T27: Population-based risk stratification in health:

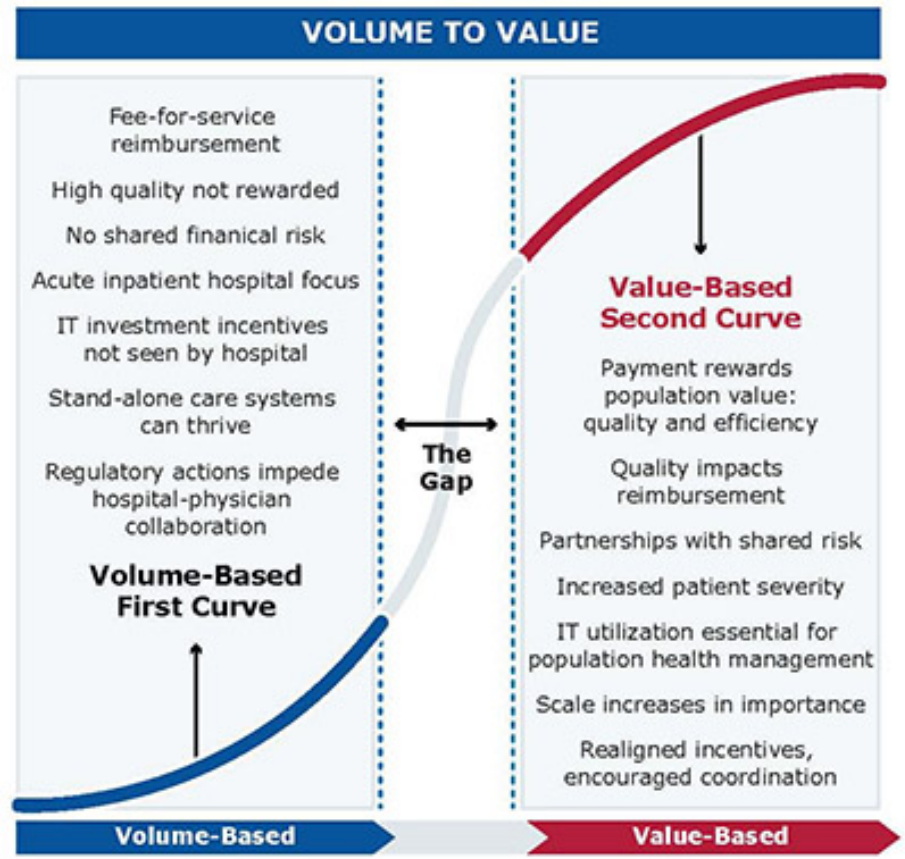
The opportunity for risk sciences to influence precision medicine

Population-Based Management

Hospitals and Care Systems of the Future

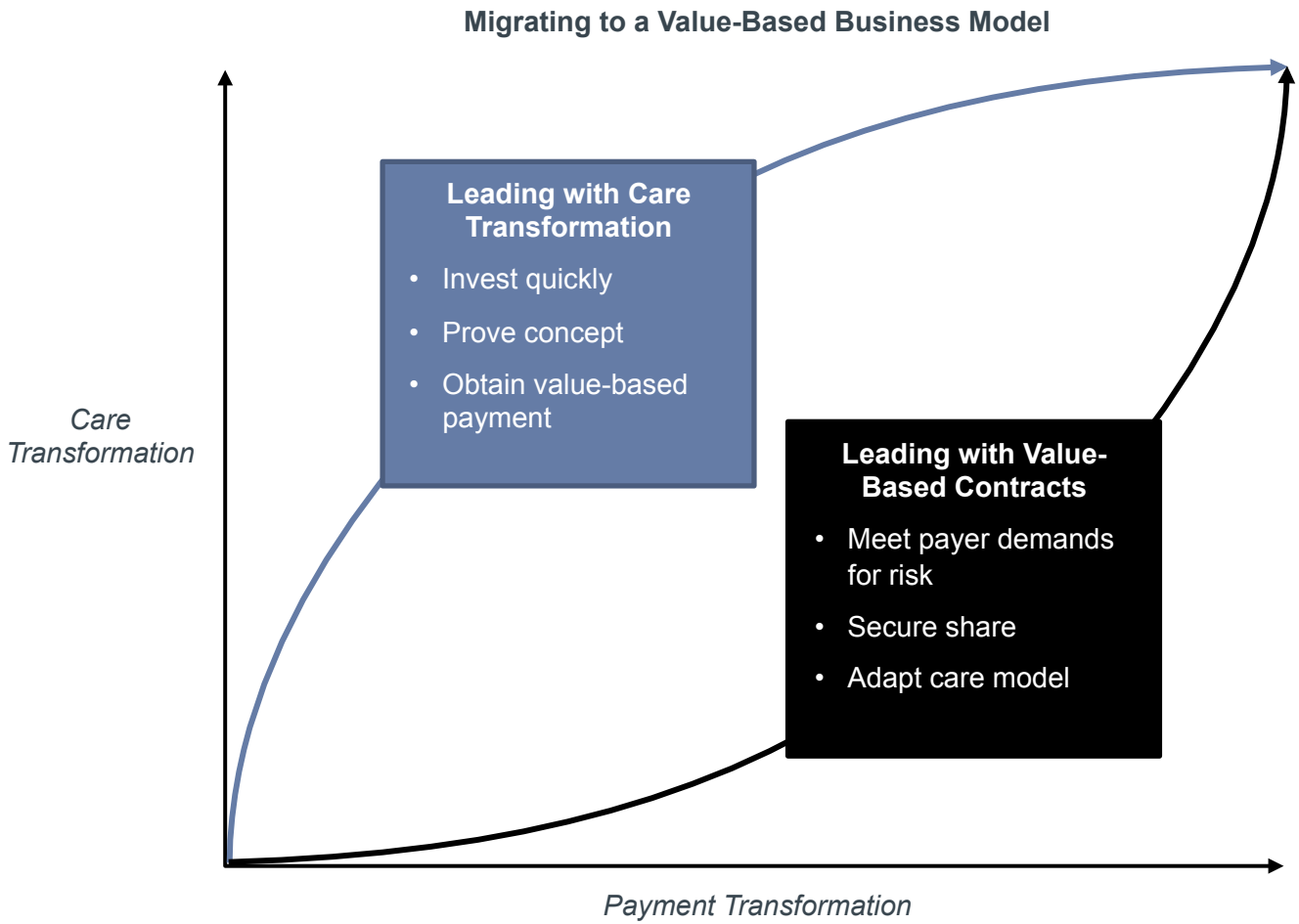
September 2011

American Hospital Association



Two Plausible Transition Paths

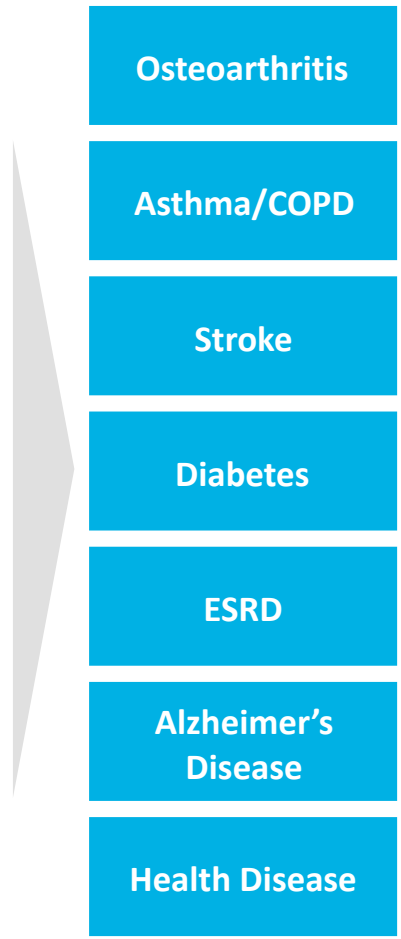
Enabling Financial Success from Population Health Management



Source: Health Care Advisory Board interviews and analysis.

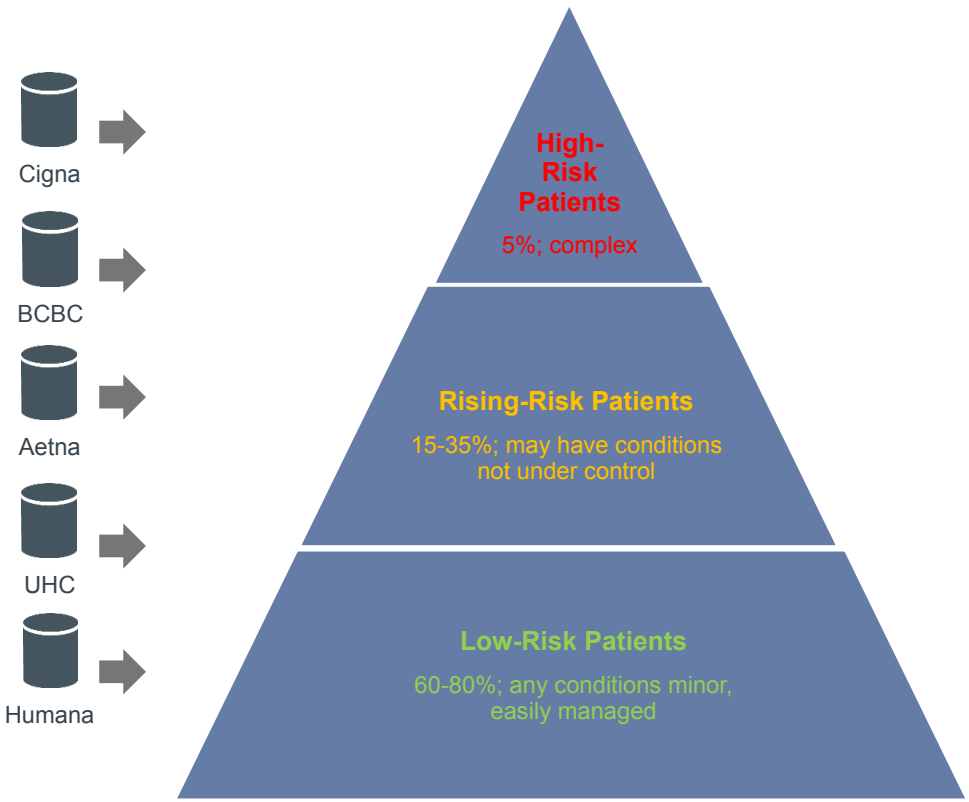
CHRONIC CONDITIONS ARE A KEY FOCUS AREA FOR RAISING HEALTHCARE COSTS

- Currently 133 million (~45%) of the population has one or more chronic condition (expected to glow to 49.3% or 180 million people by 2030)
- Attributable to 7 out of 10 deaths in the United States each year (~1.7 million deaths)
- High impact to quality of life and productivity (resulting in secondary economic impacts -- $1 Trillion in total loses to the economy[1])
- Prevention of chronic diseases[2]:
  - Believed that many chronic conditions are preventable with minor lifestyle changes (better diet, exercise, and not smoking)
  - Could prevent 80% of heart disease and stroke, 80% of type 2 diabetes, and 40% of cancers



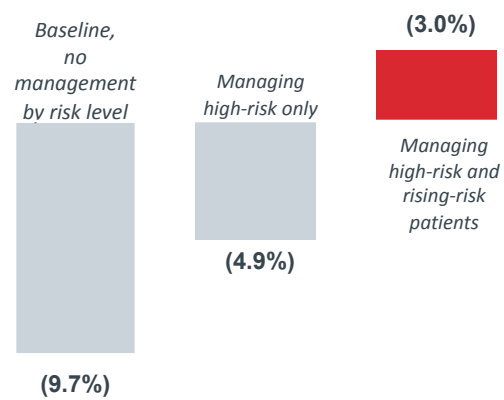
Managing Three Distinct Populations Essential to Profitability

Third-Party Information Valuable But Should Not be Sole Determinant in Segmentation Strategy



Financial Analysis Indicates Necessity of Managing Rising-Risk Patients

5 Year Margin Projection by Risk Management Level

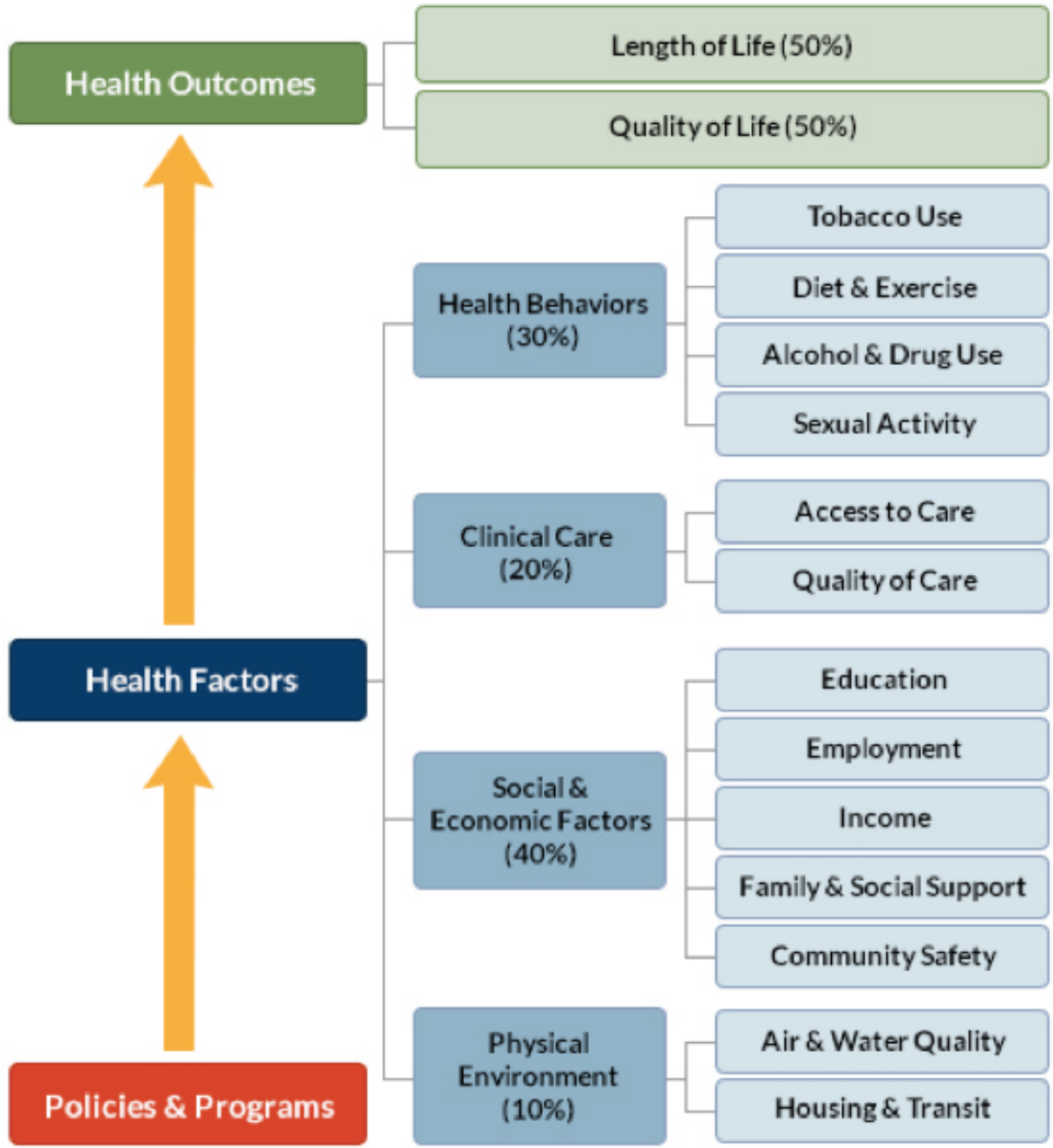


Source: Health Care Advisory Board interviews and analysis.

True Population Health Management

Requires a collaborative strategy between leaders in healthcare, politics, charity, education, and business

Robert Wood Johnson Foundation, 2014



Todays Panel Presentations

Arash Naeim, MD PhD

Risk-Based Screening for Breast Cancer

Ramin Ramezani, PhD

Sensing At-Risk Patients

Alex Bui, PhD

Optimizing imaging-based Lung Cancer Screening

Open Panel Discussion