

# A Systematic Approach to the Pharmacotherapy of Late-Life Depression

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# Faculty/Presenter Disclosure

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- **Relationships with commercial interests (past 5 years):**

**Grants/Research Support:** Brain Canada, CAMH Foundation, Canadian Institutes of Health Research (CIHR), US National Institute of Health (NIH), US Patient-Centered Outcomes Research Institute (PCORI)

Capital Solution Design LLC and HAPPYneuron: software used in studies founded by CAMH Foundation and Brain Canada

Bristol-Myers Squibb, Eli Lilly, and Pfizer: medications (or matched placebo pills) for NIH-funded clinical trials

**Speakers Bureau/Honoraria:** None

**Consulting Fees:** None

**Other:** Income from Center for Addiction and Mental Health, University of Toronto, University of Pittsburgh; directly held stocks from General Electric (less than \$5,000)

# Potential for Bias and Mitigation

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- The use of some antidepressants, antipsychotics, and several other psychotropic medications will be discussed during this program.
- Generic names will be used
- Generic forms are available for almost all medications that will be mentioned.

# Outline

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- Prevalence and treatability
- Clinical course under usual care conditions
- Argument for a systematic approach (“protocol”, “algorithm”, “clinical pathways”, “stepped care”)
- Role of clinical skills
- Treatment-resistant depression

# Treating Late-Life Depression: Fighting therapeutic nihilism

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One of the few medical conditions in which treatment can make a rapid and dramatic difference in an elderly patient's level of function and quality of life

# Major Depressive Disorder in Older Adults

## Prevalence and Treatability

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- High prevalence!
  - 3 to 5% in the community
  - 10 to 15% in clinical settings
- Absolute numbers increasing with greying population
- Highly treatable!
  - 173 patients treated over one year with five-step algorithm:
    - 87% response – 4% non-remission – 9% drop-out

# Major Depressive Disorder in Older Adults

## Clinical Course Under Usual Care Conditions

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- Low initiation of treatment
- Poor adherence
- Early treatment drop-outs
- Partial remission
- Recurrence
- Chronicity

↑ Disability

↑ Use of health care resources

↑ Morbidity and mortality

Suicide

“How do we improve the quality of mental health care? [...] We can do much better by delivering the treatments we have today. We can save lives –many lives – simply by closing the unconscionable gap between what we know and what we do.”



**Tom Insel**  
**Final blog as NIMH director**  
**October 29, 2015**

# A Tale of Two Approaches

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## What we know:

### Systematic Approach

- Based on best evidence or guidelines
- Clinical experience based on large number of patients
- Keeping the course: the clinician is protected against personal biases, pressures from the patient or family
- Focus is on the patient

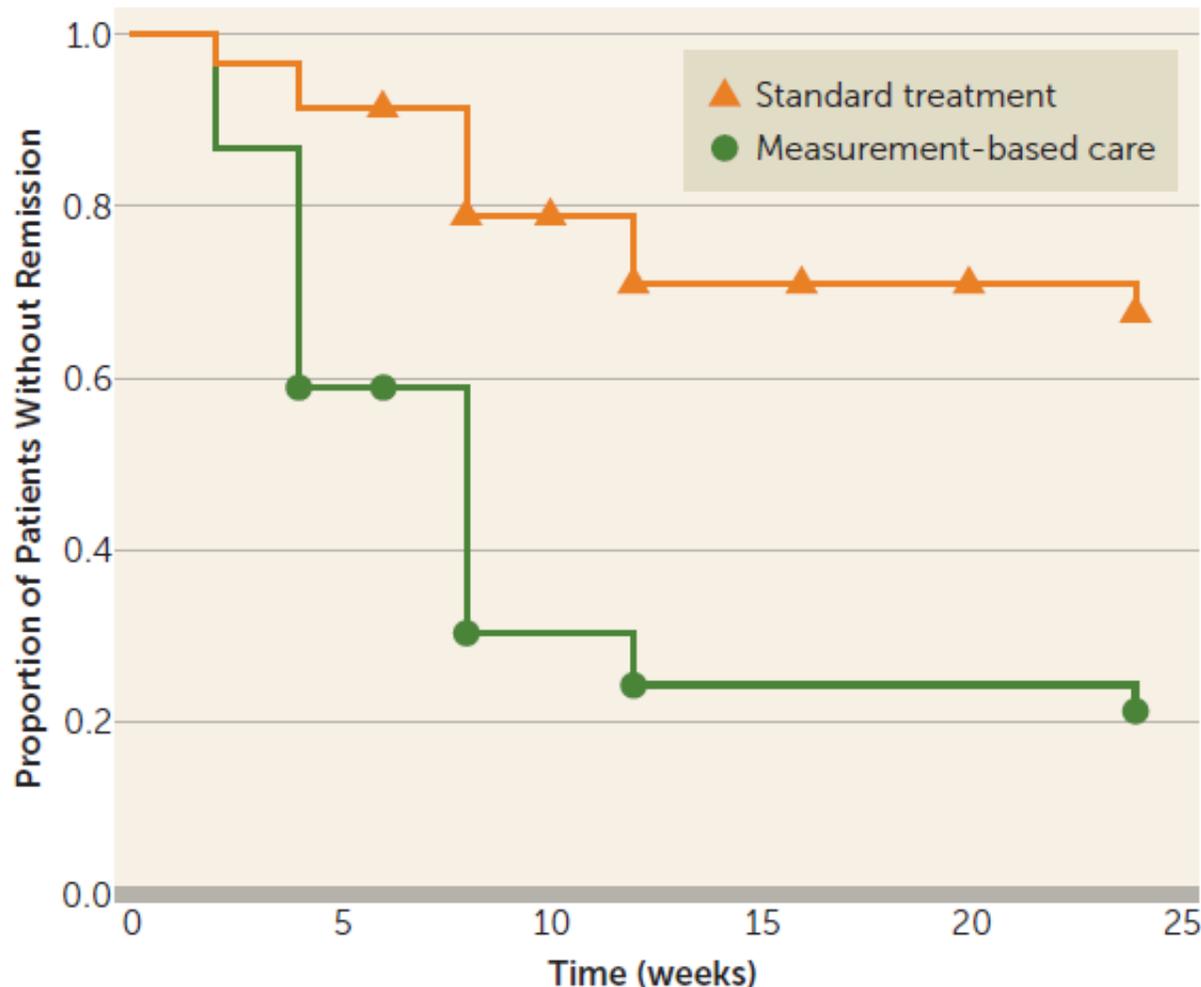
## What we do:

### Usual Care

- Based on fad “du jour”
- Little cumulative experience due to small numbers of patients receiving many different medications
- Ill-advised or ill-timed changes in treatment
- Focus is on the treatment (making decisions is exhausting)

# Measurement-Based Care vs. Standard Treatment While Controlling for Antidepressants

B. Estimated Mean Time to Remission

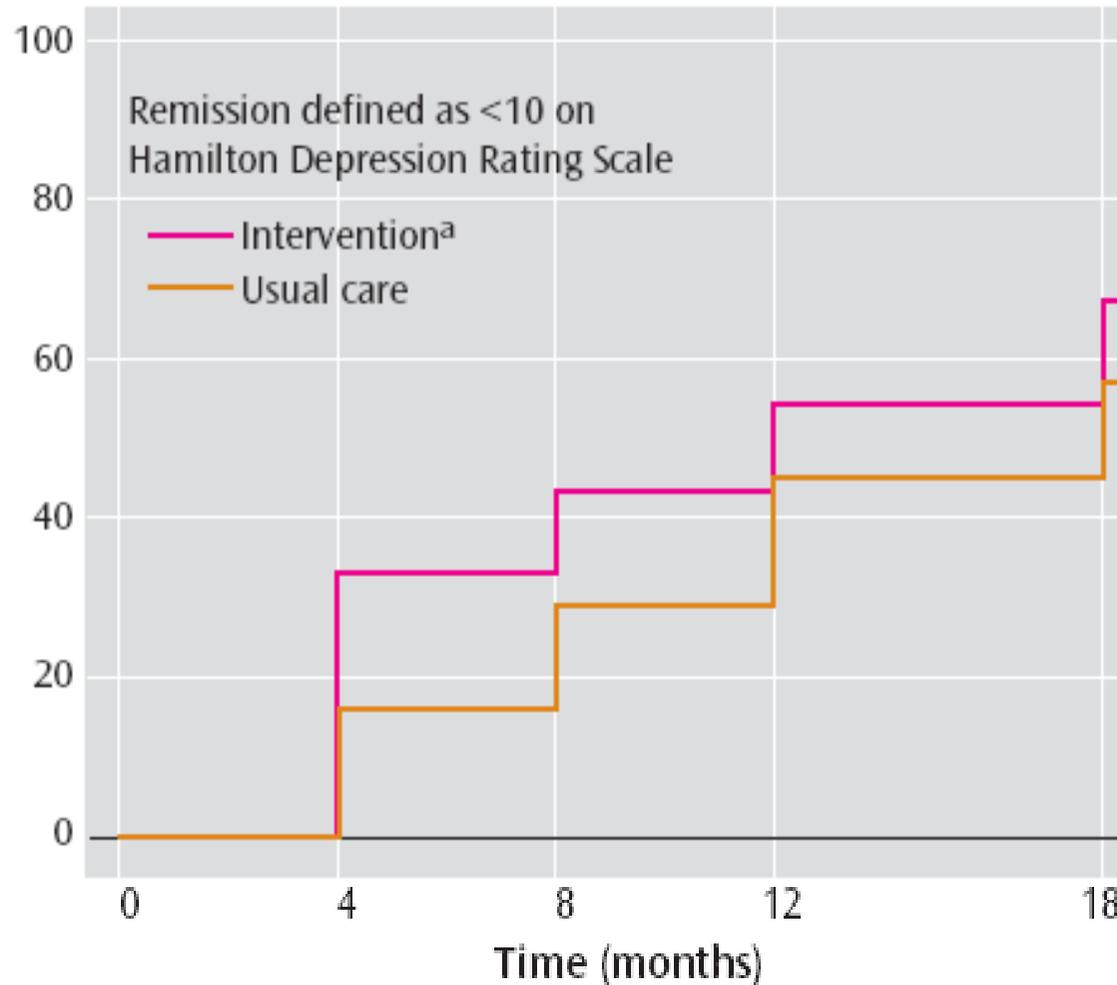


- Psychiatrists in a teaching hospital
- Adult outpatients with moderate to severe major depression
- **Pharmacotherapy restricted to paroxetine or mirtazapine in both groups**

Guo et al (2015) Am J Psych

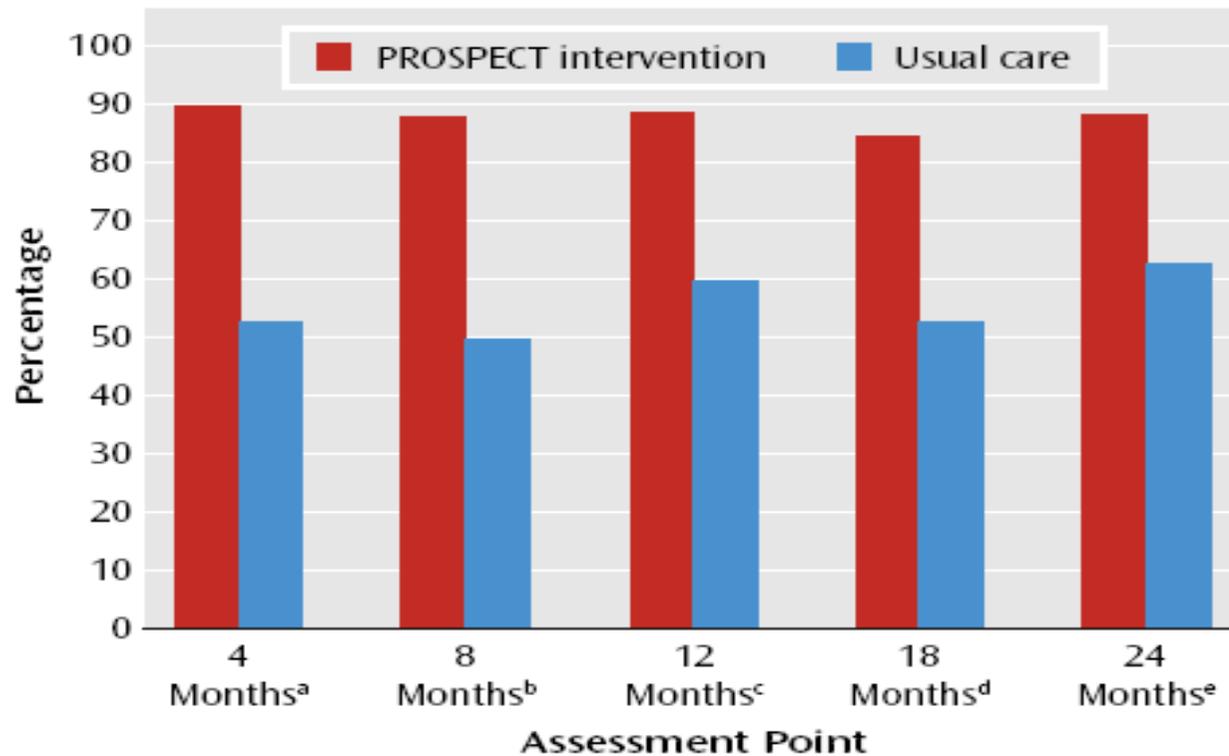
# PROSPECT: Cumulative Probability of Remission

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# PROSPECT: Probability of Being Treated

FIGURE 2. Percentage of Depressed Older Primary Care Patients Who Received Treatment for Depression, by Assessment Point



All comparisons:  $p < 0.0001$

Alexopoulos et al (2009) Am J Psych

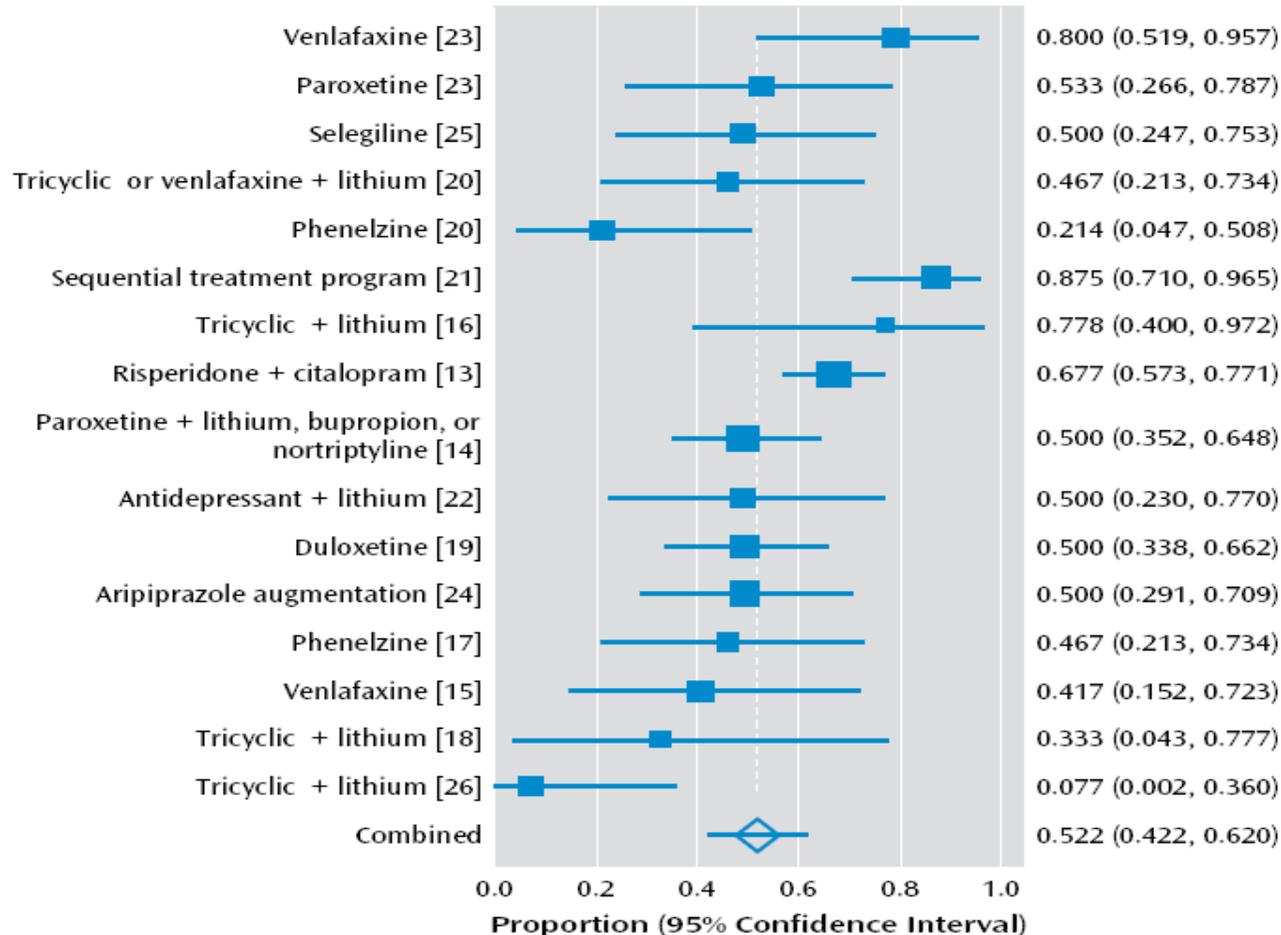
# Clinical Skills Remain Essential for Successful Antidepressant Treatment

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- Patients must be seen regularly
- Patients must be encouraged and supported to take dose regularly as prescribed
- Patient's personal illness model should be addressed
- It takes 2-6 weeks for beneficial effects
- Side effects occur right away (but many wear off)
- Need for continuation and maintenance treatment

# Response Rates in 13 Studies of Treatment-Resistant Late-Life Depression

Proportion Meta-Analysis Plot for Included Studies With Weighted Response Rates and 95% Confidence Intervals<sup>a</sup>



# Conclusions

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## **Late-Life Depression:**

- Can be effectively treated
- Requires a systematic approach
- Success requires persistence
- Do Not Give Up!