The *Bypassing the Blues* Trial

Telephone-Delivered Collaborative Care for Treating Post-CABG Depression

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Presenter Disclosure Information

- Bruce L. Rollman, MD, MPH
  The *Bypassing the Blues* Trial

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Speakers bureau/honoraria/advisory board/ownership interest:  None
CABG Surgery

• ~450,000 / Yr. performed in U.S.

• Indications:
  – Improve health-related quality of life (HRQoL)
  – Decrease angina
  – Improve survival

• 20-25% Elevated mood symptoms

• Mood symptoms associated with:
  – Delayed recovery
  – ↑Readmissions, C-V events, and death
Can collaborative care for depression:

*Increase:*
- HRQoL (SF-36 MCS - primary outcome)
- Physical functioning (SF-36 PCS, DASI)

*Decrease:*
- Mood symptoms (HRS-D)
- Health care utilization (Rehospitalization)
- Health care costs ($$)
7 Pittsburgh-Area Hospitals

Jefferson Regional Mercy Hospital
UPMC-Passavant
UPMC-Presbyterian
UPMC-Shadyside
Westmoreland
West Penn Hospital

On the Road to Recovery from Bypass Surgery?
Ask About:

Bypassing the Blues
A Study to Improve the Quality of Life Following Cardiac Bypass Surgery

It’s a cooperative effort by doctors, nurses, and other healthcare professionals from several Pittsburgh-area hospitals who are interested in helping cardiac bypass patients live life to its fullest.

If you are eligible to participate in Bypassing the Blues, you may begin a program specifically designed to help patients like you avoid or overcome depression following surgery. This program may include telephone counseling, guided use of a workbook or video, medication prescribed by your primary care physician, specialty referral, or a combination of these depending upon your treatment preferences.

Patients still hospitalized following bypass surgery may be eligible to participate. For more information:

Call 412-692-2659 or ask your nurse or doctor about the Bypassing the Blues study.
## Screening Summary

### 3/04-9/07

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approached Post-CABG</td>
<td>3,057</td>
</tr>
<tr>
<td>PHQ-2 Completed</td>
<td>2,485 (81%)</td>
</tr>
<tr>
<td>PHQ-2 (+) Screen</td>
<td>1,387 (56%)</td>
</tr>
<tr>
<td>Protocol-Elig./Consented</td>
<td>1,268 (91%)</td>
</tr>
<tr>
<td>PHQ-9 Completed (2-wk f/u)</td>
<td>1,100 (87%)</td>
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<tr>
<td>PHQ-9 ≥10</td>
<td>337 (31%)</td>
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<tr>
<td>Randomized</td>
<td>302 (90%)</td>
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<tr>
<td></td>
<td>Depressed N=302</td>
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<tr>
<td>----------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Age (SD)</td>
<td>64 (11)</td>
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<tr>
<td>Male</td>
<td>59%</td>
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<tr>
<td>Caucasian</td>
<td>91%</td>
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<tr>
<td>Hypertension</td>
<td>84%</td>
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<tr>
<td>Diabetes</td>
<td>42%</td>
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<tr>
<td>CHF</td>
<td>20%</td>
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</table>
Collaborative Care (CC)  
3/04 – 5/08

Nurse phoned patient at regular intervals X 8 mo.
– Provide basic psychoeducation
– Assess treatment preferences:
  • Self-management workbook
  • Antidepressant pharmacotherapy
  • Mental health specialty referral
– Monitor treatment response & suggest changes

Weekly case review with study PCP/psychiatrist

Nurse feedback to patient’s PCP

CC Increases HRQoL
(Primary Outcome)

ES: 0.30 (0.17-0.52; P=0.01)

CC Decreases Mood Sx.

Hamilton Rating Scale - Depression

ES: 0.30 (0.08-0.53; P=0.009)

Differential Impact by Gender

SF-36 MCS (1’ Outcome)
- All: 0.30 (0.17-0.52) P=0.01
- Male: 0.53 (0.23-0.84) P<0.001
- Female: 0.08 (-0.28-0.43) P=0.68

HRS-D
- All: 0.30 (0.08-0.53) P=0.009
- Male: 0.39 (0.09-0.69) P=0.01
- Female: 0.23 (-0.13-0.59) P=0.20

SF-36 PCS
- All: 0.26 (0.03-0.48) P=0.03
- Male: 0.57 (0.26-0.87) P<0.001
- Female: -0.04 (-0.40-0.31) P=0.82

DASI
- All: 0.32 (0.09-0.54) P=0.006
- Male: 0.55 (0.24-0.85) P<0.001
- Female: 0.10 (-0.25-0.46) P=0.58

C-V Rehospitalization: Men

13% Intervention vs. 23% UC; P=0.07

Limitations

- HIPAA
- One U.S. region
- Cost data presently unavailable
- Grant-supported care team
- Underpowered for C-V events, mortality
Conclusions

Compared to “usual care” for post-CABG depression at 8-month f/u, telephone-delivered collaborative care improves:

- Mental HRQoL
- Physical functioning
- Mood symptoms

Welcome to the Bypassing the Blues Website!

Bypassing the Blues is a National Heart Lung Blood Institute (NHLBI)-funded effectiveness trial conducted through the University of Pittsburgh’s Center for Research on Health Care. It was designed to examine the impact of a telephone-delivered collaborative care strategy for treating depression after coronary artery bypass graft (CABG) surgery on a broad variety of outcome measures that could influence uptake of our treatment strategy into routine clinical care.

CABG surgery is one of the most common and costly medical procedures performed in the U.S., and it clearly benefits most patients. However, up to half of post-CABG patients report elevated levels of depressive symptoms following surgery, and studies indicate these individuals are more likely to experience poorer health-related quality of life, continued chest pain, and higher risk of re-hospitalization and death.

Numerous clinical trials have demonstrated the effectiveness of collaborative care strategies at improving clinical outcomes for major depression in primary care settings, yet Bypassing the Blues is the first to examine the impact of collaborative care for depression in a population with cardiac disease. To promote adoption of our methods by health care providers, we utilized the PHQ-9 and a tested, clinically-efficient two-step method to identify elevated levels of depressive symptoms following CABG surgery, and centralized nurse care managers who delivered collaborative care via telephone to patients and their primary care physicians.

This website provides information about the Bypassing the Blues trial, information resources, and materials people can use to develop their own program for treating post-CABG depression. Check-back soon for more information on the outcomes of our clinical trial, and to find out the latest research and news about the field.