

# Depression in the Nursing Home: *Detection, Treatment, and Prevention*

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# Psychiatry in Nursing Homes

*“Today, a greater number of individuals with psychiatric disorders reside in nursing homes than reside in psychiatric hospitals.”*

American Psychiatric Association Task Force Report on  
Nursing Homes and the Mentally Ill Elderly, 1989

# Psychiatry in Nursing Homes

- How prevalent are psychiatric disorders in nursing homes?
  - Dementia: 66-75%
  - Depression
    - Depressive symptoms in 44-68%
    - Major depression in 10-15%
  - Schizophrenia: <10%
  - Delirium?

# Depression in the Elderly: Sadness or Sickness?

- “Normal” sadness is a proportional and self-limited response to loss and disappointment. It may or may not evolve into depression
- Depression is a clinical syndrome that may be set into motion by losses or disappointments but then takes on a “life of its own” and becomes disabling in its own right
- Both sadness and depression are important in long-term care

# Depression and Mortality

- Depression
  - increases one-year mortality among newly admitted nursing home residents.
  - increases mortality in persons with cardiovascular disease and stroke.
  - is the most important cause of suicide in the elderly.

# Major Depressive Disorder: Core Features

- Feelings of melancholy (“black bile”)
  - sadness distinguishable from grief
  - indifference to sources of pleasure
- Diminished vitality
- Negative self-regard

# Major Depressive Disorder

## Diagnostic Aid: SIG: E&M CAPS

- At least 5 symptoms daily for two weeks
  - *Sleep* disturbance
  - Loss of *interest*
  - Excessive or inappropriate *Guilt*
  - Poor *Energy*
  - Depressed *Mood*
  - Poor *Concentration*
  - Change in *Appetite*
  - *Psychomotor* slowing or agitation
  - *Suicidal* thoughts or a wish for death

# Suicide and Terminal Illness

(Brown: AJP 143:208, 1986)

- 44 terminally ill persons were evaluated for MDD and a wish for death.
- 34 never wished for early death
- Of the remaining 10
  - 7 wished for early death
  - 3 were suicidal
  - All met criteria for major depression

# Major Depressive Disorder: Associated Features

- Diurnal variation in symptoms
- Panic attacks
- Obsessive-compulsive symptoms
- Exaggerated somatic complaints
- Cognitive (esp. executive) dysfunction
- Delusions and/or hallucinations
- History of mania

# Potential Mimics of Major Depression

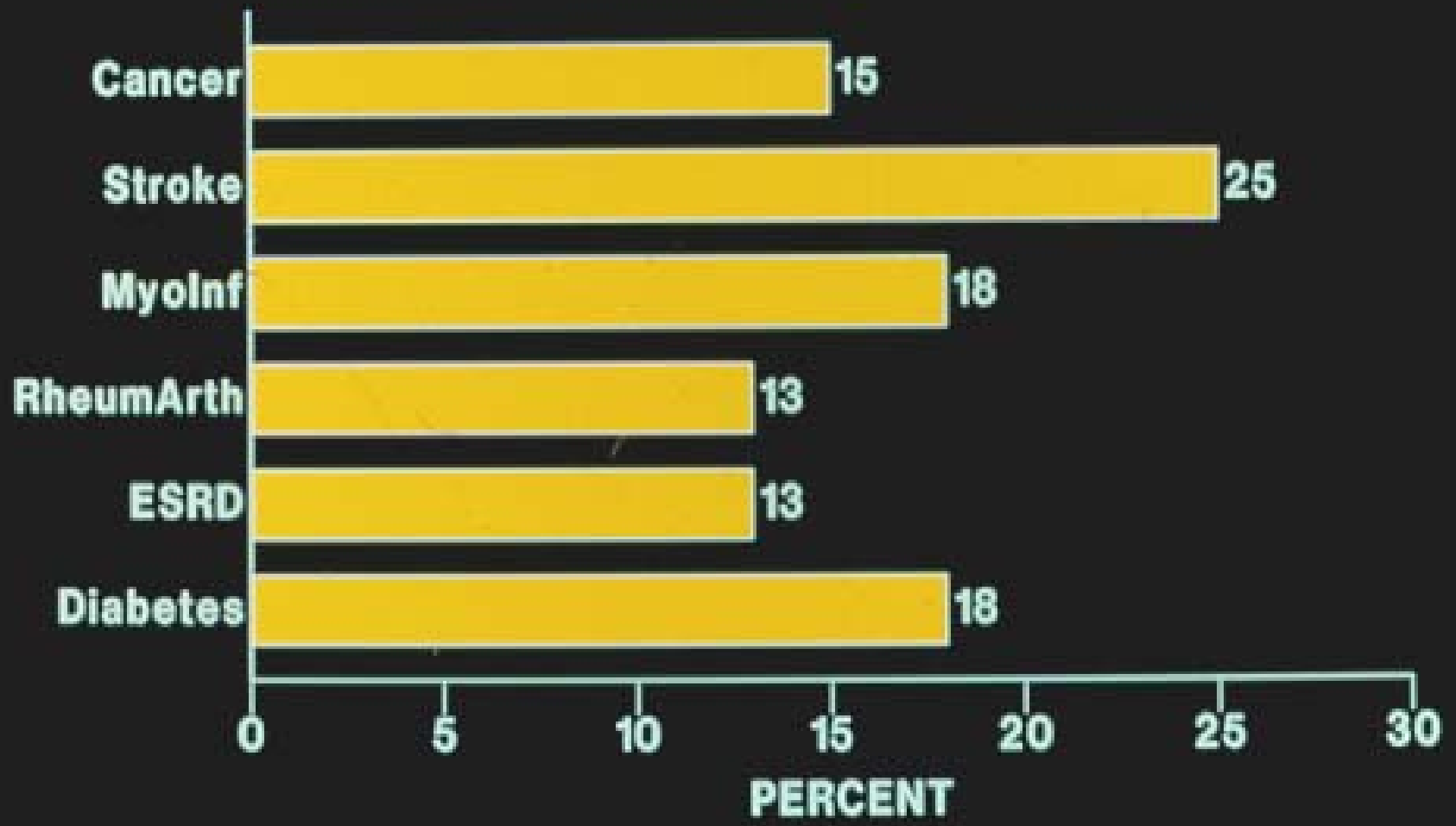
- Situational sadness
- Normal bereavement
- Substance (especially alcohol) abuse
- Apathetic states
- Emotional incontinence
- Delirium
- General medical conditions and their treatments

# Risk Factors for Depressive Symptoms in the Nursing Home

- Medical
  - Decline in health status
  - Persistent pain
- Functional
  - Loss of functional independence (declining ADL, IADL)
  - Loss of mobility
- Psychosocial
  - Loss of autonomy
  - Loss of privacy
  - Loss of significant relationships (loneliness)
- Existential
  - Transitioning to long-term care itself is associated with increased depressive symptoms, perhaps in part due to the changes in health status or other factors that occasion the need for placement (Pot: Gerontologist 45:359, 2005)

# PREVALENCE OF MAJOR DEPRESSION

## Disease-Specific Rates



# Detecting Major Depression: Screening

- Screening may be *proactive* (i.e. routine, periodic) or *reactive* (i.e., prompted by symptoms).
- Screening may be accomplished by use of formal scales
  - Self-report scales help identify patients who would benefit from in-depth questioning but do not make diagnoses or determine who should be treated
  - Clinician-rated scales help establish severity of symptomatology and quantify changes over the course of treatment
- Staff training in scale use improves detection of depression and the likelihood of appropriate physician response (Soon: JAGS 50:1092, 2002)

# Depression Rating Scales

- Self-Report
  - Geriatric Depression Scale
    - 4, 5, 10, 15, and 30 question versions available
    - 4 and 5 question versions may be adequate for screening
  - Zung Self-Rating Depression Scale
- Clinician-Rated
  - Cornell Scale for Depression in Dementia
  - Hamilton Rating Scale for Depression
  - Center for Epidemiologic Studies Depression Scale (CES-D)
  - Montgomery-Asberg Depression Rating Scale
  - Minimum Data Set

# Geriatric Depression Scale: 4-Question Version

- Are you basically satisfied with your life?
- Do you feel your life is empty?
- Are you afraid something bad is going to happen to you?
- Do you feel happy most of the time?

*One "depressive" answer indicates the presence of major depression with a sensitivity of 90% and a specificity of 55% (Goring: International Journal of Geriatric Psychiatry 19:465, 2004)*

# Geriatric Depression Scale: 5-Question Version

- Are you basically satisfied with your life?
- Do you often get bored?
- Do you prefer to stay at home rather than going out and doing new things?
- Do you often feel helpless?
- Do you feel pretty worthless the way you are now?

*In a group of elderly persons in outpatient and nursing home settings, two or more "depressive" responses identified persons with major depression with a sensitivity of 94% and a specificity of 81% (Rinaldi: JAGS, 51:694, 2003)*

# Prevention of Depression in the Nursing Home

- Primary Prevention (i.e., prevent onset)
  - Provide good general medical care and pain management
  - Maximize privacy and autonomy
  - Minimize dependency and isolation
- Secondary Prevention (i.e., detect and treat early)
  - Screen proactively and evaluate positives promptly
  - Use all appropriate psychosocial, medical, rehabilitative and psychiatric interventions
  - Monitor effects of treatment and adjust accordingly
    - VIGILANCE AND PERSISTENCE ARE CRITICAL COMPONENTS OF SAFE AND EFFECTIVE PRACTICE

# Depression in the Nursing Home: Goals of Treatment

- **Help patients *feel better***
  - Diminish intensity of depressive symptoms
    - Reduce subjective distress as measured by symptom scales
- **Help patients *do better***
  - Improve functional status
    - Improve objective measures of function; for example
      - Increased weight
      - Increased participation in activities
      - Increased time out of bed
      - Increased socialization

# Depression in the Nursing Home: Treatment Options

- Treatment of disabling and painful medical conditions
- Mitigation of sensory and other functional impairments
- Psychotherapy and other psychosocial interventions
- Antidepressant pharmacotherapy
- Electroconvulsive therapy
- Novel antidepressant treatments

# Psychosocial Treatment of Depression

- Conventional psychotherapies
  - Little study in nursing home populations
    - Cognitive-behavioral
    - Interpersonal
    - Psychodynamic
    - Supportive
- Reminiscence therapy may reduce depressive symptoms (Chao: J Nursing Research 14: 36, 2006)
- “Perceived empathy” in direct care workers may reduce depressive symptoms (Hollinger-Samson: Aging and Mental Health 4:56, 2000)

# ELECTROCONVULSIVE THERAPY

- Single most effective treatment for major depression (70-90%)
- Usually well-tolerated, even by old-old and persons with concomitant medical illness
- Cardiovascular side effects most important acutely but usually minor
- CNS effects generally time-limited, benign, and minimized by unilateral lead placement

# ELECTROCONVULSIVE THERAPY

- Relapse rates approach 50% per year
- Drugs may reduce relapse rates
- Outpatient “maintenance ECT” may be needed
- Intervals between maintenance treatments are usually one week at first, then longer (e.g., 4 weeks)

# Available Antidepressant Drugs

- Tricyclic and related agents
  - Tertiary amines: imipramine, amitriptyline, doxepin
  - Secondary amines: nortriptyline; desipramine
  - Other: maprotaline; amoxapine
- Monoamine oxidase inhibitors
  - phenelzine; tranylcypromine

# Available Antidepressant Drugs

- Serotonin-specific Reuptake Inhibitors
  - fluoxetine; paroxetine; sertraline; citalopram; escitalopram
- Newer Agents
  - bupropion
  - venlafaxine
  - nefazodone
  - Mirtazapine
- Stimulants (e.g., methylphenidate; amantadine?)
  - May be activating but are generally not effective antidepressants

# ANTIDEPRESSANT TREATMENT: Six Maxims

- Few drugs have been studied in the elderly
- Each drug helps about 2/3 persons; about 4/5 respond at least partially to at least 1 drug
- Psychotherapy usually enhances response
- Drug choice is guided by past response, side effect/interaction profiles, family history
- Start low, go slow, but may need full dose
- Full-dose maintenance best prevents relapse

# AUGMENTATION STRATEGIES

- Single agents often don't produce complete remission but leave patients with residual symptoms.
- STAR-D study is beginning to show effectiveness of medication combinations in adult outpatients

# An Approach to Antidepressant Selection

- Start with trials of monotherapy using SSRI or newer agents (e.g., venlafaxine)
- If there is no response, try drug with different putative mechanism of action
- If there is some response, *add* augmenting agent (e.g., lithium) or another antidepressant with different putative mechanism of action
- If remission is incomplete, consider ECT or referral for consultation and/or psychotherapy

# Predictors of Drug Response

- Severity
  - Acute, severe (e.g. melancholic) syndromes may respond better
- Chronicity
  - Chronic syndromes respond less well
- Executive functional impairment
  - Poor executive function predicts poor response

How long should treatment  
continue?

# Maintenance Treatment of Major Depression in Old Age

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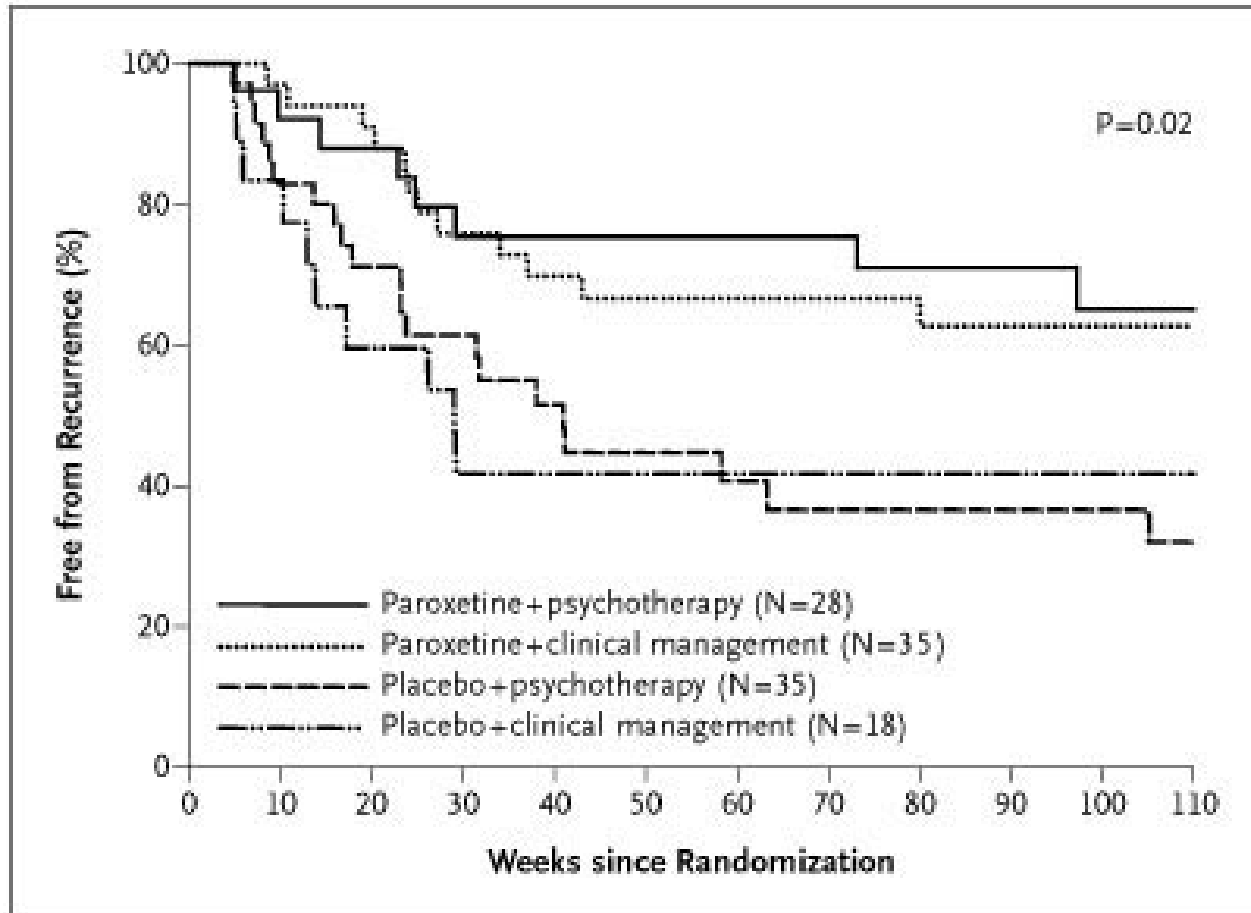
The NEW ENGLAND  
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# Study Overview

- In this randomized, controlled trial of elderly patients with major depression who had had a response to initial treatment with paroxetine and psychotherapy, two years of maintenance paroxetine prevented recurrent depression, but maintenance psychotherapy did not
- Major depression recurred in 35 percent of patients receiving paroxetine plus psychotherapy, 37 percent of those receiving paroxetine plus clinical-management sessions, 68 percent of those receiving placebo plus psychotherapy, and 58 percent of those receiving placebo plus clinical-management sessions



## Time from Randomization to Recurrence

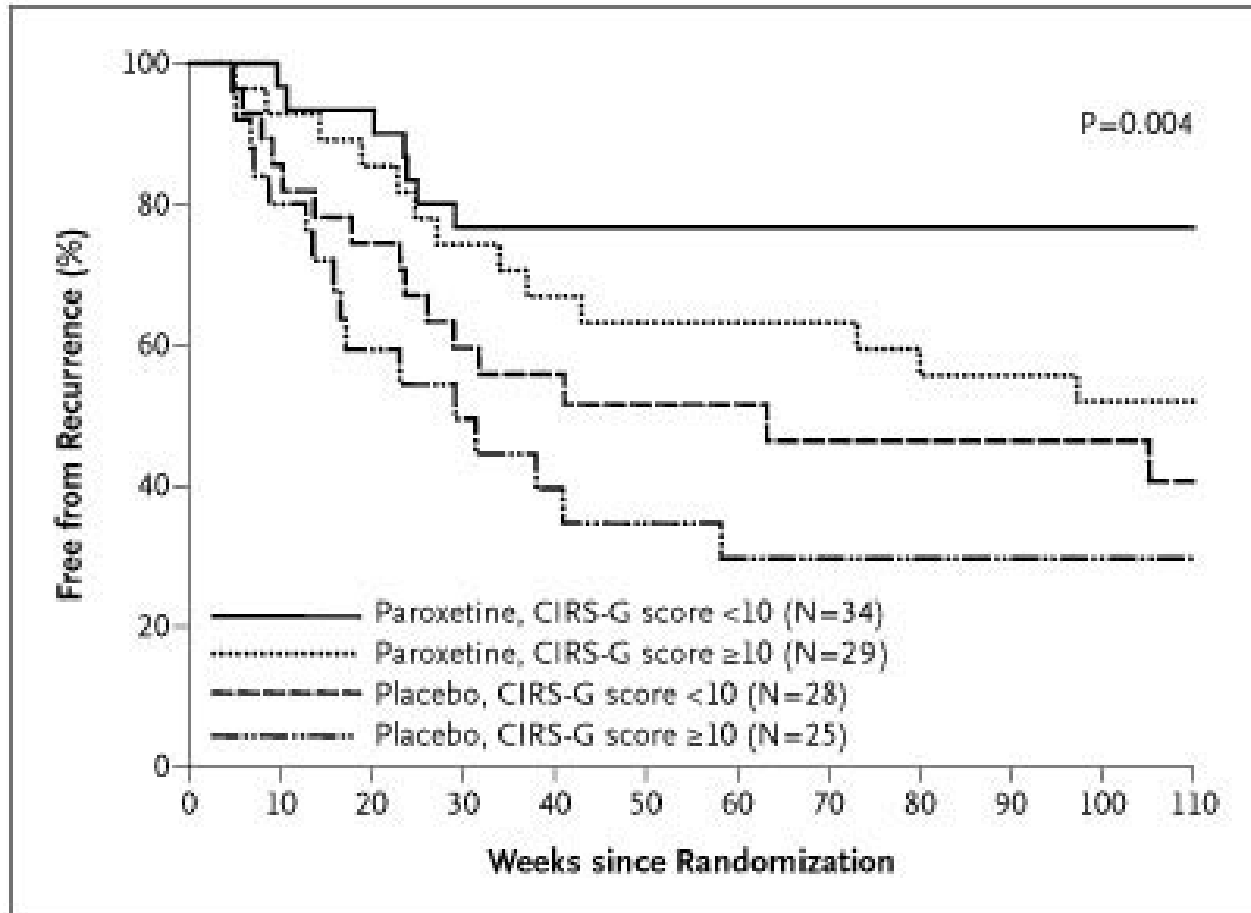


Reynolds, C. et al. N Engl J Med 2006;354:1130-1138



The NEW ENGLAND  
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# Effect of the Number and Severity of Concomitant Medical Illnesses on the Efficacy of Maintenance Therapy with Paroxetine



Reynolds, C. et al. N Engl J Med 2006;354:1130-1138



# Conclusion

- Patients 70 years of age or older with major depression who had a response to initial treatment with paroxetine and psychotherapy were less likely to have recurrent depression if they received two years of maintenance therapy with paroxetine
- Monthly maintenance psychotherapy did not prevent recurrent depression



# Case studies

# Case 1

- 83 year old woman was referred for routine follow-up after discharge from psychiatric inpatient care on mirtazapine and olanzapine.
- Within two months she was showing signs of withdrawal, anxiety, restlessness, anorexia, fearfulness, and the guilty conviction that she had killed someone.
- Diagnosis was recurrent major depression with psychotic features

# Case 1

- Clonazepam was added to ameliorate anxiety; olanzapine and mirtazapine dosages were increased
- Escitalopram was added when she did not improve
- EPS and sedation became prominent
- After 9 months of unremitting symptoms, the patient and family were open to ECT
- She underwent weekly ECT on an outpatient basis.

# Case 1

- Within one month she was markedly less depressed, less frightened, without pathological guilt, more willing to eat, and more sociable
- ECT frequency was tapered to every 2, 3, then 4 weeks and ultimately discontinued
- She remains well on mirtazapine , escitalopram, and low-dose olanzapine

# Case 2

- 89 year old nursing home resident (professional writer) was referred for depression following death of her husband.
- Exam showed sadness, a passive wish for death, loss of interest in activity, anergy, appetite loss, and marked diurnal variation in mood

# Case 2

- Paroxetine was stopped and replaced with venlafaxine
- Venlafaxine caused nausea and was replaced with fluoxetine
- Fluoxetine was ineffective and was replaced with mirtazapine
- She suffered a large right hemispheric CVA, leaving her with left hemiparesis but intact language

# Case 2

- Mirtazapine was ineffective and was replaced with nortriptyline and low-dose olanzapine
- She also was visited regularly for supportive therapy focused on reminiscence, current problem solving, religious themes
- On this regimen she showed marked improvement in depressive symptoms
- She resumed (dictated) creative work and continued publishing despite significant neurological impairment

# Depression in the Nursing Home: Recommendations

- Create a morale-enhancing physical and human environment
  - Privacy, respect, empathy
- Provide good medical care and pain management
- Ameliorate sensory impairments and minimize disability

# Depression in the Nursing Home: Recommendations

- Train staff in the detection of depression
- Screen proactively
- Refer “screen positives” for further evaluation and possible treatment
- Use psychosocial as well as pharmacologic measures to treat depression
- Watch closely and don't give up
  - *Vigilance and perseverance are rewarded*