MAYO CLINIC

Residential Treatment for Tobacco Dependence

J. Taylor Hays
Professor of Medicine
Nicotine Dependence Center

Presentation Objectives

At the end of the presentation the participants will be able to….

1. Discuss research comparing inpatient and outpatient addiction treatment

2. Describe demographics and outcomes for patients who participate in residential treatment for tobacco dependence

3. Discuss components of residential treatment for tobacco dependence

The War on Drugs

- Destroy the crops
- Convict the pushers
- Rehabilitate the users

- Subsidize the crops
- Exonerate the pushers
- Blame the users

Stop smoking plan: Calif. woman who slapped deputy to go to jail to quit smoking gets 63 days

By Associated Press, Published May 10
SACRAMENTO, Calif. – Think you've heard of every way possible to quit smoking? Etta Mae Lopez came up with a new one: slap a copy and go to jail, where smoking isn't allowed

Inpatient treatment for addictions

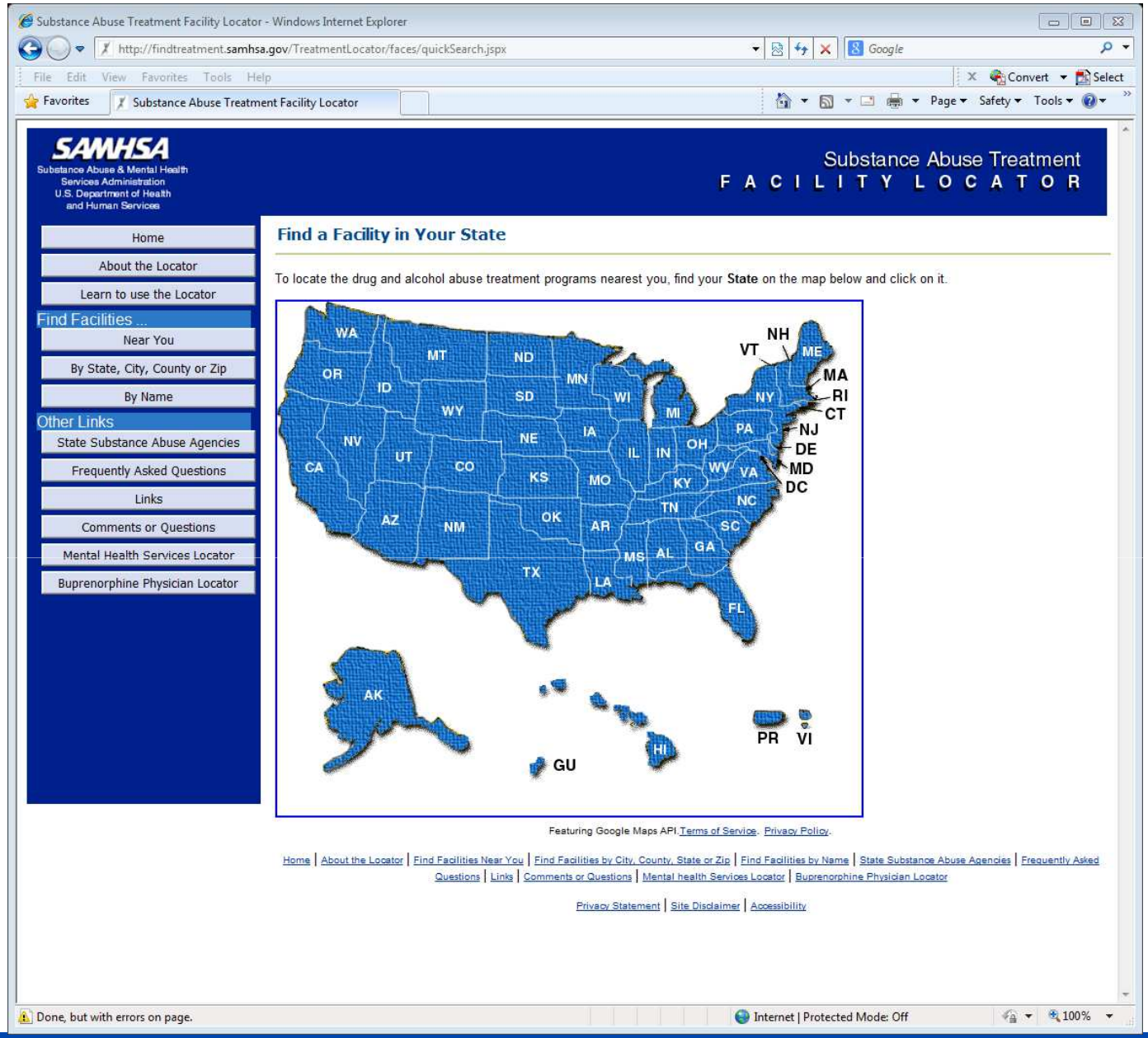
- Reviews in 1980's and 90's found no significant differences between inpatient and outpatient outcomes
  - Miller and Hester, (1986)

- Outpatient recommended for cost containment

Inpatient vs. outpatient for other addictions

- Project MATCH (alcohol use disorder-1998)
  - Possible advantage for inpatient followed by aftercare
- Inpatient more effective for those who are more dependent or more co-occurring problems
  - Rychtarik et. al. (2000)
- Not which is better, but which is treatment is better for which patients

- Currently 28% of patients treated for addictions in the US receive in patient care
  - Weiss, Sharpe Potter, and Iannucci (2007) in Gallenter et. Al. American Psychiatric Textbook on Substance Abuse Treatment



Tobacco dependence is an addiction…

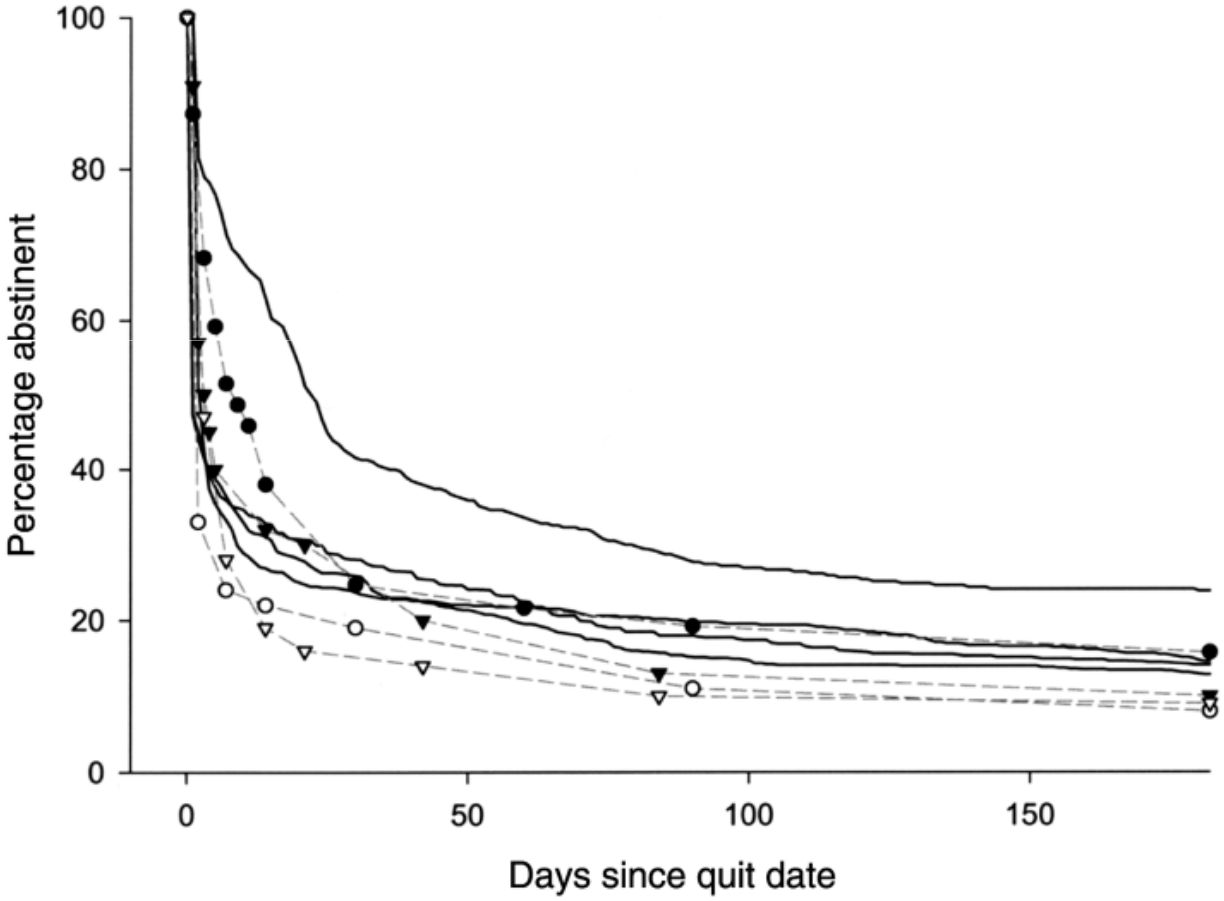
But virtually no inpatient treatment options are available

Residential program

<u>Eight day program (Friday to Friday)</u>

- Hotel license
- Each pt. has own bedroom with bath
- Maximum of 11 per program
- Common eating and lounge area
- Exercise facility

Relapse Curve in Untreated Smokers



NDC Residential Overview

- Residential Program came into being in 1991
- Colonial Building, 4th floor (remodeled 2012)
- Currently treat approximately 80/year (Total treated since program start over 1300)

Staffing

- Physician
- Two Tobacco Treatment Specialists
- Wellness Coach
- Desk staffed 24-hours/day
- Outside presenters
  - Registered Dietitian
  - Respiratory Therapist
  - Clinical Nurse Specialist

Who comes to the program?

Comparison of NDC residential patients and outpatients

	Residential N = 226	Outpatient N = 4328
Gender	47% female	44% female
Mean age	54	49
Mean CPD	31	21
Mean FTND	6.9	5.1

	Residential	Outpatient
More highly motivated (intention to quit)	96%	83%
Prior treatment for alcoholism	26%	15%
Prior treatment for depression	56%	42%

What do they have in common?

- Tried ‘everything’ to stop smoking
- Believe that the only way they will be able to quit is to be ‘locked away’
- Question why these programs are not more common

The program

First Day

- Limited History/Medical Exam
- Pulmonary Function Test
- Serum cotinine (MD discretion)
- Expired CO
- Meet with TTS and Wellness Coach
- Introduction to facility
- Pick up prescriptions
- 4:30 meet and collect all cigarettes and paraphernalia and review group rules and group therapy

A Typical Day in the Residential Treatment Program

- 7:15 Medical Rounds
- 8:45 Individual counseling
- 9:15 Group session: Understanding Nicotine Dependence
- 10:15 Break
- 10:30 Group therapy
- 12:00 Lunch
- 1:30 Group session: Stress Management
- 2:30 Break
- 3:00 Group session: Relapse Prevention
- 4:00 Exercise session
- 5:15 Dinner

TIME	MONDAY January 14	TUESDAY January 15	WEDNESDAY January 16	THURSDAY January 17	FRIDAY January 18	TIME
6:30	WAKE-UP CALLS	WAKE-UP CALLS	WAKE-UP CALLS	WAKE-UP CALLS	WAKE-UP CALLS	6:30
6:45-7:30	Body Alignment & Healing Breath & Movement	Morning Yoga	Body Alignment & Healing Breath & Movement	Morning Yoga	Body Alignment & Healing Breath & Movement	6:45-7:30
7:30	Medical Rounds (DDM/JM/JP)	Medical Rounds (DDM/JM/JP) **BLOOD DRAWS**	Medical Rounds (DDM/JM/JP)	Medical Rounds (DDM/JM/JP)	Medical Rounds (DDM/JM/JP)	7:30
7:30	BREAKFAST	BREAKFAST	BREAKFAST	BREAKFAST	BREAKFAST	7:30
9:00	Relapse Prevention I (JP)	Stress Management II (JM)	**9:15-10:15** Nutrition Discussion (Stephen De Boer)	Relapse Prevention III (JP)	Medical Lecture (DDM)	9:00
10:15	MORNING BREAK	MORNING BREAK	MORNING BREAK	MORNING BREAK	MORNING BREAK	10:15
10:30	Group Therapy (JM/JP)	Group Therapy (JM/JP)	Group Therapy (JM/JP)	Group Therapy (JM/JP)	Group Therapy (JM/JP)	10:30
11:45	Group Photograph					11:45
Noon	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH	Noon
12:45	O2 Cocktail	O2 Cocktail	O2 Cocktail	O2 Cocktail	Dismissal	6:30
1:00	Wellness Coaching (TG)	Relapse Prevention II (JP)	Wellness Coaching (TG)	Stress Management III (JM)		1:00
1:30						1:30
2:00	Individual Counseling & Quiet Time (JM/JP)	Individual Counseling & Quiet Time (JM/JP)	Individual Counseling & Quiet Time (JM/JP)	Individual Counseling & Quiet Time (JM/JP)		2:00
2:30						2:30
3:00	Pulmonary Discussion (Jim Garrett)		Medical Lecture (RDH)			3:00
3:30						3:30
4:00		Heart Disease & Lifestyle Change (Kathy Zarling)				4:00
5:00	DINNER	DINNER	DINNER	DINNER		5:00
5:30	Visit with Dr. Jack	Evening Walk	Self-guided art tour	FREE TIME		5:30

Residential Treatment- Patient Progress

- Pharmacotherapy provided day 1
- Withdrawal managed with dose adjustments as needed
- First 2 days patients are asked not to leave the unit
- On days 3 and 4 they may leave the unit with a fellow patient and sign out and sign in
- Starting day 5 they may sign out of the unit alone
- Each day expired CO
- Upon returning to the unit perform expired CO

Interaction with staff

- Daily rounds with team (MD and TTS counselors)
- Twice during the week, individual session with TTS counselor
- Daily group lectures
- Daily group therapy
- Final day discharge plan discussion with team

Follow-Up Services

- One pre-scheduled phone call each week x 4 weeks.
- At the end of 4 weeks, frequency of calls negotiated with the patient.
- Patients encouraged to become active in:
  - Their local tobacco-free support groups
  - Support groups on internet
  - Remaining connected to Residential group members

Patient Quotes

“I feel strong, confident, and back in control again!” – 2/2013

“I entered the program and my life changed. It really was the best gift I could have given myself.” - 4/2012

“They truly care about your well being and success. They address smoking as a disease that must be treated, rather than an out of control habit.” – 1/2011

Patient Quotes (cont.)

“I am trying hard to quit. It is hard, but I know I am in control and not the tobacco. I can do this!” – 2011

“Mayo Clinic was the start of a major lifestyle change for me and after 39 years of smoking a pack a day I am amazed at how quickly I was able to regain my health when I quit. My doctor told me I have added years to my life!!” - 2011

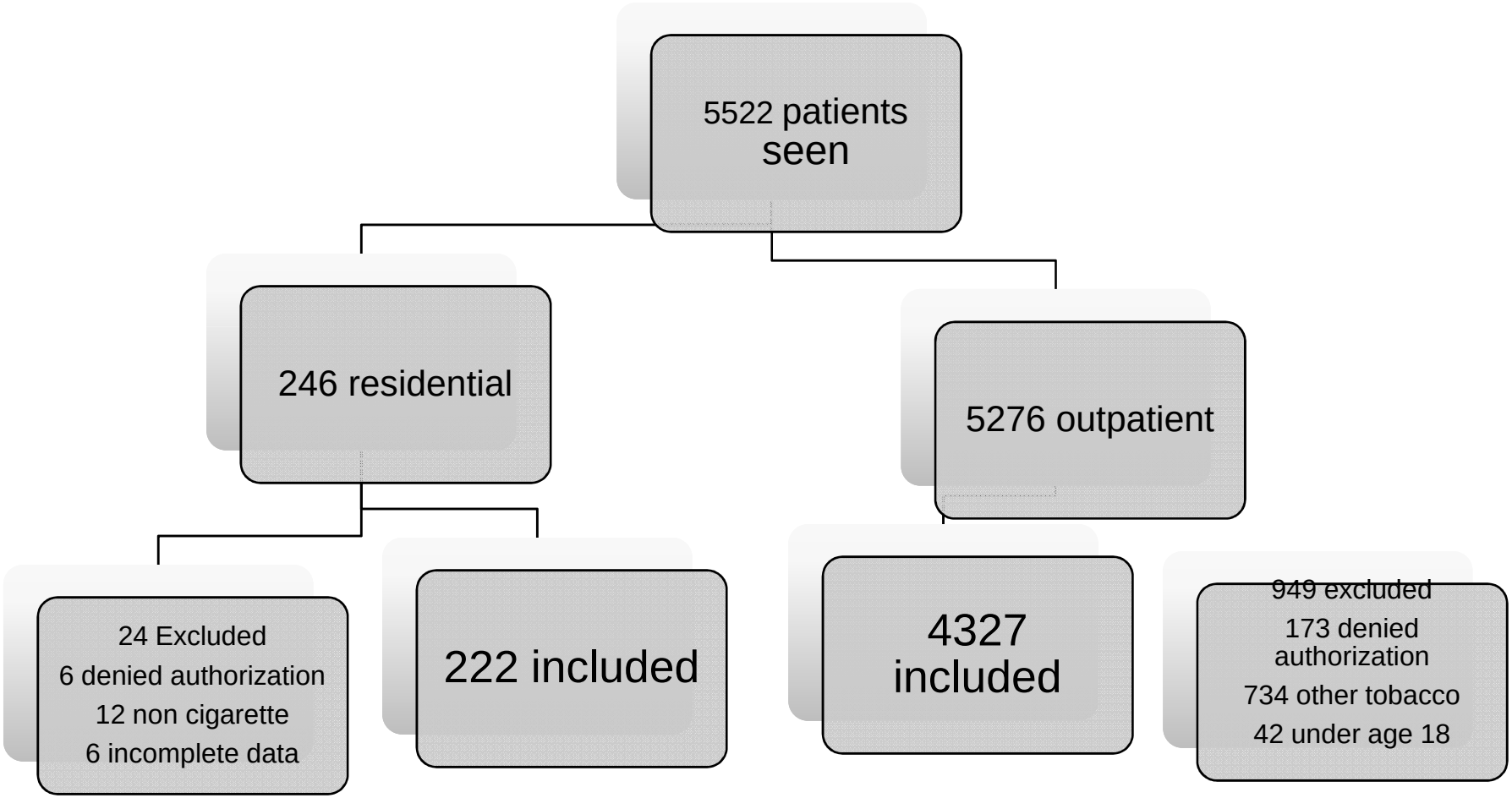
Residential Treatment Compared With Outpatient Treatment for Tobacco Use and Dependence

J. Taylor Hays, MD; Ivana T. Croghan, PhD; Darrell R. Schroeder, MS; Michael V. Burke, EdD; Jon O. Ebbert, MD; David D. McFadden, MD; and Richard D. Hurt, MD

Mayo Clin Proc. 2011;86(3):203-209

- Smoking outcomes from 2 cohorts: patients treated in residential treatment (222) and those treated in the outpatient clinic (4327)
- Treated from January 1, 2004 through December 31, 2007
- 12 month follow-up
- Self-reported 7-day point prevalence of abstinence
- Logistic regression to assess increased likelihood of smoking abstinence with residential treatment

Retrospective clinical data



Outcomes

- Significantly higher abstinence rate
  - 52% vs. 27%
    - (OR = 3.0; 95% C.I. 2.3-3.9)
- More severe dependence
- More co-occurring mental health or other addiction problems

Costs

- Fee for service
- Changing insurance coverage situation
- Out of pocket with no insurance about $5,000 per patients

In summary

- Residential treatment patients are more severely dependent
- Indicated for people who believe they need this level of intensity, have tried multiple times to quit, have psychiatric or medical co-morbidity
- Have better outcomes
- Should be offered as a component of comprehensive care

References

JT Hays*, DR Schroeder, IT Croghan, MV Burke, JO Ebbert, RD Hurt. Residential tobacco dependence treatment compared to outpatient treatment. Poster presentation: SRNT Dublin Ireland April, 2009.

JT Hays, TD Wolder, KM Eberman, IT Croghan, KP Offord, RD Hurt. Residential (inpatient) treatment compared with outpatient treatment for nicotine dependence. Mayo Clinic Proceedings Vol 79 Issue 2 124-33. 2001.

BM Sundblad, K Larsson, L Nathell. High rate of smoking abstinence in COPD patients: Smoking cessation by hospitalization. Nicotine and Tobacco Research/ 10 (5).: 883-90. 2008.

WR Miller and RK Hester. The effectiveness of alcoholism What the research reveals. In Miller and Heather (eds) Treating Addictive Behaviors the Process of Change. Pp 121-74, New York Plenum Press, 1986,

Project MATCH Research Group. Matching alcoholism treatments to client heterog3eneity: Project MATCH post-treatment drinking outcomes. Journal of Studies on Alcohol 58, 7-29. 1997

RG Rychtarik, GJ Connors, RB Whitney et. al. Treatment settings for persons with alcoholism: Evidence for matching clients to inpatient vs. outpatient care. Journal of Consulting and Clinical Psychology,68(2), 277-89, 2000.

Questions & Discussion

