



# Why Healthcare Systems Fail The right prescription for Healthcare Keynote Address

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#### Healthcare?

- Today what we have is 'Crisis Healthcare'
- Healthcare costs are going up
   But we are not getting Healthier!
- We focus on Surgery, pills & Hospitalization
- We are emphasizing on Acute care & Medical care, which is only a part of Healthcare



## Where do we stand today?

- 10 % of women in developed countries have breast cancer
- Diabetes takes 10 % of the health budget in any country
- In 2007, World spent € 172.58 Bn on Diabetes
- 16 Million people suffer stroke every year and 5-7 million people die every year



# Globally, Healthcare spend in excess of \$ 5 Trillion. 1 out of every 10 dollar earned is spent on Healthcare

## **Health – Wealth Gap**

Developing nations have 84 % of the world's population, 93 % of the disease burden & 11 % of the global healthcare funding. Adding to this, they are in HPSA – Health Professionals Shortage Areas



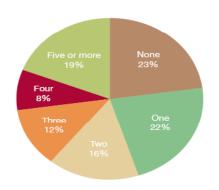
## **USA** Today

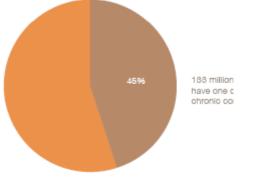
- In 2008, USA spent 2.3 trillion dollars or 17
   % of its GDP on Healthcare
- Only 5 countries in the World have GDP equivalent to healthcare spends of USA
- USA spends almost 50 % of the global healthcare spending. While ROW has 90 % of the disease burden

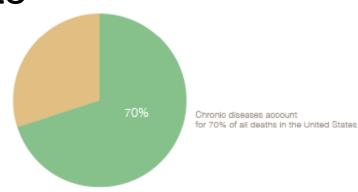


## Does higher spending mean better health?

- 77 % of American workers have at least one Chronic Disease
- 1out of 2 Americans have a Chronic disease
- 7/10 people die of Chronic diseases
- 58-67 % of Americans are really worried about their healthcare costs









## Top Four .....

 Diseases by cost in USA: Cancer, heart disease, diabetes & Hypertension

 Causes of death in USA: Tobacco, Unhealthy nutrition, Physical inactivity & Alcohol consumption



USA, In 2008 spent 17 % of its GDP on health. Far more than any other nation. Yet the WHO study ranks US health only 37<sup>th</sup> amongst nations, on par with Serbia, 31<sup>st</sup> in life expectancy & 40<sup>th</sup> in child mortality; worse than Cuba and Croatia



30 % of the rise in healthcare is due to doubling of obesity amongst adults over the past 20 years. 2/3<sup>rd</sup> of the spending is on treatable diseases such as diabetes, asthma & heart diseases

Hillary Clinton



## USA spends USD 1000 per person to administer the medical care system.



In US, for each dollar, 31 cents purchased hospital care, 22 cents paid physicians and other health care professionals, 10 cents purchased prescription drugs and 7 cents went towards nursing home care. The remaining 30 cents was spent on other kinds of medical services such as home health care and dental care as well as program administration.

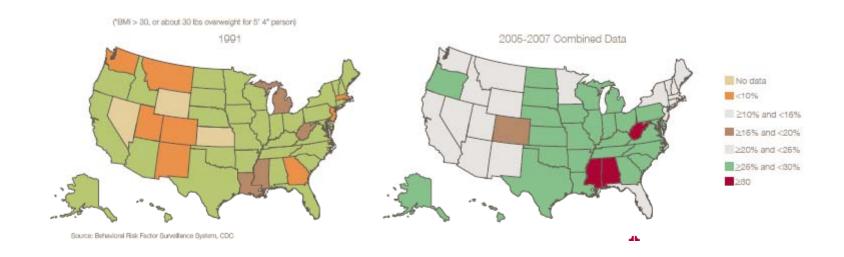
## Health Care EXPANSION

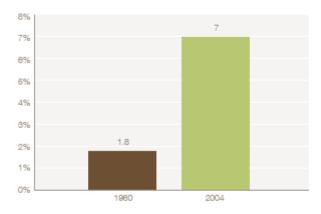


"I just don't see what's in it for us to care about helping people stay healthy." Today's payment system more often rewards the provider for the quantity of care delivery

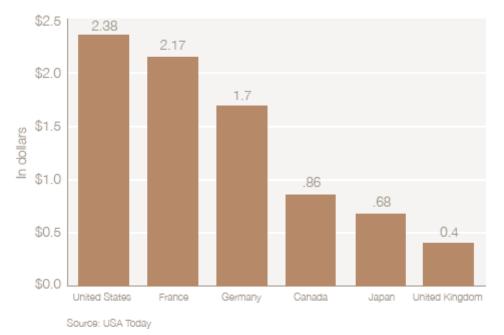
- Senate Finance Committee , USA , April 29, 2009

#### Obesity Trends amongst US adults & Children





Source: Journal of the American Medical Association

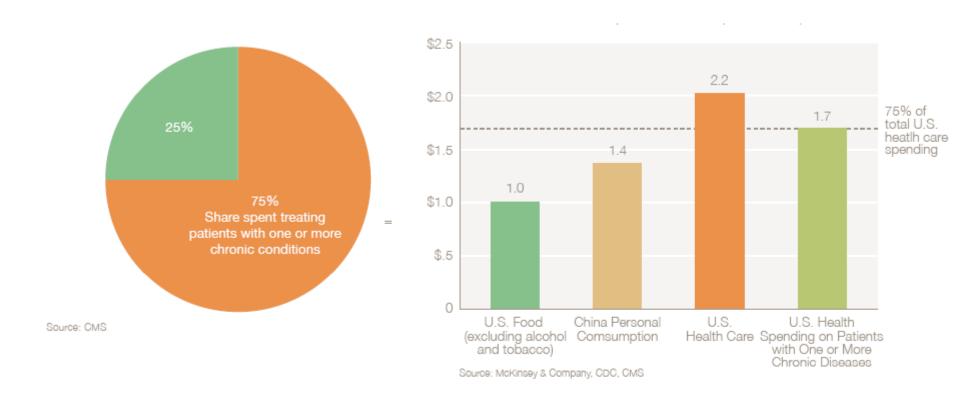


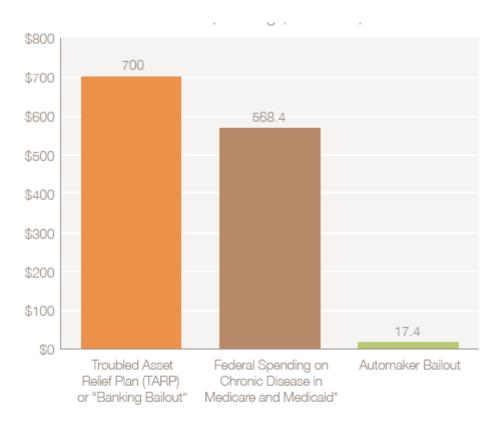
Hourly cost of Healthcare Benefits

GM, Ford, and Chrysler spend more on employee health expenses than on the steel they use to make cars. The cost of providing health care added \$1,100 to \$1,500 to the cost of each of the 4.65 million vehicles GM sold in 2004, according to various calculations.

Source: USA Today

#### 2007 Estimates – in Trillion Dollars





\*Calculated with projected figures for 2008 Medicare and Medicaid spending based on the assumption that 96 percent of Medicare spending and 83 percent of Medicaid spending went towards the treatment of patients with one or more chronic conditions. Source: CMS; Politico, Associated Press

Had US saved on healthcare costs, Economic crises could have been averted!



## In USA...in 2008 (in \$ terms)\*

 Employers paid an average of \$ 9144 per employee for health insurance.

 Employees were asked to cover about \$2064



## Healthcare Costs Going up!

- General Motors owes USD 20 Bn to retiree healthcare trust
- A 65 year old couple retiring in 2009 will need approx. \$240,000 to cover medical expenses in retirement cover with medical insurance coverage

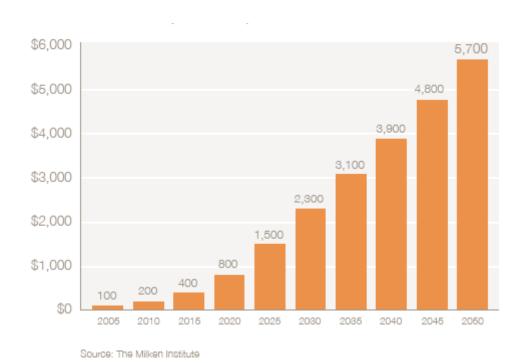


In my view, the current economic crises in USA is due to healthcare costs. To avoid higher healthcare spends on its employees, US companies off shored the jobs and so was the manufacturing. Finally, this led to a deep recession.

Rajendra Pratap Gupta

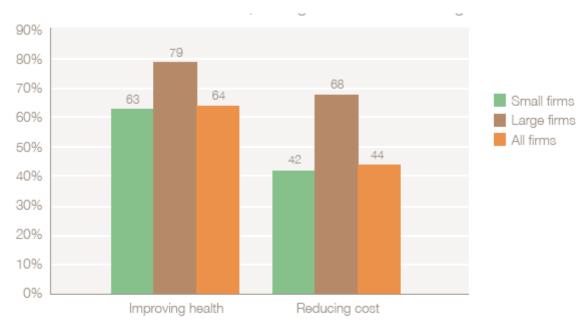


#### Long term Foregone Economic output in Billions



If Chronic diseases are left unchecked, by 2050 USA would lose 7 Trillion USD

#### Percentage of Employers who think that wellness programs are effective



Source: The Kaiser Family Foundation and Health Research Education Trust

Medicare

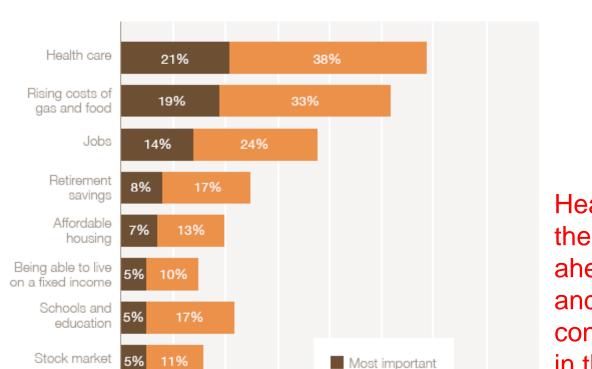
Fear of another terrorist attack

> Crime, drugs and gangs

> > 0%

10%

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Most/second

50%

60%

70%

80%

most important

Healthcare was the top concern ahead of Jobs and rising cost of consumer goods in the 2008 Election in the USA

Source: Partnership to Fight Chronic Disease 2008 Voter Survey

30%

40%

20%



Poland Ukraine Russian Federation Bulgaria

Figure 1.11 Percentage of the population citing health as their main concern

before other issues, such as financial problems, housing or crime 118

Germany Italy

Sweden Israel ■ Turkey Spain Czech Republic Slovakia

United Kingdom Mexico Chile

Canada

Peru Argentina Brazil United States Venezuela

Republic of Korea Japan

India Indonesia

Pakistan

Morocco

Bangladesh

Egypt Lebanon ■ Kuwait ■ Jordan

Malaysia

Occupied Palestinian Territory

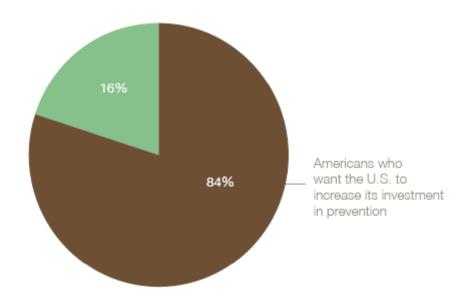
Uganda Mali United Republic of Tanzania Côte d'Ivoire ■ Senegal ■ Nigeria Ghana South Africa Kenya Ethiopia 10 20 30 70 40 50 60

The three **fundamental** needs are

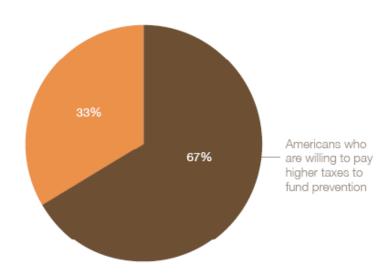
Food, Clothing & Healthcare

& Healthcare is also a 'Political issue' that decides the fate of governments

WHO report 2008



Source: National Association of Chronic Disease Directors



Source: National Association of Chronic Disease Directors

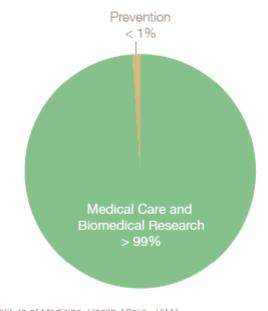


## USA – An over dosed nation, A failed system

- Practices 'Death by Prescription'
- 750,000 die of Heart diseases every year
- 550,000 die of Cancer every year
- 180,000 die due to ADR's & Prescription errors (100,000 + 80,000) – 3<sup>rd</sup> leading cause of death in USA
- 170,000 die due to stroke
- 16000 patients die every year due to use of OTC & NSAIDS



#### The REAL CULPRIT for the failed US Healthcare system



Source: Institute of Medicine, Health Affairs, JAMA

In 2002, the preventive medicine specialists represented only 0.8 % of the physician work force, down from 2.3 % in 1970



## Europe

European countries are moving to a new demographic challenge with decrease in working-age population & acceleration of ageing due to low fertility and declining mortality



Chronic diseases cause 86 % of deaths and 77 % of disease burden in the WHO European region. The disorders are largely preventable and are linked by common risk factors

WHO Report 2008



Epidemics of obesity poses one of the most serious public health challenges in the WHO Europe region (WHO,2006). Consequences: Premature death due to serious chronic conditions



EU recently reported that 600 million work days are lost annually due to absenteeism for health related reasons impacting GDP by as much as 2.6 – 3.8 %



## By 2050, the number of people in EU age 65 or over will have grown by 70 %



Europe is strikingly similar to US in Preventive care. Most of the member states of EU spend between 2-3 % of their healthcare budget on preventive care.



### Cuba

- In 1930's used the same system of buying insurance what US is using today
- Cuba spends just USD 186 on healthcare per capita
- Life expectancy is 76.9 Years
- Clean drinking water, preventive health & alternative and herbal treatment play an important role in the Healthcare system



### Cuba

- Universal coverage on health insurance exists in Cuba
- Cuba has immunization rates of 99-100 %
- With US embargo on Cuba & its limited resources, Prevention has become the only means of keeping its population healthy



### South Asia

- In India, private expenditure on health is 78%.
- Healthcare system serves just about 40 % of the population
- In China, 39 % of the rural & 36 % of urban population cannot afford professional medical care
- In Bangladesh, the healthcare system has totally collapsed.



### Canada

In Ontario, Canada's most populous province,

 Healthcare will account for 50 % of government spending by 2011, 2/3<sup>rd</sup> by 2017, and 100 % by 2026



- Approx. 130 Million population
- Diverse GDP \$ 900-43000
- Healthcare spend is Approx. \$ 43 Bn.
- Healthy life expectancy 10 years lesser than Western Europe
- Infant mortality at birth at 22 % Vs 5 % in Western Europe



- CVD causes 32 % of deaths in women & 27 % in men. WHO 2008
- Risk factors are attacking in early 30's
- Children as young as 10 are being diagnosed with Diabetes
- Nauru has the highest incidence of diabetes in the World – 30 %
- Qatar has the highest incidence of cancer



- ME Region has the highest incidence of heart attacks & stroke & highest rates of death from those conditions.
- Over weight & Obesity is a Serious problem.
   In UAE 69.7 % females & 66.9 % males have BMI above 25.
- Lack of awareness has resulted in high rates of morbidity in the Middle East region



- CVD causes 28 % deaths in UAE
- Diabetes is 20 % in UAE
- UAE study shows 24.5 % of all UAE nationals and 20 % of all nationalities in Gulf suffered from Diabetes & 33 % from obesity
- Half of the people in the UAE study were undiagnosed prior to participating in the study.



- Obesity, diabetes, CVD & Cancer are on the rise in the ME region
- Despite increase in JCI accredited hospitals and international standards,54 % of the respondents in a study think that the healthcare is so unappealing and they will continue to travel abroad for treatments



"With the cost of healthcare rising & system for financial protection in disarray, personal expenditure on health now push 100 million people below the poverty line each year"

WHO 2008 Report

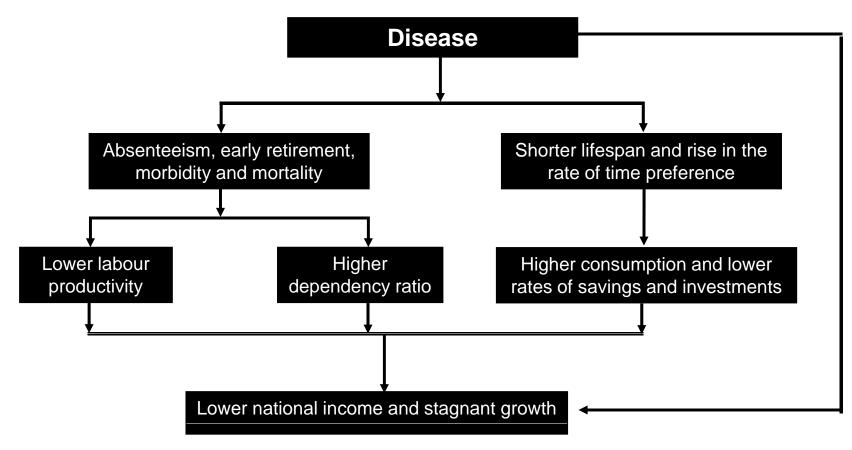


"An additional 2 % reduction in chronic disease death rates world wide, per year over the next 10 years will prevent 36 million premature deaths by 2015"

WHO Report



#### Diseases lead to lower productivity and Slow Economic Growth



Increased Healthcare spending pushes the cost of the products / services & absenteeism & presenteeism drives down the productivity. It is a double loss



# Do we have a healthcare system that works?

- As a nation, we have already made promises to coming generation of retirees that we will be unable to fulfill. Alan Greenspan
- US Medicare trust fund is projected to go bankrupt by 2019. Washington Post, February 9, 2005
- French healthcare system ranked the best in the world by WHO in 2000, is on the verge of bankruptcy, losing 28124 \$ every minute & is projected to collapse altogether by 2020. Sunday Telegraph , September 26, 2004



#### Current Healthcare System

- Is the cause of the problem and not the solution
- Chronic diseases are now an 'Epidemic'
- Public expenditure on healthcare is increasing 2 times more rapidly than the economic growth.
- Most of the developing nations would grow 'Old' before they become 'Rich'



# Do we have a healthcare system that works?

- Healthcare spending of OECD countries will increase to \$ 10 trillion by 2020 .pwc Healthcast 2020
- US will spend 21 % of its GDP on health by 2020. 1 out of every 5 dollars produced !!
- Today, the customer needs are unmet, cost unchecked & outcomes not improved
- Gradually, all healthcare systems will become unsustainable. PWC- Healthcast 2020



"Current healthcare systems are like a cancer. Growing in size, sucking more money and resources, giving pain and finally-kills the economy"



# Real issues – My view

- We have a supplier driven healthcare model.
   Any supplier driven model is bound to be overused as patients behave differently
- Healthcare professionals are working in Silos
- After we won the war against 'Infectious diseases', we should have looked at chronic diseases from the lifestyle perspective than just giving it a medical & clinical view.



"Titanic was considered to be the safest ship of its time. But it sank due to 'human error' and 'over reliance on technology'.

Healthcare systems will collapse due to the reverse"



Biggest Challenge in healthcare is not technology, medical errors, compliance, prevention or disease management. They are all just opportunities coming out because of us failing to address the biggest challenge; to convert a 'passive patient' into an 'active patient'



"Get over the Doc Welby thing, what you do makes a lot more difference to your health than what I do." We have a healthcare system where the resources pull the patient than Vice Versa

Rajendra Pratap Gupta

Reports say we have shortage of beds, and still the average bed occupancy is 65 % !!

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"This wellness stuff probably comes from the same people who never had fun in high school; I'll start wellness after the first heart attack."

Nothing is valued until it's almost gone - Aldo Leopold

We send our automobile for servicing regularly so that it does not break down in the way . But for our inexpensive body, we take it for granted and finally it breaks down without any warnings - Rajendra Pratap Gupta



#### If one understands ...

"That spending a few hundred dollars now, which helps you to get one more year of income-producing as an adult, that year of income producing is much more than whatever you spend now"



#### We must understand

- That human body cannot be treated like a 'car' & healthcare system like a 'garage'.
- Human body is not maintenance free
- One condition that body cannot survive is inactivity

'Care' should precede 'Cure'



# Challenges before Healthcare!

- Insurance companies will reimburse treatment but not prevention
- Current medical & paramedics focus on treatment and illness and do nothing about the behavioral or psychological aspect of the patient's side of the problem
- Difference is that patient is not dying with disease (e.g. cancer) but living with that disease



# Challenges before Healthcare!

- Finding the right pull or incentive for preventive care both for patients and practitioners
- Doctors are the biggest 'speed breakers' for bringing a paradigm change in healthcare
- Doctors are poor adapters, not technology savvy and patient centric
- Doctors rarely focus on preventive medicine



# Challenges before Healthcare!

We need both 'Hi-tech' & 'High Touch' care .

Preventive care is missing from the healthcare system. What we are practicing today in the name of preventive care is 'curative medicine' after getting diagnosed, to stop further progression of disease condition and calling it preventive care



#### Problem of not adopting preventive care

is that aging population requires more healthcare treatments with a lower earning and paying capacity. Earnings reduce with age but healthcare problems increase. This will put all the 'Young nations' of today in a serious economic, social and development crisis in the next 25 years, when the baby boomers become patient boomers

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# THE COST OF INACTION IS CLEAR AND UNACCEPTABLE



# We have won the war against short lifespan, but we have lost the war for a healthy lifestyle



We have won the war against Infectious diseases, but we have lost the war against Chronic diseases. Burden and deaths have shifted from 'Infectious' to 'chronic diseases'



# What is the right prescription? It is today a trillion dollar Question!



For this generation, I feel we are already late and have missed the bus. But we can at least start building for our next generation'
Rajendra Pratap Gupta



Preventive care alone will not help, we need an astonishing change, a complete over hauling of the medical curriculum & practice system along with the channels of delivery and access points of care. It calls for turning the system upside down

Rajendra Pratap Gupta



#### A new paradigm of Care Continuum

- 1. Home care & Self care Individual
- 2. School / College health Education system
- 3. Occupational health Employers
- 4. Community health Pharmacy or Nurse
- 5. Primary care Doctor
- 6. Secondary care Clinic & Diagnostic
- 7. Tertiary care -Hospitals & COE's

Currently, we are having the fifth level of care as the entry point



#### New paradigm of Care Continuum

- Awareness
- Education about health risks
- Health risk assessment
- Preventive Health screenings
- Diagnostics
- Intervention

Prevention now or Intervention later !!



#### Preventive care

- Strong preventive care has to be the mainstay of a stable healthcare system
- Health system becomes a liability if they don't focus on prevention
- Age based, industry & sector specific health & wellness guidelines needs to be defined & followed



# Preventive care covers the entire population whereas the current 'healthcare' covers the sick population



# Consequence of not following PHI is disease, disability and death



#### Preventive care needs to be

- Proactive & equitable
- Family focused & not just patient centric
- Collaborative & Multi- disciplinary
- Accessible
- Self care should be an integral part



#### Preventive care

- Can identify when the disease is a borderline case
- Delays the onset of severe symptoms
- Reduces the pain and Suffering to patients
- Avoids premature death



#### Preventive care

 For people at the risk of sudden death, prevention is the key

Reduces costs for the payers

Increases productivity for the nation



"WHO estimates that better use of existing preventive measures could reduce the global burden of disease by as much as 70 %"

WHO 2008 Report



"Preventive care starts much before a doctor visit and Chronic care continues much after the doctor visit – If these two are understood well – We have done it '

Rajendra Pratap Gupta



# Why is preventive care not working!

- Dr's are far and few in preventive medicine.
- Not institutionalized & incentivised. Only sick patients are interested after a complication
- Lot of hassles as it is doctor centric
- Self pay & no immediate benefit. Population need to be sensitized
- Needs a case study and role model approach to change the population's outlook



If we don't start healthcare with preventive care and continue with chronic care management; One day, all healthcare systems will become over burdened, under funded and outdatedno matter what you do.

Rajendra Pratap Gupta



The system has to move from being 'Disease focused' and 'doctor centric' to a system that revolves around younger populations, and where nurse and a pharmacist play the role of a health coach - Rajendra Pratap Gupta



### Even the developed world...

- NHS, U.K. is shifting towards nurse practitioners (N.P's).
- Some states in the US have extended prescription writing powers to N.P's,
   Pharmacists & Naturopaths
- Before we adopt to this, we will need to overhaul our education & training system



# Medical practice

- Doctors 'must have' a 'Follow up' mechanism inbuilt in their practice to ensure compliance or adherence to the treatment
- Nurses, Doctors must evolve 'Good Patient Practices', 'Good Prescription Practices' protocols for quality patient care
- Time spent per patient needs to be defined by such protocols as it has a direct impact on the healthcare system



## Medical practice

- Preventive medicine does not have a proper place in the medical system
- All Doctors must do an internship in 'Preventive medicine', 'Behavioral psychology' & 'Telemedicine' for at least one years before taking to any specialization
- Chronic diseases cannot be treated by 'prescription alone'.



## Medical practice

- All doctors specializing in chronic care must have a team of counselor –Health Coach, dietician & a phlebotomist. They must not be allowed to work in 'Silos'
- More than 80 % people feel that lack of integration in care has been crippling the healthcare system



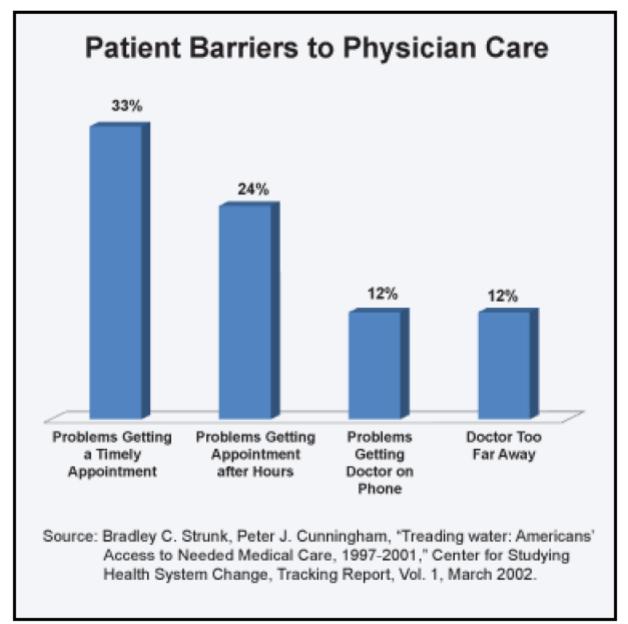
#### Health Awareness

In 2005, the US introduced a website for dietary guidelines. In the first 72 hours, it had 160 million hits, with 20 % from outside the US



## eHealth option- Healthcare for masses

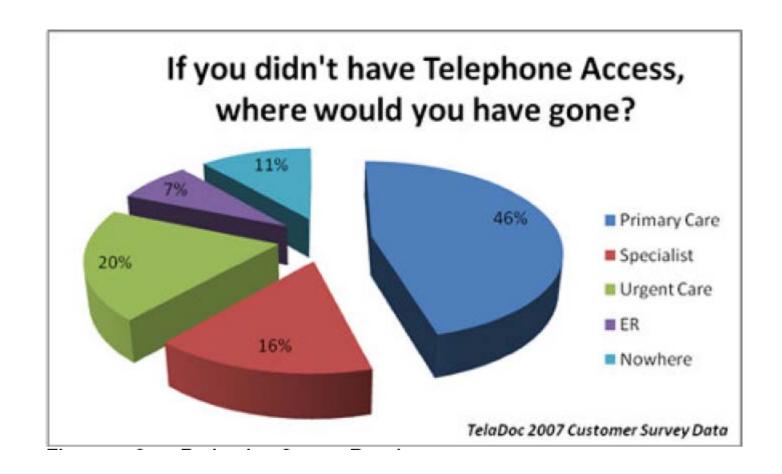
# Health Care EXPANSION



57 % of the time, appointment is not possible when required

12 % people would not visit due to distance





# 11 % of the time, people don't go anywhere

# Benefits of TeleHealth-Telemonitoring

- 40 % reduction in emergency room visits
- 63 % reduction in hospitalizations
- 22 % reduction in total bed days
- Cost of care is 27 % less in telemonitoring groups
- Disease Management saves USD 4.8 for every \$ spent
- Telehealth saves USD 5.6 for every \$ spent

## Telehealth can use the services of.....

Disabled doctors who would like to continue practicing but are unable to commute

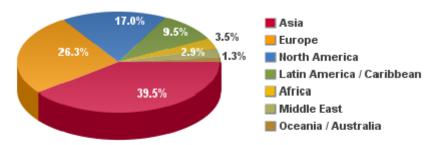
- Female physicians who are raising families and would like to work part time from home
- Retired physicians seeking to remain active, but not on a full time basis

 Physicians who spend a period of time outside their home state-but would like to continue practicing

Medicines can be shipped 'anywhere' but not doctors

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#### World Internet Users by World Regions



Source: Internet World Stats - www.internetworldstats.com/stats.htm 1,463,632,361 Internet users for June 30, 2008



Mobile phone is the first computer now

# Telehealth - Telemonitoring

- 80 % of the World's population lives in cellular network range
- 68 % of the World's new subscriptions in 2006 were in developing countries
- Free VOIP calls are possible
- In US, 50 % of doctors use PDA or Smart phones
- In clinical practice > 400,000 doctors and 600,000 nurses use PDA's
- Cell phone usage in Africa is growing at 65 %
- TM usage is < 0.3 % in developing countries and 22 % in developed countries



- We give 'immunization charts' to children at births. We need to expand the scope of immunization and include Preventive care right from the time of birth
- Those who follow the preventive care protocols must have incentive of lower rate of insurance premiums & lower co-pay



- When we diagnose a patient with Chronic disease, we must screen his entire family more frequently for HRA
- Eliminate co-pay for preventive care and make it free . Enhance co-pay for higher intervention – Disincentivize
- Give tax breaks not just on health insurance but on preventive screenings



- We have SEZ's .We need to look at creating DFZ's – Disease Free Zones
- We have Green Buildings that are energy efficient. We need 'Blue Buildings' that are HEZ's – Healthy Employee Zones
- Pharmacies should be compulsorily made to offer non-invasive checks



- We must encourage 'patient charters' and 'Patient Advocacy groups'.
- No healthcare system emphasizes the need for communication. Every system only talks about prevention and treatment
- Communication in layman's language can transform healthcare
- Promoting consumer's interest should be the first priority of decision makers



- Patients should be involved in the decision making process
- Informed proactive patient is the best gate keeper in any funded healthcare system
- If the doctors increased the time spent on patients, It can lead to a huge positive impact on the system.
- Outreach programs have been proven to be very effective in preventive care



#### What next ... CAM

- Complementary and alternative medicines play an important role in a healthcare system
- CAM treatments are now used by 85 % of general population in the developed world
- In some countries the number of visits to CAM providers is greater than the number of visits to PHC Dr's.



# We will have to make a logical progression from 'Curative' to 'Preventive' & finally to 'Predictive' healthcare

- Rajendra Pratap Gupta



### g-Health...

- There are 900 genetic tests available today
- 'Pharmacogenetic tests' will become a 'standard of care', when everyone could get an exact amount of drug
- The ultimate drug delivery system will be of 'designer or personalized drugs'.
- Stem cell & regenerative medicine holds the promise



"Without an integrated care system, we cannot have results, and without preventive care you cannot have an integrated healthcare system"

Rajendra Pratap Gupta



# We have a choice of either 'Prevention' now or 'Prescription' later

- Rajendra Pratap Gupta



# "It may be cheaper to provide free preventive care than to absorb the high cost of chronic care"



# Preventive care must become the minimum standard of healthcare

- Rajendra Pratap Gupta



The onus of healthcare and wellness has to shift from government to the individual to have a lasting positive impact on healthcare. The most effective determinants of a good healthcare system lie outside the realm of government and medical system

- Rajendra Pratap Gupta



#### Innovation in the new Care Continuum

The world runs today on cell phones, internet, emails & computers. The best innovation would be to use mobile health, non-invasive diagnostics for prevention and disease management i.e. self care.

Rajendra Pratap Gupta

Future of healthcare is in mobile health, noninvasive diagnostics, Self care & Self Control.



# Disease Management Association of Middle East & Africa - DMAMEA

- Not-for-Profit organization of stake holders from the healthcare industry
- DMAMEA will work to create awareness & increase the practice of Preventive care & Chronic Care management to raise the standard of care
- Bring in the best practice models, case studies & Global CCP's to the region



#### DMAMEA -Board

- Blake Anderson Dr., Director, HSI,USA.
- Callan Emery Editor, Middle East Health
- Caroline Maslo Dr., Medical Director, Prime Cure Wellness, South Africa
- Rajendra Pratap Gupta
- Shamsheer V.P.Dr., M.D. Lifeline Group, UAE
- Sobhi Batterjee, Engr. Chairman, SGHG.



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- Utmost care has been taken to quote the data. Any inadvertent error is regretted
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# Wish you Good Health Thanks



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