

Dental Clinical Practice 4B

Planning and Evaluation of Dental Services

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Objectives

- Understand the importance of health programs assessments.
- Know how to develop a health program and assess it.
- Assessment of health programs

Community Oral Health Programs

- Dentistry traditionally has focused primarily on providing care to individual patients on a one-on-one basis.
- Most people seek dental care from dentists in private practice, who diagnosed disease, develop a treatment plan and provide care.

- This model works in general, but has several key deficiencies:
 1. There are financial, cultural, attitudes that restrict access to private practice.
 2. Despite policies and recommendations, preventive dental visits are rare among young children.
 3. Preventive services can be cost effective if conducted in venues other than private practice

Planning should reflect:

- commitment to improvement in oral health
- role of dental services in health services
- relative roles private/public sectors
- attitudes to all types of dental workforce
- priorities for receipt of care between groups
- priorities for prevention over treatment
- expectations of the results of use of funds
- understanding of cultural practices
- research and evaluation.

Population versus individual approach

- Key differences between personal dental care and community oral health:
- 1. Personal dental care requires an individual to visit the dentist, who then conduct examination, arrives at a diagnosis and develop a treatment plan, obtain patient consent, provide treatment and collect his/her fees and schedule other visits for follow-up.

Population versus individual approach

- Community oral health program follow the same steps however, the focus is on the population, including those individuals who do not or cannot go to the dentist on their own.
- Information is collected on a population and policies could then be implemented accordingly.
- Finally, the community oral health program delivers services to the community, as a dentist would provide treatment.

Reach versus intensity

- There should be a balance between what might work best for an individual and what might be possible to deliver to the entire population.
- Example, smoking cessation programs:
- Groups vs individuals
- Some individuals may not participate in group therapy, thus it would not appear to be effective.

Reach versus intensity

- A policy to increase cost of cigarettes and restrictions on smoking areas may actually be effective.
- In dentistry water fluoridation may be less effective than application of twice a year fluoride varnish for one individual. But water fluoridation may likely prevent much more disease in a population because of its reach.

Balancing individual rights and societal protection

- Water fluoridation
- Car Seatbelts
- Motorcycle helmets

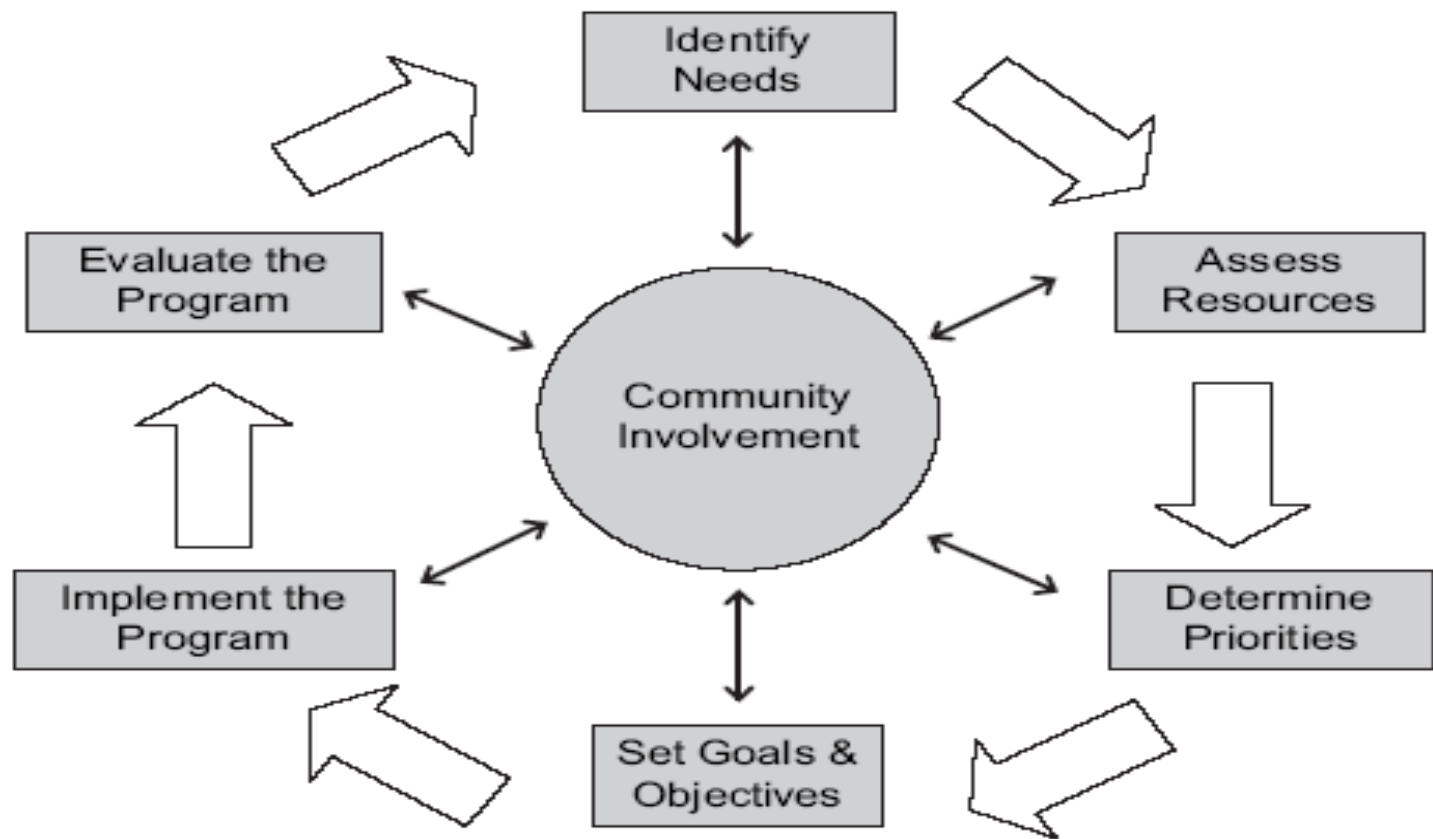


Fig. 1. Planning cycle for community-based programs.

Planning and evaluating community oral health program

- Planning:

Define the problems

1. Set priorities (oral cancer screening, fissure sealant program, etc..)
2. Engage the community (parents, teachers, agencies).
3. Identify oral health needs
What is the oral health status in the UAE?

Planning and evaluating community oral health program

- 4. Sociodemographic characteristics of the community:
- Why is this important?

Planning and evaluating community oral health program

- Information such as income, age, ethnicity, poverty status.
- Information about water fluoridation
- Cancer Registry
- Clinical Surveys
- Health care providers (how many dentists) facilities available

Develop program goals and objectives

- **Specific:** what is the outcome (reduction in the incidence of dental caries, increase in dental check ups, reduce the prevalence of smoking)
- **Measurable:** There is a method or tool/instrument to measure the outcome.
- **Achievable:** It is realistic (if the mean DMFS among 10-15 years old in the UAE is now 5.5, it is unrealistic to expect a two year intervention to reduce this value to 2.2)

- **Relevant:** the objective is important to the program (it is not relevant to oral health promotion program to reduce the incidence of oral cancer to say that the objective of the program is to increase the price of cigarettes)
- **Time-based:** there are definitive timelines and deadlines.

Implement the Program

Table 1

Example of program components to achieve objective: "By 2010, at least 50% of African American men aged 35 years or older in Duval County will report having been examined for oral cancer within the preceding 12 months"

Program component	Target population	Desired outcome
Oral cancer awareness	African-American men aged ≥ 35 years	Increased knowledge of oral cancer risk factors, signs, symptoms
Accessibility of oral cancer examinations	African-American men aged ≥ 35 years	Attendance at oral cancer screenings
Quality of oral cancer examinations	Local dentists and dental hygienists	Increased competence in providing head and neck examinations

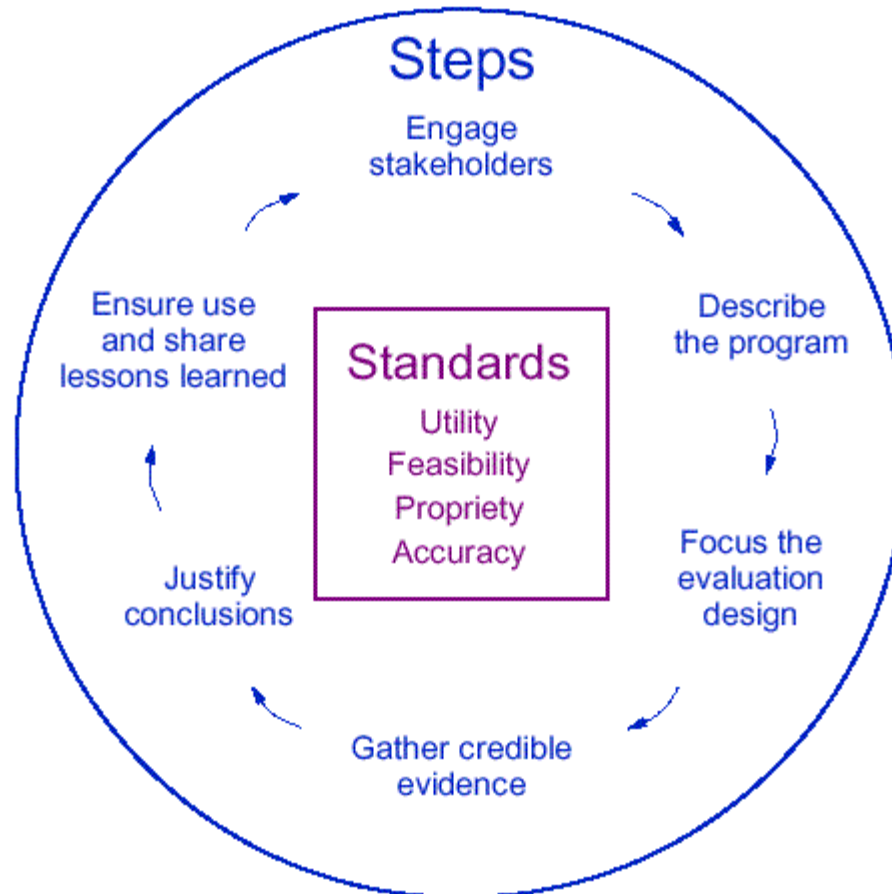
This table is a summary of the components of a community-based oral cancer prevention program designed to increase

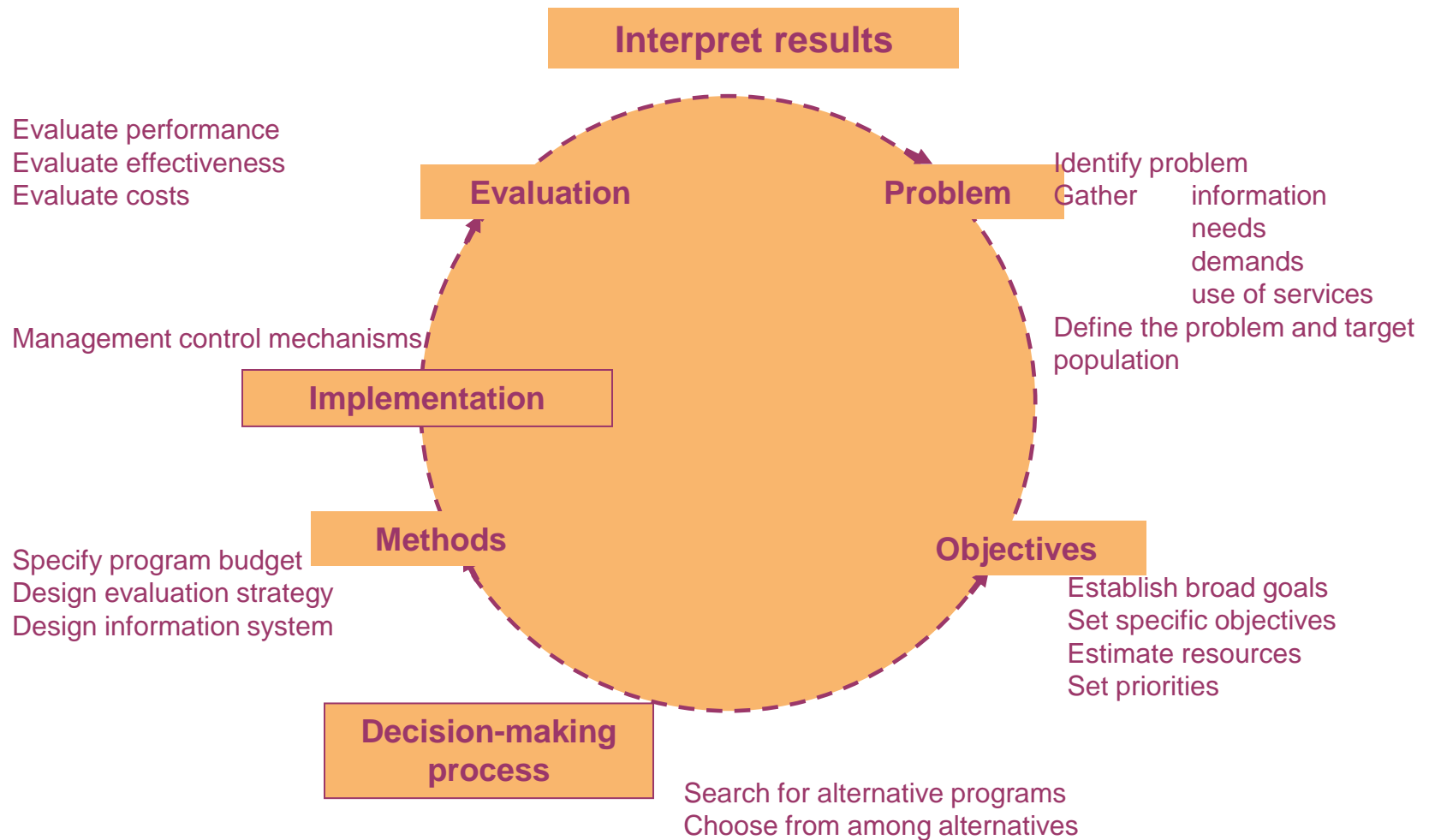
Source: Tomar et al, 2008)

Evaluate the Program

- Did the program succeed
- How effective was the program in achieving its goal.

FIGURE 1. Recommended framework for program evaluation





Planning – evaluation – decision-making cycle

Criteria

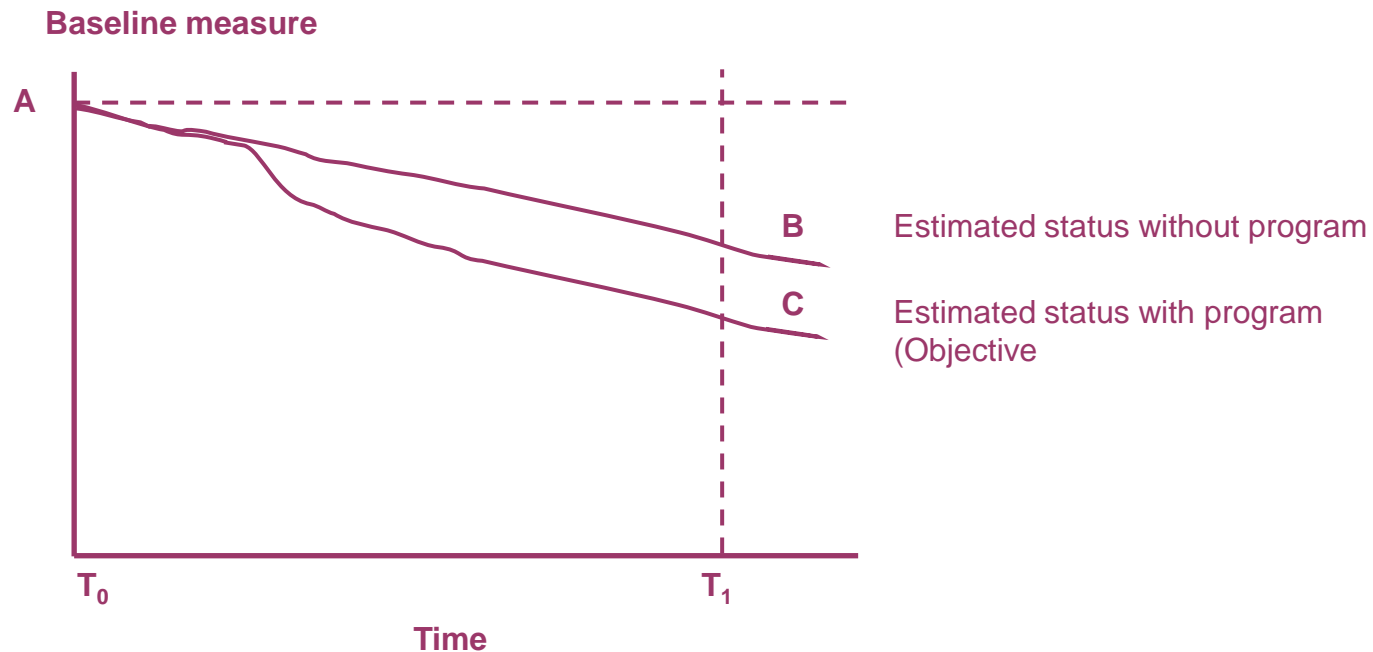
Efficacy: a measure of resources spent

Adequacy: a measure of program's actual coverage in relation to its target population

Effectiveness: a measure of goal achievement

Appropriateness: a measure of desirability of program

Effectiveness: measure of goal achievement



Effectiveness (cont.)

ii. Improvement of oral health

	1977	1980	1982	1986	1989	1992
6	0.51	0.25	0.16	0.09	0.09	0.09
8	1.94	1.23	0.92	0.60	0.45	0.38
10	3.09	2.29	1.82	1.18	0.83	0.69
12	4.79	3.56	3.01	2.01	1.55	1.22

Appropriateness:

measure of desirability/suitability of program

Has priority been given to the most useful strategy for attainment of the stated objectives?

Two dimensions:

- Is the program desirable/undesirable in an absolute sense?
- What is the degree of desirability or priority of a program in relation to other programs?

Some measures:

- Dental/health services expenditure
- Fluoridation
- Mix of personnel
- Mix of services

Extra issue:

- Were there any side effects?
- Were these good or bad?

- Dentistry, Dental Practice, and the Community (6th ed.) (c2005),
- *Burt, Brian A.; Eklund, Stephen A*

Read the article by Richard Watt: Strategies and approaches in oral disease prevention and health promotion