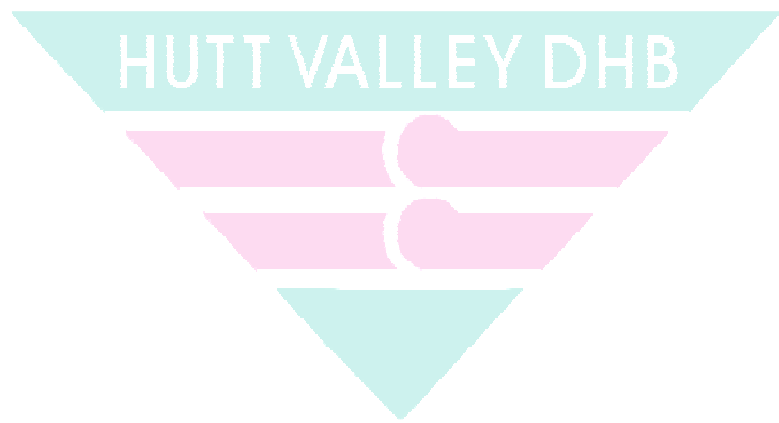


Student Nurses



Fracture Clinic & Orthopaedic Outpatients Department

Student Name:
Fracture Clinic and Orthopaedic
Outpatients Department

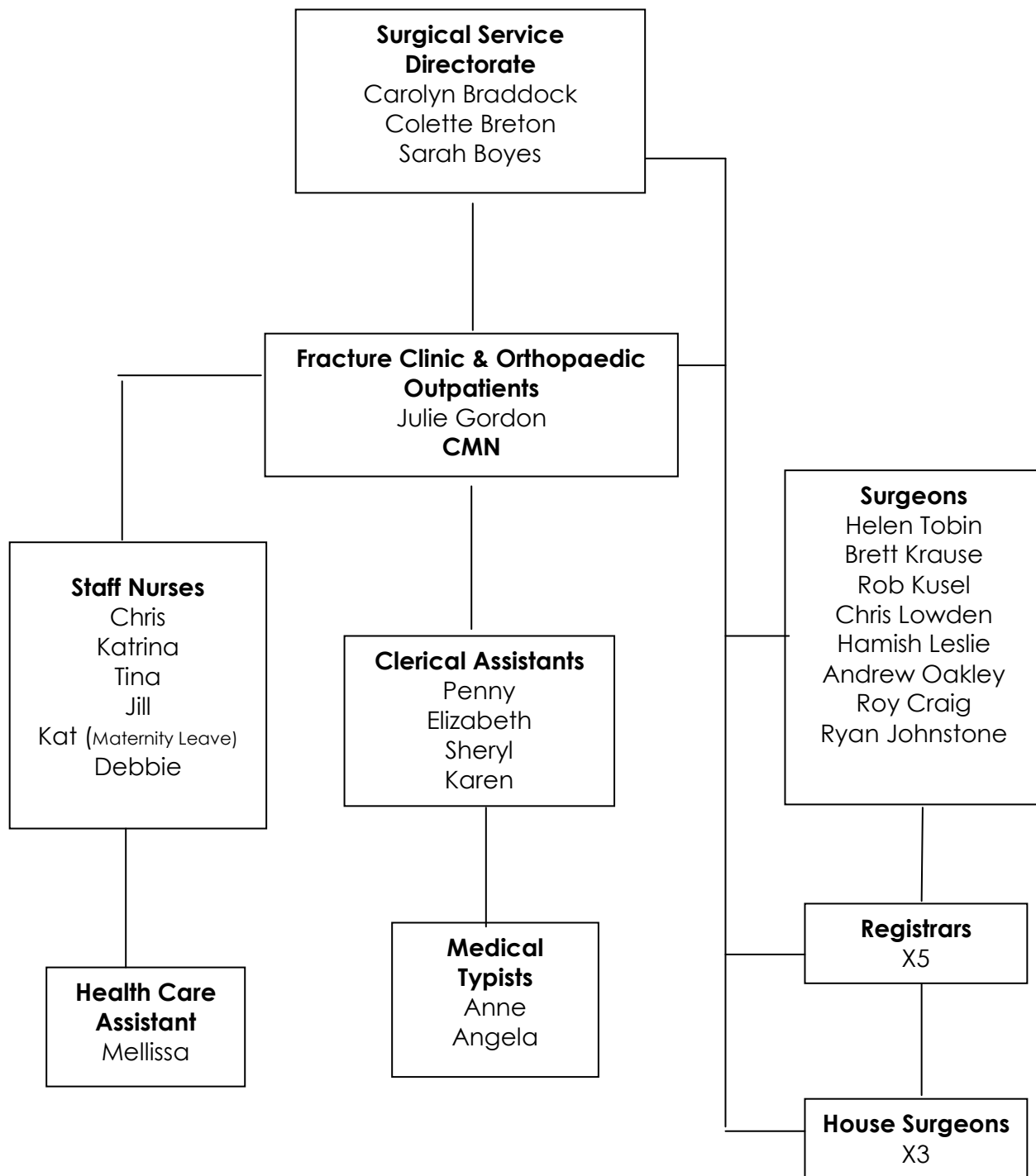
Mission

To provide a professional orthopaedic outpatient and fracture clinic service to the patients of Hutt Valley District Health Board which focuses on the needs of the patient and their family/caregivers

Objectives

1. To provide each individual with competent, considerate and respectful care, appropriate to his or her needs.
2. To provide ongoing education to staff, patients and their family/caregivers.
3. To strive to improve the quality of care and service.
4. To advocate for our patients supporting their rights and choices.

Organisational Chart



Daily activities

Fracture Clinic	Acute injury follow-up - mainly fracture pts referred from ED, GP's or transfers from other DHB's and discharged post surgery ward patients,
Orthopaedic Clinic	GP referrals of patients with orthopaedic conditions, new and follow-up patients
Acute fracture treatment	Patients are referred from Emergency Department or GP for treatment / plasters Acute Xrays of concern to be referred to Registrar on call
Ward referrals	For plaster trims, repairs, change of plasters, application of special casts - e.g. hip spica, cast brace. Requisition is faxed from the wards for these
Deferred plastering	Arranged during fracture clinics when more time is required - e.g. cast braces, PTB
Dressings	For outpatients and any acutes requiring continued dressings and who are going to be seen in our clinics
General household duties	To ensure the area is kept clean, tidy, restocked and safe.
Pre-op assessments clinics	Tuesday, Wednesday, Thursday and Friday These are managed by Pre-assessment clinic in General OPD. Pts are seen in Fracture clinic for surgery consent.
Orthotic clinics	Staff from Orthotic Services are in attendance for two sessions per week: Tuesday and Thursday mornings
Ortho Teaching Clinics	Mr Johnstone runs teaching clinics for 5 th Medical student on Wednesdays during the student year

Welcome!!

We are looking forward to working with you

Contacts

This should contain information on all the key contacts for the ward/unit

Fracture Clinic		(04) 570 9099
Clinical Nurse Manager	Julie Gordon	X 9459

Please contact Julie Gordon if you are unable to work your shift at the unit.

Your Preceptor

You will be allocated one main preceptor, this preceptor will be responsible for helping you completing your objectives. We will endeavor to ensure that you mainly work with this preceptor, however, due to shift work this is not always possible. It is **your** responsibility to ensure the nurse you are working with is aware of your objectives for the day/week. You must provide evaluations and/or other paperwork to your preceptor in a timely fashion (i.e. not on the due date!!). Your preceptor will not complete any evaluations if you give it to them on your last days in the unit.

If you have any concerns or questions do not hesitate to contact 570 9099.

Expectations of the Student Nurse while in Fracture Clinic

Students work in the fracture clinic from 8am to 4.30pm.

At times the morning clinics will start at 8.30am and the afternoon clinics will run until 5pm, so your preceptor may stay on after you finish.

We have a few expectations of student nurses working in the fracture clinic:

- ❖ It is expected that you arrive on time for your shift and if you are going to be late or you are unwell and can not come to call the unit on 570 9099
- ❖ You must complete the full shift that you are allocated to work – if you are unable to do so please discuss this with your preceptor, clinic nurse or CNM. A lot of learning occurs at quiet times in the unit!!
- ❖ It is important for your preceptor or the nurse you are working with that she is aware of your objectives in your first week
- ❖ Due to infection control a clean uniform must be worn, long hair must be tied back and cardigans must not be worn when working on the floor
- ❖ If you are not achieving your objective please see Julie or your preceptor (before the last week in the clinic)
- ❖ Please ensure all documentation you need to complete for the polytechnic/university is accomplished before the last days in the unit – your preceptor will **not** complete any paper that is given to him or her if it is given in the last days of your placement

Safety Measures in Fracture Clinic

Please be aware of specific safety measures in the unit. This should include:

In the event of a cardiac arrest student nurses are to undertake an observing role only, you are not required to participate.

In the event of a fire remove yourself from the source and inform your preceptor/nurse.

The fracture clinic can be a noisy environment to work in during clinic times, please protect your hearing and wear ear muffs during cast removal.

Please wear plastic aprons over your uniform and gloves and face masks when assisting with casting.

Treasure Hunt

This list is designed to help you become familiar with the environment, but is by no means exhaustive of all the things you will be required to locate.

- | | |
|--|--|
| <input type="checkbox"/> Clinical Nurse Manager Office | <input type="checkbox"/> Assessment rooms |
| <input type="checkbox"/> Toilet-Key pad combination | <input type="checkbox"/> Linen supplies |
| <input type="checkbox"/> Where to store your bags | <input type="checkbox"/> Arm block trolley |
| <input type="checkbox"/> Staff tea room | <input type="checkbox"/> Roster |
| <input type="checkbox"/> Discharge information pamphlets | <input type="checkbox"/> Manual BP machine / stethoscope |
| <input type="checkbox"/> Sterile instruments | <input type="checkbox"/> Suction Equipment |
| <input type="checkbox"/> Stitch cutters | <input type="checkbox"/> Bio-hazard bags |
| <input type="checkbox"/> Clip removers | <input type="checkbox"/> Tympanic thermometer covers |
| <input type="checkbox"/> Plain Gauze | <input type="checkbox"/> Stationery supplies |
| <input type="checkbox"/> Casting trolleys/buckets | <input type="checkbox"/> Photocopier |
| <input type="checkbox"/> Casting products | <input type="checkbox"/> Entonox |
| <input type="checkbox"/> Clean utility room | <input type="checkbox"/> Laboratory forms |
| <input type="checkbox"/> Dressing Materials | <input type="checkbox"/> Oxygen isolation "shut off" valve |
| <input type="checkbox"/> Sterile Gloves | <input type="checkbox"/> Online Incident Forms |
| <input type="checkbox"/> Dressing Supplies | <input type="checkbox"/> Cortisone trays |
| <input type="checkbox"/> Dressing trolleys | <input type="checkbox"/> Fire exits |
| <input type="checkbox"/> Dirty instruments | <input type="checkbox"/> Fire extinguishers |
| <input type="checkbox"/> Clinical policies & procedures | |

Objectives

- 1 To have knowledge of how patients are admitted to Fracture Clinic via:
 - Emergency Department and Radiology
 - GP and Private Radiology
 - Transferred patients from other hospitals

- 2 To learn how to care for patients with casts on in the ward setting and as outpatients – to be able to advise patients on the following:
 - Elevation of the limb
 - Exercises for the limb
 - Circulation observations – colour, warmth, movement, sensation
 - Hygiene care
 - Positioning the limb
 - Handling the cast – how to prevent damage to the cast and underlying tissues
 - Mobilisation and weightbearing status
 - Using crutches

- 3 To be aware of the different casting materials available:
 - Plaster of paris
 - Fibre glass
 - Soft cast
 - MOK cast

- 4 To observe the application and removal of plasters – if time permits to be shown a simple cast

- 5 The provision of appropriate care to the patient and whanau with support and supervision from the preceptor, including
 - Accurate assessment
 - Competent implementation of care
 - Documentation

- 6 Gain an understanding of the different roles of the multidisciplinary team

Eg Drs, nurses, reception staff, therapists.

- 7 Practice good infection control measures

- 8 Identifying the different types of fractures
 - Identifying types of fractures on xrays
 - Basic knowledge around fracture healing

- 9 The use of pain management during casting
 - Entonox
 - The role of conscious sedation and regional analgesia

- 10 Wound management – trauma and surgery
 - Performing aseptic wound dressings and wound assessment under supervision from preceptor
 - Removal of sutures and clips from a surgical wound under supervision from preceptor

Common Presentations to Fracture Clinic

Common **presentations** to fracture clinic include:

- Surgical wounds
- Chronic wounds/ulcers
- Fractures
- Casting products
- Eczema

Common Medications

The following is a list of some of the common medications used in the fracture clinic, please read up on these before you attend the placement.

Citanest	<i>injected intravenously</i>
Entonox	<i>inhaled</i>
Kenacort – A	<i>injected</i>
Panadol	<i>orally</i>
Xylocaine 1%	<i>injected</i>

Pre-reading/Resources

Suggested Web sites to visit:

www.eorthopod.com/content/library

www.imageinterpretation.co.uk

Suggested reading Material:

(found below work station bench in plaster room)

Handbook of Fractures, 3rd Ed, Koval, K.J and Zuckerman, J.D.

Practical Fracture Treatment, McRae, R.

Introduction to casting .., Kinealy, J. 2010.

Also look on shelves in nurses work station room outside CNM office.

INITIAL FRACTURE ASSESSMENT

Answer these questions before you call the orthopaedic surgeon.

1. What bone is involved?

2. Is there any break in the skin at or near the fracture site?

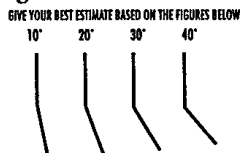
- SELECT ONE OF THE FOLLOWING THREE CHOICES
- A. No – A closed fracture.
 - B. Yes, with a clean wound less than 1 cm in length – A minimally open fracture.
 - C. Yes, with a large and/or dirty wound – A significantly open fracture.

3. Are there any joint dislocations?

4. How many pieces is the bone in now?

- SELECT ONE OF THE FOLLOWING THREE CHOICES
- A. The bone is now in two pieces – Simple fracture.
 - B. The bone is now in more than two pieces – Comminuted fracture.
 - C. The bone is now in multiple pieces – Severely comminuted fracture.

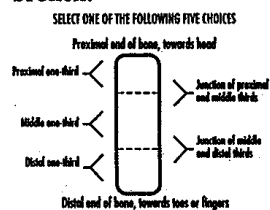
5. How much is the bone angulated at the fracture?



6. Does the fracture involve the growth plate of a child or adolescent?

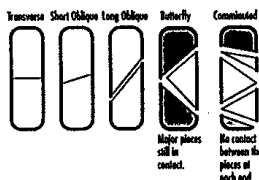
Concerning the situation where there are several fractures in the same bone, for the following questions, pick the most displaced fracture or any involving the joint surface. If both are present (i.e., one with large displacement and a separate fracture into the joint), they should be described separately from here on out.

7. What part of the bone is broken?



8. What is the general fracture pattern?

YOU HAVE FIVE CHOICES – SELECT THE ONE THAT IS CLOSEST



9. Does the fracture enter a joint?

- If Yes, go to step #11.
- If No, go to step #10.

10. Is the fracture completely nondisplaced?

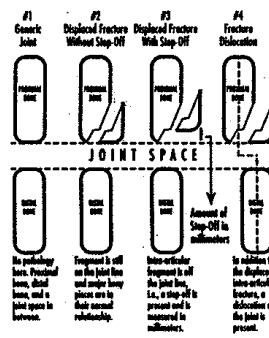
- If Yes, go to step #14.
- If No, go to step #13.

11. How many joint pieces are broken off?

- SELECT ONE OF THE FOLLOWING THREE CHOICES
- A. One piece – Simple.
 - B. More than one piece – Comminuted.
 - C. Multiple pieces – Severely comminuted.

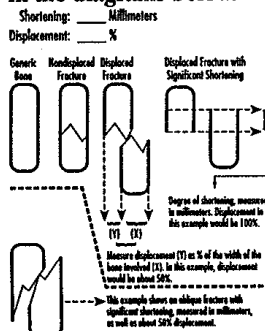
12. How does the fracture involve the joint?

SELECT ONE OF THE FOLLOWING FOUR CHOICES



Go to step #14.

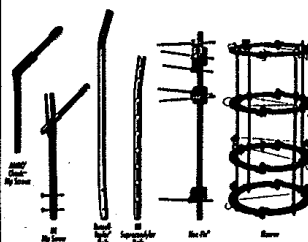
13. Roughly estimate the degree of fracture displacement as shown in the diagrams below.



14. Is there any blanching of the skin?

- A. Is the patient in much pain at rest, with the fracture held still, or have you had any difficulty controlling their pain?
- B. How would you describe the swelling?
Minimal Moderate Severe Tense
- C. Are the pulse, color, and capillary refill OK?
- D. Are the sensory and motor functions intact distal to the fracture?
- E. When was the last time the patient ate or drank?

15. Once you have addressed these basic questions, then call the orthopaedist.



Smith & Nephew Richards

Smith & Nephew

Leadership in Worldwide Healthcare

Smith & Nephew Richards Inc. • 1070 North Road • Memphis, TN 38153 USA
Phone: 901 321 1111 • Fax: 901 321 1111 • 1 800 825 5200 • For names and other important info visit: www.snr.com

Commonly used abbreviations

#	Fracture
Ad hoc	Nurse's clinic (FAH)
BXOA	Booked x-ray on arrival
C1	First cervical vertebrae
CA	Cancer
COD	Change of dressing
COP	Change of plaster
CT	Computerised Tomography scan
CTR	Carpal Tunnel Repair
CTS	Carpal Tunnel Syndrome
CW	Childrens ward
D	Discharged
DNA	Did not attend
EUA	Examination under anaesthetic
FSA	First specialist appointment
FUP	Follow-up
I & D	Incision and drainage
L1	First lumbar vertebrae
MED	Medical ward
MRI	Magnetic Resonance Imaging
MUA	Manipulation under anaesthetic
NBXOA	Non-booked xray on arrival
NOH	Neck of humerus
NOF	Neck of femur
OA	Osteo arthritis
ORT	Orthopaedic ward
ORIF	Open reduction & internal fixation
PLA	Plastic surgery outpatients
POP	Plaster of Paris (plaster cast)
PXR	Private xray
RA	Rheumatoid arthritis
R/O	Removal of
ROP	Removal of Plaster
ROS	Removal of stitches/sutures
T1	First thoracic vertebrae
TA	Achilles Tendon
THR	Total hip replacement
TKR	Total knee replacement
TSR	Total shoulder replacement
USS	Ultra sound scan
XR	xray

Glossary of Orthopaedic Terms

Abduction: Movement of an extremity away from the body.

Adduction: Movement of an extremity towards the body

Arthrodesis: The surgical fusion of a joint. The procedure removes any remaining articular cartilage and positions the adjacent bones to promote bone growth across a joint. A successful fusion eliminates the joint and stops motion. The usual purpose is pain relief or stabilization of an undependable joint

Arthroplasty: Procedure to replace or mobilize a joint, typically performed by removing the arthritic surfaces and replacing them with an implant. Total joint arthroplasty is replacement of both sides of the joint. Hemi-arthroplasty replaces only one side of a joint

Arthroscopy: A form of minimally invasive surgery in which a fiberoptic camera, the arthroscope, is introduced into an area of the body through a small incision

Articular cartilage: A smooth, glistening surface that covers the ends of bones that articulate with each other to form a joint.

Aspiration: Removal of fluids from a body cavity; often done to obtain specimens for analysis

Avascular necrosis: A condition in which cells die as a result of inadequate blood supply; see also osteonecrosis

Avulsion fracture: A fracture that occurs when a ligament or tendon pulls off a sliver of the bone

Bursa: A sac formed by two layers of synovial tissue that is located where there is friction between tendon and bone or skin and bone

Bursitis: Inflammation of a bursa

Closed reduction: A procedure to restore normal alignment of a fractured bone or dislocated joint in which the fractured bones are simply manipulated and no incision is needed

Comminuted fracture: A fracture with more than two fragments

Compartment syndrome: A condition that occurs when the amount of swelling and/or bleeding in a muscle compartment causes pressure that is greater than the capillary pressure and results in tissue ischemia and potential tissue necrosis, frequently seen in association with fibial fractures

Compound fracture: Any fracture in which the overlying skin has been penetrated

Condyle: A rounded process at the end of a long bone

Delayed union: A delay in normal fracture healing; not necessarily a pathologic process

Diaphysis: The shaft of a long bone.

Diastasis: Separation of the distal tibia and fibula

Dislocation: Complete disruption in the normal relationship of two bones forming a joint (ie, no contact of the articular surfaces). The direction of the dislocation is described by the position of the distal bone (eg, with an anterior dislocation of the shoulder, the humerus is displaced anterior to the scapula).

Displaced fracture: A fracture that produces deformity of the limb

Distal: Location in an extremity nearer the free end; location on the trunk farther from the midline or from the point of reference

Distraction: A separation of joint surfaces with no dislocation or ligament rupture.

Dorsal: Toward the posterior surface of the body: eg back of hand

Effusion: The presence of fluid within a joint

Epiphysis: The rounded end of a long bone at the joint.

Equinus: Plantar flexed position of the ankle

Exostosis: A spur or bony overgrowth.

Extension: Movement of an extremity posterior to or behind the body.

External fixation: Stabilization of a fracture or unstable joint by inserting pins into bone proximal and distal to the injury that are then attached to an external frame.

External rotation: Lateral rotation of an extremity relative to the body.

Flexion: Movement of an extremity anterior to or in front of the body.

Fracture; A disruption in the integrity of a bone

Fracture callus: Bone developed after a fracture; initially formed from a hematoma at the bleeding edges of bone, it eventually forms a cartilage mass that is remodelled into mature bone

Fracture-dislocation: A fracture of bone associated with a dislocation of its adjacent joint.

Fusion (arthrodesis): The joining of two bones into a single unit, thereby obliterating motion between the two. May be congenital, traumatic, or surgical.

Galeazzi fracture: Dislocated ulna with a fractured distal radius

Genu (knee): Genu valgum is knock-knee deformity; genu varum is bowleg deformity

Genu varum: Bowlegs

Greenstick fracture: A fracture that disrupts only one side of the bone. This fracture pattern is seen in children because of the greater plasticity of their bones.

Haemarthrosis: A collection of blood within a joint.

Haematoma: A collection of blood resulting from injury

Internal fixation: Surgical insertion of a device that stops motion across a fracture or joint to encourage bony healing or fusion

Internal rotation: Medial rotation of an extremity relative to the body.

Lateral: Lying away from the midline

Malunion: Healing of a fracture in an unacceptable position

Metaphysis: The flare at either end of a long bone.

Monteggia fracture: Dislocation of the radial head in association with an ulnar fracture

Non-union: Failure of a fracture or osteotomy to healing. With continued motion through a non-union, a pseudarthrosis will form

Oblique fracture: A fracture in which the fracture line crosses the bone diagonally

Open reduction and internal fixation (ORIF): A procedure that involves incising the skin and soft tissue to repair a fracture under direct visualization with fixation eg plate and screws, rod

Osteoarthritis (OA): A deterioration of the weight bearing surface; distinguished by destruction of the hyaline cartilage and narrowing at the joint space.

Osteomyelitis; Infection of bone, either bacterial or mycotic

Osteoporosis: Deterioration of bone tissue resulting in an increased risk of fracture as the result of a low-calcium diet.

Osteotomy: cutting of a bone. Used to describe surgical procedures in which bone is cut and realigned

Palmar: The anterior surface of the forearm, wrist, and hand

Pathologic fracture: A fracture caused by a normal load on abnormal bone, which is often weakened by tumour, infection, or metabolic bone disease

Periosteum: A sleeve of connective tissue that surrounds the shaft of the bone and contributes to fracture healing

Physis: The growth plate. Specialized cartilaginous tissue interposed between the metaphysis and epiphysis in long bones in children. Provides growth in length of the bone.

Fracture Clinic and Orthopaedic Outpatients – Student Nurses

Pronation: Flattening of the foot that occurs during walking and running.

Proximal: describing structures that are closer to the trunk

Range of motion (ROM): The amount of movement available at a joint

Shaft: The long, straight, cylindrical mid-portion of a bone

Slipped upper femoral epiphysis (SUFE): A unique fracture of the femoral epiphysis that fractures

Spiral fracture: A fracture caused by a twisting force that results in a helical fracture line

Subluxation: An incomplete disruption in the relationship of two bones forming a joint, ie, a partial dislocation. The joint surfaces retain partial contact.

Torus (buckle) fracture: A paediatric fracture that occurs at the diaphyseal-metaphyseal junction when the diaphyseal cortex is driven into the metaphysis.

Valgus: Angulation of a distal bone away from the midline in relation to its proximal partner. Genu valgum is a knock-knee deformity, with abduction of the tibia in relation to the femur. Can also be used to describe angulation of fractures or bony deformities.

Varus: Angulation of a distal bone toward the midline in relation to its proximal partner. Genu varum is a bowleg deformity, with adduction of the tibia in relation to the femur. Can also be used to describe angulation of fractures or bony deformities.

Volar: Toward the anterior surface of the body. Eg palm side of the forearm

Evaluation of your Clinical Preceptor

Please return your evaluation to Julie(CNM)

Name of Preceptor _____ Date _____

E = Excellent VG = Very Good S = Satisfactory NI = Needs Improvement

Please read the following statements then tick the box that best indicates your experience

My Preceptor:	E	VG	S	NI
Was welcoming and expecting me on the first day				
Was a good role model and demonstrated safe and competent clinical practice				
Was approachable and supportive				
Acknowledged my previous life skills and knowledge				
Provided me with feedback in relation to my clinical development				
Provided me with formal and informal learning opportunities				
Applied adult teaching principals when teaching in the clinical environment				

Cut along line

Describe what your preceptor did well

Describe anything you would like done differently

Signed: _____ Name: _____

Notes

Please use this space for notes.