The quiet revolution in tobacco treatment for psychiatric patients

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Some slides adapted from:
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July 26, 2007

Learning Objectives

- Discuss why so many people with mental illness use tobacco
- Describe how tobacco treatment and clinical systems should be tailored to best serve people with mental illness
- Describe how new CMS reporting rules are revolutionizing treatment of psychiatric inpatients

Thirteenth in a Series of Technical Reports

Morbidity and Mortality in People with Serious Mental Illness

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Tobacco #1 Killer of People with Mental Illness

- In the U.S., people with serious mental illness die 25 years earlier than the general population
  - Deaths are caused by smoking, obesity, and chronic diseases
  - NOT suicide

Manderscheid & Colton, 2006

People with mental illness consume 40% of cigarettes smoked in U.S.

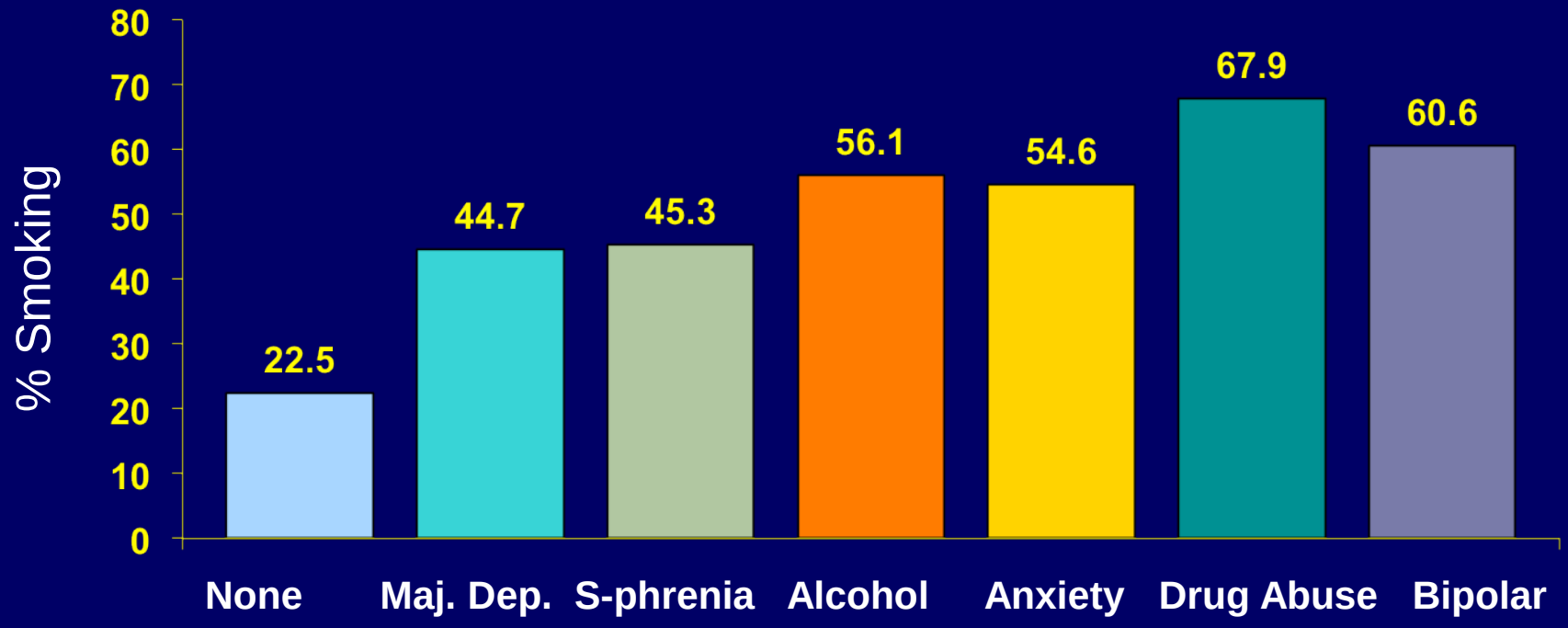
CDC, 2013

DSM-V Tobacco Use Disorder

- 3 Criteria, 15 sub-features
  - Consuming larger quantities of tobacco over a longer period then intended
  - Tolerance for nicotine
  - Withdrawal symptoms upon cessation

- Most smokers with mental illness meet criteria for DSM-IV (Prochaska et al., 2004; 2006)

Smoking by Diagnosis



Lasser et al., 2000; Morris et al., 2009

What Makes it So Hard to Quit?

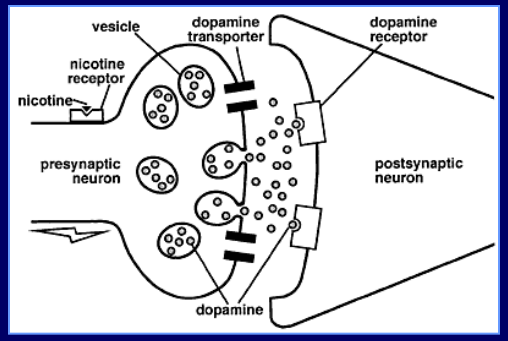
What Makes Any Drug Addictive?

<u>How the drug makes you feel…</u>

- It activates reward pathways in your brain – you feel GOOD
- Direct effects make you want to use it >>>occasionally

<u>How you feel when you *can't* use it…</u>

- Craving, depression, and irritability make you feel BAD
- Withdrawal makes you have to use it >>>regularly



http://science.education.nih.gov/supplements/nih2/addiction/guide/lesson3-1.htm

What Makes Any Drug Addictive?

HOW MUCH YOU GET HOW FAST

How your body handles the drug

- Bioavailability: amount of drug that reaches brain
- How quickly it is cleared from body
- Peaks and dips in blood levels set up an ideal "learning" cycle

Chronic use creates long-term brain changes

Sachs, DPL. Advances in Smoking Cessation Treatment. In Simmons, Ed. Current Pulmonology. Chicago, Year Book Medical Publishers, 1991:12;139-198; Niaura, 1999; Leshner, Am J Psychiatry, 1997

What Makes it So Hard to Stop?
Cigarettes-amazing drug delivery system

- Heroin/injected drugs = vein, heart, lungs, heart, brain
- Nicotine via cigarettes = lungs, heart, brain (7 sec)
- Ph-altered (freebased) to be absorbed deep in lungs

Alveolar epithelium of lungs has surface area the size of a tennis court

Adapted from presentations by Ray Niaura, John Slade

Each puff delivers a large amount of nicotine to the brain

Smokers take 12-15 puffs per cigarette

12 X 20 cigs/day X 365 day/year
= 87,000 puffs/year

people smoke for 20, 30, 40 years…

http://www.cdc.gov/tobacco/data_statistics/state_data/state_highlights/2012/pdfs/states/kansas.pdf

Adapted from presentations by Ray Niaura, John Slade.

WHY didn’t John stop the first time he tried?

Better to ask, how can *anyone* stop?

What happens when smokers quit?

They gain, on average, 6 years of life

6

Tobacco Dependence is a chronic, relapsing condition that requires longitudinal, dynamic care

21st-Century Hazards of Smoking and Benefits of Cessation in the United States;
http://smokingcessationleadership.ucsf.edu/jha_et_al_nejm_2013.pdf

Why do so many people with mental illnesses smoke?

Vulnerabilities & Barriers to Quitting

- Biological factors
- Barriers to tobacco treatment
  - Systems Factors
  - Clinician Factors
  - Client/Consumer Factors
- Tobacco industry targeting

“I’ve been schizophrenic since I was 14. I was told more or less when I went to the hospitals that cigarettes help control certain areas in my brain and the way we function out in society. I became more of a smoker because I was told it would help me with my illness. I was taught more about it helping my illness than I was about cancer and stuff like that.”

- Consumer focus group participant

Morris et al, 2009

Mental Disorders and Quit Rates

- Quit rates among those with current M.H. diagnosis may be significantly lower than for those with no history of mental illness

- Quit rates among smokers with a history of alcohol and substance abuse and social phobias are significantly lower than for those without this history

Prevalence = Incidence X Duration

- No focus on tobacco treatment
- Longtime part of psychiatric culture
- Poor access to primary care
- Lower rate of quit attempts
- Higher tobacco relapse rates

Understanding and Measuring Tobacco Treatment in Drug Treatment

- 3-year project to describe tobacco treatment in drug treatment facilities

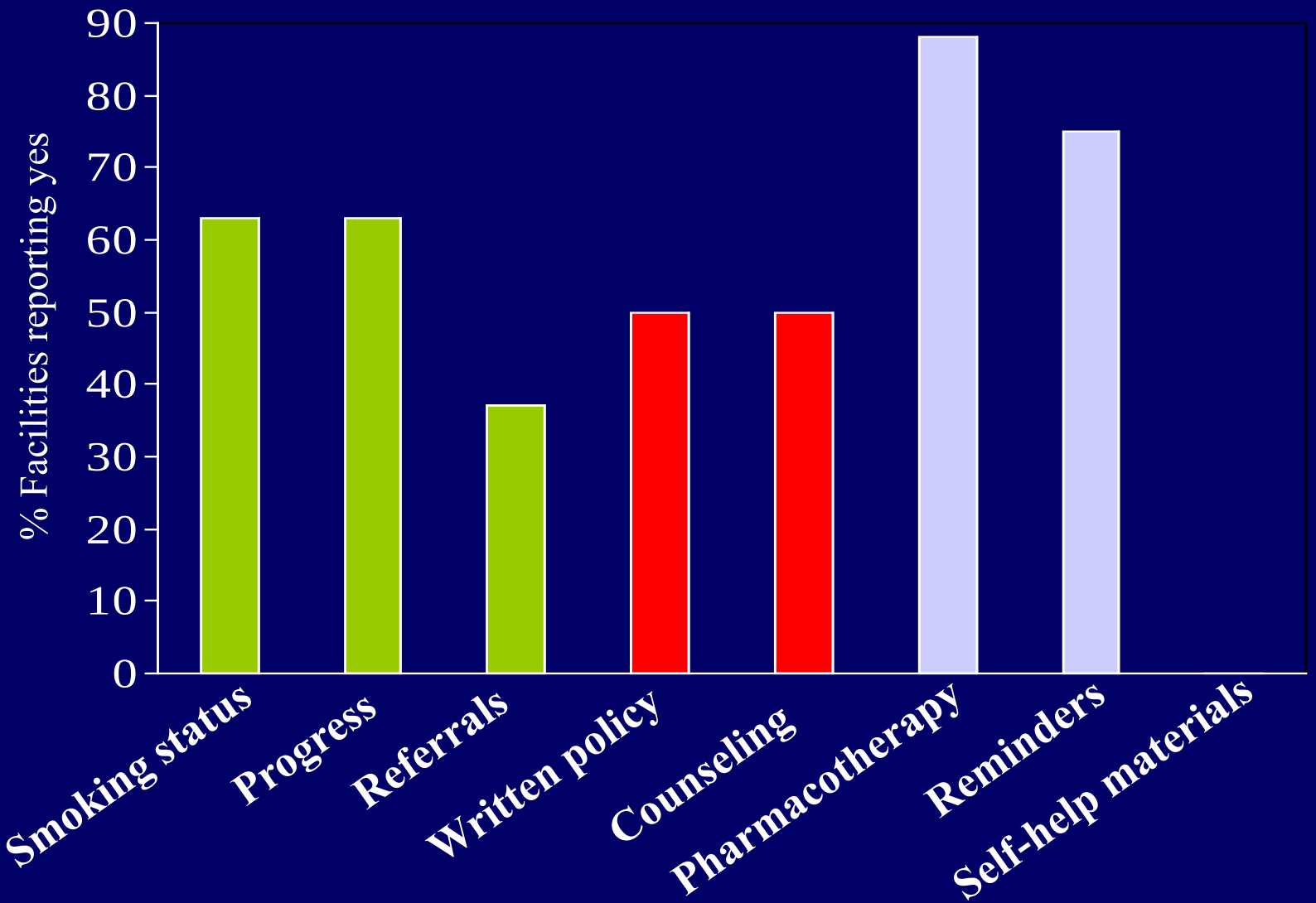
  - Phase 1 – checklists, chart reviews, interviews of how tobacco is addressed in 8 KC clinics

  - Phase 2 –created scale that measures prevalence/type of tobacco treatment services

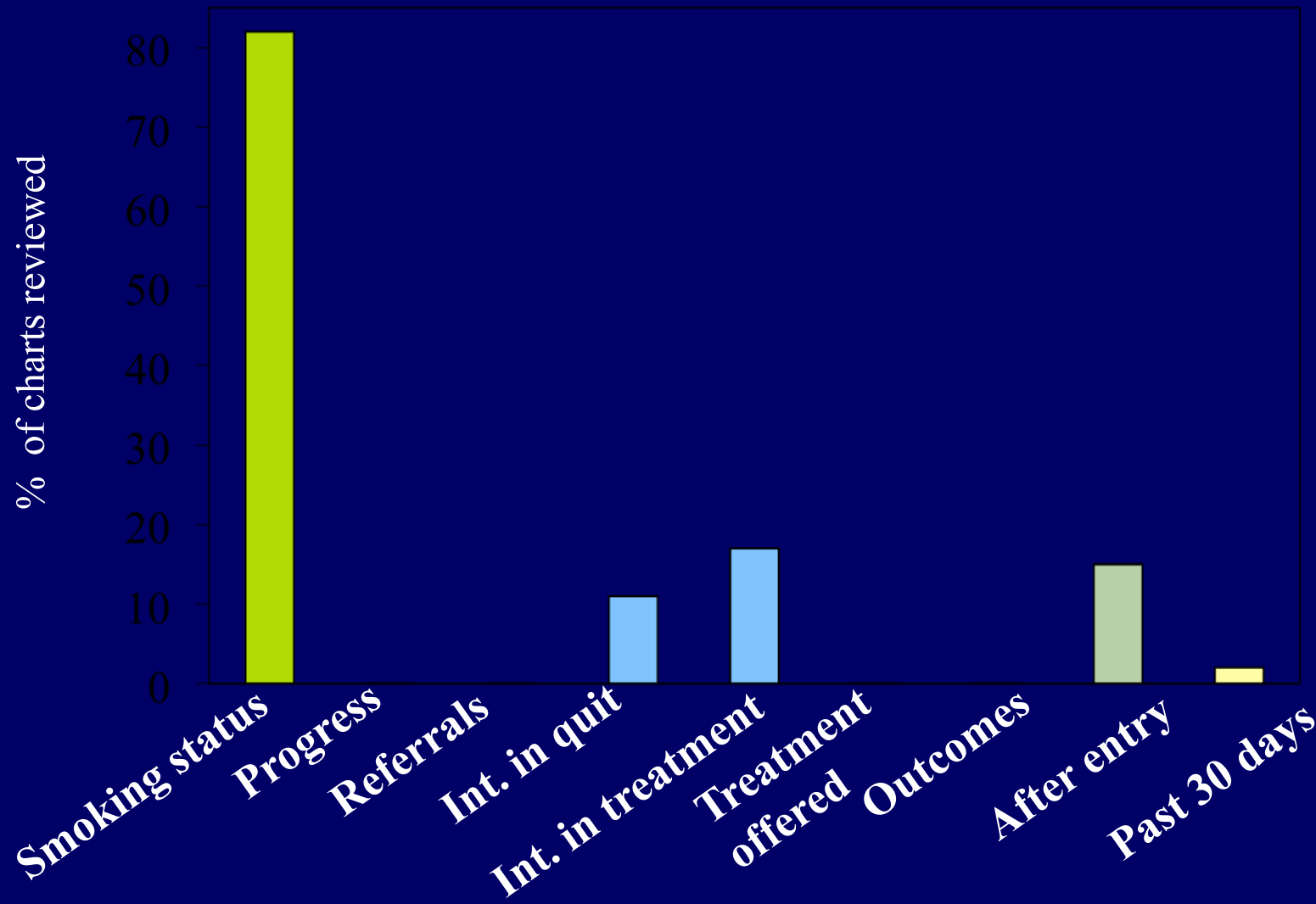
  - Phase 3 – administer survey to 400 clinics across U.S. to assess prevalence

Results: Systems Checklist

(self-report, directors)



Results: Chart review



Semistructured interviews

- None have dedicated program for tobacco
  - “Because I don't know that they do much other than lectures, occasional lectures…You know as far I know that's all they do. If they're doing something else it would be good but it's not part of their curriculum to have to do it.”
  - “Um, personally, I've been an intern here since February and I haven't seen anything about treating tobacco, just of illegal drugs and alcohol.”
- Many address tobacco as part of a “health promotion” session
  - “They had a big poster on the wall, if you care to look at it, about smoking and what it does to the lungs. And I think every now and then we might have a class on it. So that’s for your health.”
  - “There's a small component just on the education in the outpatient…Subtopic of other areas of abuse.”

Semistructured interviews

- Clients have to ask for treatment
  - “We'll provide the information, but it's really their responsibility to take the initiative to step up and say, ah I think I might want to stop smoking too.”
  - “So it's really up to the patient on the cigarette, that's something I can't force.”
- None have procedures for motivating unmotivated smokers
  - “Generally it's not something that I actively pursue unless there is some expression from the client, as to having a desire to quit.”
  - “Whatever you gain from your research to support effective ways to motivating, you know, that's really where the critical need is.”

Semistructured interviews

- Use tobacco as a tool for the treatment of other addictions
  - “It's a great example to use, because not everybody may understand being addicted to cocaine, but most everybody understands smoking.”
  - “I find that it's a powerful drug to use as an example because it is so easy to define what a craving is when you're talking about nicotine.”
- Tobacco is not a priority because it is not illegal
  - “so I don't really treat them for tobacco, we would focus more on the substance abuse and targeting that and getting their, you know, their legal cases taken care of.”
  - “I'd say at the bottom of the totem pole. And I'd say that's probably because this is a program where people are court ordered to come to, you know. And unless you're teen, like I said, you're not court ordered to come to group if all you were doing was smoking a cigarette.”

Semistructured interviews

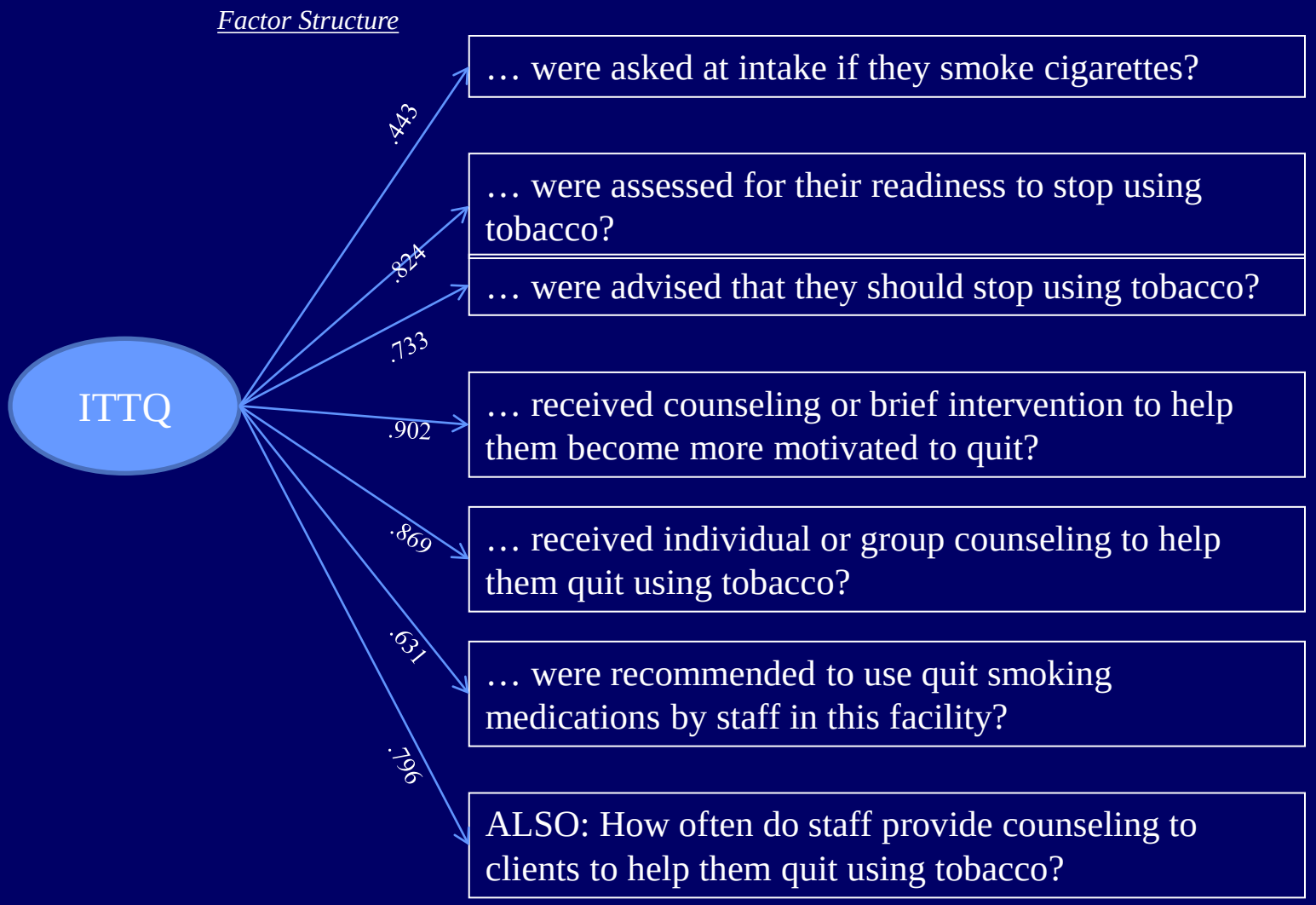
- One facility provided on-site NRT
- Most encourage clients to discuss pharm with Drs.
  - "…if they're looking at something like Zyban, probably back to their physician."
- But meds not routinely used or encouraged
  - "Our doctor, who's here like six hours a week so we don't have a lot of time, has prescribed nicotine replacement therapy, I believe, once or twice. So it's not something we routinely do. And it's not something we could even routinely afford right now, you know, like if we did that for everybody."
  - "We'll look at suggesting things like the patch or the gum, you know, kind of nicotine replacement, but many of our clients don't have the ability to pay for that."

Semistructured interviews

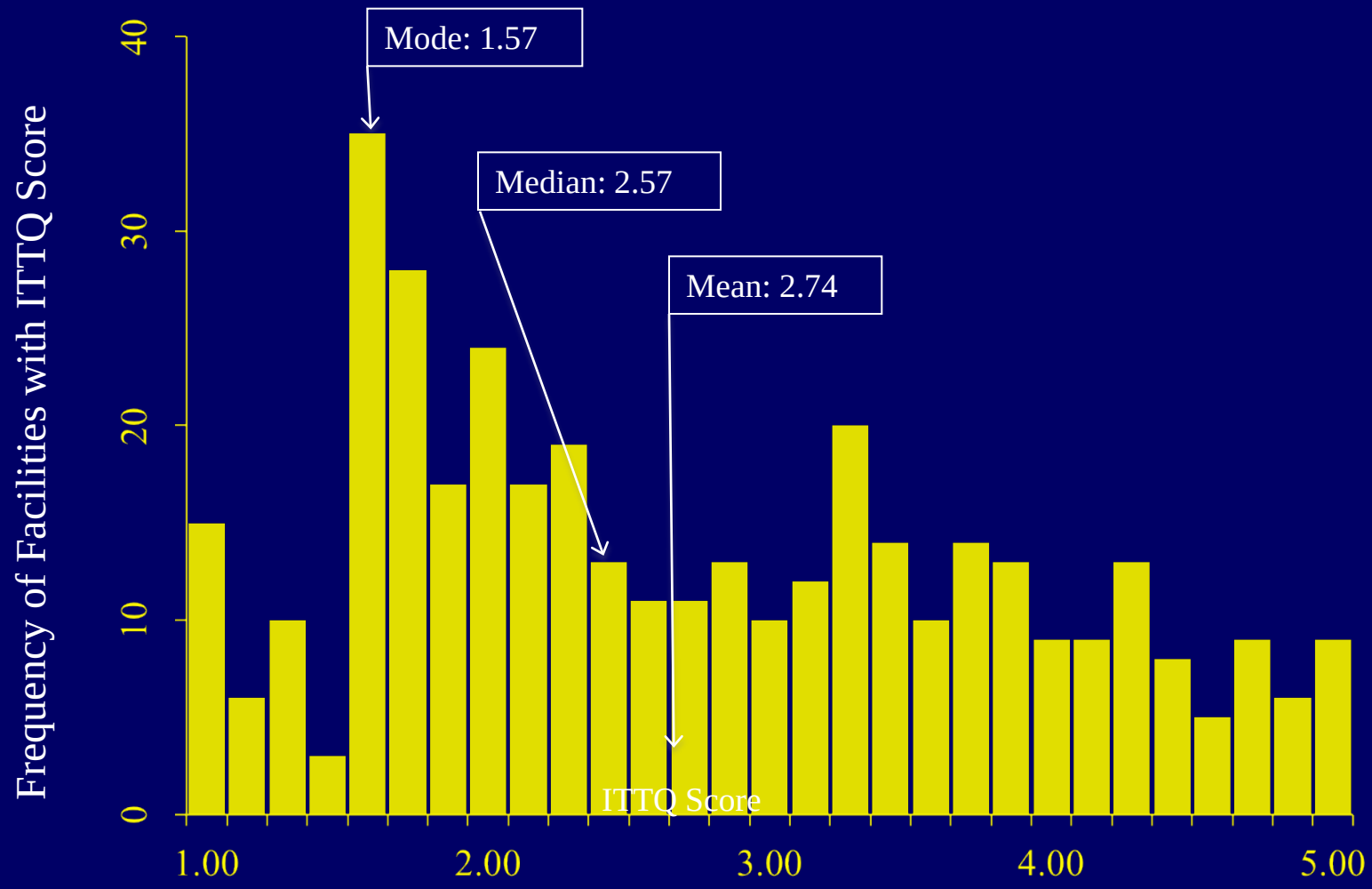
- Discrepancies between directors, staff, and clients were found
  - Some facilities, directors reported education in curriculum and counseling available on request
    - But staff stated they were not doing much if anything about tobacco
  - Other facilities, staff reported education in curriculum and counseling for smoking cessation was available on request.
    - However, clients didn't think tobacco was addressed at all
  - Staff sometimes reported "clients don't want treatment, are resistant"
    - But some clients thought that tobacco treatment would be positive addition to treatment

Index of Tobacco Treatment Quality –

What percentage of your patients…



ITTQ – Scores Across 405 Facilities in U.S.



Conclusions

- Sites are doing little
  - Big difference between saying you have a program and actually providing treatment
  - When treatment happens, it is often informal/opportunistic
- Director reports differed from chart reviews and staff/client reports
- All agreed that tobacco was dependence-forming and harmful
- Most report doing some form of tobacco education in drug education

Things we know...

- Multiple studies have found that behavioral health patients are interested in quitting and will enroll in tobacco treatment (Prochaska et.al., 2004; (Prochaska et al., 2009; Joseph et.al., 2004)
- Tobacco treatment is effective among people with SA/MH problems (el-Guebaly et al., 2002 Hughes & Kalman, 2006, Drug Alc Dep)
- Multiple studies have found that quitting does not harm – actually may help with substance abuse and mental health outcomes (Prochaska et al., 2004; Saxon, 2003; Signal Behavioral Health, 2008; Lemon et al. 2003; Gulliver et al 2006; Ziedonis et al, 2006; Baca & Yahne, 2009; (Prochaska et al., 2008; Evins et al., 2005)

Mental Health Benefits From Treating Tobacco Dependence

- Emerging evidence that morbidity is reduced
- May enhance abstinence from substances
- Reduced financial burden
- Increased self-confidence
- Reduce feelings of stigma
- Increasing focus on mental health and wellness

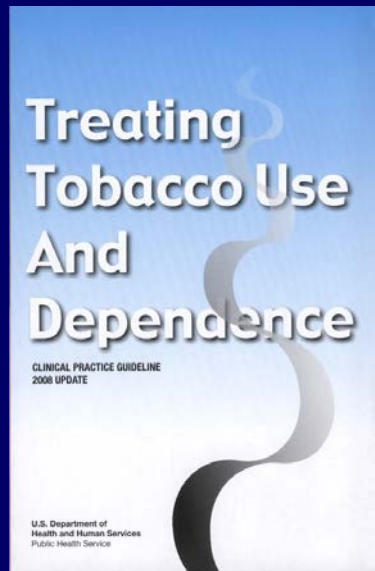
A Wellness Philosophy

- To assist people to lead meaningful lives in their communities, we need to promote behaviors that lead to health

How to Help People With Mental Illnesses Quit

U.S. Clinical Practice Guidelines

- Intervene with **all** smokers, *regardless of readiness to quit*
- Deliver brief advice to quit each time see smoker
- Ask smoker if he/she is ready to quit
  - Smoker *not* ready to quit? *THIS WILL BE 80%*
    - Deliver brief motivational intervention
  - Ready to quit?
    - Quit smoking medications – solo or combo
    - 4 or more sessions counseling – may refer to quitline
- Develop a clinic "system" to make sure all of this happens



Fiore et al. Treating Tobacco Use and Dependence: Clinical Practice Guideline. USDHHS, 2008.

Counseling + Combo Pharm Best

% quit at 1 year:

Telephone Quitline ----------13%

Group Counseling ----------14%

Individual Counseling ---------- 17%

2-3 Sessions + Medication --------- 28%

Buproprion + Counseling ---------- 24%

Patch + Counseling ---------- 27%

Varenicline + Counseling ---------- 33%

Combo Pharm + Counseling **----------26%-37%**

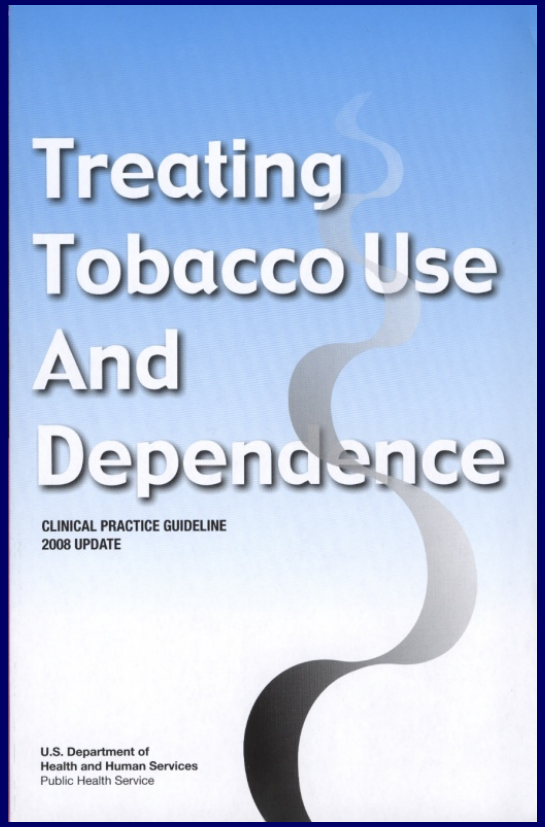
KS Medicaid covers patch, bupropion, varenicline

Fiore et al. Treating Tobacco Use and Dependence: Clinical Practice Guideline. USDHHS, 2008.

Medications

- Nicotine Replacement
  - Patch
  - Gum
  - Nasal spray
  - Inhaler
  - Lozenge
- Non-nicotine medications
  - Bupropion (Welbutrin Zyban)
  - Varenicline (Chantix)
- 2nd-line medications with evidence
  - Nortryptiline
  - Clonidine
  - Cytisine*

*Not reviewed in Practice Guideline



Some Medications May Be Especially Helpful for Smokers with Specific Conditions

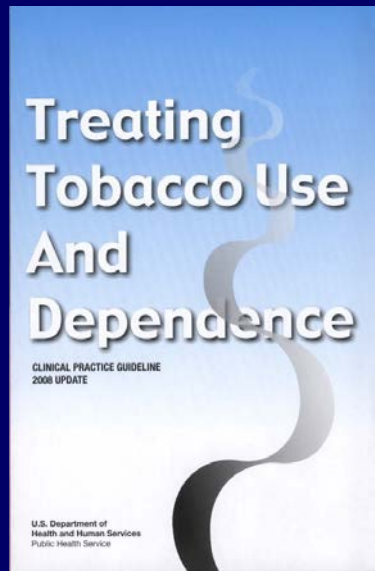
- Depression: Bupropion and Nortriptyline significantly better than placebo
- Schizophrenia: 3 studies found bupriopion significantly better than placebo

Hall, 2007: Nicotine Interventions with Comorbid Populations

Psychiatric Smokers Have Higher Dependence

Smokers with heavier dependence require:

- Higher doses of cessation medications
- Combination medications
  - Nicotine patch + nicotine gum,
  - Nicotine patch or gum + bupropion
  - May need medication for longer



Smoking Complicates Dosing of Psychotropic Medications

- Smoking can alter medication metabolism, so higher doses are often needed when smoking
- When smokers quit, changes in the metabolism of meds could result in relatively greater dose levels over time, with greater potential for adverse effects

FDA first line medications

2X

Bupropion, NRT double quit rates

3X

Varenicline nearly triples quit rates

3X +

Combination medication most effective:

Bupropion + NRT; Patch + short-acting NRT

Choice should be based on contraindications and preference of smoker, especially the resources available to them

AND: There are new treatment approaches all the time, e.g. pretreatment with nicotine patch

PHS Clinical Practice Guideline: *Treating Tobacco Use and Dependence: 2008 Update*

Behavioral Interventions

- Motivate smokers to stop
  - MI + personalized feedback – 32% of schizophrenics to seek cessation treatment (Steinberg et al., 2004)
- Longitudinal, dynamic counseling:
  - Know diagnosis, medications, history
  - Monitor psychiatric symptoms, adjust medications
  - Monitor cessation progress, troubleshoot barriers
    - Monitor withdrawal/craving, adjust medications

Other resources, behavioral support

- Fax-refer or warm handoff to Tobacco Quitline (1-800-QUIT NOW)

- Text to quit: Send a text message with the word QUIT to 47848, answer a few questions, and you'll start receiving text messages from SmokefreeTXT.

Other resources, support

- Free, Interactive Internet Support
  - becomeanex.org
  - quitnet.com
  - http://www.ctri.wisc.edu/smokers.htm
  - smokefree.gov
  - women.smokefree.gov for women and pregnant smokers
  - teen.smokefree.gov for teen smokers and smokeless tobacco users
- Free, Interactive “Apps” for Smokers
  - QuitSTART
  - NCI QuitPa
  - QuitGuide

Create systems to offer help routinely

Mental Health Care System Interventions

- Need a system to identify and offer help in quitting
- Need to train providers in harms of smoking and how to help patients quit
- Individualized, extended, flexible approaches work best
- Implement smoke free facilities to protect patients, their families, and staff

Aubin HJ, et al..Neurosci Biobehav Rev. 2012 Jan;36(1):271-84.

Clinic System:

Ask all patients if they 2) use tobacco 2) ready to quit

NOT READY: Conduct motivational intervention

READY:

-Ask if they would like to set a quit date (not required)

-Counseling: provide individual or group counseling OR refer out

-Pharmacotherapy: none, one, or combination (base on quit history)

-Add tobacco goals into treatment plan, assess often

-SET FOLLOW UP VISIT – change strategies if necessary

Help staff who smoke to quit

Have smoke free building and campus – other policies

Train staff in how to treat tobacco dependence

Designate a staff member to be tobacco treatment leader

Learning About Healthy Living

TOBACCO AND YOU

Jill Williams, MD
Douglas Ziedonis, MD, MPH
Nancy Speelman, CSW, CADC, CMS
and, MSN, APRN, NPC, BC
Michelle R. Zechner, LSW
Raquel Rahim, APRN
Erin L. O' Hea, PhD

AVAILABLE FREE

http://rwjms.rutgers.edu/psychiatry/divisions/addiction/documents/2012lahl.pdf

US Psychiatric Units Now Treat

- Hospitals that receive funding from public health care (Medicare)
- If hospital has psychiatric unit:
  - Must adopt 2 “Joint Commission” recommendations for care or receive less reimbursement
  - Must measure and report:

1. % psychiatric patients who use tobacco
2. % tobacco users who were offered quit tobacco medications/counseling in hospital
3. % receiving medications/counseling

Treatment is Ethical

- Must do no harm
- Without assistance, most will continue to smoke
- Not addressing tobacco will cause more harm than addressing it
- Offer, not mandate, tobacco treatment
  - Keep smoking cessation on problem list
  - Motivate every few months using personal risks and discussing barriers
  - Let smoker decide timing

[Hughes 2003]

Mission Accomplished?

- What makes it so hard to quit?
  - TOBACCO IS A CHRONIC, RELAPSING CONDITION
- Why do so many people with MI smoke?
- How to help people with MI quit
- Office systems to ensure it happens routinely

MUST TREAT TOBACCO DEPENDENCE WITH LONGITUDINAL, DYNAMIC CARE

"Those who deliver mental health care often pride themselves on treating the whole patient, on seeing the big picture, and on not being bound by financial irrationality or by the biases of their culture; yet many fail to treat nicotine dependence. They forget that when their patient dies of a smoking-related disease, their patient has died of a psychiatric illness they failed to treat."

John Hughes, 1997

Discussion

How to respond to patients questions about e-cigarettes

FliPP

- Figure out: "What interests you about e-cigarettes?"
- Listen and Commend: "It sounds like you're interested in quitting/cutting down/reducing harm from your tobacco use. That's great! Stopping smoking is the best thing you can do for your health."
- Inform:
  1) Dozens of companies make them
  2) Not tested for safety—don't know what they're made of or what's in the vapor
  3) Don't know if they help people stop smoking
- Pivot: "For these reasons I can't recommend e-cigarettes right now, BUT if it's ok with you, I'll describe some effective and safe options that are freely available for many patients…"
  - *[e.g., nicotine inhaler, nasal spray, lozenge, gum, patch, other meds]*
- Plan: "Where would you like to go from here?"
  - *[if patient doesn't want to try to quit, or wants to try e-cigarettes, ask if you can check in with them later to see how they're doing]*

http://www.fda.gov/ForConsumers/ConsumerUpdates/ucm173401.htm