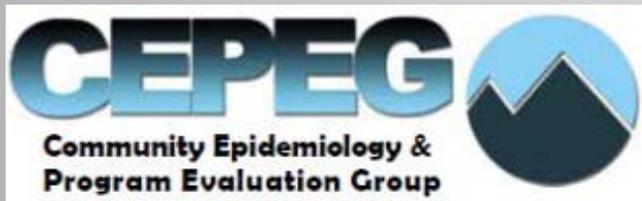


Smoking cessation among populations with lower socioeconomic status

Arnold H. Levinson, Patricia Valverde, et al

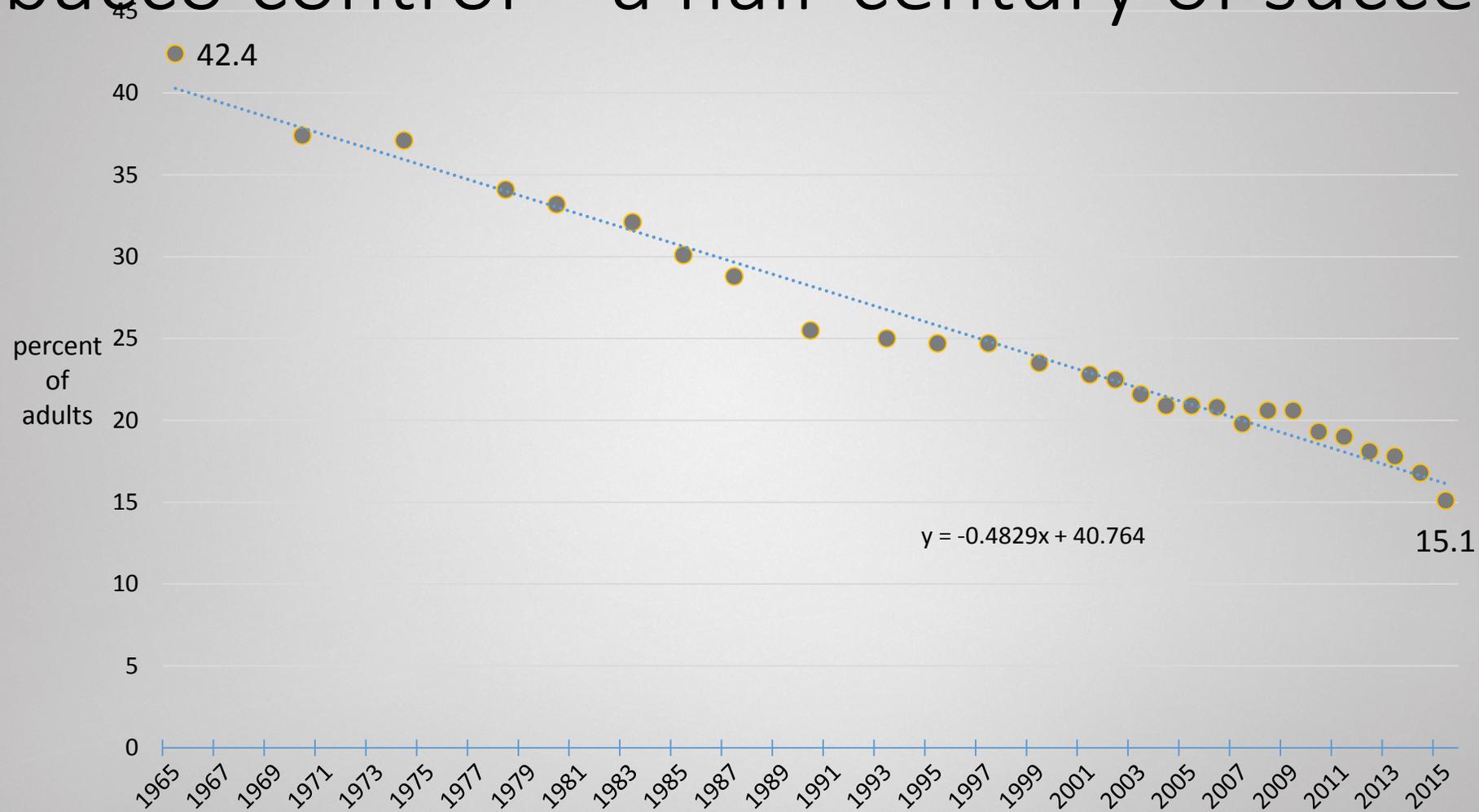
Colorado School of Public Health

University of Colorado Cancer Center



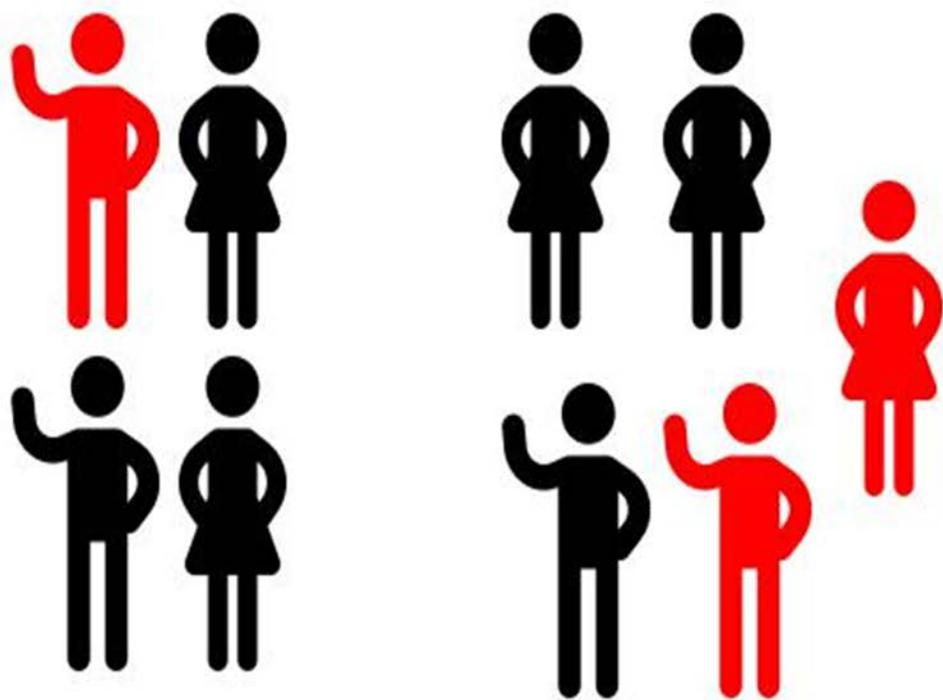
U.S. Smoking Prevalence

Tobacco control – a half-century of success



Sources: CDC. Trends in Current Cigarette Smoking Among High School Students and Adults, United States, 1965–2014. http://www.cdc.gov/tobacco/data_statistics/tables/trends/cig_smoking/
Ward BW, Clarke TC, Nugent CN, Schiller JS. Early release of selected estimates based on data from the 2015 National Health Interview Survey. National Center for Health Statistics. May 2016. Available from: <http://www.cdc.gov/nchs/nhis.htm>

Among lower socioeconomic populations, a different story



Who are LSES populations?

- Low income
- Low educational attainment
- Disability/unemployment
- Medicaid/no insurance
- Blue-collar or service work
- Mental illness

**Estimated smoking prevalence,
US 2012, spotlight on lower SES**

Highest rates

Levinson AH. Where the U.S. tobacco epidemic still rages: Most remaining smokers have lower socioeconomic status. *J Health Care Poor Underserved*, February 2017.

	% (95% CI)
Total	19.7 (17.6, 21.9)
Income (% FPL)	
<100	29.7 (22.6, 36.8)
100-199	25.4 (19.3, 31.4)
200+	13.6 (11.1, 16.1)
Health insurance status	
Medicaid	42.6 (29.4, 55.8)
uninsured	29.0 (22.5, 35.5)
private	16.6 (14.1, 19.2)
Medicare	12.3 (8.5, 16.2)
Employment status	
disabled	40.1 (30.5, 49.6)
unemployed	24.7 (15.7, 33.7)
employee	20.4 (16.8, 24.1)
other	15.1 (12.4, 17.7)
Education	
<9 years	24.3 (12.6, 36.1)
9-12 years, no diploma	34.5 (24.3, 44.8)
GED	20.3 (8.8, 31.8)
HS diploma	25.4 (20.6, 30.3)
some college or post-HS	17.8 (14.4, 21.2)
college graduate	12.4 (9.1, 15.8)
postgraduate degree	4.5 (2.2, 6.7)

Smoking among low SES categories combined

Low SES*	26.7 (23.0, 30.5)
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all others	11.8 (9.4, 14.1)
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*poor, near-poor, Medicaid, uninsured, disabled, high school dropouts

Levinson AH. Where the U.S. tobacco epidemic still rages: Most remaining smokers have lower socioeconomic status. *J Health Care Poor Underserved* February 2017.

Social justice vs. greatest good

- Populations with elevated health problems deserve public health attention.
 - Social justice ethics: Secure a sufficient level of health for all, narrow unjust inequalities.
- At the same time, public health **impact** doesn't come directly from reaching unjustly burdened groups – it requires succeeding with **the greatest number of people**.
- Social justice and greatest good compete for resources unless a population with an unfairly high health burden also has most of the people who bear the burden.

Who are the majority of smokers?

	smokers			adults	
	number (millions)	pct	(95% CI)	pct	(95% CI)
Low SES					
yes	34.91	72.2	(60.8, 83.5)	53.3	(49.4, 57.1)
no	13.46	27.8	(21.9, 33.7)	46.7	(44.1, 49.3)
Low-income employed ("working poor")					
yes	11.38	23.5	(17.0, 30.0)	14.1	(11.9, 16.3)
no	37.98	76.5	(70.0, 83.0)	85.9	(83.7, 88.1)

Levinson AH. Where the U.S. tobacco epidemic still rages: Most remaining smokers have lower socioeconomic status. *J Health Care Poor Underserved* February 2017.

The ethics are aligned

- Lower SES populations have the highest smoking rates and make up the largest number of smokers.
- For social justice and the greatest good, public health needs to focus research and programs on smoking cessation among lower SES populations.

Quick poll

- Does your organization identify lower SES smokers as a priority population?
- Does your organization have tobacco control programs or strategies targeted specifically to LSES smokers?

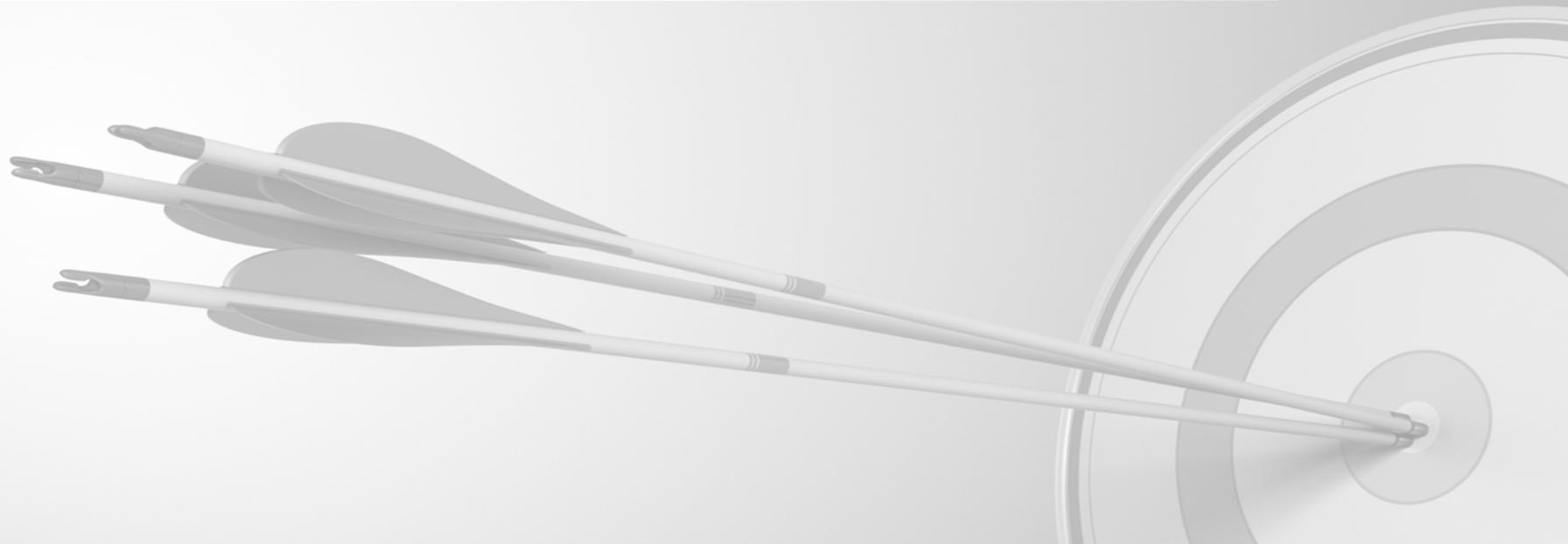
Review of cessation strategies for low SES smokers

- STEPP designates LSES smokers a priority population
- What are effective strategies for reducing LSES tobacco burdens?



Project aims

1. Summarize the state of knowledge
2. Identify effective strategies for LSES smoking cessation that are feasible for public health to adapt and implement



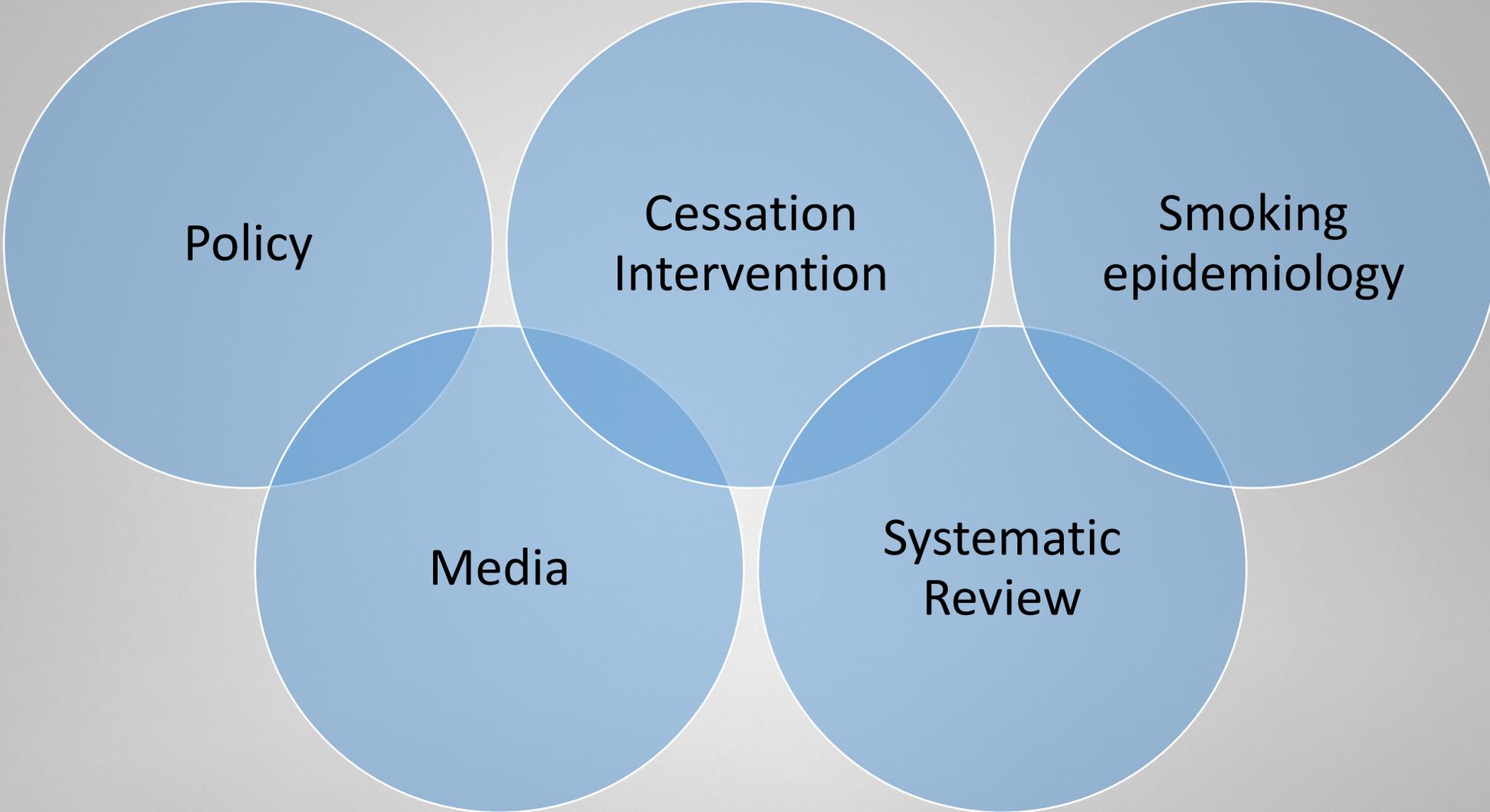


LSES and smoking knowledge review

1. Systematic search and narrative summary of published literature
2. Key informant (expert) interviews with qualitative analysis of experience-based perspectives, beliefs and suggestions



Literature categories for review



2495 titles/abstracts → 710 full articles → 262 relevant articles abstracted to REDCap database

Key informant interviews

Finding experts

- Authors from systematic search
- LSES tobacco scientists (NCI list)
- Professional network
- Colorado STEPP staff

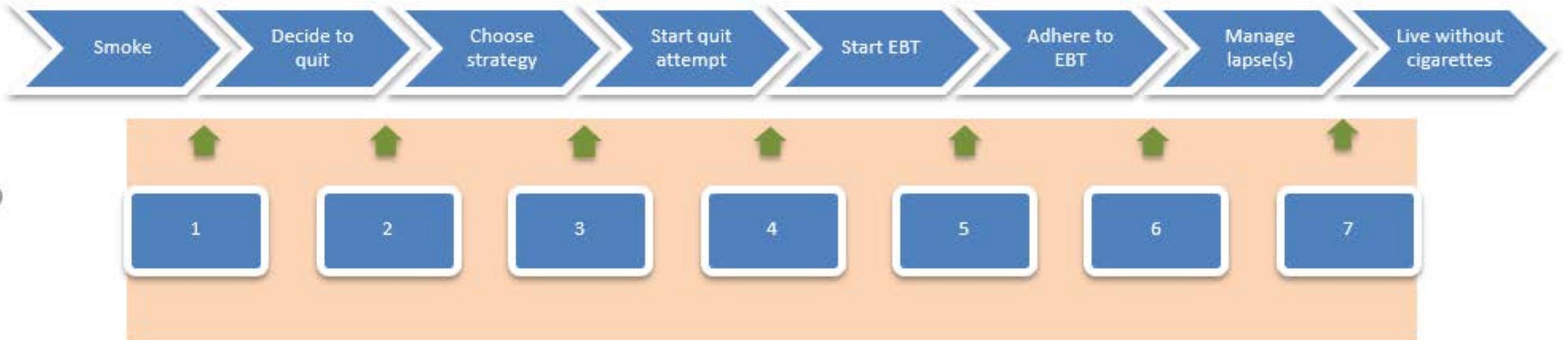
56 experts invited



16 participated

Key informant interview topics

Where, how to intervene in the cessation process for LSES smokers?



Overall emergent themes



Media



Media: Literature Findings

- **Use media to promote quitline engagement, not generic cessation**
- **Use emotionally evocative graphics**
- **Portray work, family life, personalized stories**
- **Awareness is key**



Media: Expert Recommendations

- **Target the message to LSES audiences**
- **Identify cross-cutting themes to reach broad LSES audiences**
- **Support acceptance of relapse**
- **Use emotionally evocative graphics**
- **Use LSES media modes**
- **Catch up with technology**

Policy

Policy: Literature findings

- **Higher cigarette taxes consistently increase cessation among LSES smokers.**
 - **Concerns about bigger impact on LSES income.**
 - **But cigarette taxes have the strongest equity impact, i.e., reduce SES smoking disparity (Brown 2014)**

Policy: Literature Findings, cont.

- **SHS policies: almost no study of effect on LSES cessation**
 - **One study: housing policy associated with smoking reduction, increased quit attempts**
 - **Voluntary SHS policies have negative equity impact on SHS exposure, mandatory policies have neutral equity impact on SHS exposure**
 - **Challenges: housing policy acceptability / adherence**



Policy: Literature Findings, cont.

- **Medicaid coverage of NRT**
 - **Necessary but not sufficient**
 - **Remove barriers**
 - **Pre-authorization, co-pay, limit on duration, annual limit on quit attempts, lack of benefit awareness**



Policy: Expert Recommendations

- **Cigarette tax increase**
- **Policies need to make community environment smoke-free (not just housing)**
 - **Cars, workplaces, public open spaces**

Quick poll

- Does your agency have staff who know how to design and implement media and policy initiatives for LSES smokers?
- Does your agency have resources to conduct media and policy initiatives for LSES smokers?
- Would your agency use technical assistance on media and policy initiatives for LSES smokers if it were offered?

Community Initiatives

Community Initiatives: Literature Findings

- **Community- and group-tailored strategies show promise**
 - **Community involvement from start to finish**
 - **Tailor mobilization and cessation support to community's cultural, linguistic, and local needs**
 - **Address multiple levels (policy, social norms, individual cessation support)**

Community Initiatives: Expert Recommendations

- **Create community systems of support**
- **Establish interventions in community settings:
where people work, live, receive services**
- **Conduct research to improve long-term cessation outcomes (living life without cigarettes)**

Quick poll

- Does your agency have who know how to design and implement community initiatives for LSES smokers?
- Does your agency have resources to conduct community initiatives for LSES smokers?
- Would your agency use technical assistance on community initiatives for LSES smokers if it were offered?

Individual Cessation Support

Individual Cessation Support: Literature Findings

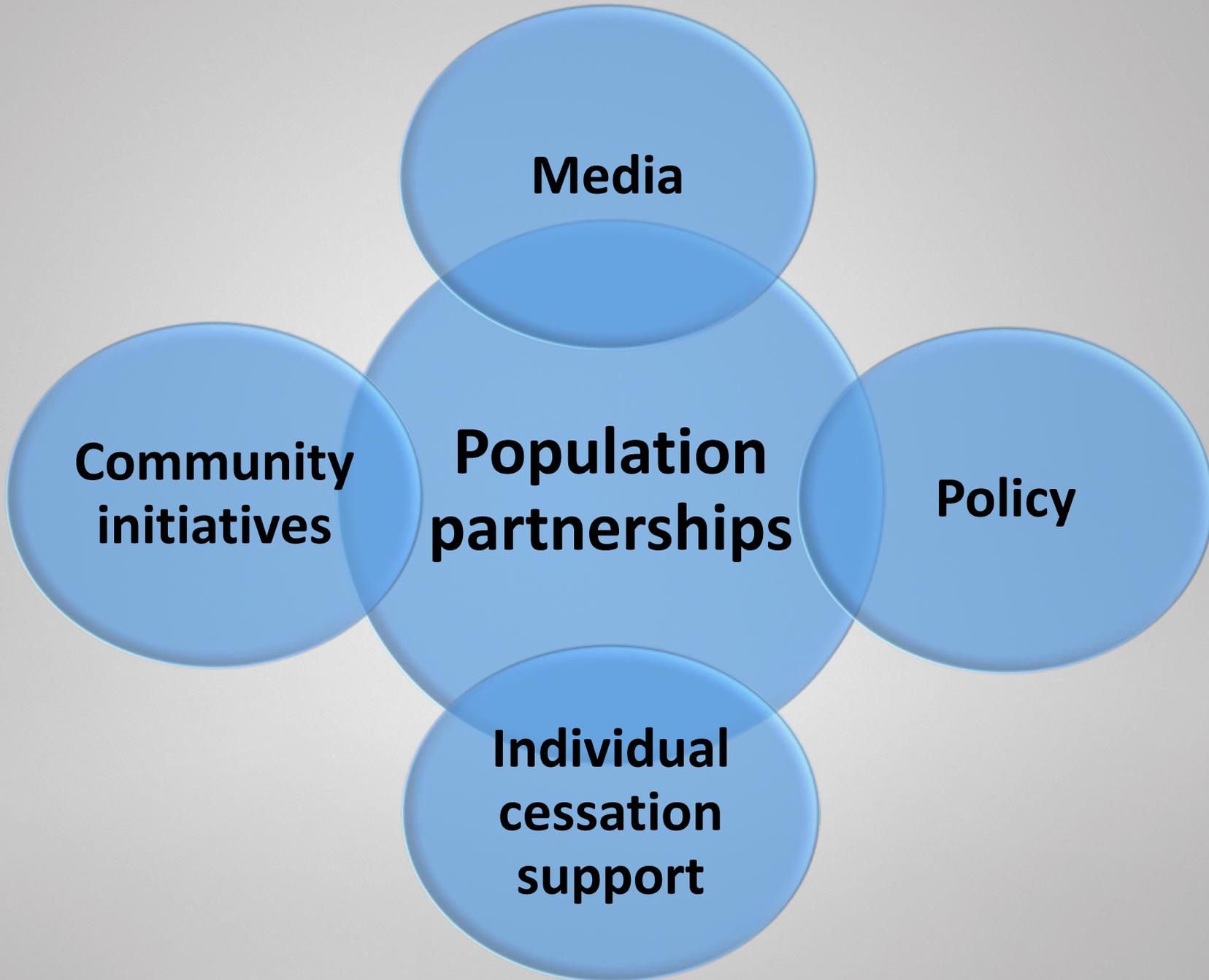
- **Helpers (PNs, CHWs) can increase adherence**
- **Reward-based programs may have promise**
- **Promote and support recycling so relapsed smokers can easily restart / resume cessation and treatment**
- **Research to prevent post-partum relapse among LSES women**
- **Quitline**

Individual Cessation Support: Expert Recommendations

- **Improve clinical systems to use every opportunity to treat smokers ready to try quitting**
- **Improve access to evidence-based treatment**
- **Improve patient engagement by including personal touch, family involvement, cultural relevance of services from providers, helpers (PNs/CHWs), technology**

Strategic Value: Community partnership

- **Partner with LSES population leaders and representatives when planning, implementing & evaluating targeted smoking cessation programs**
- **Without community involvement & support, promising strategies are unsustainable**
- **Mobilize the community**



Media

**Community
initiatives**

**Population
partnerships**

Policy

**Individual
cessation
support**

Take home messages

- **Lower SES smokers represent the majority of remaining smokers**
- **We need to partner with LSES communities in designing and delivering tobacco control strategies**
- **We need to promote and support cessation where LSES smokers live, work, play**

Take home messages

- **We need to consider more than minimal support for LSES smokers throughout the cessation process**
- **We need to develop multi-level community-based interventions for LSES smoking cessation**
- **We need to learn how to normalize relapse, recycle relapsers, and support transition to life without cigarettes**

Questions and discussion