# Social Support as an Explanation for Differential Effects of a Depression Quality Improvement Program for Men and Women

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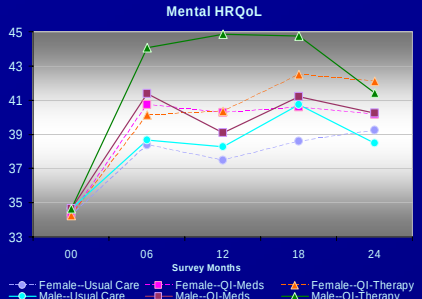
## Background

- Gender differences in the impact of primary care quality improvement (QI) programs have been infrequently studied. We recently found that two QI programs, one that facilitated access to medication management (QI-Meds) and the other that facilitated access to effective psychotherapy for depression (QI-Therapy), help narrow the gender gap that leaves a greater proportion of depressed men untreated compared with women.
- While QI was effective for both genders, men showed more improvement than women on some outcomes under QI-Therapy.
- For example, the intervention that facilitated access to psychotherapy for depression had a greater impact on mental health-related quality of life (MCS-12 score) for men than for women.




QI-Therapy improved mental health-related quality of life for both men and women, tended to have stronger benefits for men, limited to 6-18 months follow-up, while benefits for women began at 12 months and persisted through 24 months. From the perspective of illness burden, this suggests an observed year or so of benefit for each gender, but with more substantial changes over that period among men.

## Objective

- What was it about QI-Therapy that was particularly beneficial for men?
- We explore one potential reason for the beneficial effect of a psychotherapy-oriented intervention for men.
- Research has shown that inadequate social support plays an important role in poor mental health and that support is often lower among men.
- We hypothesized that men with low social support might benefit particularly from an intervention that involved a counseling component.

## Method

### Data

- Partners in Care is a group-level, randomized controlled trial designed to improve rates of initiation and adherence to either appropriate antidepressant medication or psychotherapy for depression. Features of the study include:
- Six managed care organizations; 46 primary care clinics; 181 clinicians
- 27,332 consecutive primary care patients screened
- 1356 depressed patients enrolled into a 2-year longitudinal study
- Clinics randomized to usual care or one of two quality improvement programs (QI-Meds or QI-Therapy)
- This analysis focused on 1299 primary care patients who screened positive for depression and completed at least one questionnaire over 24 months.

### Interventions

- For both QI-meds and QI-therapy, local practice teams were trained in a 2-day workshop. Designated practice nurses were trained as depression specialists, and practices were provided with patient education materials, patient tracking forms, and clinician manuals and pocket reminder cards and were encouraged to distribute them. The materials described guideline-concordant care for depression and presented psychotherapy and antidepressant medication as equally effective.
- In QI-Meds, trained nurses were available to provide follow-up assessments and support medication adherence for 6 months (12 months for a randomly selected half of QI-Meds patients).
- In QI-Therapy, the study provided local psychotherapists with manuals, and it trained them in 8-12 session courses of individual and group Cognitive Behavioral Therapy. For psychotherapy provided by the study-trained therapists, patient copayments were reduced to the amount charged for primary care visits.
- In each study arm, patients and clinicians retained choice of treatment, and their use of intervention resources was optional.

### Measures

- ***Outcome Variable***: Mental health–related quality of life was measured by MCS-12, the global mental health scale of the short-form 12 (SF-12).
- ***Social Support Items***: (adapted from the MOS Social Support Survey (Sherbourne and Stewart, *Social Science and Medicine*, 32(6):705-714, 1991.))
- People sometimes look to others for companionship, assistance or other types of support. How often is each of the following kinds of support available to you if you need it?
- (1=none of the time; 2=a little of the time; 3=some of the time; 4=most of the time; 5=all of the time)
  - Someone to help you if you were confined to bed
  - Someone who shows you love and affection
  - Someone to take you to the doctor if you needed it
  - Someone to confide in or talk about yourself or your problems
  - Someone who hugs you
  - Someone to get together with for relaxation
  - Someone to help with daily chores if you were sick
  - Someone to turn to for suggestions about how to deal with a personal problem
  - Someone to love and make you feel wanted

Low social support was defined as a mean equivalent to feeling supported "a little of the time." High social support was defined as a mean equivalent to feeling supported "all of the time."

### Analysis

- Analyses were stratified by gender. For each gender, we compared the trajectory of mental health-related quality of life, as measured by the MCS-12, for patients with initially low and high levels of social support within each intervention arm. Analyses controlled for type of depression at baseline (major depression, single or double, or current depressive symptoms without meeting criteria for major depression, with or without lifetime depression).
- We fit hierarchical linear regression models using a factor analytic covariance structure with 2 factors using SAS Proc Mixed. Repeated measurements were nested within individuals, and individuals were nested within clinics.
- Three and two-way interactions between intervention, time and social support were tested. Predicted mental health-related quality of life means were computed for low and high levels of social support using estimates from hierarchical models.

### Baseline Characteristics of Primary Care Patients with Depression, by Gender*

| Characteristic | Women (N=941) Mean or % | Men (N=358) Mean or % |
|---|---|---|
| Mean Age | 42 | 46 |
| % Married | 51 | 62 |
| *Education* | | |
| < High School | 16 | 16 |
| High School Grad | 29 | 24 |
| Some College | 35 | 33 |
| College Grad | 20 | 27 |
| *Ethnicity* | | |
| White | 57 | 61 |
| Black | 8 | 5 |
| Hispanic | 29 | 27 |
| Other | 6 | 5 |
| *Depression Type* | | |
| Double Depression | 13 | 10 |
| Single Depression | 49 | 42 |
| Symptoms with Lifetime | 20 | 24 |
| Symptoms Only | 18 | 23 |
| Baseline Level of Social Support (range 1-5) | 4 | 3 |

## Conclusions

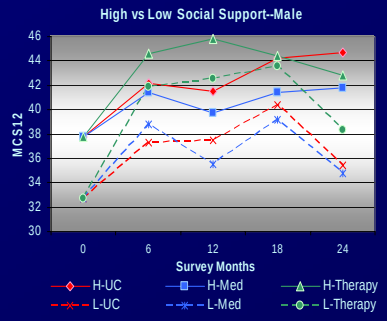
- QI interventions are effective for men and women with low and high levels of social support, but the mental health of women with low support remains lower that those with high support. A different pattern emerges for men.

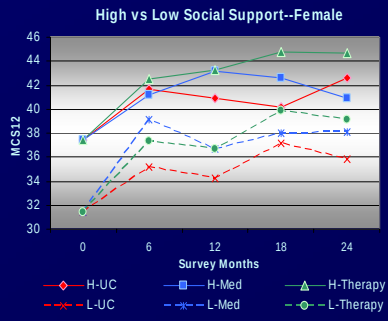
## Implications for Policy, Delivery, or Practice

- Data on illness trajectories of depressed men and women in primary care settings provide information to inform clinical care. These results suggest that QI programs for depressed women with low levels of social support may need to be enhanced to bring their levels of mental health up to those with high levels of social support. For depressed men with low levels of social support a QI program that facilitates access to effective psychotherapy is beneficial.

## Results

- At baseline, men and women had comparable levels of social support.
- Men and women who had high baseline levels of social support had better mcs12 in each intervention arm than those with low levels of support.
- There was a significant main effect for social support but not for interactions between social support and either intervention or intervention*time.
- For women, the baseline pattern of lower MCS12 for initially low than high supported patients in each intervention arm remained constant over time.
- For men with low initial social support, the QI-Therapy intervention brought their levels of mental health up to those of men with high levels of social support in the QI-Meds and UC arms. This pattern was maintained over 18 months.

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