Utilizing cloud based Data Warehouse analytics in clinically integrated network to improve patient care outcomes

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Since its formation in 2014, the Staten Island Performing Provider System (SI PPS) has become a national model for how to use data driven strategic business intelligence to create multi-agency collaboration, improve care quality, reduce costs and achieve population-level outcomes. At the structural foundation of this system is the population health analytics platform securely linking patients electronic health records, law enforcement, EMS utilization and claims data to provide a 360-degree view of the population. Utilizing the platform's interactive dashboard, decision-makers can easily view micro and macro-level healthcare trends. Caregivers can access secure, real-time patient information, working seamlessly across agencies toward true clinical integration. Customized analytics track key measures including pharmacological use, substance use and information on social determinants of health as housing, nutrition and interactions with the criminal justice system. Between 2014 and 2017, SI PPS initiatives resulted in a 52% reduction in Potentially Preventable Readmissions (PPR), a 62% drop in Potentially Preventable Emergency Room Visits (PPV) and a 58% reduction in Behavioral Health-related Emergency Room Visits (PPV BH). Sophisticated analytics have allowed a major impact to be made in the substance abuse disorder crisis. The platform allow SI PPS to hotspot high areas of overdose and origins of the highest number of 911 calls to deploy outreach teams and peers to respond and distribute naloxone. By December of 2018, 1,551 opioid reversal saves were made by administering naloxone, the per capita death rate fell 10%. SI PPS is successfully reimagining care delivery systems in a diverse borough of 472,000.