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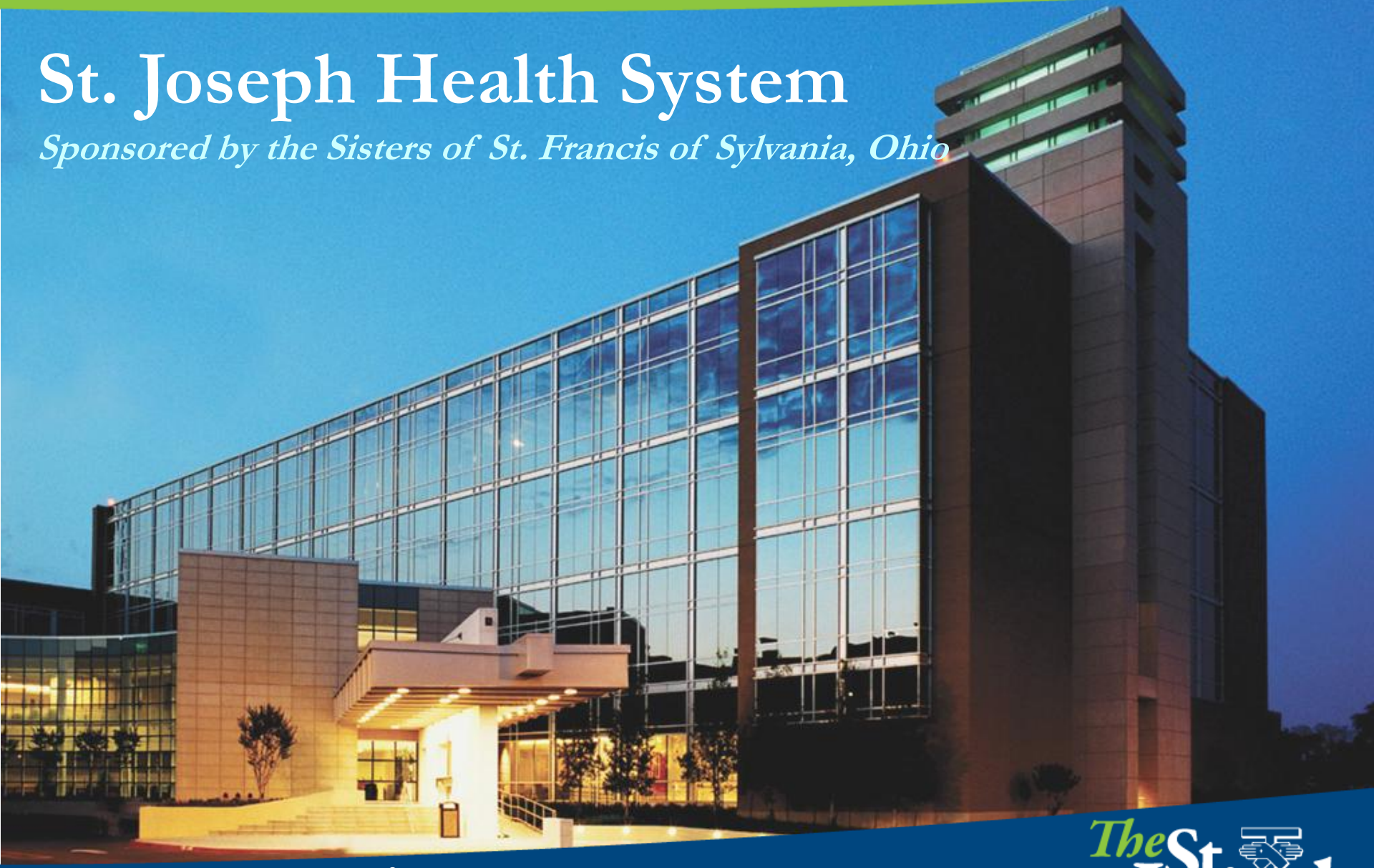
A Strategy to Meet the Heart Failure Needs of the Community

Mary Meyers-Marquardt, DNP, APRN-BC, ANP

St. Joseph Health System

Sponsored by the Sisters of St. Francis of Sylvania, Ohio



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REVERENCE :: SERVICE :: STEWARDSHIP

The St. Joseph Difference

Acknowledgements

Expert Advisors

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Problem

Heart failure (HF) epidemic illustrated by number of Americans with disease:

5.5 million with annual increase **700,000**

As Medicare numbers increase so do hospital admissions for decompensated HF

HF admissions translate to increased mortality:

30% in 1st year and 60% at 5th.

(Gotsman, 2011, Whellan, 2007, Van Vonno, 2005)

Problem

2005-2010 Texas HF Statistics

Number of HF Hospitalizations: **362,000***

Average Hospital Charge: **$30,000***

Total HF Hospital Charges: **$11,000,000,000***

2007 Bryan/Brazos HF Hospital Charges

$15,000,000*

***numbers rounded (Texas Department of State Health Services http://www.dshs.state.tx.us/ph/state.shtm)**

Problem

St. Joseph Regional Health Center (SJRHC)

2011 HF admissions: **2570**

78% of 2011 HF admissions lived in rural areas

(**57% in 2012**)

Avg. LOS: **3.4 days** Avg. reimbursement: **$7000.00**

2011 30 day readmission rate: **24.7%** 2012: **21%**

No outpatient HF program in 90 mile radius

Problem

2012 CMS 30 day HF readmissions penalty:

1%

Will increase in 2014:

2%

Partial Solution

SJRHC Inpatient Heart Failure Unit

Developed and implemented August, 2012

Unit reduced HF readmission rate 2012-2013

Effectiveness Studies: Outpatient HF Management Programs

Meet the following end points

- Increased quality-adjusted life years (QALY)
- Decreased resource consumption
- Improved functional capacity
- Increased compliance
- Prolonged survival

Limited Financial Incentives

(Miller, 2009, Eapen, 2011, Gotsman, 2011)

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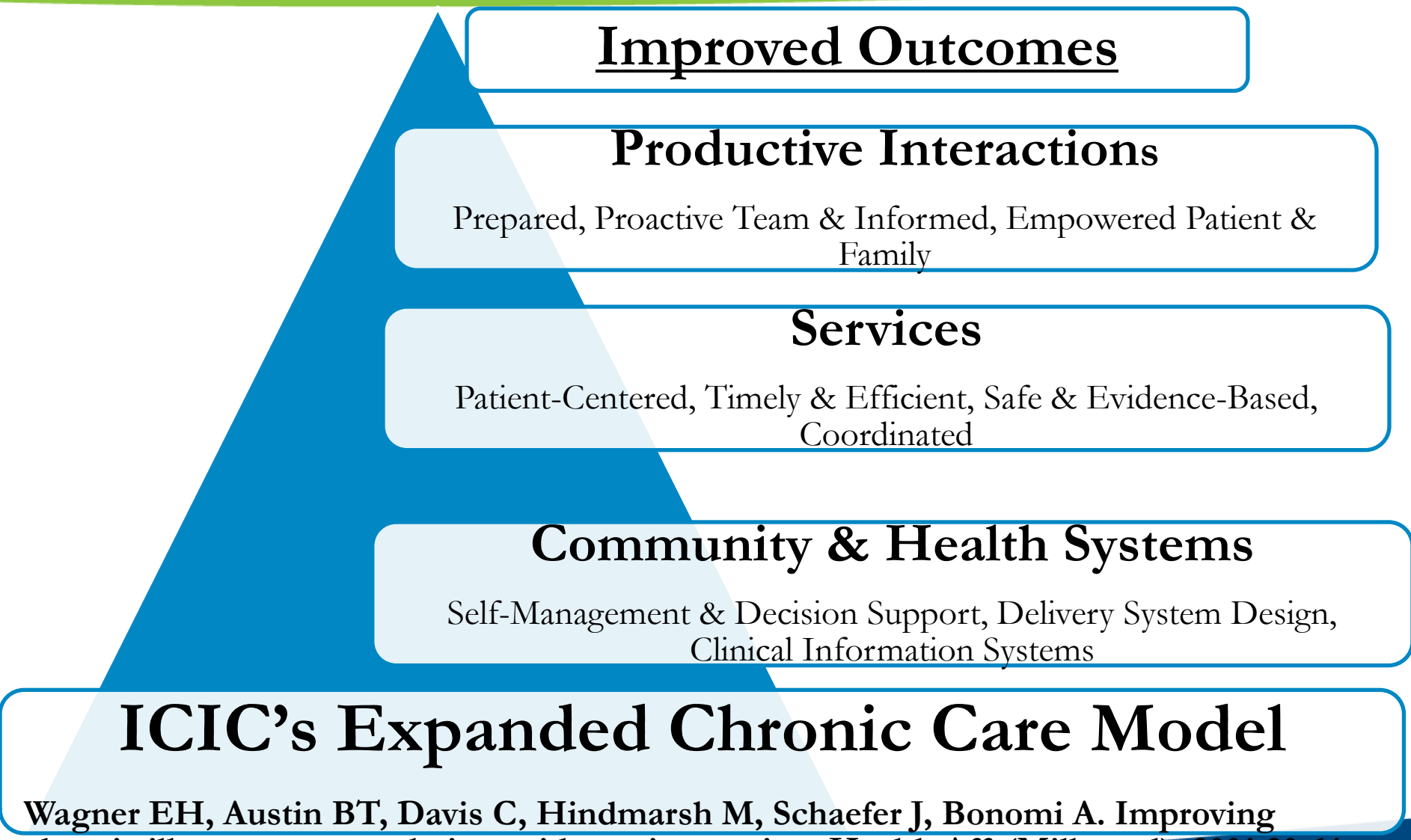
"Rural **E**xpansion to **A**ddress **C**hronic **H**eart failure"

Planned, innovative rural heart failure (HF) strategy

Developed and proposed by:

Mary Meyers-Marquardt, DNP, APRN-BC



ICIC's Expanded Chronic Care Model

Wagner EH, Austin BT, Davis C, Hindmarsh M, Schaefer J, Bonomi A. Improving chronic illness care: translating evidence into action. Health Aff (Millwood). 2001;20:64-78

NP Directed Program Development: Necessary Components

Community Needs Assessment

Identification of Stakeholders & Program Champion

Develop Mission & Goals; Choose Service Model; Identify Available Resources

Negotiate with Interdisciplinary Team/Healthcare Members

Development of Pro Forma & Cost Benefit Analysis

Community Needs Assessment

A Systematic process:

to acquire an accurate, thorough picture of the strengths and weaknesses of a community

Can be used to:

collect and examine information about issues

utilize that data to determine priority goals

develop a plan

allocate funds and resources

Steps in Conducting Needs Assessments

1. Clarify the purpose of the needs assessment
2. Identify the population
3. Determine how you will conduct the needs assessment
4. Design a survey instrument or adopt one that already exists
5. Collect Data
6. Analyze Data
7. Use the results

Identification of Stakeholders

1. Identify Your Stakeholders
2. Prioritize Your Stakeholders
3. Understand Your Key Stakeholders

   http://www.mindtools.com

Project Champion

A Project Champion:

Has the authority and commitment to ensure the project's success

Leads and directs the overall project environment

Assures the organization understands the project's value

Is ready to receive and implement the project's deliverables

Negotiation with Interdisciplinary Team Members

Identify Team Members:

- Healthcare Team
- Project Champion
- Stakeholders
- Project Experts

Develop Relationships

Identify Project Needs from Members & the Team

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A Multidisciplinary HF Team

Nurse Practitioner

Nurses

Cardiologists

Pharmacist

Social Worker

Dietitian

Cardiac Rehabilitation Therapists

Home Health & Hospice Agencies

Stakeholders

Project Champion

Project Experts

REACH© Development

Develop Mission, & Goals

Choose Service Model

- Scope of Services
- Model of Care

Identify Available Resources

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Mission

Provide excellent Heart Failure care to those diagnosed with the disease throughout the Brazos Valley

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Patient Outcome Goals

50% of participants will experience:

- Amelioration of HF symptoms
- Enhanced quality of life
- Improved adherence to medical therapy

25% of participants will experience:

- Improved functional health status

5% reduction in HF hospital readmissions

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Organizational Outcomes Goals

Increase quality & access to care

- Right Care at the Right Time by the Right Professional

Decrease costs

- Reduce HF readmissions & lessen ER visits
- Avoid or limit CMS readmission penalties
- Decrease RAC denials

Positive Pro Forma

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Implements evidence-based HF guidelines

Develops patient-specific plan of care

Supports patients, families, & significant others

- Incorporates regular, planned in-person clinic visits with scheduled telephone contact
- Promotes self improvement & self management
- Reinforces HF education at every visit
- HF Team available via phone or email

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Evaluates needs of each patient & intervenes to

- Coordinate transportation
- Provide walk in times for emergent care
- Assist in obtaining medical therapies such as scales, & pharmaceuticals

Address Palliation & End of Life issues early

Evaluate program interventions

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Provide rural patients care

"Closer To Home"

Compliments SJRHC Inpatient

Heart Failure Unit

Allows for smooth transition from

hospital to home

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Patient Criteria

- Diagnosed with Heart Failure (Echo or Cath)

  HFpEF or **HFrEF**
- ACC/AHA Stage C or D
- NYHA Functional Class II or higher

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Referral Sources:

Hospital Heart Failure discharges

Cardiology and PCP provider referrals

Self-referrals

Stakeholder:
Nurse Practitioner of REACH©

NP Project developer with extensive inpt & outpt cardiac experience will:

- coordinate, lead, and manage HF care delivery in collaboration with cardiologists
- provide care for approx. 12 patients/clinic day
- initially function as program manager

St. Joseph's Regional Health Center (SJRHC)

310 bed regional hospital

Level II Trauma Center

Brazos Valley's only regional hospital

St. Joseph Health System (SJHS)

- 7 rural outpatient clinics
- 4 rural hospitals, 2 critical access

St. Joseph's Regional Health Center (SJRHC)

Mission

"Provide excellent health care and promote wellness throughout the Brazos Valley"

Community of the Brazos Valley

7 counties

Brazos, Burleson, Grimes, Leon, Madison, Robertson, and Washington

Approximate population

310,000*

Area

5,109 square miles

Central Texas Heart Center (CTHC)

5 cardiologists practicing at SJRHC

Committed to refer patients

Chief of CV Services

Champions of REACH Program

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Advantages to SJHS & Providers

Allow for better efficiencies among providers

Improve care coordination & transitions

Provide overall higher quality of HF care

Has "First to Market" advantage

Provide the Right Care at the Right Time by the Right Professional

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5 Year Pro Forma

Developed Best/Worst/Most likely Scenarios

Assessments based on **"Most likely"** Scenario

Initial incremental losses over the 2.5 years.

Positive Net Operating Income (NOI)

Year 4 (2016) **$157,000***

Year 5 (2017) **$370,000***

Internal Rate of Return **(IRR) 22%**

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5 Year Pro Forma

REACH© Clinic Volumes						
Scenario	Year 1	Year 2	Year 3	Year 4	Year 5	Cumulative
Most Likely	996	2,880	5,760	7,500	9,600	26,736
Worst Case	415	1,200	2,400	2,400	2,400	8,815
Best Case	1,660	4,800	9,600	9,600	9,600	35,260

REACH©
5 Year Pro Forma

REACH© Clinic Net Operating Income (Loss)						
Scenario	Year 1	Year 2	Year 3	Year 4	Year 5	Cumulative
Most Likely	(77,352)	(79,797)	(19,046)	156,572	370,138	350,515
Worst Case	(141,521)	(265,346)	(390,144)	(406,703)	(425,073)	(1,628,788)
Best Case	(4,016)	132,260	405,067	388,508	370,138	1,291,957

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5 Year Pro Forma

Fiscal Year	2013*	2014	2015**	2016	2017
Total Revenue	$113,988	$329,604	$659,209	$858,345	$1,098,682
Total Expenses	$191,340	$409,401	$678,255	$701,773	$728,544
Net Income (loss)	($77,352)	($79,797)	($19,046)	$156,572	$370,138

*Represents 6 months only
**2nd NP & RN added
FY 2016 reflects 3% increase on all line items

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5 Year Pro Forma

Cash Uses	2013	2014	2015	2016	2017
Equipment Costs	$56,630		$6050		
Working Capital Requirements	$39,345	$43,909	$87,139	$83,152	$86,027
Total Cash Used	$95,975	$43,909	$87,139	$83,152	$86,027
Per Period Cash Flow	($163,971)	($75,005)	($52,055)	$164,359	$377,852
Cumulative Cash Flow	($163,971)	($238,977)	($291,031)	($126,673)	$251,179

Areas of Revenue Generation Not Accounted for in Pro Forma

- Nutritional therapy
- Lab procedures
- Radiology & other procedures: Echos, CXR, EKGs
- Cardiac Rehab
- Oxygen therapy
- Inpatient NP consults
- Nursing interventions

REACH© Service Model

NP Led Clinic with Cardiology Collaboration

NP and two nurses will open the program

Scope of Services:

- NP to see avg of 12 patients/clinic day
- Provide IV diuretics & inotropes
- EKGs, POC testing

REACH© Service Model

Nurses will

- perform HF nurse assessments & provide interventions.
- make "check in" patient calls, act as coordinator of medication assistance & track outcomes

AHA "Get with the Guidelines: HF" & ACC/IHI "Hospital 2 Home Quality Improvement Initiative"

American Heart Association. (2013, 03 26). *Get with the Guidelines Heart Failure* . Retrieved from American Heart Failure: http://www.heart.org/HEARTORG/HealthcareResearch/GetWithTheGuidelinesHFStrokeResus/Get-With-The-Guidelines-Heart-Failure_UCM_306087_SubHomePage.jsp

American College of Cardiology and Institute Health Initiative. (2013, 03 26). *Hospital to Home*. Retrieved from http://www.h2hquality.org

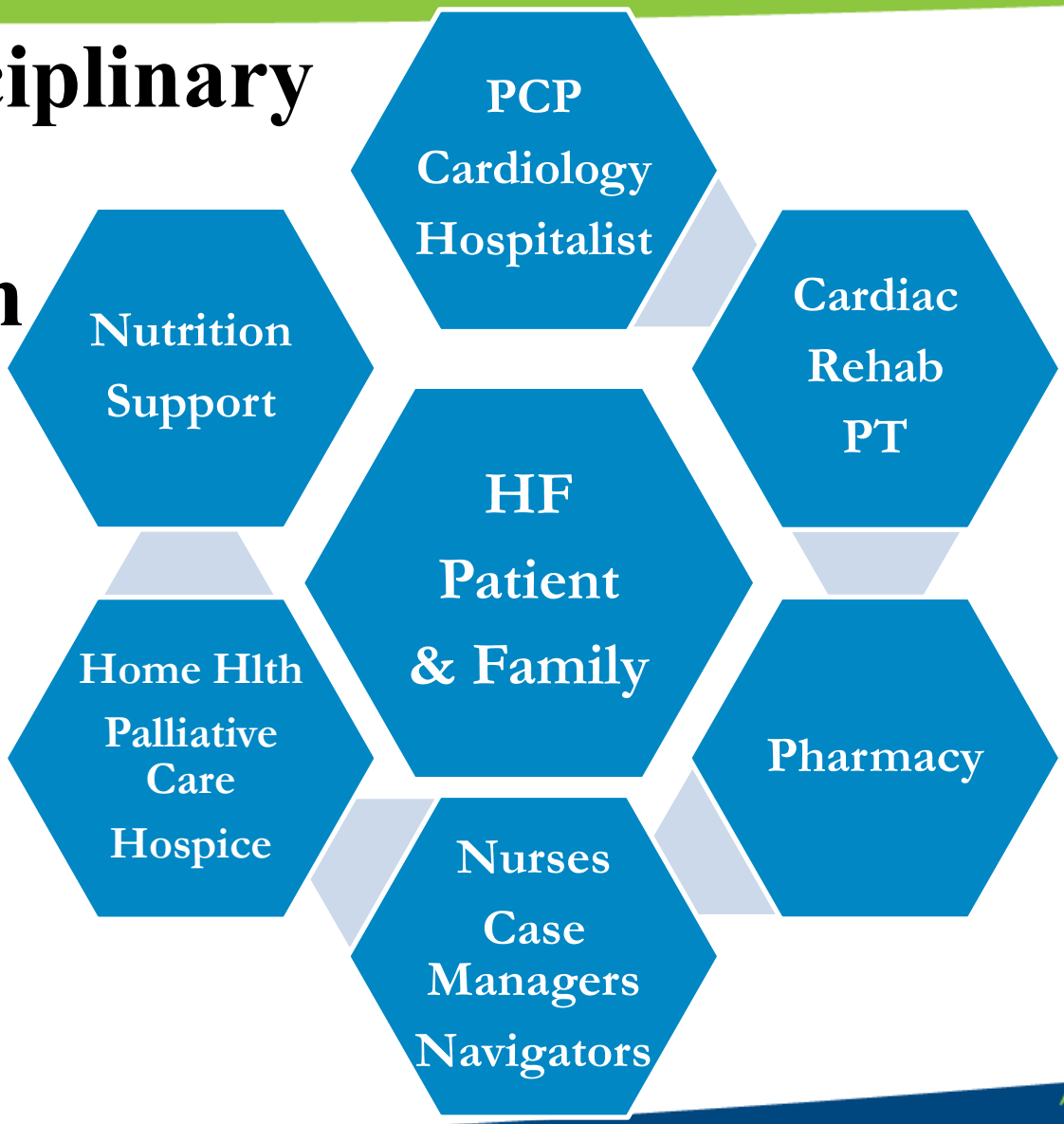
REACH© Service Model

NP & nurse will see patients in SJRHC satellite clinics

Initial target areas: Those with highest HF readmissions

2nd NP & nurse will allow for further satellite clinic expansion

Multidisciplinary Team Approach



REACH© Specifications

SJRHC volunteers initially enlisted to assist as receptionists

MA/receptionist hire projected first or second quarter 2014

Second NP& RN projected January 2015

Addition will allow for expansion to rural sites, home, & assisted living facility visits

Dependent on growth of Program

REACH©: Beneficial Strategies

Provider Based Clinic (PBC): allows for additional revenue/visit

Transitional Care Management for post-hospital discharged patients

Majority of patients Medicare eligible: **70%**

NP reimbursement: **85%** Medicare physician rate

Average Self-Pay: **5%**

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Beneficial Strategies

Provide care to medically underserved & unfunded/underfunded thru FQHC partnership

Capitalize on SJRHC volunteers to lower initial costs

Increase SJHS Visibility

Provide HF education in Brazos Valley

Act as educational site for healthcare students

Conduct & disseminate research and QI

Expand Ancillary Services to rural HF patients

Compliment SJRHC Inpt Heart Failure Unit

Apply & obtain grants to aid operational costs

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Thank You!