Introduction

- The Centers for Disease Control and Prevention (CDC) guideline recommends the use of the 5A’s Approach by primary care providers to implement smoking cessation care (CDC, 2019a).
- The Agency for Healthcare Research and Quality (2012) defines the 5A’s Approach as:

  - Asking: about smoking status at every patient encounter
  - Advising: to quit
  - Assessing: patient willingness to quit
  - Assisting: patient in quitting with pharmacotherapy and counseling
  - Arranging: for follow up care within the first week of quitting

- Implementation of the 5A’s Approach by providers is often incomplete, as practitioners neglect to implement smoking cessation interventions and follow up (Martinez et al., 2017).
- Researchers found that an electronic delivery model was effective in implementing provider-delivered 5A’s to diverse primary care patients (Satterfield et al., 2018).

Background and Significance

- There are presently 34 million adults who smoke in the United States. Every year, cigarette smoking causes 480,000 deaths and costs the country $300 billion (CDC, 2019b).
- In addition to lung cancer, smoking is linked to chronic lung disease, cardiovascular disease, stroke, and cancer of the bladder, throat and mouth, kidneys, cervix, and pancreas (American Heart Association, 2015).
- Only 15% of patients who smoke receive appropriate smoking cessation counseling based on their willingness to quit (El-Shawawy et al., 2016).
- Clinician barriers to providing smoking cessation care cited are lack of training in smoking cessation care and time constraints. Training will improve practitioner implementation of smoking cessation screening and treatment (Jadidi, 2017).
- EMRs with prompts affect clinical encounters in such a way that providers are more likely to document smoking, engage in counseling, and prescribe medications (Ba et al., 2016).
- Using EMRs to implement the 5A’s Approach is both efficient and low-cost (Satterfield et al., 2018).

Purpose

The purpose of this project was to address the problem of lack of smoking cessation counseling offered and prescribed to every patient encounter by practitioners in a primary care office in Middlesex County, New Jersey.

Clinical Question

In the primary care setting, is the implementation of the 5A’s smoking cessation screening and counseling EMR tool, as opposed to not using an evidenced-based tool, associated with an increase in the rates of smoking cessation counseling provided, and interventions prescribed, by practitioners?

Methods

Design: Quality improvement (QI) project - pre-/post-intervention chart review

Setting: Primary care private practice located in Middlesex County, New Jersey

Population: Sole Physician and sole Nurse Practitioner at primary practice

Recruitment and Informed Consent: Zoom meetings, consent obtained

Intervention:

- Education on and placement of the 5A’s Approach into the EMR
- Implementation by the clinicians to complete and document the 5A’s for smoking cessation care at every patient encounter

Measurable Outcomes:

1) % of smokers who were billed for smoking cessation counseling via CPT codes over two months before implementation of study intervention versus two months after implementing the study intervention
2) % of smokers who were prescribed medications for smoking cessation over two months before implementation of study intervention versus two months after implementing the study intervention

Results

- Pre-intervention: Retrospective chart review (July 1, 2020 – August 31, 2020)
- Post-intervention: Prospective chart review (December 1, 2020 – January 29, 2021)

Conclusions

This QI study showed that putting the 5A’s Approach into the EMR was associated with increases in smoking cessation counseling and prescriptions written by the clinicians in the primary care setting, even though the results were not statistically significant.

Implications

Healthcare Policy: 5A’s approach can easily be integrated into the EMRs of primary care practice.

Clinical Practice: Integrating the 5A’s template into EMR will impact practice in that clinicians will be able to succinctly address all five aspects of smoking cessation care, including asking about smoking status, advising to quit, assessing readiness to quit, assisting stop attempts, and arranging for follow-up care.

Patient Care: Patients may be provided quality, evidence-based, guideline recommended smoking cessation care at every encounter.

Economics: There was no cost to put the 5A’s template into the EMR or to have the practitioners use the 5A’s protocol for each patient encounter. Providers can bill insurance for these services. There is also no cost to patients as smoking cessation counseling and treatment are covered by Medicare and employer-sponsored insurance (American Lung Association, 2020).

Education: The QI project showed improvement in provider prescriptions and counseling behaviors. Therefore, it would be beneficial to educate other primary care practices and providers, as well as office managers and informatics personnel about the utility of putting the 5A’s tool into the EMR.

References:

American Heart Association. (2015, February). Smoking: do you really know the risks? http://www.heart.org/HEARTORG/HealthyLiving/Smoking-­‐Do-­‐you-­‐really-­‐know-­‐the-­‐risks_UCM_322718_Article.jsp

Although rates increased for counseling and prescriptions, neither was statistically significant based on a student’s t-test

In comparison to

<table>
<thead>
<tr>
<th>Interventions Increased in the Post-­‐Intervention Period</th>
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<tbody>
<tr>
<td>Counseling Provided</td>
<td>33.3%</td>
</tr>
<tr>
<td>Rx Provided</td>
<td>20.0%</td>
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Pre (N = 488 patients seen; n = 34 smokers) Post (N = 416 patients seen; n = 30 smokers)

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