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Required Skills:

No Preference – To Be Discussed

Preferred Team Communications:

Conference Call, to be discussed

Data Sources:

EHR data from Emory Healthcare and other potential partners including Grady and homeless shelters

Other Items:

Project has time zone flexibility. Mentors and students will determine a good time for virtual meeting

Team Info:

Needs a Developer, Analyst, Project Manager and QA. Allows one team of 4-6 members.

HOMELESS HEALTH RECORD

The present healthcare system is mired in systemic, local and regulatory issues which impede patient health information sharing between disparate health care systems that use different Electronic Health Record [EHR] vendors. Interoperability and freer flow of health data is critical to improving quality and cost effectiveness of care delivery. Additionally, marginalized social groups such as the homeless who are burdened by high rates of multiple medical and psychiatric comorbidity tend to be high utilizes of more expensive healthcare services such as ERs where delays in accessing health data can hamper efficient care delivery. We propose an Electronic Health Record [EHR] solution for the Homeless called the Homeless Health Record [HHR]. The technology at the heart of HHR, the Trustee Software package includes elements that have independently demonstrated utility including a complete direct primary care EHR called NOSH [New Open Source Health] and a blockchain-secured clinician single-sign on and accountability mechanism called uPort. Trustee benefits from the latest sophisticated connectivity standards to interface directly with Epic, Cerner and Medicare and other institutional systems. In keeping with self-sovereign principles, HHR is designed with privacy by default and uses Free/Open source software and open standards. Thus anyone can use, support or extend the Trustee system to address their needs. For the first time, participants are associated with a healthcare web service that they can see and control. Beyond the technology, our HHR project fosters a dynamic and evolving community care-collaboration ecosystem designed to alleviate of the socio-medical burdens in disenfranchised and marginalized members of our community. We therefore hypothesize that the more portable, interoperable, institution agnostic, patient-centric design of HHR will readily integrate into existing EHRs, be acceptable to community service organizations and their homeless clients and will improve resource utilization and care outcomes in the homeless.

PROJECT OBJECTIVES

We aim to 1) Validate the technical feasibility of our Homeless Health Record [HHR], 2) Implement the HHR in a real-world setting in collaboration with homeless service organizations, 3) Describe the impact of HHR on hospital readmission rates and care costs in the homeless. To achieve our AIMS we will a) create test patient accounts to ensure that the HHR prototype effectively integrates with Cerner EHR b) engage community service organization Navigators to help identify homeless participants for usability testing and training in use of the HHR, c) use the HHR to track the health encounters of 20 homeless participants for 1 year across the GA healthcare system to gather preliminary resource utilization data that will fuel future studies.

SUCCESSFUL PROJECT

To be discussed.

Intellectual Property: None