GONIOMETER

TYPES:

- Universal Goniometer
- Comes in two forms: short arm and long arm.
- Gravity Goniometer/Inclinometer
- One arm has a weighted pointer that remains vertical under the influence of gravity.
- Software/Smartphone-based <u>Goniometer</u>: A smartphone as a digital <u>goniometer</u> has several benefits like availability, ease of measurement, application-based tracking of measurements, and one-hand use.
- Arthrodial <u>Goniometer</u>: Ideal for measuring cervical rotation, flexion Extension and lateral flexion of the cervical spine.

Axis and Plane of Motion

• Elbow flexion movement occurs in the sagittal plane and around the frontal axis

Testing position

• Patient is supine or seated with the hand supinated and the arm parallel to the midline of the body

Stabilization

• Stabilize the distal end of the humerus to prevent flexion of the shoulder joint.

• Placement

AXIS LOCATION STATIONARY ARM MOVEMENT ARM

lateral epicondyle of the elbow parallel with the humerus parallel with the radius

INDICATIONS:

- Presence of muscle, tendon, or joint-related dysfunction.
- Establish a diagnosis
- Set treatment goals
- Evaluating progress
- Adjust treatment according to the progress
- Manufacture of braces
- Measurements for research purposes

CONTRAINDICATIONS:

- Joint dislocation
- Unhealed fracture
- If movement interferes with the healing process after surgery
- Osteoporosis or areas of fragile bone (because forced measurements can lead to iatrogenic damage)
- Immediately after injury when soft tissue may be destroyed.