

Provincial Adult Orthopedic & Spine Referral Pathway

EMERGENCY CONSULTATION

(Patient **NEEDS** to be seen immediately)

Call RAAPID or send patient to Emergency for:

Open fractures and / or fractures potentially requiring acute operative treatment (bimalleolar ankle #, markedly displaced wrist #, hip #, long bone #s, comminuted proximal humerus #, etc.); Suspected septic joints and Orthopedic infections; Irreducible acute joint dislocations; Compartment syndrome (acute); Cauda equina or progressive neurologic deficit after injury.

Refer directly to the Emergency Department or call RAAPID.

URGENT ADVICE (Patient **MAY** need to be seen immediately. Patients with conditions that require same day intervention and/or diagnostics but not hospitalizations and not life threatening.)

Indications: Acute fractures including all fractures within 4 weeks of injury, acute tendon ruptures and torn ligaments, dislocation, metastatic bone tumors including impending pathologic fractures, acute pathologic fractures.

Note: For suspected primary or locally aggressive bone tumors, refer to Orthopedic Oncology (except in Lethbridge – Call orthopedic surgeon on call for Wrist)

Note: If the patient is already under the care of an orthopedic surgeon for this injury, please contact them.

Please refer to specific process for acute injuries below on Pages 2-3.

North: Call **Surgeon on Call** through **RAAPID North: 780-735-0811**

Edmonton:

- For hand & wrist: Call **Plastic Surgeon or Orthopedic Surgeon on Call** through **RAAPID North: 780-735-0811**.
- For all other: Call **Orthopedic Consult Line** through **RAAPID North: 780-735-0811**.

Central: Call **Surgeon on Call** through **RAAPID North (North of Red Deer): 780-735-0811** or **South (in and south of Red Deer): 403-944-4486**

Calgary: Call **Surgeon on Call** through **RAAPID South: 403-944-4486**

South: Call **Surgeon on Call** to arrange urgent consult

REVIEW CLINICAL PATHWAY

(If available)

A clinical pathway may be available for your patient's condition. Please use the information to help support care decisions:

- [Shoulder Assessment Clinical Pathways](#)
- [Soft Tissue Knee Assessment Clinical Pathways](#)
- [Spine: Low Back Assessment Clinical Pathway](#)

If you have any questions while using a clinical pathway or if a clinical pathway is not available, reach out and seek advice.

ASK FOR NON-URGENT ADVICE

(Specialists provide advice to physicians for non-urgent questions)

If you have been directed to seek Advice or need to connect with a Specialist:

By electronic advice (Response within 5 calendar days):

Use [Alberta Netcare eReferral Advice Request](#) and submit requests. For more information, go to: albertanetcare.ca/eReferral.htm

By telephone advice:

North & Edmonton Zones - (calls returned within 48 hours): Call [ConnectMD](#) at 1-844-633-2263 or go online to pcnconnectmd.com for more information.

Calgary Zone – (calls returned within 1 hour): Visit specialistlink.ca to request tele-advice, and for more information. Tele-advice is available Monday to Friday (except statutory holidays).

NON-URGENT CONSULTATION

(Patient does **NOT** need to be seen urgently)

- Indicate a clear reason for referral and all required information as outlined under **Mandatory Info (Essential investigations & timeframes)**.
- See QuRE Referral/Consult Checklist (ahs.ca/QuRE) for high-quality referral guidelines.
- **Alberta Facilitated Access to Specialized Treatment (FAST)** is accepting referrals via fax. Submit your completed referral to the Zone FAST fax number.
 - If you have a question about a previously submitted but unassigned referral, call the FAST office.
 - If you have a question about an assigned referral, please contact the specialist office directly.
- Visit the albertareferraldirectory.ca for individual clinic contact information.
- A referral requires confirmation your patient does not qualify for expedited surgery through Workers' Compensation Board (WCB). For help or questions, call WCB's Physician HELP line: 1-855-498-4919 or check "Contact with WCB Physician" on the WCB report when you submit it.

Provincial Orthopedic & Spine Quick Reference Non- Urgent Consultation Requests Mandatory Imaging Requirements

Body Part	Requirements	Body Part	Requirements
<u>Shoulder</u>	Within 6 Months of referral <ul style="list-style-type: none"> X-rays of the affected shoulder: Shoulder Girdle: AP (with external rotation), AP oblique (Glenoid), PA/AP Oblique (Scapular Y), Axial For Instability Shoulder must also include: AP Axial (Stryker Notch), Inferosuperior Axial (West Point) 	<u>Hip</u> Arthritis Symptomatic Hip Arthroplasty	Within 6 months of referral <ul style="list-style-type: none"> Weight Bearing Hip- Routine x-rays: AP pelvis centered at pubis, AP Hip of proximal half of affected femur, Lateral view (Lauenstein) of proximal half of affected femur.
<u>Elbow</u>	Within 12 months of referral <ul style="list-style-type: none"> X-rays of the affected elbow: AP, Lateral For non-degenerative Joint pathologies, a CT scan must be ordered. For Chronic Soft Tissue Pain and Entrapment Neuropathies electrodiagnostic studies must be ordered. 	<u>Hip</u> Pain (Without Osteoarthritis) Hip Impingement Congenital Hip Dysplasia Bone Deformity Other Avascular Necrosis Synovial Disorder Residual Childhood Hip Disorder Retained Orthopedic Hardware	Within 6 months of referral <ul style="list-style-type: none"> Weight Bearing Hip – Routine x-rays: AP pelvis, AP Hip, Lateral view (Lauenstein)
<u>Hand And Wrist:</u> Arthritis Pain Ligament Pathologies Deformity	Within 12 months of referral <ul style="list-style-type: none"> X-rays of the affected joint For pain referrals only: specify location of pain. 	<u>Knee</u>	Within 6 months of referral: <ul style="list-style-type: none"> Bilateral Standing AP/PA Weightbearing affected knee- Standing PA with knees flexed 45° (Rosenburg), Lateral and Skyline views . *if patient is unable to weight bear AP/Lateral x rays and 2 oblique views (Trauma Series)
<u>Hand and Wrist:</u> Carpal Tunnel Syndrome Median Nerve Entrapment Radial Nerve Entrapment Ulnar Nerve Entrapment	Within 12 months of referral <ul style="list-style-type: none"> Electrodiagnostic study results Ulnar neuropathy only: If loss of motion at the elbow please provide x-ray of affected elbow. 	<u>Foot and Ankle</u>	Within 3 months of referral <ul style="list-style-type: none"> Bilateral, weightbearing views foot and ankle. <p>AND</p> <ul style="list-style-type: none"> X-rays of the affected foot and/or ankle: <ul style="list-style-type: none"> Weight bearing Foot - Routine: AP Axial and Lateral Weight bearing Ankle - Routine: AP, AP Oblique 15°-20° medial rotation, Lateral.
<u>Hand and Wrist:</u> Tendon Pathologies Mass (Tumor or Lump)	Within 12 months of referral <ul style="list-style-type: none"> Ultrasound 	<u>Spine:</u> Radiculopathy Myelopathy Neurogenic Claudication Intradural Pathologies	MRI required for direct surgical consideration. See referral pathway for additional details.
		<u>Spine:</u> Spine Deformity Back Pain Neck Pain	X-ray of affected region suggested. See referral Pathway for additional details.

Table of Contents

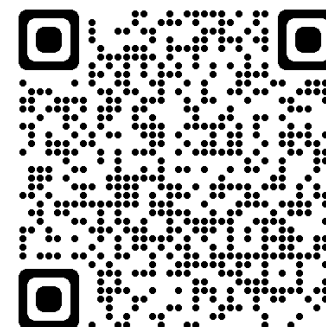
PROGRAM CONTACTS	4
ACUTE INJURY.....	5
SHOULDER	7
ELBOW	8
HAND & WRIST	10
HIP.....	16
KNEE.....	18
FOOT AND ANKLE	19
SPINE.....	20

PROGRAM CONTACTS

Program	Phone Number	Fax Number	Location
RAAPID North	1-800-282-9911		
RAAPID South	1-800-661-1700		
Specialist Link	www.specialistlink.ca		For patients in Calgary Zone
Connect MD	1-844-633-2263		For patients in North and Edmonton Zone
North Zone FAST ¹ Team	1-833-553-3278 Ext. 1	1-833-627-7025	
Edmonton Zone FAST Team	1-833-553-3278 Ext. 2	Elbow, Hand & Wrist: 780-643-1235 Other Orthopedic Referrals: 780-670-3221	
Central Zone FAST Team	1-833-553-3278 Ext. 3	1-833-627-7022	
Calgary Zone FAST Team	1-833-553-3278 ext. 4	1-833-627-7023	
South Zone FAST Team	1-833-553-3278 Ext. 5	1-833-627-7024	

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This referral pathway was created and is updated through a co-design process with primary care, specialty care and patients. We value any feedback you have that would assist in improving this referral pathway for the future. Please share your comments [here](#) or use the QR code.



¹ Facilitated Access to Specialized Treatment (FAST)

ACUTE INJURY If you identify any clinical pathway red flags, please follow urgent or emergent referral process.			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
<p>FRACTURE (< 4 WEEKS) Includes: Non-union, fractures treated (surgically or non-surgically) outside of patient's Zone but requiring treatment or follow up</p>	<p>< 4 weeks – URGENT REFERRAL:</p> <ul style="list-style-type: none"> • North: Call Surgeon on Call through RAAPID (For Bonnyville and area, there is also the option to fax referrals to Dr. Ashokchand Baburam's office at 780-826-6531). • Edmonton: <ul style="list-style-type: none"> ○ For hand & wrist: Call Plastic Surgeon or Orthopedic Surgeon on Call through RAAPID. ○ For all other fractures: Call Orthopedic Consult Line through RAAPID. • Central: Call Surgeon on Call through RAAPID. • Calgary: Call Surgeon on Call through RAAPID. • South: Call Surgeon on Call to arrange urgent consult. <p><i>Note: If the patient is already under the care of an Orthopedic surgeon for this injury, please contact them.</i></p>		
<p>FRACTURE (> 4 WEEKS) Includes: Mal-union, non-union, fractures treated (surgically or non-surgically) outside of patient's Zone but requiring treatment or follow up</p>	<p>All Zones: > 4 weeks and patient is unattached to a surgeon, send referral to Zone FAST Team.</p> <p><i>Note: If the patient is already under the care of an Orthopedic surgeon for this injury, please contact them.</i></p>	<p>For anything > 4 weeks:</p> <ul style="list-style-type: none"> • X-ray of affected body part or joint 	
<p>SUSPECTED TENDON RUPTURE (< 4 WEEKS) Includes: Distal biceps tendon, triceps tendon, quadriceps tendon, achilles tendon, proximal hamstring, pectoralis major, patellar tendon ruptures</p>	<p>< 4 weeks – URGENT REFERRAL:</p> <ul style="list-style-type: none"> • North: Call Surgeon on Call through RAAPID. • Edmonton: <ul style="list-style-type: none"> ○ For suspected tendon ruptures involving the hand & wrist: Call Plastic Surgeon or Orthopedic Surgeon on Call through RAAPID. ○ For all other suspected tendon ruptures: Call Orthopedic Consult Line through RAAPID. • Central: Call Surgeon on Call through RAAPID. • Calgary: Call Surgeon on Call through RAAPID. • South: Call Surgeon on Call to arrange urgent consult. <p><i>Note: If the patient is already under the care of an Orthopedic surgeon for this injury, contact them.</i></p> <p>Suspected Rotator Cuff Tear or Proximal Biceps Tendon Rupture, refer to <u>CLINICAL PATHWAY: SHOULDER ASSESSMENT.</u></p> <p>Suspected Achilles Tendon Rupture, place patient in plantar flexion (plantar splints) and non-weight-bearing as soon as injury is suspected.</p>		<p>Additional imaging not required. Further tests will be obtained by the specialist if necessary.</p>

<h2 style="margin: 0;">ACUTE INJURY</h2> <p style="margin: 0; font-size: 0.9em;">If you identify any clinical pathway red flags, please follow urgent or emergent referral process.</p>			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
<p>SUSPECTED TENDON RUPTURE (> 4 WEEKS) Includes: Distal biceps tendon, triceps tendon, quadriceps tendon, achilles tendon, proximal hamstring, pectoral major, patellar tendon ruptures</p>	<p>All Zones: > 4 weeks and patient is unattached to a surgeon, send referral to Zone FAST Team.</p> <p><i>Note: If the patient is already under the care of an Orthopedic surgeon for this injury, please contact them.</i></p> <p>Suspected Rotator Cuff Tear or Proximal Biceps Tendon Rupture, refer to CLINICAL PATHWAY: SHOULDER ASSESSMENT.</p> <p>Suspected Achilles Tendon Rupture, place patient in plantar flexion (plantar splints) and non-weight-bearing as soon as injury is suspected.</p>	<p>For anything > 4 weeks:</p> <ul style="list-style-type: none"> X-ray of affected body part or joint 	
<p>ACUTE LIGAMENT PATHOLOGIES – HAND & WRIST Includes: Ligament rupture or injury</p>	<p>< 4 weeks – URGENT REFERRAL:</p> <ul style="list-style-type: none"> North: Call Surgeon on Call through RAAPID. Edmonton: Call Plastic Surgeon or Orthopedic Surgeon on Call through RAAPID. Central: Call Surgeon on Call to arrange urgent consult. Calgary: Call Surgeon on Call through RAAPID. South: Call Plastic Surgeon on call or South Health Campus Hand for Hand/Finger concerns and Ortho surgeon on call for Wrist concerns. 		<p>If available, x-ray of affected body part or joint.</p>
<p>DISLOCATION Includes: Hip, tibio-femoral, elbow (including locked dislocation), wrist, ankle, subtalar</p>	<p>URGENT REFERRAL:</p> <ul style="list-style-type: none"> North: Call Surgeon on Call through RAAPID. Edmonton: <ul style="list-style-type: none"> For hand & wrist: Call Plastic Surgeon or Orthopedic Surgeon on Call through RAAPID. For all other dislocations: Call Orthopedic Consult Line through RAAPID. Central: Call Surgeon on Call through RAAPID. Calgary: Call Surgeon on Call through RAAPID. South: Call Surgeon on Call to arrange urgent consult. 		<p>If available, x-ray of affected body part or joint.</p>
<p>IMPENDING PATHOLOGIC FRACTURE</p>	<p>URGENT REFERRAL:</p> <ul style="list-style-type: none"> North: Call Surgeon on Call through RAAPID. Edmonton: <ul style="list-style-type: none"> For hand & wrist: Call Plastic Surgeon or Orthopedic Surgeon on Call through RAAPID. For all other impending pathologic fractures: Call Orthopedic Consult Line through RAAPID. Central: Call Surgeon on Call through RAAPID. Calgary: Call Surgeon on Call through RAAPID. South: Call Surgeon on Call to arrange urgent consult. 		<p>If available, x-ray of affected body part or joint.</p>

SHOULDER			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
INSTABILITY - SHOULDER	<ul style="list-style-type: none"> Refer to CLINICAL PATHWAY: SHOULDER ASSESSMENT. All Zones: Send referral to Zone FAST Team. 	<p>< 6 months of referral:</p> <ul style="list-style-type: none"> X-rays of the affected shoulder: <ul style="list-style-type: none"> <i>Shoulder Girdle:</i> AP (with external rotation), AP Oblique (Glenoid), PA/AP Oblique (Scapular Y), Axial AND AP Axial (Stryker Notch), Inferosuperior Axial (West Point) 	<p>Additional imaging not recommended. Further tests will be obtained by the specialist if necessary.</p> <p>Central: For suspected painful rotator cuff tear without significant osteoarthritis, shoulder ultrasound is recommended.</p>
STIFFNESS - SHOULDER	<ul style="list-style-type: none"> Refer to CLINICAL PATHWAY: SHOULDER ASSESSMENT. All Zones: Send referral to Zone FAST Team. 	<p>< 6 months of referral:</p> <ul style="list-style-type: none"> X-rays of the affected shoulder: <ul style="list-style-type: none"> <i>Shoulder Girdle:</i> AP (with external rotation), AP Oblique (Glenoid), PA/AP Oblique (Scapular Y), Axial 	
PAIN - SHOULDER	<ul style="list-style-type: none"> Refer to CLINICAL PATHWAY: SHOULDER ASSESSMENT. All Zones: Send referral to Zone FAST Team. 		
RETAINED ORTHOPEDIC HARDWARE - SHOULDER	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team (direct to original surgeon if available). 		

ELBOW			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
ARTHRITIS - ELBOW	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> X-rays of the affected elbow: AP, Lateral 	
<p>NON-DEGENERATIVE JOINT PATHOLOGY (NON-ARTHRITIC) – ELBOW Includes: Loose bodies, osteochondritis dissecans (OCD)</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> X-rays of the affected elbow: AP, Lateral CT scan (ordered) Please specify locking if referring for medial and lateral elbow pain 	Additional imaging not required. Further tests will be obtained by the specialist if necessary.
<p>CHRONIC SOFT TISSUE PAIN – ELBOW Includes: Lateral and medial epicondylosis</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team if pain has persisted for over 1 year. Calgary: Non-surgical specialist assessment could be considered prior to referral (such as advanced practice physiotherapist, physiatrist, sport medicine). For Lateral and Medial Epicondylosis: Please avoid cortisone injection and refer the patient for physiotherapy (wrist flexion and extension stretching exercises and common extensor/flexor eccentric strengthening exercises respectively including the Tyler Twist Program). Please consider referral to Zone FAST Team only if the patient has exhausted at least 6 months of nonoperative management with no significant response. For more information, you may look at "Five things to know about lateral epicondylosis" (https://www.cmaj.ca/content/194/7/E257). 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> X-rays of the affected elbow: AP, Lateral Electrodiagnostic study (ordered) if associated with hand numbness 	Additional imaging not required. Further tests will be obtained by the specialist if necessary.
<p>ENTRAPMENT NEUROPATHIES OF UPPER LIMB – ELBOW Includes: Median neuropathy, radial neuropathy, ulnar neuropathy</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. **Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone. 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> X-rays of the affected elbow: AP, Lateral Electrodiagnostic study (ordered) Please specify if wasting and weakness are present 	

ELBOW			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
MASS (TUMOR OR LUMP) - ELBOW	<ul style="list-style-type: none"> All Zones: For suspected or proven malignancies, aggressive tumors (sarcoma), send referrals to Orthopedic Oncology in Calgary or Edmonton. For all other concerns send to Zone FAST Team. *Lethbridge – Will accept all reasons for referral - Send to Zone FAST Team. 		
OLECRANON BURSITIS Includes: Gouty tophi	<ul style="list-style-type: none"> Consider a referral to Zone FAST Team if bursitis has not resolved with 1 year of conservative management. For Gouty Tophi, always maximize medical gout management before considering a referral to Zone FAST Team. 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> X-rays of the affected elbow: AP, Lateral 	

HAND & WRIST			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
ARTHRITIS OF HAND (INCLUDING THUMB AND FINGERS)	<ul style="list-style-type: none"> • North: Send referral to Zone FAST Team. • Edmonton: Send referral to Zone FAST Team. **Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone. • Calgary: Send referral to Zone FAST Team or Plastic Surgery • Central/South: Send referral to Plastic Surgery 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> • X-ray of the affected area • Specify previous treatments (such as injections) <p>Additional imaging not required. Further tests will be obtained by the specialist if necessary</p>	
ARTHRITIS OF WRIST	<ul style="list-style-type: none"> • North: Send referral to Zone FAST Team. • Edmonton: Send referral to Zone FAST Team. **Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone. • Calgary: Send referral to Zone FAST Team or Plastic Surgery • Central/South: Send referral to Zone FAST Team 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> • X-ray of the affected area • Specify previous treatments (such as injections) <p>Additional imaging not required. Further tests will be obtained by the specialist if necessary</p>	
PAIN – HAND	<ul style="list-style-type: none"> • North: Send referral to Zone FAST Team. • Edmonton: Send referral to Zone FAST Team. **Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone. • Calgary: Send referral to Zone FAST Team or Plastic Surgery. • Central/South: Send referral to Plastic Surgery. • 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> • X-ray of the affected area • Specify location of pain (thumb, metacarpal, phalangeal) and chronicity of pain <p>If pain is related to another reason for referral, please order the appropriate investigations</p>	

HAND & WRIST			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
PAIN –WRIST	<ul style="list-style-type: none"> • North: Send referral to Zone FAST Team. • Edmonton: Send referral to Zone FAST Team. **Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone. • Calgary: Send referral to Zone FAST Team or Plastic Surgery. • Central/South: Send referral to Zone FAST Team 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> • X-ray of the affected area • Specify location of pain (radial, central or ulnar, dorsal, volar) and chronicity of pain <p>If pain is related to another reason for referral, please order the appropriate investigations</p>	
<p>LIGAMENT PATHOLOGIES –WRIST</p> <p>Includes: Scapholunate, triangular fibrocartilage complex (TFCC) / distal radial ulnar joint (DRUJ) instability</p>	<p>> 4 weeks, send referral to:</p> <ul style="list-style-type: none"> • North: Send referral to Zone FAST Team. • Edmonton: Send referral to Zone FAST Team. **Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone. • Calgary: Send referral to Zone FAST Team or Plastic Surgery • Central/South: Send referral to Zone FAST Team 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> • X-ray of the affected area • Consider For Scapholunate – Please also order bilateral x-ray clenched fist view. 	<p>Please consider printing this article for your patient to bring with them to complete the bilateral clenched fist view x-ray: "The <i>Clenched Pencil</i>" View: <i>A Modified Clenched Fist Scapholunate Stress View, JHS 2003.</i></p> <p>Additional imaging not required. Further tests will be obtained by the specialist if necessary.</p>

HAND & WRIST			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
<p>LIGAMENT PATHOLOGIES –HAND Includes: Chronic rupture of ulnar collateral ligament of thumb, Chronic tear of ligament of finger or thumb</p>	<p>> 4 weeks, send referral to:</p> <ul style="list-style-type: none"> • North: Send referral to Zone FAST Team. • Edmonton: Send referral to Zone FAST Team. **Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone. • Calgary: Send referral to Zone FAST Team or Plastic Surgery • Central/South: Send referral to Plastic Surgery 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> • X-ray of the affected area 	<p>Please consider printing this article for your patient to bring with them to complete the bilateral clenched fist view x-ray: "The Clenched Pencil" View: A Modified Clenched Fist Scapholunate Stress View, JHS 2003.</p> <p>Additional imaging not required. Further tests will be obtained by the specialist if necessary.</p>
<p>DEFORMITY – HAND & WRIST Includes: Rheumatoid hand deformities, tendon related deformity (mallet finger, jersey finger, boutonniere's); dupuytren's contracture</p>	<ul style="list-style-type: none"> • North: Send referral to Zone FAST Team. • Edmonton: Send referral to Zone FAST Team. **Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone. • Calgary: Send referral to Zone FAST Team or Plastic Surgery • Central: Send referral to Plastic Surgery for Hand. If related to an acute rupture of deformity, contact Plastic Surgeon on call. • South: Send referral to Plastic Surgery for Hand/Finger and to Zone FAST Team for Wrist. 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> • Dupuytren's contracture – Please specify degree of contracture and provide tabletop test result. • X-ray of the affected area 	

HAND & WRIST			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
CARPAL TUNNEL SYNDROME	<ul style="list-style-type: none"> North: Send referral to Zone FAST Team. Edmonton: Send referral to Zone FAST Team. <i>**Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone.</i> Calgary: Send referral to Zone FAST Team or Plastic Surgery Central: Send referral to Plastic Surgery for Hand/Finger and to Zone FAST Team for Wrist. South: <ul style="list-style-type: none"> Medicine Hat: Send referral to Zone FAST Team or to Plastic Surgery. Lethbridge: Send referral to Plastic Surgery. 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> Electrodiagnostic study results required. <ul style="list-style-type: none"> <i>If significant muscle wasting that may impact triage decision, please consider reaching out to the specialty via telephone advice where available or Plastic Surgeon or Orthopedic Surgeon on call if not available.</i> Please specify if wasting and weakness are present. 	
<p>MEDIAN NERVE ENTRAPMENT Other than carpal tunnel syndrome. Includes: Pronator Syndrome, Lacertus Syndrome.</p>	<ul style="list-style-type: none"> North: Send referral to Zone FAST Team. Edmonton: Send referral to Zone FAST Team. <i>**Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone.</i> Calgary: Send referral to Zone FAST Team or Plastic Surgery Central: Send referral to Plastic Surgery for Hand/Finger and to Zone FAST Team for Wrist. South: <ul style="list-style-type: none"> Lethbridge: Send referral to Plastic Surgery for Hand/Finger and to Zone FAST Team for Wrist. Medicine Hat: Send referral to Plastic Surgery. <p><i>For traumatic nerve injuries refer to the</i></p> <ul style="list-style-type: none"> North/Edmonton/Central: <i>Peripheral Nerve Injury Clinic</i> Central/Calgary: <i>Refer to Plastic Surgery, SHC Hand Program or Peripheral Nerve Injury Clinic</i> South: <i>Traumatic nerve injuries distal to brachial plexus refer to Plastic Surgery or send to ER as appropriate.</i> 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> Electrodiagnostic study results required. Please specify if wasting and weakness are present. 	

HAND & WRIST			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
<p>RADIAL NERVE ENTRAPMENT Includes: Radial Tunnel, PIN Compression, Wartenberg's Syndrome</p>	<ul style="list-style-type: none"> • North: Send referral to Zone FAST Team. • Edmonton: Send referral to Zone FAST Team. <i>**Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone.</i> • Calgary: Send referral to Zone FAST Team or Plastic Surgery • Central: Send referral to Plastic Surgery for Hand/Finger and to Zone FAST Team for Wrist. • South: <ul style="list-style-type: none"> ○ Lethbridge: Send referral to Plastic Surgery for Hand/Finger and to Zone FAST Team for Wrist. ○ Medicine Hat: Send referral to Plastic Surgery. <p><i>For traumatic nerve injuries refer to the</i></p> <ul style="list-style-type: none"> • North/Edmonton/Central: <i>Peripheral Nerve Injury Clinic</i> • Central/Calgary: <i>Refer to Plastic Surgery, SHC Hand Program or Peripheral Nerve Injury Clinic</i> • South: <i>Traumatic nerve injuries distal to brachial plexus refer to Plastic Surgery or send to ER as appropriate.</i> 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> • Electrodiagnostic study (ordered) • Please specify if wasting and weakness are present. 	
<p>ULNAR NERVE ENTRAPMENT Includes: Cubital Tunnel, Guyon's Syndrome</p>	<ul style="list-style-type: none"> • North: Send referral to Zone FAST Team. • Edmonton: Send referral to Zone FAST Team. <i>**Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone.</i> • Calgary: Send referral to Zone FAST Team or Plastic Surgery • Central: Send referral to Plastic Surgery for Hand/Finger and to Zone FAST Team for Wrist. • South: <ul style="list-style-type: none"> ○ Lethbridge: Send referral to Plastic Surgery for Hand/Finger and to Zone FAST Team for Wrist. ○ Medicine Hat: Send referral to Plastic Surgery. <p><i>For traumatic nerve injuries refer to the</i></p> <ul style="list-style-type: none"> • North/Edmonton/Central: <i>Peripheral Nerve Injury Clinic</i> • Central/Calgary: <i>Refer to Plastic Surgery, SHC Hand Program or Peripheral Nerve Injury Clinic</i> • South: <i>Traumatic nerve injuries distal to brachial plexus refer to Plastic Surgery or send to ER as appropriate.</i> 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> • Electrodiagnostic study results required. • Please specify if wasting and weakness are present. <p>If loss of motion at the elbow, please provide x-ray of the affected elbow completed within 12 months</p>	

HAND & WRIST			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
<p>TENDON PATHOLOGIES – HAND & WRIST</p> <p>Includes: Instability, tendonitis, tear, DeQuervain’s Tenosynovitis, Trigger Finger</p>	<ul style="list-style-type: none"> North: Send referral to Zone FAST Team. Edmonton: Send referral to Zone FAST Team. **Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone. Calgary: Send referral to Zone FAST Team or Plastic Surgery Central: Send referral to Zone FAST Team for ECU/FCR instability and tendinopathy. For other reasons, send referral to Plastic Surgery. South: Send referral to Plastic Surgery. 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> If suspecting tear or instability of tendon: Ultrasound For a trigger finger: Please specify if the patient has previous intermittent locking/triggering and is unable to extend the finger at all even with passive extension. Please specify how many cortisone injections the patient has tried. 	<p>Trigger finger: Please consider up to 3 cortisone injections approximately 8 weeks apart prior to referral.</p>
<p>MASS (TUMOR OR LUMP) – HAND & WRIST</p> <p>Includes: Ganglion cyst of tendon sheath, neuroma of hand, Schwannoma of nerve of upper limb, Ganglion of wrist</p>	<ul style="list-style-type: none"> All Zones: For suspected or proven malignancies, aggressive tumors (sarcoma) send referrals to Orthopedic Oncology in Calgary or Edmonton. Refer to the Alberta Referral Directory for more information and contact details. *Lethbridge - Send to Zone FAST Team for Wrist. For all other concerns: <ul style="list-style-type: none"> North/Edmonton/Central: Send referral to Zone FAST Team. **Please note a collaborative program exists between Orthopedic and Plastic Surgery in the Edmonton Zone. Calgary: Send referral to Zone FAST Team or Plastic Surgery South: Send referral to Plastic Surgery for Hand/Finger and Zone FAST Team for Wrist. 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> Masses - Ultrasound Tenosynovitis - Ultrasound 	<p>Dorsal Wrist Ganglion: Please consider up to 3 aspirations prior to referral.</p> <p>Typical ganglions – Ultrasound or MRI is not required.</p>

HIP			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
<p>ARTHRITIS - HIP Includes: Osteoarthritis, rheumatoid arthritis, inflammatory arthritis</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 	<p>< 6 months of referral:</p> <ul style="list-style-type: none"> Weight Bearing Hip – Routine x-rays: AP pelvis centered at pubis, AP Hip of proximal half of affected femur, Lateral view (Lauenstein) of proximal half of affected femur 	<p>Choosing Wisely recommends not ordering a hip MRI when x-rays demonstrate osteoarthritis and symptoms are suggestive of osteoarthritis as the MRI rarely adds useful information to guide diagnosis or treatment.</p>
<p>SYMPTOMATIC HIP ARTHROPLASTY</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 		
<p>PAIN (WITHOUT OSTEOARTHRITIS) – HIP</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 	<p>< 6 months of referral:</p> <ul style="list-style-type: none"> Weight Bearing Hip – Routine x-rays: AP pelvis, AP Hip, Lateral view (Lauenstein) 	<p>Additional imaging not required. Further tests will be obtained by the specialist if necessary.</p> <p>For a patient with normal x-rays and hip pain - MRI is not required.</p>
<p>HIP IMPINGEMENT (Femoral acetabular impingement)</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 	<p>< 6 months of referral:</p> <ul style="list-style-type: none"> Weight Bearing Hip – Routine x-rays: AP pelvis, AP Hip, Lateral view (Lauenstein) 	<p>Additional imaging not required. Further tests will be obtained by the specialist if necessary.</p> <p>For a patient with normal x-rays and hip pain - MRI is not required.</p>
<p>CONGENITAL HIP DYSPLASIA (without osteoarthritis)</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 		
<p>BONE DEFORMITY OTHER– HIP Includes: Length inequality, rotational problem</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 		
<p>AVASCULAR NECROSIS (AVN) (WITHOUT OSTEOARTHRITIS)- HIP</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 		

HIP			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
<p>SYNOVIAL DISORDER – HIP Includes: Pigmented villonodular synovitis (PVNS), osteochondromatosis</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 	<p>< 6 months of referral:</p> <ul style="list-style-type: none"> Weight Bearing Hip – Routine x-rays: AP pelvis, AP Hip, Lateral view (Lauenstein) 	<p>Additional imaging not required. Further tests will be obtained by the specialist if necessary.</p> <p>For a patient with normal x-rays and hip pain - MRI is not required.</p>
<p>RESIDUAL CHILDHOOD HIP DISORDER Includes: Perthes and slipped capital femoral epiphysis (SCFE)</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 	<p>< 6 months of referral:</p> <ul style="list-style-type: none"> Weight Bearing Hip – Routine x-rays: AP pelvis, AP Hip, Lateral view (Lauenstein) 	<p>Additional imaging not required. Further tests will be obtained by the specialist if necessary.</p> <p>For a patient with normal x-rays and hip pain - MRI is not required.</p>
<p>RETAINED ORTHOPEDIC HARDWARE – HIP</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team (direct to original surgeon if available). 		

KNEE			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
<p>ARTHRITIS – KNEE Includes: Osteoarthritis, inflammatory arthropathy</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 	<p>< 6 months of referral:</p> <ul style="list-style-type: none"> X-ray of the affected knee: Weightbearing* – Knee Routine: Standing PA with Knees Flexed 45° (Rosenburg), Lateral, Skyline and Bilateral standing AP/PA views. <p>*if patient is unable to weight bear AP/Lateral x rays and 2 oblique views (Trauma Series)</p> <ul style="list-style-type: none"> Include within the referral letter: <ul style="list-style-type: none"> Description of symptom onset and duration Functional status limitations (example: impact on sleep, work, activities of daily living) Treatments initiated and responses. 	<p>Choosing Wisely recommends not ordering a knee MRI when weight-bearing x-rays demonstrate osteoarthritis and symptoms are suggestive of osteoarthritis as the MRI rarely adds useful information to guide diagnosis or treatment.</p>
<p>PAIN (WITHOUT OSTEOARTHRITIS) - KNEE</p>	<ul style="list-style-type: none"> Refer to CLINICAL PATHWAY: SOFT TISSUE KNEE ASSESSMENT All Zones: Send referral to Zone FAST Team. 		<p>Additional imaging not recommended. Further tests will be obtained by the specialist if necessary.</p> <p>Knee ultrasound is not generally recommended unless trying to confirm a tendon rupture.</p>
<p>INSTABILITY - KNEE</p>	<ul style="list-style-type: none"> Refer to CLINICAL PATHWAY: SOFT TISSUE KNEE ASSESSMENT All Zones: Send referral to Zone FAST Team. 		
<p>MECHANICAL KNEE SYMPTOMS Includes: Locking, catching, swelling, effusion</p>	<ul style="list-style-type: none"> Refer to CLINICAL PATHWAY: SOFT TISSUE KNEE ASSESSMENT All Zones: Send referral to Zone FAST Team. 		
<p>RETAINED ORTHOPEDIC HARDWARE - KNEE</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team (direct to original surgeon if available). 		

FOOT AND ANKLE			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
PAIN - FOOT AND ANKLE	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 	<p>< 3 months of referral:</p> <ul style="list-style-type: none"> Bilateral, weightbearing views foot and ankle. <p>AND</p> <ul style="list-style-type: none"> X-ray of the affected foot and/or ankle: <ul style="list-style-type: none"> Weight bearing Foot - Routine: AP Axial and Lateral Weight bearing Ankle - Routine: AP, AP Oblique 15°-20° medial rotation, lateral. If the patient has diabetes, please include HbA1c. 	<p>Additional imaging not recommended. Further tests will be obtained by the specialist if necessary.</p>
INSTABILITY - ANKLE	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 		
SWELLING – FOOT AND ANKLE	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 		
DEFORMITY - FOOT	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 		
ULCER - FOOT	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 		

SPINE			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
<p>RADICULOPATHY (CERVICAL OR LUMBAR) Symptoms of pain, weakness or numbness attributable to one or several nerve roots</p>	<ul style="list-style-type: none"> Refer to CLINICAL PATHWAY: SPINE LOW BACK ASSESSMENT All Zones: Send referral to Zone FAST Team. 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> Patients who have had previous spinal surgery: Gadolinium-enhanced scans are suggested. Referrals intended for direct surgical consideration (or patients for named surgeon/neurosurgical spine triage and assessment clinic): MRI Required prior to referral. Referrals intended for Spine Assessment and Management: MRI not required prior to referral. <i>Advanced imaging will be ordered by specialty as required.</i> Include description of neurological signs and symptoms that are present. Include reports of previous interventional procedures, x-rays and relevant surgical interventions. 	<ul style="list-style-type: none"> Oblique and flexion/extension x-rays are not recommended. Electrodiagnostic testing not recommended unless needed to rule out alternate diagnosis. CT scans are not recommended for diagnosis of nerve root or cauda equina compression unless MRI scan is contraindicated for implants such as pacemakers.
<p>MYELOPATHY (CERVICAL OR THORACIC) Includes: Symptoms of upper motor neuron dysfunction including, but not limited to, numbness, balance disturbance, bladder dysfunction, loss of dexterity with concordant spinal cord compression</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. 		
<p>NEUROGENIC CLAUDICATION Includes: Lumbar, lower extremity numbness, pain or weakness associated with walking or standing</p>	<ul style="list-style-type: none"> Refer to CLINICAL PATHWAY: SPINE LOW BACK ASSESSMENT All Zones: Send referral to Zone FAST Team. 		
<p>SPINAL DEFORMITY Includes: Scoliosis</p>	<ul style="list-style-type: none"> Refer to CLINICAL PATHWAY: SPINE LOW BACK ASSESSMENT All Zones: Send referral to Zone FAST Team. 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> Scoliosis AP/lateral x-ray (must be completed in an AHS facility) If neurological symptoms (claudication, radiculopathy, myelopathy) are also present, MRI is strongly recommended 	
<p>NECK PAIN (WITHOUT NEUROLOGICAL SYMPTOMS OR REFERRED PAIN) Includes: Benign tumors</p>	<ul style="list-style-type: none"> If available, non-surgical specialist assessment should be considered prior to referral (such as physiatry, sport medicine). All Zones: Send referral to Zone FAST Team. 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> Upright/standing cervical spine x-ray strongly suggested 	<p>Oblique and flexion/extension x-rays are not recommended.</p>

SPINE			
Reason for Referral	Process	Mandatory Info (Essential investigations & timeframes)	Extra Info (If available)
<p>BACK PAIN (WITHOUT NEUROLOGICAL SYMPTOMS OR REFERRED PAIN)</p>	<ul style="list-style-type: none"> Refer to CLINICAL PATHWAY: SPINE LOW BACK ASSESSMENT If available, non-surgical specialist assessment should be considered prior to referral (such as physiatry, sport medicine). For insufficiency fractures - Consider referral to a specialist only if insufficiency fracture with pain not responsive to medical therapy or with progressive deformity. All Zones: Send referral to Zone FAST Team. 	<p>< 12 months of referral:</p> <ul style="list-style-type: none"> Upright/standing thoracic and/or lumbar spine x-ray strongly suggested MRI may be considered for patients with pain refractile to exhaustive medical therapy with pain suggestive of discogenic origin 	<p>Oblique and flexion/extension x-rays are not recommended.</p>
<p>INTRADURAL PATHOLOGIES Includes: Intradural tumors, tethered spinal cord, chiari malformation, intradural anatomic derangement, vascular malformation</p>	<ul style="list-style-type: none"> All Zones: Send referral to Zone FAST Team. Referrals will be redirected to Neurosurgery for review. For patients with acute neurological symptoms, please consult the Neurosurgeon on call in Calgary or Edmonton. 	<ul style="list-style-type: none"> This reason for referral is seen by Spine Neurosurgery and not Orthopedics. 	<p>Tumours include: Schwannoma, peripheral nerve sheath tumor, meningioma, ependymoma, glioma.</p> <p>Intradural structural derangements including arachnoid cysts, spinal cord herniation.</p>