

Decision making and problem solving

Decision-making is one of the major tasks of planning. In each of the components of the management process, or any other process as well, decisions are made and alternative courses of action are chosen at critical points. The consequences of each of these decisions have some impact on the outcome or end results of the concerned process.

Managers engage in decision making, whether consciously or unconsciously, throughout every day of their lives, either at work or out of work settings.

The decisions made by first-line managers may not involve expenditures of large amounts of money or other resources of the organization, but the kinds of decisions that they do make, or refuse to make because of lack of initiative, are no less important to the health and survival of the organization.

Definitions:

- ***Decision making:*** A systematic cognitive process in which there must be an identification of alternatives.
- ***Decisions:*** Judgments selected from two or more alternatives.
- ***Decision making situation:*** The situation in which decisions are made. It may be personal, clinical, or organizational.
 - Personal decision making: is a familiar part of everyday life.
 - Clinical decision making: relates to quality of care and competency issues.

- Organizational decision making: is choosing options directed toward the resolution of organizational problems and the achievement of organizational goals.
- **Problem Solving:** is a process whereby a dilemma is identified and corrected.

Types of Decisions:

There are **THREE** main types of decision that the nurse manager can experience in different situations, namely: routine, adaptive, and innovative decisions.

a. Routine decisions: is the decision made when problems are relatively well defined and common and when established rules, policies, and procedures can be used to solve them.

b. Adaptive decisions: is the decision made when problems and alternative solutions are somewhat unusual and only partially understood.

c. Innovative decisions: is the decision made when problems are unusual and unclear and creative solutions are necessary.

Characteristics of effective decision making process:

1. Conducted in a **systematic, comprehensive** way of thinking.
2. The **consequences** of the implemented decision are determined.
3. Results in **positive outcomes** and fewer negative consequences.
4. Based on a "**Goal-oriented**" **analysis** of the situation, its problems, and their alternative solutions.

Characteristics of the decision:

1. Effective decision:

- Is the decision that meets or come close to meeting the goals that were established in the decision-making process.
- Ineffective decision: Is that decision that does not meet the established goals and objectives.

2. Realistic decision:

- It is that one that is physically possible, or that fits the circumstances or situation.
- For example, if you decide a hospitalized patient with bilateral amputation to be ambulated to prevent pneumonia, your decision is not realistic. For this patient, it would be more realistic to speak to the physician concerning respiratory care treatment to prevent pneumonia.

3. Feasible decision:

- It is the decision that is possible to carry out in light of the resources available in the patient care environment.
- For example, if you decide that an older adult patient would benefit from a bedside commode and no bedside commode is available within your hospital/unit, your decision is not feasible.

Problem Solving and Decision Making Process

We solve problems and make decisions everyday/all the day: at home, at work, even at play.

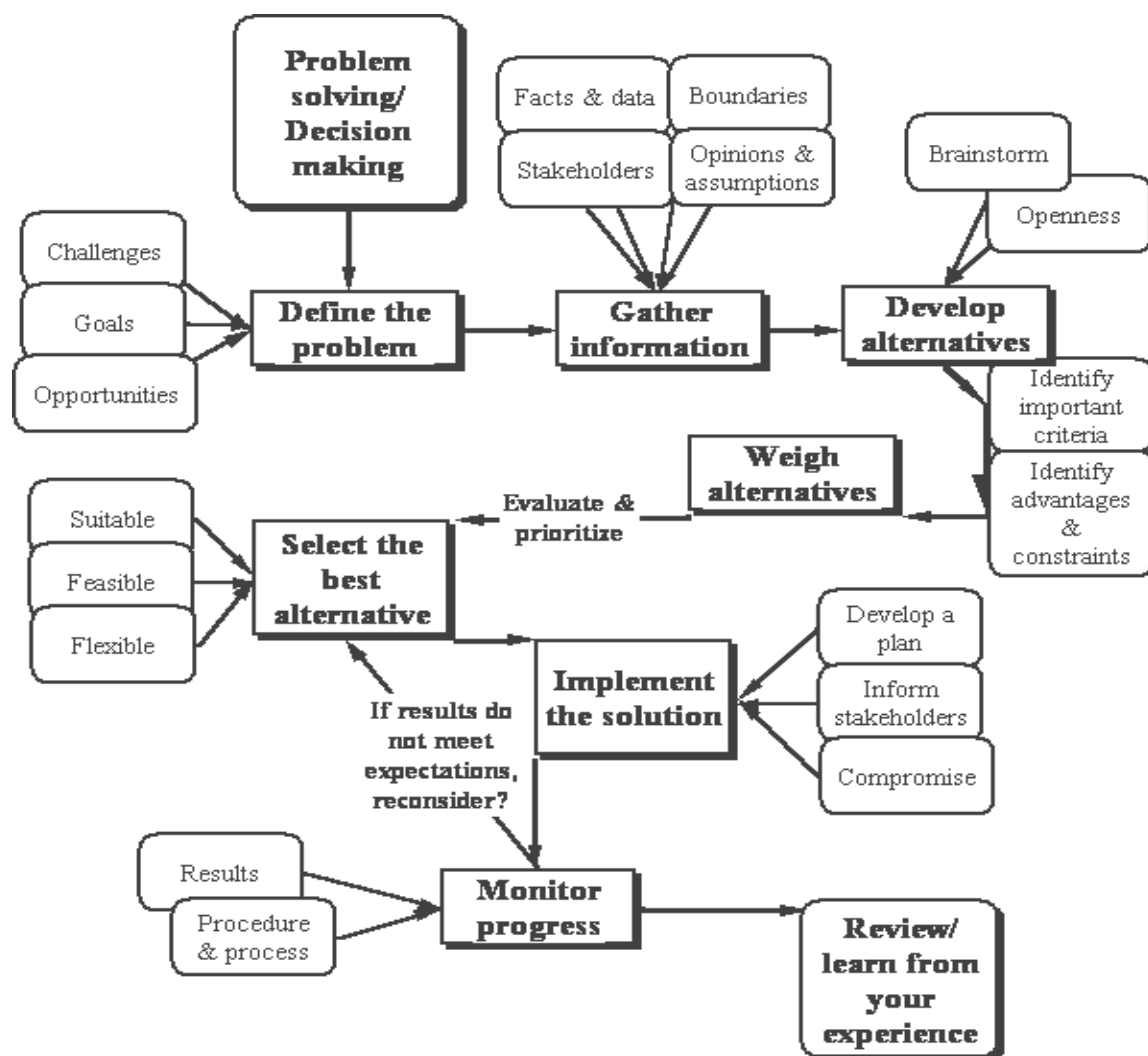
Some problems and decisions are very challenging, and require a lot of thought, emotion, and research.

Flexibility

This procedure looks as if one moves neatly from step to step. This isn't the case. These steps simply provide a structure for working on the problem. They overlap, and you may have to return to earlier steps or work them simultaneously as you find the best solution.

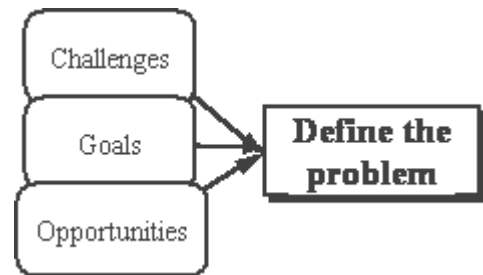
Examples of flexibility:

- Information gathering occurs in all steps—from recognition of the problem to implementation of its solution
- New information may force you to redefine the problem
- Alternatives may be unworkable, and you'll have to find new ones
- Some steps may be combined or abbreviated.



1) Defining the problem:

You may need to state the problem in broad terms since the exact problem may not be obvious.



- you may lack information to define it
- you can confuse symptoms with underlying causes

Prepare a statement of the problem and find someone you trust to review it and to talk it over. If the problem is a job situation, review it with your supervisor or the appropriate committee or resource.

Consider these questions:

- *What is the problem?*
- *Is it my problem?*
- *Can I solve it? Is it worth solving?*
- *Is this the real problem, or merely a symptom of a larger one?*
- *If this is an old problem, what's wrong with the previous solution?*
- *Does it need an immediate solution, or can it wait?*
- *Is it likely to go away by itself?*
- *Can I risk ignoring it?*
- *Does the problem have ethical dimensions?*
- *What conditions must the solution satisfy?*
- *Will the solution affect something that must remain unchanged?*

2) Gather Information: from where!!!

a. Stakeholders:

”Individuals, groups, organizations that are affected by the problem or its solution”. Decision makers and those close to us are very important to be identified.



b. Facts & data

- Research.
- Results from experimentation and studies.
- Interviews of "experts" and trusted sources.
- Observed events, past or present, either personally observed or reported

c. Boundaries

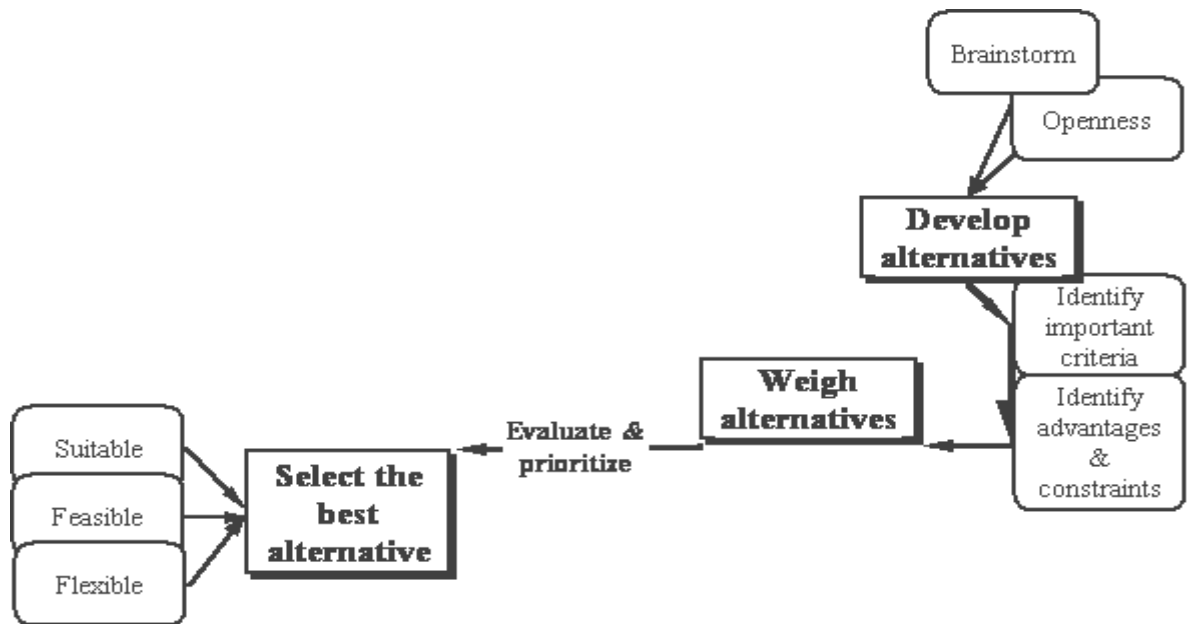
The boundaries or constraints of the situation are difficult to change. They include lack of funds or other resources. If a solution is surrounded by too many constraints, the constraints themselves may be the problem.

d. Opinions and Assumptions

Opinions of decision makers, committees or groups, or other powerful groups will be important to the success of your decision. It is important to recognize truth, bias, or prejudice in the opinion.

3) Develop Alternatives

- Look at the problems in different ways; find a new perspective that hasn't thought of before.
- Once you have listed or mapped alternatives, be open to their possibilities. Make notes on those that:
 - *Need more information.*
 - *Are new solutions.*
 - *Can be combined or eliminated.*
 - *Will meet opposition.*
 - *Seem promising or exciting.*
 - *Can be combined or eliminated.*



4) Weigh Alternatives

After listing possible alternatives, evaluate them without prejudice, no matter how appealing or distasteful

Consider all criteria while a suitable solution may solve the problem, it may not work if resources aren't available, if people won't accept it, or if it causes new problems

Techniques in weighing alternatives:

1. Thomas Saaty's Analytical Hierarchy Matrix:

ANALYTICAL HIERARCHY MATRIX						
	Alternatives				Row Sum	Rank
	A	B	C	D		
Alternative A	0	0	0	0	0	4th
Alternative B	1	0	1	0	2	2nd
Alternative C	1	1	0	1	3	1st
Alternative D	1	0	0	0	1	3rd

List alternatives in columns and rows as depicted in the matrix above. Starting with Alternative A, go across columns in the matrix and rate each alternative against all the others.

When the alternative under consideration has more value than the others,	Then give the more valuable alternative a score of <u>1</u>
When the alternative has less value than the others.	Then give the less valuable alternative a score of <u>0</u>

Add the scores for each row/alternative; highest score is the highest rated alternative according to the criteria you used. In the matrix above, Alternative C scores highest, so it's the highest rated alternative.

2. SFF Matrix: Suitability, Feasibility & Flexibility

	Suitability	Feasibility	Flexibility	Total
Alternative A				
Alternative B				
Alternative C				
Alternative D				

Rate each alternative on scale of 1 - 3 for its :

a. Suitability: refers to

the alternative itself, whether it is ethical or practical. Is it appropriate in scale or importance? An adequate response? Too extreme?

b. Feasibility: refers to

how many resources will be needed to solve the problem (i.e. Is it affordable?)

How likely will it solve the problem?

c. Flexibility: refers to

your ability to respond to unintended consequences, or openness to new possibilities? The alternative itself and whether you can control outcomes once you begin.

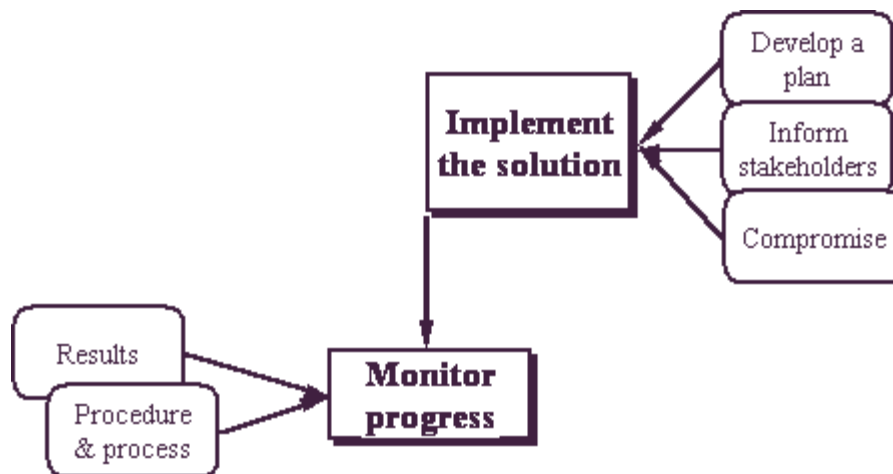
Total a score for each alternative, compare, prioritize your alternatives...

5. Select the best alternative

- **Don't consider any alternative as "perfect solution."** If there were, there probably wouldn't be a problem in the first place
- **Consider your intuition**, or inner feelings in deciding on a course of action
- **Return to a trusted outsider:** Is there something you missed? Does he/she see a problem with your solution?
- **Compromise** when you have a full grasp of the problem, and your alternatives.

6) Implement the solution

until the solution is acted on, a decision is only a good intention



Develop a plan for implementation. Its elements include:

1. Step-by-step process or actions for solving the problem.
2. Communications strategy for notifying stakeholders.
3. Where important or necessary, inform those who care for you and/or will be affected by the change. Prepare them as necessary about your decision.
4. Resource identification/allocation.
5. Timeline for implementation

7) Monitor progress

Your implementation will only be successful if you are monitoring your solution, the effects of it on resources and stakeholders, your timeline, and your progress. As you monitor your progress, if results are not what you expect, review your options and alternatives

Whether or not you achieved your goals, it is important to consider what you have learned from your experience: about yourself, about what you consider important.

Lastly, if you have done your best, you have this as one measure of success.

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