Alcohol SBIRT Implementation In Adult Primary Care: Preliminary Results from an Integrated Health Care Delivery System

Jennifer Mertens, PhD, Felicia Chi, MPH, Stacy Sterling, MSW, MPH, David Pating, MD, Constance Weisner, DrPH, MSW

INEBRIA conference
Boston, MA
September 21, 2011

Drug and Alcohol Research Team (DART)
Division of Research, Kaiser Permanente
University of California, San Francisco

Funded by NIAAA R01AA18660

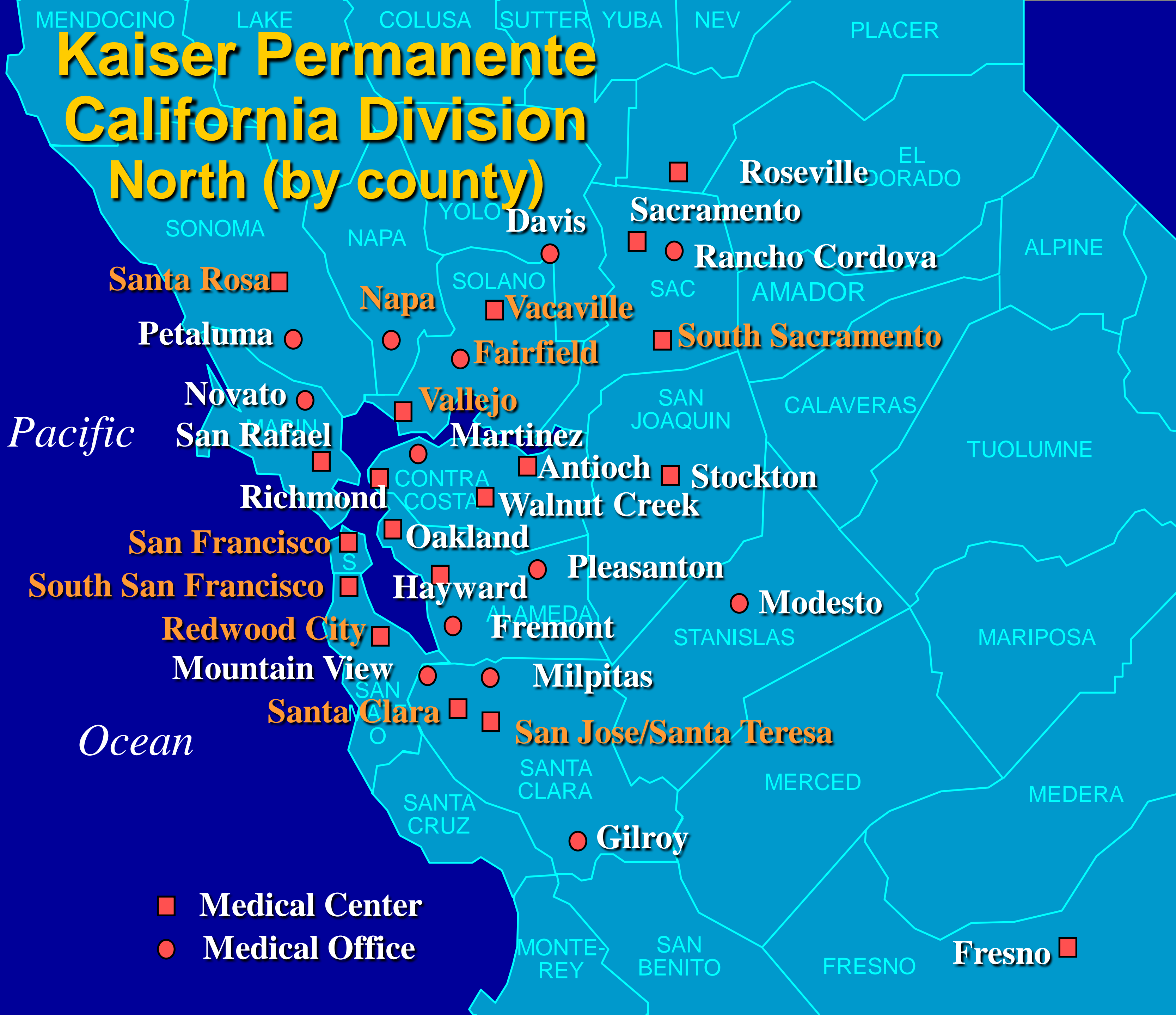
ADVISe
Alcohol Drinking as a Vital Sign

D.A.R.T
Drug & Alcohol Research Team

Background

- Randomized studies have found similar effectiveness when non-physician providers deliver SBI compared to physician delivery.
- The ADVISe study examines whether non-physician (versus physician) delivery of SBIRT in primary care (PC) clinics increases implementation and sustainability.

Babor et al. *Alcohol Alcohol.* 2006;41:624-631.
Ockene et al. *Arch Intern Med.* 1999;159:2198-2205.
Reiff-Hekking et al. *J Gen Intern Med.* 2005;20:7-13.



- Integrated health care system (medical, psychiatry, AOD services)
- Non-profit health plan
- Serves 3.4 million members (35% of insured population in the region)
- 18 hospitals, 27 AOD outpatient clinics

Randomization

Medical Centers

1/3 of PC clinics randomized to Primary Care Provider
PCP Arm

1/3 of PC clinics randomized to Non-Physician Provider
NPP Arm

1/3 of PC clinics Randomized to
Control Arm

PCPs trained to conduct SBIRT

- **Medical Assistants (MAs) trained to <u>Screen</u>**
- **Behavioral Medicine Specialists (BMSs), Clinical Health Educators (CHEs), Or Nurses trained to conduct <u>BI & RT</u>**

Informational Session on How to Use NIAAA Screener

Why this design?

Sample

- 54 Primary Care clinics
- 518 clinicians
- 460,000+ patients

Study Aims

- Implementation and Sustainability by Arm:

  Outcomes: Rates of Screening, Brief Intervention, Referral, and Follow-up

- Qualitative Analysis of Implementation Process
- Factors Affecting Implementation by Arm
- Implementation and Intervention Costs by Arm
- Effectiveness by Arm – Patient Outcomes

Intervention: NIAAA Guide

- **Based on NIAAA Guide "Helping Patients Who Drink Too Much"**
- **Curriculum: Adapted from Alcohol Clinical Training Project - R. Saitz**
  - **www.mdalcoholtraining.org**
- Feedback, advice, & addressing readiness, and collaborative goal-setting
- Providing written NIAAA brochure: "Tips for Cutting Back" (Spanish, Chinese, and Vietnamese translations)
- Referral to AOD clinic for further assessment

Data Collection

- Primary Care Leader Survey:
  - Chiefs of Medicine from ADVISe medical centers and MD leaders for each Clinic (Total N=62)
  - Response Rate=73%
- Qualitative Interviews / Feedback at Booster Trainings
- Kaiser Permanente databases
  - Implementation outcomes
  - Patient and provider characteristics
  - Patient outcomes

Implementation Process

Epic Hyperspace - SSC-MEDA >BRUCEVLL MOB - WITS - KTAZD2256 WITSCA2

LOS Close APC Vital Wgt RTF SM OnE StM MR# Jump

New None Cons Post Op Mod25 Prev Time

Desktop Action Patient Care Scheduling HIM Reg/ADT Surgery CRM/CM Reports Report Mgmt Tools Admin Help

Back Forward Home Schedule In Basket Chart Enc Tel Enc Refill Enc Ancil Ord Enc Patient Lists Secure

Epic | Home | Econsultca,Six Ii

Econsultca, Six Ii

MRN	Age	Sex	PCP	Allergies	Alert	Spec Feat	kp.org
110012963053	45 Y	F		Vancomycin, Amino Acid Supplement, Fc *		PrtD	Inactive

SnapShot
Chart Review
Results Review
Allergies
Medications
Flowsheets
Problem List
History
Letters
Demographics
Scan
CIPS
Prev Health Prompt
Patient Report
eConsult
Order Entry
Imm/Injections
Doc Flowsheet
Work/Activity Status

7/26/2010 visit with A X CEMD MD

PHQ-9 | Click to set | To PCP: FYI | To PCP: Act | RTF AVS | Fast VOT

Images Questionnaires Admin Benefits Inquiry References SmartSets Summary Open Orders Print AVS

Allergies: **Vancomycin, Amino Acid Supplement, Formaldehyde, Tetanus Antitoxin, Hepatitis A Virus Vaccine**

Last Vitals: BP: P: T: T Src: Resp: W: H:

SpO2: PF: BMI: BSA: OB/GYN Status: OB EDD: Tobacco: Not Asked

Charting

Chief Complaint
Vitals
BestPractice
Visit Notes
Progress Notes
HP Notes
Relevant Results
SmartSets
Diagnoses
Orders
Pt. Instructions
LOS
Follow-up
Close Encounter

Chief Complaint

None

Vitals

New Set of Vitals

No readings taken.

Other Vitals	
OB/GYN Status:	OB
Tobacco	
Status:	Not Asked
Verified:	Never verified

BestPractice Alerts

Please complete the Alcohol Screening for this patient.

Jump to Alcohol Screening

Refresh

Visit Notes

None

Doc Flowsheet

File | Add Row | Add Group | Add LDA | Cascade | Add Col | Insert Col | Device | Compact | Last Filed | Details | Graph | Go to Date | Values By | Refresh | Legend | Link Lines

Flowsheet: ALCOHOL SCREENIN | QUALITY OUTREACH-SUPPORT STAFF | Quality Outreach-Provider

- ALCOHOL SCRE... ☑
- Daily Limits: ☑
- Weekly Limits: ☑
- Dependence Risk: ☑
- Actions Performed: ☑

	07/19/10
	1400
	Daily Limits:
(Male 18-65) How many times in the past year have you had 5 or more drinks a day?	2
(Female 18+) and (Male 66+) How many times in the past year have you had 4 or more drinks a day?	
	Weekly Limits:
On a typical drinking day, how many drinks do you have?	
On average, how many days a week do you have an alcoholic drink?	
	Dependence Risk:
In the past year, have you sometimes been under the influence of alcohol in situations where you could	
Have there often been times when you had a lot more to drink than you intended to have?	
	In the past year, have you sometimes been under the influence of alcohol in situations where you could have caused an accident or gotten hurt?
Was an intervention performed?	
Was patient referred to CD Services?	

Implementation

- Communication with Regional and Local Leadership
- Training:
  - Included skills-based role-play, case study video
  - 2-hour trainings for PCPs in PCP arm
  - 2-hour trainings for NPP arm
    - 1st hour for both NPPs and PCPS
    - 2nd hour for NPPs only
  - 30 Minute Booster Training
  - 1-hour trainings for MAs in NPP arm
  - Conducted on-site during lunch hours; provided lunches and CME credits
- Technical Assistance in-person visits, by phone and email
- Quarterly performance feedback reports

PCP Arm

PCP screens using NIAAA screener

Negative: No further action.

Positive: PCP administers screeners for weekly limits and alcohol dependence

Negative for Dependence: **Brief Intervention** + follow-up

Positive for Dependence: PCP **Refers to AOD Treatment + follow-up**

Non Physician Provider (NPP) Arm

MA screens using NIAAA screener

Negative: No further action.

Positive: PCP sees screening results; hands off patient to see NPP

NPP administers screeners for weekly limits and alcohol dependence

Negative for Dependence: **Brief Intervention** + follow-up

Positive for Dependence: NPP **Refers to AOD Treatment + follow-up**

SBIRT Implementation Facilitators: Qualitative Findings

NPP Arm Facilitators

- Medical Assistants' vital signs screening (including smoking)
- Clinical Health Educators'
  - comfort and familiarity with motivational interviewing techniques
  - openness to adding alcohol SBIRT to their practice
- Fewer time constraints (particularly for CHEs and some BMSs)
- More flexible schedules for CHEs and some BMSs

Implementation Outcomes by Arm: Preliminary Findings

ADVISe
Alcohol Drinking as a Vital Sign

Percentage Screened and Given BI/RT by Study Arm – First Quarter of Study (N=227,308 to date)

	PCP Arm	NPP Arm	Control
N Unique Patients	79,642	77,278	70,388
% Screened	11%[a]	**54%[a,c]**	4%[c]
N Screened Positive	821	4719	288
% Given Brief Intervention/Referral among Positive Screens	**37% [a,b]**	1%[a]	0.4% [b]

a, b, and c denote statistically significant differences between groups using GEE models adjusting for patient age, gender, and clustering by facility; $p<.05$)

What is happening?
Implementation Barriers:
Qualitative Findings

Barriers to SBIRT in NPP Delivery Mode

Patient Barriers

Patient resistance to seeing the NPP

Primary Care Provider Behavior

- PCP discomfort with “warm handoff” to NPP that didn’t mention alcohol
- Easier to “ignore” screening result from MA
- Some PCPs wanted to address alcohol themselves

Systemic Barriers

- NPP appointment often required separate visit
- Exam room availability

Barriers Across PCP and NPP Arms

- Obstacles re: referral to AOD clinics
- PCP difficulty changing focus from dependence to at-risk drinking
- Resistance to NIAAA Safe Drinking Limits
  - *“All my patients drink that much”*
  - *“I drink that much”*
- PCP’s perceptions that we are asking them to do more for alcohol (i.e., BMI, referral to NPP) than other conditions or health behaviors
- **No sanctions or incentives for SBIRT**

Challenges and Questions for Further Research

Revisiting "Competing Priorities": What we are up against in the U.S.

- $ **CMS** 2011 **STAR quality measures** include:
  - ✓ Staying Healthy: Screenings, Tests, and Vaccines - **13 measures**, e.g., breast and colorectal cancer screening, cholesterol screening, flu vaccine, pneumonia vaccine, physical activity monitoring
  - ✓ Managing Chronic Conditions - **10 measures**, e.g., diabetes monitoring, controlling hypertension
  - ✓ Ratings of Responsiveness - **6 measures**, e.g., patient satisfaction and quality ratings
- $ **15 CMS core measures of "meaningful use**" of Electronic Health Records, including documenting:
  - ✓ Smoking
  - ✓ Height, weight, BMI
  - ✓ Preferred language, Demographics
  - ✓ Drug allergies
  - ✓ Updated diagnosis and problem list
- $ **HEDIS Measures** = NCQA ratings = Employer/Purchaser $$$

- ➢ **These involve strong financial incentives.**
- ➢ **Alcohol SBIRT does not!**

CMS, http://www.cms.gov/ehrincentiveprograms Golub, http://www.kff.org/healthreform/upload/8061.pdf

Challenges

- Reimbursement is an important first step, but **SBIRT HEDIS Measures, Stronger Incentives, or Sanctions** would help level the playing field.
- Need for training of physicians on BMI for **all behavioral aspects of health care** and chronic condition management.
- How to help physicians "get" distinction between dependence and drinking beyond maximum safe limits?
- How to effectively refer patients to AOD?

Questions for Future Research

- If SBIRT were incentivized and Medical Assistants screened in both models:
  - how would rates of intervention/referral compare between PCP and NPP delivery?
- Need for integration with other behavioral health (BH) screening/interventions in PC (e.g., other drugs, depression, anxiety, IPV)
  - What interventions are effective and feasible for broad BH screening approaches and multiple BH concerns?

Acknowledgements

Investigators/Staff Scientists
Connie Weisner, DrPH, LCSW
Cynthia Campbell, PhD

Group Leader & Dissemination Lead
Stacy Sterling, MSW, MPH

Health Economist
Sujaya Parthasarathy, PhD

Analysts
Felicia Chi, MPH
Andrea Hessel, MS
Wendy Lu, MPH
Tom Ray, MBA

Project Coordinators
Agatha Hinman, BA
Aliza Silver, MA
Tina Valkanoff, MPH, MSW

Adjunct Investigator
Derek Satre, PhD

Interview Supervisor
Gina Smith Anderson

Research Associates
Georgina Berrios
Diane Lott-Garcia
Melanie Jackson
Cynthia Perry-Baker
Barbara Pichotto
Martha Preble
Lynda Tish

KP Clinicians – Collaborators and Trainers
Steve Allen, PhD
Jennifer Firestone, MD
Murtuza Ghadiali, MD
Carol Havens, MD
Charles Moore, MD
David Pating, MD
Michael Rubino, MD
Matthew Tarran, PhD

KPNC Chemical Dependency Quality Improvement Committee

Questions?