

# Changes in Tobacco Treatment after introducing a Service in a State Psychiatric Facility



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## BACKGROUND

- Individuals with mental illnesses have disproportionate tobacco-related disease morbidity and mortality as compared to those without mental illnesses (Newcomer & Hennekens, 2007; Osborn et al., 2007; Tran et al., 2009).
- Despite declining smoking prevalence in the general U.S. population in the past decades, smoking among individuals with mental illnesses have only slightly dropped and are currently two to three times the national rates (Centers for Disease Control and Prevention 2013; Cook et al., 2014).
- The Clinical Practice Guidelines for treating tobacco dependence recommend identifying tobacco use and offering treatment to every user during hospitalization.
- The purpose of this study is to examine the changes in the rates of identifying tobacco use status and offering tobacco treatment medications among newly hospitalized patients with mental illness since the inception of a tobacco treatment service at state psychiatric facility.

## SETTING

- Eastern State Hospital (ESH), Lexington, KY is one of the oldest free standing psychiatric hospitals in the U.S.
- In January 2016, ESH developed a nurse-led tobacco treatment services which aims to enhance the delivery of evidence-based tobacco treatment for all tobacco using patients.

## METHODS

- This study is based on a retrospective review of data from the Inpatient Psychiatric Facility Quality Reporting (IPFQR) Program of the Centers for Medicare and Medicaid Services (CMS).
- The proportion of patients not identified as tobacco users within 3-days of admission and the proportion of tobacco users who were offered tobacco treatment medication were examined by quarters (i.e., 4 month-intervals each).
- Analysis of Variance (ANOVA) was conducted to determine differences in the rates of tobacco user identification and offering of treatment medication by quarter.

Figure 1. Changes in Identifying Tobacco Users At Admission by Quarter (Sep 2015 to Dec 2016)

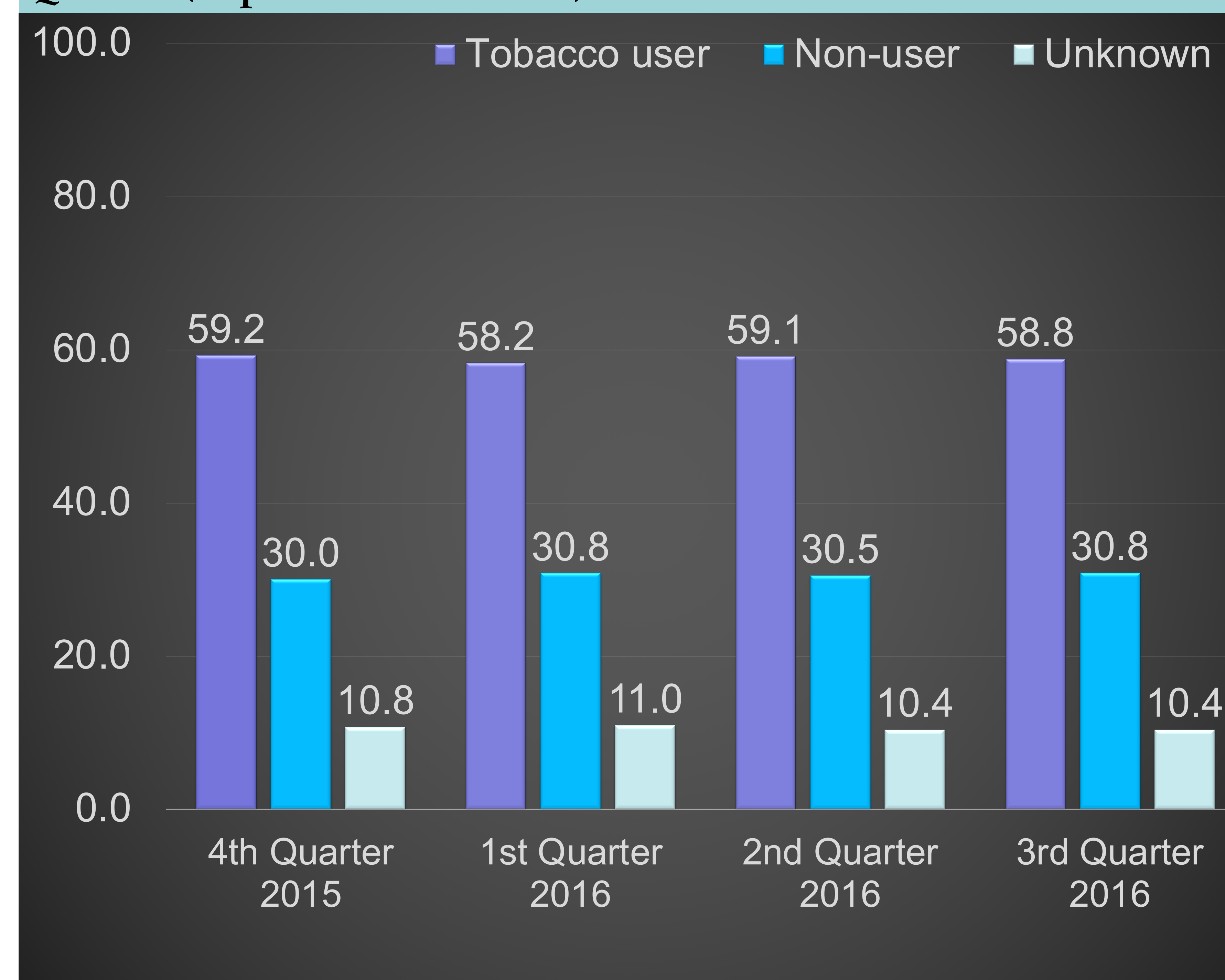
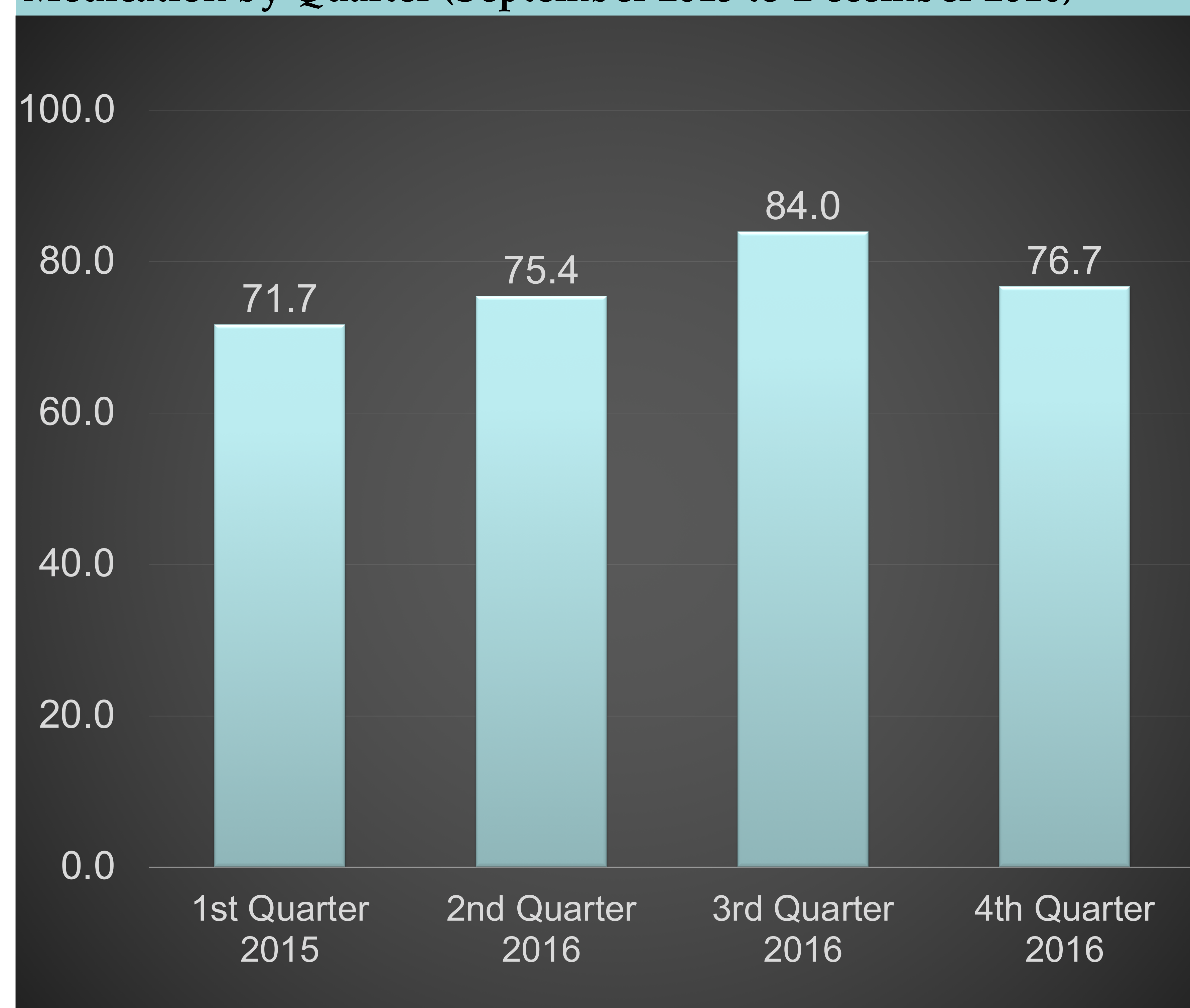


Figure 2. Changes in the Provision of Tobacco Treatment Medication by Quarter (September 2015 to December 2016)



## RESULTS

- There was no significant differences in identifying tobacco users/non-users by quarter (see Figure 1). In other words, the proportion of individuals whose tobacco use status was unknown at admission remained the same across quarters (10.8 vs. 11.0 vs. 10.4 vs. 10.4,  $F = 0.1$  [DF= 3, 12],  $p = .939$ ). The primary reason for being unable to identify tobacco use status was psychiatric symptom burden among patients.
- However, there was an increase in the provision of tobacco treatment medication to identified tobacco users at admission by quarter (71.4 vs. 75.4 vs. 84.0 vs. 76.7,  $F = 5.8$  [DF = 3, 12],  $p = .011$ ).
- Provision of tobacco treatment medication increased by at least 5 percentage points and peaked in the 2<sup>nd</sup> quarter of 2016 (see Figure 2).

## IMPLICATIONS

- **Psychiatric Nursing Practice**
  - Given their disproportionate tobacco-related morbidity and mortality, nurses should be involved in systematic processes to identify tobacco use and address tobacco use treatment among individuals with mental illnesses.
  - Treating tobacco use disorders involves receiving training, advocating for resources for treatment, and promoting tobacco-free campuses through a well-ness approach within psychiatric facilities
- **Future Research**
  - More research is needed to identify cost-effective, valid methods (such as urine or saliva screening) to identify tobacco use, especially those unable to provide a health history due to acute exacerbation of psychiatric symptoms.
  - patients with mental illness during an acute care hospitalization. Especially those who are not able to adequately provide a health history due to acute exacerbation of psychiatric symptoms.

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