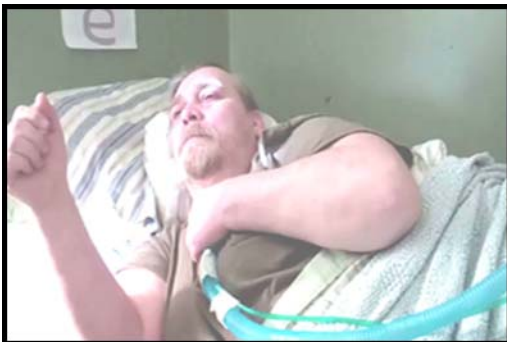


# Screening and Targeting Patients for Intervention

Working with Super-Utilizers



# Beebe CAREs

An Innovative Program for our Most  
Complex Patients

C = Care Coordination

A = Access and Advocacy

R = Referral to Community Resource

E = Empowerment of patients and Caregivers



# Program Overview

- ❖ Full time team launched Jan 2013, hospital-based
- ❖ 90 day intervention, same elements as original pilot completed Summer 2012
- ❖ Enrollment criteria:
  - 2 inpatient admissions in previous 6 months, BOOST 8P
- ❖ Referrals made via hospital providers, community providers and Siemens Decision Support
- ❖ 180+ patients completed intervention since Jan 2013, estimated cost avoidance of approximately \$1,300,000

# Cost of Chronic Disease at Beebe

	Lewes ED Patients	In-Patients
Total # of Patients	891 (4 or > visits)	378 (3 or > visits)
Total \$ Charges	\$6,754,771	\$58,630,284
Total \$ Cost (Ratio of Costs to Charges)	\$2,202,055	\$23,452,114
Total \$ Payment	\$1,840,428	\$17,542,694
Total Loss	<b>(\$361,627)</b>	<b>(\$5,909,420)</b>

Data obtained from Beebe CFO, Jim Bartle and Siemens- Decision Support Crystal System, Beebe Medical, Nov 1 2010 to Oct 31, 2011  
 Ratio of Costs to Charges is 32.6% for Emergency Department, 40% for In-patient Care



# Funding the Program

	Pilot (12 Patients)	Partial Scale Up (60 Patients)	Full Scale Up- at capacity (240 Patients)
<b>Cost of NP</b>	\$6,153 (1 day/week x 16 weeks)	\$100,000 (FTE)	\$100,000 (FTE)
<b>RN</b>	\$ 8960 (2days/week x 16 weeks)	\$ 72,800 (FTE)	2 RNs @ \$72,800 = \$ 145,600
<b>Health Coaching</b>	\$ 1,800	\$ 1,800	\$1,800
<b>Social Worker</b>	\$ 3,840 (1 day/week x 16 weeks)	\$ 62,400 (FTE)	\$ 62,400 (FTE)
<b>Supplies</b>	\$2,500	\$12,500	\$25,000 + Care Management Software
<b>TOTAL Expenses</b>	<b>\$23,253</b>	<b>\$ 249,500</b>	<b>\$334,800 + \$75,000</b>
<b>Total savings from ↓ utilization</b>	<b>(49% x 321,442)** = \$ 157,500</b>	<b>\$157,500 x 5 = \$ 787,500</b>	<b>\$ 787,500 x 4 = \$ 3,150,000</b>
<b><u>Potential Return on Investment</u></b>	<b><u>\$134,247</u></b>	<b><u>\$ 538,000</u></b>	<b><u>\$ 2,815,200</u></b>

\*\*Calculated using the cost avoidance total tabulated in the original pilot population

•All funding contributed by Beebe Healthcare



Program participants are referred in →

Via Hospitalists, Case Management, Nursing

Via Providers in Community (PCPs and Specialists)

Via Care Team Analysis/Identification



### Outcome Goals

Improved Quality of Life

Improved Self-Management and Transition Skills

Reduced Utilization and Cost



Patient evaluated for program (using 8P BOOST Tool)

Becomes program participant (Assessment and baseline questionnaire completed)

1. Goals Agreed Upon  
2. Ongoing Transitional Care Support

Phone Follow Up

Health Coaching

Care Coordination

Face-to-Face Visits



# Screening and Completing the Re-Admission Risk Assessment

All patients are screened for the following risk factors:

- (1) Recent hospitalization (within previous 6 months)
- (2) HR Primary Diagnosis (CHF, CVA, DM, Cancer, COPD)
- (3) Problem Medications (insulin, anticoagulants, narcotics)
- (4) Poly-pharmacy (> 5 routine medications)
- (5) History of depression/anxiety/psychiatric condition
- (6) Poor Health Literacy
- (7) Lack of social support/caregiver
- (8) Palliative or End-of Life Care Appropriate

\*\*\*\*\*

If presence of 5+ factors, patient is approached for enrollment



# Patient Engagement and Follow Up

- ❖ Approach face-to-face in acute care setting, consent/enroll and facilitate coordination of care prior to hospital discharge
- ❖ Complete full bio-psycho-social assessment and establish care goals based solely on what patient wants to achieve and repeatedly use coaching/motivational techniques to reinforce
- ❖ Contact via phone within 48 hours of hospital discharge- review medications, appointments and goals
- ❖ Continued Care Coordination and Health Coaching x 90 days/blend of face-to-face and phone visits depending on patient and caregiver needs



	Face-to-Face Visits	Phone Follow Up	Health Coaching	Care Coordination
Patient #1	2	0	12	5
Patient #2	2	2	12	4
Patient #3	3	4	14	4
Patient #4	1	2	<b>13</b>	3
Patient #5	3	8	9	13
Patient #6	2	5	17	3
Patient #7	4	11	10	5
Patient #8	1	2	18	8
Patient #9	5	7	18	11
Patient #10	1	9	10	5
Patient #11	2	4	10	15
Patient #12	<b>10</b>	18	10	<b>53</b>
TOTALS	36	72	<b>153</b>	<b>129</b>

# Role of the Primary Care Provider

- ❖ Timely office follow-up after hospital discharge/addressing pending needs
  - ❖ Reviewing red flags and providing support
  - ❖ Addressing palliative/end-of-life as needed
  - ❖ Collaborate with CAREs Team to optimize outcomes
- \*\* The CAREs Team does not replace PCP or specialty providers



- ❖ At the conclusion of 90 days, Action Plan and Goals are updated
- ❖ Participant and Caregiver given Certificate of Completion
- ❖ Full report and documentation given to Primary Care Provider
- ❖ All participants instructed that they may contact the program at any time for further assistance as needed

# Program Transition and Graduation

# Reducing Utilization and Improving Outcomes

	Pre- CAREs Intervention	Post- CAREs Intervention	Percent Change
Average # of Re-admissions (Intervention Group)	1.12	0.62	45% Reduction
Average # of Re-admissions (Control group)	1.08	2.22	15% Increase
Average Length of Stay (Intervention Group)	6.2 days	3.0 days	43% Reduction
Average Length of Stay (Control Group)	6.3 days	7.6 days	32% Increase

- Re-admission rate calculated using quarterly rate and averaged for both intervention (n= 180) and control group (n= 90)
- Information obtained using Beebe Electronic Medical Record and Siemens Clinical Decision Support System
- Control group represents cohort of patients with same number of readmissions and average length of stay over same time frame as CAREs Intervention group participants



# Transition Skills and Quality of Life Outcomes

	Pre- CAREs Intervention	Post CAREs Intervention	Percent Change
Transitions Skills (Average Score per participant)	4.2	25.25	601% (> 6x improvement)
Quality of Life Score (Average bad days per participant)	52.5 'bad days'	24.1 'bad days'	218% improvement (> 2x better)

- There is enough evidence at the .01 level of significance to support our claim of raising transition skills and quality of life in patients. The program is statistically proven to help patients build vital skills to cope with the transition period of discharge and solve social issues affecting quality of life.
- Transition Skills and Quality of Life measured among study participants immediately preceding CAREs intervention and at discharge (90 days)
- Transitions Skills measured using the validated Coleman CTM-15 and Quality of Life measured using the validated CDC Health-related Quality of Life Measure (N-HANES/BRFSS)



# Next Steps....

- ❖ Working to scale care coordination efforts
- ❖ Aligning with community providers
- ❖ Building the foundation of clinical integration and accountable care
- ❖ Inspiring change across the entire continuum of care for providers and patients

