



How to Implement and Evaluate a Telephonic Depression Care Management Program

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ProCare is a non-profit subsidiary of Connect Care, a care management company based in Colorado Springs. Both organizations are members of the Pikes Peak Behavioral Health Group (PPBHG).

Established: 2005

Contracts and Experience:

- City of Colorado Springs, CO
- PacificSource, OR
- El Paso County, CO
- Mountain View Medical Group, CO
- Medicaid Primary Care Practice (IMPACT), CO

PROCARE

- Experts in disease management
- State of the art technology to acquire and utilize claims data
- Medical component unique in the industry
 - Care Managers are nurses and behavioral health care professionals
 - Medical director on staff
- Research analyst on staff
 - Compiles data
 - Evaluates outcomes
 - Reports trends
- Individualized treatment plans
- Customized outreach programs

Burden of Chronic Disease

- **Chronic disease accounts for more than 75% of the nation's \$1.4 trillion in health care costs.¹**
- **Much chronic disease can be attributed to life style choices (smoking, poor diet, lack of exercise, excessive alcohol use, etc.) and is preventable.**
- **Disease management covers a wide range of activities that affect individuals' health status and use of health care services but usually refers to activities that coordinate care across providers, ensure that patients comply with their treatment regimens, and encourage provider adherence to evidence-based treatment guidelines.**
- **The medical conditions most commonly targeted by disease management programs are: heart disease, diabetes, asthma and depression.**

¹Source: Center for Disease Control (2006)

Impact of Depression

- Depression has the highest prevalence of the top four chronic diseases (9.5% of the general population in one year), followed by:
 - heart disease (8.9%)
 - asthma (6.4%)
 - diabetes (5.8%)
- Depression has a higher impact on health care costs than any other common health risk factor (abnormal glucose, inactivity, stress, obesity, tobacco use, high cholesterol, blood pressure, etc).¹
- Patients with depression are the most likely to be in need of self-management support

¹Source: Goetzel (1998)

Prevalence of Depression with Medical Illness

<u>Medical Illness</u>	<u>Rate of Depression</u>
Heart Attack	40-65%
Coronary Artery Disease	18-20%
Parkinson's Disease	40%
Multiple Sclerosis	40%
Stroke	10-27%
Cancer	25%
Diabetes	25%

Challenges to *Seeking* Treatment

- Primary Care Physician's role
- Lag time between symptoms and psychiatric help
- Stigma
- Symptoms of the disease



Challenges to *Effective* Treatment

- The nature of the disease itself
 - Lack of focus and motivation to seek or follow through with treatment
 - 66% of people with depression never receive treatment
- 74% of Americans seeking help for depression visit a primary care provider (PCP)
- Majority of PCPs lack the time, training and other resources to adequately treat depression
- Treatment compliance
 - Medication non-compliance due to side effects and medication response time
 - 4 out of every 10 depressed individuals who start antidepressant medications discontinue it before they can realize any clinical benefit
 - Lack of or inconsistent psychotherapy

The Good News



- 80% of people with depression can be successfully treated
- Effective treatment typically includes a two-fold approach:
 - Medication
 - Therapy

QuEST Model of Depression Care Management

The ProCare Depression Care Management (DCM) program is based on the QuEST model, developed and researched by Kathryn Rost, PhD, Elizabeth Freed Chair and Professor in the Department of Medical Humanities and Social Sciences at Florida State University College of Medicine in Tallahassee.

Dr. Rost was a major contributor to the MacArthur Foundation Initiative on Depression and Primary Care and developed a Depression Workplace ROI Calculator.

Rost KM, Nutting P, Smith JL, Elliott CE and Dickinson LM. *Managing Depression as a Chronic Disease: A randomized trial of ongoing primary care depression treatment*. British Medical Journal 325:934-939, 2002.

What is Depression Care Management?

- A confidential, clinically proven program for screening, managing, and supporting people with depression
- Focus is on improving depression treatment in primary care settings
- Telephonic model:
 - provides education and support
 - coaching tools to manage and prevent progression of the disease
 - individualized treatment plans

Identifying Participants

- Health screenings
- Medical claims data
- Pharmacy claims data
- Physician/therapist referral
- Self referral

Role of the Care Manager



- Establishes rapport
- Assesses patient
 - Response to treatment
 - Current medications
 - Confirm use of psychotherapy
- With patient's permission, informs PCP of patient's participation in DCM
- Links PCP with program medical director

Care Manager Responsibilities

- Respond to referrals from physicians
- Identify clients from claims data
- Contact clients to engage in program
- Perform bio-psycho-social intake assessment that determines patient acuity
- Set up regular schedule of telephone interventions
- Call client as scheduled and assess:
 - Client symptomology and well being;
 - Participation in mental health treatment;
 - Use and response to medications (filling prescription, taking medications as prescribed, side effects); and
 - Overall status of physical and mental disorders.

Care Manager Responsibilities

- Educate patients about their illnesses
- Supply or provide access to educational materials Explain the process of care
- Assess any barriers to treatment
- Use motivational interviewing techniques, teach/support positive decision making and self-management skills.
- Collection and recording of data
- Send results to each PCP for inclusion in the medical record.
- Communication with PCP and therapist regarding client depression symptom status.

Outcome Evaluation

Evaluations of patients are performed at 6, 12, 18 and 24-month intervals

Evaluations include:

- PHQ 9 - Patient Health Questionnaire
- SF 36 - Functional Health and Well Being
- WLQ-SF – Workplace Absenteeism and Productivity
- Client Satisfaction Survey

Figure 1. SF-36 Results

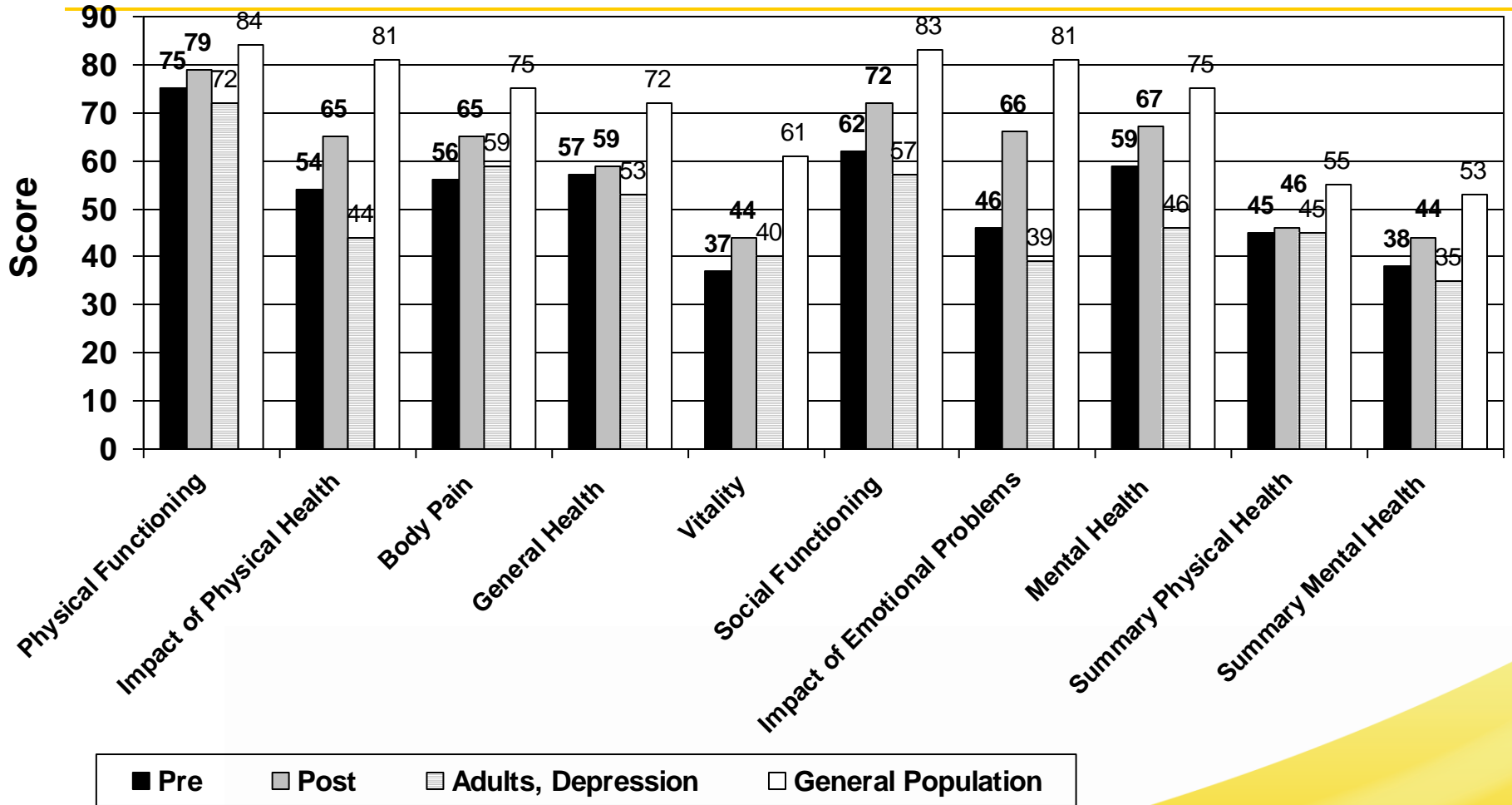
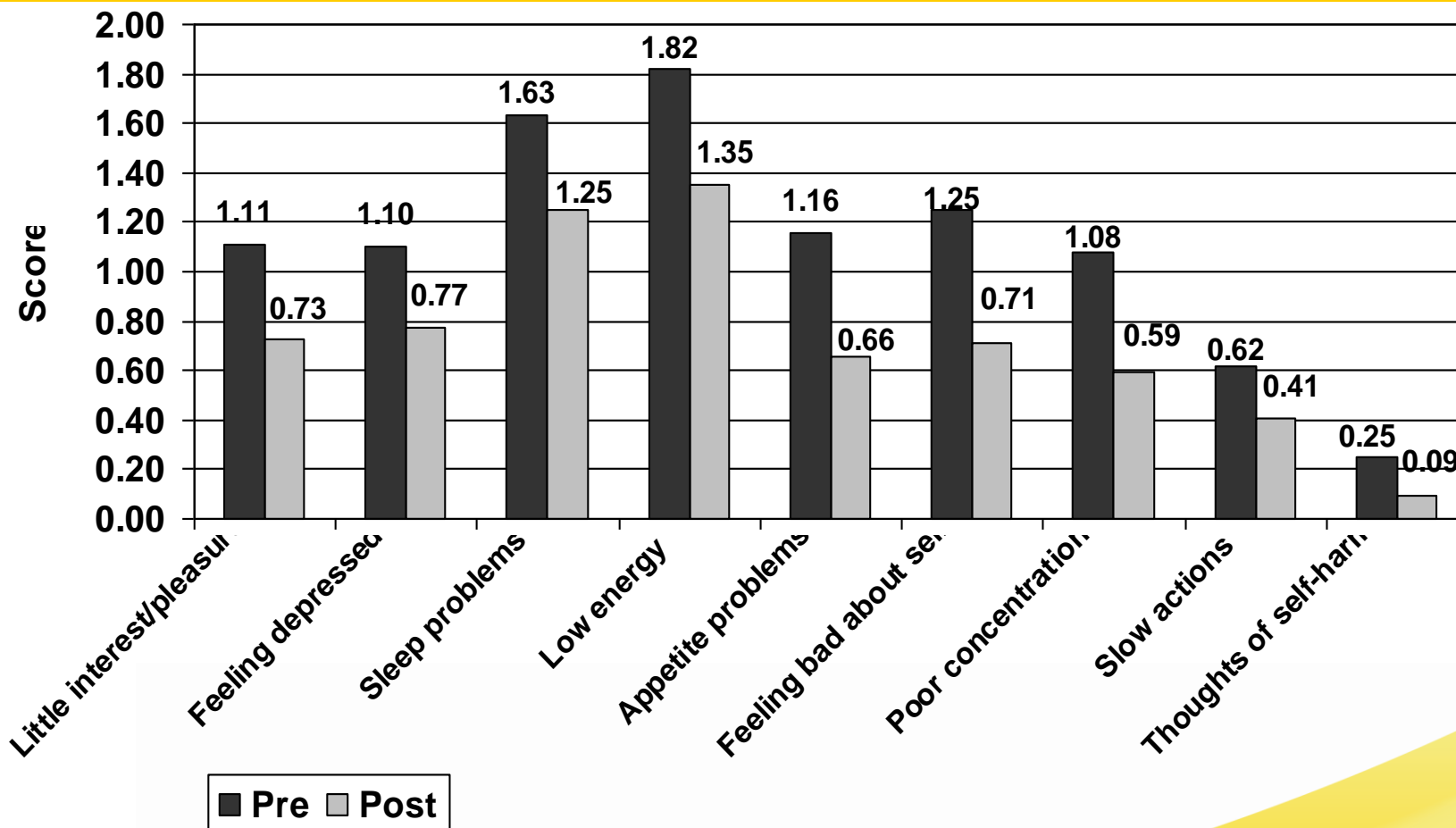


Figure 2. Pre-/Post Changes in Scores Reflecting Frequency of Depression Symptoms and Resulting Functional Difficulty, With Lower Scores Indicating Less Frequent Symptoms or Less Functional Difficulty



Scores for Individual Productivity Items and Overall Productivity

Productivity Items^[1] <i>In the past two weeks:</i>	Pre- Intervention	Six Month	Conclusio n
How much of the time did your physical health or emotional problems make it difficult for you to <u>get going easily</u> at the beginning of the workday?	2.83	2.04	Improved Statistically significant, p=.006
How much of the time did your physical health or emotional problems make it difficult for you to <u>start on your job as soon as you arrived</u> at work?	2.26	1.74	Improved Statistically significant, p=.043
How much of the time were you able to <u>sit, stand, or stay in one position for longer than 15 minutes</u> while working without difficulty caused by physical health or emotional problems? ³	2.39	1.96	Improved
How much of the time were you able to <u>repeat the same motions over and over again</u> while working without difficulty caused by physical health or emotional problems? ^[2]	2.52	2.05	Improved
How much of the time did your physical health or emotional problems make it difficult for you to <u>concentrate on your work</u> ?	2.43	1.91	Improved
How much of the time did your physical health or emotional problems make it difficult for you to <u>speak with people in person, in meetings, or on the phone</u> ?	1.96	1.52	Improved Statistically significant, p=.022
How much of the time did your physical health or emotional problems make it difficult for you to <u>handle the workload</u> ?	1.96	1.52	Improved
How much of the time did your physical health or emotional problems make it difficult for you to <u>finish work on time</u> ?	1.70	1.78	Declined
Self-Rating of Productivity in Past Two Weeks Based on Average of All Eight Items; Lower Score Indicate Fewer Perceived Productivity Problems	2.26	1.81	Improved Statistically significant, p=.016

Types of Absences from Work during the Past Four Weeks

Types of Absences		Pre-Intervention	Six Month
Days of Work Missed in the Past Four Weeks Due to Illness Average	None	9 employees	14 employees
	1-3 days	10 employees	8 employees
	≥4 days	4 employees	1 employee
		2.4 days	0.7 days
Days Late for Work or Left Early in the Past Four Weeks Due to Illness Average	None	17 employees	18 employees
	1-3 days	5 employees	5 employees
	≥4 days	1 employee	0 employees
		0.9 day	0.3 day
Days Late for Work or Left Early in the Past Four Weeks Due to Doctor's Visits Average	None	19 employees	20 employees
	1-3 days	2 employees	3 employees
	≥4 days	2 employees	0 employees
		0.6 day	0.1 day
AVERAGE NUMBER OF DAYS DURING LAST FOUR WEEKS (20 WORKDAYS) ON WHICH EMPLOYEES EITHER MISSED A DAY OF WORK OR MISSED HOURS DURING THE WORKDAY DUE TO ILLNESS AND/OR MD VISITS		3.9 days (20% of last 20 workdays)	1.1 days (6% of last 20 workdays)

Estimates of Decreased Productivity

	Pre-Intervention	Six Month
During the last two week... Productivity loss while at work due to <u>physical and behavioral health problems</u>		
Employees with No Loss	1 employee	3 employees
Employees with 1-10% Loss	12 employees	16 employees
Employees with >10% Loss	10 employees	4 employees
Average	8.73% Lost Productivity	5.70% Lost Productivity
During the last four weeks... Productivity loss due to <u>work absences</u>		
Employees with No Loss	9 employees	13 employees
Employees with 1-10% Loss	4 employees	7 employees
Employees with >10% Loss	10 employees	3 employees
Average	15.00% Lost Productivity	4.26% Lost Productivity
Average total productivity loss (Computed for each employee by combining the two types of productivity loss above)		
Employees with No Loss	0 employees	3 employees
Employees with 1-10% Loss	8 employees	10 employees
Employees with >10% Loss	15 employees	10 employees
Average	23.73% Lost Productivity	9.97% Lost Productivity

Estimated Cost to Business of Lost Productivity

The wages lost due to decreased productivity using an average wage figure of \$26.67/hour is as follows:

Pre-Intervention: \$/week loss per participating employee

40 hours per week x 23.73% lost productivity = 9.49 hours lost per week x \$26.67/hour = \$253 per employee per week

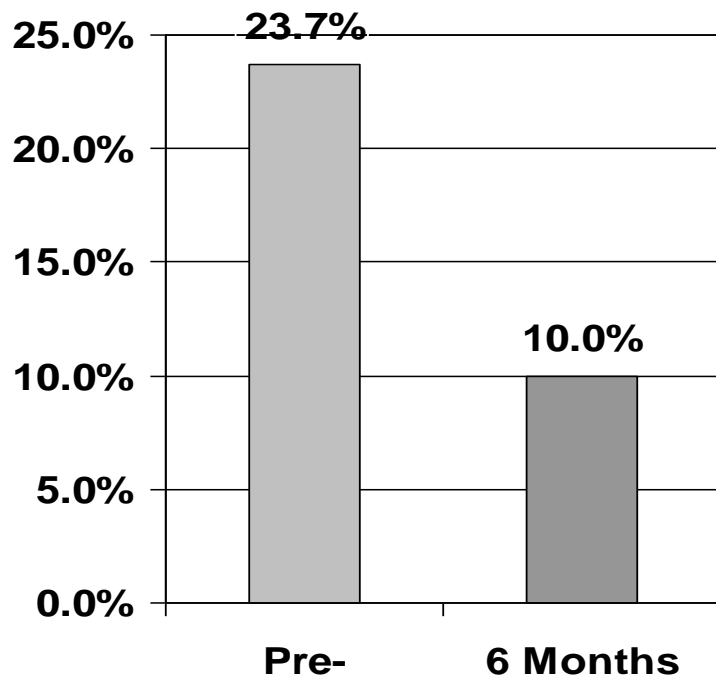
Six Months: \$/week loss per participating employee

40 hours per week x 9.97% lost productivity = 3.99 hours lost per week x \$26.67/hour = \$106 per employee per week

Pre minus Six Months = \$253 - \$106 = \$147 per week savings per employee x 23 employees = \$3,381/week

(If the change above is assumed as reflective of 30 participating employees: \$147 X 30 = \$4,410/week)

Figure 3. Pre- to 6 Month Change in Work Output



Percentage Decrease in Work Output Due to Both Level of Productivity On the Job and Absences from Work:

Pre-: 23.7%

6 Month: 10.0%

Difference +13.7%

Overall Cost to Business per Employee with Depression:

Pre-: \$253/week loss

6 Month: \$106/week loss

Savings:
+\$147/week/employee

(based on average wage of \$26.7=67/hour)

Satisfaction Items Arranged in Order from the Item with the Highest Mean Score to That with the Lowest
 (Higher Score Indicates Higher Satisfaction; Potential Score Range of 1.00 to 4.00)

Statement	Average Score for Item
Overall Mean Score	3.65
1) I was treated with dignity, respect and compassion.	3.80
2) The Care Manager listened to me and understood my situation.	3.76
7) I was offered telephone appointments at convenient days and times.	3.76
8) I believe my information was handled in a confidential manner.	3.75
10) I would recommend this Depression Care Management program to another person.	3.73
3) The Care Manager was knowledgeable about depression and its treatment.	3.71
9) I am satisfied with the help/service I received through this <i>Depression Care Management</i> program.	3.68
4) The Care Manager considered my personal strengths including any cultural and ethnic considerations when working with me and making recommendations.	3.61
5) The Care Manager coached me and helped me prepare for visits with my PCP/therapist.	3.33
6) I better understand depression and its treatment because of the information my care manager shared with me.	3.28

Outcomes Summary

- **Decrease** in all depression symptoms on PHQ 9 - Patient Health Questionnaire
- **Increase** in all measures on SF 36 - Functional Health and Well Being
- **Improvement** in 8 out of 9 measures of productivity on WLQ-SF – Workplace Absenteeism and Productivity
- **Decrease** in average number of days/hours absent on WLQ-SF – Workplace Absenteeism and Productivity
- **3.65** score on Client Satisfaction Survey (potential score range of 1.00 to 4.00 – higher score equals higher satisfaction)

Lessons Learned

- Engagement is the key:
 - Use multiple avenues
 - Stay “top of mind”
 - Be persistent
- Consider your audience when messaging
- Hire the right staff
- Provide frequent feedback to customers
- Cultivate a customer champion
- Deliver on your promises

Contact Information

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