Background

Penobscot Community Health Care Center (PCHC) is a non-profit community health center located in Bangor, Maine. PCHC offers family medicine, mental health, dental and 20 other services to Maine residents. With 19 locations, PCHC is the largest Federally Qualified Health Center in the state and the second largest in New England.¹

Problem

Noah Nesin, MD, FAAFP, Chief Medical Officer, and Theresa Knowles, FNP-C, Chief Quality Officer, were interested in reducing antibiotic prescriptions for upper respiratory infections, as well as benzodiazepines and opioids. They have worked collaboratively on opioid stewardship for 12 years and were inspired to launch this reduction initiative after seeing firsthand how families and communities are negatively affected by over-prescribing. Recognition of this issue by state government, fellow clinicians and community members also influenced the initiative.

Solution

Dr. Nesin and Knowles piloted the implementation of overuse reduction efforts with data collection at the provider level to identify high prescription rates and with the sharing of Choosing Wisely materials to educate both clinicians and patients. Physicians, nurse practitioners, physician assistants, nurses and medical assistants learned strategies for speaking with patients about appropriate prescribing practices. Patient education occurred at the point of care, including displaying Choosing Wisely posters and patient brochures in waiting and exam rooms, and promoting community education through media and social media promotion. Additionally, Choosing Wisely recommendations for antibiotic prescribing were embedded in PCHC’s electronic health record.

As a result of this and other efforts (PCHC has a formal controlled substance stewardship program), chronic benzodiazepine prescription declined by 75% from 2014 to 2019, with the majority of patients being retained and moved to more appropriate evidence-based treatment. Inappropriate antibiotic prescriptions have continuously decreased; for example in 2013, 63% of patients were prescribed antibiotics for bronchitis, which decreased to an average of 48% during 2017.

PCHC ensured implementation sustainability for both antibiotic and benzodiazepine prescription reduction initiatives. Antibiotic prescribing is reviewed on a quarterly basis for both primary care and walk-in level; data is broken out by provider, and specific interventions are applied to individuals. Every two months, clinical leaders review benzodiazepine prescribing data, identify outliers and intervene with a quality improvement initiative. PCHC also educates new clinicians about overuse reduction programs as part of their on-boarding.
Challenges

• **Urgent care barriers.** Walk-in care clinicians do not have ongoing relationships with patients, so having these conversations with patients may be more difficult than for primary care clinicians.

• **Patient demand.** “Patients’ dependency on benzodiazepines is often significant; it takes resources and a lot of effort to have these reduction conversations,” Dr. Nesin said. “Choosing Wisely helps to de-escalate the emotional experience of having conversations with patients, especially for the first time.”

• **Difficulty with overuse conversations.** Providers may experience discomfort having these conversations. To help, PCHC provided scripting to nurses, medical assistants, providers, walk-in care staff and others. For example:
  
  “Good news, this does not need to be treated with antibiotics.”

• **Emergency Department Visits.** Patients continue to visit the Emergency Department when they believe they need an antibiotic.

Keys to Success

• **Leadership support.** PCHC emphasized the importance of overuse reduction as a priority by having champions and senior leaders demonstrate the benefit to peers. “When there is pushback, this can be mitigated through meaningful conversations by leaders,” Dr. Nesin said.

• **Provide clear messages.** Resources should be as easy to read as possible. Messages should be consistent.

• **Spread education by discipline.** To combat the issue of established clinicians being unaware of guideline changes, PCHC utilized data/evidence to educate clinicians; first with nurses and medical assistants, next with primary care providers, later with pediatricians and so on.

• **Train medical assistants to be part of the conversation.** “Medical assistants are first-line clinical staff members and are often in the room longer than a clinician will be,” Knowles said. “Understanding that patients often express antibiotic prescription desire to medical assistants, we provided these staff members with Choosing Wisely education and materials.” The medical assistants could then give the Choosing Wisely materials to the patient while they were waiting for the provider to begin their portion of the visit. This often allowed patients to read the materials ahead of time and reinforced the message from the provider if they chose not to prescribe antibiotics due to a viral illness.

• **Measure at the clinician level.** Beneficial outcomes of this data analysis strategy include: identification of outliers, one-on-one intervention, and resulting improvements in appropriate prescription rates.

• **Promote organizational pride.** Informing staff members of accomplishments creates positive rapport across the outpatient setting and encourages sustainability. “PCHC now prescribes at a much lower rate than organizations across the region and state,” said Knowles.

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Choosing Wisely® is an initiative of the ABIM Foundation.

Core Interventions

• Data collection and feedback at the clinician level

• Clinician education based on discipline (nurses, physicians, nurse practitioners, physician assistants and medical assistants educated in personalized groups)

• Targeted education to medical assistants

• Recommendations embedded into workflow, including in the EHR

• Sustainability through incremental data review

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References

