

Usage of Tobacco Cessation Helpline (QUITNOW) in Rural New Mexico



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Abstract

New Mexico's QUITNOW program is an evidence-based method for increasing tobacco cessation. Although many efforts have been made to create and implement tobacco cessation interventions, research on the effectiveness of such programs in rural communities is limited. This study aims to address the following question: "To what extent are adults in rural communities engaging in the QUITNOW program compared with adults in urban communities?" Rates of QUITNOW use will be calculated for each zip code in New Mexico. Data from the US Census and the Behavioral Risk Factor Surveillance System (BRFSS) will be used for the denominator. Numbers of initial contacts made with the program from the QUITNOW data will be the numerator. Data from rural communities were compared with data from urban communities, statistically by *t*-testing. We found the initial contact rate to be significantly lower in rural communities. This research will inform development of a focus group to better understand barriers to QUITNOW use in rural communities. It will also inform future interventions to increase use of QUITNOW in those communities. Tobacco-free living is an essential component of better health, and our findings regarding disparities associated with residence in a rural community will help to address gaps in our knowledge of this issue.

Background

- 70% of adult smokers in the US want to quit
- Telephone-based interventions are recommended
- There is limited research on the effectiveness of tobacco cessation programs in rural communities
- Data obtained from any city are typically generalized to fit all communities
- Rural populations with high rates of poverty tend to have the most prevalent health disparities as a result of the oppression imposed by society
- By partnering with rural communities, researchers can:
 - Add to the understanding of what promotes tobacco use
 - Add to the understanding of tobacco cessation in rural communities
 - Work with communities to implement interventions that lead to a healthier, tobacco-free society

Materials/ Methods

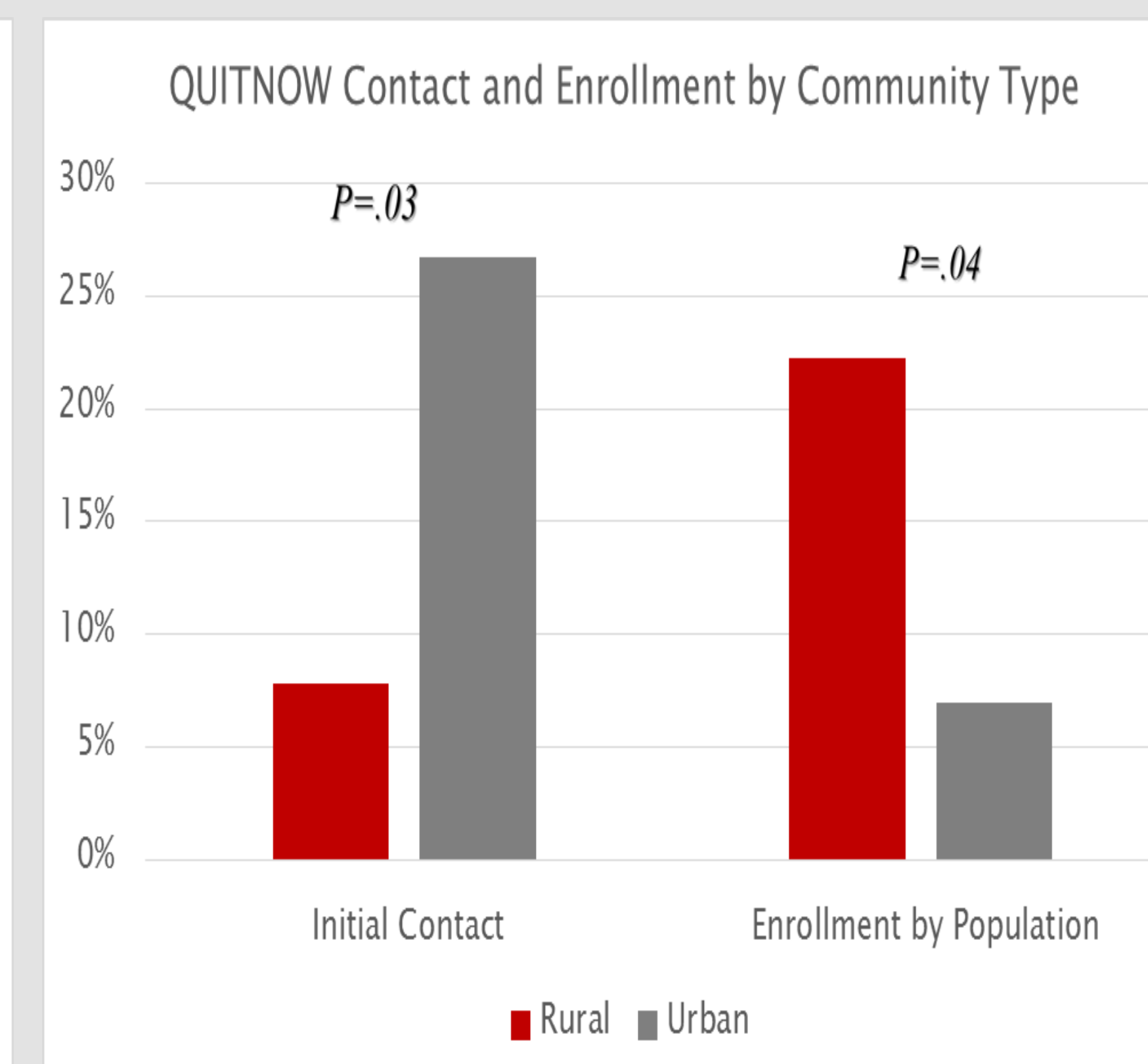
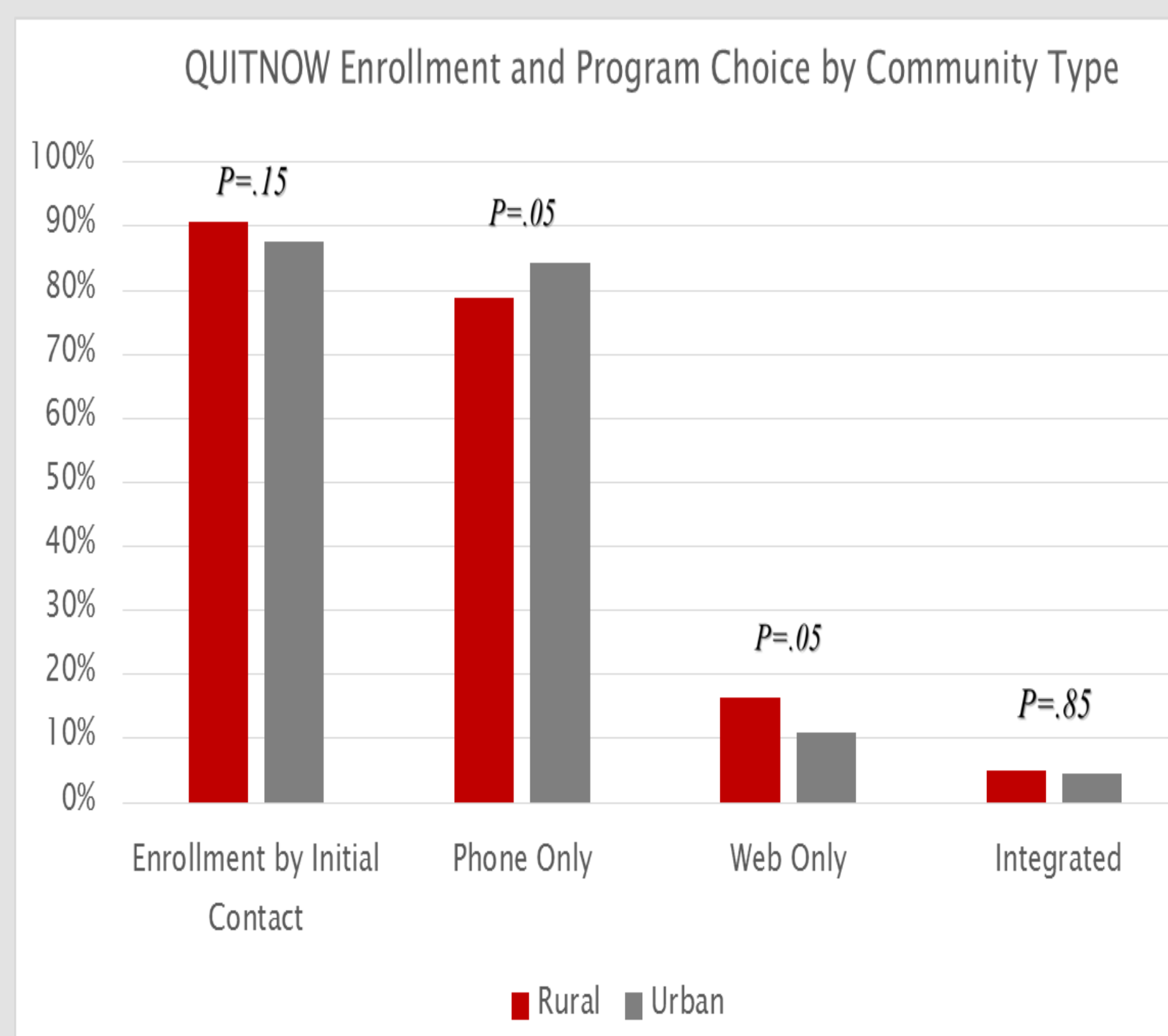
- Literature Review**
 - Conducted to identify previous studies regarding tobacco cessation in rural areas within the United States
- Data Collection Materials**
 - Adults, 18+ years, by zip code tabulation area (ZCTA),¹ tobacco users and cessation attempts (years 2011 and later) by county type,² Rural Urban Commuting Area (RUCA) codes (2010),³ and initial contact with QUITNOW by postal zip code (2012-2014)⁴
- Data Organization**
 - Combined data on Excel by postal zip code or ZCTA, determined rurality, applied percentages of tobacco users, applied QUITNOW data as numerator
- Statistical Analysis**
 - For statistical analysis, *t*-tests (one or two-tailed as appropriate) were used to determine:
 - Probability of residents in rural zip codes making a contact compared with residents in urban zip codes
 - Probability of tobacco users enrolling in QUITNOW of those who made an attempt to reach the program
 - Enrollment type preference

Results

	Urban Areas (49)	Rural Areas (132)	Statewide (367)
Cigarettes	20.6%	25.5%	20.5%
Smokeless	3.5%	7.2%	4.4%

* Numbers in parenthesis signify total number of zip codes

- Among cigarette smokers
 - 56% of urban residents
 - 61% of rural residents
 - 58% of NM have tried to quit



Limitations

- BRFSS data by county (metropolitan or rural) did not account for individual communities within county
- QUITNOW data were not age-adjusted
- ZCTAs are different from USPS zip codes, which can change monthly

Conclusions

- Rural residents are not contacting the QUITNOW program, but when they do, they are just as likely to enroll as urban residents
- There may be barriers to reaching the QUITNOW program or being aware of it

Future Directions

- Develop focus group discussion guide to better understand barriers to cessation in rural communities
- Create interventions to increase use of QUITNOW in rural communities

References

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Acknowledgements

