

# Collaborative Care Addresses Depression Treatment Preferences of Low-Income Latinos



Megan Dwight Johnson, MD MPH  
West Los Angeles VA Medical Center  
Primary and Ambulatory Care Center

RAND Corporation

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# Objective

- Describe depression treatment preferences of low-income, Latino primary care patients.
- Examine whether a collaborative care intervention that promoted patient treatment choice would increase the likelihood that patients received preferred treatment compared to usual primary care.

# Disparities and Preferences

- Rates of appropriate care for depressive and anxiety disorders:
  - 34% for whites
  - 24% for Latinos
  - 17% for African Americans
    - » Young et al 2001
- Barriers to quality care for Latinos
  - System Level
  - Provider level
  - Patient level
- Even among insured, managed primary care patients, Latinos are less likely to get depression care
  - » Lagomasino, Dwight-Johnson et al 2005
- Depression-related attitudes and preferences that have not been well understood or addressed may contribute to disparities in care
- Tailoring treatment to patient preferences and needs may increase entry and response to treatment



# Preferences and Ethics

- Institute of Medicine:
  - Attention to patients' preferences and priorities is a key feature of quality care
- Medical ethics
  - Patient autonomy
    - Respect for patient choice between appropriate treatments when possible
  - Equity
    - Tailoring care to address needs of diverse patients, especially vulnerable patients

# Previous Studies

- Most primary care patients, including Latinos, are more likely to prefer psychotherapy alone or in combination with medication as first line treatment for depression. Dwight-Johnson et al 2000
- In managed primary care:
  - Collaborative care may increase likelihood of patients receiving preferred treatment
  - However, preference for psychotherapy was more difficult to accommodate Dwight-Johnson et al 2001
- Can collaborative care similarly improve access to preferred treatment in safety net primary care settings serving low income, uninsured Latinos who are likely to prefer counseling?

# Patients, Providers, and Clinics Together (PACT) to improve depression care

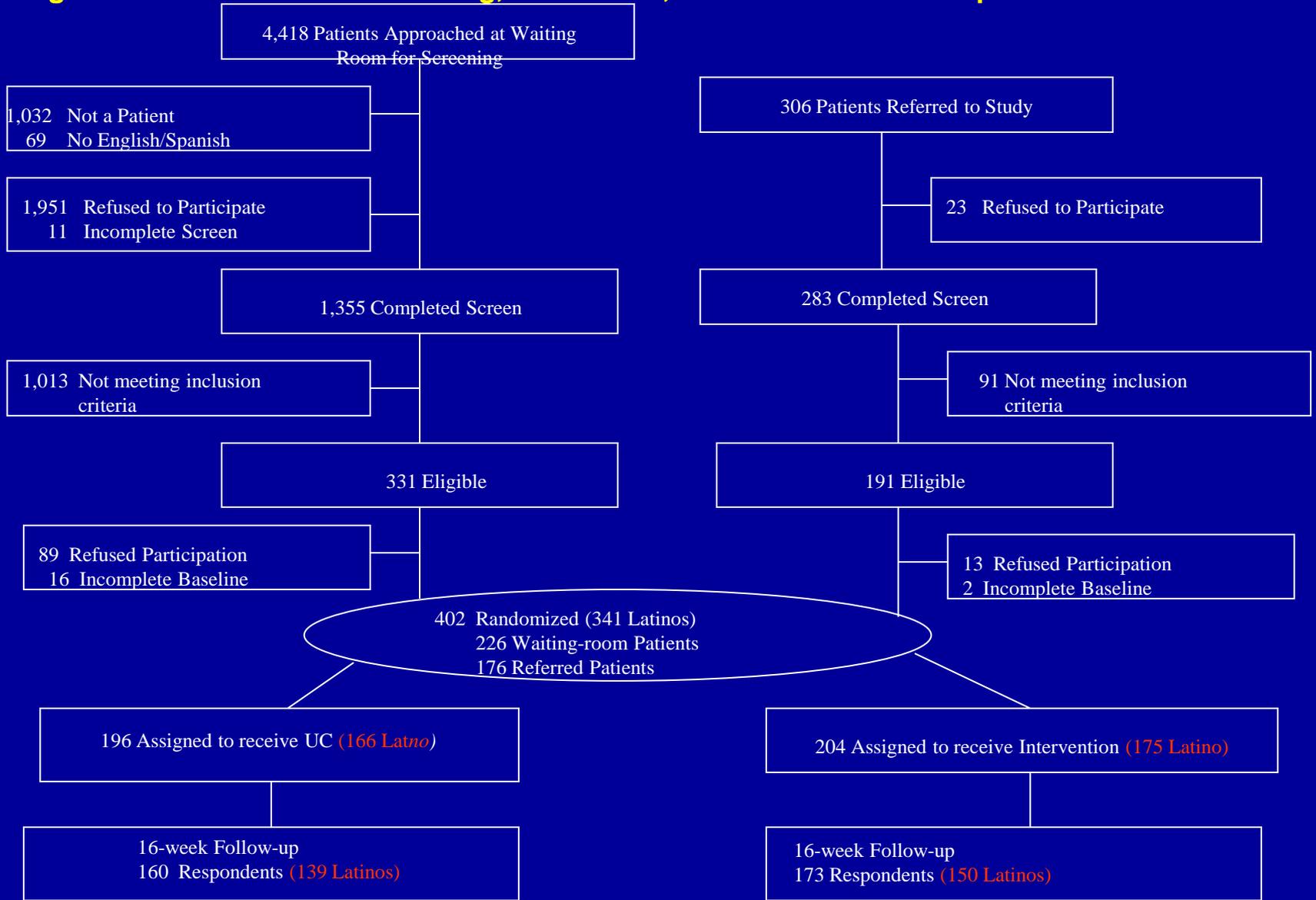
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# Study Steps

1. Baseline assessment of patient preferences
2. Randomized trial of Collaborative Care
  - Waiting room screening and provider referral
  - Patients randomized to 4-months of program vs. wait list
3. Post-intervention assessments of preferences and treatment received

**Figure 1. PACT Patients Screening, Enrollment, and 16-week Follow-up**



| <i>Characteristics</i>                | <i>Overall</i> |          | <i>Treatment (N=173)</i> |          | <i>Usual Care (N=166)</i> |          | <i>P-value</i> |
|---------------------------------------|----------------|----------|--------------------------|----------|---------------------------|----------|----------------|
|                                       | <i>N</i>       | <i>%</i> | <i>N</i>                 | <i>%</i> | <i>N</i>                  | <i>%</i> |                |
| Referred by provider                  | 154            | 45       | 82                       | 47       | 72                        | 43       | .456           |
| Age, mean $\pm$ SD                    | 49.8           | 12.6     | 50.4                     | 12.8     | 49.2                      | 12.4     | .388           |
| Female                                | 286            | 84       | 143                      | 83       | 143                       | 86       | .377           |
| Nativity                              |                |          |                          |          |                           |          | .224           |
| United States (excluding Puerto Rico) | 34             | 10       | 18                       | 10       | 16                        | 10       |                |
| Mexico                                | 148            | 44       | 71                       | 41       | 77                        | 46       |                |
| El Salvador                           | 91             | 27       | 43                       | 25       | 48                        | 29       |                |
| Other                                 | 66             | 19       | 41                       | 24       | 25                        | 15       |                |
| Primarily Spanish speaking            | 262            | 77       | 130                      | 75       | 132                       | 80       | .336           |
| Education                             |                |          |                          |          |                           |          | .971           |
| < 6 yrs.                              | 190            | 56       | 96                       | 55       | 94                        | 57       |                |
| 6-11yrs.                              | 69             | 20       | 36                       | 21       | 33                        | 20       |                |
| High School graduate or higher        | 80             | 24       | 41                       | 24       | 39                        | 23       |                |
| Employed full or part-time            | 124            | 37       | 63                       | 36       | 61                        | 37       | .949           |
| Uninsured                             | 209            | 62       | 104                      | 60       | 105                       | 63       | .552           |

| <i>Characteristics</i>                     | <i>Overall</i> |          | <i>Treatment<br/>(N=173)</i> |          | <i>Usual Care<br/>(N=166)</i> |          | <i>P-value</i> |
|--|----------------|----------|------------------------------|----------|-------------------------------|----------|----------------|
|  | <i>N</i>       | <i>%</i> | <i>N</i>                     | <i>%</i> | <i>N</i>                      | <i>%</i> |                |
| Depressive Disorder                        |                |          |                              |          |                               |          | <b>.022</b>    |
| Major depression only                      | 84             | 25       | 51                           | 29       | 33                            | 20       |                |
| Dysthymia only                             | 64             | 19       | 37                           | 21       | 27                            | 16       |                |
| Both major depression and dysthymia        | 191            | 56       | 85                           | 49       | 106                           | 64       |                |
| PHQ-9 score, mean $\pm$ SD                 | 17.3           | 3.9      | 17.4                         | 3.9      | 17.1                          | 3.9      | .506           |
| Comorbid anxiety disorder                  | 207            | 61       | 113                          | 65       | 94                            | 57       | .100           |
| Number of comorbid medical problems        |                |          |                              |          |                               |          | .544           |
| 0  | 27             | 8        | 16                           | 9        | 11                            | 7        |                |
| 1  | 44             | 13       | 19                           | 11       | 25                            | 15       |                |
| 2  | 44             | 13       | 21                           | 12       | 23                            | 14       |                |
| $\geq 3$                                   | 224            | 66       | 117                          | 68       | 107                           | 64       |                |
| Previous medication for emotional problems | 134            | 40       | 68                           | 39       | 66                            | 40       | .932           |
| Previous counseling                        | 89             | 26       | 38                           | 22       | 51                            | 31       | .066           |
| Concerned about stigma                     | 186            | 55       | 85                           | 49       | 101                           | 61       | <b>.030</b>    |

# Conjoint analysis survey of patient preferences

- Technique borrowed from marketing research
- More realistic method for preference assessment
  - Each good or service is a bundle of attributes
  - Each individual gives a unique weight to attribute levels
  - A person's overall preference is the sum of combined weights

# Conjoint Analysis Survey

## Treatment Attributes

### Type:

Medication, Counseling, Both

### Format:

Individual, Group

### Location:

Primary Care, Mental Health

### Cost per visit:

Free, \$10, \$20

|          | Type  | Session   | Place   | Cost   |
|----------|---|---|---|--|
| <b>A</b> | <br>Medication | <br>Individual | <br>Mental Health Clinic | <br>\$0 |

|          | Type  | Session   | Place  | Cost  |
|----------|---|---|--|---|
| <b>B</b> | <br>Counseling | <br>Individual | <br>Your Medical Clinic | <br>\$20 |

# Pre-Survey Educational Script

- In market research, subjects routinely educated or shown prototypes prior to surveys
- Information affects conjoint choices
  - Patients randomized to receive education more likely to choose more intensive/effective treatment
    - » van Til et al 2008
- In PACT, we used a script to standardize information to patients
- Effort to be neutral

# Treatment Type Preferences

| Characteristic             | $\beta$ | Significance | Exp ( $\beta$ ) | 95% CI    |
|----------------------------|---------|--------------|-----------------|-----------|
| Treatment                  |         |              |                 |           |
| Type                       |         |              |                 |           |
| Counseling                 | -.103   | NS           | 1.11            | .87-1.42  |
| Medication                 | -.938   | <0.001       | .39             | .33-.46   |
| Counseling and medication* | 0       |              | 1               |           |
| Setting                    |         |              |                 |           |
| Primary Care               | .41     | <0.001       | 1.51            | 1.16-2.19 |
| Mental Health*             | 0       |              | 1               |           |
| Format                     |         |              |                 |           |
| Individual                 | .07     | NS           | 1.07            | .89-1.28  |
| Group*                     | 0       |              | 1               |           |
| Cost                       | -.040   | <0.001       | 1.04            | 1.03-1.05 |

# PACT Intervention

- 1. Bilingual MSW care manager facilitates systematic treatment and follow-up**
  - a. Patient education / activation / supports treatment choice
  - b. Supports antidepressant management prescribed by PCP
  - c. Offers course of brief, manualized CBT
  - d. Systematically tracks outcomes, side effects, treatment effectiveness (PHQ-9)
- 2. Psychiatric consultation / caseload supervision**
- 3. Stepped care: change treatment and increase intensity according to evidence-based algorithm if patient is not improving**

# Usual Care

- Primary care providers informed of patient's diagnosis
- Patient given educational pamphlet and list of community resources
- Patient and provider free to use any usually available treatment
  - Antidepressant medication
  - Referral to specialty care

# Who was most likely to get preferred treatment?

- Intervention subjects (vs. usual care)
  - OR=20.1 (95% CI (8.0, 53.9),  $p < .001$ )
- Female (vs. male)
  - OR=3.9 (95% CI=(1.4, 11.2),  $p = .011$ )
- Referred by provider (vs. waiting room screen)
  - OR=2.7 (95% CI=(1.3, 5.6),  $p = .007$ )
- Unemployed (vs. employed)
  - OR=3.0 (95% CI=(1.4, 6.4),  $p = .004$ )
- English speaking patients (vs. Spanish speaking)
  - OR=2.6 (95% CI=(1.2, 5.7),  $p = .02$ )

# Limitations

- May not reflect preferences of Latinos who are not
  - Enrolled in primary care
  - Low income
  - Mexican American or Central American
- Survey format and introductory script may influence responses
- Treatment options limited to those available in the study treatment
- Did not offer the option of “no treatment”
- At baseline, UC subjects more likely to have “double depression” and to report stigma concerns

# Implications

- Low-income Latino primary care patients were most likely to prefer counseling or counseling plus medication for treatment of depression
  - Preferred to remain in primary care
  - Severity of depression, knowledge associated with preferences
- Collaborative care interventions that provide education, choice of treatment, and on-site psychotherapy greatly increased likelihood that patients received preferred treatment.
- Some patient groups including men, Spanish speakers, and employed persons may require additional outreach, advocacy, and flexibility in treatment schedule to have their preferences addressed.





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# Did patients receive preferred treatment?

| INTERVENTION SUBJECTS   |                    |                 |                 |      |       |
|-------------------------|--------------------|-----------------|-----------------|------|-------|
|                         | Treatment Received |                 |                 |      |       |
|                         | CBT & Medication   | Counseling only | Medication only | None | Total |
| Conjoint Preference     |                    |                 |                 |      |       |
| Counseling & Medication | 38                 | 23              | 2               | 13   | 76    |
| Counseling only         | 16                 | 22              | 1               | 7    | 46    |
| Medication only         | 8                  | 8               | 1               | 2    | 19    |
| No Preference           | 3                  | 3               | 0               | 1    | 7     |
| Total                   | 65                 | 56              | 4               | 23   | 148   |

| CONTROL SUBJECTS        |                    |                 |                 |      |       |
|-------------------------|--------------------|-----------------|-----------------|------|-------|
|                         | Treatment Received |                 |                 |      |       |
|                         | CBT & Medication   | Counseling only | Medication only | None | Total |
| Conjoint Preference     |                    |                 |                 |      |       |
| Counseling & Medication | 2                  | 3               | 15              | 55   | 75    |
| Counseling only         | 1                  | 1               | 9               | 31   | 42    |
| Medication only         | 0                  | 2               | 5               | 11   | 18    |
| No Preference           | 0                  | 0               | 3               | 1    | 4     |
| Total                   | 3                  | 6               | 32              | 98   | 139   |

# Study Outcomes

| <i>Variables</i>  | <i>Analytic N</i> | <i>Overall</i> | <i>Treatment (N=171) N (%)</i> | <i>Usual Care (N=160) N (%)</i> | <i>Stats</i> | <i>P-value</i> |
|---|-------------------|----------------|--------------------------------|---------------------------------|--------------|----------------|
| <b>PHQ-9</b>  |                   |                |                                |                                 |              |                |
| Baseline PHQ-9 score, Mean (SD)                                     | 331               | 17.3 (3.9)     | 17.1 (4)                       | 17.6 (3.9)                      | 1.3711       | 0.242          |
| Week 16 PHQ-9 score, Mean (SD)                                      | 331               | 10.9 (6.4)     | 8.6 (6.1)                      | 13.3 (5.7)                      | 51.5913      | 0.000          |
| Week 16 PHQ-9 <10, N (%)  | 331               | 139 (42)       | 97 (56.7)                      | 42 (26.3)                       | 31.5152      | 0.000          |
| Week 16 PHQ-9 reduced by 50%, N (%)                                 | 331               | 126 (38.1)     | 95 (55.6)                      | 31 (19.4)                       | 45.8955      | 0.000          |
| <b>Service Use</b>  |                   |                |                                |                                 |              |                |
| number of counseling visits in past 4 months, Mean (SD)             | 331               | 4.2 (5.5)      | 7.9 (5.4)                      | 0.2 (0.9)                       | 315.261      | 0.000          |
| 4 or more visits to specialist in past 4 months, N (%)              | 331               | 132 (39.9)     | 125 (73.1)                     | 7 (4.4)                         | 162.831      | 0.000          |
| Any antidepressant in past 4 months, N (%)                          | 331               | 118 (35.6)     | 77 (45)                        | 41 (25.6)                       | 13.5667      | 0.000          |
| Adequate antidepressant for 1 month or more in past 4 months, N (%) | 327               | 81 (24.8)      | 54 (31.8)                      | 27 (17.2)                       | 9.2946       | 0.002          |
| Minimally adequate combo treatment in past 4 months, N (%)          | 328               | 59 (18)        | 56 (32.9)                      | 3 (1.9)                         | 53.4918      | 0.000          |