

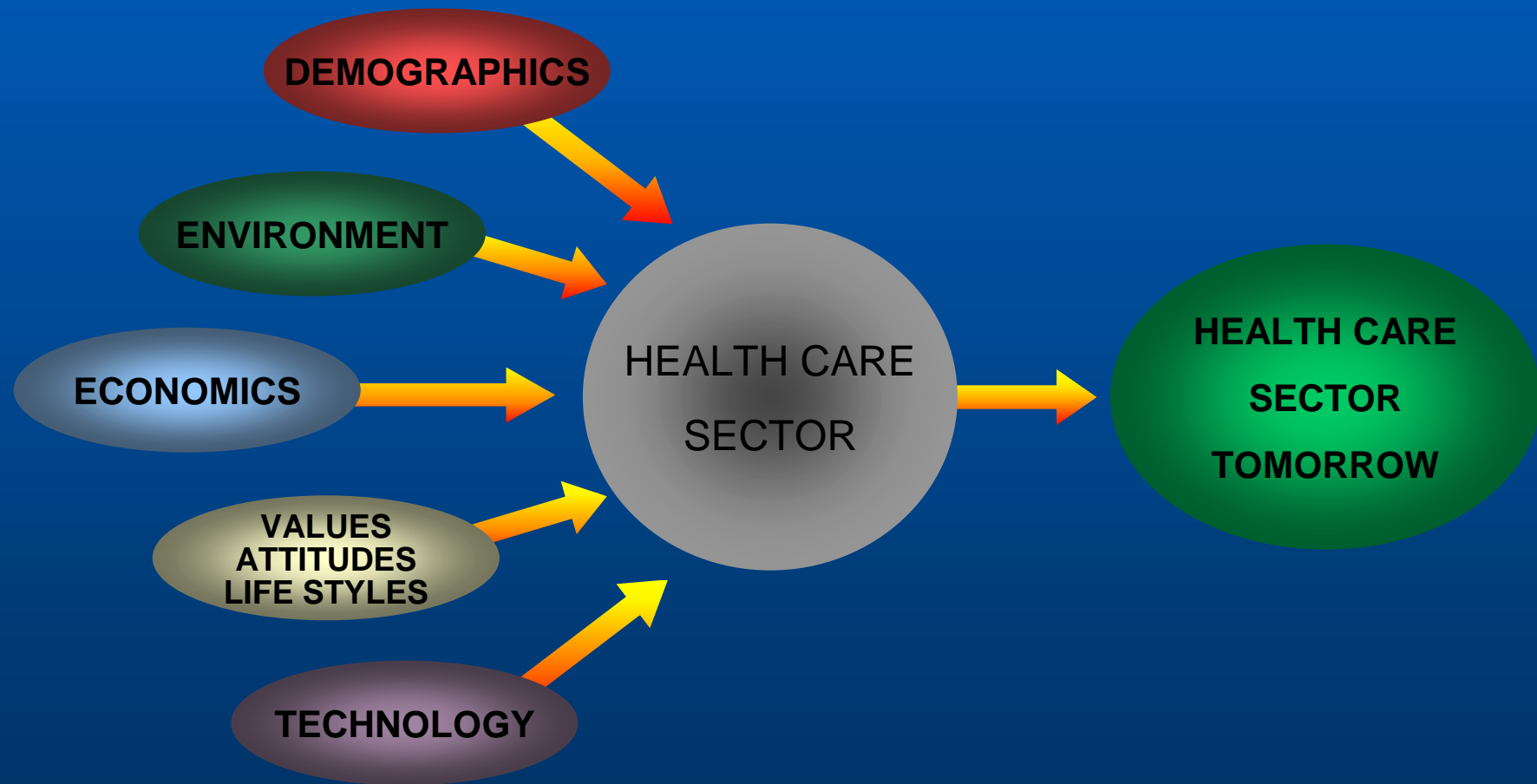


University Hospital Basel

Future trends in health care business, a plan for scenarios

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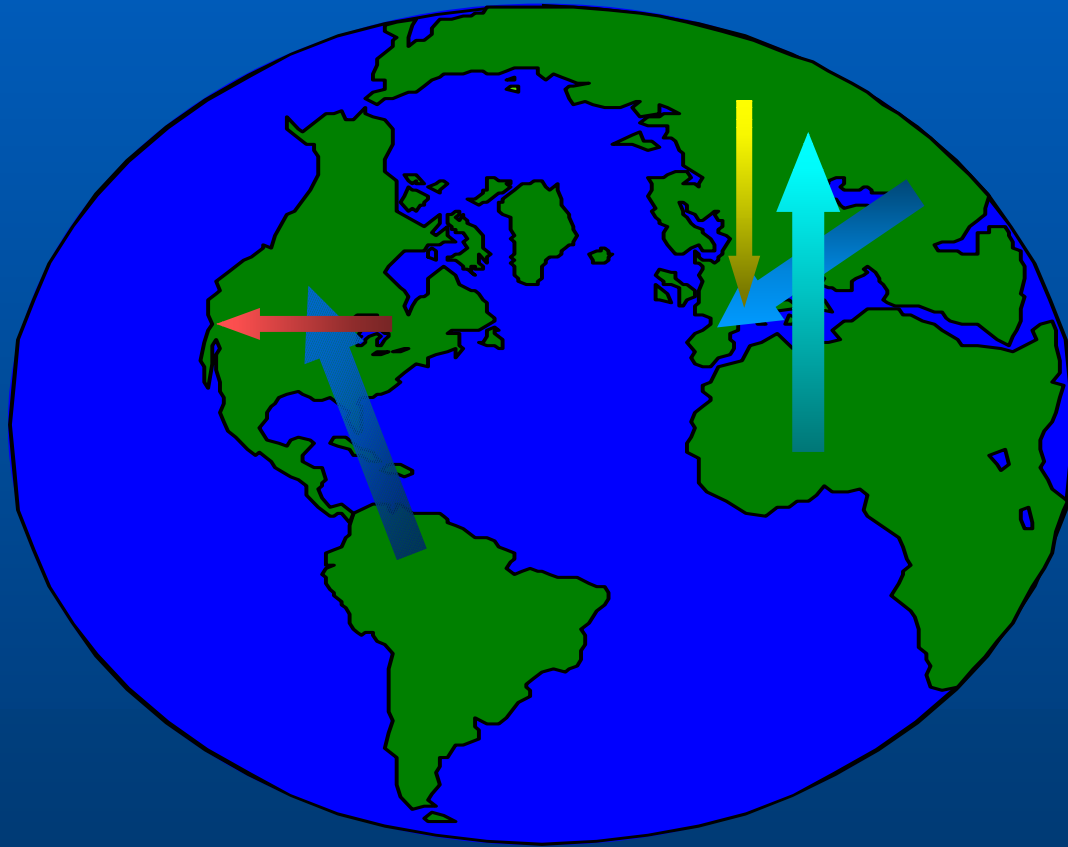
The influencing factors:



DEMOGRAPHICS:

- Population growth in the developing regions
- Stagnation of of population in the developed regions
- Population growth from 1750 to 2100 is an increase of the world population by a factor of 10 (1'000'000'000 to 10'000'000'000)
- Tremendous change in social expenditure due to demographic factors 1980 - 2040
- Increasing age dependency ratio in developed regions
 - EUROPE (1980 : 4.6 2020 : 3.7)
 - US (1980 : 4.8 2020 : 4.0)
 - JAPAN (1980 : 7.4 2020 : 3.0)

MIGRATION:



Migrating people are:

- poor
- partly not well educated
- industrious/hard working
- high birth rates
- often carriers of diseases (TB, HIV, etc.)
- less aware of health care possibilities

WORLDWIDE POLITICAL PROBLEMS:

- **INCREASE OF LOCAL AND REGIONAL CONFLICTS**
- **INCREASE OF VIOLENCE AND TERRORISMS**
- **INCREASE OF SECURITY MEASUREMENTS**

THIS SIGNIFIES:

- **ACCELERATED EROSION OF GOVERNMENTAL AUTHORITY**
- **INFORMATION, MONEY AND MIGRANTS MOVE ACROSS BORDERS BEYOND OF THE TRADITIONAL MEANS OF CONTROL**
- **IMPACTS OF TECHNOLOGY CHANGES BALANCE OF STATES**
- **TERRORISM MOVE TO FILL THE VACUUM OF TRADITIONAL GOVERNMENTAL CONTROL**
- **RISK OF REGIONAL AND/OR CULTURAL CONFLICTS**
- **RISK OF THE EMERGENCE OF INTERNATIONAL CONFLICT**

WORLDWIDE POLITICAL PROBLEMS:

- **GROWING DEMOGRAPHIC PROBLEMS WITH MIGRATION, DESTABILISATION OF REGIONAL AREAS, AND SOCIAL PROBLEMS**
- **GROWTH OF ENVIRONMENTAL PROBLEMS CAUSED BY CONFLICTS**
- **DESTABILISATION OF VALUES AND CULTURAL HERITAGES**
- **INCREASING DEMAND FOR HEALTH CARE AND RESCUE SERVICES**
- **HIGH AMOUNT OF RECOVERY OF DAMAGE IN THE POST CONFLICT PHASE IN ALL AREAS**

IMPLICATIONS OF DEMOGRAPHICS:

- INCREASING DEMAND FOR HEALTH CARE
- DETERIORATING DEPENDENCY RATIOS
- INCREASING SOCIAL EXPENDITURES INCREASING
- INCREASING COMPETITION FOR JOBS
- INCREASE IN DEATH AND STARVATION IN THE DEVELOPING COUNTRIES
- STRESS FOR THE SOCIAL SYSTEM AND THE JOB MARKET CAUSED BY MIGRANTS
- CONFLICTS AND TERRORISM (INTERGENERATIONAL, REGIONAL, CULTURAL)

ENVIRONMENTAL IMPACTS:

- AIR POLLUTION
- ACID RAIN
- OZONE DEPLETION
- GLOBAL WARMING
- DESERTIFICATION
- DEFORESTATION
- WASTE DISPOSAL
- ELECTRONIC SMOG
- INFORMATION OVERFLOW

THESE WORLD WIDE IMPACTS CREATE FOR:

- **INDIVIDUALS: INCREASED HEALTH CARE PROBLEMS**
 - **RESPIRATORY**
 - **ALLERGY / ASTHMA**
 - **DERMATOLOGY**
 - **NUTRITIONAL DEFICIENCIES**
 - **EMOTIONAL / STRESS RELATED**
- **ECONOMICS: THREATS AND OPPORTUNITIES**
 - **REPARATION AND PREVENTION**
 - **REGULATIONS**
 - **PRIVATE ENTERPRISES**
 - **CONSUMER**
 - **TECHNICAL RESOURCES**
 - **NEW BUSINESSES**

ECONOMICS:

- **GLOBALISATION**

- **OPENING MARKETS:**

- **CHINA**
 - **RUSSIA**
 - **JAPAN**

- **GLOBAL COMPANIES:**

- **FEWER COMPANIES**
 - **VERY LARGE COMPANIES**
 - **LARGE WORLD WIDE MARKET SHARE**

- **CURRENCIES WILL BECOME HIGH VOLUME COMMODITIES**

- **DEVELOPED ECONOMIES ARE BECOMING SERVICE ORIENTED**

EFFECTS OF DEREGULATION:

- **FREE FLOW OF:**
 - PEOPLE
 - SERVICES
 - MONEY
 - INFORMATION
 - GOODS
- **PRIVATISATION OF PUBLIC MARKETS:**
 - TELECOMMUNICATIONS
 - TRANSPORTATION
 - ELECTRONIC MEDIA
 - ENERGY
 - HEALTH CARE SERVICES

IMPLICATIONS ON ECONOMICS:

- **NEW MARKETS FOR GROWTH**
- **GLOBALISED COMPANIES RESULT IN ORDERLY MARKETS**
- **RESOURCE ALLOCATION CONFLICTS:**
 - **ENVIRONMENT**
 - **PENSIONS**
 - **HEALTH CARE**
 - **DEFENCE**
- **STABILISATION OF CURRENCY RELATIONSHIPS WILL BECOME IMPORTANT**

VALUES, ATTITUDES, LIFE STYLES:

POTENTIAL AND TRENDS:

- **SOCIAL:**
 - **EDUCATION / “NEW LITERACY”**
 - **DRUG ABUSE**
 - **VIOLENCE**
 - **EXPECTATIONS OF GOVERNMENT**
 - **POLARISATION OF VALUES**
- **ETHICAL:**
 - **QUALITY OF LIFE**
 - **RIGHT TO DIE**
 - **NEW TECHNOLOGIES**

VALUES, ATTITUDES, LIFE STYLES:

POTENTIAL AND TRENDS:

- **CONSUMER:**
 - “NATURAL” VERSUS “TECHNICAL”
 - INCREASED LEISURE TIME
 - HEALTH / WELL-BEING
- **ELDERLY:**
 - DISPOSAL INCOME
 - PERSONAL ASSETS
 - POLITICAL STRENGTH
 - NEED FOR COMPANIONSHIP

VALUES, ATTITUDES, LIFE STYLES:

IMPLICATIONS:

- **SOCIAL:**
 - **INCREASED DEMAND FOR FUNDING**
 - **EXPECTATIONS OF GOVERNMENT**
 - **TREND TO LOWER QUALITY WORK FORCE**
- **ETHICAL:**
 - **AVOID EXTRAORDINARY MEASURES TO EXTEND LIFE**
 - **GENE MANIPULATION TECHNOLOGY FACES ETHICAL CHALLENGES**

VALUES, ATTITUDES, LIFE STYLES:

IMPLICATIONS:

- **CONSUMER:**
 - INCREASING FOCUS ON “WHAT’S GOOD FOR ME”
 - INCREASING OFFERS / CHOICES
- **ELDERLY:**
 - LARGE GROWING MARKET
 - A NEW LIFE CYCLE WILL EVOLVE
 - VULNERABLE TO VIOLENCE IN SOCIETY

TECHNOLOGY AND HEALTH CARE:

NEW KNOWLEDGE IN:

- BIOTECHNOLOGY
- MEDICINE
- INFORMATION TECHNOLOGY
- TELECOMMUNICATIONS
- BIOSENSORS

TECHNOLOGY AND HEALTH CARE:

LEADS TO NEW APPLICATIONS AND THEY MOVE:

FROM



TO

- **DIAGNOSTICS**
- **THERAPEUTICS**
- **GENERAL THERAPY**
- **SYSTEM CARE**
- **CENTRALISED**
- **PROGNOSTICS**
- **PREVENTION**
- **PERSONALISED THERAPY**
- **INDIVIDUAL CARE**
- **PORTABLE (MOBILE)**

IMPACTS ON HEALTH CARE

HIGHLIGHTS:

- **DEMAND FOR HEALTH CARE RELATED PRODUCTS AND SERVICES WILL BE HUGE - DRIVEN BY AGEING POPULATION**
- **COST REDUCTION WILL BE A KEY SUCCESS FACTOR FOR NEW PRODUCTS AND SERVICES**
- **INFORMATION AND COMMUNICATION TECHNOLOGIES WILL ALTER HEALTH CARE DISTRIBUTION SYSTEMS**
- **INDIVIDUALS WILL BE FORCED BY COSTS TO MANAGE THEIR OWN HEALTH**
- **ETHICAL VALUES WILL MORE AND MORE INFLUENCE THE IMPLEMENTATION OF NEW TECHNOLOGIES, DRUGS AND SERVICES**

IMPACTS ON HEALTH CARE

HIGHLIGHTS:

- **GROWING IMPORTANCE OF INDEPENDENT AND INTER-DISCIPLINARY CLINICAL RESEARCH TO HEALTH CARE PROVIDERS**
- **GROWING IMPORTANCE OF DISEASE MANAGEMENT AND MANAGED CARE FOR ALL HEALTH CARE PROVIDERS**
- **DISEASE MANAGEMENT WILL CONSTITUTE NEW BASIS FOR QoS IN HEALTH CARE**
- **MOST DRUGS ON MARKET WILL BE GENERIC IN 2000**
- **OTC PRODUCTS WILL PLAY AN INCREASINGLY IMPORTANT ROLE**

TRENDS IN HEALTH CARE

LOW



DISTRIBUTION CHANNELS

NUTRITION / EXERCISE
HOME REMEDIES
OTC PRODUCTS
VACCINES
Rx PRODUCTS-GENERICS
Rx PRODUCTS-BRANDED

PHYSICIAN VISITS
ALTERNATE CARE CENTRE
EMERGENCY CARE
SURGI CARE

HOME HEALTH
ACUTE CARE HOSPITAL
NURSING HOME

IN - PATIENT CARE

AMBULATORY CARE

SELF - CARE

CENTRALISED
(SYSTEM)

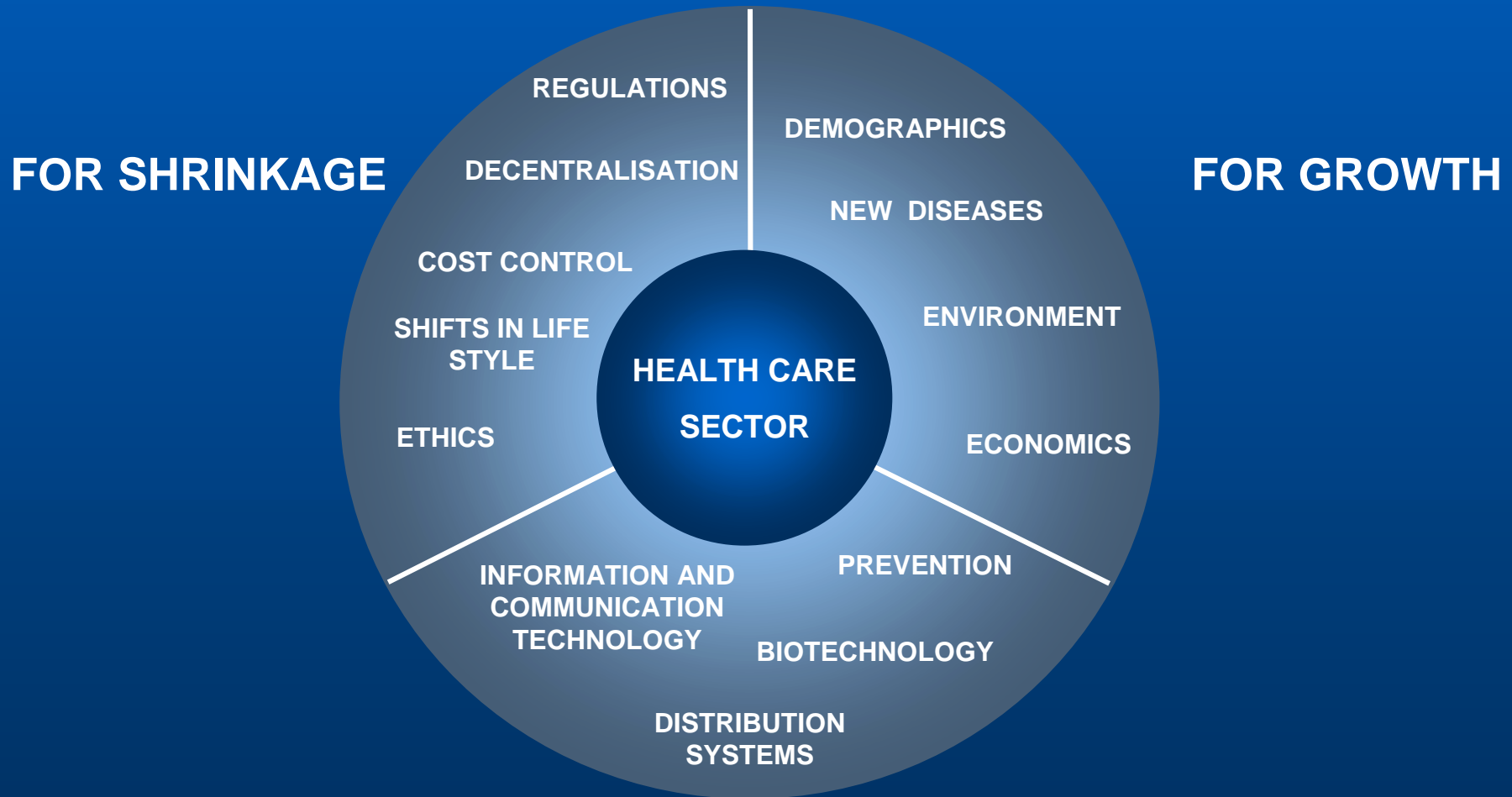
RESPONSIBILITY
FOR CARE

DECENTRALISED
(PATIENT)

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TRENDS IN HEALTH CARE

EXTERNAL FACTORS INFLUENCING THE HEALTH CARE SECTOR:



EMERGING