

 Oak Valley Health	Title: 030.920.065 Medical Directive for ED Ordering Extremity Radiography
Location: Medical Directives and Delegations (DIR)\Emergency Department	Document Type: Fail 3265 Item cannot be found in the collection corresponding to the requested name or ordinal.
Last Major Revision Date: 8/27/2018 1:00:47 PM	Electronic Approval: Geenen, Caroline (07/28/2022)
Review Frequency: Fail 3265 Item cannot be found in the collection corresponding to the requested name or ordinal.	Next File Review Date: Fail 3265 Item cannot be found in the collection corresponding to the requested name or ordinal.
<p>IMPORTANT NOTICE: Unless a policy refers to the Markham Stouffville Hospital, operating at 381 Church Street, Markham, ON in particular, reference to "Markham Stouffville Hospital" on a policy with an approval date of on or before August 18, 2021, shall be interpreted to mean the corporate entity Oak Valley Health. Any reference to "Markham Stouffville Hospital" on a policy with an approval date on or following August 18, 2021, shall be interpreted to mean only the hospital located at 381 Church Street, Markham, ON.</p>	

Title: ED Ordering Extremity Radiography

Number: 030.920.065

Activation Date: July 2022

Review due by: July 2024

Sponsoring/Contact Person(s)

(name, position, contact particulars):

**Chief of Emergency
Professional Practice Leader Emergency Department**

Order and/or Delegated Procedure:	Appendix Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Title:
<p>All Emergency Department (ED) Registered Nurses (RN), Registered Practical Nurses (RPNs), Orthopedic Technologists (Ortho Techs), Physician Assistants (PAs), hereinafter known as ED nurses, PAs and Ortho Techs may order a plain film radiography x-ray of one or more of the following in the absence of a physician:</p> <ul style="list-style-type: none"> a) Ankle x-ray b) Elbow x-ray c) Finger(s) x-ray d) Foot x-ray e) Forearm x-ray f) Hand x-ray g) Scaphoid x-ray h) Tibia/Fibula x-ray i) Wrist x-ray 	
Recipient Patients:	Appendix Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Title:
<p>Any patient greater than 5 years of age, except for ankle x-rays which are for those patients greater than 18 years of age, presenting to the ED, prior to first contact with the attending physician who meets the conditions identified in this directive.</p>	
Authorized Implementers:	Appendix Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Title:
<p>All ED nurses, PAs and Ortho Techs who have completed education on this medical directive and have demonstrated knowledge, skill and judgment in its usage.</p> <p>Co-implementers: Medical Radiology Technologists (MRT) authorized to take extremity x-rays.</p>	

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Indications:	Appendix Attached: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Title: <i>Appendix A: Extremity Plain Film Radiography X-Ray Orders Table</i>
<p>An ED nurse, PA or Ortho Tech may initiate this directive when a patient presents with conditions outlined in Appendix A in the directive and can include, but not limited to:</p> <ul style="list-style-type: none"> • Trauma to the affected area and have pain referable to that area • Discrete point tenderness and/or soft tissue swelling <p>Contraindications:</p> <ul style="list-style-type: none"> • Patient/parent/Substitute Decision Maker (SDM) refusal to consent for procedure/treatment • Children less than 18 years of age with ankle injuries – to be assessed by the physician • Known or suspected pregnancy • Unstable patient – physician to be contacted immediately • Signs or symptoms of neurovascular compromise in the affected limb – physician to be contacted immediately • Open fractures will be assessed by the emergency physician directly • Patient is intoxicated or has other distracting injuries and is unable to follow direction, maintain motor control or is uncooperative. • For MRT: <ul style="list-style-type: none"> ○ The patient questions the appropriateness of the x-ray ○ Clinical history does not indicate the radiological examination ordered e.g. injury of right limb when left limb x-ray is ordered, injury of foot and x-ray order is for ankle ○ When dictionary order entry does not match free text order description 	
Consent:	Appendix Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Title:
<p>ED nurses, PAs and Ortho Techs implementing this directive will obtain consent, where possible, from the patient or SDM prior to implementing this medical directive in accordance with Oak Valley Health's Health Care Consent policy #270.914.914.030, applicable practice standards, and Health Care Consent Act.</p>	
Guidelines for Implementing the Order / Procedure:	Appendix Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Title:
<p>The ordering of an extremity radiograph may be completed once the ED nurse, PA or Ortho Tech has:</p> <ul style="list-style-type: none"> • Assessed the patient to determine whether the specific patient condition(s) and situational circumstance(s) outlined in the directive have been met • Identified the risk(s) to the client of implementing the directive • The knowledge, skill and judgment to safely implement the directive • Determined whether management of possible outcomes is within their scope of practice and competency level • Determined if appropriate resources are available to implement the order and manage the possible outcomes • Identified who the attending physician is if clarification or assistance is needed <p>In addition, the ED nurse, PA or Ortho Tech will:</p> <ul style="list-style-type: none"> • Ensure neurological, vascular and orthopedic status are assessed and documented appropriately • Remove any jewellery or constricting clothing in a manner that will not cause further injury or discomfort • Consider the initiation of the medical directive # 020.920.140 ED Administration of Acetaminophen and Ibuprofen in Adults or #020.920.015 ED Administration of Acetaminophen and Ibuprofen in Pediatrics for pain control 	
Documentation and Communication:	Appendix Attached: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Title:
<p>If the procedure was ordered and / or performed at triage, the ED nurse will:</p> <ul style="list-style-type: none"> • Document a focused triage assessment, medication and allergy history on the triage assessment form • Document initiation of the medical directive electronically on the Emergency Patient Triage Record 	

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- Document initiation of the medical directive on the Emergency Record (form# EDR) in the doctor's order section and include both signature and time directive was initiated

If the procedure was not ordered and / or performed at triage, the ED nurse, PA or Ortho Tech will:

- Document initiation of the medical directive on the *Emergency Record* (form# EDR) in the doctor's order section and include both signature and time
- Enter the test in the computer or may delegate order entry to the appropriate staff
- Document completion of the medical directive in patient chart

The MRT will log information in the external file for any patient who had an inappropriate x-ray ordered under this medical directive.

Review and Quality Monitoring Guidelines:

Appendix Attached: Yes No **Title:**

Staff identifying any untoward or unintended outcomes arising from implementation of orders under this directive, or any issues identified with it will report these to the following people as soon as possible for appropriate disposition:

- Attending physician
- Patient Care Manager
- Quality and Risk Management (through the *iReport* Incident reporting system)

Authorized implementers will review medical directive yearly. Education will be provided on an as needed basis.

Administrative Approvals (as applicable):

Appendix Attached: Yes No **Title:**

Emergency Department Operations Committee: July 19, 2022

Uxbridge Operations Committee: July 6, 2022

Medical Advisory Committee:

Approving Physician(s) / Authorizer(s):

Appendix Attached: Yes No **Title:**

All Emergency physicians at Oak Valley Health

References:

Howard, P. K, & Steinman, R. A. (2010). *Sheehy's Emergency Nursing Principles and Practice, 6th Edition*. St. Louis: Mosby.

Ontario Hospital Association (2008). *Emergency Department (ED) Medical Directives Implementation Kit: Wait Time Strategies*. Retrieved from <https://www.oha.com/Legislative%20and%20Legal%20Issues%20Documents/1/ED%20Medical%20Directives%20Implementation%20Kit.pdf>

Stiell, I. (1996). Ottawa ankle rules. *Canadian Family Physician*,24,478-480.

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Appendix A
Extremity Plain Film Radiography X-Ray Orders Table

X-Ray Orders	Indications
a) Ankle	Upon palpation of the entire distal 6 cm of the fibula and tibia to assess the malleolar zone, pain in the malleolar zone and one or more of the following: 1. Bone tenderness at the posterior edge or tip of the lateral malleolus 2. Bone tenderness at the posterior edge or the tip of the medial malleolus 3. Inability to bear weight both immediately and in the emergency department * See Ottawa Ankle Rules Protocol
b) Elbow	Deformity and or joint effusion or swelling in the area, impaired range of motion and localized bony tenderness.
c) Finger(s)	Isolated finger injury distal to the metacarpophalangeal joint
d) Foot	Pain in the midfoot zone and one or more of the following findings: 1. Bone tenderness at the base of the 5th metatarsal 2. Bone tenderness at the navicular 3. Inability to bear weight both immediately and in the emergency department
e) Forearm	Deformity and swelling in the area, localized bony tenderness
f) Hand	Deformity and or swelling in the area, impaired range of motion and localized bony tenderness
g) Scaphoid	Pain at the anatomic "snuff box" Pain on axial compression of thumb
h) Tibia/Fibula	Deformity and or swelling in the area
i) Wrist	Deformity and swelling in the area, impaired range of motion and localized bony tenderness

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