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Study Protocol Project RHAE: a pilot study of Rapid HIV treatment initiation, Access and Engagement in care

NCT03512964

1. Study Procedures

The study will enroll for a total of 12 months. Projected enrollment is 32 newly diagnosed patients and previously diagnosed patients not in care. As of May 8, 2017 the Moore clinic HIV practice will incorporated into a new clinic, the John G. Bartlett Specialty Practice (JGBSP). Throughout the rest of this protocol, activities related to this practice will be referenced as the JGBSP clinic.

Patient recruitment

We will utilize existing HIV linkage to care services for newly and previously diagnosed patients identified at the Johns Hopkins East Baltimore campus, the JGBSP clinic and at the BCHD STD clinics to explore the feasibility and acceptability of RHTI in these settings. All patients identified in the Hopkins ED, Johns Hopkins inpatient HIV service, the JGBSP clinic and BCHD STD clinics who are newly diagnosed with HIV (test positive by 3rd or 4th generation HIV test or detectable HIV viral load with no previously documented positive HIV test by medical record and/or self-report) and patients with previous HIV diagnosis but by self-report are not in care and not on ART (> six months without HIV care and ART) will be referred to the Rapid HIV treatment initiation, Access and Engagement in care (RHAE) Research Assistant (RA) by call or text to a dedicated smart phone. At the time they are identified as needing a referral for HIV treatment services, a brief description of the study will be given to potentially eligible patients and a referral to the RHAE RA will be made with patient permission. In the ED, this referral will be made by ED HIV testing team members and/or ED clinicians. In the JGBSP clinic, the referral will be made by social work staff, nurses and/or medical providers. In the BCHD STD clinics, referrals will be made by patient advocates and/or medical providers. The linkage team will provide linkage services as per usual. In situations when potentially eligible patients present for clinical care when a Project RHAE staff member is not available to accept a referral and/or leave the clinical area before learning about the study, referring providers and staff who engage with the patient for treatment after the initial interaction will present the study and elicit interest and permission for referral at a later date in person or by phone. This may include patients who have been hospitalized at Johns Hopkins Hospital in which case the study team will discuss potential enrollment with the inpatient care team prior to approaching the patient for consent.

Patient consent, survey administration

After referral to the RA, the RA will describe the study to the patient and assess patient eligibility. A study clinician will confirm patient eligibility and the RA will consent patients who wish to enroll. Once consented, the RA will collect contact information and administer a standardized enrollment survey (Table 1). A tablet or computer will be used to record survey responses which will be uploaded to a secure REDCap Database. Domains assessed include illicit drug and alcohol use, depression and panic symptoms, stigma, quality of life, HIV knowledge and social support. The survey will assess anticipated barriers and facilitators to HIV care and adherence to medication and acceptability of RHTI. Date, time and location of HIV clinic follow up will be noted. To ensure adequate ability to obtain follow up information, patients referred to HIV care outside of Johns Hopkins and/or BCHD STD clinics will not be eligible for enrollment.

If the patient is eligible but declines enrollment, he or she will be offered enrollment in the survey-only study of RHTI (IRB00110075). A log of potentially eligible patients

who are not enrolled in the study will be kept by the Project RHAE study staff. This log will be kept in a secure Johns Hopkins network data base and will not include protected health information. The log will include: age, clinical site, whether the patient was newly or previously diagnosed, HIV risk factor, reason patient did not enroll, and if the patient enrolled in the survey-only study. Protected Health Information of patients referred by clinical staff who are not eligible or choose not to consent to enrollment will be destroyed.

Implementation of RHTI protocol at the Johns Hopkins ED and JGBSP clinic

Patients recruited from the Johns Hopkins ED and/or JGBSP clinic social work will complete his/her ED/social work visit and will then be seen in the JGBSP clinic by a JGBSP clinic clinician for a medical HIV intake visit and prescription with receipt of ART starter pack. Patients recruited from the BCHD STD clinics will see be seen in the BCHD STD by a clinician for medical intake visit and prescription and receipt of ART starter pack. The clinicians who evaluate patients and initiate treatment will be those who provide continuity HIV care in the clinics. The date and time of the medical visit to initiate treatment at JGBSP clinic and BCHD STD clinic will be as soon as possible and the visit may occur as soon as immediately after recruitment (which is preferable) or may occur on a day other than the day of recruitment if the initial encounter occurs while the clinic is closed, is too late in the day to complete before clinic closes or patient prefers an appointment at a later date. The medical intake will take place no more than one week after consent is obtained. The intake will be as per usual in the JGBSP and BCHD HIV clinics. The following clinical labs will be obtained at the time of enrollment, as part of standard of care: CD4 count, HIV viral load, HIV genotype, CBC, comprehensive metabolic panel, urinalysis, viral hepatitis, syphilis serologies, GC/CT screening based on risk. As part of standard of care, clinicians and/or clinic staff (registered nurse, pharmacist) provide counseling on medication education, potential side effects and adherence. ART prescriptions will be written for at least 14 days of an antiretroviral medication regimen chosen at the discretion of the prescribing provider. Prescriptions for more than 14 days of medication can be prescribed at the discretion of the prescribing provider. Providers in the JGBSP and BCHD HIV clinics have expertise in prescribing antiretroviral medications and caring for HIV-infected patients and they will take into consideration adverse drug-drug interactions with other patient medications and patient comorbidities when choosing the starter pack of antiretroviral medications as per standard of care. Providers will also educate patients about the antiretroviral regimen and dosing recommendations as per standard of care. Pill boxes will be offered with each starter pack. At each clinic, patients are provided with 24/7 clinic contact information should he/she experience adverse side effects to medication and/or experience a medical emergency. Prescribing providers are responsible for reviewing the laboratory results and will follow up with the patient on any regarding any abnormalities requiring urgent/emergent medical attention including need to discontinue antiretroviral medication due to contraindications to a component in the regimen such as estimated creatinine clearance <30 mL/min (a contraindication with tenofovir alafenamide) or due to HIV resistance to a component of the antiretroviral regimen. Medical follow up will be scheduled within two to four weeks.

Medical visits will be documented and billed as part of the patient's medical care. HIV intake, baseline labs and prescription of ART is standard of care for HIV treatment. RHTI accelerates the usual time it takes to receive a medical evaluation for HIV and ART prescription but does not involve investigational medications or procedures. Date of

consent and enrollment in the study will be documented in the medical record by a member of the research team.

For patients who enroll in the study who are admitted to the hospital from the Johns Hopkins ED, research physicians will consult with the inpatient attending to discuss either initiating ART while inpatient, with inpatient ID consultation if admitted to a non-ID service, and/or discharging the patient with a starter pack of ART and close follow up in the JGBSP clinic after hospital discharge (within one week of discharge).

Patients at Johns Hopkins and BCHD will engage in a social work intake as per usual. This intake includes a brief psychosocial and insurance assessment and urgent referrals for psychosocial services and/or initiation of medication and/or insurance coverage as needed. Intake also includes Ryan White eligibility determination. Ryan White eligible patients who are uninsured or need copay assistance at the JGBSP clinic and BCHD STD clinics will receive a Ryan White voucher to cover the full cost or copay of the antiretroviral medication prescription.

Study participants will receive $25 cash payment for study enrollment. It is estimated the consent process will take about 30 minutes, the survey portion 45 minutes, and the medical intake, phlebotomy, social work intake and receipt of medications will take two hours.

At week four, all patient study participants will be contacted by the RA to repeat questions from the enrollment survey in addition to questions about medication adherence and patient satisfaction with the HIV linkage team (Table 1). Study participants will receive $50 for completion of the week four survey. HIV linkage and care outcomes data will be extracted from the medical record.

Electronic medical record data extraction

HIV linkage and care outcomes will be collected for 48 weeks after enrollment and conducted through chart review of the electronic medical record at each site (Appendix 2). Data will be entered in REDCap Database by RHAE RAs through a tablet.

2. Inclusion/Exclusion Criteria

Patient Eligibility

Inclusion Criteria:

- Men and women 18 to 65 years of age
- English speaking
- Patients identified in the Hopkins ED, Hopkins JGBSP clinic or BCHD STD clinics who are newly diagnosed with HIV (test positive by 3rd or 4th generation HIV test or detectable HIV viral load with no previously documented positive HIV test by medical record and/or self-report) and patients with previous HIV diagnosis but by self-report are not in care and not on ART (> six months without HIV care or ART)

Exclusion Criteria:

- Women who are currently pregnant or planning on becoming pregnant
- Adults lacking the capacity to consent
- Patients referred to HIV care outside of Johns Hopkins and/or BCHD STD clinics
- Patients with estimated creatinine clearance <30 mL/min at last documented laboratory testing in the available medical record at site of referral, self-report of

chronic kidney disease without documented creatinine within the last three months
- Patients judged by clinic or study staff to be physically or emotionally unable to provide consent or participate in all study procedures

3. Drugs/ Substances/ Devices

Prescriptions for at least fourteen days of the antiretroviral medication regimen chosen by the prescribing provider will be prescribed and dispensed to participants. These FDA-approved drugs will be used according to the FDA-approved indication. Providers in the JGBSP and BCHD HIV clinics have expertise in prescribing antiretroviral medications and caring for HIV-infected patients and they will take into consideration adverse drug-drug interactions with other patient medications and patient comorbidities when choosing the starter pack of antiretroviral medications as per standard of care.

4. Study Statistics

Measures and Outcomes

Demographic and psychosocial information; barriers, facilitators and acceptability of HIV treatment and RHTI:

Table 1. Patient survey instruments and time of collection (Appendix 1)

Domain	Instrument	Collection	
		Baseline	Week 4
Substance use			
Drug use	NIDA ASSIST	X	X
Alcohol use	AUDIT-C	X	X
Mental health			
Depression and panic	PHQ-8 and PHQ-A	X	X
Quality of life	EuroQOL-5D	X	X
Psychosocial			
Social support	MOS-4	X	X
HIV stigma	HIV stigma scale (Earnshaw)[11]	X	X
Self-efficacy	HIV-related self-efficacy (Johnson) [12]	X	X
HIV knowledge			
HIV knowledge	ART knowledge questionnaire (Balfour, modified)[13]	X	X
Adherence			
Medication adherence	ACTG adherence questionnaire: AACTG, VAS, SRS	X	X
Barriers to medication and appointments	Barriers and facilitators to adherence questionnaire (derived from Yehia, et al)[14]	X	X
Patient satisfaction			
Patient satisfaction with clinic and HIV care linkage team	Patient satisfaction questionnaire (modified from Dang, et al)[15]		X

Demographics			
Demographic survey	NIDA Seek, Test, Treat and Retain for Vulnerable Populations: Data Harmonization Measure[16]	X	X
Prior HIV treatment history*			
History of past HIV treatment	JGBSP-ED linkage to care intake (selected questions)	X	

*For patients previously diagnosed with HIV only

RHTI acceptability

- number of patients offered RHTI, number of patients who accept RHTI
- number of patients who receive RHTI.

HIV linkage and care outcomes (Appendix 2):

- number of referrals to linkage team
- number of patients who accept linkage services
- number of patients who complete initial HIV clinic appointment and time to appointment completion
- number of patients started on ART
- number of patients who achieve an undetectable HIV viral load
  time to ART initiation and time to achieve undetectable HIV viral load (<200 copies)
- baseline creatinine
- baseline genotype
- number of patients remain on ART through the end of the study
- number of patients who achieve an undetectable HIV viral load, time to ART initiation
- time to achieve undetectable HIV viral load (<200 copies)

Safety outcomes (Appendix 2):

- ART toxicity
- ART simplification (change in ART regimen from initiation to ART regimen with fewer pills after initiation)
- genotype-driven modification (change in ART regimen from initiation due to HIV genotype indicating insufficient potency of initial regimen)

Sample Size and Analysis

Based on 2015 data, we estimate identification of 32 newly diagnosed and previously diagnosed patients not in care during the 4-month study enrollment period. Assuming a participation rate of 67%, we will be able to enroll newly diagnosed patients and previously diagnosed patients not in care.

5. Risks

Medical risks include side effects and/or toxicity to antiretroviral medication and need to change the antiretroviral regimen due to identification of HIV resistance mutations that preclude the use

of the antiretroviral medication regimen chosen by the prescribing provider. These risks, however, are not outside of the usual risks that come with initiating antiretroviral therapy. The major risks for participants are (a) discomfort in answering survey questions and (b) loss of privacy or confidentiality. In order to minimize the risks associated with discomfort in answering survey questions, participants will be told that they have the option to pass on any questions. In order to minimize the risks associated with loss of confidentiality, all participant data will be kept confidential and secure. All computers with participant data will be password protected with access restricted to certain study team members. No information will be kept on mobile devices, such as laptop computers or cell phones, unless such devices are encrypted and password-protected.
The Principal Investigator will assume responsibility for reporting any unanticipated problems or study deviations to the IRB.

6. Benefits

There are no individual benefits for any study participants. However, participation in the study could show that initiation of ART in HIV positive patients at the time of diagnosis or when identified as previously diagnosed with HIV but not in care and antiretroviral naïve or off of ART for more than six months can improve clinical outcomes and decrease the risk of transmission of HIV.

7. Payment and Remuneration

Study participants will receive $25 for enrollment and completion of the baseline visit and $50 at week 4 for completion of the standardized survey

8. Costs

Study participants and/or their health insurer will be responsible for paying for the following services and/or items that are standard of care, and would be performed regardless of patient entering onto the study (outside of the clinical trial): CD4 count, HIV viral load, HIV genotype, CBC, comprehensive metabolic panel, urinalysis, viral hepatitis, syphilis serologies, GC/CT screening based on risk, and prescriptions for the antiretroviral medication regimen chosen by the prescribing provider. Participants who have health insurance will be responsible for any co-pays or deductibles not covered by the insurance. Financial assistance to cover healthcare costs such as co-pays and/or medications for patients living with HIV will be used for eligible patients with social work assistance as per usual.