

Improving Smoking Cessation in Cardiovascular Disease Patients: An Evidence-Based Practice Project

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PROBLEM STATEMENT

- Tobacco cessation is one of the most important modifiable risk factors patients can control to reduce their risk of cardiovascular disease (CVD).
- One in three adults with CVD are tobacco users, one in five adults with CVD continue to smoke cigarettes four to five years after their diagnosis.
- 3% of tobacco users at the project site were successful in tobacco cessation and that tobacco cessation pharmacotherapy was rarely being initiated pre-implementation.

PROJECT PURPOSE

- Purpose:** Improve tobacco cessation pharmacotherapy initiation and cessation rates.
- Overarching aim:** Create, implement, and evaluate a protocol within the outpatient cardiology setting supporting tobacco cessation.
- Clinical question:** "Will a tobacco cessation protocol improve pharmacotherapy initiation and tobacco cessation rates among adult patients with established cardiovascular disease currently smoking tobacco products within 90 days compared to current practice?"

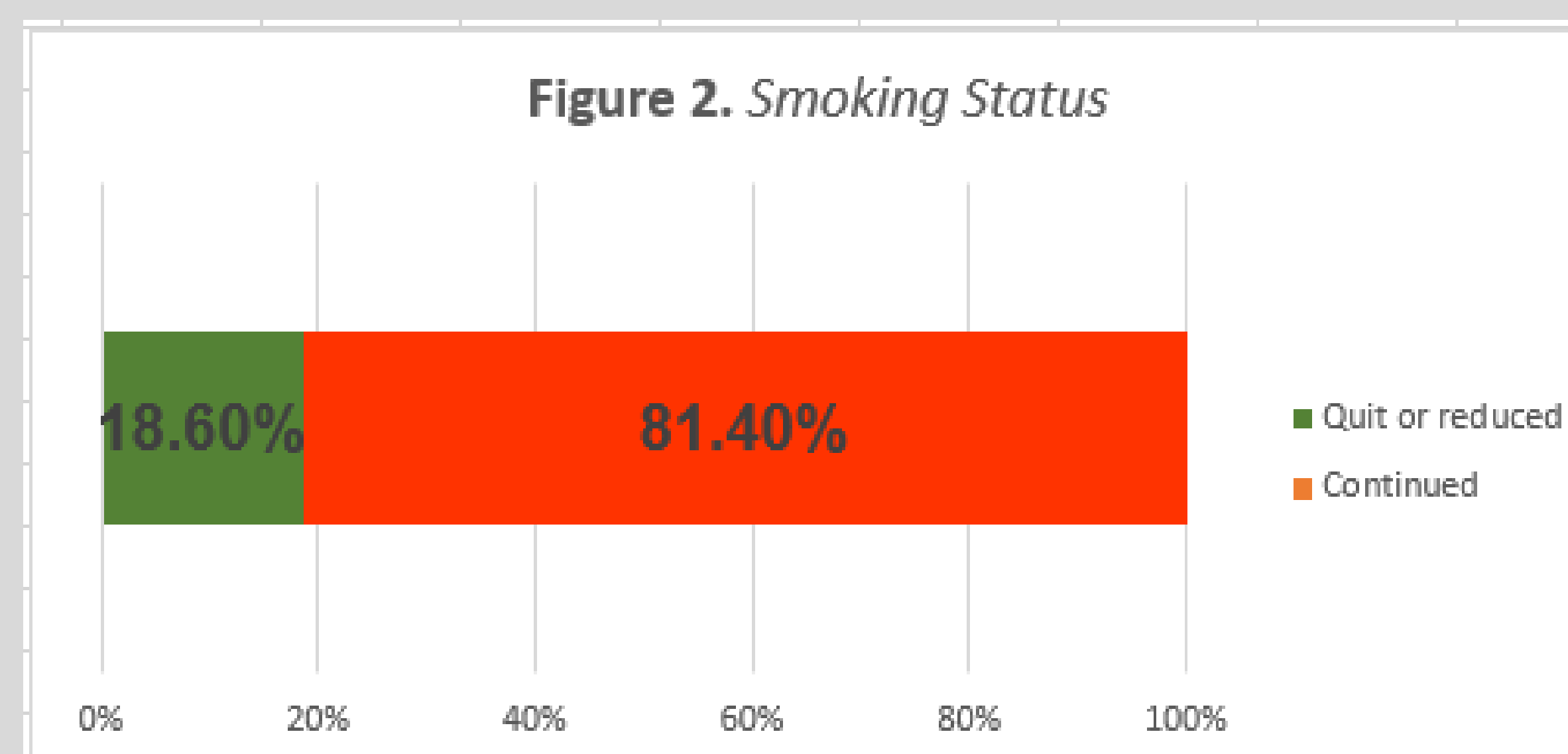
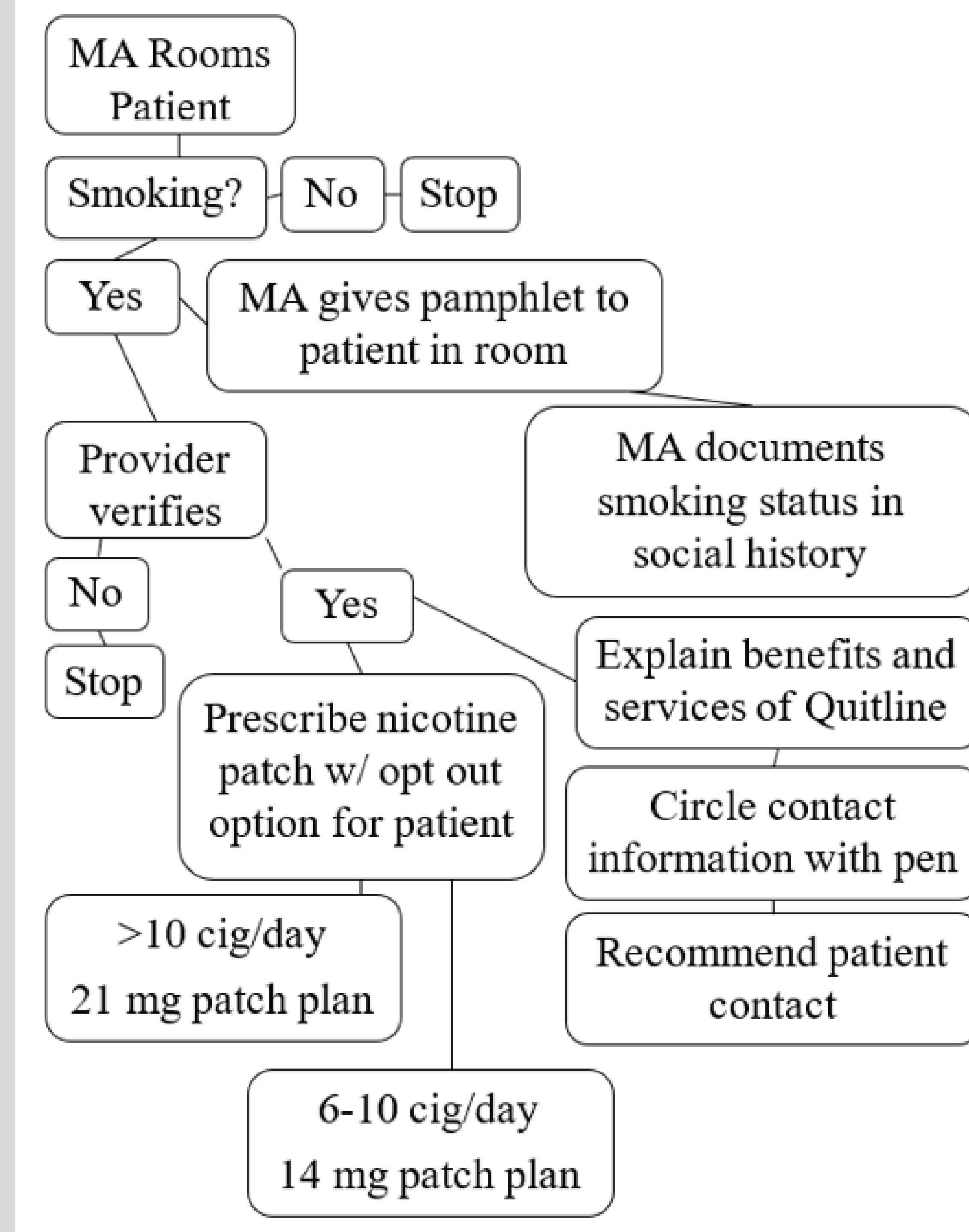
MODEL/NURSING THEORY

- Evidence-based practice model:** IOWA Model of Evidence-Based Practice.
- Nursing theory:** Kurt Lewin's Three-Step Model of Change.

METHODS

- Subjects:** Piloted by one care team within the cardiology practice. Male and female patients managed by the pilot team, aged 18 years and older with CVD, and currently smoking tobacco products.
- Setting:** Cardiology specialty private practice group comprising 40 physicians, nurse practitioners, and physician assistants providing all-encompassing cardiology services to patients in Florida. Piloted by one team within the group in the outpatient setting, comprising one physician, two nurse practitioners, and three medical assistants.
- Outcomes:** Nicotine patch initiation, tobacco cessation rates for tobacco smoking patients, referral rate to the Tobacco Free Florida quitline.
- Tools:** Data Collection Sheet to record outcome data.
- Intervention and Data Collection:** Protocol creation, pilot team education, protocol implementation (Figure 4), pre- and post-implementation chart reviews (6 months total).

Figure 4. Tobacco cessation protocol workflow



RESULTS

- 312 patients (129 pre- and 183 post-).
- Nicotine patch initiated to 3.5% of patients before and 20.7% of patients after implementation (Figure 1).
- 18.6% of patients quit or reduced smoking after implementation (Figure 2).
- 21.3% of patients referred to quitline after and 0% of patients before implementation (Figure 3).
- 76.5% of patients quitting or decreasing smoking received interventions ($Z = 7.289$, $P < 0.0001$, 95% CI = 58.86% to 89.27%).
- 66.6% of patients receiving intervention quit or decreased smoking ($Z = 4.413$, $P < 0.0001$, 95% CI = 49.71% to 80.86%).

Figure 3. Referral to Quitline

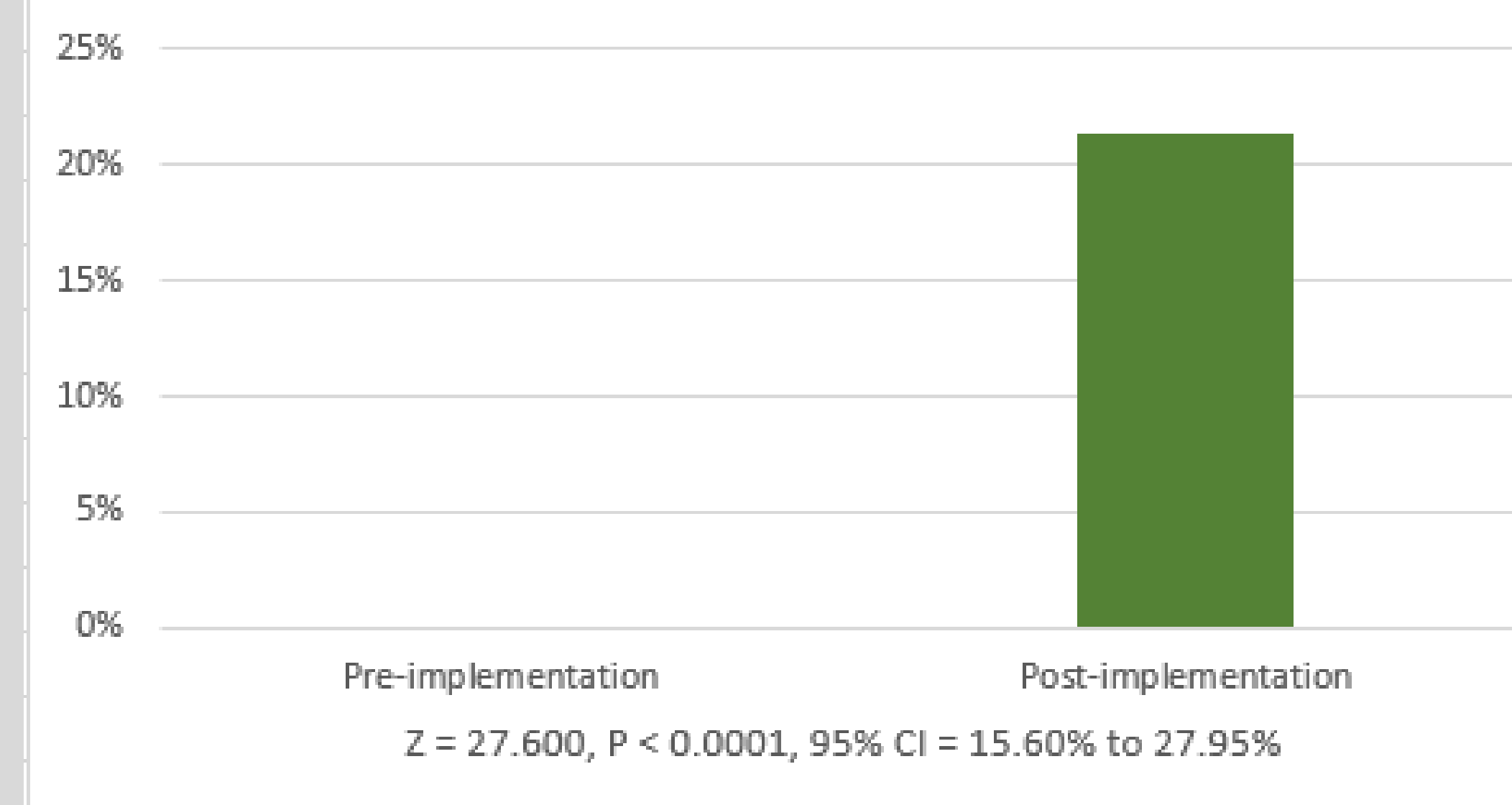
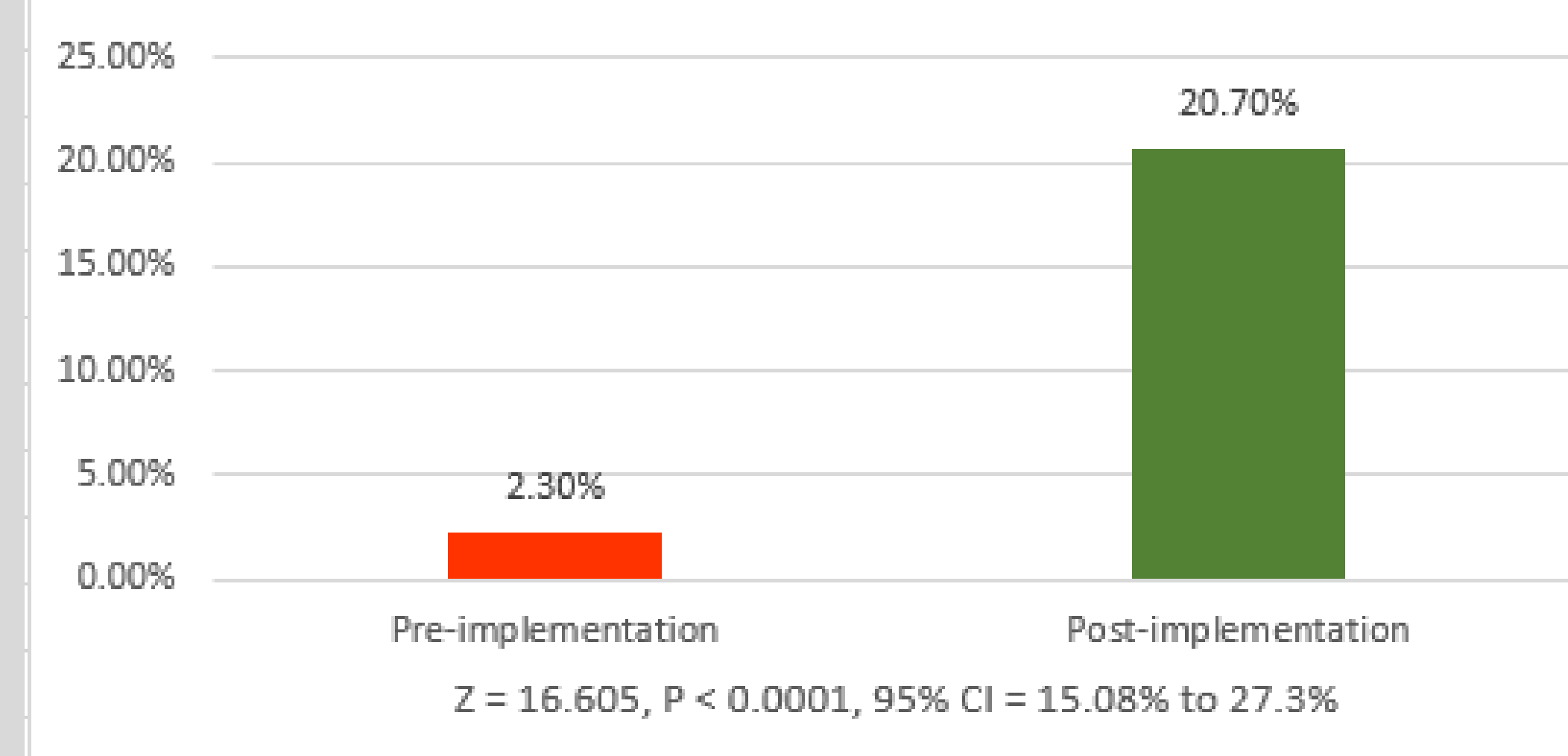


Figure 1. Tobacco Cessation Pharmacotherapy Initiation



DISCUSSION

- Nicotine patch initiation rates and quitline referral rates increased to 20.7% and 21.3% respectively.
- Smoking tobacco cessation rate post-implementation was 18.6%.
- The protocol was statistically significant in improving smoking tobacco cessation, nicotine patch initiation, and referrals to support services.
- The project will be easy to sustain if the free brochures continue to be stocked and no financial costs are required.
- Future plans could include implementation by all teams within the cardiology practice.

IMPLICATIONS FOR ADVANCE PRACTICE NURSING

- The efficient tobacco cessation protocol improved one of the most modifiable risk factors in patients with cardiovascular disease.
- This protocol is helpful in outpatient cardiology and can improve patient outcomes through risk factor modification in nearly every medical outpatient facility providing care for patients smoking tobacco products.

REFERENCES

Please scan for reference list



SMOKING RATES DECREASED IN CARDIAC PATIENTS