



Walter Reed
National Military
Medical Center

Transforming Primary Care— A Collaborative Care Model

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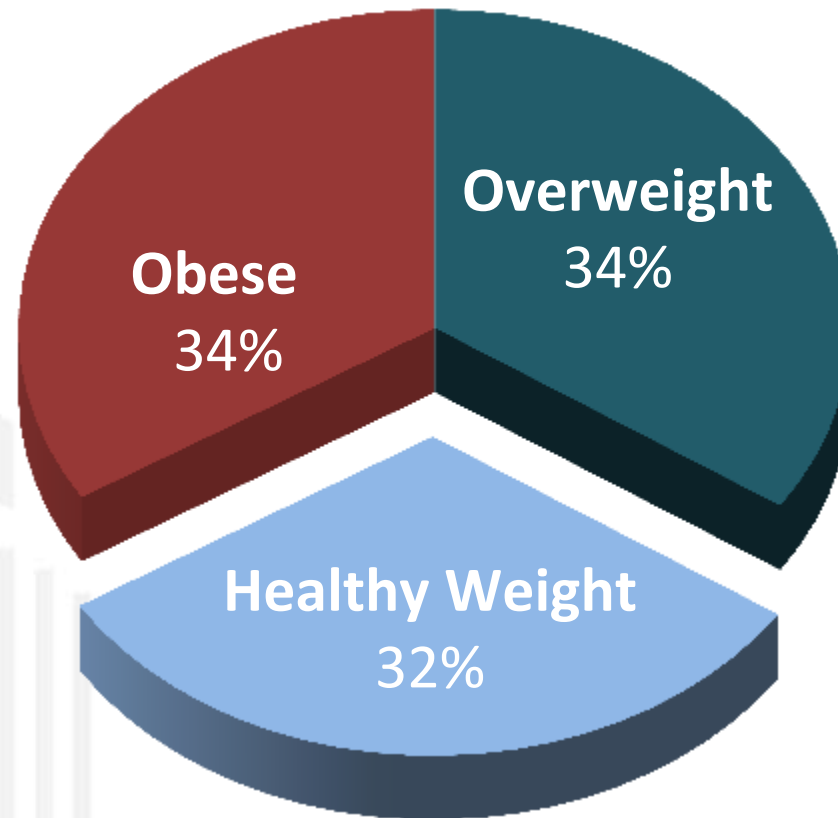
Overview

- The American health care system is broken
- Americans of all ages are at risk
- Obesity, diabetes, hypertension, life expectancy
- Patient-Centered Medical Homes are improving the nation's health
- Prevention and healing vs. testing and prescribing
- Team care including health coaches, technology, community integration
- Mobile technology
- Improve lives while saving money

The views expressed are solely those of the author(s) and do not reflect the official policy or position of the US Army, US Navy, US Air Force, the Department of Defense, or the US Government.



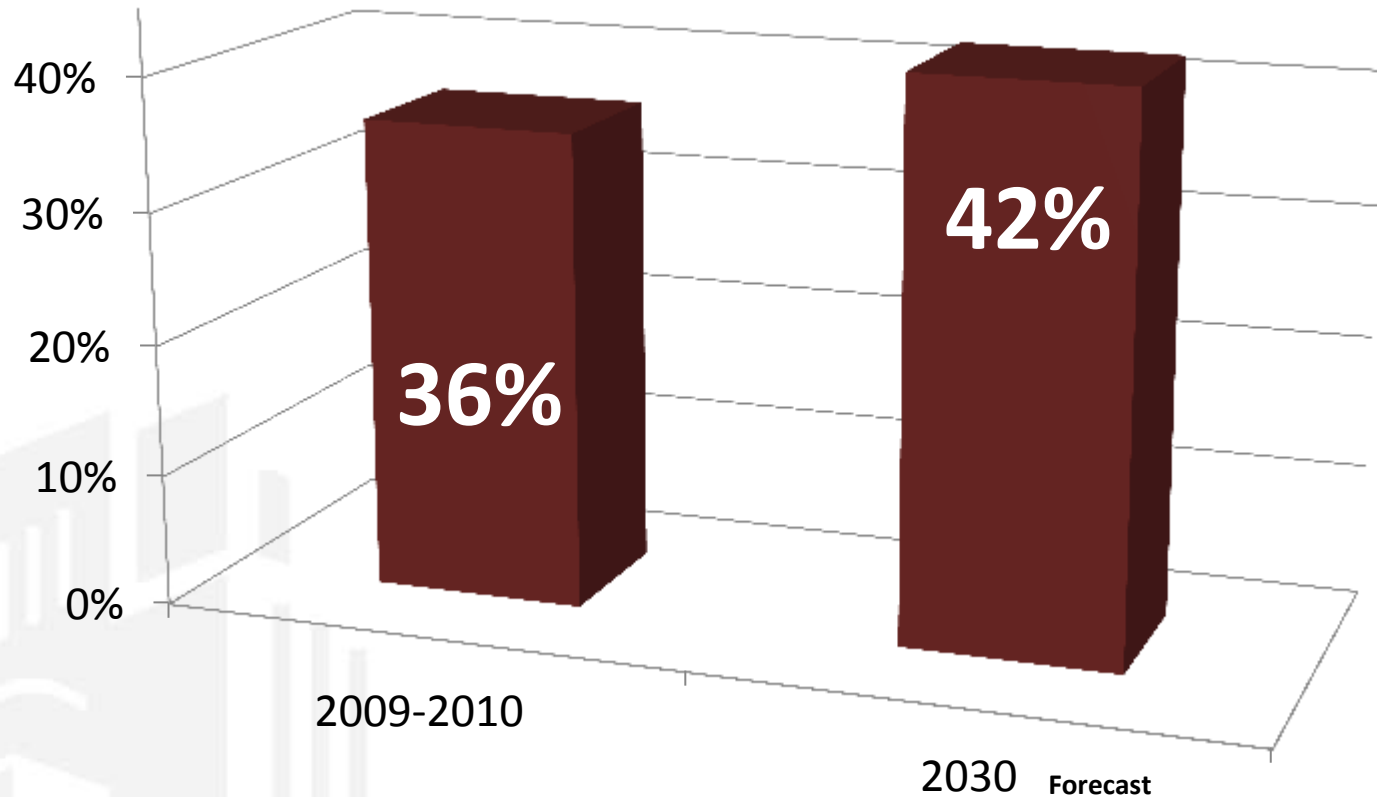
68 Percent of Americans are Obese or Overweight



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

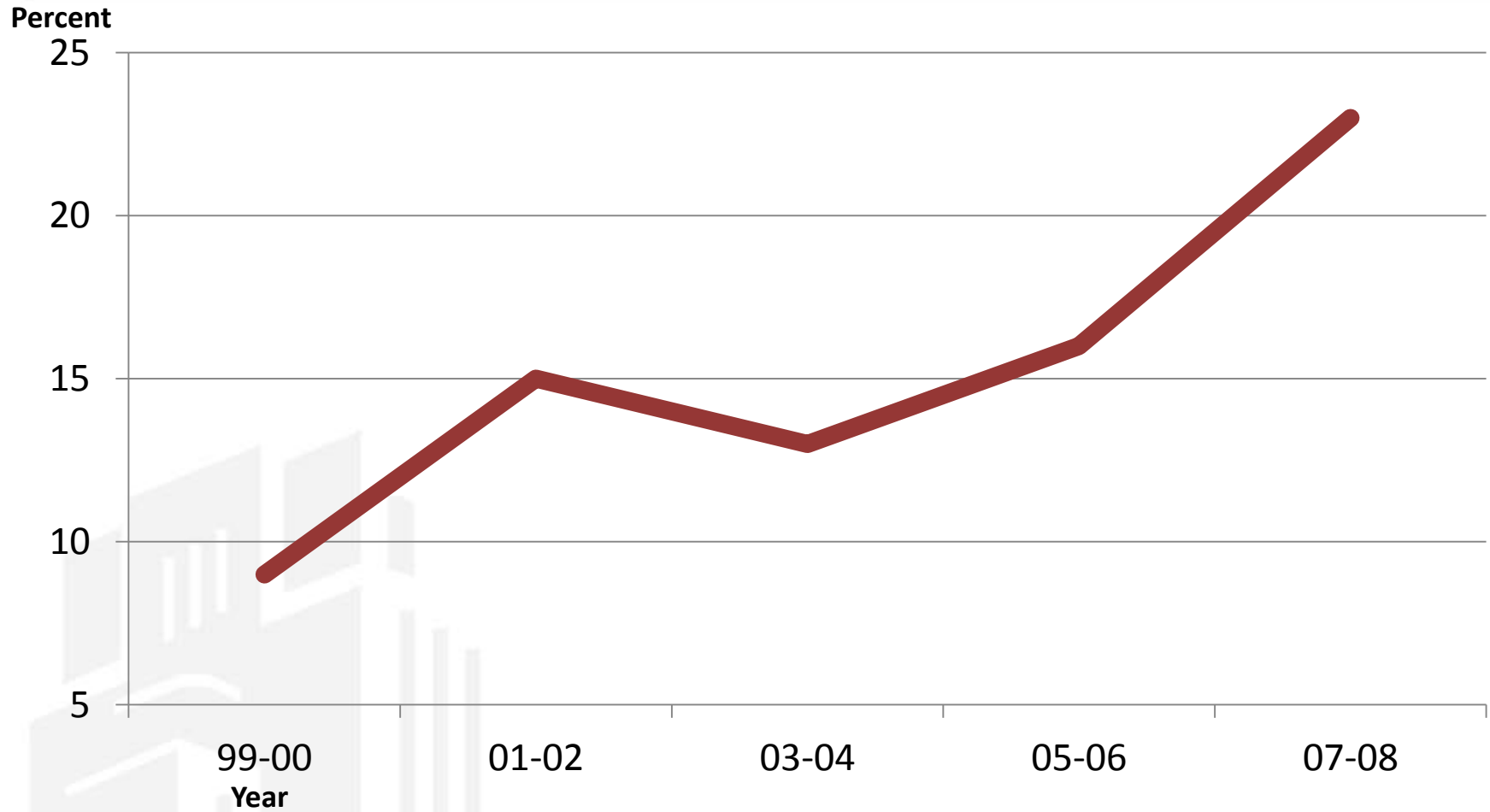
However...we're not winning the war with younger smokers.

Age	Percent Who Smoke
18-24	24 %
25-44	24 %
45-64	22 %
65+	9 %

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



So Young and So Many Pills

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

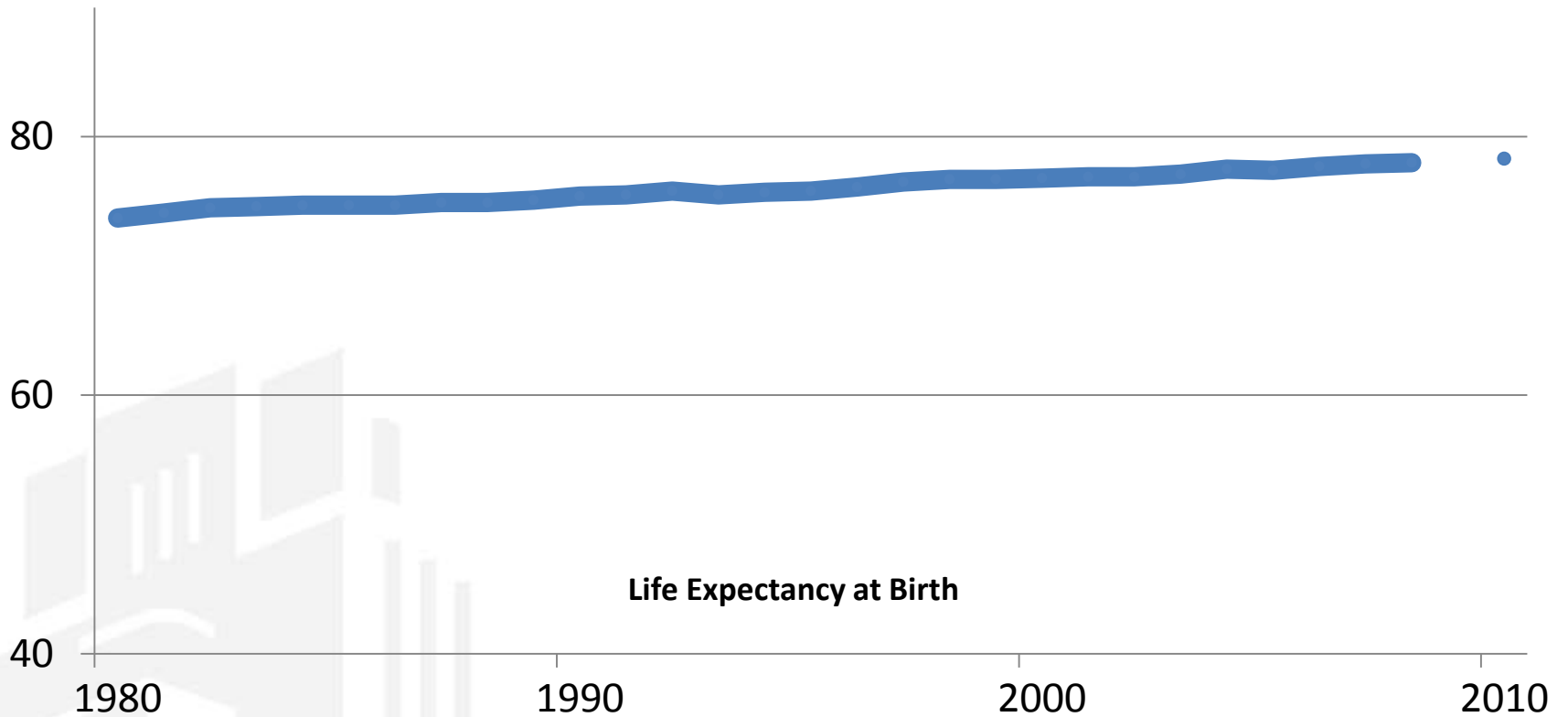
BBC News, 2 Sep 2011





Life Expectancy Levels Off

Age



Life Expectancy at Birth

Year

Source: U.S. Census Bureau

2010 Projected



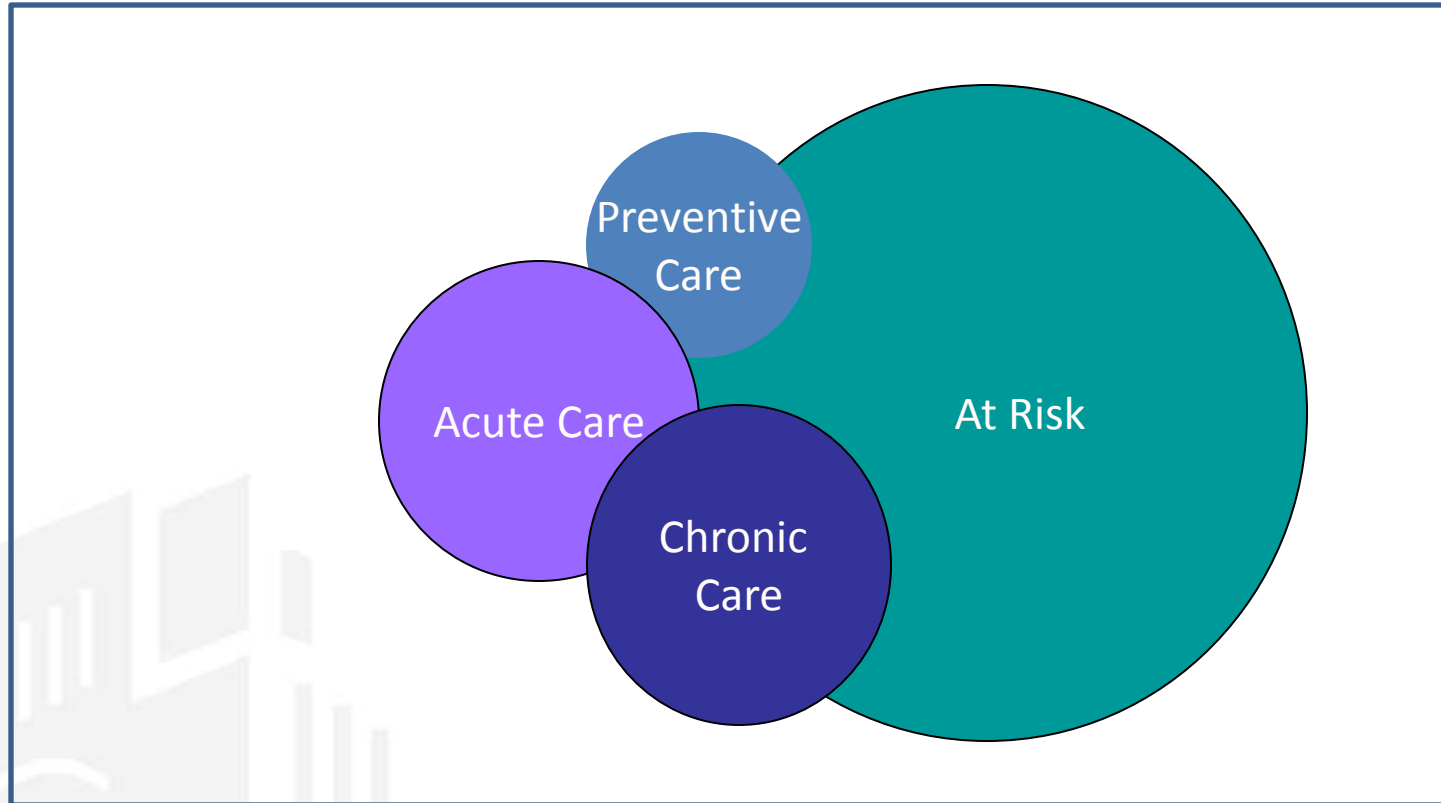
Top 10 US Public Health Achievements

- 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



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Population Health Management

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 to 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

- H e a l t R i s k A s s e s s m e n t “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

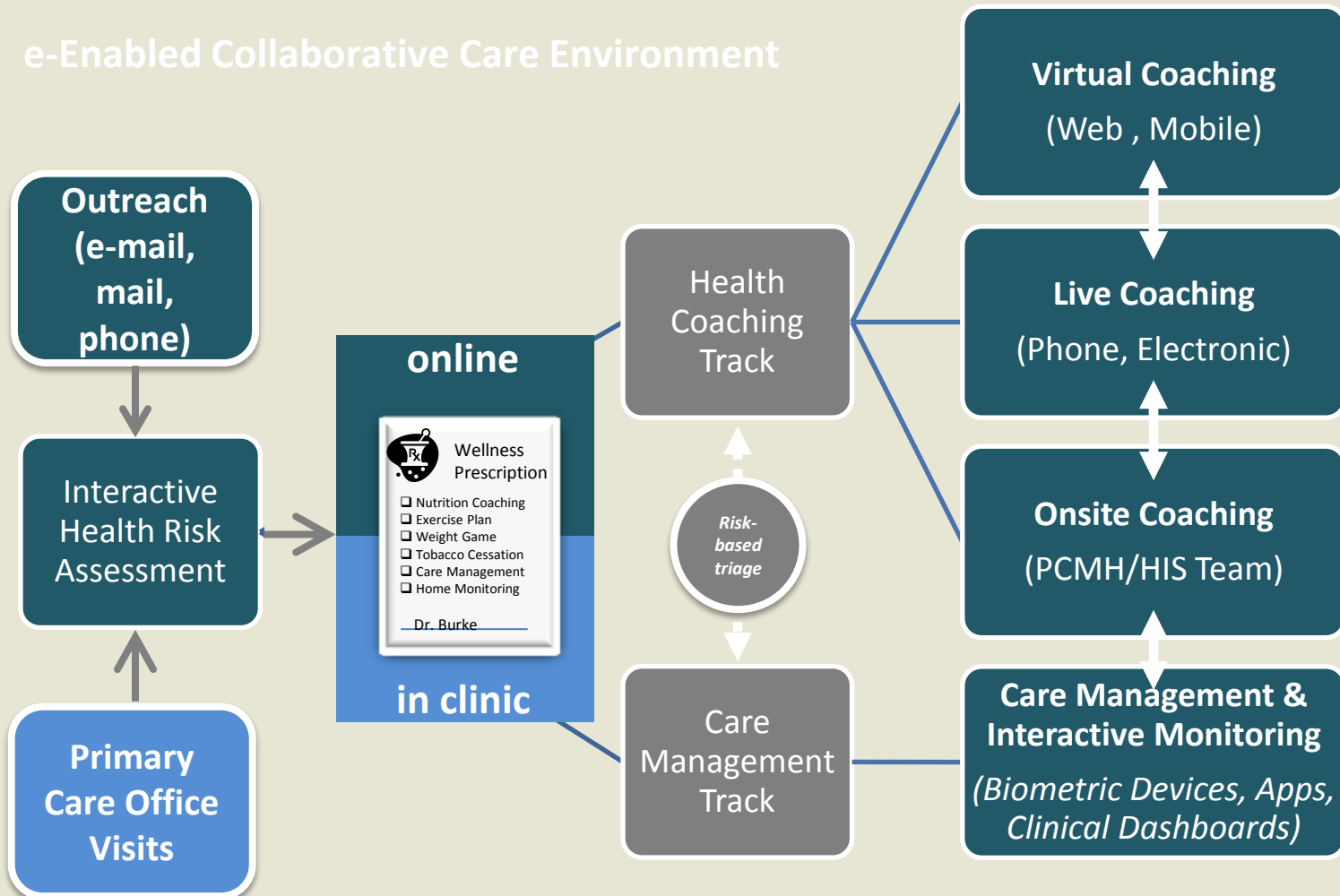
New Model Enabling Technologies

- 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



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