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# Physician Directed Smoking Cessation in the ED: Do Patients Opt-Out?

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## Background

Tobacco use is the single most preventable cause of disease, disability, and death in the United States.<sup>1</sup> There have been studies recommending tobacco cessation screening and interventions in the ED, all using an “opt in” approach to management. In contrast, “opt out” methods have shown favorable outcomes in other settings, though no studies have measured the success of an “opt out” approach to prescriptive smoking cessation intervention in the ED.

## Problem Statement

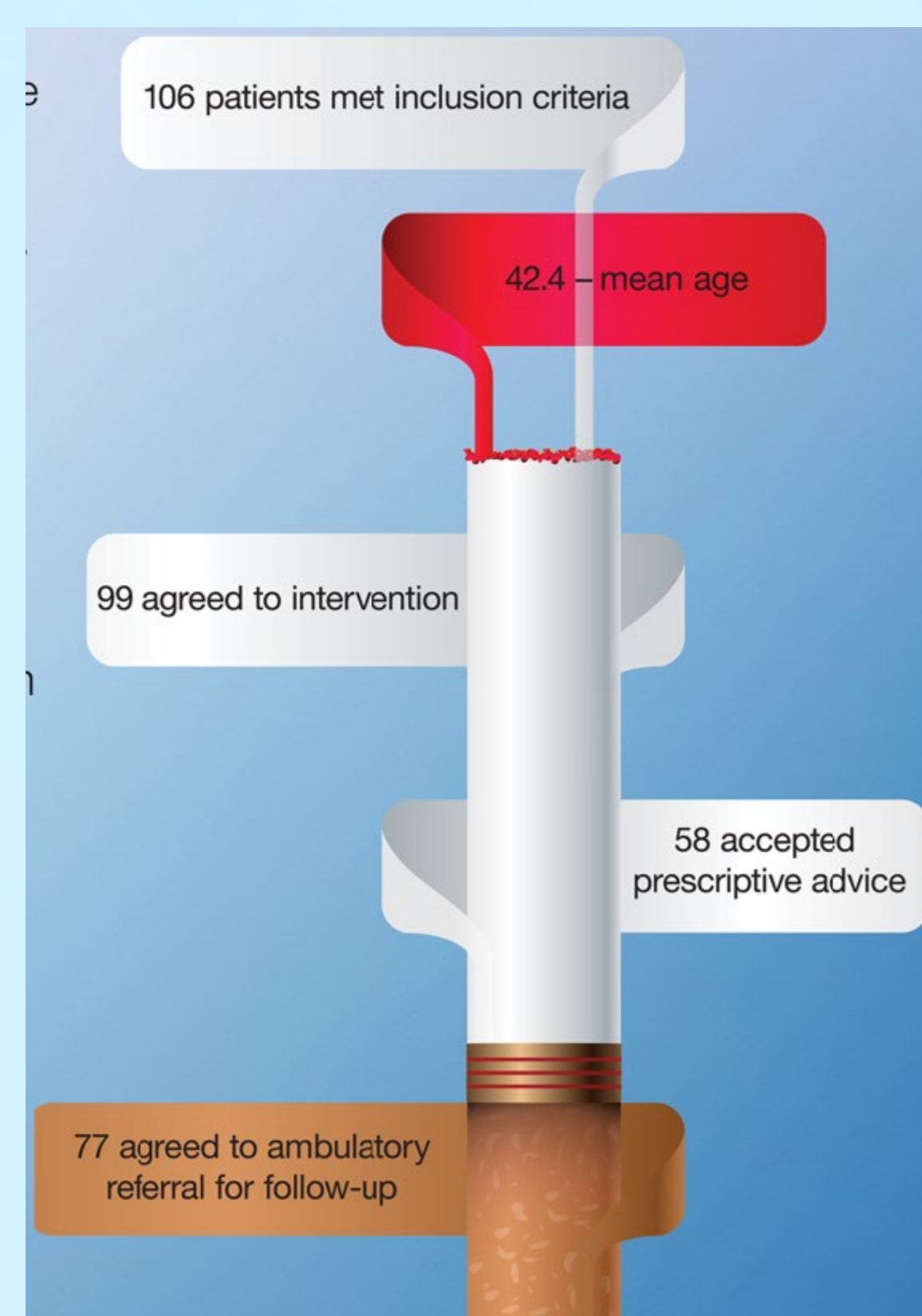
Using a physician directed, patient “opt-out” approach to prescriptive SC in the ED setting, we set out to describe adult ED patient actions as they related to SC behaviors.

## Methods

In this prospective pilot quality improvement program, a convenience sample of smokers at two NE PA hospitals who met inclusion criteria were approached. Criteria included being English speaking, ≥18 y/o, discharged, and not critically ill, incapacitated, incarcerated, or known to be currently pregnant. A standardized intervention was provided by residents/attendings to the patient in which the patient could opt-out at any level (to have the intervention, to receive prescriptive advice, or to follow-up with their PCP/tobacco treatment program). At the end of the encounter, patients were asked (5-point Likert scale) how important it was to have this conversation with a physician about their smoking behavior.

## Results

- 106 patients who met inclusion criteria were approached
- 99 (93%) agreed to the intervention
- Of those that agreed, 50 (50.5%) were male and 49 (49.5%) were female.
- Mean age was 42.4 (range 19–85 years old)
- 80% reported having a primary care physician
- Patients (as indicated) were offered prescriptive advice (nicotine replacement and/or oral medication) and 58 (58.6%) accepted one or both.
- An indication for prescriptive advice was not present in 6 (6.1%)
- Seventy-seven (77.8%) patients opted for at least one ambulatory referral for follow-up with primary care or tobacco treatment program
- Seventy-nine (79.8%) felt it was important (Likert scale 4 or 5) for the physician to be the team member to have this conversation with them.



## Discussion

This small prospective pilot study using STIR found that few smokers opted out of a SC intervention. The low opt out rate (6.6%) underscores the potential effectiveness of physician-initiated STIR. These cessation results are concordant with a larger RCT for SC in an ED setting which showed an increased validated quit rate at 6 months compared to the control group which only received a SC leaflet rather than a discussion (AWARD model).<sup>2</sup> Although this RCT utilized trained retired nurses rather than physicians, the results nevertheless concluded that brief advice made a difference in these patients' quit rates.<sup>2</sup> In both studies, the brief interface between patient and medical professional highlighting the personalized message of risks associated with smoking could have been a strong contributor to patient receptiveness. Our study may be unique as an “opt-out” model in the ED setting, but it has been done in other populations. A study of “opt out” referrals for pregnant smokers using stop smoking services (SSS) found that over twice as many women set a quit date with SSS and reported abstinence of smoking four weeks later.<sup>3</sup> Additionally an “opt-out” model was used in a hospital-based study that found that the approach positively impacted short-term cessation outcomes.<sup>4</sup> Our study seems to align with these other specialties in its potential success as an approach especially when applied with a STIR intervention. Future research should focus on a larger sample size, potentially longer timeframe for follow-up, comparing cessation in patients who received motivational interviewing with prescription therapy (STIR) vs. patients who only received motivational interviewing, and participants' reasons for not utilizing their prescribed SC medications. Variable levels of categorizing smoking status or using a form of objective smoking status such as cotinine measures could be beneficial in examining any discordance with self-reporting. Further study could also seek to determine if there are significant sex-specific differences in outcome. This study had a convenience sample of limited size and was implemented at two hospitals within the same region of northeast Pennsylvania, thus potentially limiting the generalizability of the results. Patients were only recruited based on the physicians' availability. The patients included in this study were all English-speaking. Data collected may have been biased by patient recollection and self-reporting. The measure of smoking status, cigarettes/cigars smoked per day over the last 7 days, could have been a limitation in that it may not accurately describe the patient's tobacco usage.

## Conclusions

In this small ED pilot using the STIR concepts in a patient “opt-out” setting, nearly all smokers chose to participate in the smoking cessation intervention and the vast majority felt it was important for the physician member of the health care team to lead the discussion. Over half of the patients accepted prescriptive advice and more than ¾ agreed to ambulatory referral for follow-up. These findings support a willingness of patients to participate in STIR. Future study regarding their change in smoking behaviors compared to those that receive SBIRT is indicated.

## REFERENCES

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