Tobacco Control: Policy, Systems, and Patient-based Approaches

Mark. W. Vander Weg, Ph.D.
Associate Professor
Departments of Internal Medicine and Psychological and Brain Sciences
Center for Comprehensive Access & Delivery Research and Evaluation (CADRE)
Iowa City VA Health Care System
Overview

- Present three representative studies representing policy-, systems-, and patient-level approaches to tobacco control:
  - Health impact of clean-air laws
  - Implementation of evidence-based treatments for tobacco dependence
  - Tailored tobacco intervention for rural Veterans
Health Impact of Smoke-Free Laws

- **Aims:** Examined associations between smoking bans and hospital admissions for both smoking-related and non-smoking-related conditions in all 3,182 US counties from 1991-2008

- **Data sources:** American Non-smokers’ Rights Foundation database and hospital discharge data from the Centers for Medicare & Medicaid Services (CMS).

- **Data analysis:** Poisson regression analyses adjusting for county population characteristics, hospital supply, and beneficiary state of residence

Key Findings

- Compared to counties with no bans, hospital admissions for acute MI declined 20-21% by 3+ years after implementation of smoking bans.

- Admissions for COPD declined by 11-17%.

- Health benefits tended to increase in relation to the number of settings covered by the bans.

- Minimal changes were observed in admissions for non-smoking-related conditions (hip fracture and gastrointestinal hemorrhage).

Implementation of Clinical Practice Guidelines in the Inpatient Setting

- **Design**: Multi-site, quasi-experimental, before after cessation induction trial designed to facilitate delivery of recommended smoking cessation services based on the “5As”

- **Primary Aims**: Determine the effectiveness of a nurse-initiated intervention which couples clinical reminders and low intensity inpatient counseling with proactive telephone counseling.

- **Intervention**: Based on Chronic Care Model
  - Practice redesign and clinician training
  - Self-management support for patients
  - Clinical information system modification

_Funded by VA Health Services Research & Development (HSR&D); D. Katz, PI_
Key Findings

- Most areas of nurse counseling improved during the intervention period (4 of 5 “As”)
- Advice to quit and cessation medications did not increase. Quitline referrals were infrequent.
- Nurses’ self-efficacy and satisfaction with their role in cessation improved
- No differences in 7-day point prevalence abstinence rates at 6 months were observed (13.5% vs. 13.9%).

Vander Weg et al. (Under review).
A Tailored Tobacco Cessation Intervention for Rural Veterans

- **Background**: Rural residents have elevated rates of tobacco use and reduced access to treatment.

- Smokers also frequently present with comorbid issues that may interfere with quitting (e.g., depression, risky alcohol use, weight concerns) but which are rarely addressed as part of treatment.

- **Design**: Five-site, randomized clinical trial evaluating a tailored intervention for rural smokers which screens for and addresses comorbid issues compared to enhanced usual care.

*Funded by VA Office of Rural Health*
Treatment Conditions

- **Enhanced usual care**: Referral to state tobacco quitline

- **Tailored intervention**: Standard 6-session phone-based intervention for smoking cessation combined with supplemental treatment(s) as appropriate
  - Elevated depressive symptoms – Behavioral activation
  - Risky alcohol use – Risk reduction approach consistent with NIAAA/VA recommendations
  - Weight concerns – Standard behavioral strategies for attenuating weight gain

- **Pharmacotherapy**: Both conditions receive identical pharmacological intervention in which cessation medications are selected based on a shared decision making protocol