**Submission Title:** Making Substance Use Prevention as Easy as Vaccination! Leveraging Machine Learning to Deliver Personalized Substance Use Prevention Interventions in Primary Care

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### 1) Describe the model's population of focus.

The model targets all patients aged 9 through 12 years seen for primary care at a federally qualified health center (FQHC).

### 2) Describe the screening process.

Screening will occur via a novel machine learning algorithm that will identify patients at typical versus higher risk for future substance use initiation using structured and unstructured data from the electronic health record (EHR). An EHR alert will inform the primary care clinicians (PCCs) on the day of the clinic visit whether a patient is at typical/higher risk.

### 3) Describe the preventive services available.

Patients and parents with typical risk will receive universal intervention: a Nurse-guided linkage to the Partnership to End Addiction's free online resources. Patients and parents with higher risk will receive a selective intervention: PCC referral to the virtual Guiding Good Choices© (GGC) family skills training program. Behavioral health clinicians within the federally qualified health center will deliver GGC.

## 4) Describe the location/practice type providing the screening and prevention services.

Fair Haven Community Health Care is a federally qualified health care center in New Haven, CT that provides comprehensive medical and behavioral health care for 31,918 individuals (60% children < 18 years) across the lifespan. In 2022, 62% of patients identified as Hispanic/Latino, 45% Black, 4% Asian, 2% Native Hawaiian/ Other Pacific Islander, and 0.5% American Indian/Alaska Native. Ninety-three percent are at or below 200% of the Federal Poverty Limit.

# 5) Describe the model's factors supporting screening and prevention services implementation and sustainability.

The financial sustainability of our model includes the following reimbursement strategy:

- PCCs will bill and be adequately reimbursed for time spent discussing substance use prevention
  using a CPT billing code that is similar to the tobacco use cessation counseling codes.
- Nurses will bill for nurse-guided linkage with a procedure code.
- Masters-level behavioral health clinicians be reimbursed at Prospective Payment System (PPS)
  rates when they deliver GGC program, even when rendered on the same day as the medical
  visit. When rendering services in group settings, services will also be reimbursed at PPS rates for
  children insured by Medicaid.

Processes that will help embed and sustain these practices:

- EHR-supports: Alerts for PCCs, EHR-enabled reimbursement via use of billable counseling and procedure codes, automated EHR-enabled performance monitoring and feedback.
- PCC, nurse, and practice-level performance tied to job performance metrics.
- Continuing education credits for participating in training and continued education.
- Clinical guidelines to support clinicians in providing prevention services in primary care.

Stakeholders and partners that will support implementation include frontline healthcare providers, health center administrators, national professional organizations (e.g., American Academy of Pediatrics), state and federal policymakers, private and public payers, and GGC Training Programs.