### Project Aims

#### Purpose & Aims

**Purpose:** Address prescriber-reported barriers and increase buprenorphine prescribing at an urban primary care community health organization.

**Aim 1:** Participants will report reduced stigmatizing attitudes about persons with OUD immediately after the intervention.

**Aim 2:** Participants will report increased participation in buprenorphine management two-months after the intervention.

**Aim 3:** The organization will report an increased rate of unique patients receiving buprenorphine prescriptions two-months after the intervention.

#### Methods

**Design:** Pretest Posttest Quality Improvement Project

**Setting:** Urban Primary Care Community Health Organization

**Sample:** Primary Care Registered Nurses (convenience sample)

**Intervention:** 2-hour virtual buprenorphine-specific anti-stigma training

#### Project Aims

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Measure</th>
<th>Data Collection</th>
<th>Data Analysis (N=25)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Decrease stigmatizing attitudes</td>
<td>Modified OMS-HC59 (substituted opioid use disorder for the term mental illness)</td>
<td>Qualitative survey immediately post intervention</td>
<td>Descriptive statistics: Wilcoxon matched pairs signed rank test</td>
</tr>
<tr>
<td>2. Increase participation in buprenorphine usage</td>
<td>Buprenorphine participation scale</td>
<td>Qualitative survey two months post intervention</td>
<td>Descriptive statistics: Wilcoxon matched pairs signed rank test</td>
</tr>
<tr>
<td>3. Increase use of buprenorphine treatment</td>
<td># of buprenorphine Rx/BE of buprenorphine treatment among patients over two-month timeframe</td>
<td>Data abstraction</td>
<td>Descriptive statistics: Chi-squared test</td>
</tr>
</tbody>
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#### Results

**Sample Size:** 12 (paired baseline, initial follow-up, & two-month follow-up)

**Sample Characteristics:** Majority were female (n=11, 91%), under 35 years old (n=7, 57%), with a bachelor’s degree in nursing (n=8, 67%), less than 5 years of experience in the RN role (n=6, 50%) and had attended a prior buprenorphine training (n=10, 83%).

#### Aim 1: Decrease stigmatizing attitudes

(Modified OMS4-HC showed acceptable reliability in the project, α=0.92)

<table>
<thead>
<tr>
<th>N</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modified OMS4-HC Preval</td>
<td>32</td>
<td>12.125</td>
<td>7.72</td>
</tr>
<tr>
<td>Modified OMS4-HC Postval</td>
<td>32</td>
<td>22.675</td>
<td>8.99</td>
</tr>
</tbody>
</table>

- 4% decrease in stigmatizing attitude towards persons with OUD
- No statistically significant change (Z=-1.77, p=0.08)
- Cohen’s d effect size: intermediate effect (d=0.62)

#### Aim 2: Increase buprenorphine participation

(Novel buprenorphine participation scale showed acceptable reliability, α=0.88)

<table>
<thead>
<tr>
<th>N</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participation in Buprenorphine Pre</td>
<td>22</td>
<td>10.00</td>
<td>4.33</td>
</tr>
<tr>
<td>Participation in Buprenorphine Post</td>
<td>22</td>
<td>12.85</td>
<td>3.88</td>
</tr>
</tbody>
</table>

- No statistically significant change (Z=-1.74, p=0.08)

#### Aim 3: Increase buprenorphine prescription rate

<table>
<thead>
<tr>
<th># of patients receiving Rx during two-month timeframe</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>47</td>
<td>63</td>
<td></td>
</tr>
</tbody>
</table>

- 36% increase in patients receiving buprenorphine prescription
- No statistically significant association found (x²= 2.20, p=0.15)

### Discussion & Conclusions

#### Feasibility

- Brief low-cost buprenorphine-specific anti-stigma intervention
- Low-resource community health setting

#### Statistical Relevance of Stigma Reduction

- Results from larger studies addressing other mental health diagnosis11,12,13
- Design: Pretreatment-posttest design
- Implementation: Six-ingredient anti-stigma model
- Measurement: Change in OMS4-HC
- Results: Statistically significant OMS4-HC reduction between 2.4% and 4.4%
- Project findings (4% reduction) within this range - Supports hypothesis that the intervention has the potential to reduce healthcare providers stigmatizing attitudes.

#### Limitations

- Sample size small & convenience sampling
- Timeframe too short to detect statistically significant behavior change
- Measurement tools: good internal consistency but no psychometric validity study
- Covid-19: Virtual intervention instead of in-person – impact on peer collaboration
- Change in healthcare delivery and access

#### Recommendations

- **Repeat intervention - Sample: Other primary care team members** - Setting: Similar low-resource community health center
- **Larger more rigorous studies**
- **Measure clinical impact of reduction in healthcare providers’ OUD stigma**
- **Qualitative patient testimonies**
- **Quantitative patient retention rates and change in opioid-related adverse events**

### References

1. Substance Abuse and Mental Health Services Administration. (2019). March, 31. SAMHSA, Opioids: To curb or to control?
2. Substance Abuse and Mental Health Services Administration. (2018). January 19. SAMHSA, Opioids: To curb or to control?