MEASURING WHAT MATTERS

Creating and adopting quality metrics to address Substance Use Disorders (SUDs)

Sanju Nembang
Quality Data Analyst
BHCHP
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BHCHP's Mission
For over 30 years, our mission has remained the same: to provide or assure access to the **highest quality** health care for all homeless men, women and children in the greater Boston area. We believe it has been and continues to be medicine that matters.
Basic tenets of a quality initiative

- Collection of data for baseline
- Recognition of need to improve
- Nurse champion to take lead
- Team-based approach to care
- Motivation and incentives
- Clinical reminders using EHR
- Data reporting by site, teams, and individual clinicians
BOARD OF DIRECTORS

CMO

Quality and Efficiency Committee
- Drive the continuous quality improvement program
- Multidisciplinary group
- Reviews program-wide key quality indicators
- Updates quality metrics, goals, and interventions annually

Quality Measures

<table>
<thead>
<tr>
<th>Category</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preventive Measures</td>
<td>- Cervical Cancer Screening</td>
</tr>
<tr>
<td></td>
<td>- Breast Cancer Screening</td>
</tr>
<tr>
<td></td>
<td>- Colon Cancer Screening</td>
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<tr>
<td>Chronic Disease Measures</td>
<td>- Hypertension Control</td>
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<td>- Diabetes Control</td>
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<td>- Access to Antiretroviral Medicines</td>
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<td>Wellness Measures</td>
<td>- Adult Weight Screening and Follow-up</td>
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<td>Mental Health Measures</td>
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<tr>
<td>Home-grown Measures</td>
<td>- Primary Care-Provider connections</td>
</tr>
<tr>
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<td>- Network Resource</td>
</tr>
</tbody>
</table>

Data reporting and stratification
- Site-based quality reporting
- Provider-based quality reporting
- Quality data by race/ethnicity, sex, housing status, etc.

Example: Site-based quality reporting

Sharing best practices
- Father Bills Place Clinic's patient self-administration of PHQ-9 and GAD-7 questionnaires
- SFH Clinic use of pre-assembled pap trays
- BMI FIT Fridays initiative
- Green Team's reminder letters for female patients due to cervical or breast cancer screening

Trends in quality measures
Cervical Cancer Screening at BHCHP

Graph showing trends over time.
Quality and Efficiency Committee

- Drive the continuous quality improvement program
- Multidisciplinary group
- Reviews program-wide key quality indicators
- Updates quality metrics, goals, and interventions annually
# Quality Measures

<table>
<thead>
<tr>
<th>Quality Measures</th>
<th>Examples</th>
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<td>Preventive Measures</td>
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<td>• Naloxone Rescue kits</td>
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Data reporting and stratification

- Site-based quality reporting
- Provider-based quality reporting
- Quality data by race/ethnicity, sex, housing status, etc.

Example:

![Bar chart showing percentage of diabetics with A1C <= 9 by housing status.](chart.png)
Example:

Diabetics with A1C <= 9
by Housing Status

- Housed: 74%
- Non-housed: 61%
- Unknown/Other: 55%
Sharing best practices

Examples:

- Father Bills Place Clinic's patient self-administration of PHQ-9 and GAD-7 questionnaires
- SFH Clinic use of pre-assembled pap trays
- BMH FIT Fridays initiative
- Green Team's reminder letters for female patients due for cervical or breast cancer screening
Patients given a FIT kit for colon cancer screening at respite

- Mar-Sep 2014: 60
- Mar-Sep 2015: 178

66% increase
Trends in quality measures

Cervical Cancer Screening at BHCHP

Percentage of women age 21-64 who are up to date on cervical cancer screening
Cervical Cancer Screening at BHCHP

Percentage of women age 21-64 who are up to date on cervical cancer screening
Why SUD Quality Metrics?

- Prevalence of substance use disorders exponentially higher in the homeless population.
- Opioid overdose is a leading cause of death in the homeless population.
- Overdoses with opioid pharmaceuticals led to almost 17,000 deaths in 2011.
- Since 1999, opiate overdose deaths have increased 265% among men and 400% among women.
- In 2014, an estimated 1.9 million people had an opioid use disorder related to prescription pain relievers and an estimated 586,000 had an opioid use disorder related to heroin use.

Age-Stratified Substance Attributable Rates


SAMHSA: http://www.samhsa.gov/disorders/substance-use
Age-Stratified Substance Attributable Rates

- Homeless Population
  - Mortality rate (per 100,000 PY)
  - 20-34 years
  - 35-49 years
  - 50-64 years

- Tobacco
- Alcohol
- Drugs

Baggett T, et al. AJPH 2015
# Quality Metrics for SUDs in Primary Care

<table>
<thead>
<tr>
<th>Measure Title</th>
<th>Measure Steward</th>
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<tr>
<td>Alcohol Screening and Follow-up for People with Serious Mental Illness</td>
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<tr>
<td>Initiation and Engagement of Alcohol and Other Drug Dependence Treatment (IET)</td>
<td>National Committee for Quality Assurance</td>
</tr>
<tr>
<td>Preventive Care and Screening: Unhealthy Alcohol Use: Screening &amp; Brief Counseling</td>
<td>AMA-convened Physician Consortium for Performance Improvement</td>
</tr>
<tr>
<td>Alcohol Use Screening</td>
<td>The Joint Commission</td>
</tr>
<tr>
<td>Alcohol Use Brief Intervention Provided or Offered and Alcohol Use Brief Intervention</td>
<td>The Joint Commission</td>
</tr>
<tr>
<td>Percent of patients prescribed a medication for alcohol use disorder (AUD)</td>
<td>The Washington Circle</td>
</tr>
<tr>
<td>Percent of patients prescribed a medication for opioid use disorder (OUD)</td>
<td>The Washington Circle</td>
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Feedback from Stakeholders

- Staff
- Consumers
- Experts
- IT
SELECTING THE RIGHT MEASURES FOR US

Pharmacotherapy or Medication Assisted Therapy (MAT) for Substance Use Disorder (SUD)
1) Opioid Use Disorder (OUD)
2) Alcohol Use Disorder (AUD)

Counseling Regarding Psychosocial and Pharmacologic Treatment Options for SUD

Naloxone Rescue Kits
What we couldn't add

Measures for Social Determinants of Health for people experiencing homelessness
SELECTING THE RIGHT MEASURES FOR US

Pharmacotherapy or Medication Assisted Therapy (MAT) for Substance Use Disorder
1) Opioid Use Disorder (OUD)
2) Alcohol Use Disorder (AUD)

Counseling Regarding Psychosocial and Pharmacologic Treatment Options for SUD

Naloxone Rescue Kits
Percentage of patients with diagnosis of OUD receiving a medication for opioid use disorder

Numerator: Number of patients receiving a medication for opioid use disorder

Denominator: Number of patients with an opioid use disorder diagnosis

Pharmacotherapy for Opioid Use Disorder (OUD): Methadone maintenance, Buprenorphine/ Naltrexone (Suboxone), or Naltrexone (Vivitrol)
**Percentage of patients with diagnosis of AUD receiving a medication for alcohol use disorder**

**Numerator:** Number of patients receiving a medication for alcohol use disorder

**Denominator:** Number of patients with an alcohol use disorder

*Pharmacotherapy for Alcohol Use Disorder (AUD):* Disulfiram, Acamprosate (Campral), or Naltrexone (Vivitrol)

**Percentage of patients with SUD counseled regarding psychosocial and pharmacologic treatment options**

**Number of patients counseled regarding substance use disorder**
Percentage of patients with diagnosis of AOD receiving a medication for alcohol use disorder

Numerator: Number of patients receiving a medication for alcohol use disorder

Denominator: Number of patients with an alcohol use disorder

Pharmacotherapy for Alcohol Use Disorder (AUD): Disulfiram, Acamprosate (Campral), or Naltrexone (Vivitrol)

Percentage of patients with SUD counseled regarding psychosocial and pharmacologic treatment options

Numerator: Number of patients counseled regarding substance use disorder

Denominator: Number of patients with substance use disorder diagnosis

Percentage of patients with opioid use disorder OR history of overdose OR active prescription for an opioid who were prescribed or offered a Naloxone Kit
Percentage of patients with opioid use disorder OR history of overdose OR active prescription for an opioid who were prescribed or offered a Naloxone Kit

Numerator: Number of patients prescribed or offered a Naloxone Kit

Denominator: Patients with opioid use disorder OR history of overdose OR active prescription for an opioid
<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Pharmacotherapy for OUD</td>
<td>28% (844/3029)</td>
<td>35%</td>
<td>1. Institute monthly risk rounds for OBOT teams and prescribers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2. Continue expansion of OBOT</td>
</tr>
<tr>
<td></td>
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<td></td>
<td>3. Increase Suboxone inductions in BMH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4. Kraft project (Wright)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5. Educate clinicians about naltrexone</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>6. Create protocol for Vivitrol injections in clinics</td>
</tr>
<tr>
<td>Pharmacotherapy for AUD</td>
<td>13% (329/2529)</td>
<td>25%</td>
<td></td>
</tr>
<tr>
<td>Counseling Regarding Psychosocial and Pharmacologic Treatment Options for SUD</td>
<td>0%</td>
<td>35%</td>
<td>1. Create checkbox with link to MI prompts</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2. Add to most note types including CM and MA</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3. Continued MI training for staff</td>
</tr>
<tr>
<td>Naloxone Rescue Kits</td>
<td>15% (475+90/3756)</td>
<td>30%</td>
<td>1. Population management for teams</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2. Signage in pharmacy windows</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3. Improve accessibility of prescribing; put button in more places</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4. Increase education for patients and staff</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>5. Document patients who already have kits</td>
</tr>
</tbody>
</table>
IMPLEMENTATION

- Assign champion for each measure or intervention
- Create a timeline for implementation and review
- Analyze quarterly data for the new metrics
- Stratify data by site/team/provider and share

<table>
<thead>
<tr>
<th>Site</th>
<th>Quant. Skills Indicator</th>
<th>Qual. Skills Indicator</th>
<th>Math Proficiency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Outreach</td>
<td>214</td>
<td>90</td>
<td>85%</td>
</tr>
<tr>
<td>BOC HCC</td>
<td>1406</td>
<td>613</td>
<td>48%</td>
</tr>
<tr>
<td>Case Experience</td>
<td>140</td>
<td>82</td>
<td>59%</td>
</tr>
<tr>
<td>Family Team</td>
<td>120</td>
<td>55</td>
<td>46%</td>
</tr>
<tr>
<td>Geriatric</td>
<td>120</td>
<td>55</td>
<td>46%</td>
</tr>
<tr>
<td>Home</td>
<td>144</td>
<td>55</td>
<td>56%</td>
</tr>
<tr>
<td>Huntington</td>
<td>120</td>
<td>55</td>
<td>56%</td>
</tr>
<tr>
<td>IL, SD, CO, &amp; South Dakota</td>
<td>120</td>
<td>55</td>
<td>56%</td>
</tr>
<tr>
<td>Mass General Hospital</td>
<td>120</td>
<td>55</td>
<td>56%</td>
</tr>
<tr>
<td>MetroHealth</td>
<td>120</td>
<td>55</td>
<td>56%</td>
</tr>
<tr>
<td>Network</td>
<td>120</td>
<td>55</td>
<td>56%</td>
</tr>
</tbody>
</table>

**Index:**
- exceeding goal
- meeting goal
- w/in 5% of goal
- below goal

**Change since last quarter:**
- increase by 2% or more
- change is less than 2%
- decrease by 2% or more
Trends

Pharmacotherapy for Opioid Use Disorder (OUD) at BHCHP

Pharmacotherapy for Alcohol Use Disorder (AUD) at BHCHP

Naloxone Rescue Kits at BHCHP
Pharmacotherapy for Opioid Use Disorder (OUD) at BHCHP

Percentage of patients with diagnosis of **OUD** receiving a medication for opioid use disorder
Pharmacotherapy for Alcohol Use Disorder (AUD) at BHCHP

Percentage of patients with diagnosis of AUD receiving a medication for opioid use disorder
Naloxone Rescue Kits at BHCHP

Percentage of patients with OUD or history of overdose or active prescription for an opioid who are prescribed or offered a naloxone rescue kit
Naloxone Rescue Kits
Data Stratification

Percentage of patients prescribed or offered Naloxone by Ethnicity

Percentage of patients prescribed or offered Naloxone by Care Team

Percentage of patients prescribed or offered Naloxone by Race

Percentage of patients prescribed or offered Naloxone by Housing Status
Percentage of patients prescribed or offered Naloxone by Race

- American Indian/Alaskan Native: 45%
- Asian: 10%
- Black/African American: 20%
- More than one race: 35%
- Other Pacific Islander: 25%
- Unreported: 25%
- White/Caucasian: 20%
Percentage of patients prescribed or offered Naloxone by Housing Status

- Assisted Living Facility, Nursing Home, Rest Home
- Doubling up
- Housing with No Support Services
- Motel
- Other
- Shelter
- Street
- Supportive Housing
- Transitional Housing or Residential Treatment Program
- Unknown
Percentage of patients prescribed or offered Naloxone by Care Team
Conclusion

If you measure it, improvement will follow

Quality culture is vital in QI

SUD should not be treated differently

Questions?