Mayor’s Innovation Conference
Health Care

August 21, 2014
Welcome to UNC Health Care!

Mission:
To provide comprehensive patient care, facilitate physician education and research excellence and promote the health and well-being of all North Carolinians

Academic Medical Center in Chapel Hill with a broad system across North Carolina

- 840 staffed beds (840 licensed)
- >7,800 co-workers
- >1,100 attending physicians
- 780 residents
- >77,000 ED visits
- >29,000 surgeries
- FY13 Net Rev = $1.2B

Integrated, not-for-profit health care system, owned by the State of North Carolina and based in Chapel Hill
We serve North Carolina. Everyday.

- UNC Health Care Affiliated Hospital
- Affiliated Hospital campus under construction
- Affiliated Hospital campus in development (CON approved)
- UNC Health Care Owned or Affiliated Physician Practice
Roger Stancil
Town Manager, Town of Chapel Hill

Jim Orr
Director, Parks and Recreation Town of Chapel Hill

Dr. Mark Gwynne
UNC Department of Family Medicine
Medical Director, Wellness@Work
The Burning Platform

- >10% premium increase each year x 4 years
- 96% increase over 8 years ($3.1 million increase)
- Chronic disease accounts for 75% of health care costs. Disease burden is increasing.

- 2009 Healthcare Task Force developed to align mission and resources to address healthcare costs to the Town
Goals of the Wellness Program

• Improve access, quality of care, and overall health of Town employees

• Develop robust prevention & wellness services - critical to improving chronic disease care

• Facilitate change in unhealthy behaviors

• Identify and intervene on “About to Be Expensive”

• Create a “Culture of Wellness”
Wellness Program Structure – Administrative

- Advisory Group - long term vision/operations
- Wellness Committee – core of the program, champions from each department
- Subcommittees – operational core workgroups
Wellness Program Structure – Clinical

3-Part Health Risk Assessment:
1) Questionnaire to assess health behaviors and lifestyle
2) Biometrics including height, weight, BP, cholesterol and diabetes screening.
3) Follow up clinic visit for HRA results, risk assessment and goal setting
Integrated Data → Targeted Outreach

- Targeted educational programs (emotional health, cardiovascular risk, etc)
- Targeted wellness programs (exercise, nutrition, weight loss)
- Management of chronic disease
- Facilitated behavior change – individual counseling and coaching
- Outreach to employees at risk for complications of chronic disease
### Employee Risk Stratification

All BCBS Employee Member IDs, CY2011 Data

<table>
<thead>
<tr>
<th>Risk Level</th>
<th>Employees</th>
<th>Percent of Claims</th>
<th>Percent of Eligibles</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>91</td>
<td>24%</td>
<td>14%</td>
</tr>
<tr>
<td>Medium</td>
<td>47</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>Low</td>
<td>239</td>
<td>63%</td>
<td>79%</td>
</tr>
<tr>
<td>Total</td>
<td>377</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

- Unexpected distribution of high and low risk
- Medium risk population lower than expected
Which Metrics, And Why?

Participation and Implementation

» HRA participation rates
» Health promotion programs implemented and rates of employee participation
» Incentives paid

Health risk reductions

» Risk factor reporting (tobacco use, BMI, cardiac risk factors, HTN, DM, depression).
» Rates of change in biometric data and risk factors:
  • Blood pressure, physical activity, tobacco use, BMI, A1C, cholesterol

ROI

» Absenteeism/presenteeism
» Health Care Utilization: admissions, outpatient visits, ER visits, pharmacy
» Premiums
Outcomes: Employee Engagement

<table>
<thead>
<tr>
<th></th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nurse Practitioner Visits</td>
<td>1,380</td>
<td>1,056</td>
<td>1,160</td>
<td>3,596</td>
</tr>
<tr>
<td>Total Tobacco Cessation Visits</td>
<td>141</td>
<td>168</td>
<td>147</td>
<td>456</td>
</tr>
</tbody>
</table>

Clinic Utilization
- 672-721 eligible employees
- Average clinic use = 4.9 visits/employee/year

<table>
<thead>
<tr>
<th>Condition</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>High cholesterol</td>
<td>33%</td>
<td>33%</td>
<td>42%</td>
</tr>
<tr>
<td>Diabetes</td>
<td>8%</td>
<td>8%</td>
<td>10%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>20%</td>
<td>22%</td>
<td>26%</td>
</tr>
<tr>
<td>Pre-hypertension</td>
<td>32%</td>
<td>29%</td>
<td>35%</td>
</tr>
<tr>
<td>Asthma</td>
<td>11%</td>
<td>12%</td>
<td>16%</td>
</tr>
<tr>
<td>Depression</td>
<td></td>
<td>22%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Health Risk Assessment (HRA) data
- HRA self-reported most common health conditions

<table>
<thead>
<tr>
<th>Newly identified Cases</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diabetes</td>
<td></td>
<td>11</td>
<td>22</td>
</tr>
<tr>
<td>Pre-Diabetes</td>
<td>41</td>
<td>52</td>
<td>61</td>
</tr>
</tbody>
</table>

Lab-validated conditions:
- 61 newly identified cases of pre-diabetes
- 22 newly identified cases of diabetes
Outcomes: Employee Engagement

HRA participation (% of eligible employees)

- HRA participation is declining
- Incentives are effective for a limited time
- Insurance Premium cost-sharing may be an option
Outcomes: Tobacco Cessation

**Comprehensive strategy:**
- Personal counseling
- Free Nicotine Replacement Treatment (NRT)
- BCBS $10,000 Grant for NRT
- Medical treatment

**Outcomes:**
- 65 employees enrolled
- 41% 3-month quit rate
- 35% 6-month quit rate (national average 15-27%)
- 33% 12-month quit rate
- Cost savings/year for 12 month quit = $75,076

Tobacco cessation visits per month
## Outcomes: Chronic Disease

<table>
<thead>
<tr>
<th>Condition</th>
<th>2011-12</th>
<th>2012-13</th>
<th>2013-2014</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP &lt; 140/90</td>
<td>84.07%</td>
<td>84.55%</td>
<td>90.6%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Diabetes and BP &lt; 140/90</td>
<td>42.9%</td>
<td>55.56%</td>
<td>51.52%</td>
<td>16.8%</td>
</tr>
<tr>
<td>Diabetes and A1C &lt; 7</td>
<td>60.98%</td>
<td>52.90%</td>
<td>20.83%</td>
<td>14%</td>
</tr>
<tr>
<td>Diabetes and A1C &gt; 9</td>
<td>17.07%</td>
<td>13.89%</td>
<td>13.69%</td>
<td>22%</td>
</tr>
<tr>
<td>% of employee with weight loss</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average weight loss per employee in weight goal</td>
<td>-9.7 lbs</td>
<td>-6.8 lbs</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- Significant improvement in population Blood Pressure control
- Significant improvement in blood pressure for employees with diabetes
- Decrease in well-controlled diabetes (A1C < 7)
- Significant improvement in diabetes control for those at highest risk for complications (A1C > 9)
Employee Success: Tobacco Cessation

T.Y. Edwards, Transit

- Started smoking at age 17
- Smoked for 37 years, 1-2 packs/day
- Wife has asthma
- Father died of throat/lung cancer
- Tried to quit twice before
- Entered W@W program, fall 2011
- Celebrated 2-year anniversary, fall 2013
Employee Success: Weight Loss

William Smith, Police

• Lost 75 pounds over two years, maintained for over a year
• Father died at 59, heart attack
• Brother died at 65, diabetes
• Approaching age 60, wake-up call
• Walks 3x day, 6-8 miles daily
• Increased fruits/vegetables in diet
• Joined Wellness Committee, 2013
Outcomes: Reduction in Premiums 2013

Medical Insurance Cost
Increase from Prior Year


W@W implemented

2014-2015 more than half of premium increase due to ACA costs/fees transferred (yellow)
Summary

- Managing employee wellness using population health management tools works
- Employer Leadership engagement is critical
- Employee interests and employee metrics should drive interventions
- Incenting employee participation is important yet difficult to maintain
- Employee driven Wellness Committee is critical to success
- Relationships between employer – health care system – payor (BCBS) are critical to success. These are different need nurturing to prevent return to business as usual
- Partnering Employers with Healthcare Systems is a significant piece to the Accountable Care Organization puzzle
Chapel Hill Wellness@Work is a comprehensive wellness program for employees of the Town of Chapel Hill. The program is a partnership between UNC Health Care Department of Family Medicine and the Town of Chapel Hill.

www.chapelhillwellnessatwork.org

• 2012
• 2013
Carolina Advanced Health
What is Carolina Advanced Health?

New Primary Care Practice with a Chronic Care Focus

• BCBSNC and UNC Health Care partnered to design, build and operate Carolina Advanced Health, a model practice for primary care located in Chapel Hill, NC.
• Team of providers, services and technology, all in one location.
• Goal of members with a focus on adult patients with chronic conditions.
  – Diabetes, hypertension, hyperlipidemia, CAD, CHF, asthma, COPD and depression.

Managing Every Aspect of Care for Each Patient

• CAH addresses a patient’s medical and social issues early and directly.
• CAH encourages and teaches self-management techniques aimed at allowing patients to remain in control of their health and reduce costly future interventions.
• Visits are scheduled to provide significant time with the providers and as often as necessary for each patient.

Goal is to significantly reduce ED and Inpatient utilization
Population Management

EPIC Launched April

New Registry

[Image showing a spreadsheet with patient data]
# Growth

## Current Volume

- Total patients: 2,000 (+800 since last conference)
- Total appointments: 15,800 (Jan to August)
Growth (cont.)

2014 Growth Sources

• Word of mouth referrals

• Corporate HR outreach has had an excellent ROI

• Direct referrals from community providers
  • Specialists and other Primary Care Providers (PCPs)
  • ER/Urgent Care
  • Case Management from BCBS and Active Health
How much to get there?

To achieve significant ED and Inpatient utilization

PCP visit: 23%

Specialist Visits: 12%

Tele – Health: 443 visits (12.5% of all visits)

The future is here; you will compete with this technology
Family Health Network

- Smartphone Technology
  - Asthma
    - ACT scores
      - < 19 goes to the PharmD
  - Depression
    - Have you been able to adhere to our medical plan?
    - Have you been unable to take your meds?
  - HTN
    - Have you taken your BP and was it over 140/90?
    - Do you fell that you BP is controlled?

Answers are triaged by CAH PharmD and CM
Piedmont Health Services and the Chapel Hill Carrboro Chamber of Commerce
Small Business Health Service
High Quality-Low Cost Care for Small Business
What is the Chamber’s Health Program?

- The **Small Business Health Service** is a partnership with **Piedmont Health** to provide affordable comprehensive high-quality health care to un- and under-insured employees and family members of Chamber members.

- Offers access to affordable high-quality primary health care, health services, dental and pharmacy services.
Conception of the Program

- In 2008, UNC Kenan-Flagler Business School helped conceive the Chamber of Commerce

The Goals:

- To evaluate opportunities for new lines of business
- To consider non-traditional and innovative public health business models
- To remain consistent with Piedmont Health’s mission and resources
Participant Benefits

- Participation is **FREE**
- Access to:
  - Comprehensive high-quality primary care ($60 per visit and in-house labs)
  - Dental services *(significant reduced cost)*
  - Pharmacy services *(most prescriptions $10)*
  - Health Services
- 7 Locations

*Partnering to Make a Difference in Our Community*
Growth

Caswell County Chamber of Commerce
Chatham Chamber of Commerce
Greater Chapel Hill Realtors
Hillsborough
Roxboro Area Chamber of Commerce and Economic Development Center

Partnering to Make a Difference in Our Community
Patients to Date *(centricity 8/21/13)*

- December 2008 – Enrollment began
  - 50 active patients enrolled by 2009
- 2010 – 151 Patients Enrolled
  - 124 - active
  - 27 - inactive
- 2013 – 320 Patients Enrolled
  - 253 - active
  - 67 - inactive
- Dental *(added in 2013)* - 57 Patients Enrolled
PHS Benefits

- Means to fulfill PHS mission
- Exposure to new patients and improve awareness of CHC’s
- Networking through Chamber and hosted events
- Opportunities to partner
- Improve community relations
- Positioning PHS for Affordable Care Act

Partnering to Make a Difference in Our Community
Chamber and Affiliate Benefits

- Offer members access to high-quality health care at an affordable price to employees and their family members (7 locations)
- Offer members significantly reduced dental services (4 locations)
- Recruitment and retention of members
- Opportunity to partner on other community projects and issues
Investment in Health Care Research