


Measurement into practice



Introduction

Like other branches of health care, progress in rehabilitation depends on advances in research. However, the rehabilitation process is different from some other facets of health care in that it focuses simultaneously on health outcomes that range from cellular to social. It's required the proper measurement of health status for better service allocation and implementation.

	Time needed to finish this unit	Approximately 3 weeks
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Lessons of this unit

Lesson 1: Selection, interpretation and integration of measures into practice

Lesson 2: Validity and reliability of measurement

Lesson 3: Continuous quality improvement cycles


Lesson 4: Measurement uses for multidisciplinary team in terms of rehabilitation.

Lesson-1: Selection, interpretation and integration of measures into practice

Learning Objectives

After completion of this lesson students will be able to—

- Know about PERT chart, Gantt chart, PESTLE Analysis, SWOT Analysis, SMART Goal etc.
- Acquire knowledge about selection and interpretation of measuring tools in health and rehabilitation sectors with examples.

	Keywords	Measures into practice
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Subject-matter

3.1.1: PERT chart

- Program Evaluation and Review Technique;
- PERT was developed in the late 1950's for the US Navy's Polaris Project;
- First used as a management tool for military projects;
- Adapted as an educational tool for business managers;
- It has the potential to reduce both the time and cost required to complete a project;
- It is a network model that allows for randomness in activity completion times;
- Tool used to control the length of projects;
- A PERT chart is a graphic representation of a project's schedule, showing;
- the sequence of tasks, which tasks can be performed simultaneously and
- The critical path of tasks that must be completed on time in order for the project to meet its completion deadline;
- The chart can be constructed with a variety of attributes, such as earliest and latest start dates for each task, earliest and latest finish dates for each task, and slack time between tasks;
- A PERT chart can document an entire project or a key phase of a project;
- The chart allows a team to avoid unrealistic timetables and schedule expectations;
- To help identify and shorten tasks that are bottlenecks, and to focus attention on most critical tasks.

When to use it

- Because it is primarily a project-management tools, a PERT chart is most useful for planning and tracking entire projects or for scheduling and tracking the implementation phase of a planning or improvement effort.

- Path
 - A connected sequence of activities leading from the starting event to the ending event
 - Critical Path
 - The longest path (time); determines the project duration

(That is, when the last task in the critical path is completed, the project is completed)

Critical Activities

- All of the activities that make up the critical path

Slack Time:

- ❖ The amount of time a task can be delayed before the project finish date is delayed;
- ❖ Total slack can be positive or negative;
- ❖ If total slack is a positive it indicates the amount of time that the task can be delayed without delaying the project finish date;
- ❖ If negative, it indicates the amount of time that must be saved so that the project finish date is not delayed;
- ❖ Total Slack = Latest Start - Earliest Start.

By default and by definition, a task with 0 slack is considered a critical task. If a critical task is delayed, the project finish date is also delayed. (Also known as float time)

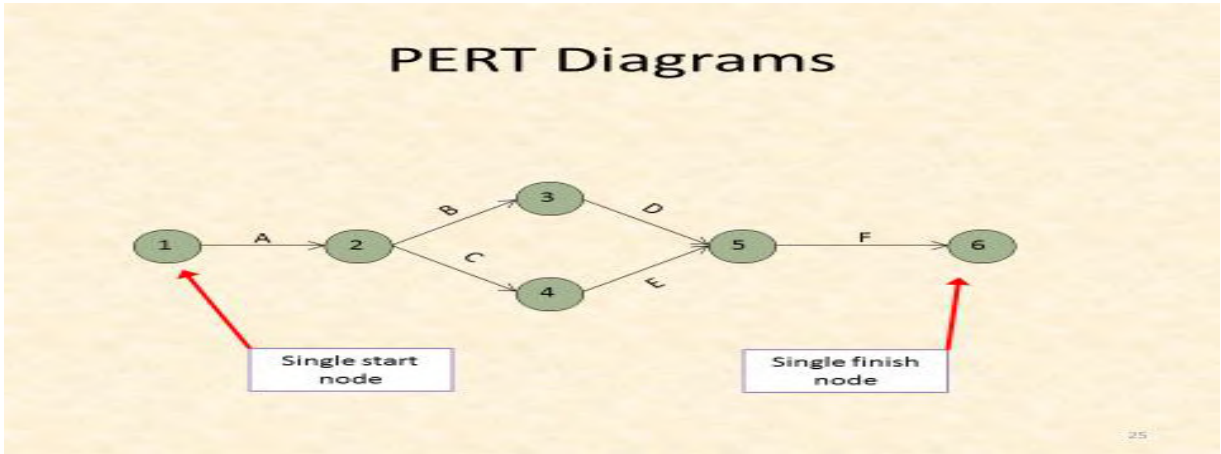
Construct the PERT chart

- Number each task, draw connecting arrows, and add task characteristics such as duration, anticipated start date, and anticipated end date;
- Determine the critical path. The project's critical path includes those tasks that must be started or completed on time to avoid delays;
- To the total project. Critical paths are typically displayed in red.

PERT Diagrams

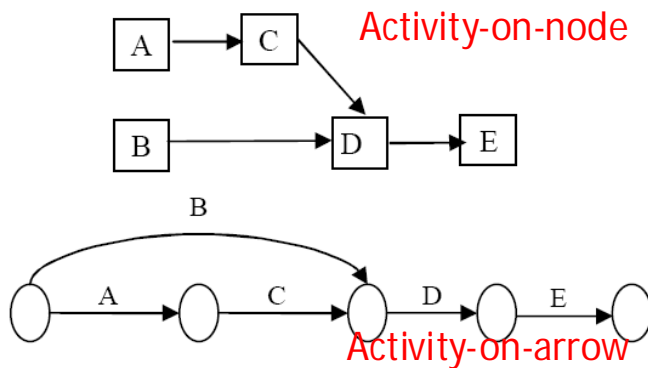
- **Activity-on-node diagrams**
 - Maybe more than one single start and end node
 - Nodes represent activities
 - Arrows indicate precedence
- **Activity-on-arrow diagrams**
 - One single start and one single end node
 - Arrows represent activities
 - Nodes indicate beginning/end of activities

PERT Diagrams



Example of PERT diagrams:

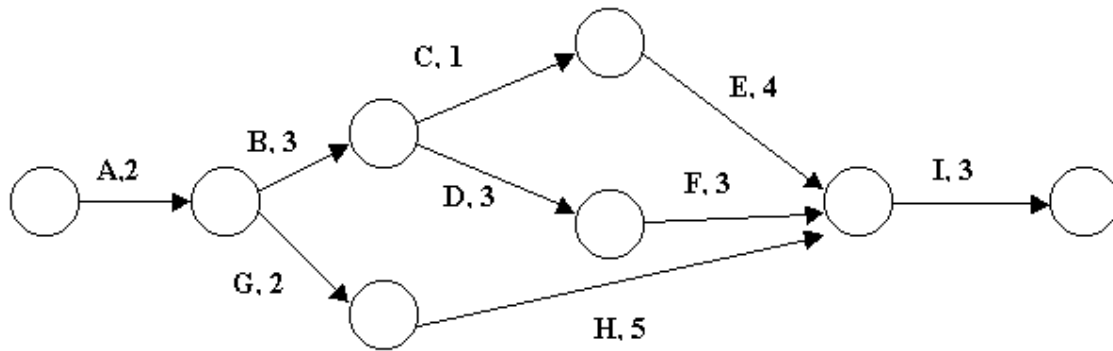
Task	Precedence
A	
B	
C	A
D	B,C
E	D



- Tasks are represented as arrows;
- Nodes represent the start and finish points of tasks;
- There is only one overall start node;
- There is only one overall finish node;
- Two tasks cannot share the same start and end node.

This PERT chart follows the “Activity on Arrow” style.

- The tasks are shown by **arrows**. Task name are shown by letters, in this case.
- The circles are called **nodes**. The nodes indicate the *start* or *end* of tasks.
- Task durations are the shown by the numbers.



Example: Which tasks are on the critical path?

Possible paths:

A,B,C,E,I = 2+3+1+4+3 = 13 days

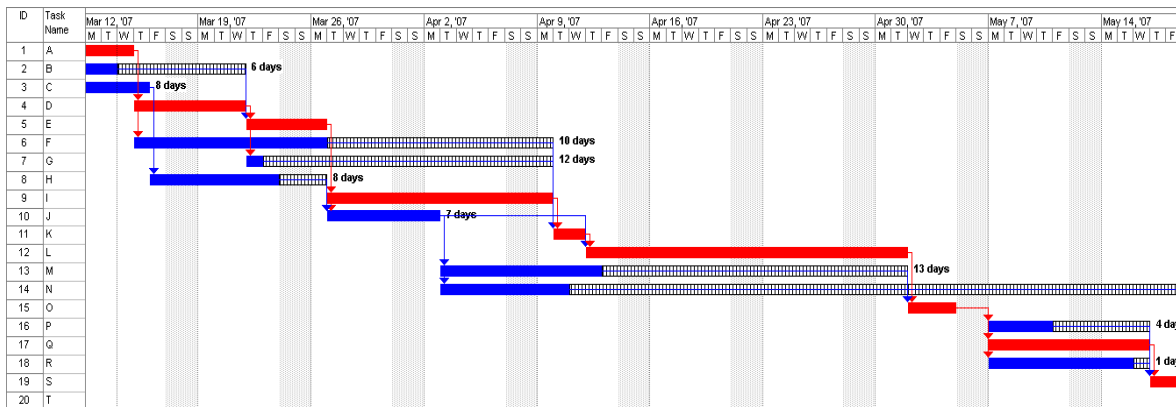
A,B,D,F,I = 2+3+3+3+3 = 14 days

A,G,H,I = 2+2+5+3 = 12 days

ANSWER: A,B,D,F,I

3.1.2: Gantt chart

- ❖ A GANTT chart is a type of bar chart that illustrates a project schedule;
- ❖ After the PERT/CPM analysis is completed, the following phase is to construct the GANTT chart and then to re-allocate resources and re-schedule if necessary;
- ❖ GANTT charts have become a common technique for representing the phases and activities of a project work breakdown structure;
- ❖ It was introduced by Henry Gantt around 1910 – 1915.



Characteristics

- The bar in each row identifies the corresponding task;
- The horizontal position of the bar identifies start and end times of the task;
- Bar length represents the duration of the task;
- Task durations can be compared easily;
- Good for allocating resources and re-scheduling.

○ Advantages

- Simple;
- Good visual communication to others;
- Task durations can be compared easily;
- Good for scheduling resources.

○ Disadvantages

- Dependencies are more difficult to visualise;
- Minor changes in data can cause major changes in the chart.

Constructing Gantt chart

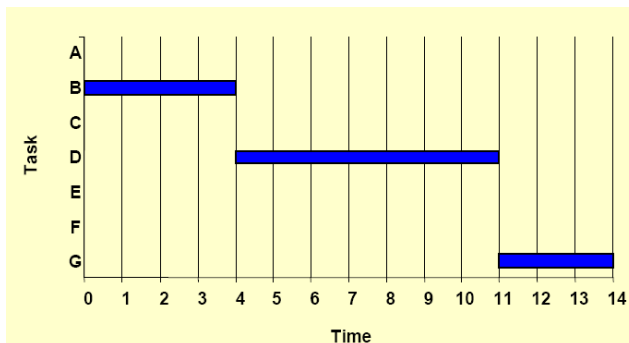
The steps to construct a GANTT chart (from the information obtained by PERT/CPM);

1. Schedule the critical tasks in the correct position;
2. Place the time windows in which the non-critical tasks can be scheduled;
3. Schedule the non-critical tasks according to their earliest starting times;
4. Indicate precedence relationships between tasks.

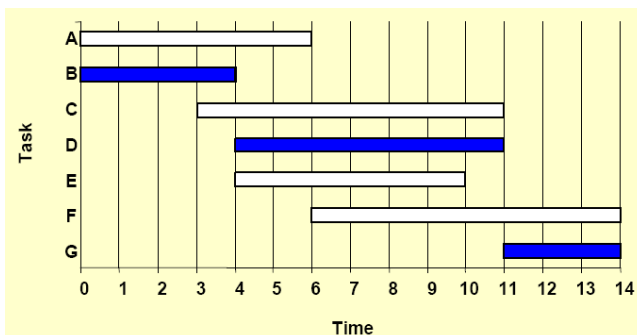
Example of an early GANTT chart construction

Task	Duration	Precedence	ES	EF	LS	LF	Slack Time	Critical Task
A	3		0	3	3	6	3	N
B	4		0	4	0	4	0	Y
C	5	A	3	8	6	11	3	N
D	7	B	4	11	4	11	0	Y
E	2	B	4	6	8	10	4	N
F	4	E	6	10	10	14	4	N
G	3	C,D	11	14	11	14	0	Y

Step 1. Schedule critical tasks

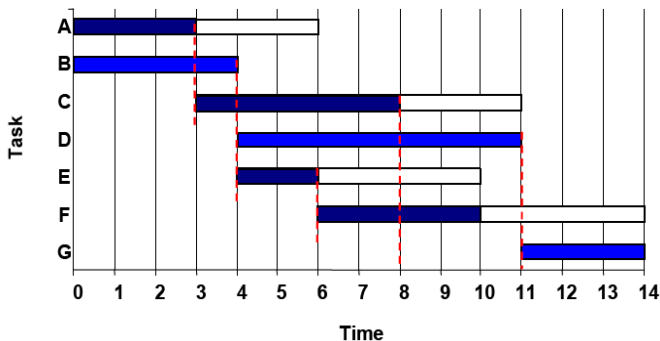


Step 2. Place time windows for non-critical tasks



Step 3. Schedule non-critical tasks

Step 4. Indicate precedence relationships



3.1.3: PESTLE analysis

- **PESTLE analysis**, which is sometimes referred as **PEST analysis** is a concept in marketing principles;
- Moreover, this concept is used as a tool by companies/organisations the world over to track the environment they're operating in or are planning to launch a new project/product/service etc.

PESTLE is a mnemonic which in its expanded form denotes

- ❖ P for Political,
- ❖ E for Economic,

- ❖ S for Social,
- ❖ T for Technological,
- ❖ L for Legal and
- ❖ E for Environmental.

It gives a bird's eye view of the whole environment from many different angles that one wants to check and keep a track of while contemplating on a certain idea/plan.

There are certain questions that one needs to ask while conducting this **analysis**, which give them an idea of what things to keep in mind. They are:

- What is the political situation of the country and how can it affect the industry?
- What are the prevalent economic factors?
- How much importance does culture has in the market and what are its determinants?
- What technological innovations are likely to pop up and affect the market structure?
- Are there any current legislations that regulate the industry or can there be any change in the legislations for the industry?
- What are the environmental concerns for the industry?
- It may be so, that the importance of each of the factors may be different to different kinds of industries, but it is imperative to any strategy a company wants to develop that they conduct the **PESTLE analysis** as it forms a much more comprehensive version of the **SWOT analysis**.

PESTLE Analysis is useful for four main reasons

- It helps you to spot business or personal opportunities, and it gives you advanced warning of significant threats.
- It reveals the direction of change within your business environment. This helps you shape what you're doing, so that you work with change, rather than against it.
- It helps you avoid starting projects that are likely to fail, for reasons beyond your control.
- It can help you break free of unconscious assumptions when you enter a new country, region, or market; because it helps you develop an objective view of this new environment.

PEST Analysis is often linked with SWOT Analysis, however, the two tools have different areas of focus.

PEST Analysis looks at "big picture" factors that might influence a decision, a market, or a potential new business. SWOT Analysis explores these factors at a business, product-line or product level. These tools complement one another and are often used together.

How to Use the Tool

- ❖ Use PEST to brainstorm the changes happening around you;
- ❖ Brainstorm opportunities arising from each of these changes;
- ❖ Brainstorm threats or issues that could be caused by them;
- ❖ Take appropriate action.

Political: These factors determine the extent to which a government may influence the economy or a certain industry. [For example] a government may impose a new tax or duty due to which entire revenue generating structures of organizations might change.

Economic: These factors are determinants of an economy's performance that directly impacts a company and have resonating long term effects. [For example] a rise in the inflation rate of any economy would affect the way companies' price their products and services. Adding to that, it would affect the purchasing power of a consumer and change demand/supply models for that economy.

Social: These factors scrutinize the social environment of the market, and gauge determinants like cultural trends, demographics, population analytics etc. An example for this can be buying trends for Western countries like the US where there is high demand during the Holiday season.

Technological: These factors pertain to innovations in technology that may affect the operations of the industry and the market favorably or unfavorably. This refers to automation, research and development and the amount of technological awareness that a market possesses.

Legal: These factors have both external and internal sides. There are certain laws that affect the business environment in a certain country while there are certain policies that companies maintain for themselves. Legal analysis takes into account both of these angles and then charts out the strategies in light of these legislations. For example, consumer laws, safety standards, labor laws etc.

Environmental: These factors include all those that influence or are determined by the surrounding environment. This aspect of the PESTLE is crucial for certain industries particularly for example tourism, farming, agriculture etc. Factors of a business environmental analysis include but are not limited to climate, weather, geographical location, global changes in climate, environmental offsets etc.



3.1.4: SWOT Analysis

- ❖ Developed at Stanford;
- ❖ Funded by Fortune 500 companies;
- ❖ Took 9 years to develop;
- ❖ Involved 5000 interviews;
- ❖ A strategic planning tool that separates influences on a business's future success into internal and external factors;
- ❖ The SWOT Analysis framework is a very important and useful tool to use in Management and other applications;
- ❖ As a basic tool its mastery is a fundamental requirement for the marketer, entrepreneur or business person;
- ❖ A clear understanding of SWOT is required for a project.

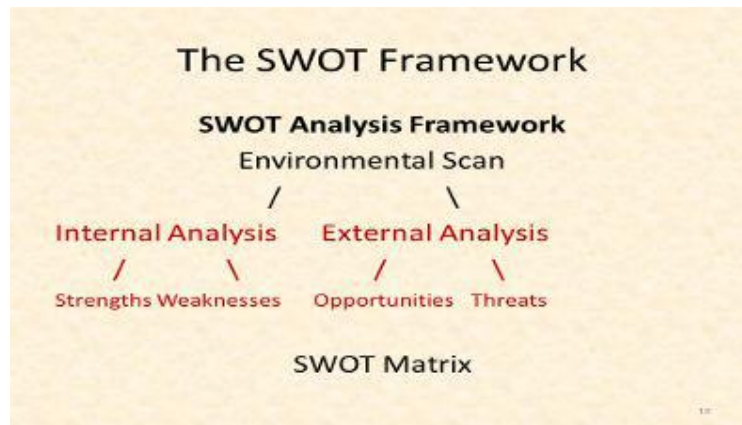
Definition of SWOT

- A scan of the internal and external environment is an important part of the strategic planning process;
- Environmental factors internal to the firm usually can be classified as strengths (**S**) or weaknesses (**W**), and those external to the firm can be classified as opportunities (**O**) or threats (**T**);
- Such an analysis of the strategic environment is referred to as a **SWOT analysis**.

The SWOT Matrix



- The SWOT analysis provides information that is helpful in matching the projects resources and capabilities to the competitive environment in which it operates.
- As such, it is instrumental in strategy formulation and selection.



Social Work Education in Canada SWOT Analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> ▪ A holistic practice orientation ▪ The linkage between theory and practice ▪ Regulation and certification ▪ A generalist approach to practice ▪ Increased cultural relevance of social work education ▪ High quality social work programs ▪ A continued demand for social worker ▪ The values of the profession 	<ul style="list-style-type: none"> ▪ Lack of professional identification, or identity crisis ▪ An inability to promote the profession ▪ The diffuse knowledge base of the profession ▪ Conflict between the values of social action and social control ▪ A lack of preparation to manage the stress of our work ▪ Insufficient aboriginal, visible minority and multicultural members of the profession

Opportunities	Threats
<ul style="list-style-type: none"> ▪ A trend to neoliberalism ▪ Increasing identification of social workers with the bureaucracy ▪ Increasing managerialization ▪ Increased community responsibility for service delivery ▪ Interdisciplinarity 	<ul style="list-style-type: none"> ▪ Design of cost effective programs which meet service user needs ▪ Exercise of responsibility for social advocacy ▪ Development of managerial competence in social workers ▪ Extension of job opportunities through privatization ▪ Articulation of social work competencies

3.1.5: Goal Setting in Disability Rehabilitation

The goal setting in disability rehabilitation should be SMART. The acronym SMART has several slightly different variations, which can be used to provide a more comprehensive definition of goal setting:


S - Specific, significant, stretching


M - Measurable, meaningful, motivational

A - Agreed upon, attainable, achievable, acceptable, action-oriented

R - Realistic, relevant, reasonable, rewarding, results-oriented

T - Time-based, time-bound, timely, tangible, tractable

 Learner's Activity	Different evaluation practice
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 Summary Different evaluation format used for different analysis and measurement for monitoring and evaluation.
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Study Skills

Short Questions

- How do you set your goal in disability Rehabilitation?
- What is PERT chart, Gantt chart, PESTLE Analysis, SWOT Analysis, SMART Goal etc?
- How do you select and interpret measuring tools in health and rehabilitation sectors with examples?

References

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- Chermack, Thomas J.; Bernadette K. Kasshanna (December 2007). "The Use of and Misuse of SWOT analysis and implications for HRD professionals". *Human Resource Development International*. 10 (4): 383–399.
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Lesson-2: Validity and Reliability of Measurement



Learning Objectives:

After completion of this lesson students will be able to.....

- Understand the validity and reliability of a measurement.
- Acquire knowledge about the application of validity and reliability in your practice.

	Keywords	Validity and reliability
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Subject-matter

Research is the only way to prove any phenomenon where the validity and reliability is highly important as its implementation.

3.2.1: Background

For the statistical consultant working with social science researchers, the estimation of reliability and validity is a task frequently encountered. Measurement issues differ in the social sciences in that they are related to the quantification of abstract, intangible and unobservable constructs. In many instances, then, the meaning of quantities is only inferred.

Another important feature is the *population* for which the measure is intended. This decision is not entirely dependent on the theoretical paradigm but more to the immediate research question at hand.

Once some of these decisions are made and a measure is developed, which is a careful and tedious process, the relevant questions to raise are “how do we know that we are indeed measuring what we want to measure?” since the construct that we are measuring is abstract, and “can we be sure that if we repeated the measurement we will get the same result?”. The first question is related to validity and second to reliability. Validity and reliability are two important characteristics of behavioural measure and are referred to as psychometric properties.

It is important to bear in mind that validity and reliability are not at all or none issue but a matter of degree.

3.2.2: Validity

Very simply, validity is the extent to which a test measures what it is supposed to measure. The question of validity is raised in the context of the three points made above, the form of the test, the

purpose of the test and the population for whom it is intended. Therefore, we cannot ask the general question “Is this a valid test?” The question to ask is “how valid is this test for the decision that I need to make?” or “how valid is the interpretation I propose for the test?” We can divide the types of validity into logical and empirical.

Content Validity: When we want to find out if the entire content of the behavior/construct/area is represented in the test we compare the test task with the content of the behavior. This is a logical method, not an empirical one. Example, if we want to test knowledge on American Geography it is not fair to have most questions limited to the geography of New England.

Face Validity: Basically face validity refers to the degree to which a test appears to measure what it purports to measure.

Criterion-Oriented or Predictive Validity: When you are expecting a future performance based on the scores obtained currently by the measure, correlate the scores obtained with the performance. The later performance is called the criterion and the current score is the prediction. This is an empirical check on the value of the test – a criterion-oriented or predictive validation.

Concurrent Validity: Concurrent validity is the degree to which the scores on a test are related to the scores on another, already established, test administered at the same time, or to some other valid criterion available at the same time. Example, a new simple test is to be used in place of an old cumbersome one, which is considered useful, measurements are obtained on both at the same time. Logically, predictive and concurrent validation are the same, the term concurrent validation is used to indicate that no time elapsed between measures.

Construct Validity: Construct validity is the degree to which a test measures an intended hypothetical construct. Many times psychologists assess/measure abstract attributes or constructs. The process of validating the interpretations about that construct as indicated by the test score is construct validation. This can be done experimentally, e.g., if we want to validate a measure of anxiety. We have a hypothesis that anxiety increases when subjects are under the threat of an electric shock, then the threat of an electric shock should increase anxiety scores (note: not all construct validation is this dramatic!).

3.2.3: Reliability

Research requires dependable measurement. Measurements are reliable to the extent that they are repeatable and that any random influence which tends to make measurements different from occasion to occasion or circumstance to circumstance is a source of measurement error. Reliability is the degree to which a test consistently measures whatever it measures. Errors of measurement that affect

reliability are random errors and errors of measurement that affect validity are systematic or constant errors. Test-retest, equivalent forms and split-half reliability are all determined through correlation.

Test-retest Reliability: Test-retest reliability is the degree to which scores are consistent over time. It indicates score variation that occurs from testing session to testing session as a result of errors of measurement. Problems: Memory, Maturation, Learning.

Equivalent-Forms or Alternate-Forms Reliability: Two tests that are identical in every way except for the actual items included. Used when it is likely that test takers will recall responses made during the first session *and* when alternate forms are available. Correlate the two scores. The obtained coefficient is called the coefficient of stability or coefficient of equivalence. Problem: Difficulty of constructing two forms that are essentially equivalent.

Both of the above require two administrations.

Split-Half Reliability: Requires only one administration. Especially appropriate when the test is very long. The most commonly used method to split the test into two is using the odd-even strategy. Since longer tests tend to be more reliable, and since split-half reliability represents the reliability of a test only half as long as the actual test, a correction formula must be applied to the coefficient. Spearman-Brown prophecy formula.

Split-half reliability is a form of internal consistency reliability.

Rationale Equivalence Reliability: Rationale equivalence reliability is not established through correlation but rather estimates internal consistency by determining how all items on a test relate to all other items and to the total test.

Internal Consistency Reliability: Determining how all items on the test relate to all other items. Kudser-Richardson-> is an estimate of reliability that is essentially equivalent to the average of the split-half reliabilities computed for all possible halves.

Standard Error of Measurement: Reliability can also be expressed in terms of the standard error of measurement. It is an estimate of how often you can expect errors of a given size.



Learner's Activity

Validity and reliability example setup



Summary

Research is the systematic investigation whose outcomes help to establish or confirm facts, reaffirm the results of previous work, solve new or existing problems, support theorems, or develop new theories.



Study Skills

Short Questions

- What is validity and its different types?
- What reliability and its different types?
- How could you apply validity and reliability in your practice?

References

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Lesson-3: Continuous Quality Improvement Cycles



Learning Objectives

After completion of this lesson students will be able to.....

- Conceptualize the quality improvement cycle and its application.



Keywords

Quality assurance



Subject-matter

3.3.1: Quality improvement cycle

A quality improvement cycle is a planned sequence of systematic and documented activities aimed at improving a process.

Improvements can be effected in two ways

- By improving the process itself and/or;
- By improving the outcomes of the process.

3.3.2: Four steps of Quality improvement cycle

A quality improvement cycle can typically be defined into the four steps of **Plan, Do, Check and Act** (also known as the PDCA cycle).

1. Plan – the change

This can include:

- selection of the change or identification of the need to implement change;
- reflection on and interpretation of relevant information concerning the existing process – this should be drawn from as wide a range of sources as possible and include information from clients and stakeholders;
- definition of the current process and the opportunities for improvement;
- planning of how you will monitor the progress and the effectiveness of the change;
- Documentation of your goals and objectives – what improvements/changes do you expect to see?

Ask questions such as

- What data indicates a change is required?
- What change is to be made?
- How do you know the planned change is appropriate? What other alternatives are there?
- What sequence of steps is needed to implement this change?
- Who will be responsible for carrying out each step?
- Who will need to be consulted?
- Who will the change affect?
- How long will the change take? How long will each step take?
- How will you know you have completed each step?
- How will you monitor the change's effectiveness and the benefits of the change?
- How will you monitor and track the progress of the change?
- How will you collect, review and act on information?
- What will you do about unexpected problems?

2. Do – implement the change

- carry out the change or new practice;
- document the activities of implementation

3. Check – monitor and review the change

This can include:

- monitoring the progress and effectiveness of the change according to your plan
- recording of observations and results (planned and unexpected) in comparison with the original data or the project goals, measures and objectives
- Studying the results - what did you achieve?/ what did you learn?

Checking can go on continuously throughout the whole improvement cycle.

4. Act – revise and plan how to use the learnings

Ask questions such as:

- What will you do with the learnings – adopt them, abandon them, run them through another PDCA cycle again to test?
- What did the information you collected tell you about the effectiveness of the change?
- What can be done to improve the process further?
- How can the change be refined?
- What lessons have you learned that can be applied elsewhere? How can these lessons be communicated?

3.3.3: What will the Quality Award Judges be looking for?

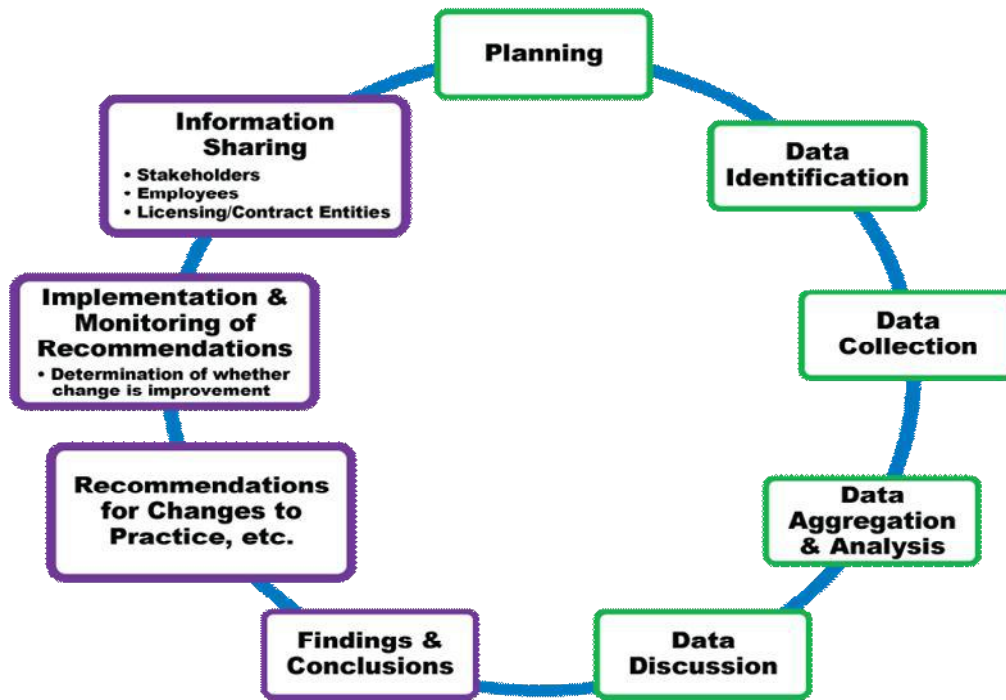
The judges will be looking to see that submissions address ALL aspects of the PDCA cycle and address the other Awards Criteria.


In addition to assessing how well your submission meets the Awards Criteria, the judges will be looking for aspects of the following:


- Projects are planned and planned steps are evident from the beginning of the project;
- The needs and outcomes of students/clients and other stakeholders drive the project;
- Decisions are based on facts, data and analysis;
- Results are evidenced;
- Goals and outcomes are clearly defined and can be measured;
- Improvements to the process and/or outcomes can be measured (qualitative and/or quantitative);
- Activities are evaluated and improved;
- There is a team based approach (in the case of an individual submitting a project the team based approach includes liaison and cooperation with stakeholders and clients of the project/process);

Continuous Quality Improvement Cycle





 Learner's Activity	Make an example of quality assurance with the cycle
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 Summary
Continuous quality assurance procedures is important for maintaining the proper quality of the study and services.

Study Skills

Short Questions

- What is quality improvement cycle and its process of application?

References:

GMC Good Medical Practice Domain 2: Safety and quality, April 2013.

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RCGP. The 2022 GP- A Vision for General Practice in the future NHS. Royal College of General Practitioners, 2013.

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Lesson-4: Measurement uses for Multi-Disciplinary Team (MDT) in terms of Rehabilitation



Learning Objectives

After completion of this lesson students will be able to—

- Understand the MDT and its importance;
- Acquire knowledge about competence of MDT;
- Conceptualize the model of MDT.



Keywords

MDT for rehabilitation



Subject-matter

3.4.1: Background

Hospital-based “multidisciplinary teams” often involve all levels of “staff” on the treatment pyramid including aides, nurses, physician assistants, physical therapists, social workers, anesthesiologists, and attending physicians. These “teams” are consistently more effective than randomly assigning staff to the emergency room (ER), the floors, the Intensive Care Unit (ICU), the operating room (OR), or other locals. These “teams,” acting as “well-oiled machines,” counteract the “silo or halo effect” (e.g. characterized by the “I am too important because I am...”), break down communication barriers between specialists, and provide better cooperation among all specialists. Utilizing such cohesive teams limits adverse events (AE) (e.g. including morbidity/mortality), improves patient outcomes, decreases patient length of stay (LOS), and increases patient satisfaction. Additional benefits for the “staff” include improved job performance, reduced AE/complications, reduced costs, and increased job satisfaction, while the “staff” and hospitals benefit from greater retention of experienced personnel. We must continue to work with our hospital administrators to ensure that these “multidisciplinary teams” stay together for the “greater good” of the patient, “staff,” and the institution.

3.4.2: Define Multidisciplinary Team (MDT)

A multidisciplinary team is a group of health care professionals who are members of different disciplines (professions e.g. Physiotherapist, Occupational Therapist, SLT, Physician, Psychiatrists,

Social Workers, etc.), each providing specific services to the patient. The team members independently treat various issues a patient may have, focusing on the issues in which they specialise. The activities of the team are brought together using a care plan. This co-ordinates their services and gets the team working together towards a specific set of goals. Sometimes the person has a key worker, who becomes the main point of contact for the person.

A **multidisciplinary approach** involves drawing appropriately from multiple academic disciplines to redefine problems outside normal boundaries and reach solutions based on a new understanding of complex situations. One widely used application of this approach is in health care, where people are often looked after by a **multidisciplinary team** that aims to address their complex clinical needs.

3.4.3: Importance of multidisciplinary team

Multidisciplinary teams convey many benefits to both service users and the mental health professionals working on the team, such as continuity of care, the ability to take a comprehensive, holistic view of the service user's needs, the availability of a range of skills, and mutual support and education.

According to Moss (1994), multidisciplinary teams working in the community enables the following three key functions to be available to service users:

- Continuing proactive care of those with long-term serious mental health problems
- 24-hour access to information and support, intervention and treatment before and during crises, and
- An organised response to requests for help from primary care

3.4.4: Core competencies for multidisciplinary team working

- A performance component which identifies 'what people need to possess' and 'what they need to achieve' in the workplace
- An ethical component that is concerned with integrating a knowledge of culture, values and social awareness into professional practice
- A component that emphasises reflective practice in action
- The capability to effectively implement evidence-based interventions in the service configurations of a modern mental health service, and
- A commitment to working with new models of professional education and responsibility for lifelong learning

Core skills, knowledge and attitudes for multidisciplinary working

- Assessment
- Treatment and care management
- Collaborative working
- Management and administration
- Interpersonal skills

3.4.5: MDT care in Stroke Rehabilitation

Co-ordinated multidisciplinary team working has made a significant contribution to improvements in the quality of care within stroke services over the past five years.

The 12 key indicators of stroke care:

- ❖ Patient initially admitted to a stroke unit;
- ❖ Discussion with the patient about their diagnosis;
- ❖ Patients treated for 90% of stay in a Stroke Unit;
- ❖ Screening for swallowing disorders within 24 hours of admission;
- ❖ Brain scan within 24 hours of stroke;
- ❖ Commenced aspirin by 48 hours of admission;
- ❖ Physiotherapy assessment within first 72 hours of admission;
- ❖ Swallowing assessment by a speech and language therapist within 72 hours of admission;
- ❖ Assessment by an occupational therapist within four working days of admission;
- ❖ Rehabilitation goals agreed by the multidisciplinary team within five days of admission;
- ❖ Patient weighed at least once during admission;
- ❖ Mood assessed by discharge.

3.4.6: Benefits of multidisciplinary team care

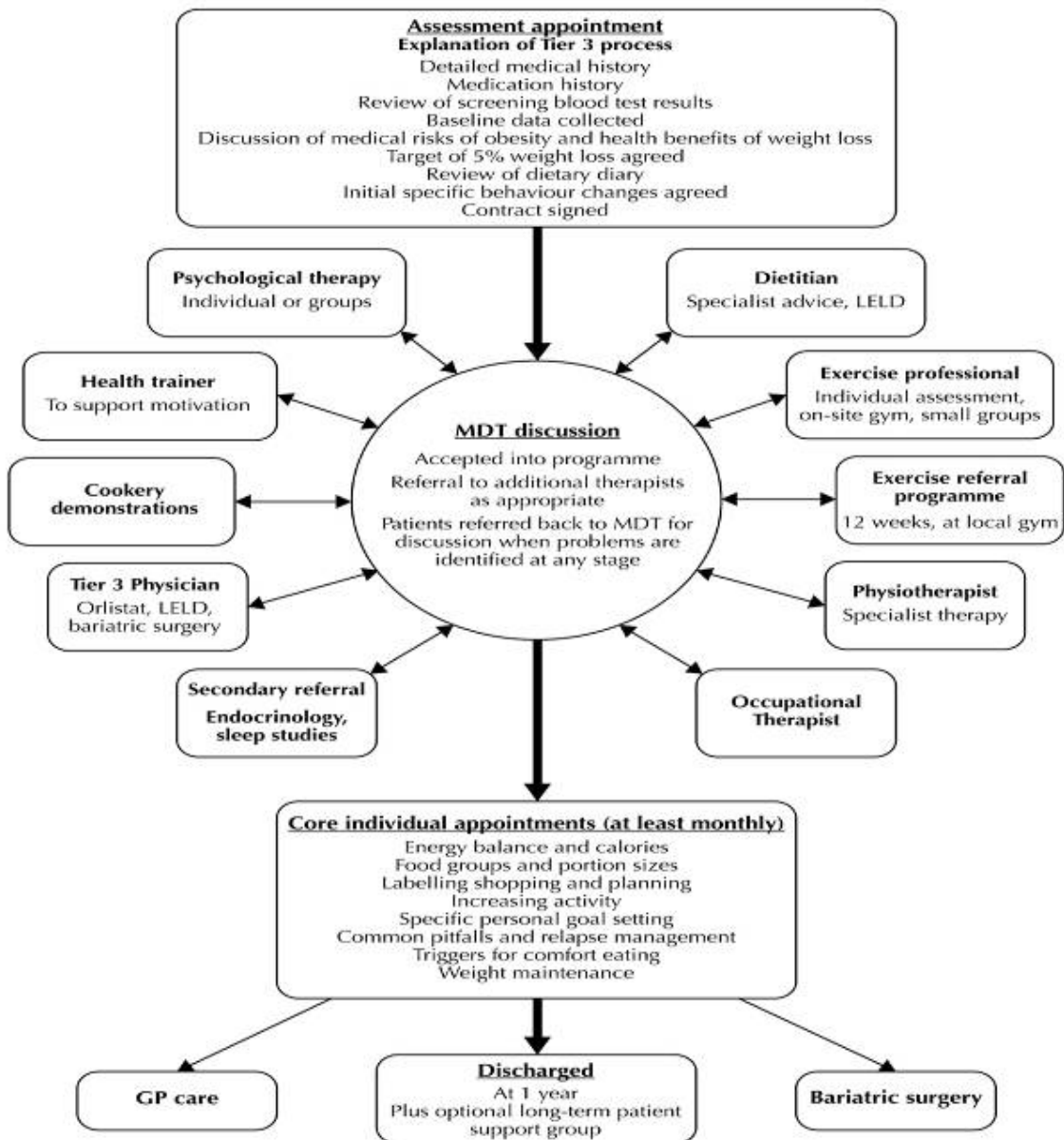
There is unequivocal evidence of improved outcomes when patients are treated in a stroke unit by multi-disciplinary teams. When compared with conventional care, organised inpatient stroke care resulted in long-term reductions in death, dependency and the need for institutional care. There is also good evidence that ESD teams facilitate earlier discharge to the home, increase the likelihood that patients will regain independence in activities that support daily living, and result in fewer patients requiring long-term institutional care. These outcomes are associated with established stroke unit or ESD team services, employing stroke skilled professionals who collaborate through regular

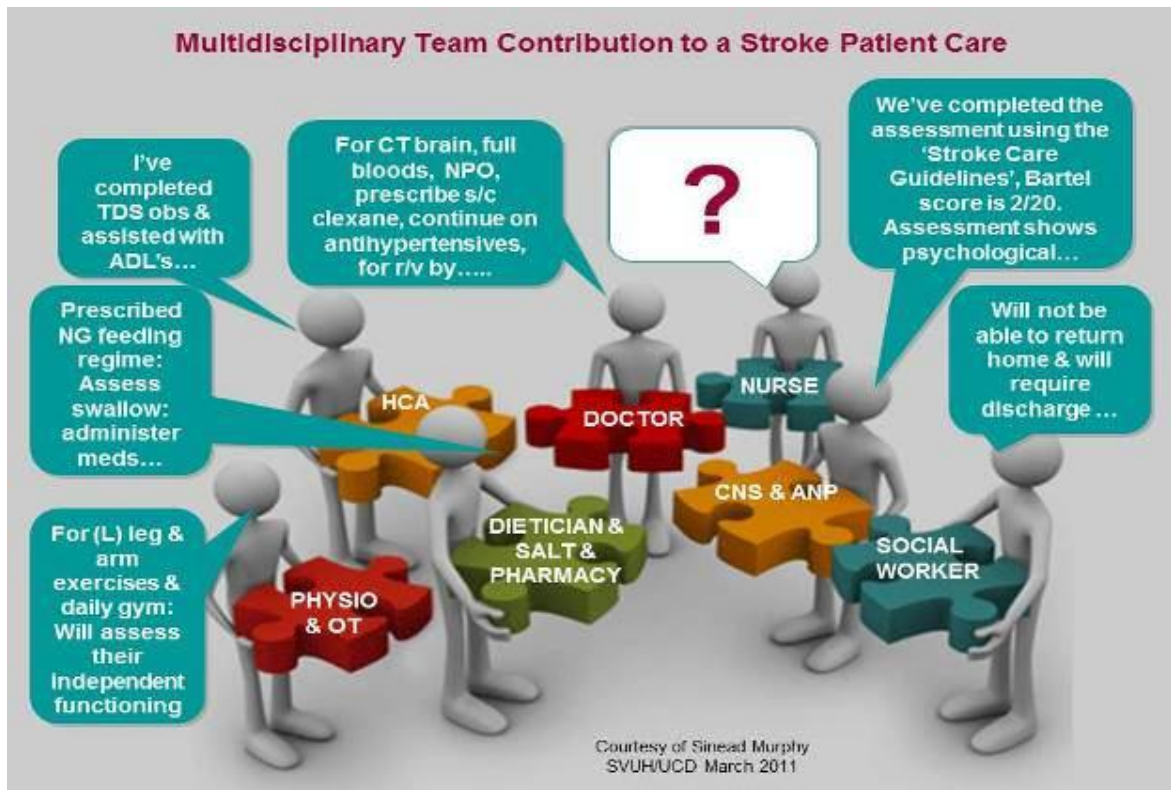
multidisciplinary team meetings and have clearly defined stroke care pathways within the wider context of hospital or community care services.

3.4.7: Usual Measurement uses for multidisciplinary team in terms of rehabilitation

- ❖ ADLs
- ❖ QALY
- ❖ DALY
- ❖ Life expectancy
- ❖ Mortality rate
- ❖ Morbidity rate
- ❖ Crude death rate etc

3.4.8: Model Example of MDT





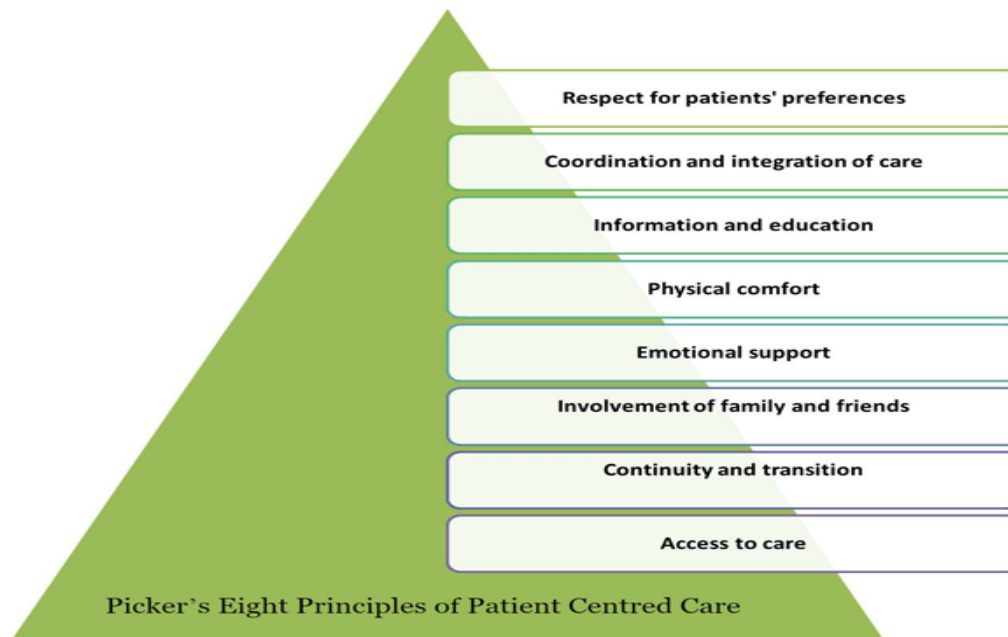
3.4.9: Patient-Centered Care

Defining Patient-Centered Care

Patient-centered care is the practice of caring for patients (and their families) in ways that are meaningful and valuable to the individual patient. It includes listening to, informing and involving patients in their care. The IOM (Institute of Medicine) defines patient-centered care as: "Providing care that is respectful of, and responsive to, individual patient preferences, needs and values, and ensuring that patient values guide all clinical decisions."

The Eight Principles of Patient-Centered Care

As anyone who works in healthcare will attest, patient-centered care has taken center stage in discussions of quality provision of healthcare, but has the true meaning of patient-centered become lost in the rhetoric? In this week's *Insights*, we examine what it means to be truly patient-centered, using the eight principles of patient-centered care highlighted in research conducted by the Picker Institute and Harvard Medical School.



The Biopsychosocial Approach of patient care

The biopsychosocial approach was developed at Rochester decades ago by Drs. George Engel and John Romano. While traditional biomedical models of clinical medicine focus on pathophysiology and other biological approaches to disease, the biopsychosocial approach in our training programs emphasize the importance of understanding human health and illness in their fullest contexts. The biopsychosocial approach systematically considers biological, psychological, and social factors and their complex interactions in understanding health, illness, and health care delivery.



To apply the biopsychosocial approach to clinical practice, the clinician should

- ❖ Recognize that relationships are central to providing health care;
- ❖ Use self-awareness as a diagnostic and therapeutic tool;
- ❖ Elicit the patient's history in the context of life circumstances;
- ❖ Decide which aspects of biological, psychological, and social domains are most important to understanding and promoting the patient's health;
- ❖ Provide multidimensional treatment.



Learner's Activity

Make an example of different types of disability care



Summary

Disability rehabilitation and management is usually done as social model and patients centered care is important for stabilizing the rights of the persons with disabilities.



Study Skills

Short Questions

- Define MDT.
- What are the importance of MDT?
- What is the model example of MDT?
- Describe MDT functions for a stroke patients.
- What is patient centered care?
- Describe Biopsychosocial model of patient care.

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