Introduction and Overview to Health Assessment

Health assessment: Refers to a systematic method of collecting and analyzing data for the purpose of planning patient centered care.

Components of health assessment

1. **Health History**: A health history consists of subjective data collected during an interview. This history includes information about patients' current state of health, medications they take, previous illnesses and surgeries, and family history and a review of systems. Patients may report feelings or experiences associated with health problems.
2. **Physical Examination:** A physical examination involves the collection of objective data; these data are sometimes referred to as signs. During a physical examination, objective data are collected using the techniques of inspection, palpation, percussion, and auscultation. In addition, the patient's height, weight, blood pressure, temperature, pulse rate, and respiratory rate are measured.
3. **Documentation of Data**: Health assessment data are documented so the health status at the time of the interaction is recorded and so other health care team members can use the information.

Types of health assessment

1. **Comprehensive assessment**: This involves a detailed history and physical examination performed at the onset of care in a primary care setting or on admission to a hospital or long-term care facility. The comprehensive assessment encompasses health problems experienced by the patient; health

promotion, disease prevention, and assessment for problems associated with known risk factors; or assessment for age- and gender-specific health problems.

2. **Problem-based/focused assessment**: The problem based or problem-focused assessment involves a history and examination that are limited to a specific problem or complaint (e.g., a shortness of breathing). This type of assessment is most commonly used in a walk-in clinic or emergency department, but it may also be applied in other outpatient settings.
3. **The focus of data collection**: is on a specific problem; the potential impact of the patient's underlying health status also must be considered.
4. **Episodic/follow-up assessment**: This type of assessment is usually done when a patient is following up with a health care provider for a previously identified problem. For example, a patient treated by a health care provider for pneumonia might be asked to return for a follow-up visit after completion of antibiotics. An individual treated for an ongoing condition such as diabetes is asked to make regular visits to the clinic for episodic assessment.
5. **Shift assessment**: When individuals are hospitalized, nurses conduct assessments each shift. The purpose of the shift assessment is to identify changes in a patient's condition from baseline
6. **Screening assessment**: A screening assessment, or screening examination, is a short examination focused on disease detection. Examples include blood pressure screening, glucose screening, cholesterol screening, and colorectal screening.

Type of data:

1. **objective data**: are Signs observed, felt, heard, or measured. Examples of signs include rash, enlarged lymph nodes, and swelling of an extremity.
2. **subjective data**: are Symptoms perceived and reported by the patient. Examples of symptoms include pain, itching, and nausea.
   Occasionally data may fall into both categories. For example, a patient may tell the nurse that he "feels sweaty"—a symptom. At the same time the nurse may observe excessive sweating, or diaphoresis—a sign

The health history

The health history is obtained from patients on every visit; the amount of data collected for a history depends largely on the setting and the purpose of the visit. The health history is obtained through an interview process. During the interview the nurse facilitates discussion to collect and record data. The interview consists of three phases: **introduction, discussion, and summary**.

1. **Introduction phase**: the nurse introduces himself or herself and informs the patient about the nurse's role in the patient's care. During the introduction the nurse should also explain to patients what to expect during the interview and how long the process should take.
2. **Discussion phase**: During this phase the nurse collects the health history by facilitating a discussion regarding various aspects of the patient's health. Although the role of the nurse is to facilitate the direction of conversation.
3. **Summary phase**: is a time for closure. Summarize with patients the main points and emphasize data that have implications for health promotion, disease prevention, or resolution of their health problems.

Types of Questions to Ask to obtain heal history

1. **open-ended questions**: usually start the interview with the open-end questions such as, “How have you been feeling?” This broadly stated question encourages a free-flowing, open response. The risk of asking open-ended questions is that patients may be unable to focus on the specific topic of the question or may take excessive time to tell their story.
2. **closed-ended questions**: To gain more precise details, nurses ask more direct, specific, closed-ended questions that require only one or two words to answer. For example, the nurse might ask, “Do you become short of breath?
3. **Directive questions**: lead patients to focus on one set of thoughts. This type of question is most often used in reviewing systems or evaluating an individual’s functional capabilities. An example would be, “Describe the drainage you have had from your nose.”

Components of the Health History

1. **Biographic Data**: Biographic data are collected at the first visit and updated as changes occur it contain Name Gender, Address, ,Birth date , Birthplace, Religion , Marital status , Occupation Source of data
2. **Reason for Seeking Health Care**: The reason for seeking care (also called the chief complaint [CC] or presenting problem) is a brief statement of the patient’s purpose for requesting the services of a health care provider.
3. **History of Present Illness:** When patients seek health care for a specific problem, the nurse documents the present illness or problem as described previously but then should further investigate the history of the present problem. Several formats are used to conduct a symptom analysis, but it

should include all of the following variables: onset of symptoms, location and duration of symptoms, characteristics, aggravating and alleviating factors, related symptoms, attempts at self-treatment, and severity of symptoms, for example COLDSPA method.

COLDSPA Assessment Guide		
Letter	**Meaning**	**Key Questions to Ask the Patient**
C	Character	"Can you describe the pain/symptom?" (e.g., sharp, dull, burning, throbbing)
O	Onset	"When did it start?" "Was it sudden or gradual?"
L	Location	"Where is the pain/problem?" "Does it radiate anywhere?"
D	Duration	"How long does it last?" "Is it constant or intermittent?"
S	Severity	"On a scale from 0 to 10, how severe is it?"
P	Pattern	"What makes it better or worse?" "Does it happen at certain times?"
A	Associated factors	"Do you notice other symptoms with it?" (e.g., nausea, shortness of breath, sweating)

4. **Present Health Status**

The present health status focuses on the patient's conditions (acute and chronic), medications the patient is currently taking, and allergies the patient has experienced.

* **Health Conditions**. Examples include diabetes, hyper tension, heart disease, mental illness. Ask patients how long they have had the condition(s) and the impact of the illness on their daily activities.

* **Medications**. Inquire about prescription, over-the counter, and herbal preparations. Include the reason for taking the medication, how long the patient has been taking it, dose and frequency, any adverse effects, and the patient's perception of its effectiveness.

* **Allergies**. Ask patients about allergies to foods, medications, environmental factors, and contact substances.

5. **Past Health History**

   The past health history is important because past and present conditions may have some effect on the patient's current health needs and problems. The following data categories are included:

   A. **Childhood illnesses**: Ask about the childhood diseases such as measles, mumps and if there were complications in later years such as rheumatic fever or glomerulonephritis that can occur after streptococcal throat infection.

   B. **Surgeries**: types, dates, outcomes

   C. **Hospitalizations**: illnesses, dates, outcomes

   D. **Accidents or injuries**: type (fractures, lacerations, loss of consciousness, burns, penetrating wounds), dates, outcomes

6. **A family history of the patient's blood relatives**: is obtained to identify illnesses of genetic, familial, or environmental nature that might affect the patient's current or future health. For example diabetes mellitus (specify type 1 or type 2), coronary artery disease (including myocardial infarction).

7. **Personal and Psychosocial History**: The personal and social history explores a variety of topics, including information that affects and reflects the patient's physical and mental health.

8. **Review of Systems Review of systems** is conducted to inquire about the past and present health of each of the patient's body systems. Symptoms listed in the review of systems are written in medical terms. A brief definition of each term is included as needed to facilitate patient understanding.

Techniques of physical assessment

Data for physical assessment are collected using four basic assessment techniques: inspection, palpation, percussion, and auscultation.

1. **Inspection**

   The term inspection refers to a visual examination of the body, including body movement and posture. Data obtained by smell are also a part of inspection. Examination of every body system includes the technique of inspection. For example, when inspecting the lungs and respiratory system, the nurse observes the shape of the chest, giving attention to breathing (noting the rate, depth, and effort of respirations); and notices the overall color of the skin, lips, and nail beds.

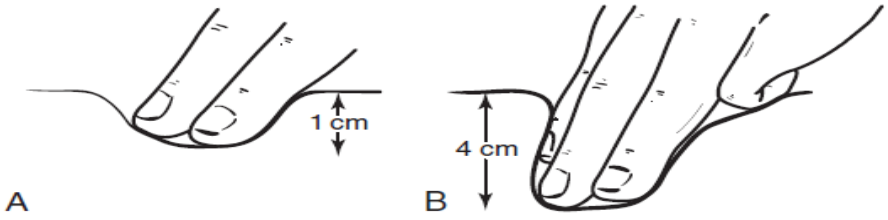
2. **Palpation**

   Palpation involves using the hands to feel texture, size, shape, consistency, pulsations, and location of certain parts of the patient's body and also to identify areas the patient reports as being tender or painful.

   Palpation using the palmar surfaces of the fingers may be light or deep and is controlled by the amount of pressure applied.

   a. **Light palpation** is accomplished by pressing down to a depth of approximately 1 cm and is used to assess skin, pulsations, and tenderness.
   b. **Deep palpation** is accomplished by pressing down to a depth of 4 cm with one or two hands and is used to determine organ size and contour.
   c. **A bimanual technique** of palpation uses both hands, one anterior and one posterior, to entrap a mass or an organ (such as the uterus, kidney or large breasts) between the fingertips to assess size and shape.

The palmar surfaces of **fingers and finger pads are more sensitive for palpation than the fingertips**; thus they are better for determining position, texture, size, consistency, masses, fluid, and crepitus. **The ulnar surface of the hands extending to the fifth finger is the most sensitive to vibration**, whereas the **dorsal surface (back) of the hands is more sensitive to temperature.**



A, Superficial palpation. B, Deep palpation.

3. Percussion

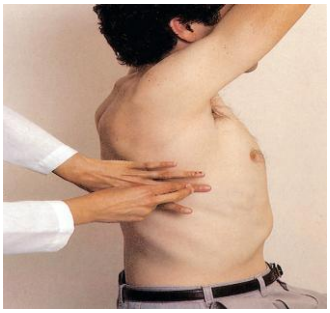
Percussion is performed to evaluate the size, borders, and consistency of internal organs; detect tenderness; and determine the extent of fluid in a body cavity. There are two percussion techniques: direct and indirect.

a. **Direct Percussion:** Direct percussion involves striking a finger or hand directly against the patient's body.

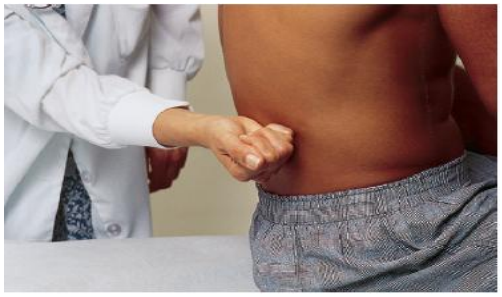
b. **Indirect percussion:** requires both hands and is done by different methods, depending on which body system is being assessed. Indirect percussion is performed by placing the distal aspect of the middle finger of the nondominant hand against the skin over the organ being percussed and striking the distal interphalangeal joint (between the cuticle and first joint) with the tip of the middle finger of the dominant hand.

The Five percussion tones

1. **Tympany** is normally heard over the abdomen.
2. **Resonance** is heard over healthy lung tissue
3. **Hyper resonance** is heard in overinflated lungs (as in emphysema).
4. **Dullness** is heard over the liver.
5. **Flatness** is heard over bones and muscle. Detecting



Indirect percussion of lateral chest wall



Hand position for direct fist percussion of kidney

4. **Auscultation** involves listening to sounds within the body. Although some sounds are audible to the ear without the use of special equipment (e.g., respiratory stridor, severe wheezing, and abdominal gurgling), a stethoscope is usually used to facilitate auscultation.

Characteristics of sound during auscultation

A. Intensity is the loudness of the sound, described as soft, medium, or loud.
B. Pitch is the frequency or number of sound waves generated per second. High-pitched sounds have high frequencies. Expected high-pitched sounds are breath sounds, whereas cardiac sounds are low pitched.
C. Duration of sound vibrations is short, medium, or long. Layers of soft tissue dampen the duration of sound from deep organs.
D. Quality refers to the description of the sounds (e.g., hollow, dull, crackle).