Treating Depression in Disadvantaged Women: What is the evidence?

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Overview

- Can antidepressants effectively treat depression in disadvantaged populations?
- Can psychotherapy effectively treat depression in disadvantaged populations?
- How can practices and providers improve rates and quality of care?

What is Major Depression?

- NOT having a “bad day,” a “bad attitude,” or “normal sadness”

- A pervasive depressed mood or lack of interest/pleasure for more than 2 weeks, plus
  - Impaired sleep
  - Changes in appetite
  - Decreased energy
  - Poor concentration
  - Guilty ruminations
  - Psychomotor changes
  - Thoughts of death/suicide

What is Dysthymia?

- Depressed mood most of the day, more days than not for ≥ 2 years
- ≥ 2 of the following:
  - Change in appetite
  - Change in sleep
  - Low energy
  - Low self-esteem
  - Poor concentration
  - Feelings of hopelessness

Epidemiology of Depression

- Lifetime prevalence
  - Major Depression: 10-18%
  - Dysthymia: 2-5%

  National Comorbidity Study-Replication
- Although there is variation between studies, rates appear similar across race and ethnic groups controlling for socioeconomic status
- Low income persons are at increased risk for depression (including post-partum depression) (Kessler et al 1994)
- Among Latinos, recent immigrants may have lower rates of depression compared to US born

Low rates of depression care in low-income and ethnic minority groups

- Of African Americans with a diagnosable mental health condition:
  - Only 33% of African Americans received any treatment
  - Only 16% of African Americans received specialty mental health care (Kessler et al 1994)
- Among Latinos with diagnosable mental health condition:
  - Fewer than 1 in 5 contact a general health provider (<1 in 10 among recent immigrants)
  - Fewer than 1 in 11 contact a mental health specialist (<1 in 20 among recent immigrants)

Less is known about rates of care for Asian Americans and Native Americans

- Asian Americans
  - Diverse group not well represented in epidemiologic studies
  - Lower rates of insurance than whites
  - Lower use of mental health services than whites
  - Severity of illness greater when services are sought
- Native Americans
  - Data extremely sparse
  - Lower rates of insurance than whites

Quality of Depression Care

- Household survey of 1636 adults
- Rates of appropriate care for depressive and anxiety disorders:
  - 34% for whites
  - 24% for Latinos
  - 17% for African Americans
    - » Young et al 2001

Poorer quality of depression care for persons of color

- Even when primary care providers diagnose depression and recommend treatment:
  - African Americans (OR=0.30) and Latinos (OR=0.42) are less likely than whites to report taking an antidepressant
  - Latinos are less likely than whites to obtain specialty mental health services (OR=0.50) (Miranda & Cooper 2004)
- In one primary care study,12.8% of Latinos received appropriate depression care compared to 35.3% of whites (Miranda et al 2003)

Evidence-Based Treatment for Depressive Disorders

- Antidepressant Medication
- Psychotherapy/Behavioral interventions

Antidepressant Medications

- Selective Serotonin Re-uptake Inhibitors (SSRIs)
  - Fluoxetine, sertraline, paroxetine, citalopram, escitalopram, fluvoxamine
- Other antidepressants
  - Venlafaxine, duloxetine, bupropion
- Tricyclic antidepressants
  - Imipramine, amitriptyline, desipramine, nortriptyline

  All shown effective in randomized trials

Low-income and minority patients are underrepresented in treatment trials

- Only 7% of subjects participating in depression trials are identified as racial/ethnic minorities (Surgeon General's Report)

- Recent initiatives from the National Institute of Mental Health aimed at increasing participation of minorities in clinical trials

Antidepressant treatment

- Drug metabolism is in part genetically determined
- Distribution of genetic polymorphisms varies across ethnic groups
- Genetic differences may interact with differences in diet and use of alternative medicine
- Thus, efficacy and sensitivity may vary between ethnic groups

Cytochrome P-450

- Affect metabolism of most antidepressants
- Alleles for inactive cytochrome p-450
  - Heterozygous: intermediate metabolizers
  - Homozygous: poor metabolizers
- Rates of poor metabolizers highest in Asians compared to other ethnic groups
  - May lead to increased side effects at usual doses
- Rates of “ultra-high metabolizers” highest in Arab and Ethiopian populations
  - May lead to low blood levels and decreased efficacy at usual doses

Paroxetine in Minority Patients

- Pooled analysis of the large paroxetine clinical trials database
- No consistent differences in response and remission rates for both depression and various anxiety disorders similar in Latino, African American, Asian, and Caucasians
- Results likely similar for all the SSRI's

Roy-Byrne et al 2005

Antidepressants in Ethnic Minorities

- Despite under representation of ethnic minorities in research studies…
- Despite possible genetic variation in medication effects…
- **Existing evidence suggests that standard antidepressants are effective in ethnic minority patients**

Evidence-Based Psychotherapies

- Cognitive Behavioral Therapy
- Behavioral Activation
- Interpersonal Therapy
- Problem Solving Therapy

- Structured
- May be manualized

Cognitive Behavioral Therapy

- Depression results from a cycle of:
  - Events → Negative Cognitions → Mood
- CBT helps clients to:
  - Identify and correct negative cognitions
  - Increasing positive interpersonal interactions and pleasurable activities
- Individual or group
- 6 randomized trials showing equal efficacy with medication for depression

Behavioral Activation

- As effective as CBT
- Shown effective as medication in severe depression
- May require less training to deliver than CBT

Interpersonal Therapy

- A structured, supportive therapy linking recent interpersonal events to mood or other problems, paying systematic attention to current personal relationships, life transitions, role conflicts and losses

Problem Solving Therapy

- Involves training individuals:
  - problem orientation
  - problem definition and formulation
  - generation of alternatives
  - decision making
  - solution implementation and verification
- Shown effective in primary care settings

Adapting psychotherapy for disadvantaged patients

- Language (translation, reading level)
- Address cultural similarities/differences between client and provider
- Goals should be culturally compatible
- The conceptualization of the problem and treatment should be culturally congruent
- Manual content (i.e. vignettes) should be culturally appropriate
- Activities should be economically and culturally appropriate
- Take into consideration the sociocultural context
- Extensive outreach
- Flexible schedule

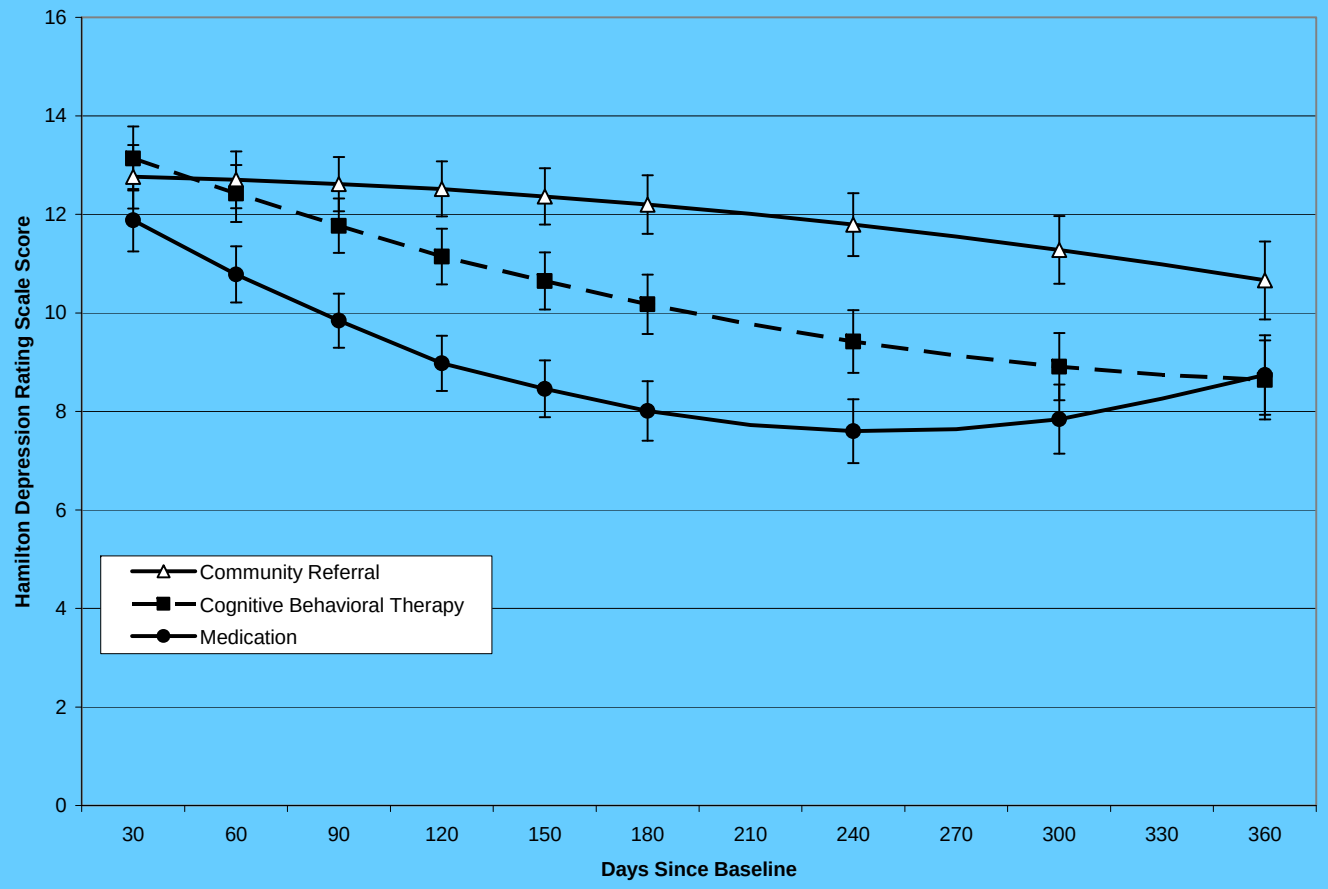
WE-CARE: Miranda et al 2003

- 267 Women with Major Depression
  - 44% African American
  - 50% Latino
- 60% below federal poverty level
- Recruited from WIC and Family Planning offices
- Randomized to either:
  - Cognitive Behavioral Therapy (8 weeks)
  - Antidepressants (Paroxetine or Bupropion)
  - Community Referral

WE-CARE Outcomes

- Medication ($p<0.001$) and CBT ($p=.006$) more likely to improve depression symptoms (HDRS) than community referral
- Rates of remission (HDRS<7):
  - 44.4% with medication
  - 32.2% with CBT
  - 28.1% with community referral

WE-CARE 1-Year Outcomes



Miranda et al, *J Con Clin Psychol, 2006*

WE-CARE Process of Care

- Of those assigned to medication:
  - 75% received 9 weeks of guideline level antidepressants
  - 45% received 24 weeks of guideline level antidepressants
  - Average of 8 contacts prior to first medication visit
- Of those assigned to CBT:
  - 53% received 4 or more sessions
  - 36% received 6 or more sessions
  - Average of 10 contacts prior to first session

WE-CARE Patients with Depression and PTSD

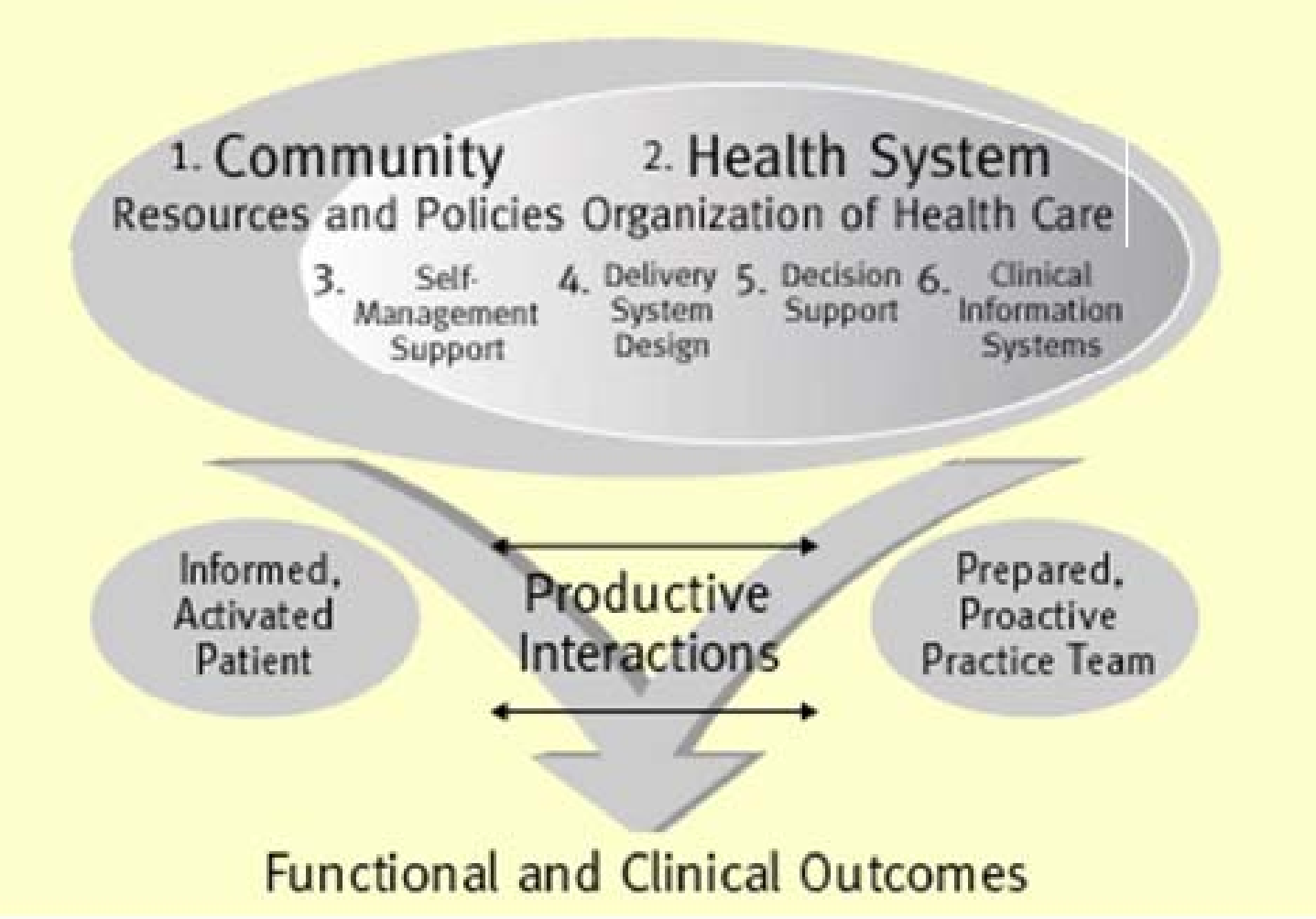
- At baseline, 33% of patients had comorbid PTSD
- Compared to women with depression alone, those with PTSD and depression:
  - Had higher exposure to assualtive violence
  - Had higher levels of depression/anxiety
  - Had more functional impairment
- At 1 year follow-up:
  - Women with and without PTSD both showed improvement in depressive symptoms
  - Women with PTSD had poorer functioning

Preferences for Depression Care

- African Americans and Latinos particularly likely to prefer psychotherapy over medication (Dwight-Johnson et al 2000)
- Compared to whites, African Americans:
  - Less likely to find antidepressants acceptable
  - Less likely to believe antidepressants are effective
  - More likely to believe antidepressants are addictive (Cooper et al 2003)

What does it take to deliver effective depression care to disadvantaged persons?

The Chronic Care Model



www.improvingchroniccare.org

Chronic Care Model components for depression

1. Community: linkages and partnerships with community agencies that provide psychosocial services
2. Health system: buy-in from leadership, translation into policies and procedures, resource allocation
3. Self-management support: education, activation for self-care and engagement in mental health care
4. Delivery system design: designated staff person for depression care, outreach and proactive follow-up
5. Decision support: treatment guidelines, training, access to consultation
6. Clinical information systems: disease registries to monitor outcomes and provide reminders

Isolated components not as effective

- Screening, or screening with provider feedback
- Dissemination of practice guidelines
- Provider education and training
- Referrals to mental health care settings
  - Only 1/3-1/2 of patients follow-through
  - Most never complete a course of treatment
  - Quality cannot be assured

Unutzer, Schoenbaum, Druss, et al: Transforming mental health care at the interface with general medicine: report for the presidents commission. *Psychiatric Services* 2006; 57:37-47.

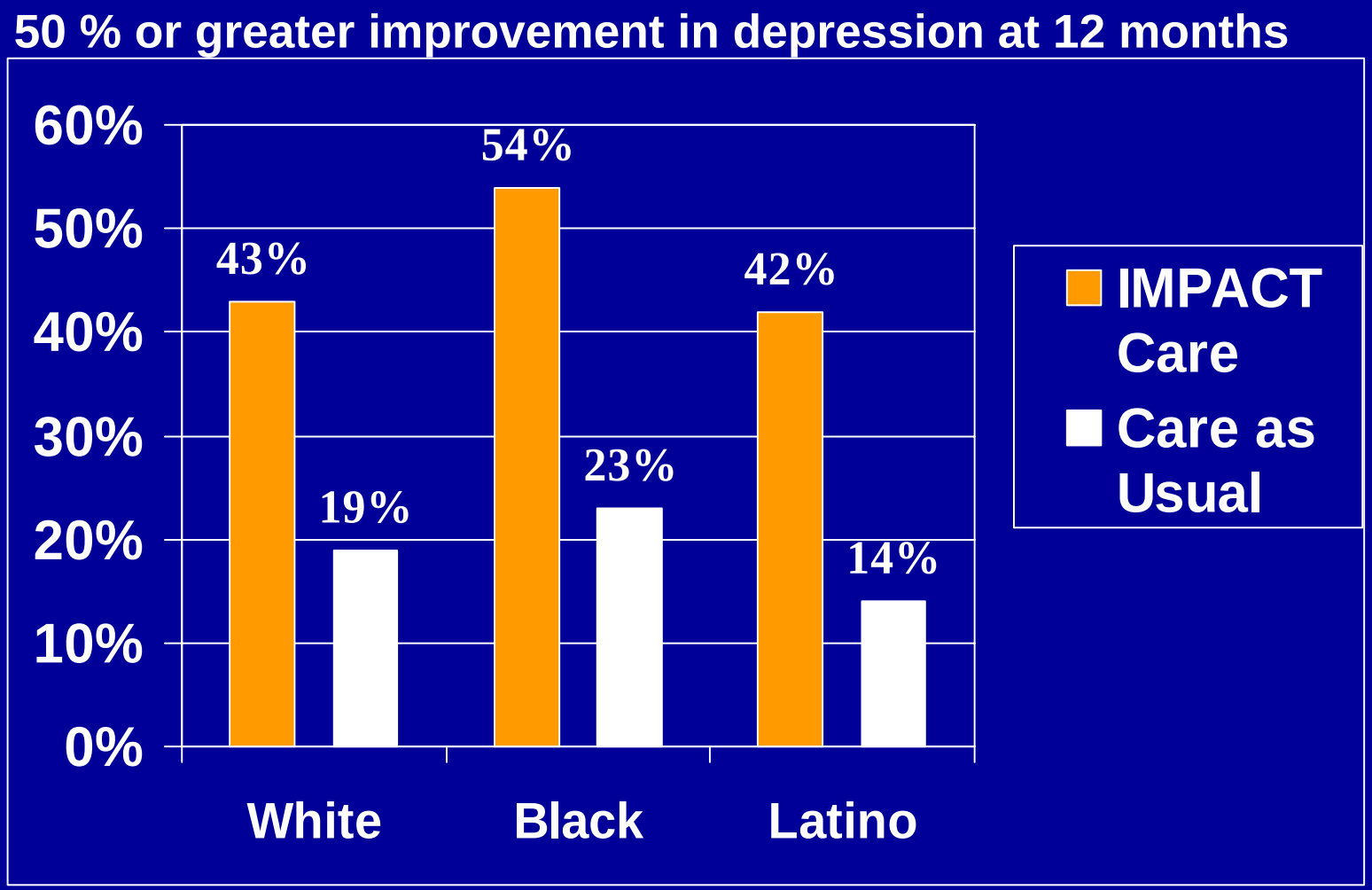
IMPACT (Unutzer et al 2002)

- 1801 depressed older adults
  - 12% African American
  - 8% Latino
  - 3% other minority groups
- 7 study sites
- Patients randomized to Collaborative Care vs. Usual Care

IMPACT Intervention

1. **Care manager facilitates systematic treatment and follow-up**
   a. Patient education / self-management support
   b. Supports antidepressant management prescribed by PCP
   c. Systematically tracks outcomes, side effects, treatment effectiveness (PHQ-9)
   d. Offers course of brief, evidence-based therapy (e.g., Behavioral Activation; Problem Solving Treatment)
2. **Psychiatric consultation / caseload supervision**
3. **Stepped care: change treatment and increase intensity according to evidence-based algorithm if patient is not improving**
4. **Relapse prevention once patient is improved**

IMPACT Effectiveness in Disadvantaged Populations

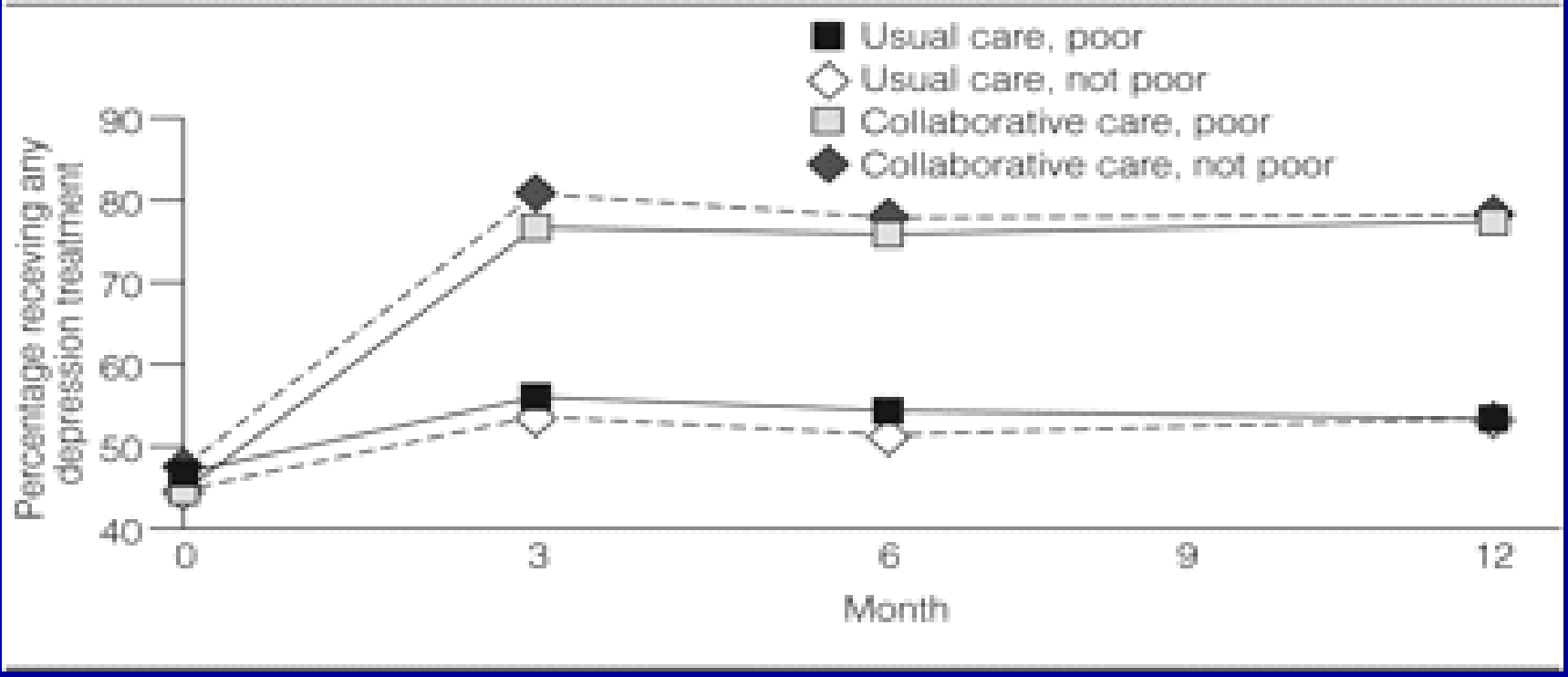


Arean et al. Medical Care, 2005

Low-income patients also benefit

Figure 1

Adjusted estimates of use of any depression treatment by elderly persons with depression in collaborative care or usual care, by income status and treatment condition

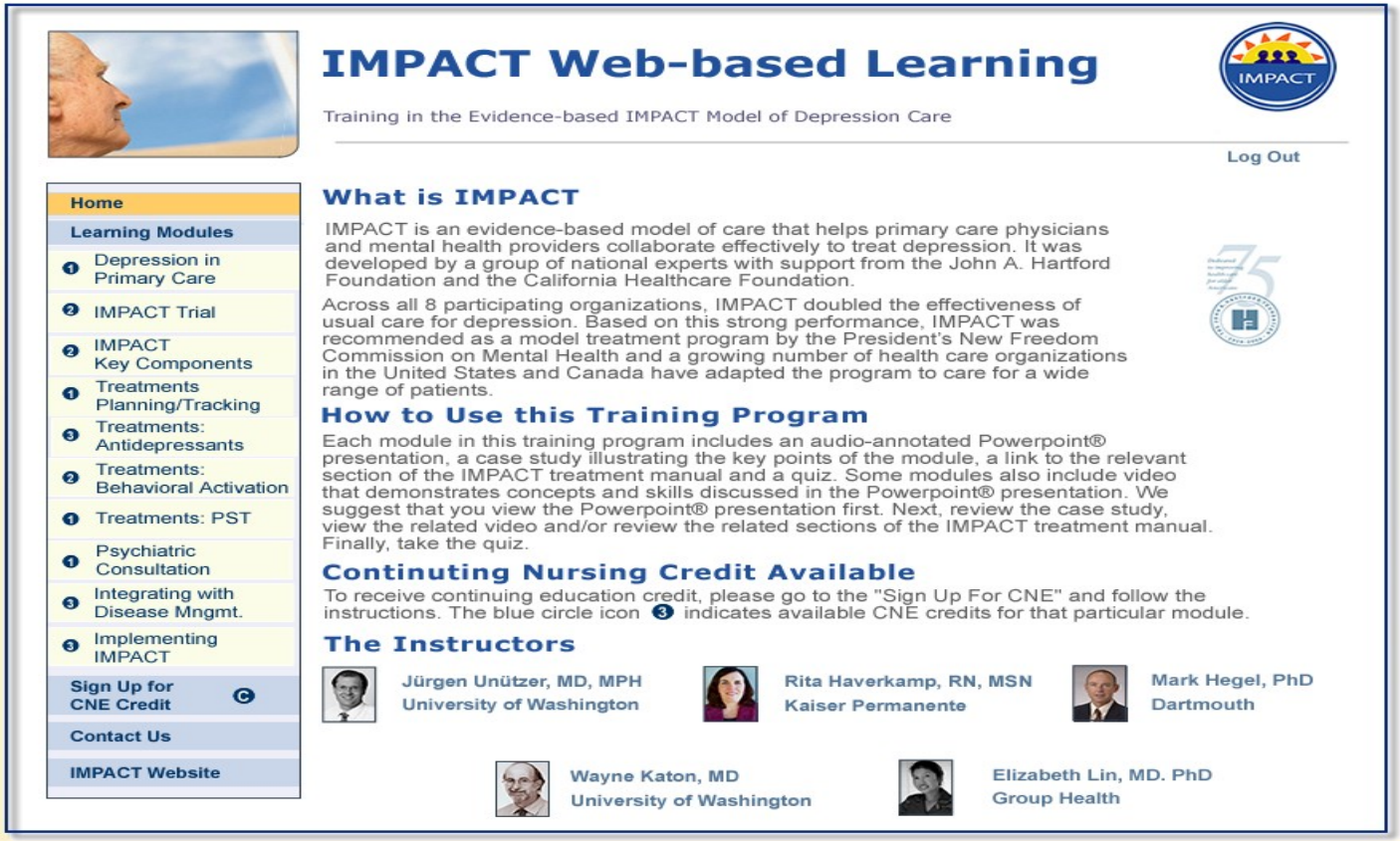


Arean et al, *Psychiatric Services, Aug 2007*

Long-term outcomes

- 2 year follow up of IMPACT shows effect persists even 1 yr after program ends
- Compared to usual care, subjects have:
  - >100 more depression free days
  - Higher quality of life
  - Decreased physical pain
- No significant difference in treatment cost between intervention and usual care

http://impact.son.washington.edu/



Partners in Care (Wells et al 2000)

- 46 primary care practices
- 1356 depressed patients
  - 398 Latinos
  - 93 African Americans
  - 778 Whites
- Practices randomized to:
  - Quality improvement for medication
  - Quality improvement for psychotherapy
  - Usual Care
- Interventions materials in English and Spanish developed by multicultural intervention team

Partners in Care

- Rates of appropriate depression care increased for all ethnic groups
- Rates of probable depression at 6 months:
  - Latinos: 47% QI vs. 64% UC (p=0.02)
  - African Americans: 24% QI vs. 56% UC (p<.01)
  - Whites: 37% QI vs. 41% UC (NS)

Multi-faceted Oncology Depression Program

- 55 low-income Latinas with breast or cervical cancer randomized to collaborative care vs. usual oncology care
- MODP patients significantly more likely to
  - have improvement in depression symptoms (OR=4.51 95% CI 1.07-18.93)
- Suggested effect on treatment adherence and survival

- Dwight-Johnson et al, *Psychosomatics* 2005

Adaptations to collaborative care for minority patients

- Increased outreach efforts
- Assistance with practical barriers to care
- Culturally adapted and translated:
  - Educational materials
  - Psychotherapy manuals
- Provider education should include attention to cultural sensitivity

Case Management improves adherence to CBT in Latinos

- 199 low-income primary care patients randomized to group CBT vs. group CBT + case management
- Supplemental case management associated with:
  - Lower drop-out from therapy
  - Greater improvement in depression and functioning outcomes among Spanish speakers

- Miranda et al, *Psychiatr Serv* 2002

Summary

- Rates of depression treatment are low among persons of color and the poor
- Although more studies are needed, current evidence suggests that available treatments are effective in persons of color
- Treatments may need to be adapted
- Collaborative care interventions are particularly effective for improving depression care for disadvantaged groups