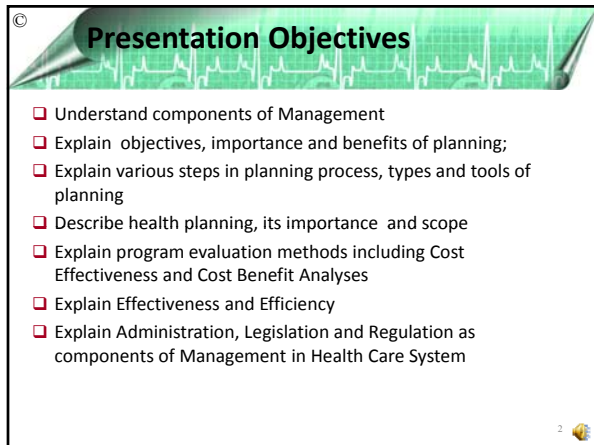








©

Frederic Taylor's principles of Management

- ❑ Develop a science for each element of an individual's work
- ❑ Scientifically select, train and develop the worker
- ❑ Heartily cooperate with the workers
- ❑ Divide work & responsibility equally between managers & workers
- ❑ Improve production efficiency through work studies, tools, economic incentives

4

©

Henri Fayol's principles of management

1. Division of work	8. Centralization
2. Authority	9. Scalar chain
3. Discipline	10. Order
4. Unity of command	11. Equity
5. Unity of direction	12. Stability of tenure
6. Subordination of individual interest	13. Initiative
7. Remuneration	14. Esprit de corps

5

©

Roemer Model

The Roemer model of a healthcare system incorporates 4 major functions.

1. Planning
2. Administration,
3. Legislation and
4. Regulation

6



What is Planning ?

- ❑ Planning is the process of setting objectives and determining how to accomplish them.
- ❑ In one sentence, we can define planning as, “chalking out the blueprint of future activities”
- ❑ Related terms
 - ❑ Implementation
 - ❑ Evaluation



Why health care planning?

- 📌 Objectives of planning
 - 🌐 Set direction
 - 🌐 Decide where you want to go
 - 🌐 Decide how best to get there



The Planning Process

- ❑ There are five essential steps in the planning process (Schermerhorn):
 1. Define Objectives
 2. Determine where you stand vis-à-vis objectives
 3. Develop premises regarding future conditions
 4. Analyze and choose among action alternatives
 5. Implement the plan and evaluate results

©

Why plan?

Anticipate problems:

- ▶ **Externally:**
 - o Greater government regulations,
 - o Ever-more complex technologies,
 - o Uncertainties of market and global economy,
 - o Changing technologies, and
 - o The sheer cost of investments in inputs
- ▶ **Internally:**
 - o Quest for operating efficiencies
 - o New structures and technologies
 - o Alternative work arrangements
 - o Greater diversity in workplace
 - o Related managerial challenges

10

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Benefits of planning

- ▶ Planning improves
 1. Focus
 2. Flexibility
 3. Action orientation
 4. Coordination
 5. Time management
 6. Control

11

©

Types of plans

- ▶ Time horizon
 - o Short term
 - o Long term
- ▶ Scope
 - o Strategic
 - o Operational

12

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“Terms” and “tools and techniques”

- Terms

 - Policy
 - Procedure
 - Budget
- Tools and techniques

 - Forecast
 - Contingency planning
 - Benchmarking

13

©

Planning in health care

- Goals are outcome based
- Specific objectives
- Budget

 - Allocation to optimize goals
- Community served

14

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An Example: Mission of American Health Planning Association (AHPA)

"The mission of health planning is the development of comprehensive, community-oriented health systems designed to assure universal access to necessary care of the highest quality and most reasonable cost possible."

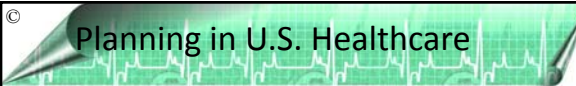
15



Summarize: Why Health Planning?

- ▶ Better utilization of available resources
- ▶ achieving targeted outcomes
- ▶ Prevention of epidemics and disease spread
- ▶ Combating emerging health threats
- ▶ Ensuring healthcare **cost** (affordable), **quality** (high) and **access** (increased) issues

16



Planning in U.S. Healthcare

- ▶ A revival in the 1990s
 - ▶ Private sector
 - ▶ Cost, quality, access
 - ▶ Public sector
 - ▶ Emerging public health threats

17

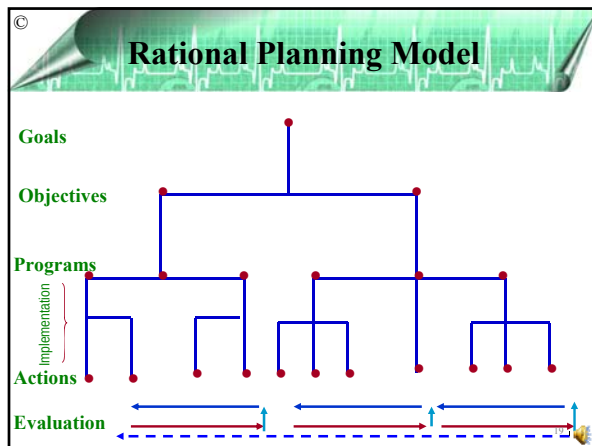


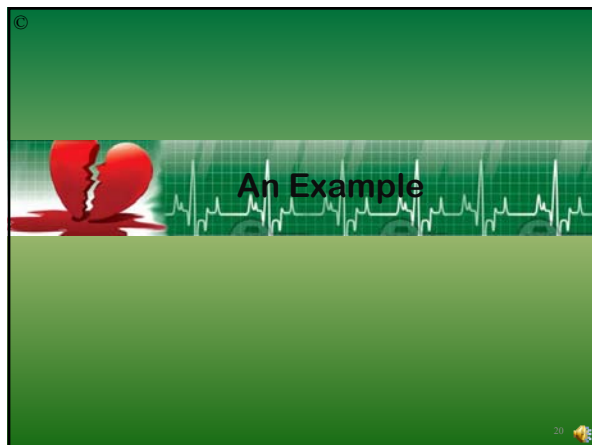
Factors drawing attention to health planning are:

- ▶ An emphasis on local, community-based approaches to health issues;
- ▶ Obvious failures of the laissez-faire approach applied to health care;
- ▶ Identified deficiencies in public health;
- ▶ The abuses and excesses that have occurred in the private sector;
- ▶ The costs of providing health services under current conditions;
- ▶ Increasing numbers of mandated services at the state level; and
- ▶ The perceived ineffectiveness of the health care system overall.

(Source: AHPA)

18





©

Example of a health planning process

A health program for a local community.

Goal: (e.g.) "To assess and improve the cardiovascular health of the community"

Objective:

General: To prevent or minimize the incidence (occurrence) of heart attacks in the community.

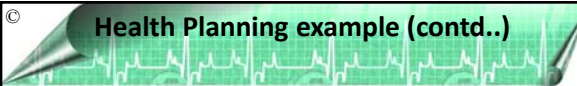
21



Example: the objectives

Specific objectives:

- To perform Cholesterol screening among selected age group (20-65),
- To perform Blood Pressure (BP) screening among the same age group,
- Identify high risk individuals based on screening findings,
- Refer those who are in **risk groups** for treatment/medication, and
- Provide preventive measures to others



Health Planning example (contd..)

In the survey, we'll look for the following (for example):

- Population structure – age, gender, race, ethnicity
- Average life expectancy
- Literacy rate
- Communication (transport) system, media coverage
- Major occupations, average income
- Life style, Recreation places
- Cultures, traditions, and beliefs
- Local climate, natural resources etc.



Health Planning process (contd..)

Now, we move to the **implementation phase**.

► Assume it is a week long program:

- 1st day:** Set up our mobile work area and select different locations to provide free transport
- 2nd and 3rd day:** Collect blood samples
- 4th day:** Analyze the results and contact high risk groups who would be referred for medication and treatment
- 5th and 6th day:** distribute relevant printed information to local people
- 7th day:** Interact with local leaders, social organizations, and government departments to discuss about the outcome and future coordination on similar program

©

Example: Evaluation Phase (contd..)

Next, we move to evaluation phase:

1. Preliminary evaluation: the survey
2. Ongoing Evaluation:
 - periodically scheduled according to plan
 - Allows for mid-implementation modifications
3. Terminal evaluation: Since our goal was to improve the cardio-vascular health of the local population: we'll repeat the program every year and follow up the collected data to see if we achieved our goal

- ****Recommendations**

25

©



Evaluation

Cost benefit
Cost Effectiveness

26

©

Why CBA?

- Rationality and efficiency in choice
- Rationale for CBA
 - Positive net-benefits implies social welfare will be improved
 - Benefits and costs include
 - All direct benefits & costs
 - All indirect benefits or costs
 - The above implies CBA involves the evaluation of social benefits and social costs
 - “Spending less” vs. “Spending wisely”

27



Cost Benefit Analysis (CBA)

A. **Types of costs (for whom?)**

- Direct medical care costs**
- Direct non-medical costs** are all monetary costs imposed on any non-medical personnel.
- Indirect costs** primarily consist of the opportunity cost of the patient's time.

28





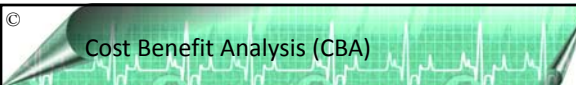
Cost Benefit Analysis (CBA)

B. **Types of benefits: just like costs are negative benefits, benefits are regarded as negative costs, so**

- direct benefits: savings in health expenditures
- indirect benefits: restored earnings
- intangible benefits: reductions in pain and suffering from illness that no longer exists

29





Cost Benefit Analysis (CBA)

- A common unit of account (weights)
- Problems
 - Absence of Markets (public goods)
 - Quality of Life Improvement Projects
 - In general: intangible benefits
 - Revenue vs. Consumer Surplus

30





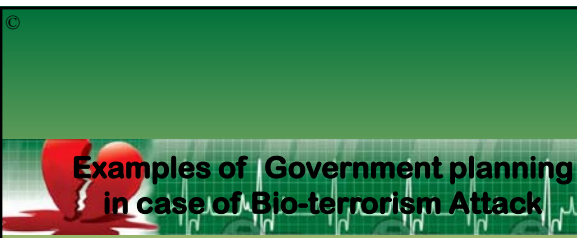
Cost Benefit Analysis (contd..)

- With the total figures the benefit/cost (B/C) ratio can be calculated:
- $B/C \text{ Ratio} = \text{Total Benefits} : \text{Total Costs}$
- As an example, let's say the total benefits of the program are \$100,000 and the total operating cost is \$98,000. The benefit/cost ratio is: $\$100,000 / \$98,000 = 1.02$

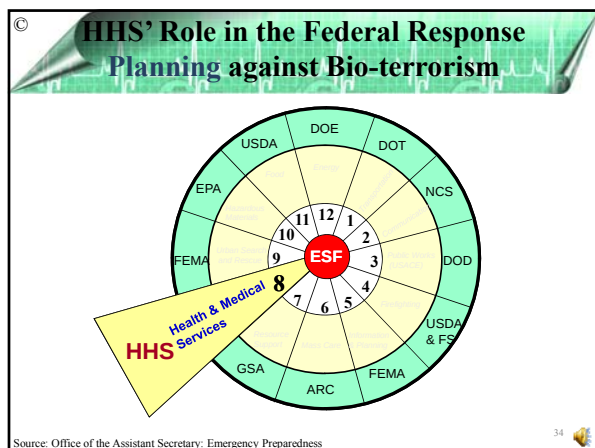


COST-EFFECTIVENESS ANALYSIS (CEA)

- A more modest approach to program evaluation
- The difference between CBA and CEA*
 - CBA
 - What is the dollar value of program costs and benefits?
 - Do the benefits exceed the costs by a sufficient amount?
 - CEA
 - Is there a desirable pre-specified objective to be attained?
 - What are the alternatives for reaching that objective?
 - What are the costs associated with the various alternative?



Examples of Government planning in case of Bio-terrorism Attack



© **Identify Potential Terrorist Biological Weapons**

- Anthrax
- Smallpox
- Botulism
- Plague
- Q Fever

- Tularemia
- Brucella
- Cholera
- Typhoid
- Hemorrhagic Fevers

© **Forecast estimated damage**

AGENT	DOWNWIND REACH (km)	DEAD	INCAPACITATED
Anthrax	>20	95,000	125,000
Tularemia	>20	30,000	125,000
Typhus	5	19,000	85,000
Tick-borne encephalitis	1	9500	35,000
Brucellosis	10	500	100,000
Rift Valley Fever	1	400	35,000
Q-fever	>20	150	125,000

* Biological Weapons Attack: City of 500,000 People

©

Increase Community Awareness: Educate Community with Terrorism “Clues”

- o Any case of a **rare or novel disease**
- o **Unusual** clinical **presentation** or age distribution
- o Many cases of **unexplained illness** or deaths
- o Outbreak of a disease in non-endemic area
- o **Animal** illnesses/deaths
- o Seasonal disease during a different time of year
- o **Atypical transmission** through aerosols, food or water

37

©

Terrorism “Clues” (continued)

- Known pathogen with **unusual features**
- Illnesses affecting people in **a specific building or** who attended the same **event**
- Unusual liquid, spray or vapor
 - Droplets, **oily film**
 - Unexplained **odor**
 - Low flying clouds/fog unrelated to weather
- Genetically-identical pathogen in different areas

38

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Planning for a Bio-terrorism attack with Small Pox virus

Source: CDC

39

© Smallpox

Day 2

Day 4

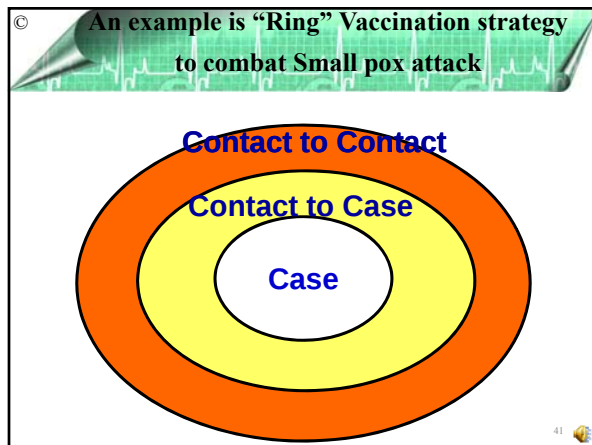
SMALLPOX DAY 8

SMALLPOX DAY 13

Educate the community to diagnose small pox

<http://www.bt.cdc.gov/DocumentsApp/Smallpox/RPG/index.asp>

40



© Other issues

- Community involvement and developing a community plan
- Coordination between public and private facilities
- Training and planning
- Improvement of surveillance

42



Effective and Efficient Planning

Effective:

Related to **Goal attainment**

Efficient

Related to **Resource utilization**

Resource includes materials, money, man power etc. utilized to achieve the goal.

The Possibilities

Goal Attainment	High	Effective but not efficient - Goals achieved - Resources wasted	Effective and efficient - Goals achieved - Resources not wasted
	Low	Neither effective nor efficient - Goals not achieved - Resources wasted	Efficient but not effective - Goals not achieved - Resources not wasted
		Poor	Good
		Resource Utilization	

©

Effective and efficient

📌 Example

- 🌐 A surgical unit plans to have 1000 surgeries in 4 months time, and allocates a monetary resource of \$ 5,000,000 to achieve the goal.
- 🌐 Now, the unit has following resources to attain that goal.
 - 🌱 Resource = \$5,000,000.
 - 🌱 Goal = 1000 surgeries

46

©



Roemer Model

- Planning
- Administration**
- Legislation
- Regulation

47

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Administration

📌 *"the decision making of program leaders and the supervision, controls and other actions to ensure satisfactory performance and attain certain goals"*

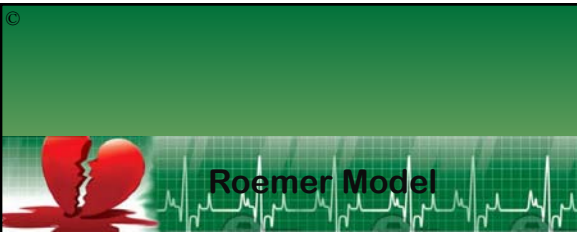
48



Dimensions of an Administrative Capacity

1. **Organization** of a program into manageable units
2. **Staffing** and **budgeting**
3. **Supervision** of and **consultation** with employees
4. **Procurement** of necessary supplies and materials
5. **Maintenance** of appropriate records
6. **Coordination** of activities; and
7. **Evaluation** of the unit's efforts

49



Roemer Model

- Planning
- Administration
- Legislation**
- Regulation

50



Legislation

- ❑ All government units have legislative authority to enact laws and ordinances to aid in governing
- ❑ Roemer identifies six types of legislation that govern a health services system (*next slide*)

51



Six types of Legislation: Roemer

- 1) **Writing** or **enabling** legislation to provide governmental authority to carryout a program or an activity
- 2) Legislation that **facilitates resource production** to train the work force or develop health services facilities
- 3) **Social financing of health services;**
- 4) **Quality surveillance;**
- 5) Legislation that **prohibits injurious behavior**, including environment protection laws; and
- 6) Legislation that **protects individual rights**
 - E.g. informed consent.

52



Roemer Model

- Planning
- Administration
- Legislation
- Regulation**

53



Regulation

- o A control mechanisms for authoritative bodies to ensure that programs and services are provided in the prescribed manner
- o In a free market economy, regulatory provisions may be invoked when voluntary collective-societal behavior cannot be achieved to accomplish the desired goal

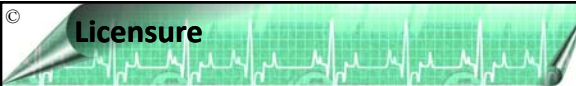
54



Regulatory Process

- Specific Targeted Regulations
 - Licensure
 - Certification
 - Other registration requirements
- Accreditation by a national body is an additional, and usually voluntary form of regulation

55

Licensure

Licensure is Required

- To operate a facility; and
- Ability to practice a profession
- Usually issued by the state government – although national standards may be required

56




Certification

- May also be required for a facility or a profession
 - Sometimes voluntary
- Medicare Certification of Facilities
 - For reimbursement purposes
- State health facility licensure agencies, usually under state health department, generally conduct certification procedures
- Professional like physicians may take board certification as an extra credential component.

57




Accreditation

- Usually voluntary
- Ensure national standards
- Ensures the users of a facility or a program that the program or facility meets specified operational standards
- Examples:
 - JCAHO for hospitals
 - NCQA for managed care organizations

58




Effective Management

- Effective management of a health services system incorporates the functions of planning, administration, legislation and regulation
- Effective management ensures quality and desired outcome
- Effective management ensures disciplined and organized effort against specific challenges and problems of each organization

59




Conclusion

To be an effective manager

- ❑ Know your strengths and weaknesses and those of the people around you.
- ❑ Know your objectives and have a plan of how to achieve them.
- ❑ Build a team of people that share your commitment to achieve those objectives, and
- ❑ Help each team member to achieve their best which will be able to attain a common goal.

60

