A Multi-Team Tobacco Treatment Approach: Interdisciplinary Teamwork

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Learning Outcomes

1. Discuss the roles of different disciplines in tobacco treatment for people living with mental and behavioral health challenges

2. Describe multi-level approaches for addressing tobacco use reduction and cessation for people living with mental and behavioral health challenges

Interdisciplinary Team Approach to Deliver Tobacco Treatment

Our Responsibility

"All smokers with psychiatric disorders, including substance use disorders, should be offered tobacco dependence treatment, and clinicians must overcome their reluctance to treat this population.... Treating tobacco dependence in individuals with psychiatric disorder is made more complex by the potential for multiple psychiatric disorders and multiple psychiatric medications."

Fiore M, Jaén C, Baker T, et al. *Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline.* Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. ;2008.

Tobacco Treatment Challenges in Mental and Behavioral Health Services

[1]Ziedonis D, Hitsman B, Beckham JC, et al. Tobacco use and cessation in psychiatric disorders: National Institute of Mental Health report. *Nicotine & Tobacco Research*. 2008;10(12):1691 - 1715.

[2]Prochaska JJ. Smoking and mental illness — breaking the link. *New England Journal of Medicine*. 2011;365(3):196-198

[3]U.S. Department of Health and Human Services. [3]*Eliminating Tobacco Related Health Disparities: Summary Report*. U.S. Department of Health and Human Services, National Institute of Health, National Cancer Institute;2002

[4] Gonzales D, Rennard SI, Nides M, et al. Varenicline, an {alpha}4beta2 Nicotinic Acetylcholine Receptor Partial Agonist, vs Sustained-Release Bupropion and Placebo for Smoking Cessation: A Randomized Controlled Trial. *JAMA*. 2006;296(1):47-55

[5]Koegelenberg CN, Noor F, Bateman ED, et al. Efficacy of varenicline combined with nicotine replacement therapy vs varenicline alone for smoking cessation: A randomized clinical trial. *JAMA*. 2014;312(2):155-161

[6]Tonnesen P, Paoletti P, Gustavsson G, et al. Higher dosage nicotine patches increase one-year smoking cessation rates: results from the European CEASE trial. Collaborative European Anti-Smoking Evaluation. European Respiratory Society. *European Respiratory Journal*. 1999;13(2):238-246

[7]Selby P, Voci SC, Zawertailo LA, George TP, Brands B. Individualized smoking cessation treatment in an outpatient setting: Predictors of outcome in a sample with psychiatric and addictions co-morbidity. *Addictive Behaviors*. 2010;35(9):811-817

1. Paucity of tobacco treatment delivered in behavioral settings[1,2]

2. Conventional tobacco treatment programs do not address the unique relationship between tobacco use and behavioral health in their treatment approach[3]

3. Current evidence-based pharmacotherapy is equally efficacious for people with and without mental and behavioral health challenges, but may be   ineffective as prescribed

- Pharmacotherapy largely based on efficacy studies that excluded persons with behavioral health issues in their development [4,5,6]
- Those with behavioral health may need higher doses and longer durations of pharmacotherapy to achieve equitable smoking cessation [7]

Best Practices using an Interdisciplinary Team Approach
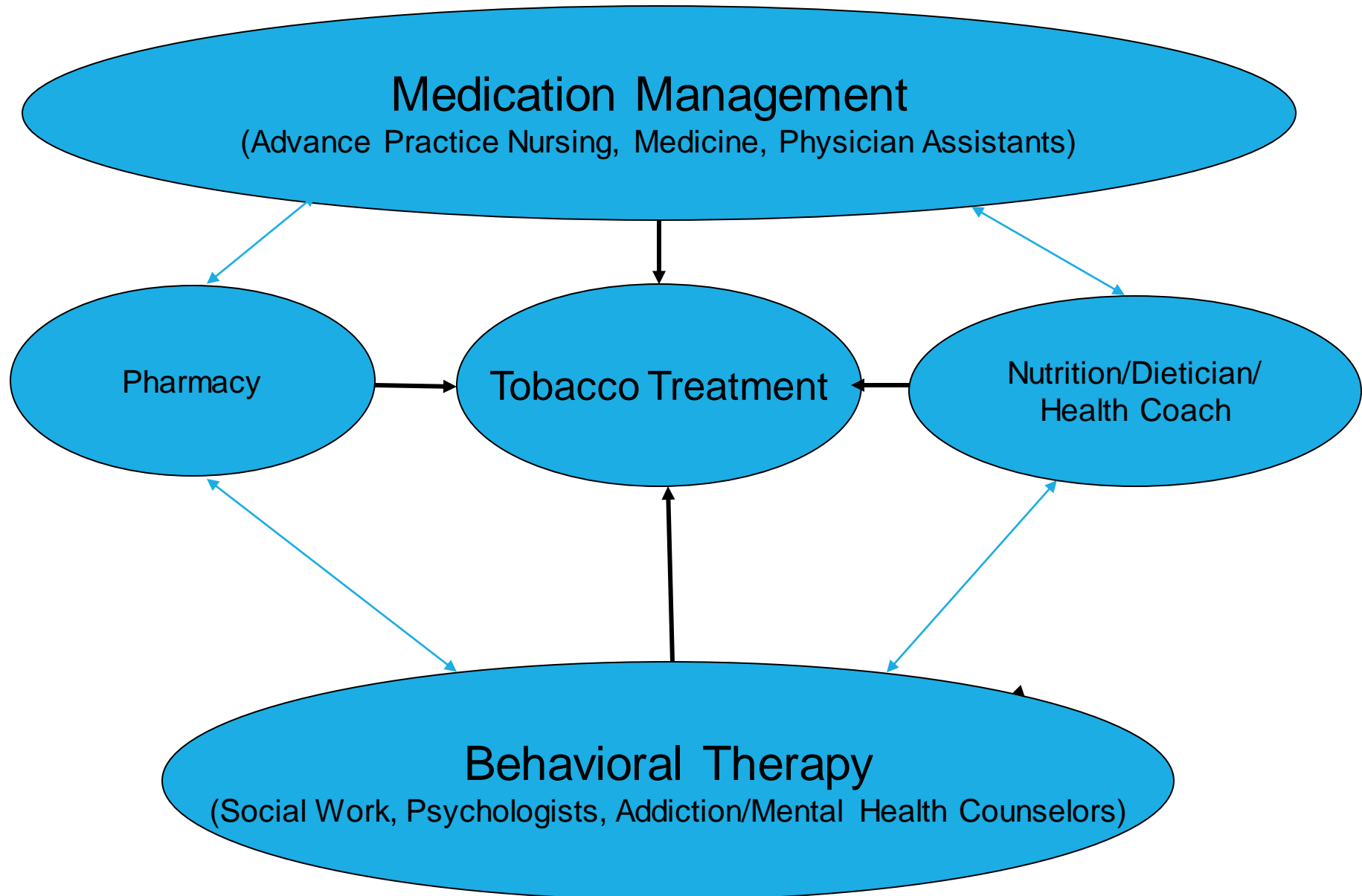
For Providers Education is Key

Provide Tobacco Treatment Content in Healthcare Student Courses

Provide Specialized Tobacco Treatment Training to Mental and Behavioral Health Providers and Settings

Ye, L., Goldie, C., Sharma, T., John, S., Bamford, M., Smith, P. M., ... & Schultz, A. S. (2018). Tobacco-nicotine education and training for health-care professional students and practitioners: a systematic review. *Nicotine and Tobacco Research*, 20(5), 531-542.

Sheffer, C. E., Al-Zalabani, A., Aubrey, A., Bader, R., Beltrez, C., Bennett, S., ... & Wendling, A. (2021). The emerging global tobacco treatment workforce: Characteristics of tobacco treatment specialists trained in council-accredited training programs from 2017 to 2019. International Journal of environmental research and public health, 18(5), 2416.

Core competencies for Tobacco treatment Specialists

Tobacco Dependence Knowledge and Education.

Counseling Skills.

Assessment Interview.

Treatment Planning.

Pharmacotherapy.

Relapse Prevention.

Diversity and Specific Health Issues.

Documentation and Evaluation.

Multi-level Approaches to Address Tobacco Use Reduction and Cessation among People Living with Mental and Behavioral Health Challenges
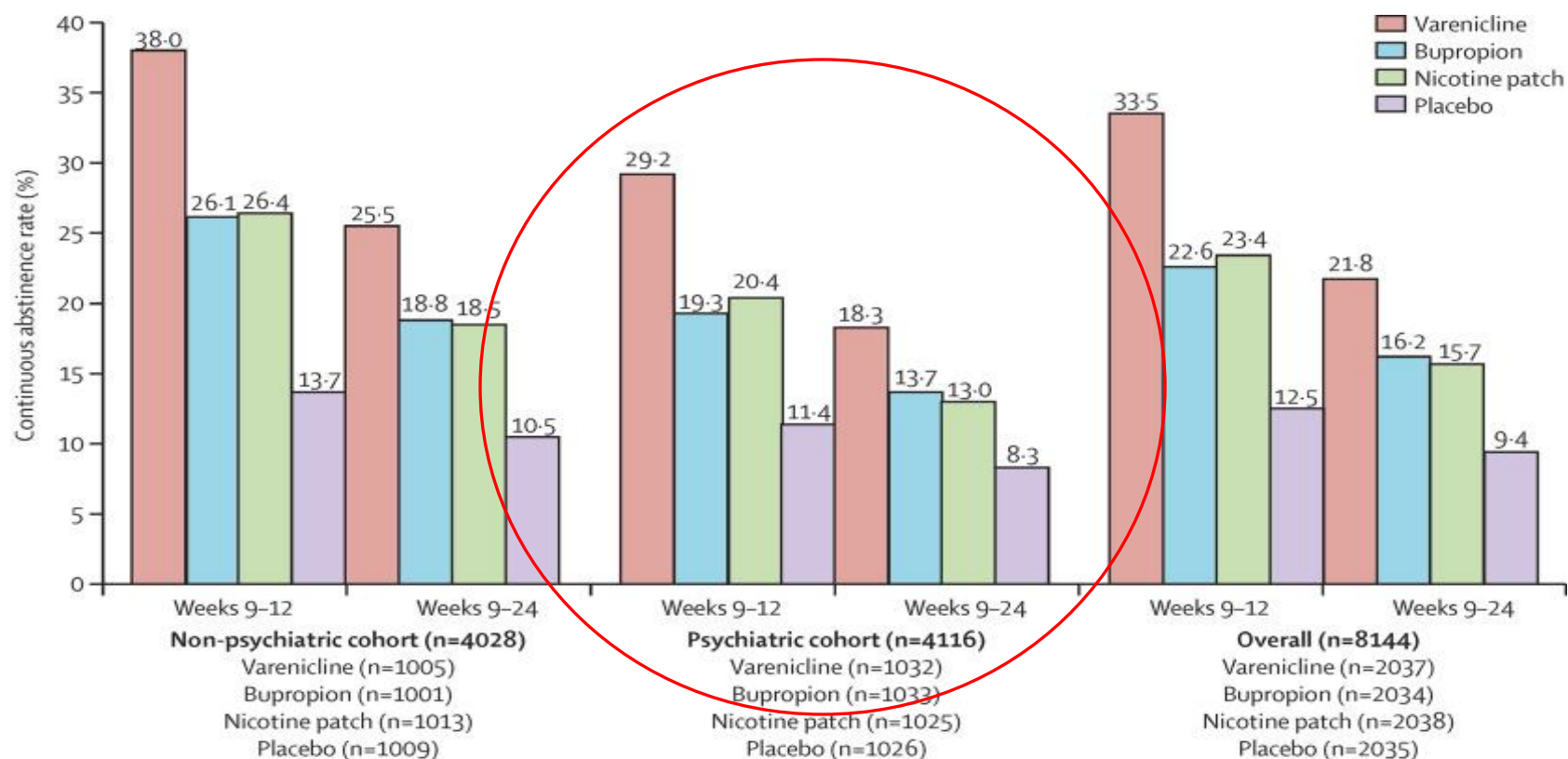

Socio-ecological Model

Individual Level Approaches
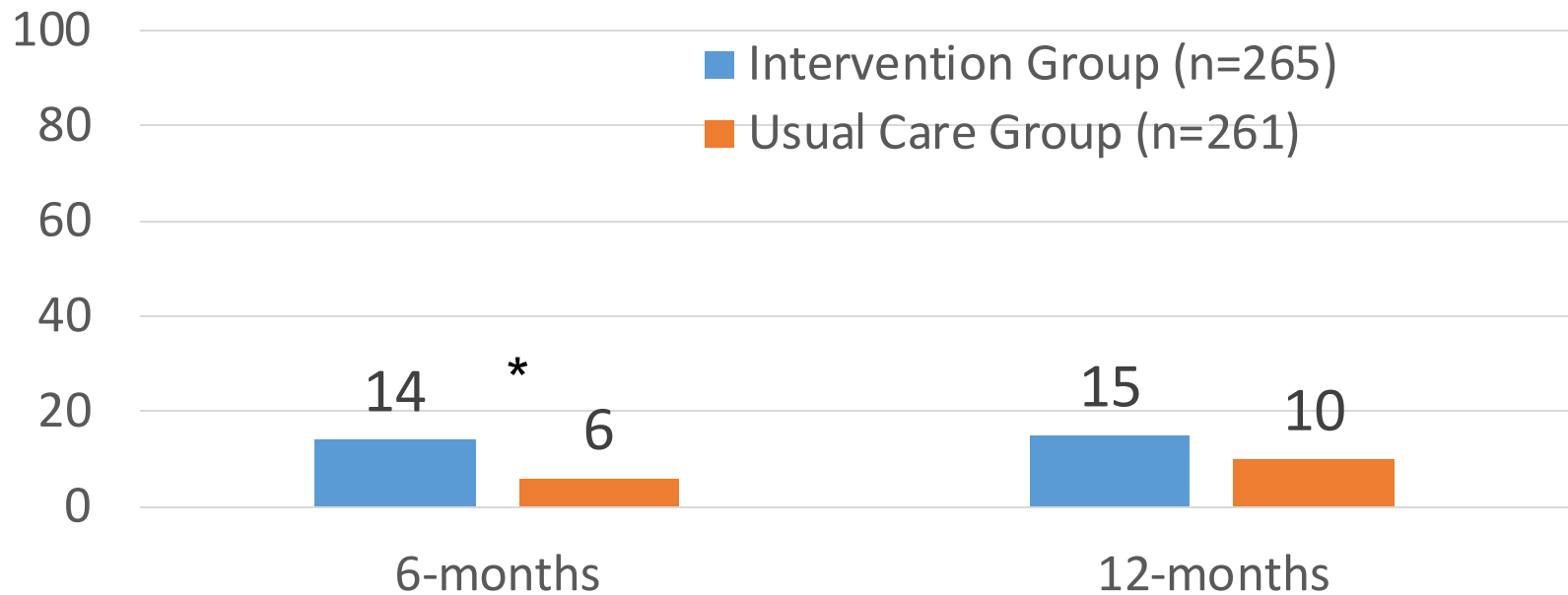
RECOMMEND APPROVED PHARMACOTHERAPY

- All those trying to stop tobacco use, except in special circumstances (such as pregnancy), should be provided pharmacotherapy

- First-line pharmacotherapy – nicotine replacement (patch, gum, lozenge, inhaler, nasal spray) and Oral medications (buproprion SR, Varenicline)

- Individuals with MI may require higher dosages and longer durations of medications than specified on the product monographs because of greater tobacco consumption and nicotine dependence.

Fiore, M. C., Jaen, C. R., Baker, T., Bailey, W. C., Benowitz, N. L., Curry, S. E. E. A., ... & Henderson, P. N. (2008). Treating tobacco use and dependence: 2008 update. *Rockville, MD: US Department of Health and Human Services.*
Prochaska, J. J., Delucchi, K., & Hall, S. M. (2004). A meta-analysis of smoking cessation interventions with individuals in substance abuse treatment or recovery. *Journal of consulting and clinical psychology, 72*(6), 1144.
Selby, P., Voci, S. C., Zawertailo, L. A., George, T. P., & Brands, B. (2010). Individualized smoking cessation treatment in an outpatient setting: Predictors of outcome in a sample with psychiatric and addictions co-morbidity. *Addictive behaviors, 35*(9), 811-817.

OR (95% CI) p value	Weeks 9–12	Weeks 9–24	Weeks 9–12	Weeks 9–24	Weeks 9–12	Weeks 9–24
Primary comparisons						
Varenicline vs placebo	4·00 (3·20–5·00) p<0·0001	2·99 (2·33–3·83) p<0·0001	3·24 (2·56–4·11) p<0·0001	2·50 (1·90–3·29) p<0·0001	3·61 (3·07–4·24) p<0·0001	2·74 (2·28–3·30) p<0·0001
Bupropion vs placebo	2·26 (1·80–2·85) p<0·0001	2·00 (1·54–2·59) p<0·0001	1·87 (1·46–2·39) p<0·0001	1·77 (1·33–2·36) p<0·0001	2·07 (1·75–2·45) p<0·0001	1·89 (1·56–2·29) p<0·0001
Secondary comparisons						
Nicotine patch vs placebo	2·30 (1·83–2·90) p<0·0001	1·96 (1·51–2·54) p<0·0001	2·00 (1·56–2·55) p<0·0001	1·65 (1·24–2·20) p=0·0007	2·15 (1·82–2·54) p<0·0001	1·81 (1·49–2·19) p<0·0001
Varenicline vs nicotine patch	1·74 (1·43–2·10) p<0·0001	1·52 (1·23–1·89) p=0·0001	1·62 (1·32–1·99) p<0·0001	1·51 (1·19–1·93) p=0·0008	1·68 (1·46–1·93) p<0·0001	1·52 (1·29–1·78) p<0·0001
Bupropion vs nicotine patch	0·98 (0·80–1·20) p=0·8701	1·02 (0·81–1·28) p=0·8645	0·94 (0·75–1·16) p=0·5467	1·07 (0·83–1·39) p=0·5824	0·96 (0·83–1·11) p=0·5797	1·04 (0·88–1·24) p=0·6002
Varenicline vs bupropion	1·77 (1·46–2·14) p<0·0001	1·49 (1·20–1·85) p=0·0003	1·74 (1·41–2·14) p<0·0001	1·41 (1·11–1·79) p=0·0047	1·75 (1·52–2·01) p<0·0001	1·45 (1·24–1·70) p<0·0001

Anthenelli, R. M., Benowitz, N. L., West, R., St Aubin, L., McRae, T., Lawrence, D., ... & Evins, A. E. (2016). Neuropsychiatric safety and efficacy of varenicline, bupropion, and nicotine patch in smokers with and without psychiatric disorders (EAGLES): a double-blind, randomised, placebo-controlled clinical trial. *The Lancet*, *387*(10037), 2507-2520.

COUNSELING APPROACHES

- There is a dose-response relationship between intensity of tobacco dependence counselling and its effectiveness

- Three types of counselling are particularly effective:
  - Practical counselling (direct treatment)
  - Support
  - Helping to secure support outside of treatment

Fiore, M. C., Jaen, C. R., Baker, T., Bailey, W. C., Benowitz, N. L., Curry, S. E. E. A., ... & Henderson, P. N. (2008). Treating tobacco use and dependence: 2008 update. *Rockville, MD: US Department of Health and Human Services*.
Siu, A. L. (2015). Behavioral and Pharmacotherapy Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Women: US Preventive Services Task Force Recommendation StatementUSPSTF Recommendation Statement for Interventions for Tobacco Smoking Cessation. *Annals of internal medicine*, *163*(8), 622-634.

Percent differences in outcomes of a behavioral counseling program for people with mental and behavioral health challenges: Bespoke Intervention

Gilbody, S., Peckham, E., Bailey, D., Arundel, C., Heron, P., Crosland, S., ... & Vickers, C. (2019). Smoking cessation for people with severe mental illness (SCIMITAR+): a pragmatic randomised controlled trial. *The Lancet Psychiatry*, *6*(5), 379-390.
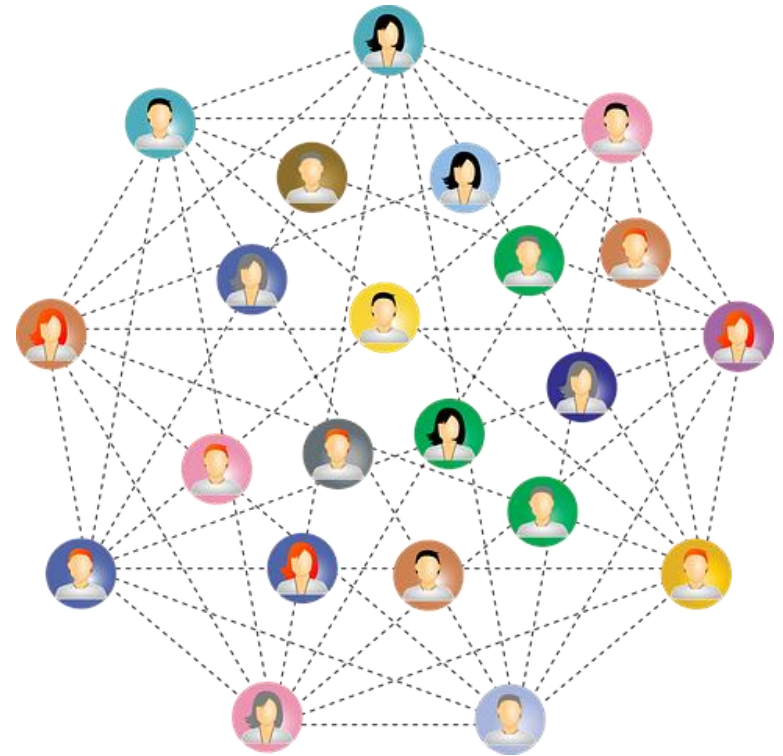
Interpersonal Level Approaches

Former smokers can help current smokers with SMI to stay abstinent after treatment

"The presence of former smokers in the network was associated with decreased odds that the ego was smoking post-treatment."

Aschbrenner, K. A., Bobak, C., Schneider, E. J., Naslund, J. A., Brunette, M. F., & O'Malley, A. J. (2018). Egocentric social networks and smoking among adults with serious mental illness. *Translational behavioral medicine*, *8*(4), 531-539.

Support for cessation from Family and Friends

1) Practical support (e.g., purchasing medications for cessation)

2) Emotional support (e.g., encouraging their cessation progress)

3) Changing smoking behaviors while around those trying to stop (e.g., not smoking around them or offering them cigarettes).

Organizational Level Approaches

TREATMENT APPROACHES:
BRIEF CLINICAL INTERVENTIONS

It is essential to provide at least a brief intervention to ALL tobacco users at EACH clinical visit

Patients willing to try to stop using tobacco should be provided treatments

Patients unwilling to stop should be provided with a brief intervention designed to increase their motivation

Fiore, M. C., Jaen, C. R., Baker, T., Bailey, W. C., Benowitz, N. L., Curry, S. E. E. A., ... & Henderson, P. N. (2008). Treating tobacco use and dependence: 2008 update. Rockville, MD: US Department of Health and Human Services.
Siu, A. L. (2015). Behavioral and Pharmacotherapy Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Women: US Preventive Services Task Force Recommendation StatementUSPSTF Recommendation Statement for Interventions for Tobacco Smoking Cessation. Annals of internal medicine, 163(8), 622-634.

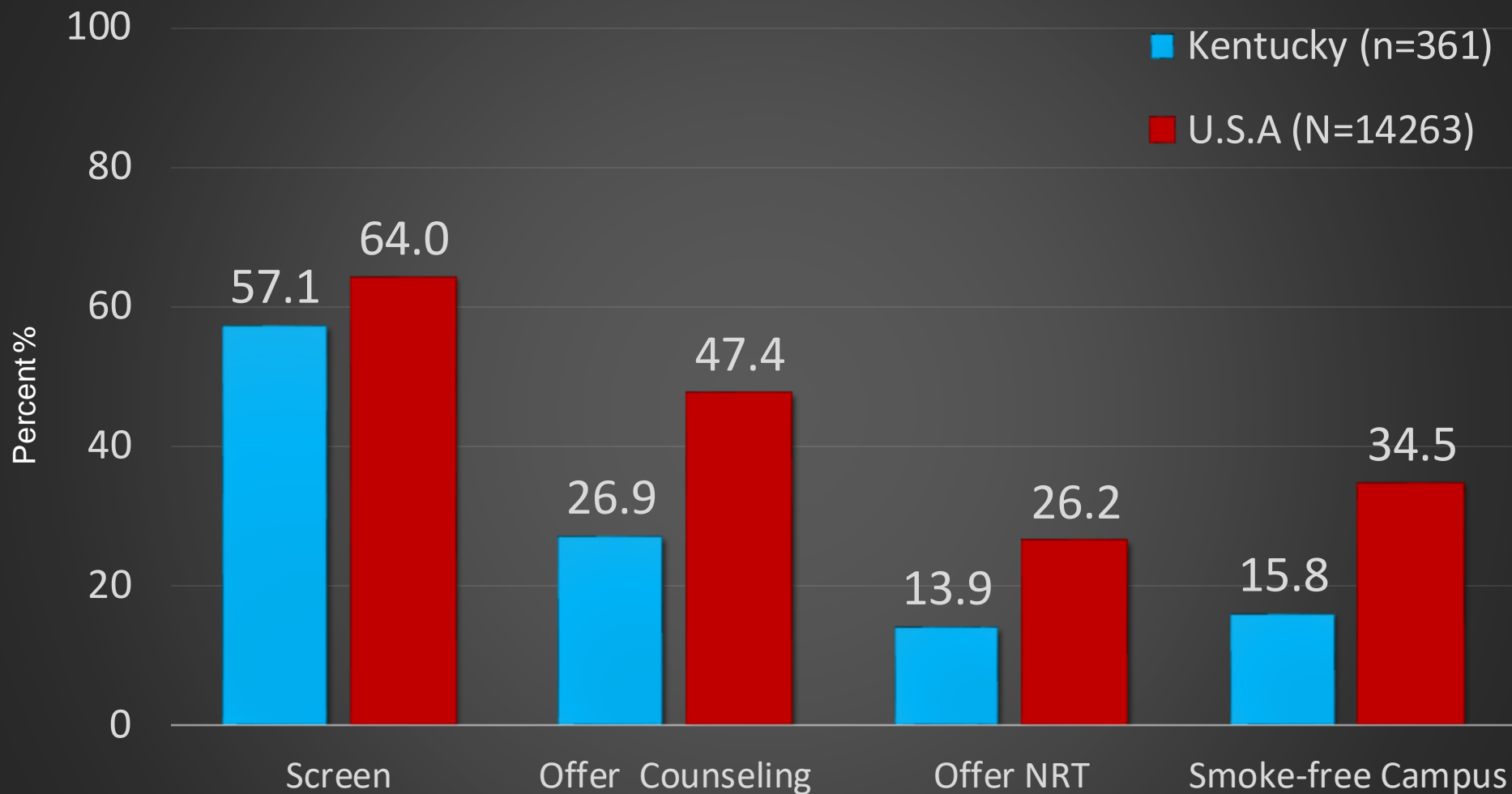| ASK:	About tobacco use
ADVISE:	Every tobacco user to quit
ASSESS:	Assess readiness to quit
ASSIST:	Self-help material, offering pharmacotherapy
ARRANGE:	Follow up or referral

THE 5 "A'S" FOR BRIEF INTERVENTION

Fiore, M. C., Jaen, C. R., Baker, T., Bailey, W. C., Benowitz, N. L, Curry, S. E. E. A., ... & Henderson, P. N. (2008). Treating tobacco use and dependence: 2008 update. *Rockville, MD: US Department of Health and Human Services*.

Siu, A. L. (2015). Behavioral and Pharmacotherapy Interventions for Tobacco Smoking Cessation in Adults, Including Pregnant Women: US Preventive Services Task Force Recommendation Statement USPSTF Recommendation Statement for Interventions for Tobacco Smoking Cessation. *Annals of internal medicine*, *163*(8), 622-634.
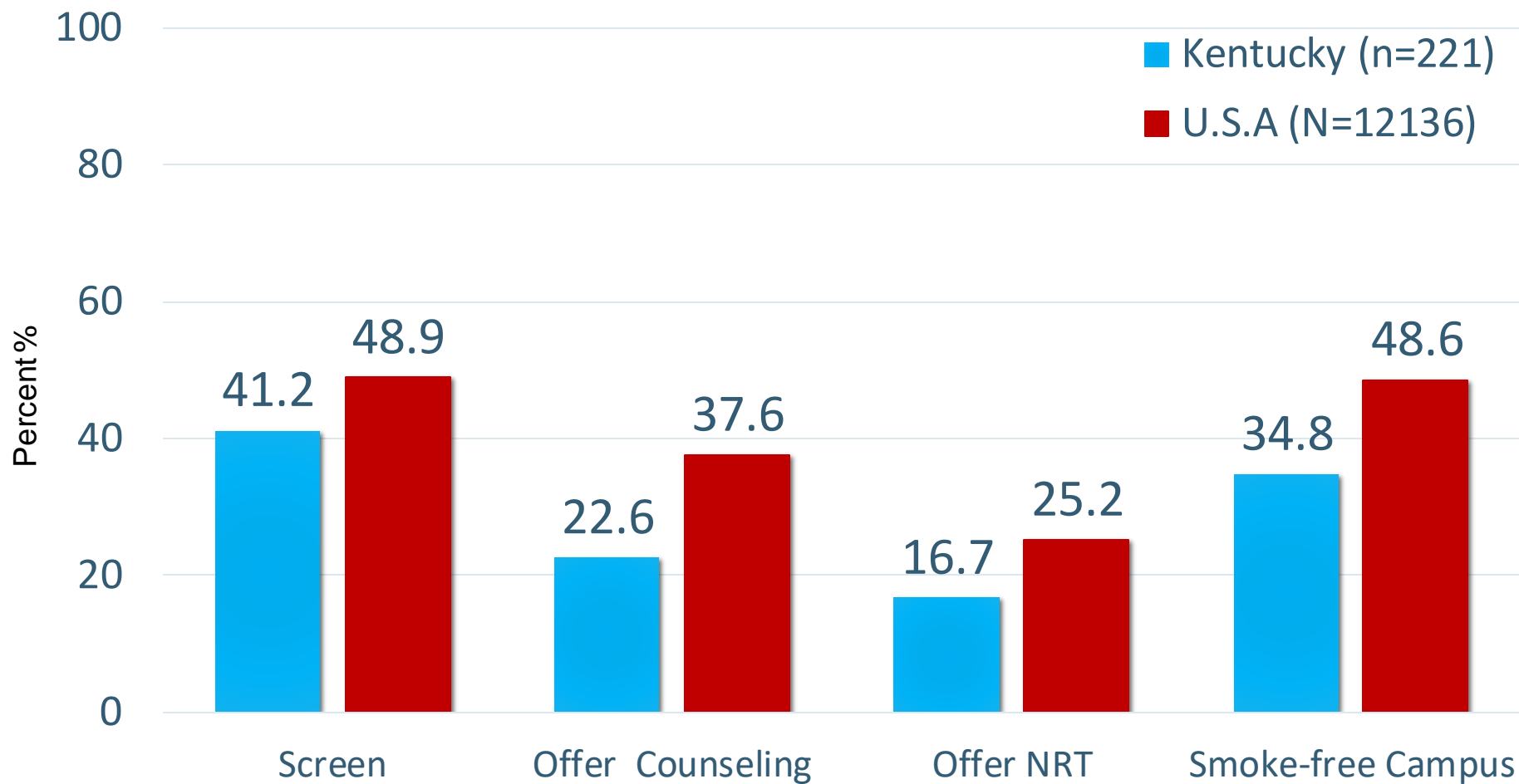
Percentage of Mental Health Treatment Facilities Engaged in Tobacco Control Efforts (2016)

Marynak, K., VanFrank, B., Tetlow, S., Mahoney, M., Phillips, E., Jamal Mobbs, A., Schecter, A., Tipperman, D., & Babb, S. (2018). Tobacco Cessation Interventions and Smoke-Free Policies in Mental Health and Substance Abuse Treatment Facilities - United States, 2016. *MMWR. Morbidity and mortality weekly report*, 67(18), 519–523. https://doi.org/10.15585/mmw r.mm6718a3

Percentage of Substance Use Treatment Facilities Engaged in Tobacco Control Efforts (2016)

Marynak, K., VanFrank, B., Tetlow, S., Mahoney, M., Phillips, E., Jamal Mobbs, A., Schecter, A., Tipperman, D., & Babb, S. (2018). Tobacco Cessation Interventions and Smoke-Free Policies in Mental Health and Substance Abuse Treatment Facilities - United States, 2016. *MMWR. Morbidity and mortality weekly report*, 67(18), 519–523. https://doi.org/10.15585/mmw r.mm6718a3
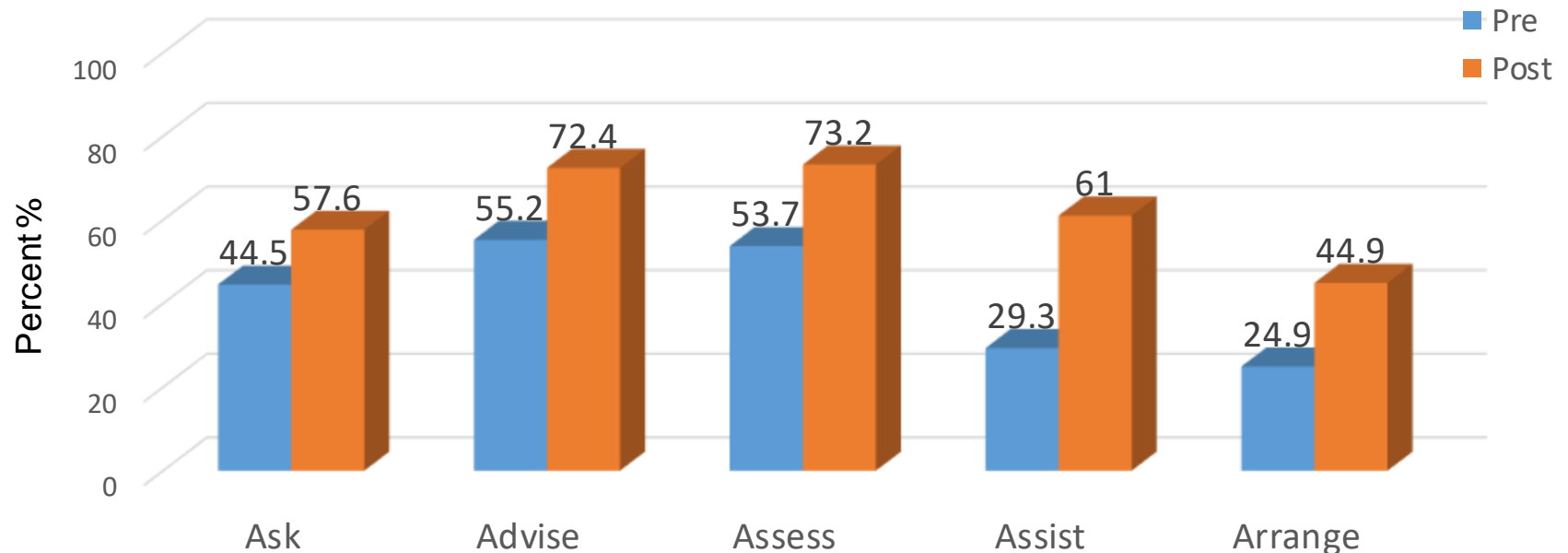
CDC Recommendations for Behavioral Health Settings

✓ ❑Stopping practices that encourage tobacco use (such as not providing cigarettes to patients and not allowing staff to smoke with patients)

✓ ❑Making entire campus 100% tobacco-free

✓ ❑Including tobacco treatment as part of mental health treatment and wellness

Case Example: Taking Texas Tobacco Free (TTTF)

Initiative in Texas to:
1. Implementing/enforcing tobacco-free workplace policy;
2. Educating staff on hazards of tobacco use and exposure
3. Training clinicians to routinely screen/treat tobacco dependence
4. Resource provision to clinics (e.g., nicotine replacement, workplace signage, education materials)
5. Community outreach to support tobacco-free living for clients

Changes in implementation of the 5As after a 6-Month implementation period

Nitturi, V., Chen, T. A., Kyburz, B., Martinez Leal, I., Correa-Fernandez, V., O'Connor, D. P., ... & Reitzel, L. R. (2021). Organizational characteristics and readiness for tobacco-free workplace program implementation moderates changes in clinician's delivery of smoking interventions within behavioral health treatment clinics. *Nicotine and Tobacco Research*, *23*(2), 310-319.

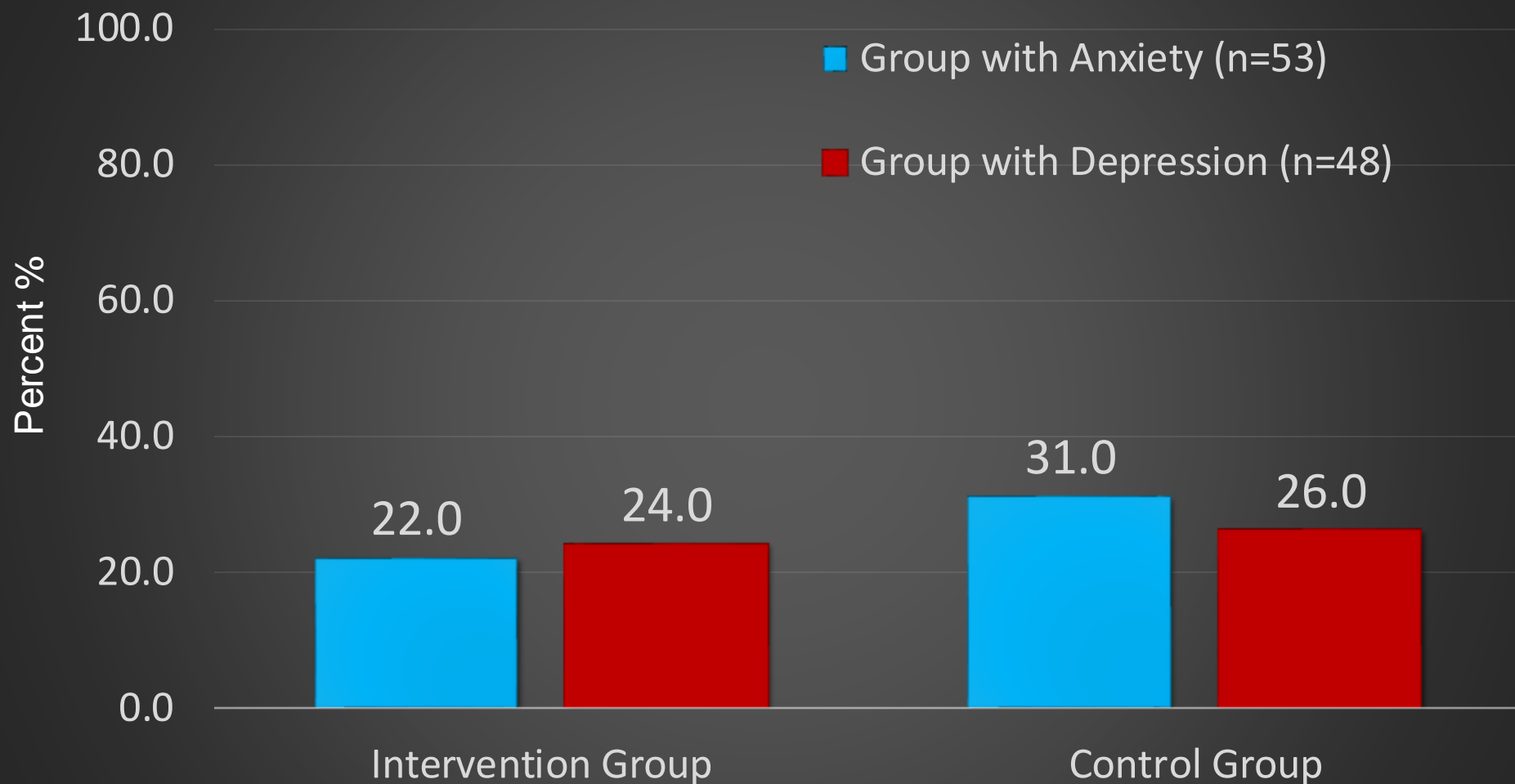# Community Level Approaches

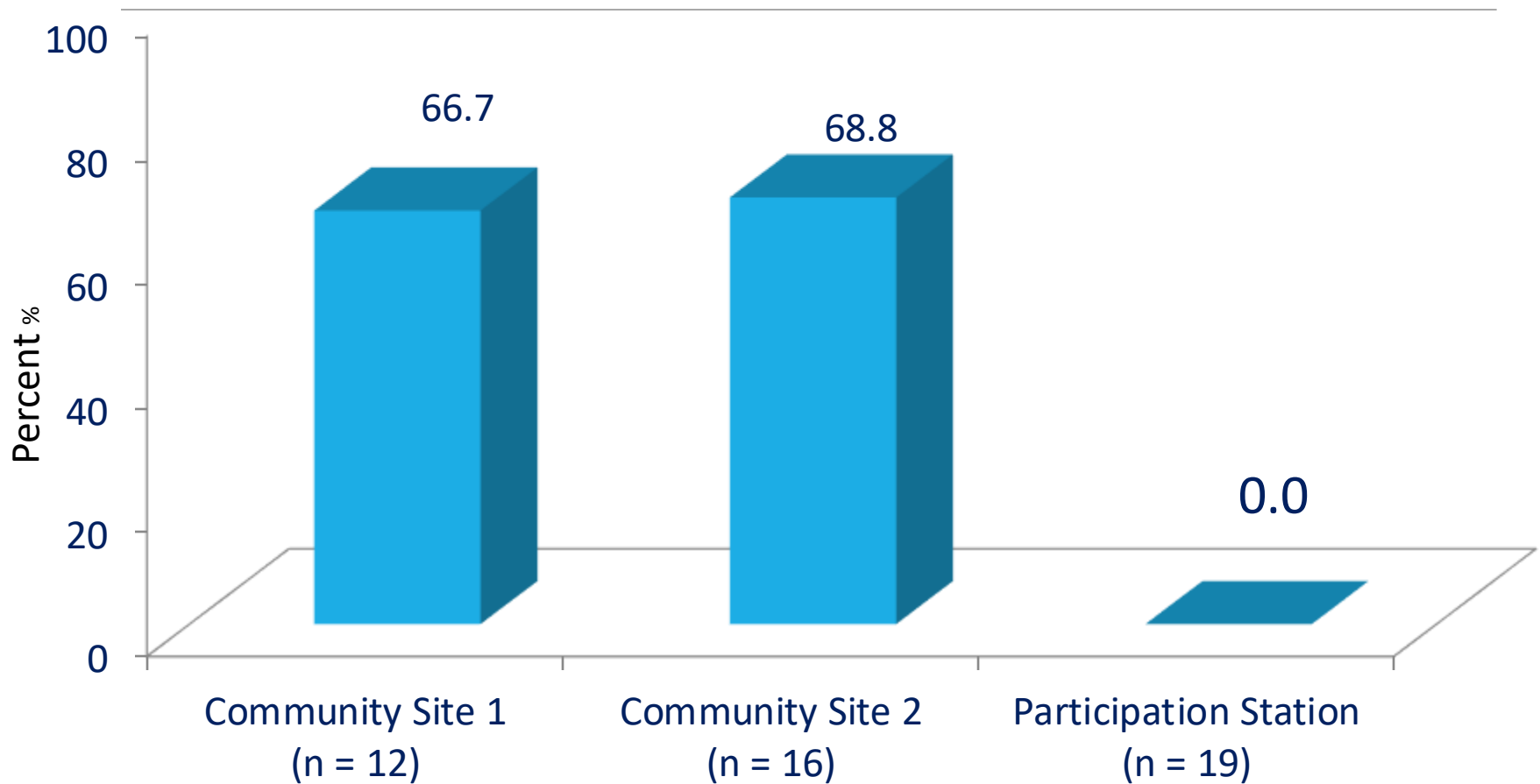# Community Based Approaches

Quitline

Community tobacco treatment programs

Incentives/Quit and win contests

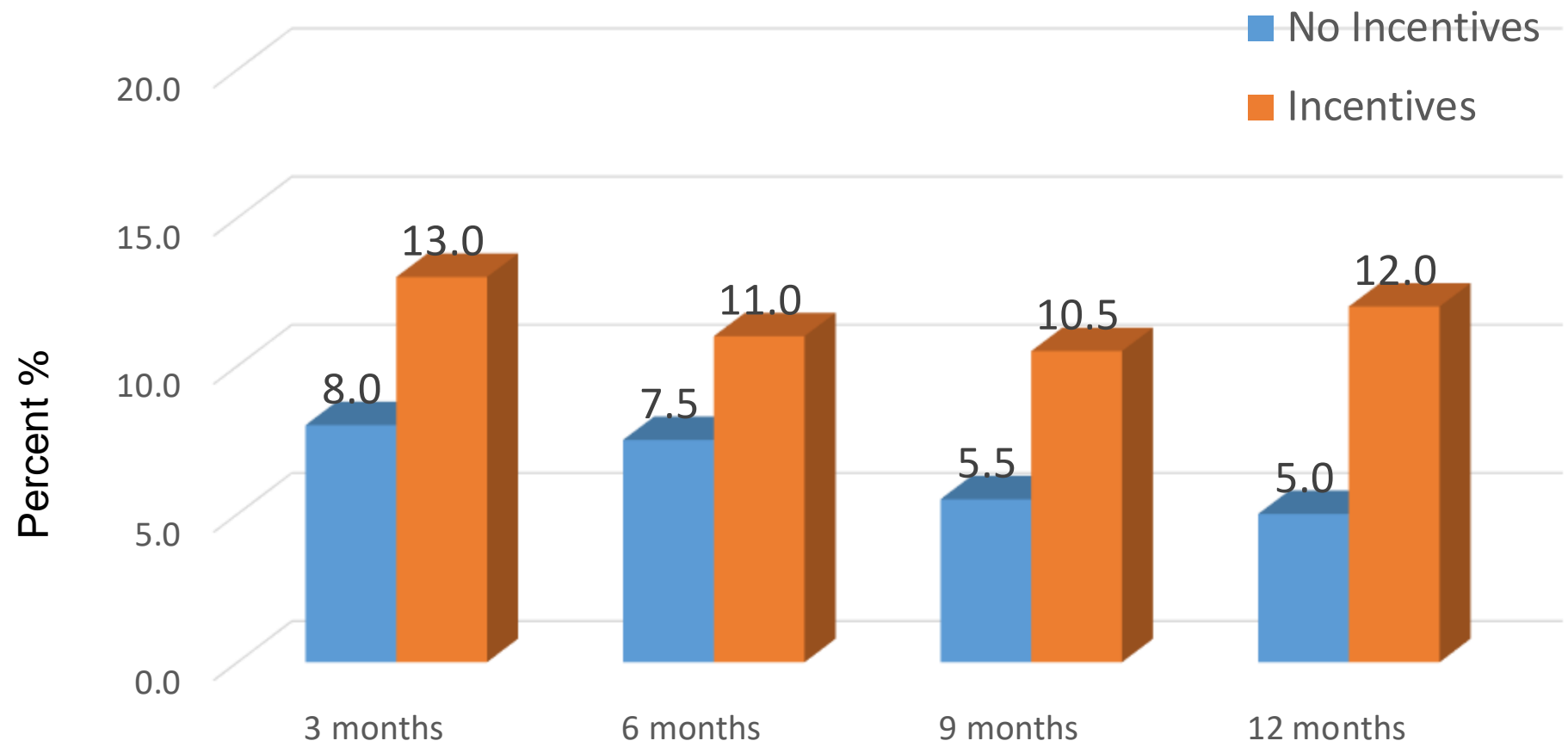Percentage of participants achieving 6-months abstinence among tailored and regular Quitline users

Morris, C. D., Lukowski, A. V., Vargas-Belcher, R. A., Ylioja, T. E., Nash, C. M., & Bailey, L. A. (2021). Quitline programs tailored for mental health: initial outcomes and feasibility. *American journal of preventive medicine*, *60*(3), S163-S171.

Smoking Cessation Outcomes of a Community-Based Tobacco Treatment Program delivered in Community Mental Health and Non-Mental Health Sites

Okoli, C. T., Mason, D. A., Brumley-Shelton, A., & Robertson, H. (2017). Providing Tobacco Treatment in a Community Mental Health Setting: A Pilot Study. *Journal of addictions nursing*, *28*(1), 34-41.

Tobacco Treatment Outcomes of a Contingency-Incentive intervention delivered in Community Mental Health Clinics

Brunette, M. F., Pratt, S. I., Bartels, S. J., Scherer, E. A., Sigmon, S. C., Ferron, J. C., ... & Capuchino, K. (2018). Randomized trial of interventions for smoking cessation among Medicaid beneficiaries with mental illness. *Psychiatric Services*, *69*(3), 274-280.

Behavioral Health Quit and Win Contest

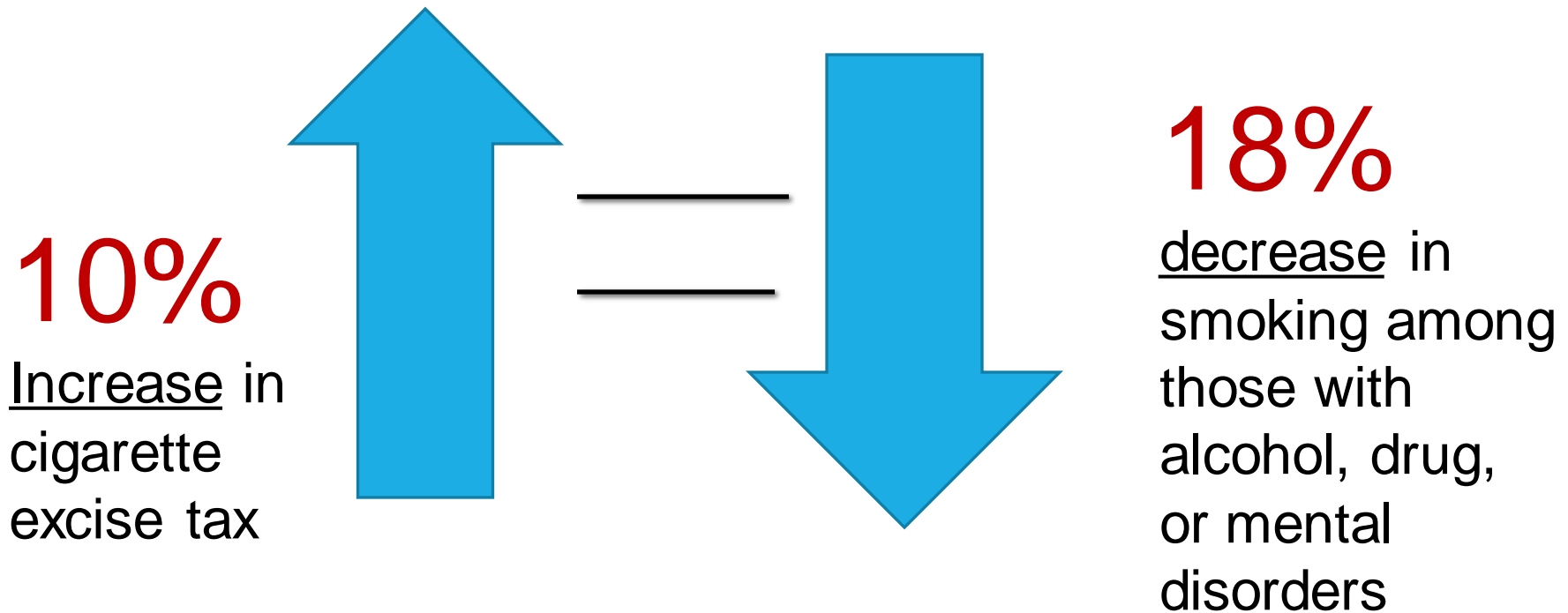| Setting	Time Period	Enrolled	Quit (%)
Site 1	March 2020	7	1 (14.3%)
Site 2	April 2022	16	3 (18.8%)
Site 3	April 2022	6	0 (0.0%)

Public Policy Level Approaches

Effect of Excise Taxes on People with Mental and Behavioral Health Challenges

10%
Increase in cigarette excise tax

18%
decrease in smoking among those with alcohol, drug, or mental disorders

Ong, M. K., Zhou, Q., & Sung, H. Y. (2010). Sensitivity to cigarette prices among individuals with alcohol, drug, or mental disorders. *American journal of public health*, *100*(7), 1243–1245. https://doi.org/10.2105/AJPH.2009.159962

Tobacco-Free Policy in Permanent Supportive Housing

After Tobacco-Free Policy

- Decrease in indoor smoking (by 59.7%)

- Decrease in proportion of residents identifying as current smokers

- Increased support for the policy even among current smokers

- No change in residents who smoked

Petersen, A. B., Stewart, H. C., Walters, J., & Vijayaraghavan, M. (2018). Smoking Policy Change Within Permanent Supportive Housing. *Journal of community health*, *43*(2), 312–320. https://doi.org/10.1007/s10900-017-0423-7

Conclusions

❑ Addressing tobacco use among people living with mental and behavioral health challenges often requires an interdisciplinary team approach

❑ Assessing multi-level tobacco control initiatives provides insight into approaches that can be further explored for this population

❑ Engagement in tobacco control efforts across disciplines and at multiple levels can be instrumental in addressing the disproportionate tobacco use prevalence, morbidity, and mortality among those living with mental and behavioral health challenges.
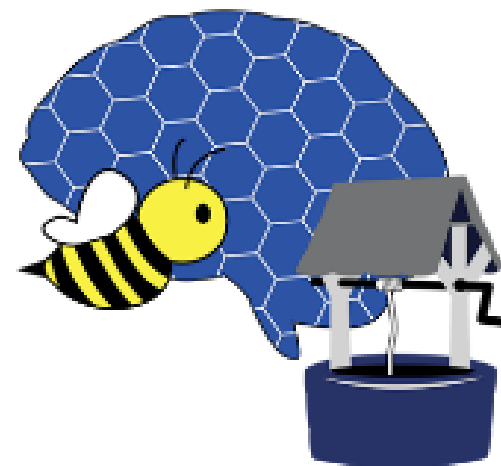
Thank you for your time and attention!