

Facilitating Recovery in the Context of Healthcare: Challenges and Opportunities

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Disclosure Information



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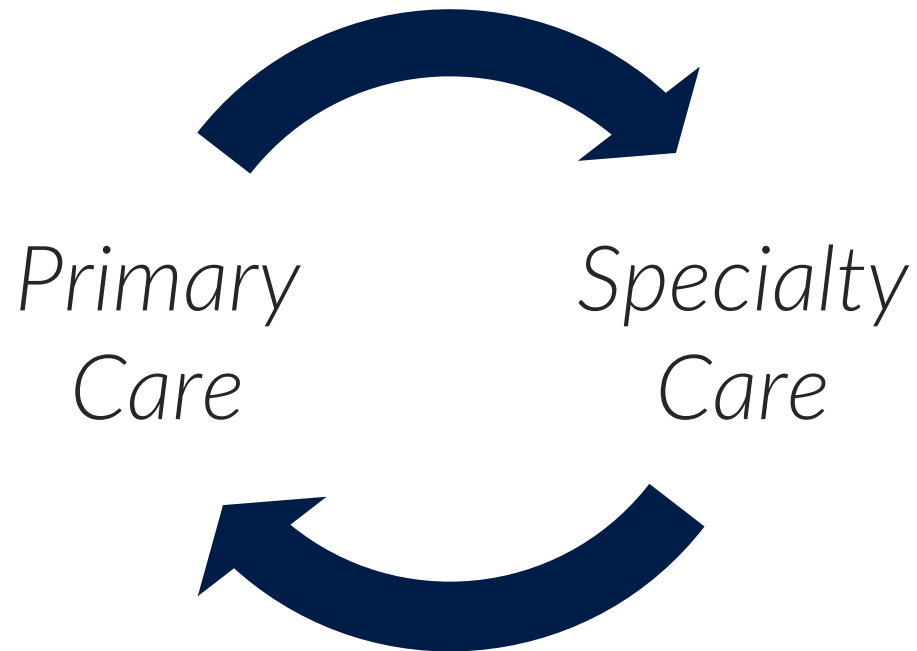
- No Disclosures

Session Learning Objectives

At the end of the session, you will be able to:

- The continuum of care for alcohol use problems in healthcare settings: Barriers and Facilitators.
 - Identification and Early Intervention
 - Linkage between primary and specialty care
 - Alcohol pharmacotherapy in primary care
- Components of recovery-supportive healthcare, for the spectrum of alcohol problems.
- Using an alcohol registry to facilitate research and improve quality of care for people with alcohol problems.
 - Factors associated with early, sustained and stable recovery from alcohol use problems, among healthcare patients.

Integration of Alcohol and Drug Services with Primary Care as the Anchor (Health Home)



- Screen and treat in PC (if moderate problem continue monitoring)
- Specialty care if needed
- Back to Primary Care for monitoring

Setting: Kaiser Permanente Northern California

- >4.3 million members
- 1/3 of the population in Northern California
- Diverse
- Reflects the U.S. population with access to care
- Direct access to specialty addiction medicine and psychiatry



Challenge: Identifying Alcohol Problems
Early and Improving Overall Health →
Alcohol Screening and Brief Intervention
in Primary Care

***ADVISE Alcohol SBIRT Trial
(R01AA018660)***

- Cluster-randomized implementation trial
- 54 Primary Care Clinics
- 11 Medical Centers
- 639,613 patients with visits
- 556 primary care providers



***Alcohol as a Vital Sign (“AVS”)
Health System-Wide Systematic Alcohol SBIRT Initiative
(R01AA018660, R01AA025902)***

- Region-wide implementation of alcohol SBIRT in KPNC adult primary care
- 21 Medical Centers
- ~4.5 million members
- ~2,500 adult primary care physicians



1. Medical Assistants screen for unhealthy alcohol use, using items based on NIAAA daily and weekly limits, tailored to sex and age, as part of adult primary care “rooming” process , along with BP, Tobacco, exercise
2. Primary Care Clinicians deliver Brief Intervention and Referral to specialty treatment, as needed

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

Snapshot 7/26/2010 visit with A X CEMD MD PHQ-9 Click to set

Chart Review Images Questionnaires Admin Benefits Inquiry References SmartSets Summary Open Orders Print AVS To PCP: FYI To PCP: Act

Results Review Allergies: Vancomycin, Amino Acid Supplement, Formaldehyde, Tetanus Antitoxin, Hepatitis A Virus Vaccine RTF AVS Fast VOT

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

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

- Flowsheets
 - Problem List
 - History
 - Letters
 - Demographics
 - Scan
 - CIPS
 - Prev Health Prompt
 - Patient Report
 - eConsult
 - Order Entry
 - Imm/Injections
 - Doc Flowsheet
 - Work/Activity Status
- 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

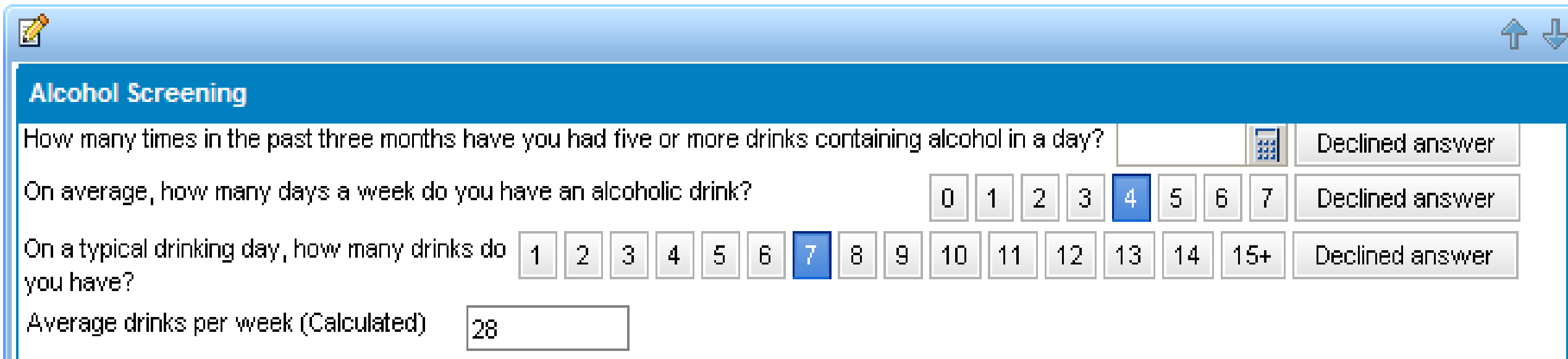
Please complete the Alcohol Screening for this patient.
Jump to Alcohol Screening

Refresh

Visit Notes
None



Alcohol as a Vital Sign Questions in Electronic Health Record



The screenshot shows an EHR interface for an Alcohol Screening form. The form is titled "Alcohol Screening" and contains three questions with corresponding input fields and buttons. The first question asks for the number of times in the past three months the patient had five or more drinks in a day, with a text input field and a "Declined answer" button. The second question asks for the average number of days a week the patient has an alcoholic drink, with a row of buttons from 0 to 7, the button for 4 is selected, and a "Declined answer" button. The third question asks for the number of drinks on a typical drinking day, with a row of buttons from 1 to 15+, the button for 7 is selected, and a "Declined answer" button. Below the questions is a calculated field for "Average drinks per week (Calculated)" with a text input field containing the value 28.

Alcohol Screening

How many times in the past three months have you had five or more drinks containing alcohol in a day? Declined answer

On average, how many days a week do you have an alcoholic drink? 0 1 2 3 4 5 6 7 Declined answer

On a typical drinking day, how many drinks do you have? 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15+ Declined answer

Average drinks per week (Calculated)

NIAAA Single-item screening item (*modified time frame*)
(4+/5+ drinks per day, tailored to age and gender)

+ daily and weekly frequency and calculated quantity

Best Practice Alert for Clinicians

Screening Results

Patient had 4+ drinks/day 7 time in past 3 months, which exceeds the daily low-risk limit: no more than 3 drinks on any one day (women/older adults or men aged 18-65).

Patient typically has 20 drinks a week which exceeds weekly low-risk limits: no more than 7 per week.

Decision Support

Patient has screened positive for Unhealthy Alcohol Use. Provide Brief Advice to "Cut Back." and code "Counseling, Alcohol prevention".

Ask questions to screen for Alcohol Dependence (see more info below).

>>If positive to either question, refer to CD services if patient agrees and code "Monitoring, Alcohol Use and Abuse"; document if referral refused.

[Note: Alcohol Dependence screening indicates possible dependence but does not confer a diagnosis.]

Assessment Tools

Alcohol Dependence Screening Questions:

1. 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?
2. Have there often been times when you had a lot more to drink than you intended to have?

AVS at a Glance

(June 2013 to March 2022)

15,884,508
total alcohol
screenings
conducted

90% screening
rate
81% of all adult
members have
been screened

1,263,873 (8%)
total screenings
positive result
766,184 (17%)
adults screened
positive

1,160,713 total
brief alcohol
interventions
conducted
462,304
unique adults

Brief Interventions Are Effective At...

- Reducing alcohol consumption overall¹
 - Especially among younger adults, those who exceed only daily limits, and those without AUD
- Reducing alcohol consumption in clinically important subgroups with:
 - Hypertension²
 - Type II diabetes (T2D), especially those who drank more at baseline³
- Among hypertension patients, reducing diastolic BP (clinically meaningful)⁴
 - Effect of the BI may wane over time
- Among T2D patients, greater glycemic control²
 - Especially among those with poor glycemic-lowering medication adherence

Chi FW, Parthasarathy S, Palzes VA, Kline-Simon AH, Metz VE, Weisner C, Satre DD, Campbell CI, Elson J, Ross TB, Lu Y, Sterling SA. (In press). Alcohol Brief Intervention, Specialty Treatment and Drinking Outcomes at 12 Months: Results from a Systematic Alcohol Screening and Brief Intervention Initiative in Adult Primary Care. *Drug and Alcohol Dependence*.

Chi FW, Parthasarathy S, Palzes VA, Kline-Simon AH, Weisner C, Satre DD, Grant RW, Elson J, Ross TB, Awsare S, Lu Y, Metz VE, Sterling SA. (Submitted). Effects of Alcohol Brief Intervention in Primary Care on Drinking and Health Outcomes in Adults with Hypertension and Type 2 Diabetes. *BMJ Open*.

Challenge: Many People with AUD are not connected to Primary Care → Linking Specialty Addiction Patients to Primary Care

Nine-Year Primary Care-Based Continuing Care Outcomes and Costs

- Patients receiving continuing care:
 - were more than twice as likely to be remitted over 9 years⁵
 - were less likely to have ER visits and hospitalizations⁶

People used far fewer services than their access provided; we need to find ways to link to healthcare.

How to Activate Patients to Use Healthcare: LINKAGE Study

- Patient Activation/Empowerment – focus on the patient, not physician
 - Whole person/wellness focus
 - Address stigma – relationship with physicians
 - Take a proactive role with their primary care physician in their health care
- Used Electronic Health Record (EHR) and Patient Portal to help engage in health care
- 6 group sessions and 1 facilitated phone call, email or in-person visit with PCP



LINKAGE Outcomes

- LINKAGE participants had more^{7, 8}:
- Days of logging in to patient portal (*6 mos, 1-2 years*)
- Days of logging in for medical advice (*6 mos*)
- Days of logging in for lab test results and information on labs (*6 mos*)
- # of emails from PCP (*6 mos*)
- # of emails to PCP (*1-2 years*)
- More LINKAGE participants talked with their PCP about AOD problems (*6 mos, 1-2 years*)
- Online Rx Refills (*1 year*)
- More Primary Care visits and fewer substance-related Emergency Room visits over 5 years

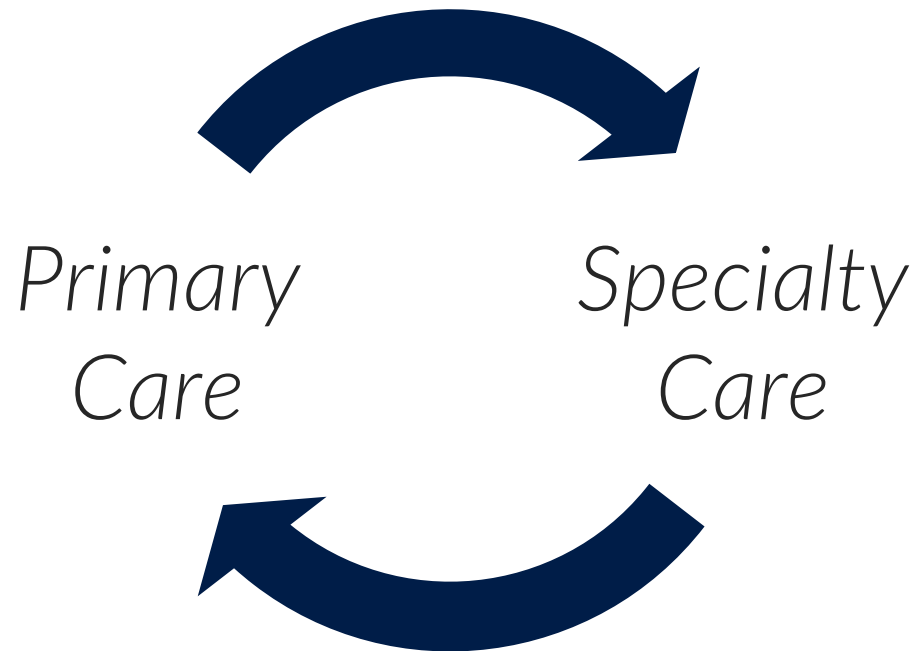
Similar findings for those with psychiatric conditions.

LINKAGE Outcomes – Over 2 Years

Ongoing regular screening in primary care

- 83% had been back to primary care and screened
- Of them 22% had a positive screen
- 65% of the positive screens received a brief intervention
- 47% of them went back to Addiction Medicine treatment
- Having an SBI predicted admission to Addiction Medicine treatment

Integration of Alcohol and Drug Services with Primary Care as the Anchor (Health Home)



- Screen and treat in PC (if moderate problem continue monitoring)
- Specialty care if needed
- Back to Primary Care for monitoring

*Challenge: Sub-Optimal Use of Alcohol
Pharmacotherapy, Specialty Treatment
Initiation → Clinical Pharmacist Alcohol
Treatment Consultation in Primary Care*

Pragmatic Trial in 16 KPNC Adult Primary Care Clinics

Alcohol Telemedicine Consultation Current RCT (R01AA028211)

Trained Clinical Pharmacists provide:

- Motivational enhancement via video or phone
- Pharmacotherapy prescribing, under protocol
- Facilitated referrals (e.g., follow-up with patient after referral and/or initiation of specialty treatment)
- Advice to PCPs (real-time or asynchronous) regarding patient-specific treatment options, including pharmacotherapy, specialty treatment, and combined treatments
- Ongoing support to PCPs regarding Rx management

1-hour info sessions for PCPs at routine clinic meetings, focused on pharmacotherapies and when/how to refer patients.

*Kaiser Permanente Northern California
Alcohol Registry*

Disease Registries

- Aid health care professionals and researchers in:
 - Understanding chronic illnesses and how to manage them
 - Facilitating care
 - Evaluating treatment effectiveness and health outcomes
 - Identifying patients for clinical trials
- Excessive alcohol use is a significant contributor to the global burden of disease and disability, so why no registries?
 - Rationale for developing the Kaiser Permanente Northern California (KPNC) Alcohol Registry



Purpose of the KP Northern California (KPNC) Alcohol Registry

Leverage KPNC EHR data

- Longitudinal and comprehensive
- To facilitate secondary data research

Be a Critical Resource

- Reporting
- Clinical interventions addressing alcohol problems

Study Full Course of Alcohol Problems

- Initiation, treatment, relapse, and recovery
- Identify patients with or at-risk of developing an alcohol problem

Easily Refreshed and Enriched

- Updated and refreshed using automatic programs
- New elements can be added

Flexible

- Address many research questions in collaboration with NIAAA

Inclusion/Exclusion Criteria⁹

Inclusion Criteria

The index date is the first qualifying criterion date:

- a. Unhealthy alcohol use, identified by a positive alcohol screening conducted at any encounter type and any department.
- b. Alcohol use disorders (except remission), identified using International Statistical Classification of Diseases (ICD) codes at any encounter type.
- c. Alcohol-related health problems, identified using ICD codes at any encounter type.

Exclusion Criteria

- <18 years on index date

ICD Codes Part of Inclusion Criteria For The Alcohol Registry

Disorder	ICD Version	Code	Description
Alcohol Use Disorders (AUD)	9	291*	Alcohol-induced mental disorders
		303*, except 303.03 and 303.93 ^a	Alcohol dependence syndrome
		305.0*, except 305.03 ^a	Nondependent alcohol abuse
	10	F10.9*	Alcohol use, unspecified (includes alcohol-induced mental disorders)
		F10.2*, except F10.21 ^b	Alcohol dependence
Alcohol-related Health Problems	9	F10.1*, except F10.11 ^b	Alcohol abuse
		357.5	Alcoholic polyneuropathy
		425.5	Alcoholic cardiomyopathy
		535.3*	Alcoholic gastritis
	571.0 - 571.3	Alcoholic liver disease	
	10	G31.2	Degeneration of nervous system due to alcohol
		G62.1	Alcoholic polyneuropathy
		G72.1	Alcoholic myopathy
		I42.6	Alcoholic cardiomyopathy
		K29.2*	Alcoholic gastritis
		K70*	Alcoholic liver disease
K86.0		Alcohol-induced chronic pancreatitis	

* Denotes all codes including the prefix.

^a 303.03, 303.93, and 305.03 are ICD-9 AUD remission codes.

^b F10.21 and F10.11 are ICD-10 AUD remission codes.

Alcohol Registry at a Glance

(June 2013 to March 2022)

892,368 adults
in the KPNC
Adult Alcohol
Registry

204,177 adults
with an alcohol
use disorder

766,184 adults
with unhealthy
alcohol use

29,182 adults
with an
alcohol-related
health problem

Data Elements

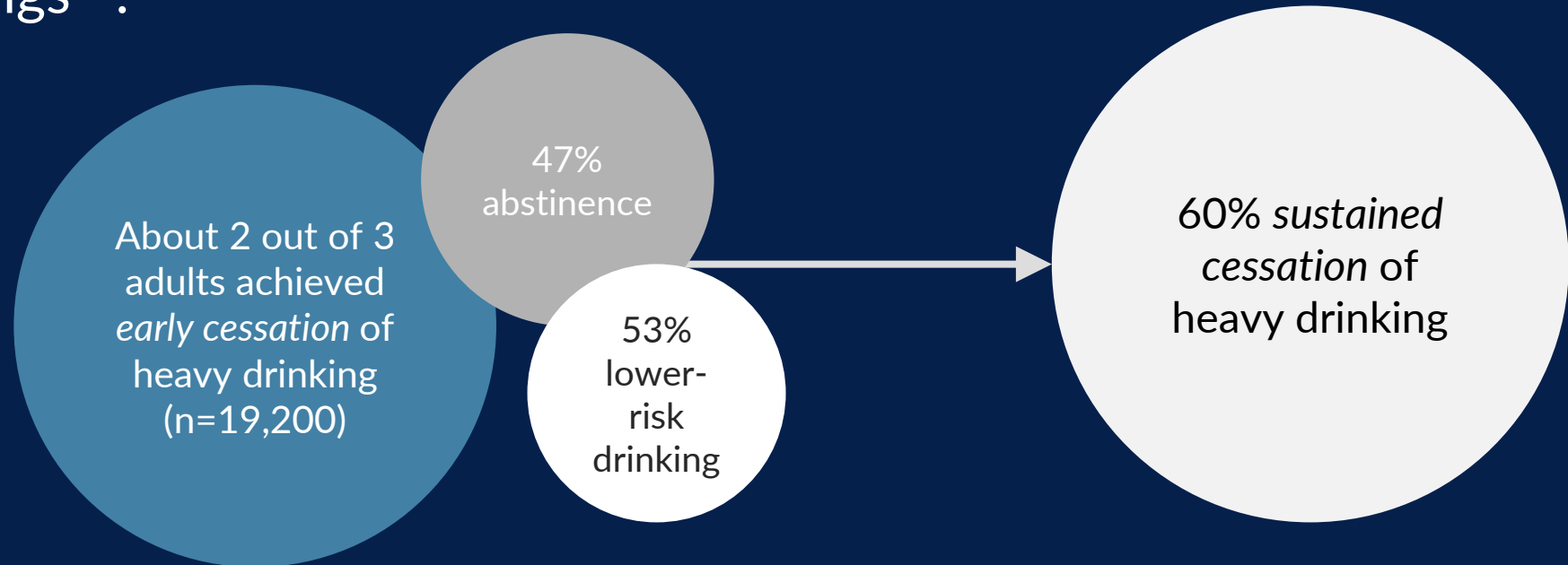
- 24 files (SAS datasets)
- 14 elements
 - Demographics & eligibility
 - Alcohol screenings
 - Membership
 - Diagnoses
 - Procedures
 - Pharmacy
 - Labs
 - Patient reported outcomes
 - Mortality
 - Geocoded Census data
 - Tobacco use
 - Utilization
 - Codebooks
 - Person-time

Predictors of Early and Sustained Cessation of Heavy Drinking

- Aim: to identify factors associated with early and sustained cessation
- NIAAA research definition of recovery¹⁰
 - Cessation of heavy drinking
 - Early cessation: lower-risk drinking or abstinence at 1 year
 - Sustained cessation: achieving early cessation and reporting lower-risk drinking or abstinence at 5 years
 - Lower-risk drinking: within NIAAA daily and weekly limits

Predictors of Early and Sustained Cessation of Heavy Drinking

- Design: retrospective cohort study of 85,434 adults who screened positive for heavy drinking between June 2013 and May 2014 in KPNC
- Sample characteristics: 41% female, 34% non-White, mean age=50 years
- Main findings¹¹:



Predictors of Early and Sustained Cessation of Heavy Drinking

- More likely to achieve early and sustained cessation:
 - Women (vs men)
 - Black, Latino/Hispanic, and API patients (vs White)
 - Patients with chronic medical conditions, psychiatric disorders, and drug use disorders
 - *Routine primary care*
 - *Addiction treatment*
- Less likely to achieve early and sustained cessation:
 - Higher baseline drinking levels (exceeding both daily and weekly limits)
 - For sustained cessation: lower-risk drinking (vs abstinence) at 1 year

Final Takeaways

- Healthcare is a critical and opportune setting for care for alcohol (and other drug) problems, and integrated care improves outcomes.
- Evidence-based tools and models exist, so why aren't many patients receiving optimal care for alcohol problems in healthcare settings?
- Effect heterogeneity – what works, for whom, and why?
- How can effective interventions best fit into modern health care systems?

References

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