Evidence-Based Practice Project: Implementation of the 5 As Protocol to Increase Smoking Cessation in a Substance Abuse Clinic
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PROBLEM STATEMENT
• The CDC estimates smoking related illnesses account for over $300 billion dollars yearly inclusive of, $170 billion for adult medical directed care and $160.6 billion for lost productivity
• Research has shown that individuals living with mental health conditions, including substance use disorder (SUD), consume tobacco at higher rates than the general population leading to an escalated risk of all-cause mortality and ten to twenty-year reduction in life expectancy

PROJECT PURPOSE
• The aim of this evidence-based practice (EBP) project is to implement the 5 As model in an outpatient substance abuse clinic to improve smoking cessation rates.
• Implementation of the EBP protocol into the EMR will improve current screening and counseling rates by 20%, improve smoking cessation or declaration of the aim to quit tobacco use in patients who received counseling by 20%, and providers will communicate increase awareness of knowledge, behavior, attitude, self-efficacy, and barriers related to tobacco use screening and counseling.

MODEL/NURSING THEORY
• The John Hopkins Nursing Evidence Based Practice Model (JHNEBP) will be the leading framework for this evidenced-based practice intervention project. This model uses a problem-solving approach to clinical decision making is used and encompasses a three-step process called PET: practice question, evidence, and translation.
• The nursing theory that best guides this EBP project is Care, Cure, and Core nursing theory developed by Lydia Hall in the 1960s

METHODS
• **Target Population**
  - The target population includes one substance abuse medical doctor (MD), one adult nurse practitioner (NP), one nonactive MD specializing in public health/substance abuse
  - **Subjects**
  - Patients receiving smoking cessation counseling at an urban outpatient substance abuse clinic.
  - **Setting**
  - This project will be conducted in an private practice outpatient substance abuse clinic located within Central West Florida. The clinic consists of two physicians (one who does not practice medicine, but manages the clinic and counsels), one nurse practitioner, and one medical personnel. The providers see between 25-40 patients daily.
  - Patients have weekly appointments. The patient age ranges between 25-70 years old, with 60 % females and 40 % males, all of the Caucasian race. An estimated 90 % of the patient population have a mental health disorder.
  - **Instruments/Tools**
  - The pre/post survey for providers knowledge, attitudes, behaviors, barriers, and self-efficacy towards tobacco cessation will be utilized to measure the effectiveness of smoking cessation training amongst healthcare providers.
  - The smoking cessation 5 As model educational material used for the proposed presentation was retrieved from the Agency for Healthcare Research and Quality (AHRQ), which produces evidence-based research based for sound clinical practice guidelines and recommendations.
  - **Intervention and Data Collection**
  - The EBP protocol consists of the implementation of the 5 As standardized protocol consisting of a clinician education intervention, incorporation of the 5 As model into EMR documentation, and assessment of patient’s readiness for smoking cessation.
  - Evaluation of providers’ knowledge, attitudes, behaviors, barriers, and self-efficacy regarding tobacco cessation, responses to the pre/post ProSCiTE survey will be analyzed by summation of the five subscales. Surveys will be administered 4 weeks prior and after intervention initiation.
  - Provider smoking cessation practices will be analyzed by assessing the total number of patient visits and smoking interventions four weeks before and after implementation of the smoking cessation intervention through a retrospective electronic medical record review.

RESULTS
Examination of the relation between the 5 As protocol intervention (pre/post) and patient’s readiness to quit, intent to quit, and not quit was deemed significant, χ²(2, N=50) = 15.1, p< .00537. The results of the paired samples t-test revealed that mean total differs before educational training (M=195.87, SD=12.897) and after (M=258.33 SD=4.819) at the .009 level of significance (t=−10.730, df=2, n=3, p<.009, 95% CI mean difference =−87.796 to −37.537). Overall 5 As documentation increased from 57% pre-intervention to 100% post-intervention.

Table 1. Smoking cessation patient outcomes: pre-intervention and post-intervention

<table>
<thead>
<tr>
<th></th>
<th>Quit</th>
<th>Intent to quit</th>
<th>Not quit</th>
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<tbody>
<tr>
<td>Pre-intervention</td>
<td>50%</td>
<td>40%</td>
<td>10%</td>
</tr>
<tr>
<td>Post-intervention</td>
<td>100%</td>
<td>20%</td>
<td>10%</td>
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Table 2. Number with percentages of electronic chart reviewed 4-weeks prior and 4-weeks after intervention.

<table>
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<tr>
<th>Number of sessions with intervention documented</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
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<tbody>
<tr>
<td>Ask</td>
<td>129 (65%)</td>
<td>200 (100%)</td>
</tr>
<tr>
<td>Advise</td>
<td>115 (58%)</td>
<td>200 (100%)</td>
</tr>
<tr>
<td>Assess</td>
<td>58 (29%)</td>
<td>200 (100%)</td>
</tr>
<tr>
<td>Assist</td>
<td>120 (60%)</td>
<td>200 (100%)</td>
</tr>
<tr>
<td>Arrange</td>
<td>150 (75%)</td>
<td>200 (100%)</td>
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DISCUSSION
• This study sought to determine the feasibility and effectiveness of the implementation of a standardized 5 As smoking cessation protocol in a substance abuse clinic to improve smoking cessation rates by educating providers on current practice smoking cessation guidelines, increasing tobacco use screening and counseling, and incorporating electronic medical record (EMR) documentation of smoking cessation.

IMPLICATIONS FOR ADVANCE PRACTICE NURSING
• Many SUD individuals desire to quit smoking but deal with obstacles requiring further assistance. With the utilization of the 5 As model, providers can improve smoking cessation rates within this patient population. As a result of the implementation of the 5 As standardized protocol into clinical practice, providers’ knowledge, behavior, attitude, self-efficacy, and barriers related to smoking cessation increased smoking cessation interventions at every patient visit influencing patient smoking cessation increases.

SUSTAINABILITY
Substance abuse or other clinical practices that implements the 5 As protocol into practice must continue providing repeated in-services and education for continued adaptation and compliance.

REFERENCES
• "Substance abuse or other clinical practices that implements the 5 As protocol into practice must continue providing repeated in-services and education for continued adaptation and compliance."