# Health Dynamics



Opportunities to 'do well' by 'doing good'

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A story of change



## Seoul, 1966





## Seoul, 2005





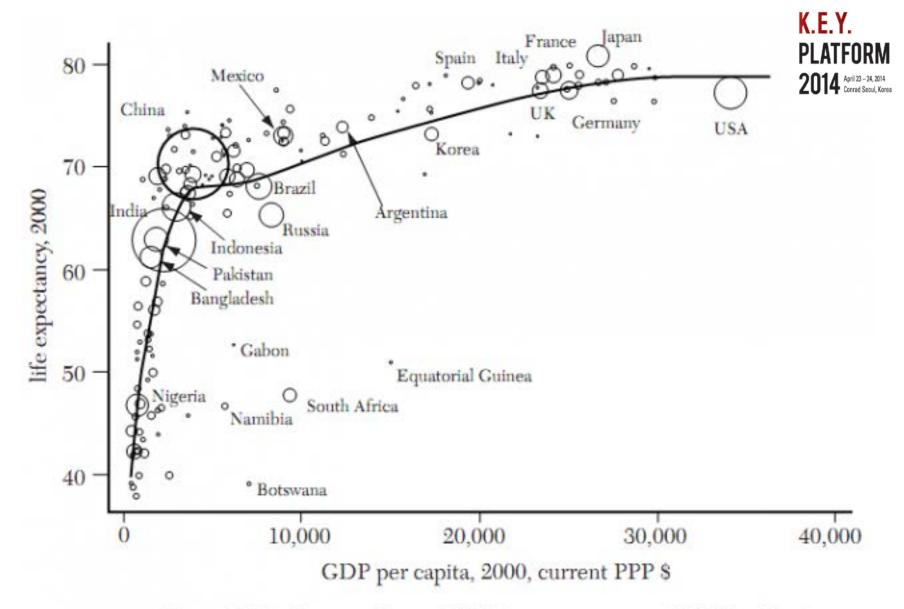
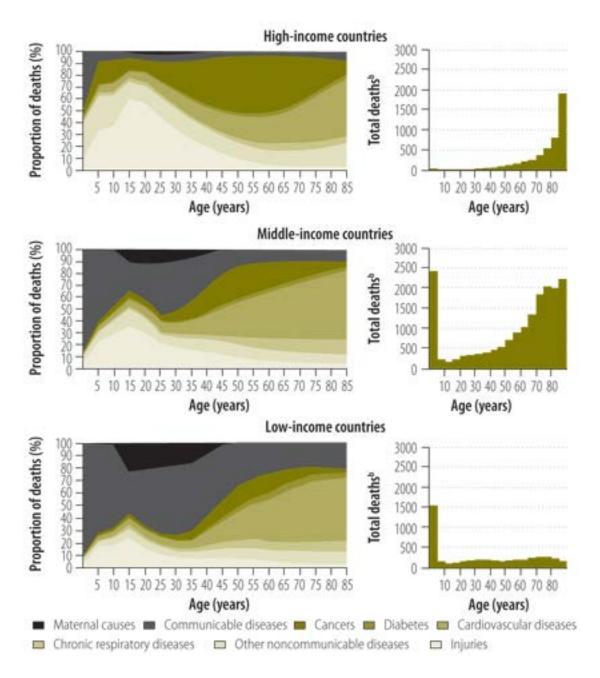


Figure 1. The Preston Curve: Life Expectancy versus GDP Per Capita





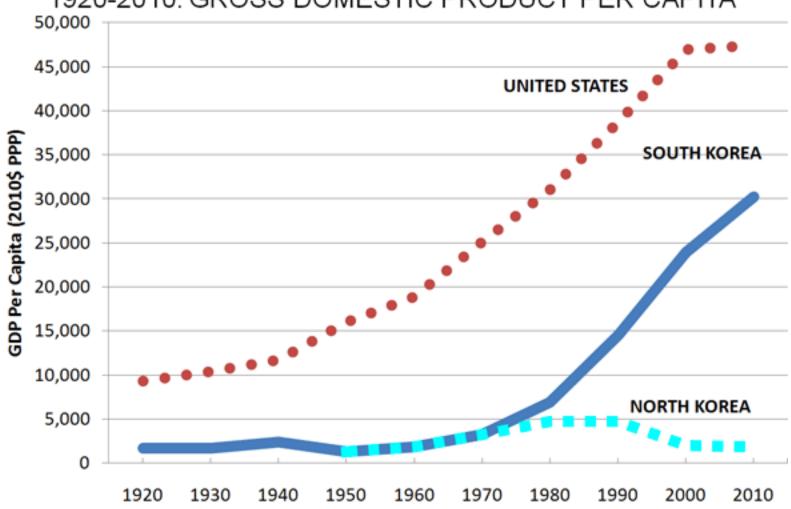


Does the pattern hold within Korea?

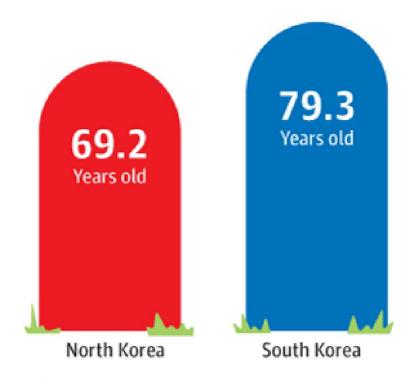


#### Economic Growth: Korea & US

1920-2010: GROSS DOMESTIC PRODUCT PER CAPITA







Life expectancy at birth, total population



#### South

- 1. Stroke
- 2. Coronary Heart Disease
- 3. Lung Cancer
- 4. Diabetes Mellitus
- 5. Stomach Cancer
- 6. Suicide
- 7. Liver Cancer
- 8. Road Traffic Accidents
- 9. Colon Cancer
- 10. Liver Disease

#### North

- 1. Coronary Heart Disease
- 2. Influenza & Pneumonia
- 3. Stroke
- 4. Hypertension
- 5. Tuberculosis
- 6. Lung Cancers
- 7. Lung Infections
- 8. Diabetes Mellitus
- 9. Kidney Disease
- 10. Violence



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A focus on South Korea...



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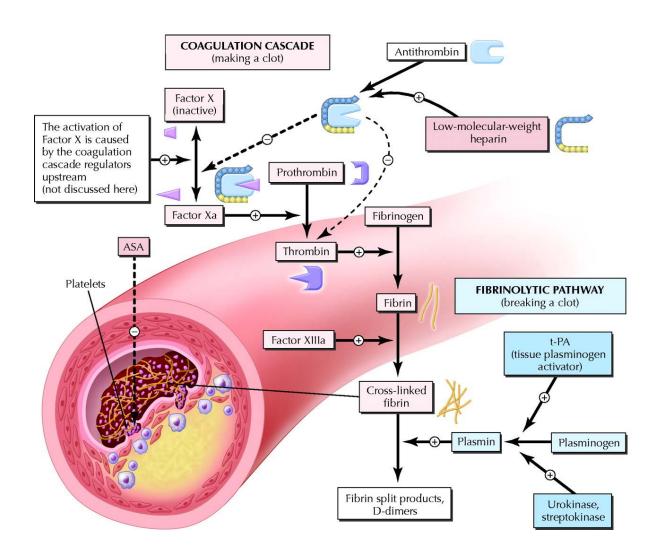


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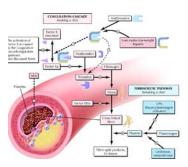


What causes strokes and heart attacks?

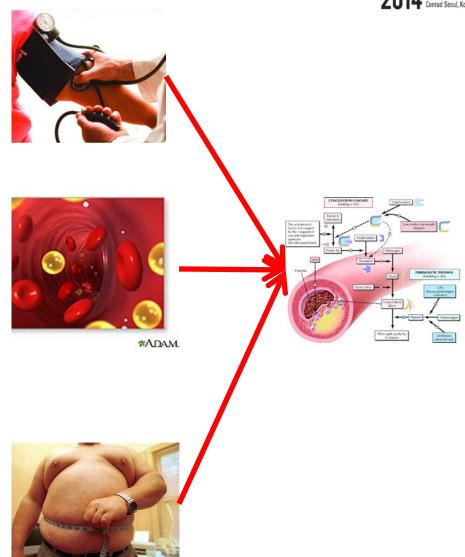




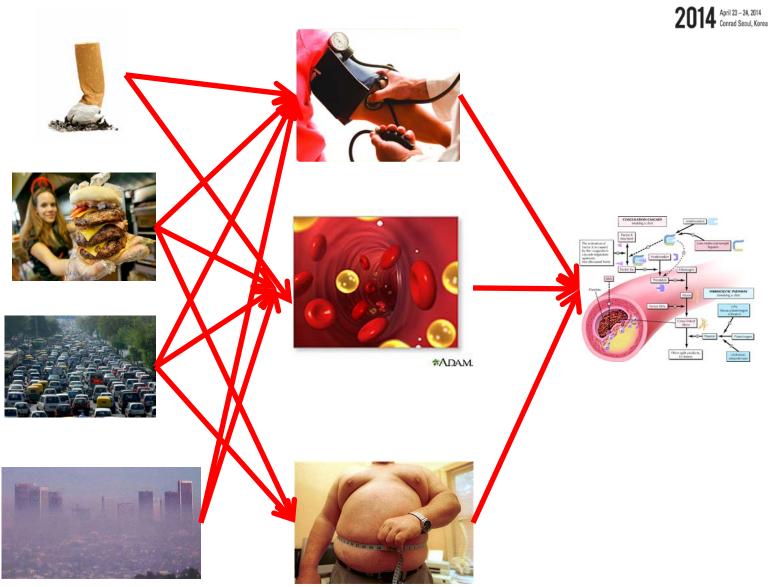
# K.E.Y. PLATFORM 2014 April 23-24, 2014 Conrad Seoul, Korea













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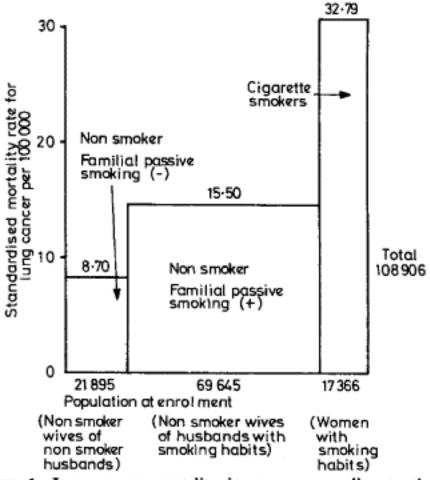


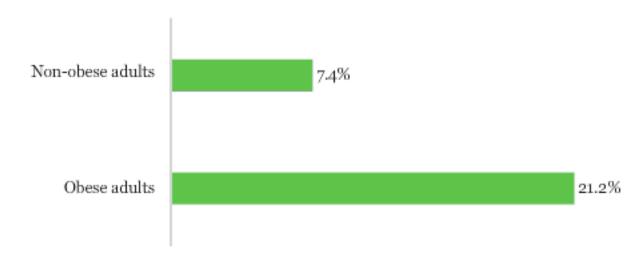
FIG 1—Lung cancer mortality in women according to the presence or absence of direct and familial indirect smoking.



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#### Likelihood of Having Been Diagnosed With Diabetes: Obese vs. Non-Obese January-September 2009 results



Gallup-Healthways Well-Being Index

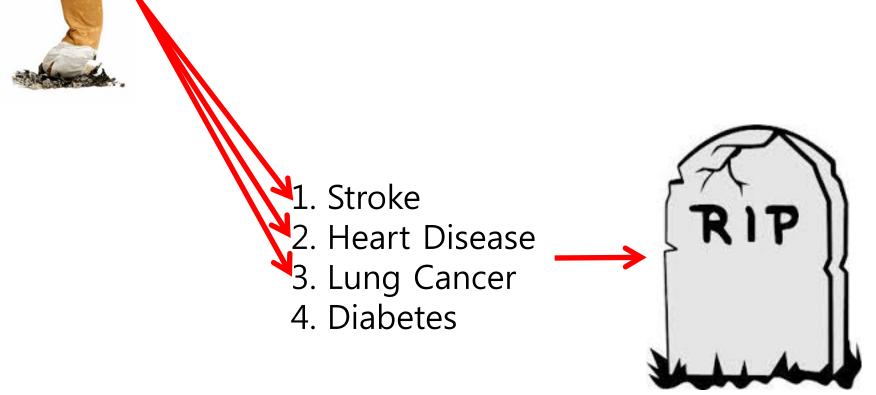
GALLUP®



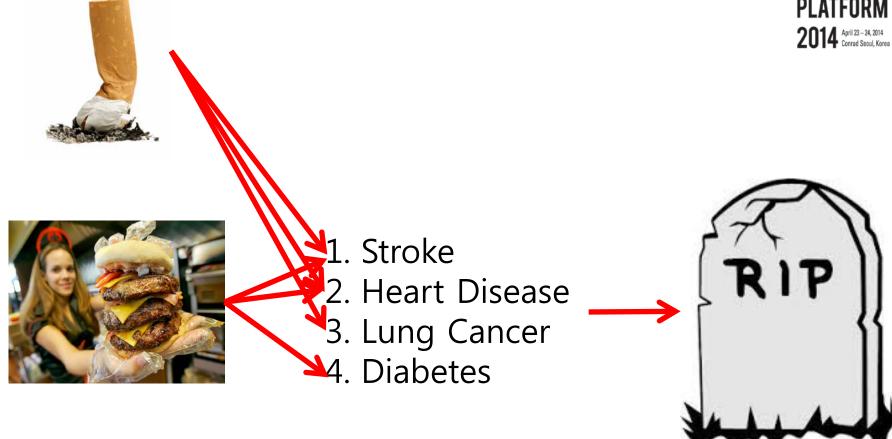
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1. Stroke

2. Heart Disease

3. Lung Cancer

4. Diabetes















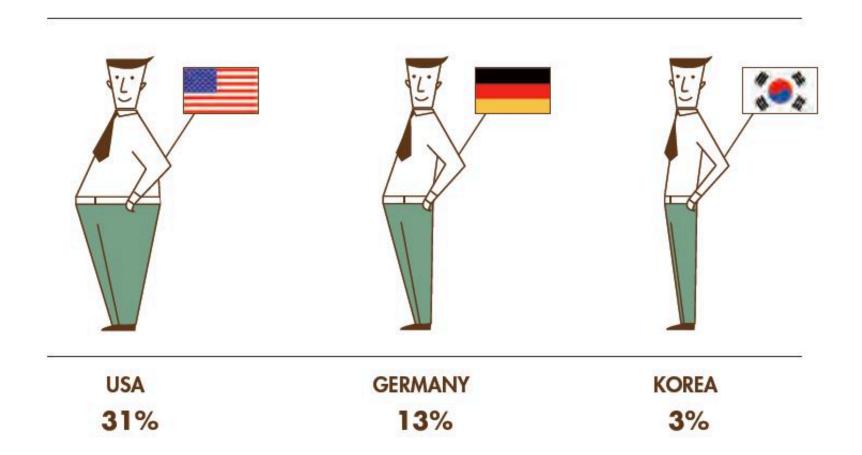






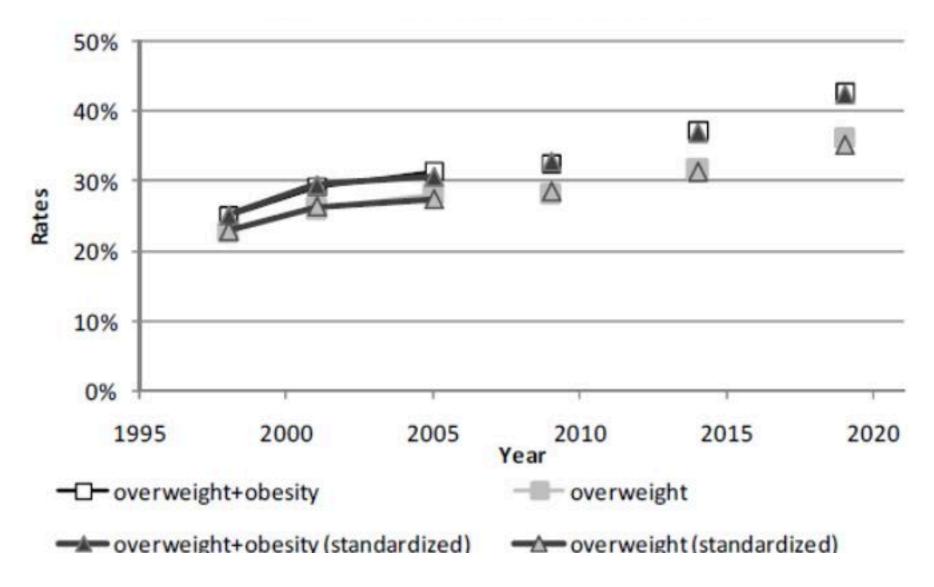






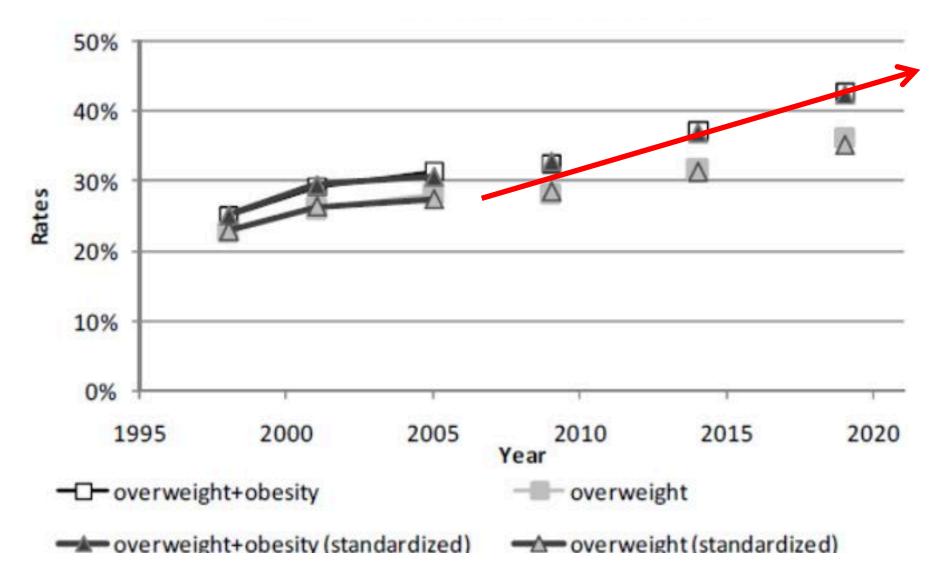
## Obesity projections, South Korea





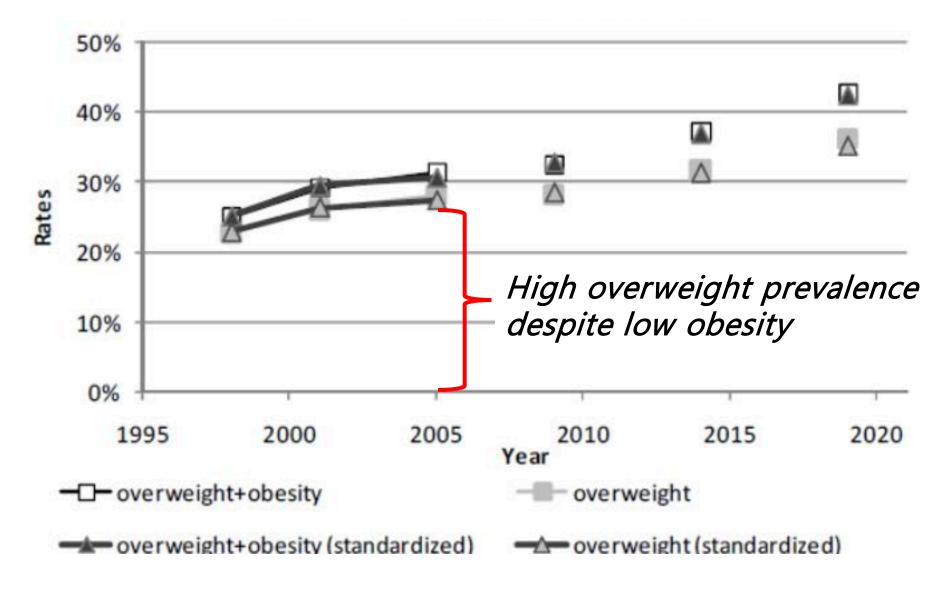
## Obesity projections, South Korea





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## Top 10 Causes of Death

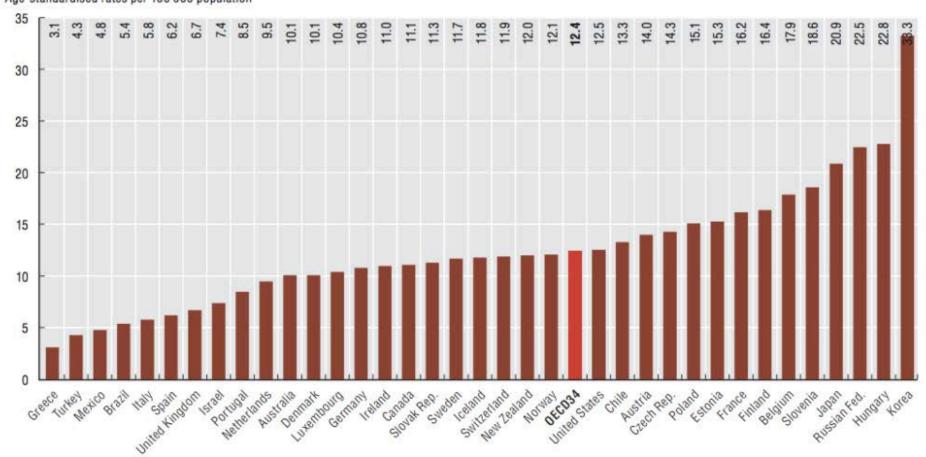


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#### 1.6.1. Suicide mortality rates, 2011 (or nearest year)







Public health is what we, as a society, do collectively to assure the conditions for people to be healthy



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But there remains an opportunity for business...

#### Business offers...



1) Agility

2) Innovation

3) Efficiency



Opportunities to do 'well' and do 'good'

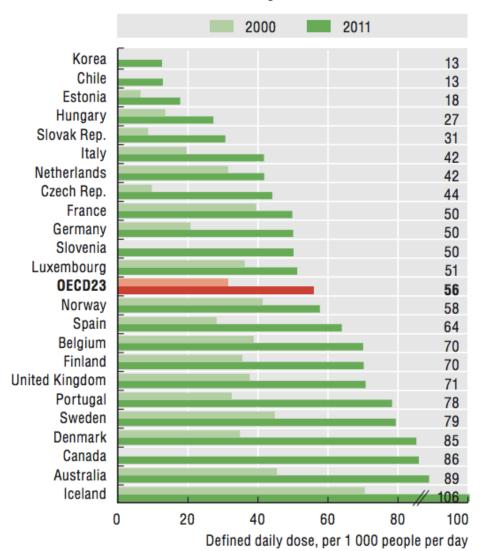
## 1) Traditional medical interventions



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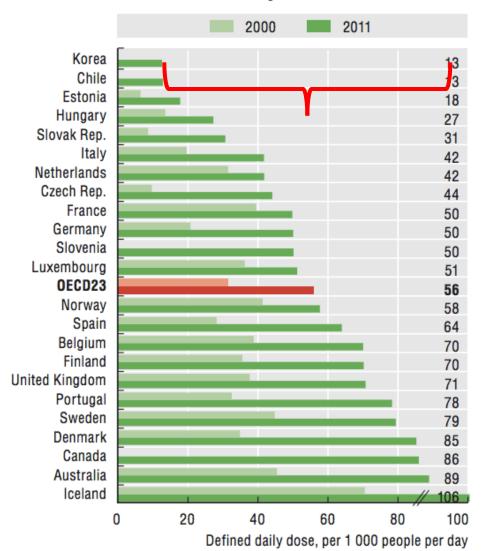
### Antidepressants consumption, 2000 and 2011 (or nearest year)



## 1) Traditional medical interventions



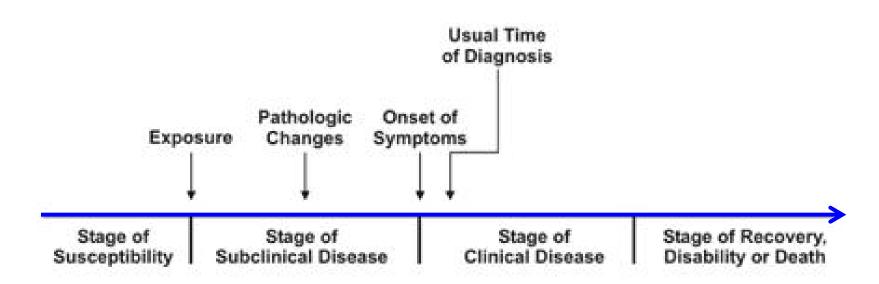
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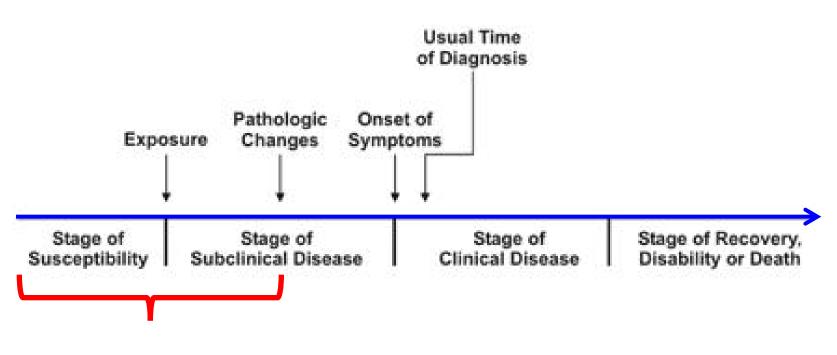


Medicine: A double-edged sword



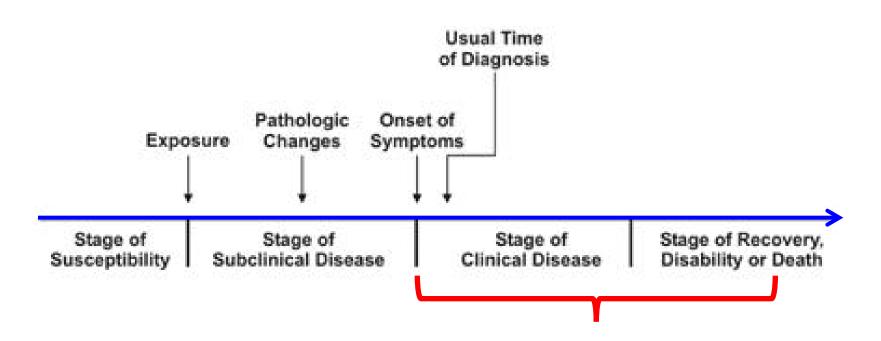






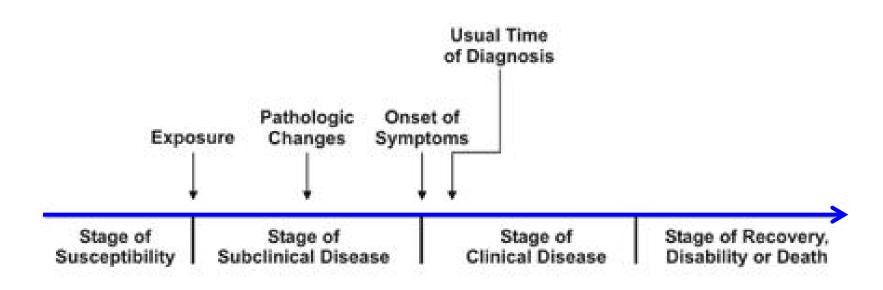
We want to be here





But medical interventions mak e \$\$\$ when people are here





Incentivizes disease

## 2) Innovative investment models



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A case study

#### The Facts:



 Nearly 20% of children in Fresno, CA have asthma

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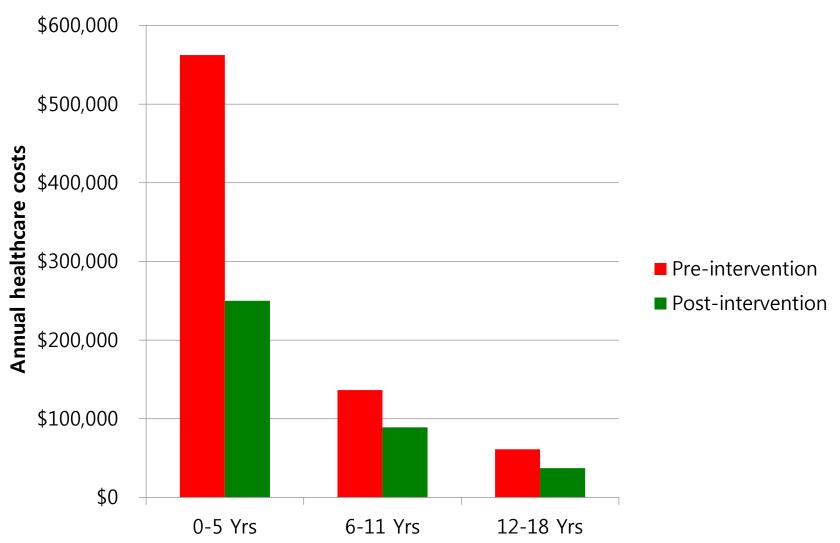
- Nearly 20% of children in Fresno, CA have asthma
- Children with asthma who are not well cared for often require emergency care, costing nearly \$35 million annually

#### The Facts:



- Nearly 20% of children in Fresno, CA have asthma
- Children with asthma who are not well cared for often require emergency care, costing nearly \$35 million annually
- There are cost-effective interventions that reduce emergency room visits (and more importantly, asthma emergencies)





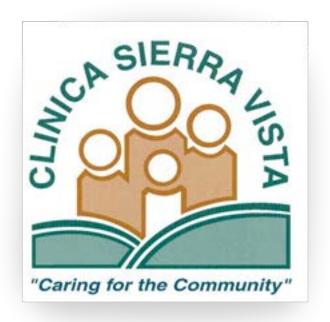


# Central California ASTHMA COLLABORATIVE













Working together to reduce the burden of asthma

## 3) Leveraging shared incentives



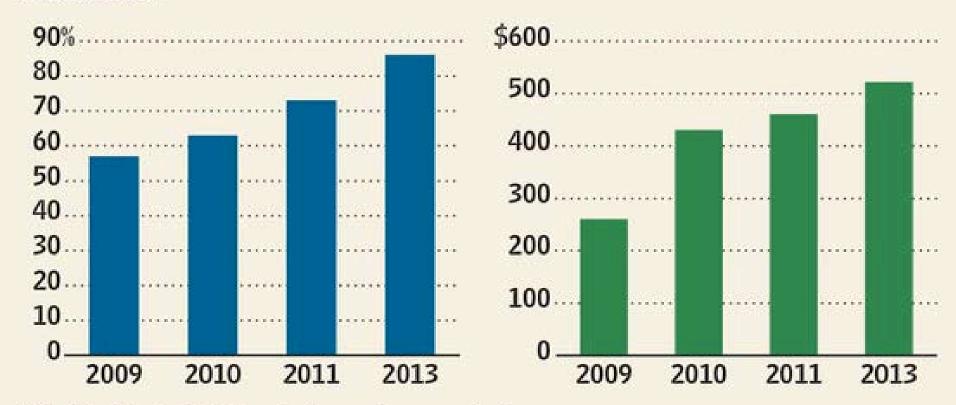
## Time and Money Lost to One Employee Smoking (based on four ten-minute smoke breaks per day)

Employee Annual Salary*	Hourly Wage	Dollars Lost to Smoking		
		Weekly	Yearly (A)**	ON AVERAGE, FOR
\$20,000/year	\$10.00/hr	\$33.33	\$1,667/year	EVERY \$5,000 A
\$25,000/year	\$12.50/hr	\$41.66	\$2,083/year	
\$30,000/year	\$15.00/hr	\$49.99	\$2,500/year	SMOKER MAKES IN SALARY, HE/SHE IS
\$35,000/year	\$17.50/hr	\$58.32	\$2,916/year	
\$40,000/year	\$20.00/hr	\$66.65	\$3,333/year	COSTING YOU AS
\$45,000/year	\$22.50/hr	\$74.98	\$3,749/year	AN EMPLOYER AN
\$50,000/year	\$25.00/hr	\$83.32	\$4,166/year	ADDITIONAL
\$55,000/year	\$27.50/hr	\$91.65	\$4,583/year	\$412/YEAR
\$60,000/year	\$30.00/hr	\$99.98	\$4,999/year	¥112/112AIX
\$65,000/year	\$32.50/hr	\$108.31	\$5,415/year	
\$70,000/year	\$35.00/hr	\$116.64	\$5,832/year	

\*All numbers based on 40 hrs/week, 50 weeks/year
\*\*Figure A x Number of smokers in your company = yearly profit lost

### Spreading the Health

Percentage of surveyed companies offering wellness incentives Value of wellness incentives per employee



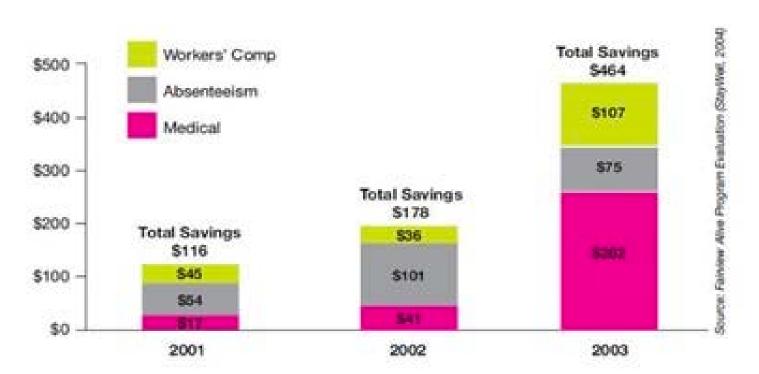
Note: No data for 2012 due to change in survey design.

Source: National Business Group on Health/Fidelity Investments surveys;
2013 data is based on responses from a national sample of 120 companies
in a range of industries and sizes

The Wall Street Journal

#### Wellness Program Savings

A three year study conducted at a health system in Minneapolis found that health risks decreased after the implementation of a comprehensive worksite wellness program. This led to increased savings due to reduced health care costs, absenteeism, and workers' compensation claims each year of the program.





Charity starts at home



# Investment >> Charity starts at home