

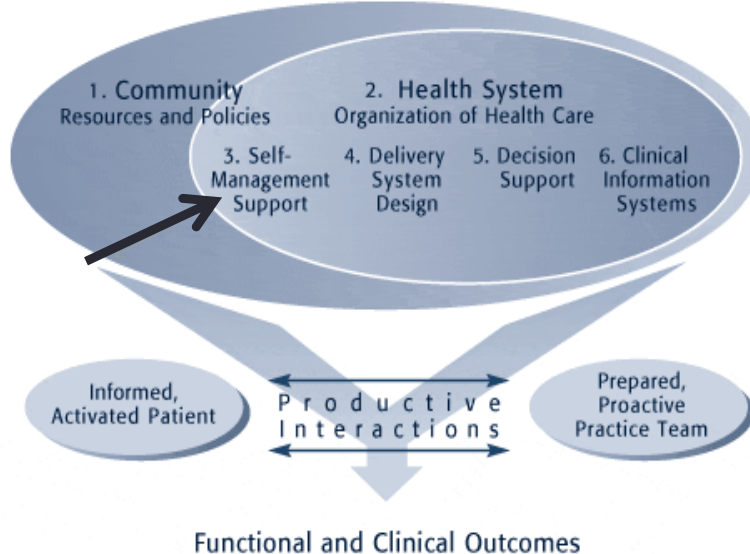
TREATING MODIFIABLE COMORBIDITIES IN MS

CMSC 2015

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Chronic Care Model



Wagner, 1998

Building Collaborative Care

- If providers view themselves as experts whose job is to get patients to behave in ways that reflect that expertise, both will continue to be frustrated. . . . Once they recognize patients as experts on their own lives, they can add their medical expertise to what patients know about themselves to create a plan that will help patients achieve their goals.

Runnell et al., *JAMA*, 2000

Self-Management

- Involves (the person with the chronic disease) **engaging** in activities that protect and promote health, **monitoring** and managing the symptoms and signs of illness, **managing** the impact of illness on functioning, emotions and interpersonal relationships and **adhering** to treatment regimes

You have **BRAINS** in your **HEAD**.
You have **FEET** in your **SHOES**.
You can **STEER** yourself any
DIRECTION you **CHOOSE**.
~ Dr. Seuss

Targets for Intervention

- Physical Activity
- Smoking
- Alcohol
- Medication Adherence
- Depression

Facilitating Choice: Menu of Options

“People can improve their health in a number of areas. Which strategy seems like it would be most helpful for you?” Or is there something else that you think we should work on that is not listed here?

Physical Activity

Smoking Cessation

Medications

Weight Management

Mood and Stress
Reduction

Something
else?

PHYSICAL ACTIVITY

Physical Activity Guidelines for MS

Aerobic

- 30 minutes 2x/week
- Moderate intensity (6/10)
- Work up to this gradually

Strength training

- 2x/week
- 10-15 repetitions
- 2 sets
- Upper and lower body

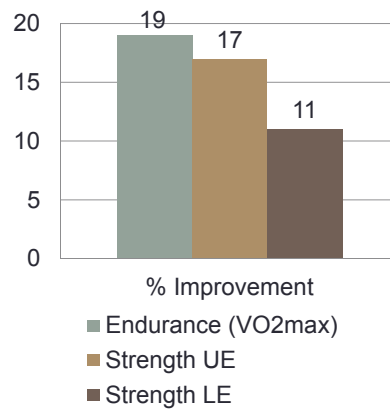
Latimer-Cheung et al., *Arch Phys Med Rehabil*, 2013

Clinic Based Exercise in MS

Intervention

- Group Based Exercise
 - 40 minute sessions
 - Arm and Leg cycling
 - 3 times per week
 - 15 weeks

Outcome



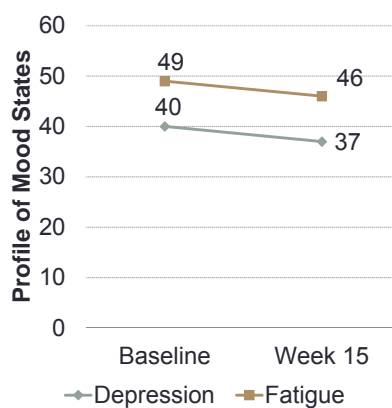
Petajan et al., *Ann Neurol*, 1996

Clinic-Based Exercise

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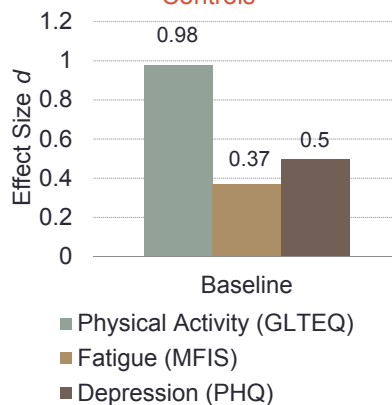
Petajan et al., *Ann Neurol*, 1996

Home-Based Exercise in MS

Intervention

- Individual Exercise
 - Mailed Graphic Feedback
 - 6 telephone counseling sessions
 - Telehealth home monitoring
 - Booster sessions when appropriate

Improvements Compared to Controls



Turner et al., under review

SMOKING

Smoking in MS

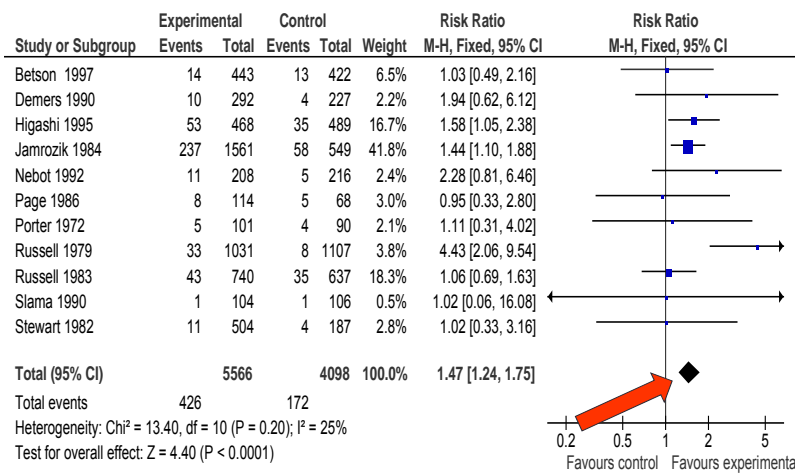
Health in General

- Smoking is....
- Leading cause of preventable death in US
- Linked to.....
- Heart and vascular disease
- Lung disease
- Multiple cancers

Health in MS

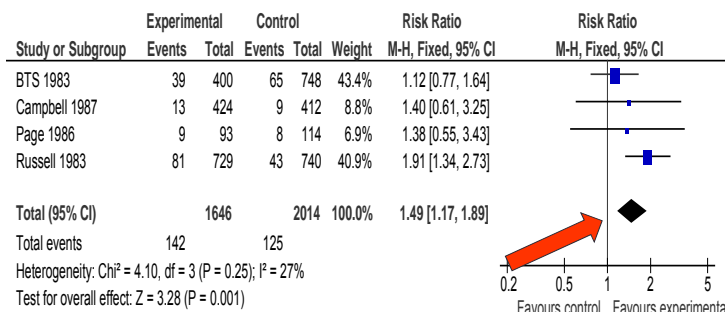
- Smoking in MS linked to
 - Higher risk of developing MS
 - Heavier smoking associated with higher risk
 - Increase risk of progressing to secondary progressive MS
 - Some evidence of
 - Greater lesion volume
 - Greater brain atrophy
 - Greater disability

Brief Provider Advice is Effective in Promoting Long-term Abstinence



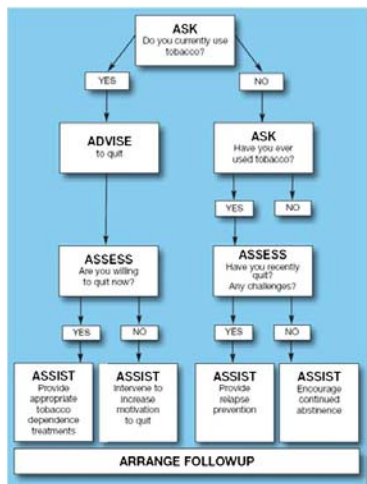
Aveyard et al, *Addiction*, 2011

Assistance is Better Than Advice Alone



Aveyard et al, *Addiction*, 2011

The 5 'A's of Brief Intervention



ALCOHOL

HOW TO HELP PATIENTS: A CLINICAL APPROACH

STEP 1 (continued): Is the Screening Positive?

Positive Screening=

- 1 or more heavy drinking days, or...

Positive Screening=

- AUDIT-C score of ≥ 8 for men
- ≥ 4 for women

HOW TO HELP PATIENTS: A CLINICAL APPROACH

AT-RISK DRINKING

STEP 3: Advise and Assist

State your conclusion and recommendation clearly

“You are drinking more than is medically safe.”

HOW TO HELP PATIENTS: A CLINICAL APPROACH

AT-RISK DRINKING

STEP 3: Advise and Assist

Is the patient ready to commit to change at this time?

YES

- Agree on a plan, including—
 - what specific steps the patient will take (e.g., not go to a bar after work, measure all drinks at home, alternate alcoholic and non-alcoholic beverages)

HOW TO HELP PATIENTS: A CLINICAL APPROACH

AT-RISK DRINKING

STEP 4: At Followup: Continue Support

REMINDER: At each visit—

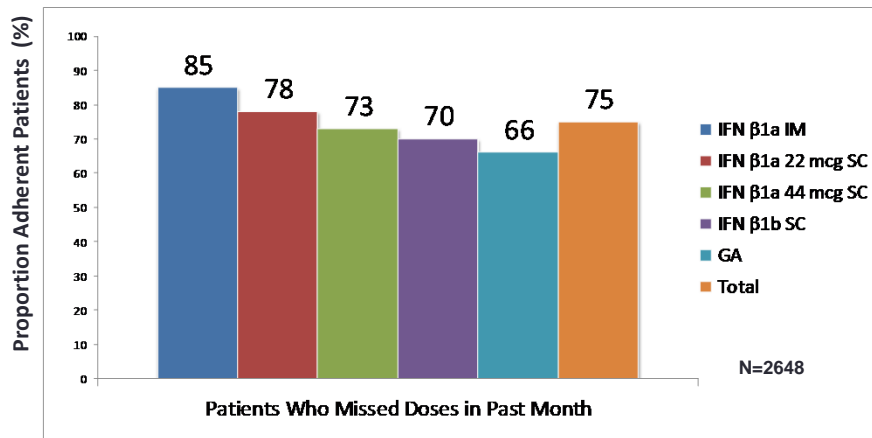
- document alcohol use, and
- review goals

✓ Obtain the drinking quantity and frequency at followup visits

Tip Download Progress Notes from www.niaaa.nih.gov/guide --

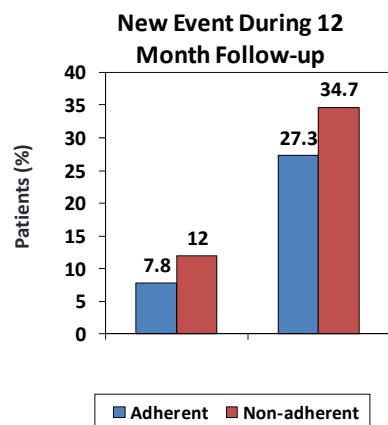
MEDICATION ADHERENCE

Self-Reported Adherence to DMT



Devonshire V et al. *Euro J Neurol.* 2011;18:69-77.

Poor Adherence is Associated With Poorer Clinical Outcomes



Risk of Relapse 2006–2008

	RR (95% CI)
DMT adherent	0.97 (0.94–1.00)*

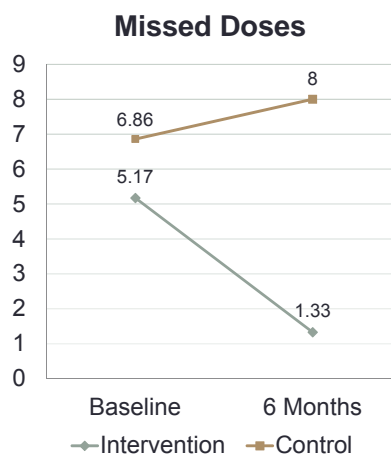
* $P < 0.05$

Tan H et al. *Adv Ther.* 2011;28:51-61.

Steinberg SC et al. *Clin Drug Investig.* 2010;30:89-100.

Improving Adherence: A Self-management Program

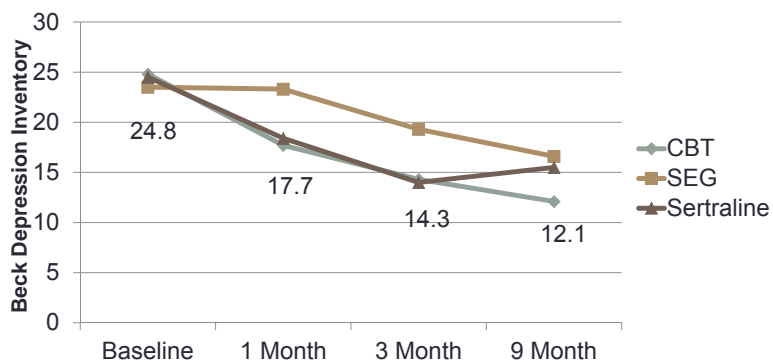
- Mailed Graphic Feedback about benefits of DMT adherence
- 3 Telephone counseling sessions
- Home telehealth monitoring providing dose reminders
- Provided counselor with feedback about missed doses
- Booster sessions when necessary



Turner et al., *Rehabil Psychol*, 2014

DEPRESSION

Psychotherapy for Depression in MS



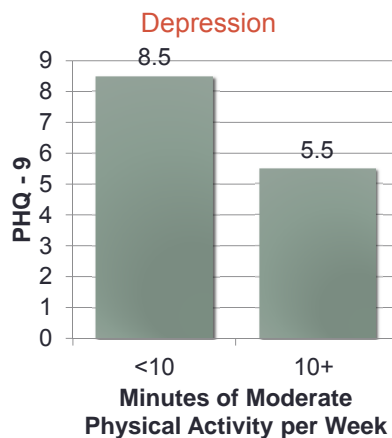
Significantly Improved:

CBT =	50%	CBT = Cognitive Behavior Therapy
SEG =	14%	SEG = Supportive Expressive Group Therapy
Sertraline =	24%	Sertraline = M = 139 MG (25-200 MG)

Mohr et al., *J Consul Clin Psychol*, 2001

Physical Activity and Depression

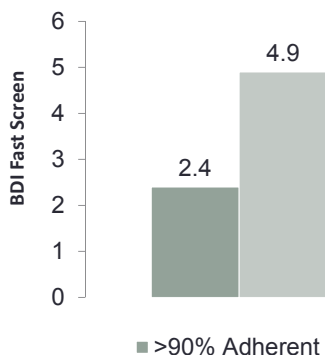
- Even very modest levels of physical activity are associated with lower depression
- Relationship persists even after controlling for age and overall disability



Jensen, Molton et al., *DHJ*, 2012

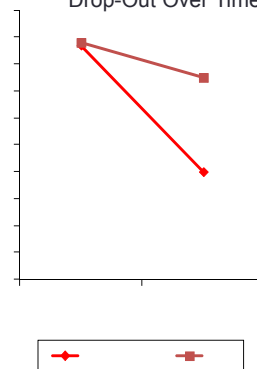
Depression and DMT Adherence

Depression is Associated with Missed Doses



Bruce JM et al. *J Behav Med.* 2010;33:219-227

Depression Treatment Reduces Drop-Out Over Time



Mohr DC et al. *J Consul Clin Psychol.* 2000;68:356-361.

Facilitating Choice: Menu of Options

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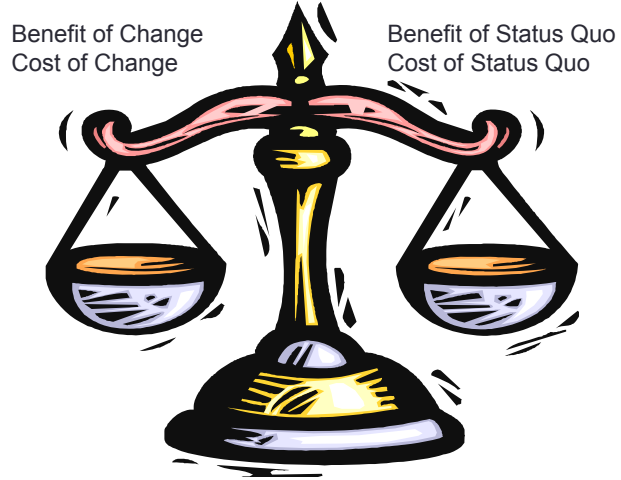
Mood and Stress
Reduction

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else?

MOTIVATIONAL INTERVIEWING

Things to keep in mind.....

Decisional Balance



Importance and Confidence



Eliciting Change Talk

- Disadvantages of the status quo-What concerns do you have about not exercising?
- Advantages of change-How do you think exercising might help people?
- Optimism about change-What makes you think you could exercise if you wanted to?
- Intention to change-What exercises would you be willing to try?

Brief MI

Looking Forward

- How would you like things to be different?
- How would you like things to turn out for you 10 years from now?
- What do you think will happen if you don't make a change?

Looking Back

- Do you remember when things were going well, how has that changed?
- What was different about you 10 years ago?
- How has lack of exercise kept you from moving forward?

Brief MI: Importance

- How important is it right now for you to ...? On a scale from 0 to 10 what number would you give yourself?
- Why are you at X and not at 1?
- What would need to happen for you to get from X to (slightly higher number)?

Rollnick, 1999

Brief MI: Confidence

- *If you decided to change*, how confident are you that you would succeed? On a scale from 0 to 10 what number would you give yourself?
- Why are you at X and not at 1?
- What would need to happen for you to get from X to (slightly higher number)?

Rollnick, 1999

Steps to Self-management

- Understand your illness
- Pick a target
 - Symptom reduction (reduce pain impact)
 - Health promotion (better diet, exercise)
 - Medical management (medication adherence)
- Establish a Plan

Goal Attainment

- Pick a Target that is:
 - Specific
 - Measurable
 - Achievable
 - Revisit progress frequently
 - Make mid course corrections

THANK YOU

Summary

- ❖ Risk factors for the onset of MS, modifiable factors associated with progression of MS, and intervention strategies including:
 - ✓ Genetics and Environment
 - ✓ Persistence with Disease Modifying Therapy
 - ✓ Vitamin D
 - ✓ Obesity
 - ✓ Alcohol
 - ✓ Cigarette Smoking
 - ✓ Cannabis
 - ✓ Physical Activity
 - ✓ Depression
 - ✓ Collaborative Care
 - ✓ Brief Intervention
 - ✓ Motivational Interviewing, Goal Setting and Follow-Up

Questions?



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Marsha.Tarver@va.gov

Thank you!

- Panel
- Colleagues in the MS Center of Excellence
- Veterans
- CMSC