Data Driven Goals for the Health Neighborhood

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Session Objectives

• Explore the use and limits of tobacco use prevalence rates
• Use real world examples to illustrate the data selection decision-making process
• Provide several resources to inform data selection for Arizona Counties
Putting Prevalence in Context
The Limits of Prevalence

740,000 adult smokers in Arizona

7,100 ASHLine enrollees

~2,100 (est.) successful quits

3,700 new smokers
How Many Adults Smoke Cigarettes?

- Behavioral Risk Factor Surveillance System (2018) 16.1%
- Tobacco Use Supplement to the Current Population Survey (2017-2018) 15.8%
- National Health Interview Survey (2018) 14.4%
Common Measures:
Behavioral Risk Factor Surveillance System

• Have you smoked at least 100 cigarettes in your entire life?
• Do you now smoke cigarettes every day, some days, or not at all?
• During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?
• How long has it been since you last smoked a cigarette, even one or two puffs?
• Do you currently use chewing tobacco, snuff, or snus every day, some days, or not at all?
• Have you ever used an e-cigarette or other electronic vaping product, even just one time, in your entire lifetime?
• Do you now use e-cigarettes or other electronic vaping products every day, some days, or not at all?
• How old were you when you first started to smoke cigarettes regularly?
• How old were you when you last smoked cigarettes regularly?
• On average, when you smoke/smoked regularly, about how many cigarettes do/did you usually smoke each day?
Trends in U.S. Adult Smoking

~14% of adults smoke cigarettes on all or some days

Graph showing trends from 1960 to 2010 with data for males and females.
Four Smoking Trajectories

- **Experimenters**
- **Quitters**
- **Early Established**
- **Late Escalators**

Days Smoked per Month vs. Age (years)
Different Goals Require Different Metrics

- Nicotine Use Prevention
- Nicotine Cessation *as prevention*
- Harm Reduction
- Recovery maintenance
  - Contingency planning
  - Cravings control
  - Skills development
- Motivation enhancement
- Connection to/provision of services and supports
Data for Program Planning
Data to Action

• What should staff, directors, providers do with the numbers?
• Is this number too high? Too low?
• Compare across clinics and providers.
• Are successes replicable?
• Are low numbers the result of systemic or personal conditions?
• How does this year compare to last year? (Trend going the right way or wrong way?)
Process

Pros
- Easily communicated and understood
- Easier to measure
- Scalable

Cons
- Less flexible in the face of changing needs/new capacities
- May not achieve program aims

Outcomes

Pros
- Flexibility around tasks may lead to efficiencies
- Removes bureaucratic barriers

Cons
- Outcomes are hard or impossible to measure
- Non-standard practices are harder to evaluate, hold people accountable
Educational Interventions
KNOWLEDGE

ATTITUDES

BEHAVIORS

ENVIRONMENT

EDUCATIONAL INTERVENTION
Impact Forecasting

Staff Knowledge Assessment, 2018
Blended, Stepped Approach

Phase 1
- Developing referral sites
- Recruitment
- Attendance
- Staff education/training, attitudes, and practices
- Establishment and adherence to new policies

Phase 2
- Staff confidence of new skills
- Enhanced skillsets
- Group (or modality) fidelity measures
- Consumer experience satisfaction
- Consumer longevity/completion rates

Phase 3
- Stages of Change progress
- Growth in patient knowledge, skills, & confidence
- Development of new behaviors (e.g., reduction or abstinence)
- Longer-term outcomes
I can administer and interpret a validated nicotine dependence instrument (e.g., Heaviness of Smoking Index, Fagerström Test for Nicotine Dependence).

![Diagram showing mean score comparison]

\[ t = 7.653 \]
\[ p < 0.001 \]
Service Provision Programs
Mortality in Jails, 2005-2014

- Suicide: 372
- Heart Disease: 239
- Drug/alcohol intoxication: 90
- Respiratory disease: 41
- Cancer: 38

Yearly mortality trends from 2005 to 2014.
Setting the Stage forSuccess

- Organizational criteria for referral
- Estimate your work burden
- Determine your workflow
- Set benchmarks
- Train relevant staff
- Act
- Adjust and relaunch
Interest in Quitting

Drug Court Participants, Florida--2015
# Identified Practice Gap

<table>
<thead>
<tr>
<th></th>
<th>ASK</th>
<th>ADVISE</th>
<th>ASSESS</th>
<th>ASSIST</th>
<th>ARRANGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAFP 2014</td>
<td>91.1%</td>
<td>NA</td>
<td>NA</td>
<td>50.3%</td>
<td>NA</td>
</tr>
<tr>
<td>Park 2015</td>
<td>77.2%</td>
<td>75.6%</td>
<td>63.4%</td>
<td>56.4%</td>
<td>10.4%</td>
</tr>
<tr>
<td>Gottlieb 2001</td>
<td>59.3%</td>
<td>80.9%</td>
<td>NA</td>
<td>21.9%</td>
<td>1.8%</td>
</tr>
<tr>
<td>DePue 2002</td>
<td>44.0%</td>
<td>26.0%</td>
<td>NA</td>
<td>10.0%</td>
<td>5.0%</td>
</tr>
<tr>
<td>HRSA 2011</td>
<td>79.5%</td>
<td>52.7%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Lebrun-Harris 2015</td>
<td>98.9%</td>
<td>68.0%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Land 2012</td>
<td>56.5%</td>
<td>83.8%</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Quinn 2009</td>
<td>100.0%*</td>
<td>77.0%</td>
<td>NA</td>
<td>41.0%</td>
<td>NA</td>
</tr>
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</table>
Tobacco Cessation Interventions: 
5 A’s

ASK

• Denominator: All Patients that can answer the question (e.g., conscious, not agitated, not intoxicated)
• Goal: 100% of patients—frequency is variable
• Data:
  • Tobacco use (not smoking) Status
  • Secondhand smoke exposure
  • History of tobacco use
Tobacco Cessation Interventions: 5 A’s

ADVISE

- Denominator: All Tobacco-Users
- Goal: 100%
- Data:
  - Did advise to quit occur during the visit
  - Who provided (what clinical role) the advice to quit?
Tobacco Cessation Interventions: 5 A’s

ASSESS Stage of Readiness
• Denominator: All Tobacco Users
• Goal: 100%
• Data:
  • Stage of Readiness
## Stages of Change—Operationalized

<table>
<thead>
<tr>
<th>Stage</th>
<th>Definition</th>
<th>Intervention</th>
<th>Desire to Quit Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-contemplation</td>
<td>Not considering changing</td>
<td>Educate/Inform</td>
<td>Not interested (today) in quitting within the next six months</td>
</tr>
<tr>
<td>Contemplation</td>
<td>Thinking about making a change</td>
<td>Encourage/Motivate</td>
<td>Within the next six months</td>
</tr>
<tr>
<td>Preparation</td>
<td>Actively considering changing in the immediate future or within the next month</td>
<td>Assist with goal setting</td>
<td>Within next 30 days</td>
</tr>
<tr>
<td>Action</td>
<td>Making overt attempts to change</td>
<td>Provide support, assist as needed to overcome barriers</td>
<td>Have (tried to) quit within the last six months</td>
</tr>
<tr>
<td>Maintenance</td>
<td>Made changes for longer than six months</td>
<td>Continued support, set new goals when ready</td>
<td>Have been abstinent for six months or longer</td>
</tr>
</tbody>
</table>
Tobacco Cessation Interventions: 5 A’s

ASSESS 2

- **Denominator**: All ≥ Contemplation Stage
- **Goal**: 100%
- **Data**:
  - Level of Dependence
  - Diagnosis
  - Lung health- CO monitor
  - Cotinine/Anabasine levels
## FTND and HSI Scales

<table>
<thead>
<tr>
<th>Dependence Level</th>
<th>Nicotine Replacement Therapy Dosage</th>
<th>Combination Therapy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High</strong>&lt;br&gt;FTND: 8+&lt;br&gt;HSI: 5+</td>
<td>Patches: 21mg/24hr or 15mg/16hr&lt;br&gt;Inhaler: 6 –12 cartridges per day&lt;br&gt;Lozenge: 4mg&lt;br&gt;Gum: 4mg</td>
<td>Patches: 21mg/24hr or 15mg/16hr&lt;br&gt;AND&lt;br&gt;Lozenge or Gum: 2mg</td>
</tr>
<tr>
<td><strong>Moderate</strong>&lt;br&gt;FTND: 5-7&lt;br&gt;HSI: 4</td>
<td>Patches: 21mg/24hr or 15mg/16hr&lt;br&gt;Inhaler: 6 –12 carrots per day&lt;br&gt;Lozenge: 4mg&lt;br&gt;Gum: 4mg</td>
<td>Patches: 21mg/24hr or 15mg/16 hr&lt;br&gt;AND&lt;br&gt;Lozenge or Gum: 2mg</td>
</tr>
<tr>
<td><strong>Low to Moderate</strong>&lt;br&gt;FTND: 3-4&lt;br&gt;HSI: 3</td>
<td>Patches: 14mg/24hr patch or 10mg/16hr&lt;br&gt;Inhaler: 6 –12 carrots per day&lt;br&gt;Lozenge: 2mg&lt;br&gt;Gum: 2mg</td>
<td>Patches: 14mg/24hr or 15mg/16 hr&lt;br&gt;AND&lt;br&gt;Lozenge or Gum: 2mg</td>
</tr>
<tr>
<td><strong>Low</strong>&lt;br&gt;FTND: 1-2&lt;br&gt;HSI: 1-2 (“very low”)</td>
<td>May not need NRT&lt;br&gt;Monitor for withdrawal symptoms&lt;br&gt;Patches: 7mg/24hr patch or 5mg/16hr&lt;br&gt;Lozenge: 2mg&lt;br&gt;Gum: 2mg</td>
<td></td>
</tr>
</tbody>
</table>

Fiore et al. 2008
There are four tobacco-related disorders:

① Tobacco Use Disorder
② Tobacco Withdrawal
③ Other Tobacco-Induced Disorders
④ Unspecified Tobacco-Related Disorder

These are categorized under Substance-Related and Addictive Disorders.
## Billing Treatment Codes

<table>
<thead>
<tr>
<th>Disorders</th>
<th>DSM-5</th>
<th>ICD-10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco Use Disorder</td>
<td>305.1</td>
<td>Z72.0</td>
</tr>
<tr>
<td>Mild</td>
<td></td>
<td>F17.200</td>
</tr>
<tr>
<td>Moderate/Severe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tobacco Withdrawal</td>
<td>292.0</td>
<td>F17.203</td>
</tr>
<tr>
<td>Unspecified Tobacco-Related Disorder</td>
<td>292.2</td>
<td>F17.209</td>
</tr>
<tr>
<td>Other Tobacco-Induced Disorders</td>
<td>No code</td>
<td>No code</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Duration</th>
<th>CPT Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symptomatic Tobacco Use Counseling</td>
<td>3-10 min</td>
<td>99406</td>
</tr>
<tr>
<td>Symptomatic Tobacco Use Counseling</td>
<td>&gt;10 min</td>
<td>99407</td>
</tr>
<tr>
<td>Asymptomatic Tobacco Use Counseling</td>
<td>3-10 min</td>
<td>G0436</td>
</tr>
<tr>
<td>Asymptomatic Tobacco Use Counseling</td>
<td>&gt;10 min</td>
<td>G0437</td>
</tr>
</tbody>
</table>
Biofeedback Options

- Spirometry
- Carbon monoxide
- Drug Screening
  - Nicotine
  - Anabasine
  - Cotinine
Tobacco Cessation Interventions: 5 A’s

ASSIST
• Denominator: Preparation; Action
• Goal: Varies
• Data (Highly Variable):
  • Quit date
  • Prior authorization
  • Prescription
  • Consultations and referrals
  • Billing codes attached to service
  • Modality of service (if applicable)
Tobacco Cessation Interventions: 5 A’s

ARRANGE

• Denominator: Action, Maintenance
• Goal: Varies
• Data:
  • Mutually agreed upon date for follow-up and method (e.g., future visit, phone call)
  • Documentation of warm hand-off
  • Adjust tobacco-use status
True Sustainability is Built on Systemic Supports

1. Is tobacco cessation education/training embedded in new hire orientations?
2. Is tobacco screening or assessment embedded in intake or enrollment?
3. Are there prompts for customers/clients to approach staff?
4. Are there regularly scheduled reporting structures?
5. Are clients connected to tobacco resources at discharge/re-entry/program exit?
6. Are tobacco services a part of supervision/accountability?
Record Treatment Type & Referrals

Maintain record of services provided:

- A brief intervention (3-10 minutes)
- More intensive treatment (10+ minutes)
- Medication prescription or referral
- Referral (electronic or fax) to the state quitline or other community resources
1-800-QUIT-NOW
Resources
Resources Curation and Provision
Increasing Low Income Callers’ Access to and Utilization of the Colorado QuitLine

Prepared For:
Colorado Department of Public Health and Environment

9 October 2014

Presented By:
Behavioral Health and Wellness Program,
University of Colorado, School of Medicine

Jim Pavlik, M.A.
Susan Young, Ph.D.
Rebecca Richey, Psy.D.
Sara Mumby, B.A.
Chad Morris, Ph.D.
National Academies Press
Surgeon General's Reports

The Health Consequences of Involuntary Exposure to Tobacco Smoke
A Report of the Surgeon General

Smoking Cessation
A Report of the Surgeon General
Community Solutions for Second Chances

42,000 people were incarcerated in 2018

78% have a history of substance use
29% need ongoing mental health treatment

Arizona Resources

Collateral consequences are an issue of incarceration. They keep people from finding a place to live, building credit, or continuing to live normal lives. The community has not seen the full extent of the economic impact of incarceration. It is time to invest in community building, not more jail beds.

19 thousand people arrested in the state, 26% of which are people of color.

Since 2010, the jail population has increased by 12%. In 2019, 60% of the jail population was white.

Arizona Town Hall - 2020

Incorporation Trends in Arizona

Since 2010, the jail population has increased by 12%. In 2019, 60% of the jail population was white.

Arizona- Specific Resources
Promotes evidence-based approaches and best practices to prevent tobacco use and cancer among behavioral health populations
