

Population Health and The Future of Emergency Medicine

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The US Health Care System



It is said that, "The United States enjoys the finest health care in the world." Do we?

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World Health Organization

The World Health Report 2000

- **Ranking of overall health system performance based on measures**
 - Level and distribution of health
 - Responsiveness – level and distribution
 - Expenditures – per capita, fairness of financial contribution

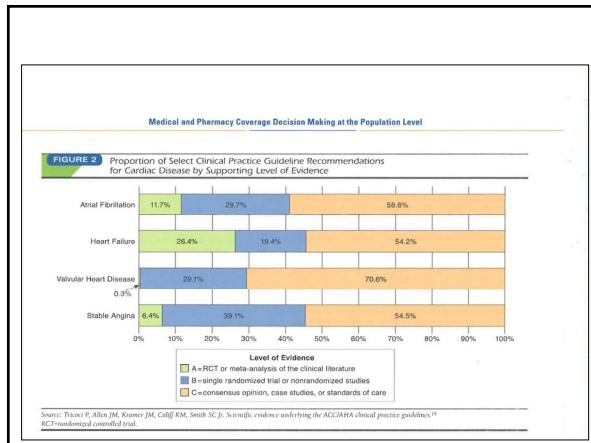
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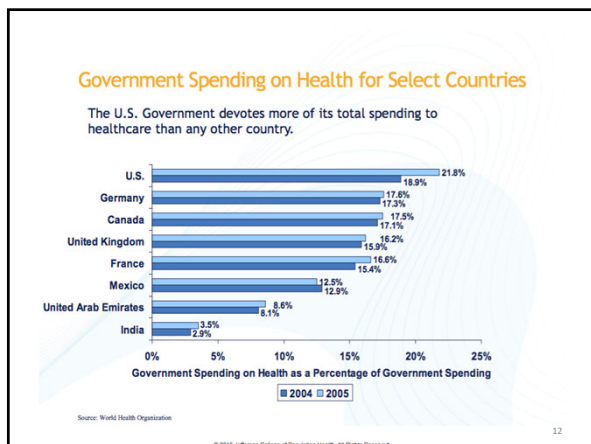
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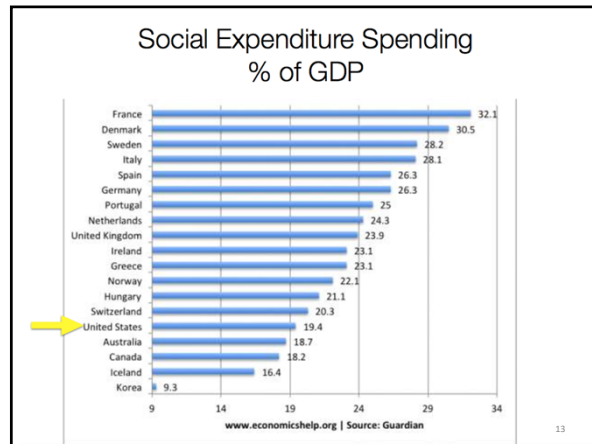
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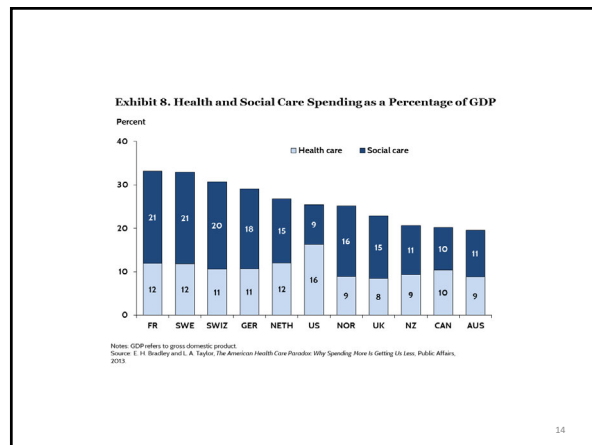
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Medical Care's Importance

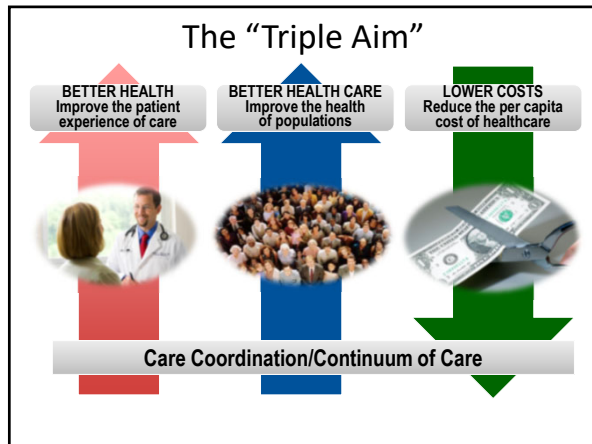
Factors accounting for premature mortality in the USA:

- One's standard of living and lifestyle (50%)
- Genetic disposition or make up (20%)
- Social and environmental (physical, cultural, and economic) factors (20%)
- Medical Care accounts for (10%) making it the least critical factor

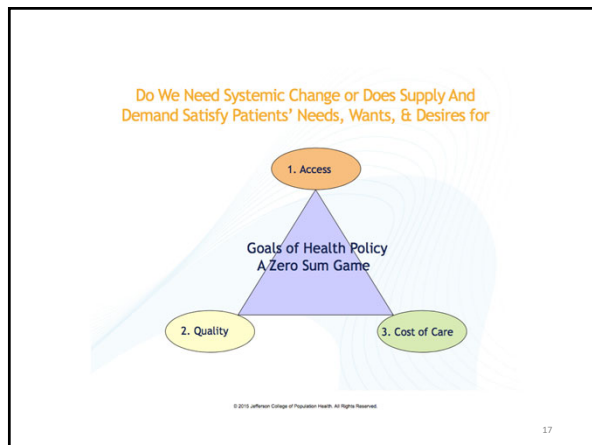
Source : Centers for Disease Control

Begs the question : How should we invest in (budget for) and structure our health care enterprise ?

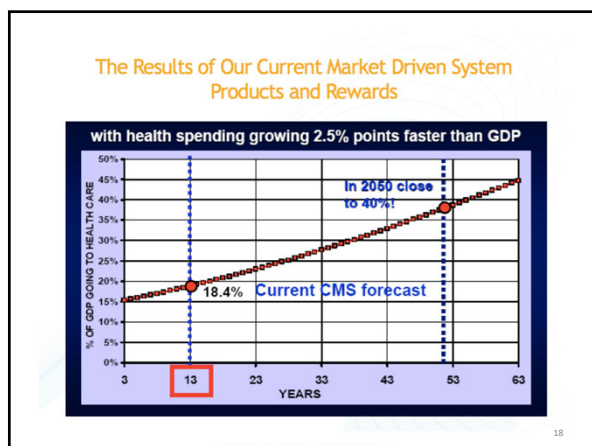
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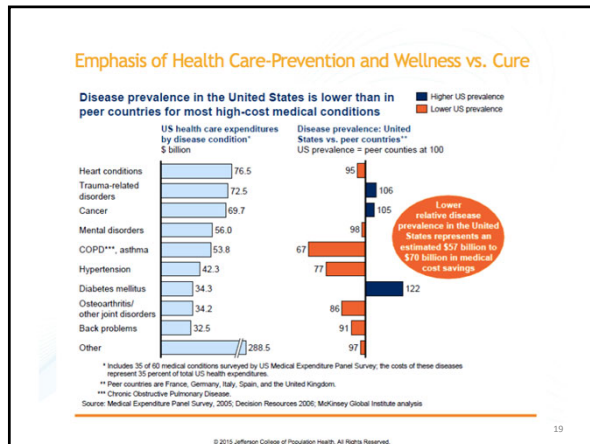
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Reducing need for services

- Preventive services and health promotion activities
 - Immunization
 - Screening
 - Smoking cessation programs
 - Weight reduction programs

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Reducing need for services

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Can this be done in the Emergency Department

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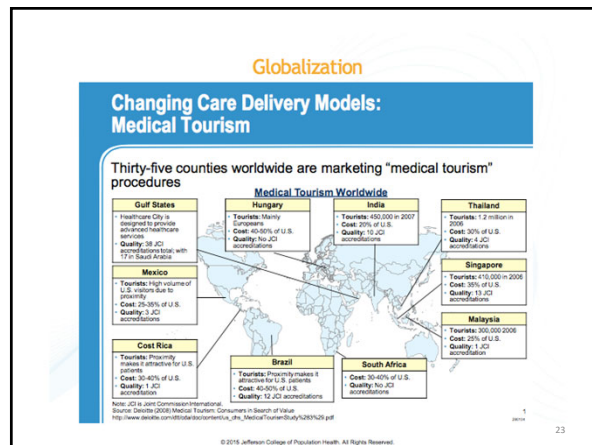
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Healthcare Globalization and Changing Healthcare Market

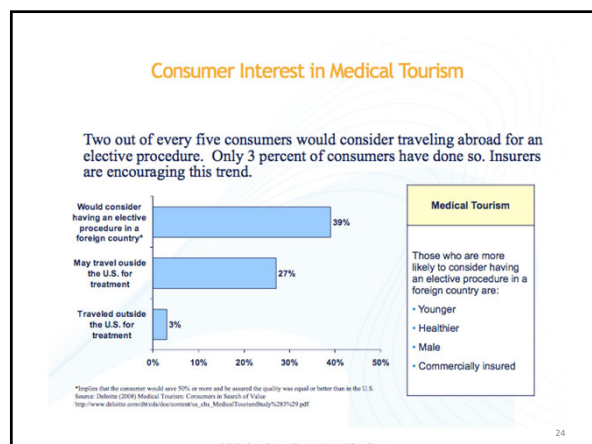
Tourism
Telemedicine
Retail Medicine

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Medical Tourism: A Cost Comparison of 14 Procedures in 10 Countries

	Angioplasty	Breast Implant	Breast Reduction	Dental Implant	Gastric Bypass	Heart Bypass	Heart Valve Replacement	Kidney Transplant	Spine Fusion	Transcatheter Aortic Valve Replacement	Transcatheter Mitral Valve Replacement	Transcatheter Tricuspid Valve Replacement	Transcatheter Pulmonary Valve Replacement	Transcatheter Aortic Valve Replacement	Transcatheter Mitral Valve Replacement	Transcatheter Tricuspid Valve Replacement	Transcatheter Pulmonary Valve Replacement
U.S.	\$ 47,000	\$ 6,000	\$ 6,200	\$ 1,100	\$ 16,000	\$ 66,000	\$ 65,000	\$ 33,000	\$ 47,000	\$ 34,000	\$ 17,000	\$ 6,200	\$ 41,000	\$ 4,400			
Costa Rica	\$ 13,000	\$ 3,000	\$ 4,100	\$ 900	\$ 11,000	\$ 21,000	\$ 20,000	\$ 16,000	\$ 12,000	\$ 9,500	\$ 10,000	\$ 3,400	\$ 17,000	\$ 3,300			
Hungary	NA	\$ 3,875	\$ 3,400	\$ 600	\$ 8,500	NA	\$ 11,000	\$ 9,000	NA	\$ 9,500	\$ 5,500	\$ 2,800	\$ 16,000	\$ 1,100			
India	\$ 11,000	\$ 2,200	\$ 2,500	\$ 1,100	\$ 8,500	\$ 14,400	\$ 11,000	\$ 8,000	\$ 8,200	\$ 7,500	\$ 7,500	\$ 2,800	\$ 5,500	\$ 2,800			
Malaysia	\$ 11,000	\$ 3,300	\$ 3,343	\$ 2,636	\$ 8,500	\$ 20,000	\$ 16,000	\$ 12,000	\$ 12,000	\$ 2,000	\$ 3,800	\$ 17,000	\$ 3,800				
Mexico	\$ 16,000	\$ 2,500	\$ 3,000	\$ 900	\$ 13,000	\$ 27,000	\$ 24,000	\$ 11,000	\$ 12,000	\$ 12,000	\$ 7,500	\$ 2,800	\$ 22,000	\$ 3,000			
Poland	\$ 7,200	\$ 2,243	\$ 2,146	\$ 903	\$ 11,000	\$ 7,140	\$ 9,500	\$ 6,100	\$ 7,000	\$ 6,375	NA	\$ 1,700	NA	\$ 3,000			
Singapore	\$ 13,000	\$ 6,000	\$ 6,000	\$ 1,000	\$ 13,000	\$ 24,000	\$ 21,400	\$ 12,000	\$ 12,000	\$ 12,000	\$ 4,700	\$ 27,000	\$ 6,200				
Thailand	\$ 16,000	\$ 2,800	\$ 3,750	\$ 1,429	\$ 12,000	\$ 25,000	\$ 22,000	\$ 16,000	\$ 15,000	\$ 11,000	\$ 9,000	\$ 4,300	\$ 16,000	\$ 3,000			
U.K.	\$ 8,000	\$ 4,300	\$ 6,075	\$ 1,600	\$ 16,000	\$ 13,821	\$ 35,000	\$ 23,000	NA	\$ 16,162	\$ 15,000	\$ 3,000	\$ 31,000	\$ 4,810			

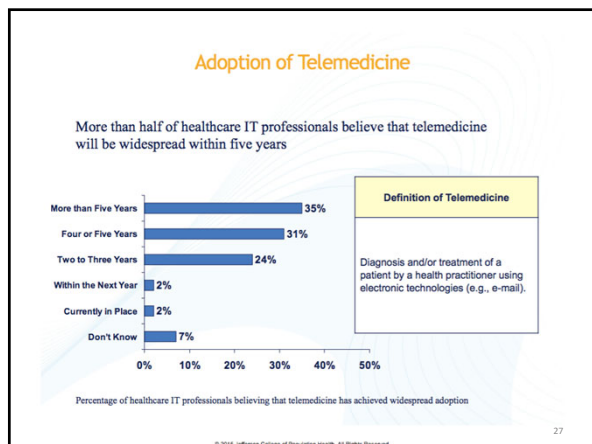
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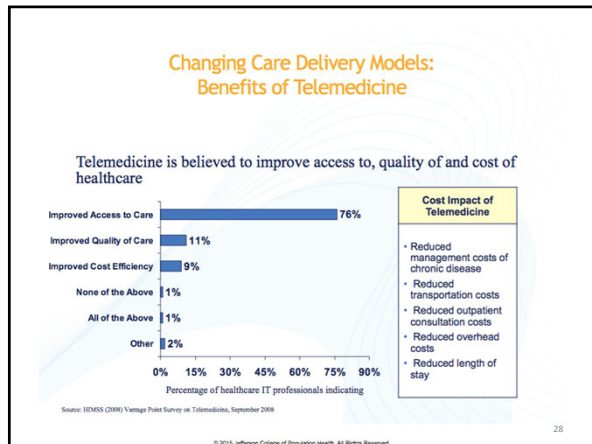
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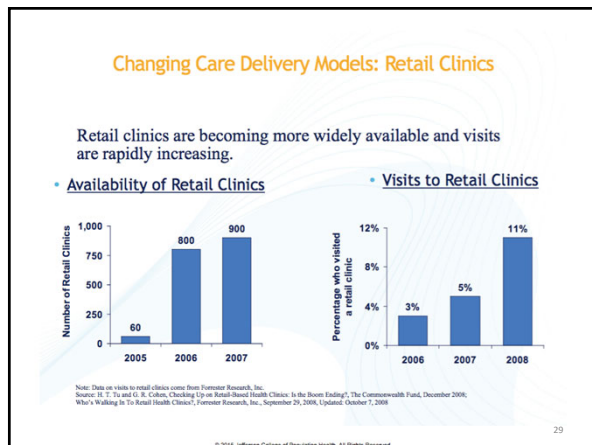
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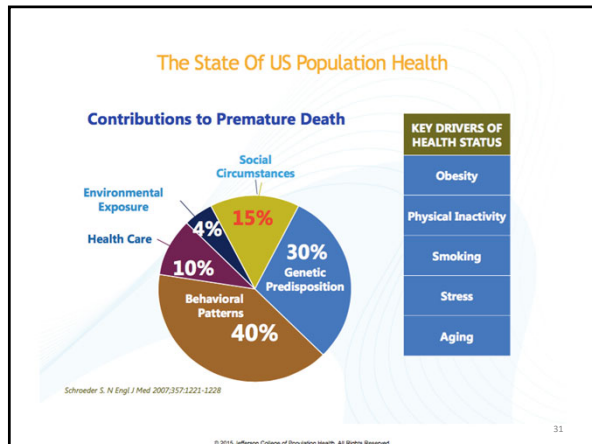
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Need to refocus

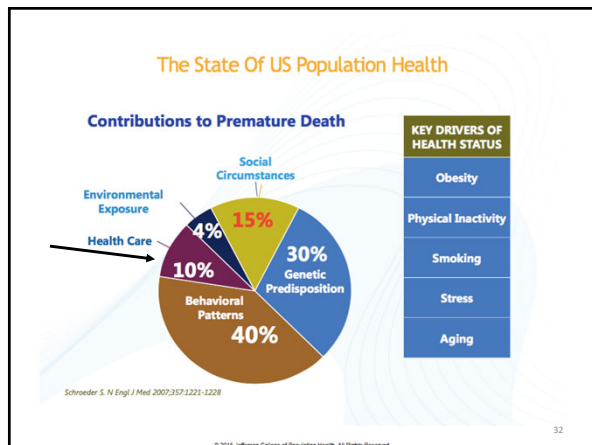
Prevention, Waste
and
Care Coordination

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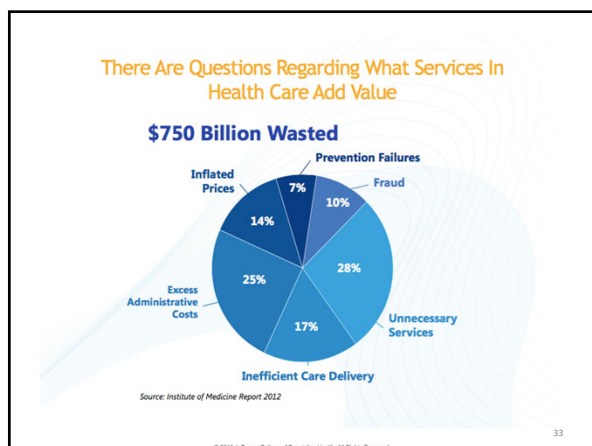
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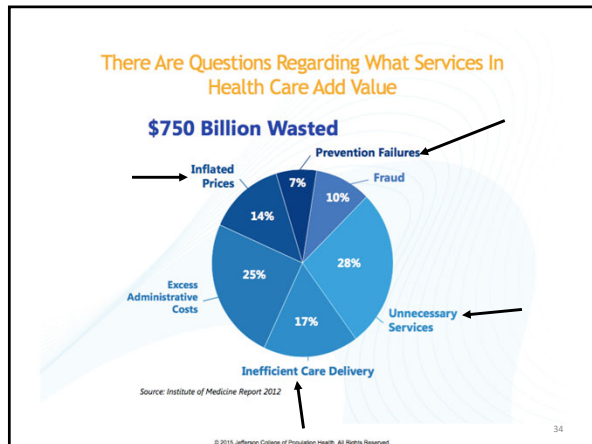
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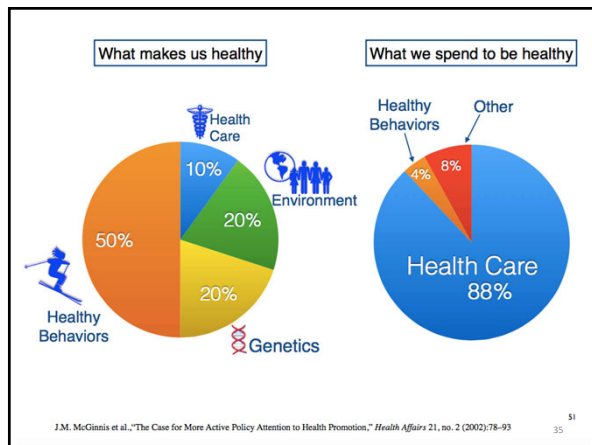
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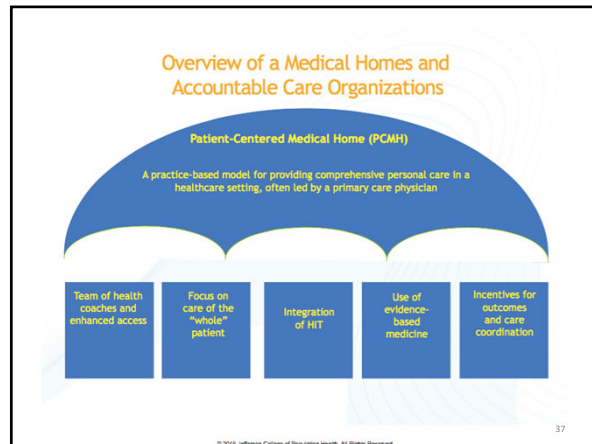
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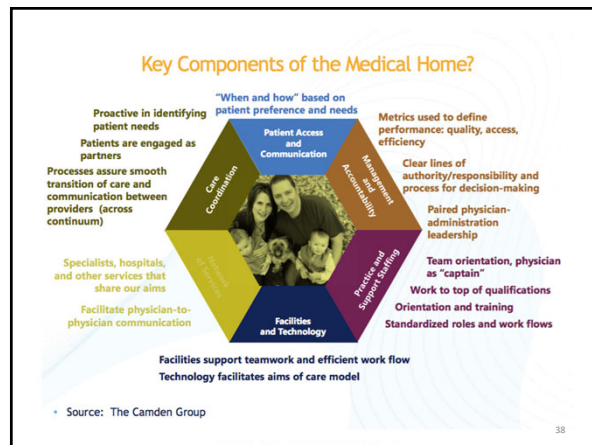
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Medical Home Pilot Results

Pilot	Incentives	Results		
		Hospitalization Reduction	ER Visit Reduction	Total Savings
Colorado Medical Homes for Children	Pay for Performance (P4P)	18%	N/A	\$215-\$1,129
Community Care of North Carolina	PMPM payment	40%	16%	\$516
Geisinger (ProvenHealthNavigator)	P4P; PMPM payment; shared savings	18%	N/A	\$500
Group Health Cooperative	PMPM payment	16%	29%	\$10 PMPM
Intermountain Health Care (Care Management Plus)	P4P	4.8-19.2%	0.7-3%	\$640-\$1,650
MeritCare Health System and BCBS of ND	PMPM payment; shared savings	6%	24%	\$530
Health Partners Medical Group (Best Care)	N/A	24%	39%	8% < MN state average
Genesee Health Plan (Genesys HealthWorks)	N/A	15%	50%	N/A

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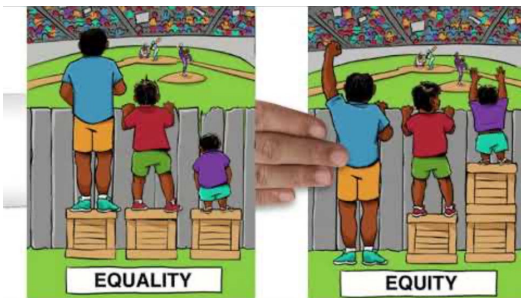
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SO...WHAT IS POPULATION HEALTH

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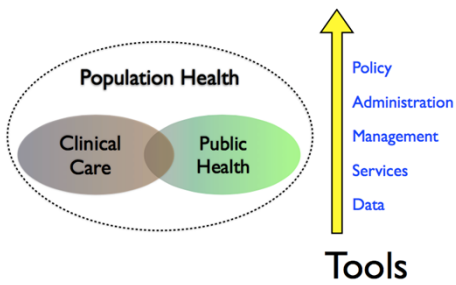
Health Equality vs Equity



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But...What is Population Health



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Management of Asthma

- Identify the Problem
- Hot spotting
- Care Coordination
- Nothing Stands in the Way of Health
 - Vacuum Cleaners
 - Air Filtration
 - Mold Mitigation

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Population Health Paradigm

	<i>Conventional Healthcare</i>	Population Health
Purpose	Curing disease	Preventing disease Keeping people healthy & well
Values	Diagnosis, treatment & cure Physician's expertise Unlimited access to healthcare* *if you can afford it	Prevention of disease Emphasis on wellness Timely & high-quality cost-effective care Agency and self-efficacy Medical home
Methods	Diagnosis & treatment Fee-for-service	Personalized wellness plans Community engagement & prevention Global payments Shared health information

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Population Health Paradigm

	<i>Conventional Healthcare</i>	Population Health
Constraints	Cost Continuity of care Lack of access Administrative burdens Limited patient contact	Implementation cost Politics Culture
Opportunities	Greater autonomy	Cost effectiveness Evidence-based & personalized medicine Increase quality & reduction of errors
Assumptions	System "rescue" patients Doctor center of authority	Patient is responsible for health & wellness Doctor center of care team

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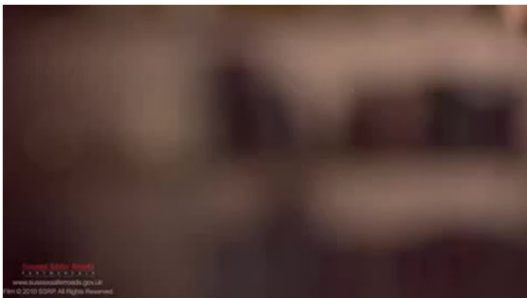
Some Population Health Initiatives

- Water and sewage treatment
- Smoking
- Seat Belts

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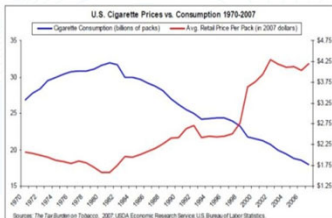
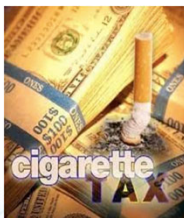
A Population Health Program



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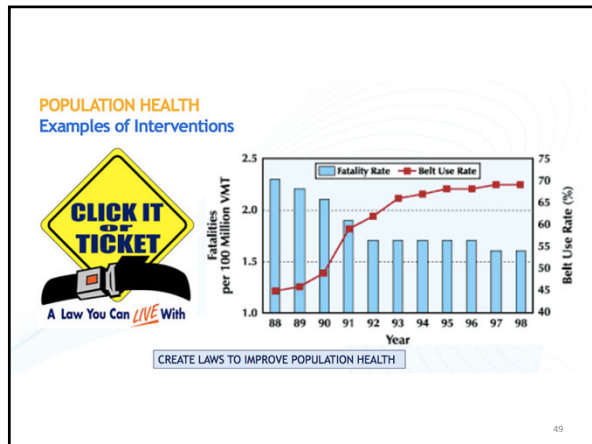
POPULATION HEALTH Examples of Interventions



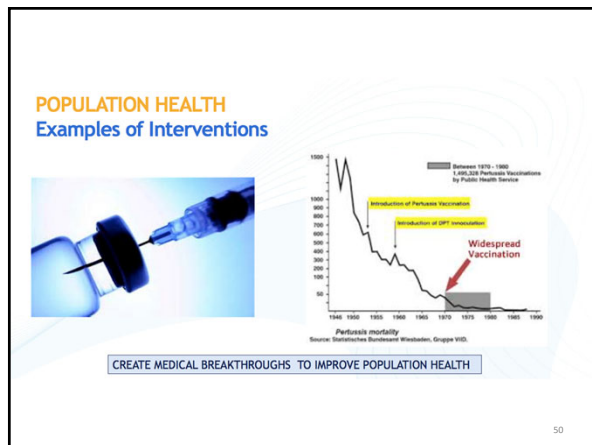
CREATE TAXES TO IMPROVE POPULATION HEALTH

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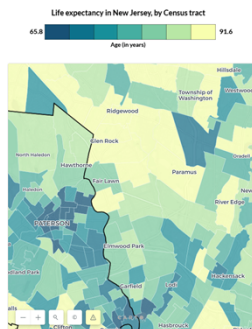


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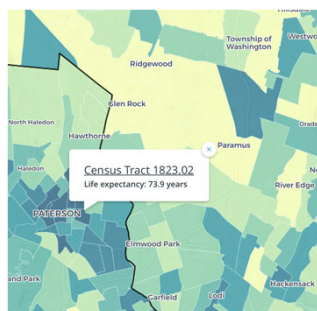
LIFE EXPECTANCY ACROSS THE RIVER

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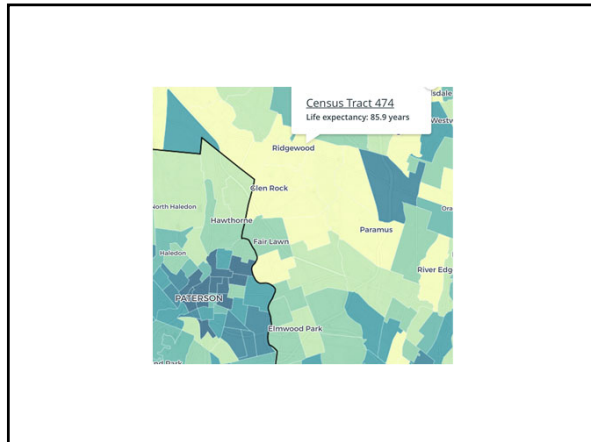
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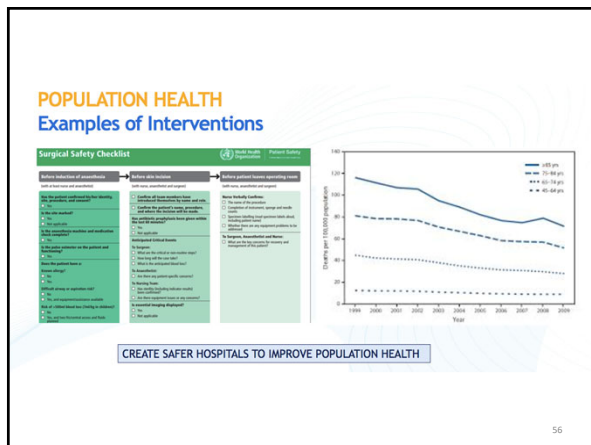
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OK, so

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Lifestyle: Strongest Determinant of Mortality



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A Patient Gateway to Health and Wellness

PATIENT-CENTERED MEDICAL HOME 7 KEY TENETS

A Patient Gateway
NOT a Gate Keeper

LITERATURE IS
REPLETE WITH
EVIDENCE OF
THE IMPACT OF
THE TRUSTED
CLINICIAN



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PATIENT CENTERED MEDICAL HOMES

Why Pursue Excellence in Primary Care?

- Research demonstrating that
 - The medically homeless receive expensive and poor care
 - The consumer that is affiliated with a primary practice receives better care
 - The consumer affiliated with a primary care physician inside a practice receives best care
 - High performing primary practices achieve remarkably efficient and effective results
- Value over volume - Industry calling for improved clinical outcomes
- Patient Centered - Greater focus on excellent patient access and experience
- Transparency - Increasing reliance on identifying best providers to deliver enhanced quality and decreased utilization of high-cost resources
- Provider-driven medical management - Business need to shift responsibility for improvement to the practices themselves
- Shared Risk - Ability to identify ACO-ready practices suitable for contracting approaches that focus on shared responsibilities and reduce the need for Horizon to manage the practices



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But.....

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CATASTROPHIC ILLNESS DESPITE THE PROGRESS OF MEDICAL SCIENCE

World Death Rate Holding Steady At 100 Percent

GENEVA, SWITZERLAND—World Health Organization officials expressed disappointment Sunday over the group's finding that, despite the enormous efforts of doctors, rescue workers, and other medical professionals worldwide, the global death rate remains at 100 percent.

Death, a metabolic affliction causing shutdown of all life functions, has long been considered humanity's number-one health concern. Responsible for 100 percent of all recorded fatalities worldwide, the condition has no cure.

"I was really hoping, what with all those new radiology treatments, rescue helicopters, cardiovascular-exercise machines, and what have you, that we might at least make a dent in it this year," WHO Director General Dr. Ernst Wessel said. "Unfortunately, it would appear that the death rate remains constant, as it has since the dawn of time."

Many suggest that the high mortality rate represents a massive failure on the part of the planet's healthcare workers.

"The inability of doctors and scientists to address and confront this issue of death is nothing less than a scandal," concerned parent Marcia Grella said. "Do you have any idea what a full-blown case of death looks like? I do, and believe me, it's not pretty. In prolonged cases, total decomposition of the corpse is the re-

see DEATH page 84

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NEW ACCESS POINTS FOR CARE



Retail Clinics

- Open 7 days a week, including evenings and weekends
- No appointments necessary
- Staffed by Nurse Practitioners licensed to write prescriptions
—Physician Assistants in Texas and Nevada
- Most insurance plans accepted
—Cost of visit is co-payment
—If uninsured, visits average \$59-74
- Services provided to patients 18 months and older
- Paperless registration
- Electronic medical record



Pharmacies

- Drug monitoring and disease management for defined conditions
- Patient education
- Participating in multi-disciplinary care teams
- Further public health initiatives
- Consult on drug utilization programs
- Formulary management
- Administer Immunizations
- Influence behavior change

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The ACO at St Joes

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Thoughts

- Asthma Management
- CHF and Patient Ping
- A Culture of Wellness
- 7000 Employees

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The ED 2020

- Emergency and Trauma
- Walk-in Primary and Urgent Care
- Wellness Center
 - Vaccines,
 - DM,
 - BP
- Falls Prevention
- ED Waiting Room
- More.....

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Think Different



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Last Story

91+88=Priceless

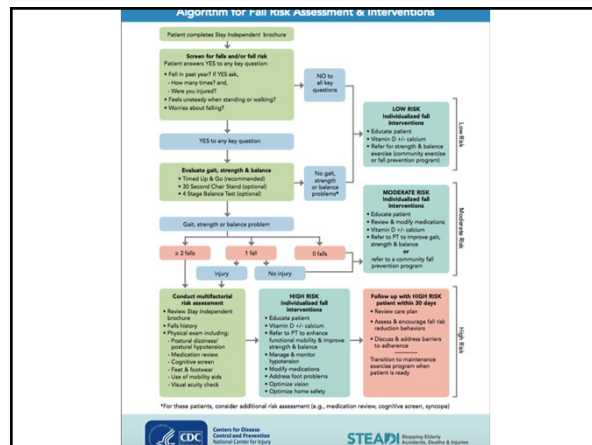
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Falls



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- <http://www.cdc.gov/stead/index.html>
- <http://www.medscape.com/viewarticle/841020>

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Happy Birthday



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Evelyn's Story 3 Days Later



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Stanley's Story – 10 Days Later



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8 Months Later

- Evelyn
 - 20% Loss Body Weight
 - Disability
 - Hospice
 - Depression
- Stanley
 - Alienation
 - Depression
 - Disability

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8 Months Later

- Evelyn
 - 20% Loss Body Weight
 - Disability
 - Hospice
 - Depression
- Stanley
 - Alienation
 - Depression
 - Disability

Treatment Goal and
What's Important to You?:

We Want to Dance
Together

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Thank you



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One Year Latter

- Evelyn
 - Weight
 - Independent
- Stanley
 - Driving

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Thank you



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