Produced in collaboration with:

TMC TEXAS MEDICAL CENTER

ACHE - SouthEastTexasChapter
An Independent Chapter of the American College of Healthcare Executives

TWO VITAL INDUSTRY EVENTS CO-LOCATED MAY 18-20, 2016 | GEORGE R. BROWN CONVENTION CENTER | HOUSTON, TEXAS

Community Care Management eFrontiers: Patient-Centered Coordination and Communications

An ACHE Qualified Education (Category II) Session – 1.0 Hour CEU

Dani Hackner, MD, MBA, FACP, FCCP – Vice President, Care Management, Memorial Hermann Health System

Paula Lenhart, RNC, MSN, CNS, ACM, FABC – Associate Vice President, Care Management, Memorial Hermann Health System

ACHE-SETC is An Independent Chapter of American College of Healthcare Executives for leaders who care®

MEMORIAL HERMANN

EDUCATIONAL FOUNDATION of the SouthEastTexasChapter
An Independent Affiliate of the ACHE - SouthEastTexasChapter

Learning Objectives

- Identify the 4 key components of a patient-centered community
- Discuss the 3 main results of community care management with the use of technology
- Identify potential patient populations based on risk levels
- The ultimate value of virtual visits to bridge the gap between time and distance in health care delivery

Introduction

We are increasingly facing a technologically engaged consumer of health care services and health-promotion information. Are we prepared to reach consumers, manage plan members, and support our patients with appropriate technology, human factor innovations, and clinically appropriate care plans? Are we prepared in times of 'feast' and 'famine', in health and illness, in acute transitions and community living? This presentation addresses our experience in community care management through the strong matrix of engaged people, appropriate technology, and clinically relevant care plans.

April 18, 2015. When natural events challenge our physical infrastructure, how do we respond?

MEMORIAL HERMANN

Mitigating Harm and Coordinating Response, April 18, 2016

- Technology: Almost every picture shown before was taken on a cellphone. Harris and other counties monitored bayous electronically and with video. Houstonians had access to the information on the move
- People: Houstonians stepped up to help
- Care: The outreach was focused where it was needed and timely

For Community-Based Care
4 Factors

MEMORIAL HERMANN

Acutely Ill, Planned Surgery, or Chronically Ill

- Patient
- Physician
- Nurse
- Technology

Health Plan

- Member
- Primary Care Provider
- Care manager
- Technology

Unaffiliated/ Uninsured

- Consumer
- Community benefit organization
- Coordinator
- Technology

Engagement and Care Management Technology is Expanding in Use

MEMORIAL HERMANN

We employ:

- Tablet-based devices
- Bluetooth connected related devices
- Cellphone based (hardwareless) approaches as well

- **4G Built-In** – integrated high-speed connectivity
- **Custom Care Plans** – any condition, with >50 built-in
- **Educational Videos** – any video, with hundreds built-in
- **Medication Reminders** – to the medication detail level
- **Health Tips** – rich media content of any kind
- **Text-to-Speech** – speaking all text content for simplicity
- **Remotely Managed** – remote control support and GPS tracking
- **Logistics Services** – integrated back-end logistics services

Our System, Our Program

MEMORIAL HERMANN

System Summary Profile

- Large not-for-profit health system with 14 hospitals, numerous specialty programs, 21,000 employees and 5,500 affiliated medical staff physicians - http://www.memorialhermann.org/virtualcarecheck/

Remote Care Program

- Launched September 2013 in their Post Acute Department (Home Health and Hospice)
- Now enterprise-wide, including physician community and commercial payer reimbursement

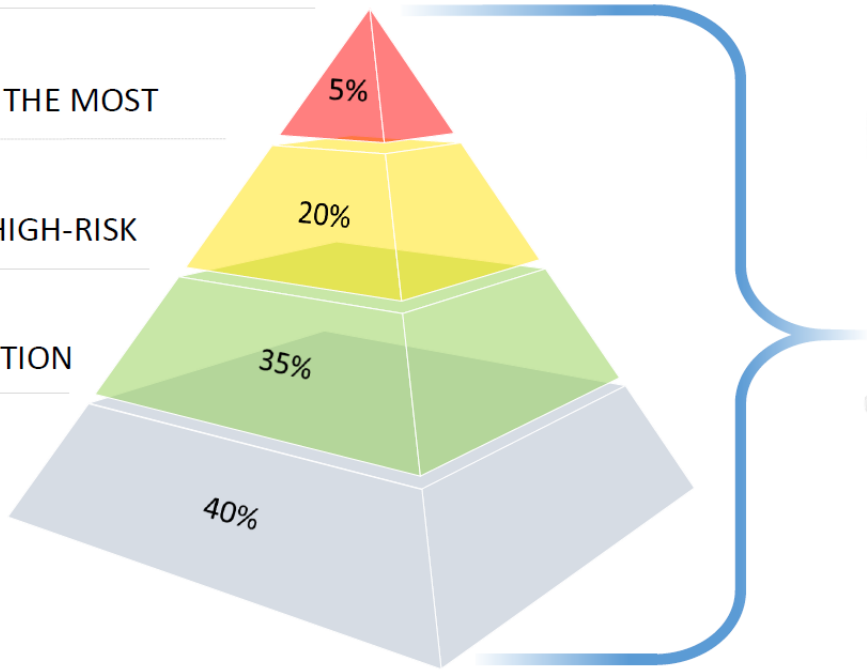
Clinical Care Plans Based on Patient Risk

HIGH-RISK
COMPLEX ILLNESSES, COSTING THE MOST

RISING-RISK
RISK FACTORS APPROACHING HIGH-RISK

AT-RISK
MANAGING A CHRONIC CONDITION

HEALTHY
MAINTAINING THEIR HEALTH



- Care plans are clinically relevant
- Over 50 care plans developed through vendor
- Individually customized
- Address risk level of member, consumer, patient

Care Plans are Key to the Process Sample (Heart Failure)

MEMORIAL HERMANN

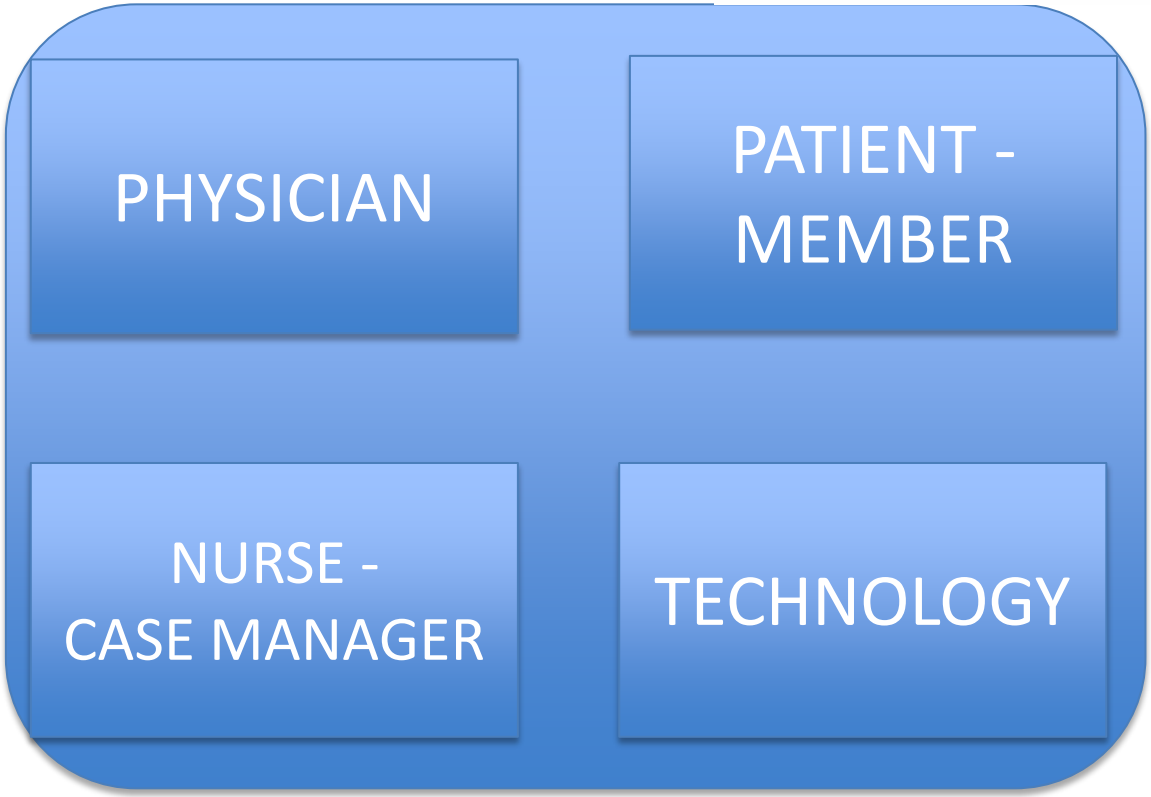
Congestive Heart Failure

Has there been a change in the medicines you are taking?	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Did you take all of your medicines yesterday?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Did you seek medical treatment or contact your physician within the past 24 hours?	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Did you feel severely dizzy or lightheaded yesterday?	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Did you notice an increase in swelling in your feet, ankles or hands yesterday?	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Did you wake up with shortness of breath last night?	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Did you sleep in a chair or propped up on extra pillows last night?	No	No	No	No	No	No	No	No	No	No	No	No	No	No
How much did your breathing affect your activities yesterday?	I did everythi	I did everythi	I did everythi	I did everythi	I did everythi	I did everythi	I did everythi	I did everythi	I did everythi	I did everythi	I did everythi	I did everythi	I did everythi	I did everythi
While at rest, how was your breathing yesterday?	No shortnes	No shortnes	No shortnes	No shortnes	No shortnes	No shortnes	No shortnes	No shortnes	No shortnes	No shortnes	No shortnes	No shortnes	No shortnes	No shortnes

Physicians are Central to the Process

Physicians receive:

- Alerts
- Weekly reports
- Direct access to monitoring technology (if wishing)
- Video link (if wishing)



Alerts Drive Communication with: Patients and Physicians

- Visual dashboard
- Care Plan Alerts Drive:
- Care Interventions
- Communication with patient s
- Communication with physicians

Patient Monitoring

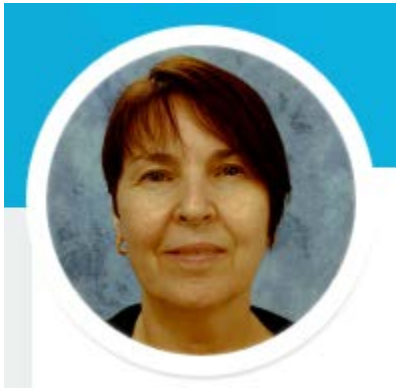
<< < 03/10/2015 Select Range 03/23/2015 > >>

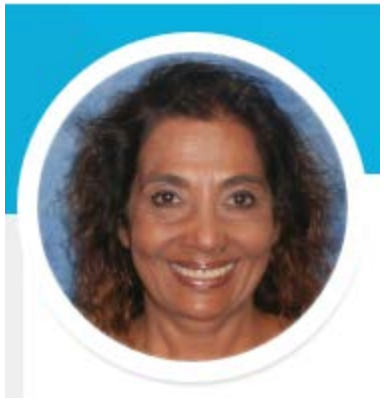
Protocols	3/10	3/11	3/12	3/13	3/14	3/15	3/16	3/17	3/18	3/19	3/20	3/21	3/22	3/23
Daily Health Score	81	81	91	72	91	96	91	91	91	72	91	95	100	91
Biometrics														
Blood Pressure	110/85	110/85	102/81	113/92	101/80	115/86	112/90	110/81	106/84	106/90	122/89	109/82	102/81	92/71
Blood Pressure						115/86						97/76		
Pulse	75	86	82	74	75	78	77	76	78	75	73	74	85	88
Pulse						76						75		
Pulse						88								
Oxygen	97	96	97	97	94	98	96	97	96	98	98	96	97	96
Oxygen						98						98		
Oxygen						97								
Weight	331.0	336.6	338.6	335.4	334.2	336.2	334.6	332.8	333.6	337.8	338.6	337.4	337.0	336.8

The Key Factor is People

MEMORIAL HERMANN

- We do not outsource outreach, clinical care or engagement
- The clinical case managers and nurses keep their patients/members close





Our Experience

MEMORIAL HERMANN

Pilot program started in Home Care division

- Decreased hospital readmissions for heart failure patients
- Funded development of System level department (Virtual Care Check)
- 2 RN FTEs

Care Categories

- Home care (operating)
- Primary care physician offices targeting Medicare Shared Savings Program members – (pilot)
- Memorial Hermann Health Solutions – (pilot)
- Hospital Care Transitions – (pilot)
- Post-transplant, solid organ (operating)
- Smartphone, kitless – early phase

Program Adherence / Satisfaction

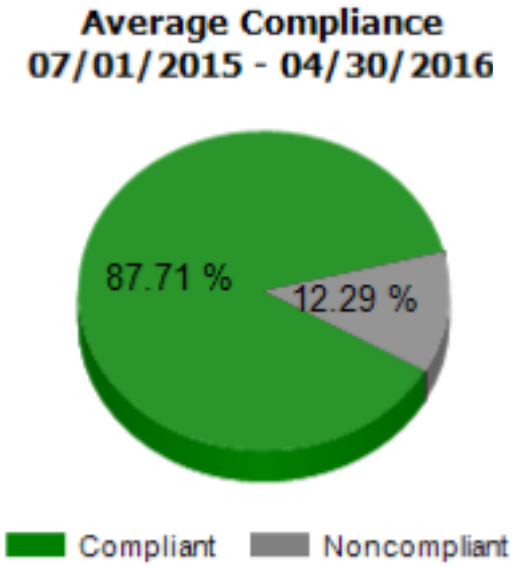
Patients adhere to monitoring with surprising faithfulness

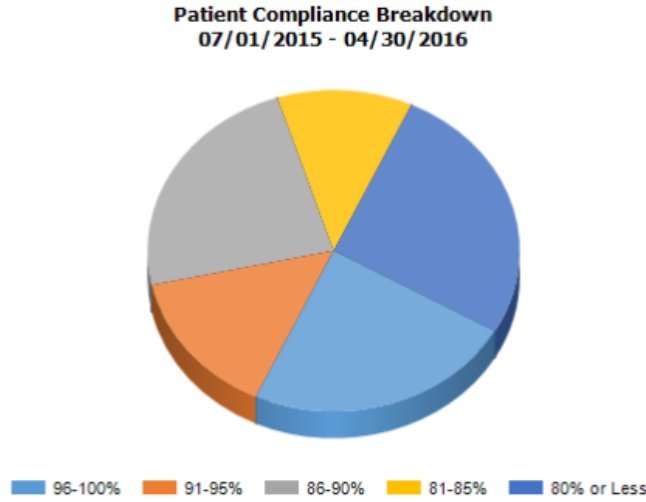
Lack of check-in is a warning sign

Team avoids blame or criticism

Aim is to understand why a patient did not check in?

Why's usually reveal opportunities for health promotion, intervention





N = 187

Program Outcomes

MEMORIAL HERMANN

- Result 1: Readmissions

  Readmissions reduced by over 50%, from >17% to <5%

- Result 2: Staffing

  Reduced nurse visits by 3.6 per episode

  Home Health LOS reduced from 82 to 48 days

- Result 3: Costs

  Cost savings of over $8,500 per patient (n=199)

- Result 4: Patient Satisfaction (Adherence)

  Patient satisfaction exceeding 90%, leading to a new model of direct-to-consumer care

Cost Avoidance

230 Episodes in FY15

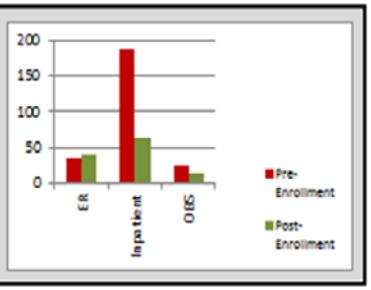
- Reduced utilization of hospital based services (emergency center visits and hospitalizations) by ***52.4%***
- Cost avoidance - ***$1.9M***
- Average change in cost per completed patient (pre vs. post) - ***$8.3K***

Virtual Care Check (Cost Avoidance)

Program Completions (Home Health)

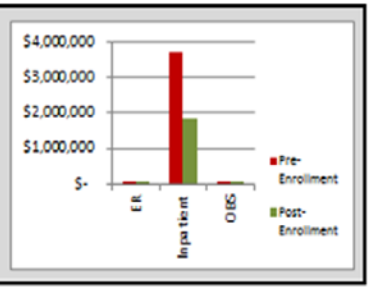
Visits FY2015

	Pre-Enrollment	Post-Enrollment	Change (#)	Change (%)
ER	35	40	5	14.3%
Inpatient	188	64	(124)	-66.0%
OBS	25	14	(11)	-44.0%
TOTAL	248	118	-130	-52.4%



Cost

	Pre-Enrollment	Post-Enrollment	Change ($)	Change (%)
ER	$ 17,683	$ 21,986	4,303	24.3%
Inpatient	$ 3,725,885	$ 1,844,758	(1,881,127)	-50.5%
OBS	$ 80,784	$ 41,115	(39,669)	-49.1%
TOTAL	$ 3,824,353	$ 1,907,859	(1,916,494)	-50.1%



# Completed Patients:	230
# Unique Patients:	221
Average cost per completed patient (Pre-Enrollment):	$ 16,628
Average cost per completed patient (Post-Enrollment):	$ 8,295
Average change in cost per completed patient Favorable/(Unfavorable):	$ 8,333

* Post-enrollment date range = visits/costs while enrolled
* Pre-enrollment date range = visits/costs prior to enrollment (equivalent to days enrolled)

Cost Avoidance

90 Episodes in Early FY16

- Reduced utilization of hospital based services (emergency center visits and hospitalizations) by **63.9%**
- Cost avoidance - **$1.2M**
- Average change in cost per completed patient (pre vs. post) - **$14K**

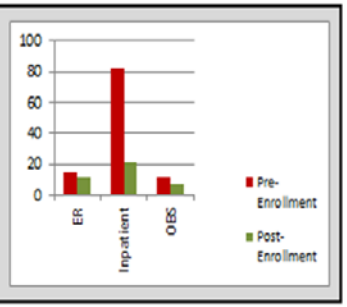
MEMORIAL HERMANN

Virtual Care Check (Cost Avoidance)

Program Completions (Home Health)

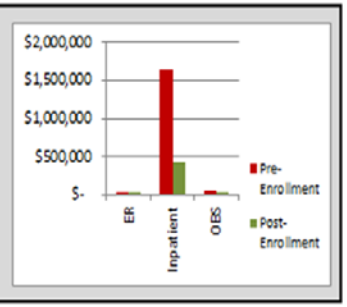
Visits (FY2016)

	Pre-Enrollment	Post-Enrollment	Change (#)	Change (%)
ER	15	11	(4)	-26.7%
Inpatient	82	21	(61)	-74.4%
OBS	11	7	(4)	-36.4%
TOTAL	**108**	**39**	**-69**	**-63.9%**



Cost

	Pre-Enrollment	Post-Enrollment	Change ($)	Change (%)
ER	$ 10,112	$ 6,491	(3,621)	-35.8%
Inpatient	$ 1,654,588	$ 419,129	(1,235,459)	-74.7%
OBS	$ 53,222	$ 22,257	(30,965)	-58.2%
TOTAL	**$ 1,717,922**	**$ 447,877**	**(1,270,045)**	**-73.9%**



# Completed Patients:	90
# Unique Patients:	88
Average cost per completed patient (Pre-Enrollment):	$ 19,088
Average cost per completed patient (Post-Enrollment):	$ 4,976
Average change in cost per completed patient Favorable/(Unfavorable):	$ 14,112

* Post-enrollment date range = visits/costs while enrolled
* Pre-enrollment date range = visits/costs prior to enrollment (equivalent to days enrolled)

Summary

There are 4 key components to a successful community care management program in the new millennium

- People: physicians and care coordinators
- Patient engagement
- Effective clinical care plans with alerts based on risk
- Technology enabling care coordination and engagement

There are 4 observed outcomes of community care management with the use of technology

- Reduced readmissions
- Reduced total cost
- Improved patient adherence/satisfaction
- Possibly also rationalized staffing

Mitigating Harm and Coordinating Response, April 18, 2016

We reached out to our 700 telephonically managed and 40 technology managed community care patients.

- All but one technology patient checked in electronically that same day
- Telephonically managed patients took days to reach
- We identified 2 patients with health / safety issues, resolved within 24 hours

Biography

Dani Hackner MD MBA is Vice President or Care Management for the 14 hospital Memorial Hermann Health System. Dr. Hackner's areas of responsibility includes system-wide physician advising services, inpatient case management, technology on transitions of care, diabetes disease management, telephonic care management, and concurrent utilization review. He maintains current board certifications in Pulmonary Disease, Critical Care and Internal Medicine and licensed in Texas and California. Dr. Hackner attended USC-Marshall School of Business, Stanford University Medical School and the University of California Berkeley. He is an Associate Professor of Medicine at UCLA. He is also a certified Healthcare Simulation Educator.

Dr. Hackner has served as the Co-Chief Editor of the Compass PA Online Physician Advising training manual (ACMA), editor of Collaborative Case Management, and investigator in a PCORI study on advocacy in healthcare. Dr. Hackner has received awards for innovation, collaboration and as a friend of nursing. His bibliography also includes work on hospitalist performance, guideline adherence, and efficiency of care, and he holds two patents in case finding methodologies and safety technology.

Biography

Paula insert your photo here

Paula Lenhart is the Associate Vice President of Care Management for Memorial Hermann Health System

Ms. Lenhart is a registered nurse with nearly 30 years of health care experience. Paula's areas of responsibility include education, oversight of clinical quality improvement and for care management program development, including ambulatory care management programs focused on population health. She serves as a coach and mentor to case management directors and case managers in skill development, and acts as a resource to case management directors. She collaboratively developed a LCSW supervision program structure to support the continued social worker professional development. She is also responsible for attaining optimal targeted clinical and financial outcomes through care management processes.

Ms. Lenhart is an active member of American Case Management Association and one of the authors of COMPASS Online Case Management training manual. She serves national committees and held chapter board positions such as secretary, president-elect and president.

She earned an Associate Degree in Nursing-Science from St. Mary's School of Nursing in Minneapolis, Minnesota; a Baccalaureate of Science, major in Nursing from University of Minnesota and a Master of Science Nursing , neonatal clinical nurse specialist role, from the University of Texas Health Science Center at Houston, School of Nursing, in Houston Texas.

MEMORIAL HERMANN

Questions?

On Behalf of

Produced in collaboration with:

TMC TEXAS MEDICAL CENTER

and

ACHE - SouthEastTexasChapter

An Independent Chapter of the American College of Healthcare Executives

TWO VITAL INDUSTRY EVENTS CO-LOCATED MAY 18-20, 2016 | GEORGE R. BROWN CONVENTION CENTER | HOUSTON, TEXAS

Thank you for attending this session