Why They Don't Puff: Understanding Low Adherence Rate of Chronic Steroid Inhalers for COPD Patients in a PACE Clinic

Introduction/Problem

- Elderly patients have low adherence with medications, particularly the use of chronic inhalers. Non-adherence to inhalers has been linked to poorer health outcomes, increased hospitalizations, and exacerbations from their COPD.
- Patients enrolled in a PACE (Program of All- Inclusive Clinic for the Elderly) program are aged >55, living in the community, and require significant assistance as defined as a nursing home level of care. This population is at higher risk due to increased rates of cognitive impairment and disability.

Aim/Goal

- To evaluate patients' understanding of inhalers and adherence with chronic inhalers within a site-specific outpatient setting of an ElderCare PACE program in Lynn, MA
- Determine reasons for non-adherence with chronic inhalers.

The Team

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The Interventions

- Patients who were prescribed one or more chronic inhalers and had a
 primary diagnosis of COPD. Exclusions were interruptions in care, such as
 disenrollment, death, or admission into a skilled nursing facility.
- Patients were asked to complete an in-person questionnaire with a medical provider with the 4 following questions:
 - 1) When was the last time you used your scheduled COPD inhalers? How many times a day do you use it? If you do not use it, why not?
 - 2) Can you tell me what inhalers you are on?
 - 3) When was the last time you used a rescue inhaler for shortness of breath?
 - 4) Do you have "extra" of these items (inhalers) at home?
- Adherence was defined as refilling their inhalers early, not refilling their inhalers on a regular basis, and not properly taking their inhalers as prescribed. Reasons for non-adherence were gathered during the questionnaire. Information was gathered by self report and confirmed by pharmacy refills. Demographic and medical problems were accessed through their electronic medical records.

Results/Progress to Date



- Of 41 patients, 37 (90%) were non-adherent to their COPD inhalers.
- Of those, 8 refilled early and 29 failed to refill medications on a regular basis.
- Main reasons for non-adherence: failing to feel symptomatic from their disease and not understanding the basis for the medications.

Lessons Learned

- We found that adherence to chronic inhalers was very low in a primary care outpatient setting. Many patients do not understand the importance of inhalers.
- Development of educational programs that are tailored to PACE individuals may improve adherence to chronic inhalers in COPD patients.

Next Steps

- Nurses to conduct an in-person educational session with patients on COPD, their inhalers, importance of use, and smoking cessation
- Challenges with implementation: Limited nursing staff time allocated to
 educating patients, patients with known cognitive impairment whom may not
 retain medication training sessions, patients' willingness to attend
 educational programs

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