The Power of Primary Care Transformation

Grace Terrell, MD, MMM, FACP, FACPE
Founder and Strategist
Our Mission:
To empower providers to make the transition to value-based medicine

Our Vision:
To be the force across the nation that builds healthy communities by enabling coordinated and sustainable care

Our Values:
Collaboration, Innovation, Fairness, Integrity

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Innovation changes how services are delivered.
Opportunities for cost reduction and quality improvement require realignment of the health care ecosystem into a new value chain.
Mission:
To be your medical home

Vision:
To be the model for physician-led health care in America

Values:
As a physician owned and directed company, we are committed to ensuring that patient care is efficient, effective, equitable, patient centered, safe, and timely
Cornerstone’s Timeline

**1995**
- Cornerstone Health Care formed
- CHC goes live on Humedica Mindshare
- Revised MVV

**2007**
- Premier Building built
- NCQA Medical Home designations

**2008**
- CHC on EMR

**2010**
- Cornerstone Convenience Care opened at Westchester building

**2011**
- FastMed partnership

**2012**
- Cornerstone Convenience Care opened at Premier building

**2013**
- Value-based compensation formula implemented

**2014**
- CMS NextGen ACO participant

**2015**
- 13 CHC practices earn 2011 PCMH Recognition
- COPD Model Launched

**2016**
- Cornerstone Convenience Care opened at Premier building

**1995**
- Westchester Building built
- Extended and weekend hours now offered

**January**
- CHC & Oliver Wyman Redesign
- Care Pathway Redesign
- Optum & Teradata Tech partners
- VBR: Negotiating Contracts

**March**
- Personalized Cardiac Care Program launched

**April**
- Personalized Cancer Care w/ embedded Primary Care launched

**June**
- CHC opens its first practice in Hickory

**July**
- MSSP ACO Personalized Primary Care Program launched

**January**
- CHC goes full-risk
- CHESS MSSP ACO
- CHESS Select
- Lightbeam launch
- Nephrology Medical Home Launched
- Touchcare telemedicine begins
- Livongo launched

**April**
- Cornerstone Convenience Care opened at Westchester building

**December**
- Gainshares paid out
- Catawba Valley Medical Center signs contract with CHESS
- Received highest quality score in NC & ranked 6th in the nation on quality

**January**
- 13 CHC practices earn 2011 PCMH Recognition
- COPD Model Launched

**March**
- FastMed partnership

**April**
- Cornerstone Convenience Care opened at Westchester building

**July**
- Shareholders approve Cornerstone Compact

**December**
- Gainshares paid out
- Catawba Valley Medical Center signs contract with CHESS
- Received highest quality score in NC & ranked 6th in the nation on quality
Care Model Number One: Personalized Primary Care Program

Team:
Top 20% of patients
Health Navigation
Care Coordination and Outreach (PCAs)
Health Coaching (Rite Aid)

Patients Enrolled:

<table>
<thead>
<tr>
<th>Team</th>
<th>Patients Enrolled:</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPCP A</td>
<td>678</td>
</tr>
<tr>
<td>PPCP B</td>
<td>539</td>
</tr>
</tbody>
</table>

Estimated Savings:

<table>
<thead>
<tr>
<th>Team</th>
<th>Estimated Savings:</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>$.5 Million</td>
</tr>
<tr>
<td>B</td>
<td>$2.2 Million</td>
</tr>
</tbody>
</table>
Care Model Number Two: Personalized Life Care Program

Team:
Internist with focus on chronic disease management
Health Navigation
Embedded Pharmacist
Licensed Clinical Social Work
Extended Office Visit times
Home visits

Patients Enrolled:
261

Readmissions:
ED% chg -36%
Hosp% chg -74%

Estimated Savings:
$1.43 Million
Care Model Number Three: Cornerstone Care Outreach Clinic

Team:
Medical Director
LCSW
Consultant psychiatrist (IMPACT Model)
Pharmacist

Initial focus on Dual Eligible patients

Patients Enrolled:
IMPACT Model 138
Total >600

Clinical Impact:
ED% chg -60%
Hosp% chg -64%

Estimated Savings:
$1 Million

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Care Model Number Four: Cornerstone Cancer Services

Team:
5 hematologist/oncologists
Tumor lines: breast, lung
Director of Psychosocial Oncology
Tumor line specific Health Navigators
Nutritionist
Pharmacist
Chaplain
Embedded Internist for primary care needs

Patients Enrolled:
Breast Cancer 325
Lung Cancer 220

Clinical Impact:
Ed % Chg -84%
Hosp % Chg -27%

Estimated Savings:
$1 Million

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Care Model Number Five: Cornerstone Heart Function Clinic

Team:
Three lead physicians
Health Navigator
Nurse Practitioner
Tightly aligned psychologist
Dedicated pharmacist available remotely
Nutritionist

Patients Enrolled:
321

Clinical Impact:
Ed % Chg -41%
Hosp % Chg -54%

Estimated Savings:
$1.8 Million

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### Care Model Number Six: Chronic Obstructive Pulmonary Disease

**Team:**
- Dedicated Pulmonologist
- Health Navigation (RT v. RN)
- Dedicated pharmacist available remotely

Emphasis on identification and management

<table>
<thead>
<tr>
<th>Readmissions:</th>
<th>Estimated Savings:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction from 12% to 6%</td>
<td>Pending</td>
</tr>
</tbody>
</table>

**Patients Enrolled:**

Patients currently being enrolled.

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The new care models significantly altered the cost and utilization by service area.

<table>
<thead>
<tr>
<th></th>
<th>Cornerstone Heart Function</th>
<th>Cornerstone Life Care</th>
<th>Cornerstone Care Outreach Clinic</th>
<th>Cornerstone Personalized Primary Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall program</td>
<td>-13.7%</td>
<td>-10.7%</td>
<td>-16.1%</td>
<td>-13.6%</td>
</tr>
<tr>
<td>Inpatient Hospital</td>
<td>-32.5%</td>
<td>-13.3%</td>
<td>-23.3%</td>
<td>-44.9%</td>
</tr>
<tr>
<td>Outpatient Hospital</td>
<td>16.1%</td>
<td>-19.1%</td>
<td>-26.7%</td>
<td>40.2%</td>
</tr>
<tr>
<td>Home Health</td>
<td>71.5%</td>
<td>-19.9%</td>
<td>-0.6%</td>
<td>18.6%</td>
</tr>
<tr>
<td>SNF</td>
<td>-4.2%</td>
<td>-28.9%</td>
<td>-98.1%</td>
<td>91.3%</td>
</tr>
<tr>
<td>Office</td>
<td>49.6%</td>
<td>17.4%</td>
<td>18.4%</td>
<td>-8.6%</td>
</tr>
<tr>
<td>ED</td>
<td>-24.6%</td>
<td>16.7%</td>
<td>8.1%</td>
<td>-28.4%</td>
</tr>
<tr>
<td>Injectable Drugs</td>
<td>68.0%</td>
<td>-33.5%</td>
<td>-57.0%</td>
<td>-50.9%</td>
</tr>
<tr>
<td>Laboratory</td>
<td>-8.4%</td>
<td>35.8%</td>
<td>-5.4%</td>
<td>-26.0%</td>
</tr>
<tr>
<td>DME</td>
<td>106.0%</td>
<td>-36.1%</td>
<td>38.6%</td>
<td>-31.8%</td>
</tr>
<tr>
<td>Adv. Imaging</td>
<td>-3.5%</td>
<td>-38.9%</td>
<td>-47.3%</td>
<td>-19.2%</td>
</tr>
<tr>
<td>ASC</td>
<td>4.9%</td>
<td>-34.7%</td>
<td>992.4%</td>
<td>-43.1%</td>
</tr>
<tr>
<td>Rehab (PT/OT)</td>
<td>-100.0%</td>
<td>-88.0%</td>
<td>-78.5%</td>
<td>-47.3%</td>
</tr>
<tr>
<td>Other</td>
<td>91.1%</td>
<td>121.5%</td>
<td>105.1%</td>
<td>209.0%</td>
</tr>
</tbody>
</table>
# Care model program summary results:

<table>
<thead>
<tr>
<th></th>
<th>Heart Function Care Model</th>
<th>Life Care Extensivist Model</th>
<th>Care Outreach Dual-Eligible Care Model</th>
<th>Personalized Primary Care Poly-Chronic Care Model</th>
<th>Aggregate for Fully Implemented Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td># of patients in study sample</td>
<td>21</td>
<td>56</td>
<td>25</td>
<td>159</td>
<td>261</td>
</tr>
<tr>
<td>Avg. per person spend in year prior to study</td>
<td>$40,284</td>
<td>$51,289</td>
<td>$23,616</td>
<td>$18,574</td>
<td>$30,771</td>
</tr>
<tr>
<td>Avg. per person spend in study year (actual)</td>
<td>$34,754</td>
<td>$45,815</td>
<td>$19,805</td>
<td>$16,051</td>
<td>$26,876</td>
</tr>
<tr>
<td>Predicted avg. per person spend in study year</td>
<td>$38,583</td>
<td>$63,374</td>
<td>$35,900</td>
<td>$26,631</td>
<td>$38,224</td>
</tr>
<tr>
<td>Aggregate spend in year prior to study</td>
<td>$845,957</td>
<td>$2,872,164</td>
<td>$590,403</td>
<td>$2,953,340</td>
<td>$7,261,863</td>
</tr>
<tr>
<td>Aggregate spend in study year (actual)</td>
<td>$729,840</td>
<td>$2,565,657</td>
<td>$495,130</td>
<td>$2,552,148</td>
<td>$6,342,775</td>
</tr>
<tr>
<td>Predicted aggregate spend in study year</td>
<td>$810,246</td>
<td>$3,548,963</td>
<td>$897,500</td>
<td>$4,246,625</td>
<td>$9,503,334</td>
</tr>
<tr>
<td>% change (prior to actual)</td>
<td>-13.7%</td>
<td>-10.7%</td>
<td>-16.1%</td>
<td>-13.6%</td>
<td>-12.7%</td>
</tr>
<tr>
<td>% change (prior to predicted)</td>
<td>-9.9%</td>
<td>-27.7%</td>
<td>-44.8%</td>
<td>-40.0%</td>
<td>-33.3%</td>
</tr>
</tbody>
</table>
Our performance in the Medical Shared Savings Program the first year of the care models was strong.
How do we tap the power of primary care transformation?
Next generation PHMs will thrive on complex adaptive systems that are highly-tailored to particular segments of the population.

**Severe behavioral**
- Dedicated psychiatric NPs/MDs
- Bio-monitoring of Rx adherence
- Dedicated social worker and PCP
- Etc.

**Chronic with social needs**
- Case worker embedded in care team
- Dedicated coach focused on nutritional and mental health needs
- Etc.

**Generally healthy**
- Affordable acute care options
- Rewards and incentives
- Social/mobile health tracking tools
- Etc.

**Early chronic/at-risk**
- Dedicated health coach focused on fitness, nutrition
- Attention to behavioral health
- Rewards for meeting health goals
- Etc.

**Poly-chronic/complex**
- Dedicated “Extensivists”
- Remote monitoring
- Specialty clinics
- Integrated behavioral health
- Etc.

**End of life**
- Palliative care experts
- Support for caregivers
- Hospice centers
- Legal/financial advisers for family
- Etc.

Specialized care models will be supported by new population-specific ecosystems.
Begin with what we know: Identify Patient Populations & Opportunity

Poly-chronic patients
Kidney failure
Diabetes
COPD
Heart failure
Multiple co-morbidities
Chronic & complex conditions
Cancer
Understand that a new ecosystem of disruptive business models will arise.
New competencies are required to support the population health management business.

- Care Coordination
- Clinical Performance Management
- Effectiveness Analysis
- Financial and Clinical Risk Management
- Patient Engagement
- Patient Safety
- Physician Development and Training
- Smart Care Teams
- Value-Based Contracting
Models of care must be designed around the patient’s needs, not the tyranny of the 15 minute office visit.

### Populations Health Segments

<table>
<thead>
<tr>
<th>Healthy and Independent</th>
<th>Health Risk Factors</th>
<th>Early Stage Chronic Disease</th>
<th>Complex Conditions</th>
<th>Late-stage or poly-chronic</th>
</tr>
</thead>
<tbody>
<tr>
<td>No chronic conditions and free of key risk factors</td>
<td>No major conditions with one or more risk factors</td>
<td>Chronic condition that is well-controlled and now substantially progressed</td>
<td>Systematic or otherwise complex condition</td>
<td>One or more chronic conditions that are uncontrolled or advanced</td>
</tr>
</tbody>
</table>

- **Healthy and Independent**
  - Normal weight
  - Non-smoker
- **Health Risk Factors**
  - High cholesterol
  - High blood pressure
  - Smoker
- **Early Stage Chronic Disease**
  - Diabetes
  - Asthma
  - Coronary artery disease
- **Complex Conditions**
  - Cancer
  - Multiple sclerosis
  - Cystic fibrosis
- **Late-stage or poly-chronic**
  - Congestive heart failure
  - End-stage renal disease
Team based care model redesign is crucial...

…and it requires reorganization of the health care work force into SMART CARE TEAMS.
Smart care teams are integrated across the continuum of care.

- Community Workers
- Dieticians/Nutritionists
- Extensivists
- Faith-based community
- Health Coaches
- Health Navigators
- Licensed Social Workers
- Patient Care Advocates
- Pharmacists
- Primary Care Providers
- Psychologists
- Specialists
Here’s what we need to do together:

- Commit to partnership that drives value further faster
  - Reduce clinical variation
  - Reduce costs for all involved
  - Strong focus on consumerism

- Build culture
  - Transparency, team work, trust, solution-focused

- Evolve economics and associated business models

- Learn together
  - Predictive analytics and micro-segmentation
  - Match clinical models and interventions
But we are just at the starting line...
Three transformational waves are reshaping the health marketplace.

**WAVE 1**
**PATIENT-CENTERED CARE**
2010-2016

FROM
- Physician-centered
- Transactional, isolating
- Sick-care
- Inaccessible
- Patient turnover-volume
- Unwarranted variation

TO
- Patient-focused care
- Care team managed
- Health and well-being
- Convenient and 24/7
- Patient health-value
- Evidence-based standard

**WAVE 2**
**CONSUMER ENGAGEMENT**
2014-2020

FROM
- Uninformed
- Limited engagement
- Isolated individual
- Limited consequence
- Bricks, office hours
- Physician opinion

TO
- Informed, shared decisions
- Highly engaged/empowered
- Socially connected
- Financial rewards/incentives
- Virtual, mobile, anytime
- Informed shared decisions

**WAVE 3**
**SCIENCE OF PREVENTION**
2018-2025

FROM
- Basic health management
- Symptom treatment
- One-size-fits-all
- Limited biomarkers
- Big pharmaceuticals
- Medical competencies

TO
- Genome-linked life plan
- Monitoring and prevention
- Personalized therapies
- 100% accurate diagnostics
- Tailored gene/microbiome therapies
- Life, social, and ethics competencies
Contact Information

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