Transforming Primary Care—
A Collaborative Care Model

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68 Percent of Americans are Obese or Overweight

Obese: 34%
Overweight: 34%
Healthy Weight: 32%

Source: CDC Faststats 11/11
Forecast: 42 Percent of Americans Obese by 2030

Source: Duke University Global Health Institute
Smoking Declined to 19.3% in 2010

However...we’re not winning the war with younger smokers.

<table>
<thead>
<tr>
<th>Age</th>
<th>Percent Who Smoke</th>
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<tbody>
<tr>
<td>18-24</td>
<td>24 %</td>
</tr>
<tr>
<td>25-44</td>
<td>24 %</td>
</tr>
<tr>
<td>45-64</td>
<td>22 %</td>
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<tr>
<td>65+</td>
<td>9 %</td>
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</tbody>
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Source: CDC Smoking and Tobacco, 9/11
Prevalence of Pre-diabetes and Diabetes Ages 12 to 19 Increased 14%

Source: Prevalence of Cardiovascular Disease Risk Factors Among US Adolescents in Pediatrics 5/21/12
Prescriptions for anti-hypertensives in people age 19 and younger could hit 5.5 million this year if the trend through September continues, according to IMS Health. That would be up 17% from 2007, the earliest year available.

*Wall Street Journal*
28 December 2010
So Young and So Many Strokes

- Researchers at the CDC analyzed hospital data on up to 8 million patients a year from 1995-2008; in *Annals of Neurology*, they say stroke rates in five to 44-year-olds rose by about a third in under 10 years.
- The rate of ischemic stroke increased by 31% in five to 14-year-olds, from 3.2 strokes per 10,000 hospital cases to 4.2 per 10,000.
- There were increases of 30% for people aged 15 to 34 and 37% in patients between the ages of 35 and 44.

*BBC News, 2 Sep 2011*
Life Expectancy Levels Off

Source: U.S. Census Bureau

2010 Projected
Top 10 US Public Health Achievements

- Vaccination
- Motor vehicle safety
- Safer workplaces
- Control of infectious diseases
- Decline in deaths from coronary heart disease and strokes
- Safer and healthier foods
- Healthier mothers and babies
- Family planning
- Fluoridated drinking water
- Recognition of tobacco as a health hazard

Health care has had little to do with increased life expectancy over time.
Current Population Health Management Model

The Population

- Acute Care
- Chronic Care
- Preventive Care
- At Risk
An integrated set of health delivery programs that proactively monitors and improves the fundamental health of a given population

We have more personal control over what we are dying from than ever before.
What’s Driving the Need for Change?

- Unsustainable cost trajectory—according to CMS, by 2020:
  - U.S. healthcare costs will exceed $4.6T
  - Costs will represent roughly 20% of GDP
  - Half of these costs will be borne by our government

- What’s driving this trajectory
  - Changing demographics—aging boomers
  - Unhealthy behaviors and choices that cause and exacerbate chronic conditions that account for nearly 75% of all costs
  - Misaligned Incentives—reimbursement for taking care of those who are sick rather than keeping people healthy
The Primary Care Model of the Future

- Prevention and healing vs. testing and prescribing
- PCMH Team Care: providers and health coaches
- Encounters vs. office visits
- Pro-active Health Risk Assessments
- Technology: EHR, RelayHealth, mobile monitoring
- Address behavioral issues
- Community integration
New Model
Blends Two Key Elements

- Patient-Centered Medical Home Model
  - Team-based
  - Technology-enhanced and connected
  - Dashboard-enabled
  - Home-based hub for biometric monitoring
  - Chronic Care Management

+ Population Health Management Model
  - Health Risk Assessment “Plus”
  - Prescription for better health (shared decision model)
  - Proactive outreach—keep healthy people healthy (apps, interactive tech)
  - Health coaching (live, phone, virtual) to address risk factors and chronic care
New Model
Evidence That It Works

- Patient-Centered Medical Home at Walter Reed
  - Reduced ER visits by 6.8%
  - Decreased pharmacy costs by 12.9%
  - Achieved $333 annual cost reductions for chronic care patients
  - Improved HEDIS (quality) scores, as well as access and patient trust

- Population Health Management Model
  - Returns $3.27 for every $1.00 spent in employer settings *(Health Affairs, Feb 2010)*
  - Improves active health engagement among consumers
  - Creates productivity/performance gains with profound economic impact
  - CDC task force found strong or sufficient evidence that “HRA Plus” can:
    - Reduce rates of tobacco use, dietary fat consumption, seat belt non-use, high blood pressure, total serum cholesterol levels, and high-risk drinking.
    - Improve physical activity
    - Reduce hospital admissions and hospital days of care in Medicare population
New Model
Key Elements

- Validated physician-connected Health Risk Assessment
  - Captures and analyzes biometric and behavioral health risks
  - Produces immediate recommendations for patients and physicians
  - Creates a “teachable moment” for engaging patients in their health

- Personalized Prevention Plan
  - A “prescription” for better health
  - Facilitates collaborative decision—physician wellness consult
  - Sets stage for proactive, targeted outreach to engage patients
  - Creates productivity/performance gains with profound economic impact

- Prevention and Wellness Interventions
  - Personalized live or “virtual” coaching and apps to address primary risk factors

- Chronic Care Management Interventions
  - PCMH-based on-site coaching and support via Integrated Health Services Team
  - Extended care team—telephone health coaches and “virtual” coaching apps
New Model
Enabling Technologies

- EHR system
- System-wide secure messaging system (PHR)
- Clinic-facing patient dashboards
- Web-based interactive Health Risk Assessment / Personal Prevention Plan
- Web and mobile health behavior change interventions ("virtual coaching")
- Trackers, challenges and health games to reinforce healthy behaviors
- Wireless biometric monitoring / home health hub (for chronic patients)
- Mobile applications
New Model
How It Works

e-Enabled Collaborative Care Environment

Outreach (e-mail, mail, phone)

Interactive Health Risk Assessment

Primary Care Office Visits

online

Health Coaching Track

Risk-based triage

in clinic

Care Management Track

Virtual Coaching
(Web, Mobile)

Live Coaching
(Phone, Electronic)

Onsite Coaching
(PCM/HIS Team)

Care Management & Interactive Monitoring
(Biometric Devices, Apps, Clinical Dashboards)

Wellness Prescription

- Nutrition Coaching
- Exercise Plan
- Weight Game
- Tobacco Cessation
- Care Management
- Home Monitoring

Dr. Burke

Nutrition Coaching
Exercise Plan
Weight Game
Tobacco Cessation
Care Management
Home Monitoring
New Model
Expected Outcomes

Better Health
- Address underlying causes of poor health: physical inactivity, behavioral risk factors, lack of preventive care, and poor nutrition
- Establish infrastructure for coordinated chronic care monitoring and management
- Improve the overall health status of the target patient population

Better Care
- Improve patient satisfaction by providing a patient-centered experience that enables patients to better take control of their own health and health data
- Provide coaching and care management support that makes patients feel secure that they are not alone in the process of leading a healthy lifestyle and managing their chronic diseases
- Improve appropriate utilization, quality of care delivery, and access to care

Lower Costs
- Reduce unnecessary utilization – particularly inpatient admissions and ED visits
- Reduce overall cost to the health system