Data Delivers: Collecting SBIRT Data to Inform Quality Improvement

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BACKGROUND

Early identification of substance misuse and treatment is a national public health priority. As rates of substance misuse and substance use disorders (SUD) rise, healthcare systems struggle to cope with the needs of their communities. The Surgeon General[1] reported that nearly 8 percent of the US population met diagnostic criteria for a SUD for alcohol or illicit drugs, and that an additional 1 percent met diagnostic criteria for both. Of these 20.8 million people that met the diagnostic criteria for a substance use disorder, only 2.2 million of these individuals (10.4 percent), received any type of substance use disorder treatment. Nationally, the abuse of alcohol, tobacco, and illicit drugs, total $740 billion annually in costs associated to crime, lost work productivity, and health care. Specifically, the annual health care costs related to alcohol was $27 billion (2010), and illicit drugs and prescription opioids was $37 billion (2013)[2].

At the State level, the New York State Office of Alcoholism and Substance Abuse Services (OASAS) reported that in 2010, approximately 12 percent of New York State residents, age 12 and older, have a substance use disorder, accounting for over 1.9 million individuals[3].

At the County level, according to a 2016 publication from the Office of the New York State Comptroller[4], indicated that in 2014, Suffolk County had the highest number of overdose deaths related to heroin, and the highest number of overdose deaths where prescription opioids were a factor. Recent data (2012-2014) indicates that the age adjusted County rate for drug related hospitalizations is 25.8 per 10,000. This rate is higher, and significantly different from, both the New York State rate (22.6), and New York State Excluding New York City rate (20.7), placing Suffolk County in a "least favorable" County Ranking Group[5].

Why SBIRT?

The overall trend in substance use underscores the importance of promoting evidence based population health focused initiatives. Screening, Brief Intervention, and Referral to Treatment (SBIRT) is a comprehensive, integrated, public health approach to the delivery of early intervention and treatment services for persons with, or at risk of developing, SUDs. Through the DSRIP program, the Suffolk Care Collaborative (SCC) has partnered with 11 Hospitals in Suffolk County to implement SBIRT in Emergency Departments (EDs).

SBIRT Data Collection

SBIRT data can be examined from both a population health (PH) and quality improvement (QI) perspective. For PH, data analysis can be used to identify substance use treatment needs across Suffolk County. Through this lens, stages of the SBIRT process are compared to the total eligible population visiting EDs. Data trends can inform the need for increased resources in Suffolk County. QI focuses on the progression of patients from one step in the SBIRT process to the next. This lens emphasizes the process of SBIRT and identifies where the program is functioning optimally or where workflows can be improved. From this analysis, hospitals can create and deploy targeted QI projects aimed at enhancing the SBIRT program and increasing its efficacy.

In DY2Q4, the SCC initiated a reporting procedure for hospitals to collect and submit SBIRT Data to monitor program implementation and further understand the substance use burden in Suffolk County. SBIRT related data is collected monthly for quarterly submission to SCC. To standardize data collection and the definitions of all data elements, the SCC SBIRT Workgroup and Committee developed a data collection workbook, using Microsoft Excel. The format of the workbook allows hospitals to monitor program implementation, and assess its efficacy.

1. **Raw Data Collection Template -** where SBIRT encounters are documented, featuring16 data elements (Figure 1). Template was designed to mirror the style of a decision tree; the columns of the spreadsheet allow the hospitals to document the refusal, screening-out, or advancement of each patient at each stage in the SBIRT process: pre-screen, full screen, brief intervention, and referral to treatment. The segmentation of the data allows for providers to identify specific areas that need to be improved to increase the integrity of the SBIRT program.
2. **Quarterly SBIRT Services Total -** aggregates the monthly raw data into quarterly totals.
3. **Quarterly SBIRT Data Results -** utilizes the quarterly data aggregate and applies formula logic to compare certain raw data elements. Auto-calculation allows the template to be readily used by hospitals to examine SBIRT processes and outcomes.
4. **Referral to Treatment Template -** captures information related to the number of patients referred to specified substance use agencies.

Data Sample

The SCC has collected SBIRT data from 10 Suffolk County Hospitals, from DY2Q4 to DY3Q3.

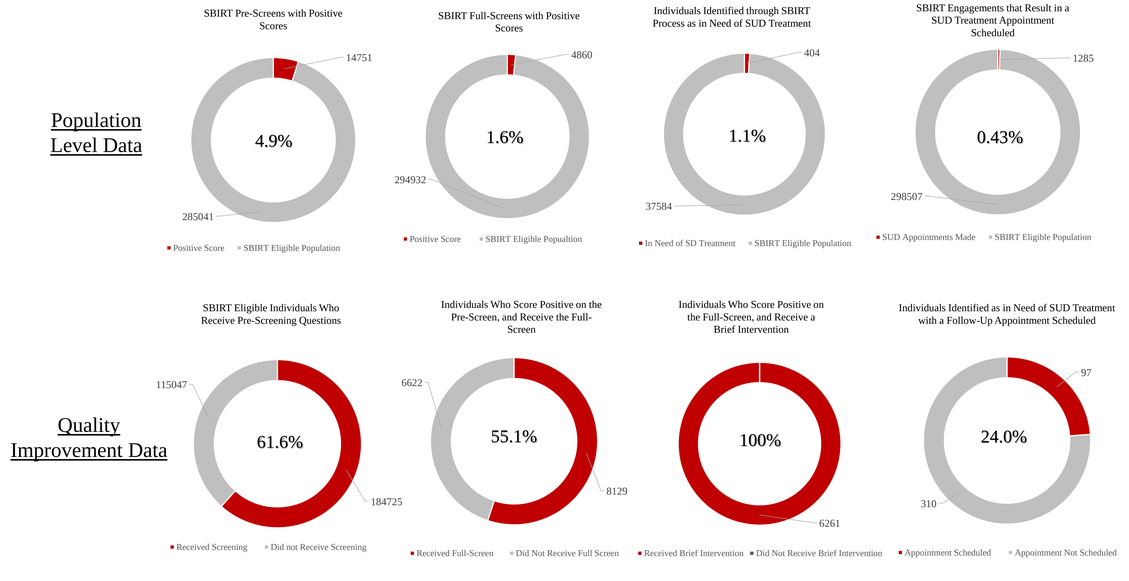
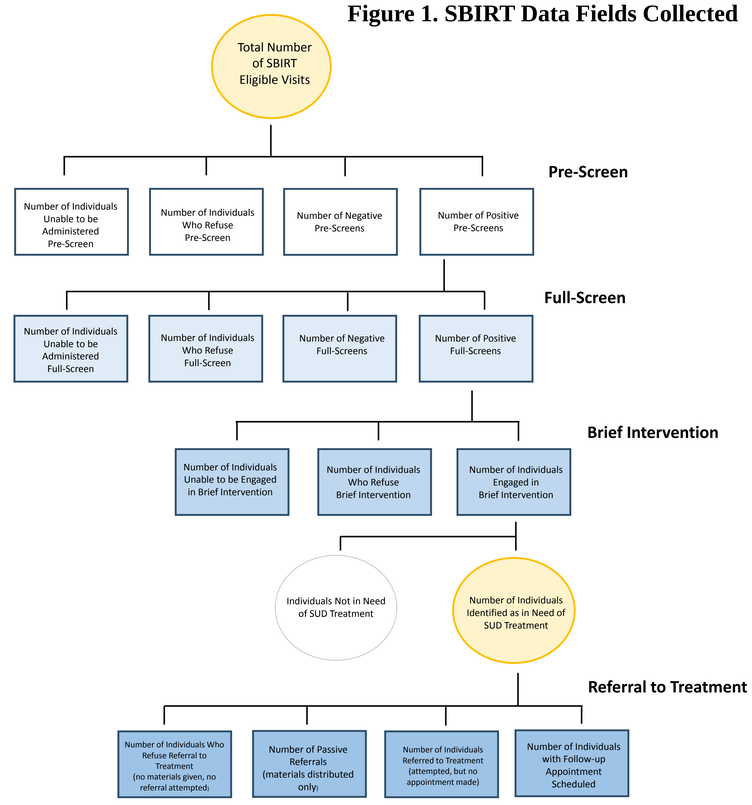


Figure 1. SBIRT Data Fields Collected



Next Steps

- Construct quarterly SBIRT scorecards for each Hospital to monitor program progress
- Continue to analyze collected data for opportunities related to performance improvement of the SBIRT process within each hospital
- Develop strategies to address trends observed across hospitals
- Strengthen ties with community substance use treatment facilities

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