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Real World Use of EHR data and Public Data Sets to Inform Public Health and Population Health Research and Surveillance

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Across the United States, linking electronic health record (EHR) data with public health and other publicly available datasets remains a significant challenge due to the lack of a universal patient ID and limited interoperability. While technology exists to overcome these barriers, silos between primary care, tertiary care, and public health (PH) entities continue. AllianceChicago (AC), a network of Federally Qualified Health Centers (FQHCs), participates in two key initiatives, Multi-State EHR-based Network for Disease Surveillance (MENDS) and CAPriCORN, a Federated Data Network, to connect clinical data for public health surveillance, research, and care continuity. AC is working to bridge these efforts to strengthen integration between healthcare delivery and public health systems. A recent project completed using CAPriCORN related to Youth Suicide Prevention analyzed care utilization patterns

linking a primary care cohort of youth (age ≤ 24) hospitalized for suicide attempt or ideation to tertiary care data. Findings revealed gaps in timely follow-up care, with only 16% receiving a primary care visit and 41% a psychiatric visit within 30 days of discharge. These insights informed the development of solutions to improve referral pathways between social and behavioral services and healthcare for care continuity. Similarly, MENDS, leverages standardized EHR data for chronic disease surveillance. AC contributes de-identified data from 17 FQHCs and collaborates with PH agencies using vetted tools to identify geographic risk hotspots and inform program planning. Emerging use cases demonstrate that improved data linkage and infrastructure can enhance PH surveillance and care coordination, paving the way for more effective health systems.

