

Title of Project: Community-engaged Approaches to Testing in Community and Healthcare settings for Underserved Populations (CATCH-UP)

Principal

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Statistical Methods:

Descriptive statistics and qualitative summaries will be reported to summarize implementation process measures (type, dose, frequency, and sequencing of provided support strategies) and the facilitators and barriers of implementation.

We will calculate descriptive statistics for all Aim 1 measures and will perform formal hypothesis testing to compare pre- versus post-implementation provider- level, care process, and patient-level outcomes at the patient and practice levels. In addition to this pre-post analysis, trends in testing rates will be explored. A mixed effects linear regression model will be fit to explore changes in testing rates over time relative to the control period (0 months on intervention), accounting for correlation among repeated measures on the same practice and among practices nested within PFs will be accounted for using random effects.³⁸

Descriptive statistics and qualitative summaries will be reported to summarize the facilitators and barriers to implementation. We will calculate descriptive statistics for all Aim 2 measures. County-wide initiatives to amplify community- based testing that are initiated by CHIOs will be descriptively summarized as a function of county, region, and time period. Patient Survey data and program implementation process observations will be used to understand the influence of internal and external contextual factors on the success of community-based testing events. For qualitative data analyses, we will use software-assisted (NVIVO v12) content analytic techniques. Key informant interviews will be transcribed and evaluated by at least two independent coders. Initial codes will be compared across evaluators and emergent thematic categories will be argued to consensus and graphically represented for a better understanding of their meaning and relationships. Although much of the interviews will be guided by a solid understanding of well-known facilitators and barriers to testing, we will be intentionally open to new or unexpected qualitative findings. A subset of the transcripts (10%) will be chosen at random and coded by another researcher to achieve an inter-rater reliability kappa of at least 90%.³⁹⁻⁴⁰ Disagreements on codes will be resolved by discussion. We will take steps to minimize potential bias⁴¹ including conducting regular debriefs with members of the evaluation team. To better understand perceptions of the utility, effectiveness, and generalizability of the CATCH-UP program, detailed PF implementation notes will be summarized and analyzed according to the domains of the program model.