# Tobacco Control: Policy, Systems, and Patientbased 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 patientlevel 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
- <u>Data sources</u>: American Non-smokers' Rights
   Foundation database and hospital discharge data from the Centers for Medicare & Medicaid Services (CMS).
- <u>Data analysis</u>: 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

### 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%).

# 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



#### **Treatment Conditions**

- Enhanced usual care: Referral to state tobacco quitline
- <u>Tailored intervention</u>: 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