Defy Diabetes! A unique CDE partnership with faith community nurses and primary care nurse champions to reduce diabetes risk factors and improve diabetes management within the chronic care model.

Presented by:
Nancy Brennan-Jordan, FNP, CDE
Diane Deeley, RN, CDE
Debra Frenn, MSN, FACHE
Objectives

1. Describe the role of the faith community nurses and how they partner within the chronic care model.

2. Describe the role of the Defy Diabetes nurse champions and how they partner with the diabetes educator.

3. Discuss quarterly results of a dynamic chart review process and it’s impact on diabetes management in primary care.
Introduction/History

Seton Health is an integrated Catholic health care system anchored by St. Mary's Hospital in Troy, NY and provides services to residents of Rensselaer, Southern Saratoga & Northern Albany counties.

- 155 years
- Over 20 locations
- Primary Care, OB/GYN, Specialty Services, Long-Term Care, Imaging, Home Care
- A member of Ascension Health
- In December 2007 Seton Health received a two-year grant from the New York State Health Foundation (NYSHF).
Defy Diabetes!
Goals & Objectives

Comprehensive Program for Diabetes Detection & Management which will:

- Reach 1000 people through Seton’s Faith Community Nurse Program
- Engage 25 primary care practice teams empowering nurse champions
- Develop web based diabetes data registry to track progress and outcomes
Expected Outcomes

- Reduction in diabetes risk factors in those with diabetes and pre-diabetes
- Strengthen ADA Guidelines in primary care practices
Logic Model for Defy Diabetes!

SITUATION
Diabetes Epidemic in the Capital Region

PRIORITIES
Mission:
Seton Health’s Mission
...we commit ourselves to serving all persons with special attention to those who are poor and vulnerable. Our Catholic health ministry is dedicated to spiritually-centered, holistic care, which sustains and improves the health of individuals and communities.

Seton Health’s Call to Action
- Health Care that Works
- Health Care that is Safe
- Health Care that leaves no one behind

Mission of NYS Health Foundation
- Increasing access to high-quality health care
- Strengthening public and community health by educating New Yorkers about expanding health insurance coverage for those who can not afford coverage or for whom coverage is inadequate.
- Empowering communities to address health care issues

INPUTS
Funding from the NYSHF
Seton Health:
- Faith Community Parish Nurse Program
- Seton Health’s ADA accredited Out Patient Diabetes Ed Program
- Larger primary care network: physician champion, nurse champions
- IT Department

OUTPUTS (ACTIVITIES)
- Health Fairs
- Pulpit talks
- Healthy Living Class Curriculum development
- Healthy Living Classes held in English and Spanish
- Training program FCPN’s and 2 HOS community health promoters
- Educational In-services to primary care network
- Dynamic NCQA Chart Reviews
- Training Modules for Nurse Champions
- Develop Diabetes Data Registry
- Implement Harbor software for out pt tracking
- Develop Share Point
- Focus Groups

OUTCOMES
Short Term
Collect and Monitor the following measurable outcomes:
Faith Community Participants:
- HES
- Self Care
- Focus group results
- Wt
- Height
- BP
- Waist circumference
- IF DM, HgA1c, BP, LDL

Primary Care Network
Chart Reviews (NCQA Guidelines)
- A1C
- Blood Pressure
- LDL
- Foot Exam
- Eye Exam
- Smoking Status
- Nephropathy Assessment
- Referrals to Diabetes Education

Medium:
A decrease is risk factors for persons living with Diabetes and at risk for diabetes
- Improved diabetes management of persons living with diabetes in the Seton Health network
- Increased compliance with the ADA Guidelines in primary care
- NCQA Recognition Awards for Seton Health’s primary care providers
- The primary care network and Ascension Health can access updated diabetes information through Share Point

Long Term:
- Improve public health
- Replicate the defy diabetes nurse champion/FCPN model in primary care practices throughout NYS and Ascension Health
- Improve the primary care system
- Increase Community resources to reinforce the adoption of prevention and management activities
- Reduce medical costs

REACH
Reach 1,000 people through Seton’s Faith Community Parish Nurse Program
- Primary Care Network
- Pt with diabetes and at risk for diabetes
The Situation: The New York Diabetes Epidemic

- More than 1.7 million New Yorkers have diabetes
  - 1.1 million have been diagnosed with diabetes. [1]
  - 733,000 have diabetes but don’t know it. [1]
- That’s more people than the total population for Manhattan or all of Western New York.
- An estimated 3.7 million New York adults are estimated to have pre-diabetes. [2]

Source [1]: New York State Department of Health (calculated from BRFSS 2007)
Source [2]: New York State Department of Health
Disparities in Diabetes

- Diabetes disproportionately affects Black, Latino, and low-income New Yorkers. [1]

- Diabetes is the third leading cause of death among Blacks and the fifth among Hispanics. [1]

- Half of all Asians in New York City have either diabetes or pre-diabetes. [2]

Source [2]: The New York City Health and Nutrition Examination Survey. New York City Department of Health and Mental Hygiene, 2004
Disparities Example

- White patients were significantly more likely than Black patients to achieve control of three critical health measures for diabetes patients: hemoglobin A1c, LDL, cholesterol, and blood pressure. [1]

<table>
<thead>
<tr>
<th>Measure</th>
<th>White Patient</th>
<th>Black Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemoglobin A1c &lt;7%</td>
<td>47%</td>
<td>39%</td>
</tr>
<tr>
<td>LDL Cholesterol &lt;100 mg/dl</td>
<td>57%</td>
<td>45%</td>
</tr>
<tr>
<td>Blood Pressure &lt;130/80 mmHg</td>
<td>30%</td>
<td>24%</td>
</tr>
</tbody>
</table>
Economics of Diabetes

- Estimated total cost of diabetes in New York State in 2006 was more than $12 billion. \[1\]
  - $8.676 billion: excess medical expenses
  - $4.188 billion: value lost in productivity
- Health care cost for New Yorkers living with diabetes are more than five times as much as New Yorkers without diabetes—$13,000 vs. $2,500. \[2\]

Source [2]: Center for Disease Control Website, DDT
Priorities/ Mission

The NYSHF is a private foundation formed in 2006 with a three-part mission:

- increasing access to high-quality health care
- strengthening public and community health by educating New Yorkers about expanding health insurance coverage for those who cannot afford coverage or for whom coverage is inadequate.
- Empowering communities to address health care issues

Seton Health’s Mission

...we commit ourselves to serving all persons with special attention to those who are poor and vulnerable. Our Catholic health ministry is dedicated to spiritually-centered, holistic care, which sustains and improves the health of individuals and communities.

- Health Care that works
- Health Care that is safe
- Health Care that leaves no one behind
Inputs/Partners

- The New York State Health Foundation (NYSHealth) has committed $35 million over five years toward a statewide campaign to reverse the epidemic of diabetes in New York.
- Faith Community Nurse Program
- ADA Accredited Out Pt Diabetes Education Program
- Hispanic Outreach Services
- Sage College of Nursing
- SUNY School of Social Welfare
- Cornell Cooperative Extension
What is a Faith Community Nurse?

The Seton Health Faith Community Nurse Program is an interfaith Ministry designed to promote health and wellness within local faith communities.

A faith community nurse is a registered nurse who serves the faith community as a health educator, personal health counselor, advocate, referral agent and volunteer coordinator.
Outputs: Activities

#1 Community Intervention

- Healthy Living Classes (English and Spanish)
- Pulpit Talks
- Health Fairs
Outputs: Activities

#2 Primary Care Interventions

- Defy Diabetes chart reviews; tool is reflective of NCQA Recognition criteria
- The nurse champion serves as the “change agent”
- Provide feedback, results of chart reviews and education to staff for continued improvements of diabetes management
What Is A Defy Diabetes Nurse Champion?

A Defy Diabetes Nurse Champion Is:

- Passionate about diabetes
- Someone who strives for excellence in the management of their patients living with diabetes
- Someone who develops and implements strategies to improve outcomes
Defy Diabetes Nurse Champions

you can
YES & DEFEY
DIABETES!

SETON HEALTH
Defy Diabetes Outcomes

Healthy Living Classes

Faith Community Nurses

Participants

Empowerment Scale Survey

Diabetes Self Care Activities Measure

Focus Groups

Primary Care Providers

Nurse Champions

Chart Reviews (NCQA Guidelines)

- A1C
- Blood Pressure
- LDL
- Foot Exam
- Eye Exam
- Smoking Status
- Nephropathy Assessment
- Referrals to Diabetes Education

- BMI
- Blood Pressure
- Height
- Weight
- Waist Circumference
- (If DM, HgA1c, LDL, BP)
Defy Diabetes - PRIMARY CARE PROVIDERS
Chart Review Results

1st Quarter Review (July-October 2008)
- 7 Sites
- 28 Providers
- 275 Charts Reviewed

2nd Quarter Review (October - December 2008)
- 7 Sites
- 32 Providers
- 355 Charts Reviewed

3rd Quarter Review (January - March 2009)
- 7 Sites
- 33 Providers
- 322 Charts Reviewed
## Defy Diabetes - NCQA Recognition Program

**Scored Measures**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Threshold % Pts/ Sample</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>HbA1c Control ≤ 7.0 %</td>
<td>40 %</td>
<td>10.0</td>
</tr>
<tr>
<td>HbA1c Control &gt; 9.0 %</td>
<td>≤ 15 %</td>
<td>15.0</td>
</tr>
<tr>
<td>BP Control &gt; 140/90 mm Hg*</td>
<td>≤ 35 %</td>
<td>15.0</td>
</tr>
<tr>
<td>BP Control &lt; 130/80 mm Hg</td>
<td>25 %</td>
<td>10.0</td>
</tr>
<tr>
<td>LDL Control &gt; 130 mg/dl</td>
<td>≤ 37 %</td>
<td>10.0</td>
</tr>
<tr>
<td>LDL Control &lt; 100 mg/dl*</td>
<td>36 %</td>
<td>10.0</td>
</tr>
<tr>
<td>Eye Examination</td>
<td>60 %</td>
<td>10.0</td>
</tr>
<tr>
<td>Foot Examination</td>
<td>80 %</td>
<td>5.0</td>
</tr>
<tr>
<td>Nephropathy Assessment</td>
<td>80 %</td>
<td>5.0</td>
</tr>
<tr>
<td>Smoking Status &amp; Cessation Advice or Rx</td>
<td>80 %</td>
<td>10.0</td>
</tr>
</tbody>
</table>

**Total Points**

- 100.0

**Points to Achieve Recognition**

- 75.0

*Denotes poor control*
## Chart Assessment Tool

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>DEFY DIABETES DATA COLLECTION TOOL</td>
<td>CHARTS</td>
<td>Enter 1 for Yes and 0 for No</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Provider/Location</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Status:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>HbA1c done within 6 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>HbA1c Control HbA1c &lt; 7.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>HbA1c Control HbA1c &gt; 9.0%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Blood Pressure BP &lt; 130/80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>BP &gt; 140/90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>LDL done within 1 year</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Cholesterol Control LDL &lt; 100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Cholesterol Control LDL &gt; 130</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Eye Exam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Foot Exam</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Nephropathy Assessment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Smoking Status and Cessation Advice or Treatment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Sample P12 Results

<table>
<thead>
<tr>
<th>SETON HEALTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFY DIABETES</td>
</tr>
<tr>
<td>P-12 Percent of Success</td>
</tr>
<tr>
<td>-------------------------</td>
</tr>
<tr>
<td>HbA1C done within 6 months</td>
</tr>
<tr>
<td>HbA1C Control HbA1c &lt; 7.0%</td>
</tr>
<tr>
<td>HbA1C Control HbA12c &gt;9.0%</td>
</tr>
<tr>
<td>Blood Pressure BP&lt; 130/80</td>
</tr>
<tr>
<td>BP &gt; 140/90</td>
</tr>
<tr>
<td>LDL done within 1 year</td>
</tr>
<tr>
<td>Cholesterol Control LDL &lt; 100</td>
</tr>
<tr>
<td>Cholesterol Control LDL &gt; 130</td>
</tr>
<tr>
<td>Eye Exam</td>
</tr>
<tr>
<td>Foot Exam</td>
</tr>
<tr>
<td>Nephropathy Assessment</td>
</tr>
<tr>
<td>Smoking Status and Cessation Advice or Treatment</td>
</tr>
</tbody>
</table>
HbA1c Control < 7.0 %
HbA1c Control > 9.0 %
BP Control ≥ 140/90
BP Control $\leq 130/80$
LDL Control > 130 mg/dl
LDL Control < 100 mg/dl
Eye Examination
Nephropathy Assessment

![Bar Chart]

- 1st Qtr
- 2nd Qtr
- 3rd Qtr
- TH

Legend:
- S-1
- S-2
- S-3
- S-4
- S-5
- S-6
- S-7
Smoking Status & Cessation Advice/Tx

![Bar Chart](chart.png)
Defy Diabetes Summary
1st, 2nd, 3rd Quarters

FIVE DPRP MEASURES MET
- HbA1c Control ≤ 7.0%
- BP Control >140/90 mm Hg*
- BP Control < 130/80 mm Hg
- LDL Control > 130 mg/dl
- LDL Control <100 mg/dl

TWO DPRP MEASURES PARTIALLY MET
- Smoking Status & Cessation/Advice/Rx

FOUR DPRP MEASURES NOT MET
- HbA1c Control >9.0%
- Eye Examination
- Foot Examination
- Nephropathy Assessment
The “Setonized” Chronic Care Model

**COMMUNITY**
- Faith Community Parish Nurses
- Healthy Living Classes
- Hispanic Outreach Services
- Cornell Cooperative Extension
- Community Gardens
- Local ADA Chapter
- Russell Sage College
- SUNY School of Social Welfare

**HEALTH SYSTEM**
Seton Health commits to implementing the chronic care model across the organization

**SELF MANAGEMENT SUPPORT**
- Out Patient Bilingual (Spanish/English)
- Diabetes Education Program
- Diabetes Support Group

**DELIVERY SYSTEM DESIGN**
- Comprehensive self management plan with patient input
- Multidisciplinary team members: MD, NP, RN, MA, CDE, RD, Pharmacist
- Clearly defined team roles

**DECISION SUPPORT**
- Multidisciplinary team partners
- Live chart reviews, benchmarking reports
- Diabetes Flow Sheets
- Physician Champions
- Evidence based care; ADA Guidelines Updates and In-Services

**CLINICAL INFORMATION SYSTEMS**
- Diabetes Registry
- Harbor Software
- Share Point

**IMPROVED OUTCOMES**
- Informed Activated Patient
- Productive Interactions
- Prepared Proactive Practice Team
Innovative New Model for the Future

- An INNOVATIVE approach that has not been tried before; Faith Community Nurse Model.

- Replicable NEW model for Ascension Health Network and other hospitals with FCN Programs and primary care networks.
The CDE Take Home Messages

- #1 Consider partnering with Faith Community Nurses

- #2 Nurse Champions: “Agents for Change” in Primary Care

- #3 “Individualize” the Chronic Care Model for your health system
Any Questions? Thank You
Contact Information

Nancy Brennan-Jordan, FNP, CDE
nbrennanjordan@setonhealth.org

Diane Deeley, RN, CDE
ddeeley@setonhealth.org

Debra Frenn, MSN, FACHE
dfrenn@setonhealth.org