Health I.T.: Understanding Its Value in Transforming Health Care

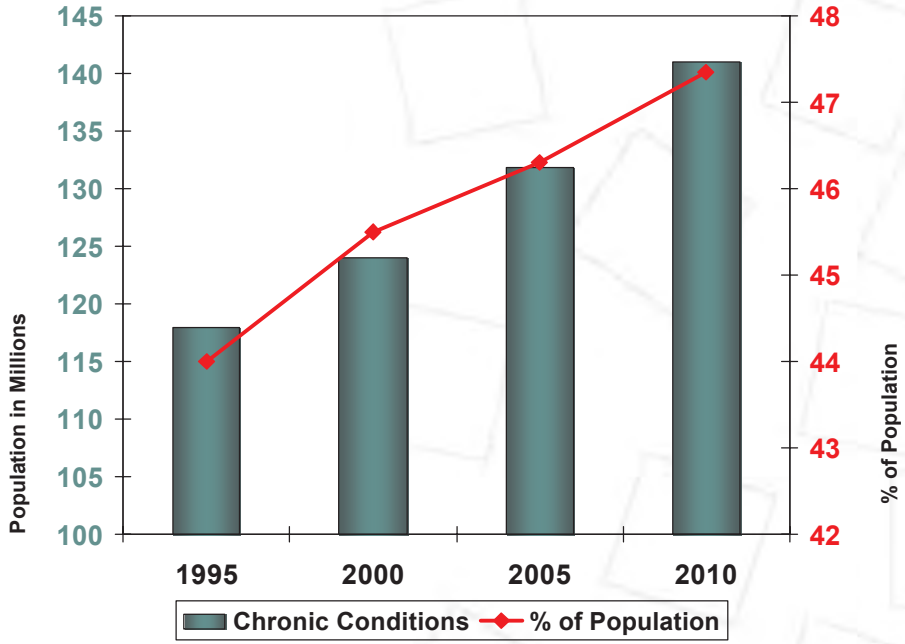
Discussion Document

Charles Kennedy M.D.

October 2009

Prevalence of Chronic Illnesses

More than 130 million Americans suffer from chronic conditions



Chronic disease is the national challenge that must be addressed

Chronic Condition	Prevalence in America	Annual Cost
Diabetes	16 million	• $105 billion in health expenses • 11 million lost work days
Heart Disease	60 million	• $300 billion in health expenses • 1 million deaths
Asthma	14 million	• $5.1 billion in medical expenses • 2.1 million missed work days
Depression	17 million	• $43 billion

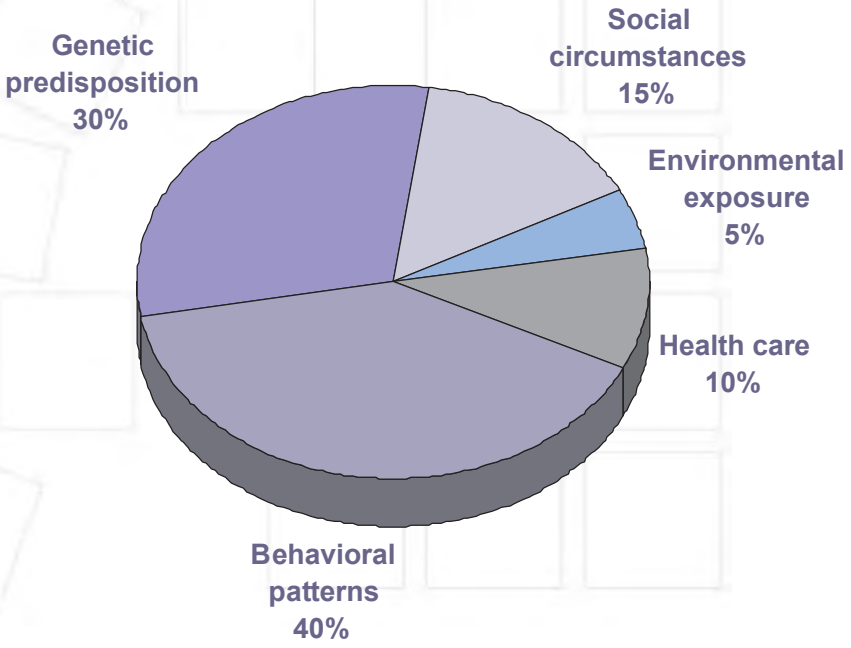
The State of U.S. Population Health

Deteriorating population health status is primarily driven by behavioral patterns. Health I.T. must influence behavior to create change

Key Drivers of Health Status

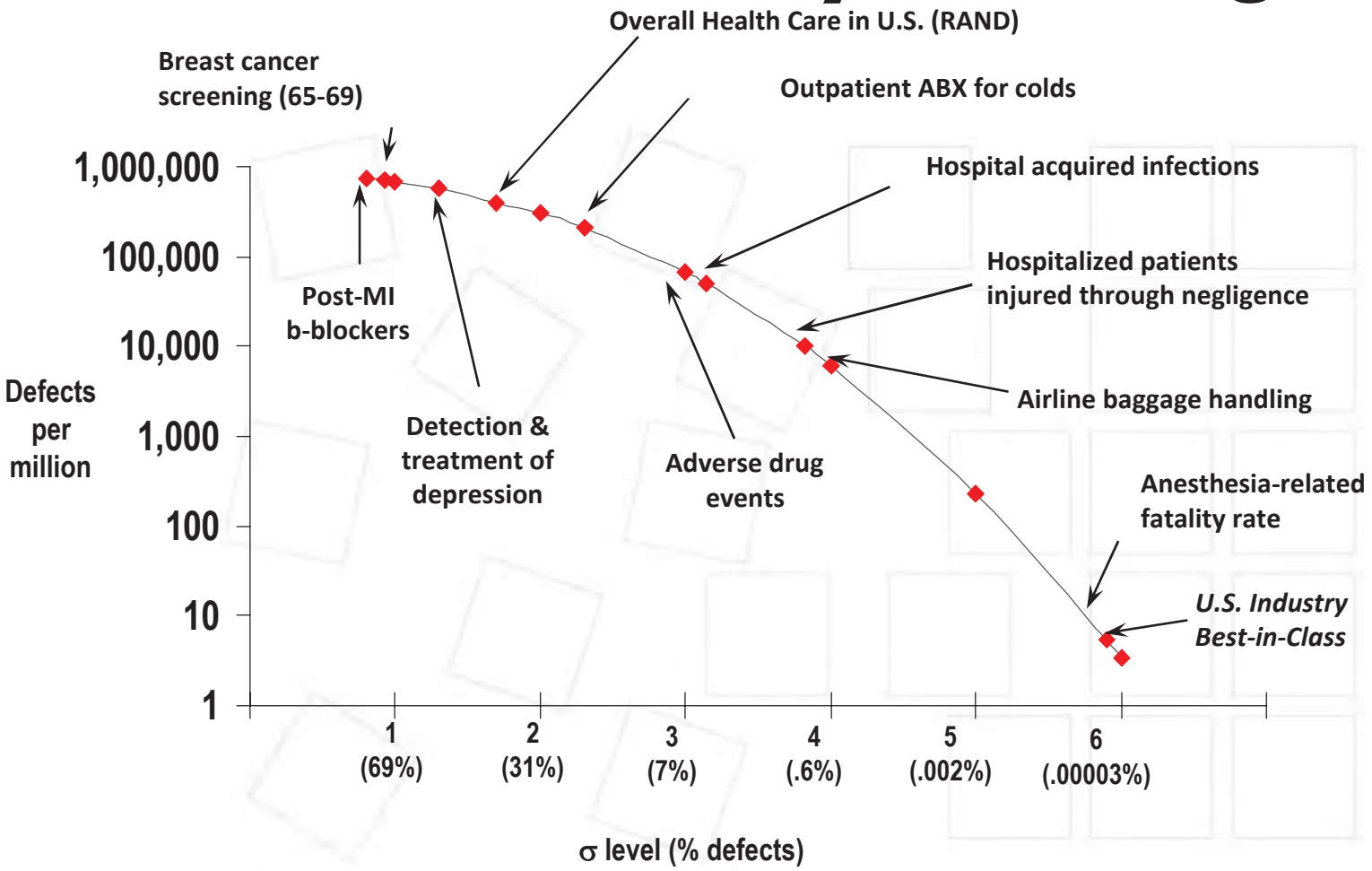
Driver	Prevalence
Obesity	66% obese or overweight
Physical Activity	28% inactive
Smoking	23% smokers
Stress	36% high stress
Aging	22% > 55 years, aging population

Proportional Contribution to Premature Death



Schroeder S. N Engl J Med 2007;357:1221-1228

Health Care Safety Challenges



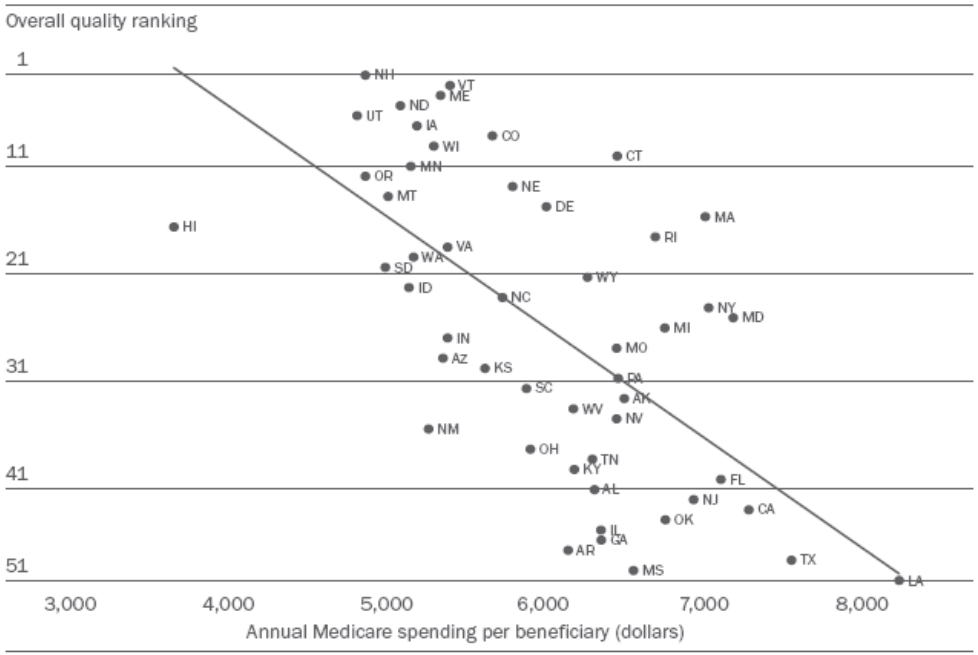
Source: modified from C. Buck, GE

Health I.T. must address safety in order to deliver transformational change

Spending And Quality Not Linked

Multiple studies indicate the lack of a relationship between spending on health care services and the use of evidence based, high quality care.

EXHIBIT 1
Relationship Between Quality And Medicare Spending, As Expressed By Overall Quality Ranking, 2000–2001



SOURCES: Medicare claims data; and S.F. Jencks et al., "Change in the Quality of Care Delivered to Medicare Beneficiaries, 1998–1999 to 2000–2001," *Journal of the American Medical Association* 289, no. 3 (2003): 305–312.
NOTE: For quality ranking, smaller values equal higher quality.

- Health Affairs study[4] of CMS costs
  - **Increased spending did not result in increased use of proven, evidence based, effective care or health care quality**
  - **Primary drivers of this challenge felt to be increased use of specialists in high cost areas**
  - **Increased use of specialists highlighted care coordination needs and failure of communication across larger numbers of physicians caring for patients**
  - **Health I.T. is needed as a communication platform to reduce spending via non value added care reductions and increase quality. Key components include:**
    - **Comprehensive data**
    - **Real time cognitive decision support**
    - **Messaging to the physician & patients**

CentriHealth™

- By 2010, **half** of the U.S. population will suffer from a **chronic disease**
- 83% of health care spending is driven by **chronic disease management**
- 50-70% of health care spending is related to **behaviors**

A large gap exists in the care that doctors provide and the care they ought to provide.*

40%	of people with chronic disease don't get recommended care
50%	of people don't receive recommended preventive care
30%	receive contraindicated acute care
20%	receive contraindicated chronic care

- Increasing health care value requires a focus on chronic disease management, behavioral change, and strong patient involvement
- WellPoint care management strategies seek to improve physician decision making to increase compliance with the evidence base

*Schuster, McGlynn and Brook. Milbank Quarterly.; 76(4) 1998: 517-563; **Earl Steinberg M.D. Noted John Hopkins Health Services Researcher

Health I.T. & WLP Care Mgmt Transforms Care

WellPoint care management programs linked to Health I.T. such as the IHR offer true health care reform

- The IHR integrates all clinical and financial data on a regional basis creating a comprehensive clinical and financial record for the patient and the doctor:
  - A PHR for the patient
  - An E-HR and E-Prescribing for the doctor
  - A data exchange infrastructure allowing health coaches and physicians to use a common record
  - A rules engine with evidence base medicine rules and benefit optimization rules loaded into the system
  - In development: Health plan operational rules which will drastically reduce pre-auth for admissions, radiology services…

IHR Results Summary

Financial Results

Continuous Enrolled Study Cohort			
Health IT Non-Users			
	2007	**2008**	**Variance**
Allowed Cost	$ 9,077,150	$ 11,661,058	28.5%
Mbrs	4126	4126	0.0%
MM	37134	37134	0.0%
Cost PMPM	$ 244.44	$ 314.03	28.5%
Avg DXCG		2.13	
Health I.T. Users			
	2007	**2008**	**Variance**
Allowed Cost	$ 1,839,258	$ 2,226,974	21.1%
Mbrs	666	666	0.0%
MM	5994	5994	0.0%
Cost per Pt	$ 2,762	$ 3,344	21.1%
Cost PMPM	$ 306.85	$ 371.53	21.1%
Avg DXCG		2.72	

7.5% trend reduction

.60 higher risk score

Quality Results

Measure	IHR User	IHR Non User	Difference
Colonoscopy	41.50%	25.60%	15.90%
Mammogram	10.50%	-11.20%	21.70%
Pap Smear	12.70%	0.80%	11.90%
PSA	62.50%	24.40%	38.10%
LdL Test	21.70%	1.10%	20.60%
Hemoglobin A1C	13.90%	2.30%	11.60%
Measured in year over year change			

IHR Utilization Stats

- Employees: ------ 70%
- Dependents: ------ 15%
- Total*: ---------- 48%
- 6 or more log ins---- 45%

The IHR includes E.H.R., P.H.R., and E-Rx functionality. Pilot results showed substantial utilization of the tool by members with higher risk scores, trend reductions and quality improvements vs. non-users. These results are the strongest we have seen in the industry.

CentriHealth™

The IHR—Remarkable Results