House the psychiatrist provided weekly follow-ups and helped the team to work with Susan, who at various occasions could be abusive and dismissive.

When Susan was about to leave Casey House, she was scheduled to receive follow-up care at HIV outpatient clinic and a family physician was arranged both part of St. Michael's Hospital. She still needed a great deal of support in the community and the psychiatrist advocated for her to be accepted by two other community partners from St. Michael's Hospital: McEwan Housing and Fife House. McEwan Housing is a supportive community support program for PHAs, who have mental health or addiction issues and are homeless or at risk of becoming so. It is the only housing program in Ontario dedicated to serving this highly vulnerable population. Fife House provides supportive housing and support services to PHAS. Through these two programs, Susan received housing, nursing support and intensive case management.

Fast forward - one year later - Susan has been stable, taking mood stabilizers and abstinent from drugs. She is adherent to the ARV treatment, CD4 has increased to 350 cells (from the initial 30) and viral load is undetectable. She still attends several medical appointments and is on the waiting list for liver transplant.

Discussion

Improvements in access to psychiatric services among patients certainly facilitated the engagement in HIV care and improved adherence to ART. Recently, the concept of HIV care cascade has emerged as a model that outlines the sequence of stages of HIV care that PHAs go through from initial diagnosis to achieving viral suppression [14]. Unfortunately, this sequence of steps is not seamless. Among people living with HIV, we know that not everyone is successfully diagnosed, linked to and engaged in care. The HIV continuum of care is one of the tools increasingly being used to determine how well the system is doing to engage and keep clients in care. The continuum is based on the successive steps that are needed for a person living with HIV to achieve an undetectable viral load, which is an optimal clinical endpoint. Strong engagement in care and undetectable viral load improves quality of life for the person living with HIV and reduces the risk of transmitting HIV to others [15]. Some people are lost in this continuum of care due to obstacles including difficulties to access care for mental health and addiction problems. In the integrated model of psychiatric care used at St. Michael's Hospital, HIV-infected patients with mental health problems have access to a system that is better equipped to respond to their unique psychosocial needs in order to improve the HIV care cascade. The multidisciplinary care approached used in this model reduce barriers to care for patients. When services are co-located or when linkages to external services are explicit, patients may be less likely to be lost to care. The ability to seek services in one space or being offered navigation between services that are not co-located may mean less planning for clients and may reduce the burden healthcare has on the lives of people with complex needs such being HIV and have addiction and mental health problems. The complexity of clinical needs among HIV-infected patients mandate treatment services that are comprehensive, integrated, continuous, and culturally responsive [16]. The global burden of mental health in HIV patients poses significant challenges to health care system. Management of mental illness and substance related disorders is emerging as a key element of risk reduction and amelioration in quality of life in PHAs. Ongoing research that looks at integrated care models for this population is necessary to provide recommendations on best practices for working with clients living with HIV.

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HIV MENTAL HEALTH TREATMENT ISSUES

HIV and People with Severe Mental Illness (SMI)

Serious mental illness among HIV+ patients

The prevalence of psychiatric disorders is relatively high among adults receiving care for HIV disease in the United States. "Severe Mental Illness" (SMI) refers to a wide range of psychiatric diagnoses that have common psychiatric symptoms which persist over time and are functionally disabling. They can affect daily living skills, family relations, educational attainment, work productivity, and social role. SMI includes schizophrenia, schizoaffective disorder, bipolar disorder, major depression, autism, and obsessive compulsive disorder. These disorders affect at least 2.8% of the U.S. population. No program for people with SMI can be considered comprehensive unless it incorporates services aimed at detecting and preventing HIV, and provides links to medical assessment and treatment for patients who are already infected.

How widespread is SMI among HIV+ patients?

Epidemiological trends in the HIV epidemic indicate the SMI may be the most vulnerable, disenfranchised subpopulation at risk for HIV infection. Rates of HIV infection and transmission among those with SMI are as much as 76 times higher than in the general population.

Studies of inpatient (residential) psychiatric patients in the Northeast have shown rates of HIV infection ranging from 4% among long-stay state hospital patients to 23% among those on an acute dual diagnosis unit for people with combined mental illness and alcohol/substance use disorders. Women were as likely to be infected as men. Unfortunately, the peer-reviewed literature contains little information about outpatients, and is silent on epidemiology in other U.S. regions.

One of the few non-hospital based studies found that 19% of men attending a psychiatric program located within a homeless shelter in New York City were HIV+. Advanced HIV disease (AIDS) was the leading cause of death in a sample of 320 patients between 20 and 40 years of age in a longitudinal study of individuals experiencing their first psychiatric hospitalization for a psychotic episode. This study, conducted in suburban and semi-rural Suffolk County, New York, suggested that HIV is a major issue even for psychiatric patients outside of cities known to have high HIV rates.

Why are people with SMI at increased risk?

Drug Use. Studies indicate that patients with SMI have lifetime rates of alcohol or substance use disorders of between 20% and 75%, depending on the sample studied. Studies focused on patients with SMI have found recent injection drug use in 1% to 8% of patients and past injection drug use in 5-20% of patients. Seroprevalence studies support the powerful link between HIV and injection drug use in this population. One study demonstrated that psychiatric patients with any alcohol or drug use diagnosis had elevated rates of sexually transmitted diseases, which are both co-factors in HIV transmission and markers of unprotected sex.

Sexual Behavior. Studies show that a majority of patients with SMI have been sexually active in the past year. Providers and policymakers often don't recognize patients' sexual activity despite its links to HIV risk behaviors, including:

- Low rates of condom use;
- Buying and selling sex;
- Poorly known partners of undetermined HIV status;
- Partners who have been identified as injection drug users or as having HIV;
- Multiple partners;
- Coerced sexual encounters;
- For women: partners who are bisexual men; partners who are violent and/or have alcohol/substance use disorders; and;
- For men: rates of same-sex sexual activity exceeds rate in the general population.

Environmental factors. Circumstances known to be common among people with severe mental illness that increase the risk of acquiring HIV infection include:

- Residing in urban areas with a generalized HIV epidemic;
- Being institutionalized in shelters, prisons, and hospitals where HIV is prevalent, rates of same-sex sexual activity are high, and condoms are usually unavailable;
- Poverty due to limited entitlements, which makes it hard to purchase condoms and access family planning services, and promotes exchanging sexual favors for shelter, food, etc; and;
- stigma, which, along with poverty, interferes with access to medical and family planning services.

Risk assessment and HIV testing

Many at-risk patients have never been tested for HIV. Four New York-based studies found that rates of detection varied from 12% in a state hospital setting to 68% on an acute psychiatric unit in a general hospital setting. Detection may vary with the intensity of medical oversight, and is clearly quite low in certain settings.

Risk assessment should always be incorporated into the psychiatric assessment of patients with

SMI. Forming an adequate therapeutic alliance between provider and
patient—ensuring confidentiality and using language comprehendible and comfortable for the patient—is needed to obtain accurate and candid information about sexual activity or drug use. HIV testing should be offered routinely to patients who are pregnant, have risk histories or medical findings that suggest HIV infection, or are being admitted to hospitals with more than a 1% HIV seroprevalence. Careful pre- and post-test counseling is important, and when appropriate, providers who know the patient well should be involved.

Access to medical care/reproductive services

Patients with SMI often find it hard to access adequate medical care. It is well known that this population has higher morbidity and mortality with common medical illnesses. With respect to HIV/AIDS, it is important to ensure access and integration of medical, mental health, alcohol/substance use, and reproductive/family planning services. Changes in HIV+ patients' mental states require medical assessment to rule out organic causes.

Adherence

Adherence has long been a focus in treating people with SMI. The medical literature does not support the common assumption that this population is less likely than the general population to properly take prescribed medication. Psychiatric patients are familiar with stigma as well as the emphasis on maintenance medication, so it may be easier for them to accept having a second stigmatizing illness that requires ongoing medication management. Even patients in homeless shelters can follow antiretroviral regimens when all the necessary supports are in place. A 2009 study found that HIV+ patients with psychiatric disorders were more likely to adhere to HIV treatment when they had regular mental health care visits.

Patients with SMI need to be assessed individually and without preconceived bias regarding their ability to follow an antiretroviral regimen. It is essential first to stabilize their psychiatric condition before starting an antiretroviral regime. Involving significant others and using directly observed therapy (DOT) are useful adherence strategies. As with other populations, only patients who are ready to adhere should be started on antiretrovirals, since intermittent use leads to the dangerous problem of viral resistance.

Education and training

Both patients and providers need continuous updates about HIV. Educational materials can be provided to patients easily and inexpensively, but knowledge must be paired with skills training. It is also essential to have administrative support for education, adequate risk assessment, and preventive interventions.

Prevention

Primary prevention efforts—including skills-building and rehearsal of safer strategies such as correct condom use—are effective for people with SMI. These skills must be reviewed repeatedly with patients to maintain gains. It is important to provide condoms in both institutional settings and for the majority of outpatients who live well below the poverty level. Access to clean needles and syringes is important for those who inject drugs. Secondary prevention efforts aimed at decreasing the morbidity and mortality associated with HIV must include risk assessment and HIV antibody testing to identify infected patients, better access to medical care, and efforts to promote adherence to antiretroviral treatment.

Psychopharmacology

The combined medical treatment of HIV infection and severe mental illness raises concerns about the psychopharmacologic management of patients. The literature suggests that most psychotropic drugs can be used safely, though the dosage may need to be adjusted depending on the stage of HIV disease, the presence of neurocognitive impairment, and drug-drug interactions caused by competitive metabolism in the liver's cytochrome P-450 system. Of note in the treatment of patients with combined psychotic illness and late-stage HIV disease (AIDS) is that standard neuroleptics, particularly such high-potency medications as haloperidol, can be associated with severe side-effects, especially extrapyramidal symptoms (movement disorders). These include parkinsonism that is unresponsive to usual treatments, and the rapid onset of neuroleptic malignant syndrome or tardive diskinesia. It is helpful to use the lowest possible doses and select the newer "atypical" antipsychotic medications.

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About this Fact Sheet

This fact sheet was updated by John-Manuel Andriote, based on an earlier version written by Francine Cournos, M.D., in collaboration with the APA Commission on AIDS. For more information contact American Psychiatric Association, Office of HIV Psychiatry, 1000 Wilson Blvd., Suite 1825, Arlington, VA 22209; phone: 703.907.8668; fax: 703.907.1089; or e-mail AIDS@psychiatry.org. Visit our web site at www.psych.org/AIDS.

HIV MENTAL HEALTH TREATMENT ISSUES

HIV and Anxiety

One of the most common, treatable psychiatric conditions.

Feelings of anxiety are a normal, healthy response to the diagnosis, onset, or progression of HIV infection. But it's important to recognize the difference between this type of anxiety and the sort that signals a clinical disorder. HIV itself does not cause anxiety disorders, but HIV+ people tend to experience more anxiety than the general population. Certain medications used to treat HIV can also cause anxiety symptoms. Fortunately, anxiety disorders are among the most treatable of psychiatric conditions, and respond well to pharmacological and nonpharmacological treatment.

Why are anxiety disorders a concern for HIV+ people?

People living with HIV can experience symptoms of anxiety across the spectrum of anxiety disorders. Adjustment disorder is the most common psychiatric disorder that manifests as anxiety, and is common after receiving an HIV diagnosis.

The other major types of anxiety disorder are panic disorder and agoraphobia, social phobia and other phobias, obsessive compulsive disorder (OCD), post traumatic stress disorder (PTSD), generalized anxiety disorder (GAD), acute stress disorder and anxiety disorder due to a general medical condition.

HIV+ people experience some anxiety disorders, such as OCD, no more frequently than those who do not have the virus. But the experience of having HIV can prompt or exacerbate other disorders, such as PTSD, especially when someone has an underlying risk for them.

Anxiety can present in a variety of ways, including shortness of breath, chest pain, racing heart, dizziness, numbness or tingling, nausea or the sensation of choking. When there are no underlying medical explanations for these symptoms, clinicians are advised to consider an anxiety disorder as the cause.

Anxiety disorders can seem to flare up at key moments in the experience of HIV disease, such as at the time of initial HIV diagnosis, diagnosis with an opportunistic infection, a declining CD4 count or a "blip" in viral load, or any other reminder of ongoing HIV infection. It's helpful to recognize that these experiences may trigger anxiety, even symptoms of panic disorder and depression, for an HIV+ person.

Besides the discomfort of anxiety disorders, they can interfere in an HIV+ person's overall success in managing HIV because they are a major cause of nonadherence to medication.

How common are anxiety disorders among HIV+ people?

A person who has anxiety lasting longer than six months, and who has excessive worries is typically diagnosed with a general anxiety disorder. The disorder has been noted in 15.8% of HIV+ persons, compared with only 2.1% of the general population.

Some 10.5% of HIV+ people, compared to 2.5% of the general population, have experienced panic disorder, which can be associated with viral infections, cocaine use disorder, and major depressive disorder. There is also a higher rate of posttraumatic stress disorder (PTSD), which may be related to a history of trauma, physical or sexual abuse.

Anxiety disorders among HIV+ people range from 2% - 40%, the wide margin between the figures reflecting different ways of collecting information. Overall, however, as HIV-related illnesses become more advanced, and HIV+ people live longer because of effective treatment, the rate of anxiety disorders seems to increase.

HIV+ women experience higher rates of anxiety compared to the general population. One study found 37% of 361 women had high anxiety, mostly related to HIV stigma, reproductive health worries, or having experienced judgment from their family and friends for trying to become pregnant. Being in a romantic/sexual relationship, older age, and undetectable HIV viral load were associated with low anxiety.

Who is most at risk for anxiety disorders?

Anxiety disorders are a serious concern for HIV+ people who don't have good coping strategies and a strong social support network, such as family, friends, or a faith community. Individuals with a history of abuse—physical, sexual, emotional—are more likely to have an anxiety disorder.

People who have unresolved grief, whatever the source, should be screened for anxiety. Those with a personal or family history of anxiety disorders also are at higher risk for developing them.

How are anxiety disorders diagnosed?

A person with HIV who appears to have symptoms of an anxiety disorder should be given a thorough medical evaluation that includes taking a history of anxiety symptoms to determine onset, frequency, and severity. The interviewing clinician should ask about stressful life events, family history, drug and alcohol use (past and present), and any medications the patient is taking.

A complete diagnostic evaluation includes testing thyroid, liver, and kidney function, and evaluating for other psychiatric disorders associated with comorbid anxiety (e.g., depression).

Certain neuropsychiatric disorders that are common in people with advanced HIV disease (AIDS) must be ruled out before diagnosing anxiety, particularly HIV-associated dementia which can include anxiety. Delirium also commonly features anxiety and agitation. It's especially important to treat the delirium and avoid using anti-anxiety medications, which can have serious adverse affects.

A host of general medical conditions are associated with anxiety and must also be ruled out during the diagnostic process. These include fever, dehydration and metabolic complications, CNS opportunistic infections, neurosyphilis, respiratory conditions, endocrinopathies (problems with the endocrine system), cardiovascular disease, and hyperventilation syndrome.

A number of HIV-related medications can cause anxiety as a side effect, especially at first. These include acyclovir, antiretrovirals (e.g., efavirenz), corticosteroids, isoniazid, interferons, interleukin-2, and pentamindine. Anxiety is also a side effect of a variety of medications used for other psychiatric complaints (e.g. depression, delirium). In both cases, the anxiety-producing medication should be replaced. If this isn't possible, the anxiety should be treated, preferably with nonpharmacological methods.

There are some important tools available to help in the accurate diagnosis of anxiety disorders. Physicians can use the Structured Clinical Interview for DSM III-R Non-Patient Version HIV (SCID-NPHIV), and the Modified Hamilton Anxiety Rating Scale. Both include a focus on anxiety that can be specifically triggered by the experience of living with HIV.

What are appropriate treatments for an HIV+ person suffering from an anxiety disorder?

There are three different methods used to successfully treat anxiety disorders: pharmacological, nonpharmacological, or a combination of the two. Each patient's experience of an anxiety disorder is unique and must be treated as such.

Although many anti-anxiety medications are effective, there are also a number of good nonpharmacological treatments to choose from. When someone suffering from anxiety disorder is already taking a variety of medications, or there is concern about potential complications or interactions between medications, it may be preferable to pursue a nonpharmacological approach.

Medications used to treat anxiety disorders include SSRIs; benzodiazepines, the most commonly used but potentially causing withdrawal symptoms when stopped; venlafaxine; and buspirone. Other anti-anxiety agents that can be effective include antihistamines, beta-adrenergic blocking agents, neuroleptics, tricyclic antidepressants. It's important to consider drug-drug interactions and potential side effects if the treating physician chooses to treat anxiety with one of these medications.

Nonpharmacological treatments of HIV-related anxiety include muscle relaxation, behavioral therapies, acupuncture, meditation techniques, self-hypnosis and individual imagery psychotherapy, cognitive-behavioral therapy, psychoeducation, aerobic exercise, and supportive group therapy.

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About this Fact Sheet

This fact sheet was revised by John-Manuel Andriote, based on an earlier version by Kerry Flynn Roy in collaboration with the APA Commission on AIDS. For more information contact American Psychiatric Association, Office of HIV Psychiatry, 1000 Wilson Blvd., Suite 1825, Arlington, VA 22209; phone: 703.907.8668; fax: 703.907.1089; or e-mail AIDS@psych.org. Visit our web site at www.psychiatry.org/AIDS.

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Depression in the Aging HIV Infected Population

Clinical Recommendations January 26, 2016

- Depression is a common co-morbidity in older patients infected with HIV
- Depression is associated with increased risk taking behavior
- Cognitive impairment may coexist with depression compounding the difficulty in diagnosis
- Screening for depression using the Geriatric Depression Scale or the Montreal Cognitive Assessment should be done
- SSRI drugs are the mainstay of treating depression in this population
- Community support services are important in the treatment strategy

An estimated 50% of HIV infected individuals in the United States are over 50 years of age, with 15-25% of new infections diagnosed after the age of 50 [1, 2]. Since 1993, the CDC has designated as "older" HIV patients > 50 years old as a statistical definition, as HIV accentuates the aging process due to the increased medical comorbidities and decreases in physical and mental functional capacity [3, 4].

Sexual activity and substance use increase the risk for acquiring HIV. Depressed mood and cognitive impairment are associated with increased risk taking behavior. Depression may also mediate the effectiveness of interventions to decrease secondary transmission [5]. Denial about the older population being sexually active or using substances often leads to lack of counseling or screening for HIV. Older men and women may not recognize the risk for getting infected [6], especially as HIV has no longer been perceived as a lethal illness and is not as apparent in the press or publications accessed by older people.

Among MSMs even moderate levels of depression increase the risk for acquiring HIV [7]. MSMs continue to be the largest subgroup of HIV infected people in the US, even over age 50. In particular, white men who have sex with men constitute the largest demographic group of older HIV infected persons, although this may change as younger men of color age, particularly Black and Hispanic men, who are disproportionately represented among younger people with HIV. Intravenous drug users make up about 15% of older HIV infected people. Women who have sex with HIV infected men constitute the largest group of older women with HIV [8].

Depression is the most common of mental health disorders in all people infected with HIV, with some studies suggesting that older HIV patients have increased risk for both depression and cognitive impairment [9]. With age comes increased medical comorbidity that may present with depressive like symptoms such are decreased energy, libido and appetite, sleep disruption, and decreased mentation [10]. Older people are also more vulnerable to the inflammatory changes in the CNS, and side effects of antiretroviral therapies (ART) may precipitate or worsen cognition, mood and daily functioning [11-13]. ART in the older population may overlap with neuropsychiatric effects of HIV itself in the CNS [9, 14, 15]. Older patients are at risk for increased rates of toxicities due to ART such as lipodystrophy, dyslipidemia, peripheral neuropathy, metabolic syndrome, and endocrine and pancreatic dysfunction. Older patients with HIV are more likely to report symptoms characteristic of somatization, increased life stress HIV burden, decreased access to care, as well as depression [16].

With the advent of ART many older people infected with HIV in the pre-ART era (who

survived long enough to benefit from multidrug treatment) have been living with HIV for a two decades or more. They may have established social support networks and/or be engaged in HIV community based organizations while others may be socially isolated, abandoned by friends and family, and affected by ageism. Health care access continues to be significantly problematic in ethnic and racial minorities. One study reported that Hispanics with HIV had higher levels of declining health and increased depression attributable to discrimination. Health care disparities for Hispanics with HIV were five times more prevalent than for non-Hispanic whites.

Those who were infected before the advent of ART may have not expected to survive, and may be unable to work, with limited income, dramatically changing their social status and future orientation, having waited to die only to be "resurrected" after years of illness with AIDS. Many have watched the inexorable decline in significant others or friends who did not survive long enough to benefit from treatment. Repeated losses and unremitting grief increase the risk for acute and chronic depression.

There may be significant differences in the psychosocial supports for older men and women. Gay men who have lived within the gay community in urban areas may have more supports than straight men and women who did not develop social supports early on in community based organizations. Furthermore, women with children may have hidden their HIV infection from family.

Newly infected people over 50 may represent different psychological profiles. Some were diagnosed with HIV (or AIDS) having not expected to be at risk. With the absence of regular HIV screening in the older population, the discovery of HIV infection may be due to illnesses secondary to immunological decline. Others may have weathered the earlier years of the AIDS epidemic by shutting down sexually and isolating, only to get infected in later years, fatigued by years of safer sex behavior. Many newly infected remain quite unaware of HIV network resources and isolated due to the stigma associated with sex and/or substance use in the older population. Some are diagnosed late in the illness and may be overwhelmed with the medical issues associated with low CD4 count such as opportunistic infections or neoplasms. A new diagnosis of HIV in older patients may complicate already existing medical and psychiatric conditions that mediate depressed mood. Untreated depression increases non-adherence to ART and HIV treatment, increasing morbidity and mortality [5, 17-19]. Of people triply diagnosed with HIV, substance use, and psychiatric disorders 72.9% have been shown to meet criteria for major depressive disorder [20].

Cognitive Impairment

Confounding the diagnosis of depression in the older HIV infected population is the increased prevalence of cognitive impairment compared to the non- HIV infected population. The risk for cognitive impairment increases with age in the general population. Elevated rates of cognitive impairment have been shown in the HIV infected population independent of age, pre- and post-ART [21, 22]. The impact of cognitive impairment may be initially subtle, affecting adherence to medications and treatment, and may be confused with other aspects of normal aging, such as forgetfulness. Cognitive impairment due to HIV in the CNS can present with changes in personality, lethargy, affect dysregulation, and depressive symptoms. Depression may also affect neurocognitive assessment [23]. Increased mood disturbance is significantly related to poorer cognitive functioning, particularly in the domains of reasoning, speed of processing, psychomotor speed and visuomotor coordination [24]. Self-reports of cognitive difficulties may be more indicative of depression than cognitive impairment due to HIV in the CNS.

Pro-inflammatory cytokines have been studied in the pathophysiology of affective disorders [25]. Studies have shown the impact

of neuroinflammation in HIV related disorders. This is of particular importance in depression, as neuroinflammation has been documented in depression with or without HIV [26]. Depression may affect and /or be affected by the elaboration of pro-inflammatory cytokines influencing diverse processes for regulation of mood [27, 28]. Hypothalamic-pituitary-adrenal activation, also involved with depressed mood, has been documented in the non- HIV infected person [29] and may be present in HIV infected people who are at risk for higher prevalence rates of endocrine disorders. Many of the comorbid conditions of the older population such as coronary disease, or diabetes, are associated with inflammatory processes and increased prevalence of depression. Importantly, increased neuro-inflammation appears to be part of the mechanism for neurocognitive impairment in the HIV infected person, even in persons with suppressed peripheral viral load.

Assessment of the Older Person with HIV

Symptoms of low mood, or depressed feelings are seen in the older person with HIV, and may represent psychological, social, and/or biological disorders. Symptoms must be assessed in the overall context of a person's social, cultural, economic, psychological and biological conditions [Table 1]. Depression in

Table 1: Depressive Symptoms: Differential Diagnosis

Biological	Psychological	Social	Cultural/ religious factors
Major depression	Dysthymia	Social isolation	Homophobia
Cognitive disorders	Adjustment disorder with depressed features	HIV stigma/ homophobia, transphobia	Antipsychiatry beliefs
Hypothyroidism	Personality disorders	Lack of parity for mental health treatment	Family rejection
Hypogonadism	Grief, bereavement,	Financial stress	Use of alternative treatments
Addison's Disease	Survivor's guilt	Housing/ food insecurity	
Addictive disorders	Decreased physical and/or mental function	Lack of access to health care in native language; undocumented status	
Cardiac disease	Illness burden		
Diabetes Mellitus	Shame of infection		
Neurotoxicities of medications or adjunctive treatments			
Vitamin deficiency: B12			
Syphilis			

the older person may be difficult to distinguish from the somatic symptoms of HIV disease itself, which may delay the diagnosis of depression and increase the risk for the transmission of HIV due to inadequate adherence to ART as well as increase the functional impact of any cognitive impairment that may be present [30].

An appropriate standard measure for depression, such as the Geriatric Depression

Table 2: Treatment for HIV Related Depression

Goals of treatment:

- Decrease social isolation
  - Encourage engagement in HIV community support services where available
  - Connect over the internet with HIV support services
- Identify psychological issues potentiating depressed mood:
  - Attending to loss of function and social supports
  - Treatment for grief and bereavement
  - Shame of acquiring HIV in older years
  - "safer sex" fatigue
- Increasing physical activity [increases BDNF that increase neurotransmitter activity]
- Pharmacological interventions
  - Use of antidepressants that minimally affect the CYP 450
- Combination of Cognitive Behavioral Therapy and medication [most evidence based treatment]
- Use of family therapy to reconnect older people with support systems

Support maintenance of cognitive reserve:

- Reduce alcohol and substance use (illicit or prescribed)
- Improving nutrition
- Attention to treatment of co-morbidities
- Increasing social contact and engagement of cognitively stimulating activities
- Applying cognitive remediation therapies
- Using psychopharmacological interventions [e.g. psychostimulants]

Scale, that minimizes the impact of somatic depressive symptoms should be used in assessing the older person infected with HIV. Assessing daily function, and cognition as well as social factors allows for a truly bio-psychosocial treatment plan.

While there are screening tools available that may provide some indications of cognitive impairment such as the HIV Dementia Scale, International Dementia Scale, or the Montreal Cognitive Assessment (MoCA), only a complete neurocognitive battery can demonstrate the more subtle changes over time. One study reported the MoCA as a useful screening tool in the older HIV infected population, as it examines both cortical and subcortical domains of function [31]. Assessment of real world function is important to determine the level of activity and impairment that is present in the older patient with HIV [32-34].

Treatment of the Older Person with HIV

A comprehensive approach is essential in treating the older person who is depressed and HIV positive (Table 2). All HIV infected patients should be screened for depression, as it is an independent factor affecting morbidity and mortality. In the older population especially, depression and mild to moderate cognitive impairment are often difficult to differentiate, and providers should develop a standard screening protocol that examines both mood and cognition. Since both depression and cognitive impairments may decrease medication and treatment adherence, a multimodal approach is essential. Particular attention should be paid to the psychosocial context, as older patients are more likely to be isolated, even from family, because of the stigma of HIV. Important psychosocial and economic issues should be considered in the older patient with limited resources include the impact of food and housing insecurity, increasing risks for depression and anxiety.

The most studied approach to the treatment of depression generally is a combination of antidepressant medication and cognitive behavioral therapy. There are few randomized controlled studies of most antidepressants, although there is clear support for the use of medication in HIV related depression. Antidepressants that minimally affect the CYP 450 isozyme system are preferable by reducing the risk for drug interactions that reduce viral suppression. Psychostimulants have been used in patients with depressed mood and mild cognitive impairment. Although effective for the treatment of depression in HIV as in the general population, caution must be used with tricyclic antidepressants due to side effects and drug interactions, which are more significant in the older population. Antipsychotic medications should be avoided in the absence of psychosis in order to reduce the risks for metabolic syndrome. Drug-drug interactions may be more common in older patients due to decreased renal and hepatic clearance, especially in co-occurring HCV and/or HBV infection. Benzodiazepines should be used with great caution in the older patient with HIV. SSRI's are often effective in managing anxiety, especially in the context of co-occurring depressive symptoms. Some recent studies have suggested that SSRI's may be protective of inflammation [35].

In addition to the medical management of depression, community support services, psychotherapy, individually or in groups can decrease shame and isolation, and increase adherence to care. Problem solving therapeutic interventions may help older patients identify both emotional and functional needs. Although more research is needed, there is growing evidence that exercise throughout the life cycle may increase brain derived neurotropic factor (BDNF) and confer some cognitive protection [36]. In addition to the medical management of depression, community support services, psychotherapy, individually or in groups can decrease shame and isolation, and increase adherence to care. Problem solving therapeutic interventions may help older patients identify both emotional and functional needs. Although

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