Metro Nashville Public Schools
Employee & Family
Healthcare Centers
About Metro Nashville Public Schools (MNPS)

- 42nd US urban school system, 81,000 students.
- 140 schools across 526 square miles
- 4,000 support staff covered by Metro Nashville Government (no control over coverage)
- 6,200 active teachers and 3,000 retired teachers managed by MNPS
- 17,000 total members on Teachers Health Plan including 3000 retired Medicare Members
MNPS Vision Statement States:

TO SUCCEED WE MUST

• Provide an **excellent teacher** in every class, for every student, every year...

WE BELIEVE

• Quality school staff is essential to academic excellence...
Excellence involves being in the classroom

“On average, public school teachers in the United States are absent **five to six percent** of the days schools are in session...U.S. teacher absence rates are nearly **three times** those of managerial and professional employees.”

“We find large variation in adjusted teacher absence rates among schools. **We estimate that each 10 days of teacher absences reduce students’ mathematics achievement by 3.3 percent of a standard deviation.**”

“Do Teacher Absences Impact Student Achievement? Longitudinal Evidence from One Urban School District”
Raegen T. Miller, Richard J. Murnane, and John B. Willett, NBER Working Paper No. 13356
August 2007
What Can We Do To Improve Attendance?

- Make them healthier
- Reduce work-related injuries
- Improve worksite
- Assist with dealing with work/home issues
- Improve absence management/policies
- Enhance personal and managerial accountability
Make Them Healthier

• Introduced onsite primary care clinics
• Provide value-based benefits allowing diabetics, along with those who have cardiovascular disease, asthma and COPD to receive “free” medication and assistance
• Launched engagement health plan
• Introduced health coaches
• Measuring outcomes
What We Believe

• Current fee based **medical system is flawed**; providers are paid for providing service- not improving outcomes.
• **Primary care providers are best suited** to engage the patient population and facilitate improvement.
• Due to the intertwined nature of medical conditions, mental and physical health, you have to adopt a holistic approach to care.
• By **removing obstacles** to care, patients will receive care earlier, and decrease exacerbations and lost time.
• By **improving teacher health, we will be able to assist in the improvement of student education**.
Our Journey

2006
- Established mission: “To look beyond health care cost alone to the impact of poor health on the total health & productivity paradigm.”

2009
- Opened 5 onsite medical clinics, open to all MNPS/Metro members – active & retired
- Located within 15 minutes of any worksite; same day access with less than 15 minute wait
- Full primary care – staffed by Family Nurse Practitioners

2010-13
- Value-based benefits tied to clinic disease management
- Integrated Data Warehouse/Enhanced Analytics - Continuance Health Solutions
- Targeted outreach, medical home designation

2014
- Introduced Plus Plan with HRA requirement (adding biometrics for 2015)
- Expanded analytics to include attendance and teacher performance
- Moved contract to Vanderbilt, expanded our vision
Why Family Nurse Practitioners?

Studies have shown that Nurse Practitioners:
• Spend more time with patients
• Communicate more effectively
• Have easier access
• Are very effective in health promotion and management
• Provide safe effective care
• Have very satisfied patients

More cost effective
Our Approach to Onsite Clinics

- Mandated claim submission and in-network status with Cigna & BCBST
- MNPS pays balance after claim reimbursement
- Multiples sites critical for employee access
- Started cheap and proved their value
  - $500,000 initial investment for offices and 5 clinics
- Encourage utilization through plan design
  - $0 copays & Portal for disease management/value based benefits
  - Targeted outreach by clinic staff
New Uses for Old Portables
Built for Efficiency & Growth
Where Are We Today?

- 5 clinics with an average of 400-450 visits per week
- 25% plus of active population considers the clinics as their medical home
- Extremely high customer satisfaction ratings
- Data that shows we save $100 per member per month on patients being managed by the clinics
- Ever improving medical outcomes
What Are We Working On?

• Introducing our health coaches
  – Lose weight or maintain weight loss
  – Improve eating habits
  – Control chronic conditions like diabetes, high blood pressure or cholesterol, heart disease, asthma, COPD and more
  – Get fit or design a personal exercise plan
  – Make overall health improvements

• Implementing engagement health plan
  – 80% in Plus Plan- completed HRA
  – Including biometrics this year.
The Wellscore Measurement

- Wellscore uses a broad range of clinical & behavioral indicators to quantify health, wellness, & engagement.
- Incorporates, biometric values, wellness participation, preventative care, medication adherence, avoidable hospital visits, physician engagement, diagnosed conditions, lifestyle choices, etc.
- Wellscore measures whether a person is healthy & the likelihood that they will remain healthy.
- Higher Wellscores indicate better health outcomes & are associated with lower PMPM costs.
### Who Gets Our Attention?

<table>
<thead>
<tr>
<th>Measure Type</th>
<th>Measure</th>
<th>Count</th>
<th>WellScore</th>
<th>% w/ WellScore</th>
<th>Ave Cov'd Months</th>
<th>Ave Age</th>
<th>% Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic</td>
<td>Demographic</td>
<td>2,104</td>
<td>511</td>
<td>83%</td>
<td>11.7</td>
<td>39</td>
<td>70%</td>
</tr>
<tr>
<td>Biometric</td>
<td>Blood Pressure</td>
<td>1,092</td>
<td>52%</td>
<td>462</td>
<td>486</td>
<td>124</td>
<td>20</td>
</tr>
<tr>
<td>Biometric</td>
<td>BMI/Body Fat</td>
<td>1,372</td>
<td>65%</td>
<td>492</td>
<td>357</td>
<td>393</td>
<td>130</td>
</tr>
<tr>
<td>Biometric</td>
<td>Glucose</td>
<td>377</td>
<td>18%</td>
<td>285</td>
<td>63</td>
<td>22</td>
<td>7</td>
</tr>
<tr>
<td>Biometric</td>
<td>LDL</td>
<td>423</td>
<td>20%</td>
<td>172</td>
<td>154</td>
<td>70</td>
<td>27</td>
</tr>
<tr>
<td>Biometric</td>
<td>HDL</td>
<td>561</td>
<td>27%</td>
<td>418</td>
<td>112</td>
<td>28</td>
<td>3</td>
</tr>
<tr>
<td>Biometric</td>
<td>Triglycerides</td>
<td>427</td>
<td>20%</td>
<td>343</td>
<td>39</td>
<td>43</td>
<td>2</td>
</tr>
<tr>
<td>Biometric</td>
<td>HbA1c</td>
<td>219</td>
<td>10%</td>
<td>206</td>
<td>3</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Medication Adherence</td>
<td>Asthma/COPD</td>
<td>102</td>
<td>5%</td>
<td>47</td>
<td>17</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Medication Adherence</td>
<td>CAD/CHF</td>
<td>211</td>
<td>10%</td>
<td>156</td>
<td>28</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Medication Adherence</td>
<td>Cholesterol</td>
<td>144</td>
<td>7%</td>
<td>99</td>
<td>22</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>Medication Adherence</td>
<td>Depression</td>
<td>343</td>
<td>16%</td>
<td>242</td>
<td>36</td>
<td>38</td>
<td>27</td>
</tr>
<tr>
<td>Medication Adherence</td>
<td>Diabetes</td>
<td>105</td>
<td>5%</td>
<td>71</td>
<td>16</td>
<td>13</td>
<td>5</td>
</tr>
<tr>
<td>Medication Adherence</td>
<td>Hypertension</td>
<td>219</td>
<td>10%</td>
<td>170</td>
<td>30</td>
<td>13</td>
<td>6</td>
</tr>
<tr>
<td>Medication Adherence</td>
<td>Migraine Prophylaxis</td>
<td>394</td>
<td>19%</td>
<td>200</td>
<td>51</td>
<td>44</td>
<td>99</td>
</tr>
<tr>
<td>Physician Visits</td>
<td>Primary Care-Prevention</td>
<td>1,941</td>
<td>92%</td>
<td>860</td>
<td>1,081</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hospital Use</td>
<td>Avoidable Inpatient</td>
<td>9</td>
<td>0%</td>
<td>0</td>
<td>8</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Hospital Use</td>
<td>ER-Avoidable/Divertable</td>
<td>186</td>
<td>9%</td>
<td>0</td>
<td>68</td>
<td>108</td>
<td>10</td>
</tr>
</tbody>
</table>
What Are Our Results?

WellScores & PMPMs

<table>
<thead>
<tr>
<th>PCP=MNPS</th>
<th>PCP=Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>$372</td>
<td>$508</td>
</tr>
<tr>
<td>WellScore</td>
<td>503</td>
</tr>
<tr>
<td>PMPM</td>
<td>501</td>
</tr>
</tbody>
</table>
## Improving Quality, Reducing Waste

<table>
<thead>
<tr>
<th>Service Type</th>
<th>PCP=UCHS</th>
<th>PCP=Other</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hospital Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inpatient (Admits/1,000)</td>
<td>52</td>
<td>64</td>
<td>-19%</td>
</tr>
<tr>
<td>Outpatient (Visits/1,000)</td>
<td>2,540</td>
<td>4,381</td>
<td>-42%</td>
</tr>
<tr>
<td><strong>Emergency Room (ER) &amp; Urgent Care Center Services (UCC)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ER (Visits/1,000)</td>
<td>143</td>
<td>187</td>
<td>-24%</td>
</tr>
<tr>
<td>UCC (Visits/1,000)</td>
<td>107</td>
<td>266</td>
<td>-50%</td>
</tr>
<tr>
<td><strong>Professional Services</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anesthesia (Visits/1,000)</td>
<td>165</td>
<td>229</td>
<td>-28%</td>
</tr>
<tr>
<td>Medicine (Visits/1,000)</td>
<td>6,778</td>
<td>7,994</td>
<td>-15%</td>
</tr>
<tr>
<td>Surgery (Procedures/1,000)</td>
<td>1,435</td>
<td>1,681</td>
<td>-15%</td>
</tr>
<tr>
<td>Radiology (Procedures/1,000)</td>
<td>987</td>
<td>1,427</td>
<td>-31%</td>
</tr>
<tr>
<td>Laboratory (Tests/1,000)</td>
<td>2,559</td>
<td>3,009</td>
<td>-15%</td>
</tr>
</tbody>
</table>
Impacting the Bottom Line

Annual Benefits Cost - Fiscal Year

- 7.00%
- Actual:
- Annual Savings
- Revenue

<table>
<thead>
<tr>
<th>Year</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost</td>
<td>55,818,881</td>
<td>61,385,055</td>
<td>66,814,458</td>
<td>74,336,004</td>
<td>82,040,651</td>
<td>90,951,652</td>
<td>97,637,609</td>
<td>105,701,02</td>
<td>112,039,42</td>
</tr>
<tr>
<td>Actual</td>
<td>56,557,177</td>
<td>60,747,184</td>
<td>64,076,200</td>
<td>72,130,603</td>
<td>80,469,549</td>
<td>80,978,909</td>
<td>84,661,954</td>
<td>92,824,712</td>
<td>86,894,417</td>
</tr>
<tr>
<td>Annual Savings</td>
<td>637,871</td>
<td>2,738,258</td>
<td>2,205,401</td>
<td>1,571,102</td>
<td>9,972,743</td>
<td>12,975,655</td>
<td>12,876,317</td>
<td>25,145,003</td>
<td></td>
</tr>
<tr>
<td>Revenue</td>
<td>57,212,444</td>
<td>60,538,607</td>
<td>66,150,115</td>
<td>67,251,562</td>
<td>67,251,562</td>
<td>78,891,958</td>
<td>90,379,026</td>
<td>98,082,777</td>
<td>101,506,45</td>
</tr>
</tbody>
</table>

Trend:
- 8.4%
- 4.6%
- 3.6%
- 6.2%
- 8.1%
- -2.8%
- 4.2%
- 8.4%
- -5.5%

Rate Change:
- 0.0%
- -4.8%
- 0.0%
- 4.9%
- 10.9%
- 17.4%
- 9.9%
- 5.4%

5 yr Avg Rate Change:
- 2.2%
- 5.7%
- 8.6%
- 9.7%

5 yr Avg Trend:
- 6.6%
- 4.3%
- 4.3%
- 5.2%
- 2.5%
But Have We Helped Improve Education?
There Are Correlations Between Teacher’s Health and Student Outcomes
And Between Health & Attendance

<table>
<thead>
<tr>
<th>2013 EE’s</th>
<th>Average Age</th>
<th>Wellscore Range</th>
<th>Average Wellscore</th>
<th>Absence Rate</th>
<th>Sick Hours/Person</th>
<th>Average Days/Person</th>
</tr>
</thead>
<tbody>
<tr>
<td>372</td>
<td>46</td>
<td>&lt;=475</td>
<td>454.4</td>
<td>4.9%</td>
<td>72</td>
<td>9.6</td>
</tr>
<tr>
<td>3250</td>
<td>44</td>
<td>476-525</td>
<td>504.5</td>
<td>4.0%</td>
<td>58</td>
<td>7.7</td>
</tr>
<tr>
<td>1192</td>
<td>40</td>
<td>526+</td>
<td>537.7</td>
<td>3.1%</td>
<td>46</td>
<td>6.1</td>
</tr>
<tr>
<td><strong>Total/Averages</strong></td>
<td></td>
<td></td>
<td><strong>508.9</strong></td>
<td><strong>3.8%</strong></td>
<td><strong>56</strong></td>
<td><strong>7.4</strong></td>
</tr>
</tbody>
</table>

*2012 Absence Rate was 4.5%
So We Will Press Forward with Our Future Plans

• Increase clinic utilization
  – Goal of 50% active employee’s medical home
• Continue to improve health outcomes
• Expand clinic services to address:
  – Pharmacy
  – Physical/Occupational Therapy
  – Exercise/Nutrition
  – Stress
  – Onsite oversite MD
As We Become

Vanderbilt Health
at Metro Nashville Public Schools Employee and Family Health Centers

Be smart Live well
Contacts:

• David Hines
  – Metro Nashville Public Schools
  – David.hines@mnps.org

• Jon Harris-Shapiro
  – Continuance Health Solutions
  – jhs@continuancehealthsolutions.com

• John P. Von Arb
  – Vanderbilt University Medical Center
  – John.vonarbs@vanderbilt.edu