eMERGE Network: External Collaborator Manuscript Concept Sheet

Reference Number *(to be assigned by CC)*	NT398
Submission Date	07/13/2020
Project Title	The Devil is in the details: Perspectives of health system stakeholders on implementing a standardized family health history tool into the electronic health record.
Tentative Lead Investigator *(first author)*	Wiesner, Georgia
Tentative Senior Author *(last author)*	Smith, Maureen or Alanna Rahm
eMERGE Site Sponsor & Contact	Sponsor: Dan Roden Contact: Sarah Bland
All Other Authors	The study is not open to other authors. See table
Sites Participating	Vanderbilt, Northwestern, Geisinger. This project also includes Lori Orlando, and MeTree investigators from Duke University.
Background / Significance	Family health history (FHH) reliably identifies patients at risk for common conditions and rare genetic disorders. While several collection programs exist, FHH is not systematically integrated into health system electronic health record (EHR). MeTree is a patient facing FHH platform developed at Duke University that collects, analyzes and creates clinician decision reports on 45 inherited conditions. This is an extension grant to VUMC eMERGE site to assess the barriers and facilitators to integrating FHH into the EHR. The main outcome of this to understand the perspectives of the stakeholders in the health system about the institutional level needs in integrating and using a systematic collection of FHH of their institutions.
Outline of Project	This paper is the second in a set of three planned manuscripts about this project. This relates to Specific Aim 2 of the project. Semi-structured interviews with key stakeholders from 3 electronic Medical Record and Genomics (eMERGE) network sites (Northwestern University, Geisinger, Vanderbilt University Medical Center), will be performed to assess the institutional needs in implementing the MeTree FHH platform. The Consolidated Framework for Implementation Research (CIFR) method was used to design and analyze a 28 item survey focusing on use and collection of FHH, impact on workflow, data security, and confidence in FHH collection. A short video about MeTree will be shown to each stakeholder. The interviews will be recorded, analyzed and coded using the Dedoose program by at least 2 reviewers. Codes will be reviewed, harmonized for content, and tabulated by provider type and site to identify thematic trends.

Desired Data - Common Variables* *(Available from the CC)*	☐ Demographics ☐ Common Variable Labs ☐ ICD9/10 codes ☐ Common Variable Meds ☐ CPT codes ☐ Other: Case/Control status on Phase I and Phase II phenotypes ☐ Phecodes ☐ BMI **NONE NEEDED**
Other Desired Data *(Available from participating sites)*	*Please specifically list out any data elements that participating sites would collect or extract from clinical or other sources for this project (i.e. not common variables above)* *NONE NEEDED*
Desired Genetic Data	☐ eMERGE I-III Merged set (HRC imputed, GWAS) ☐ eMERGE PGx/PGRNseq data set ☐ eMERGEseq data set (Phase III) ☐ eMERGE Whole Genome sequencing data set ☐ eMERGE Exome chip data set ☐ eMERGE Whole Exome sequencing data set ☐ Other (not listed above): ☐ NONE NEEDED
Does project pertain to an existing eMERGE Phenotype?	☐ Yes, if so please list ☐ **XX- No**
Planned Statistical Analyses	Study is qualitative and descriptive in nature. Summary statistics for each paper will be presented. .
Ethical Considerations	Exempt- low risk
Available Funding or Resources	Extension funds to VUMC eMERGE parent grant
Target Journal	TBD
Milestones *(This section should include the key dates for completion of project, including approval, project duration, draft completion, and submission.)*	Completion of draft and submission of manuscript, Summer, 2020

*Common Variables available across all datasets:
- Demographics: sex, year of birth, decade of birth, race, ethnicity
- Codes: (repeated values & age at event): ICD, CPT, Phecodes
- BMI: (repeated value & age at event) height, weight, BMI
- Labs: (lab **name, repeated lab value & age at event)** Serum total cholesterol, LDL, HDL, Triglycerides, Glucose fasting/non-fasting/unknown, & White Blood Cell count

- <u>Medications</u>: (medication name, repeated, & age at event) Cerivastatin sodium, Rosuvastatin, Simvastatin, Fluvastatin, Pravastatin, Lovastatin, Atorvastatin, & Pitavastatin
- <u>Other</u>: Case/Control status on Phase I and Phase II phenotype: only on GWAS dataset participants

Table of investigators and support staff for eMERGE-MeTree Project.
Not all of these individuals will be authors, as it depends on their role in each project.

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