

CLINICAL PATHWAY

Musculoskeletal Health



Hip Fracture Clinical Pathway



CHRISTIANA CARE
HEALTH SYSTEM

Hip Fracture Clinical Pathway

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INTRODUCTION

This clinical pathway supports optimal care and management process for patients presenting in a Christiana Care Emergency Department with potential or actual hip fracture.

This pathway is intended to improve the value of care as well as the patient experience for individuals sustaining a hip fracture.

Scope of this Pathway

Trauma Service patients will be evaluated for hip injury using a standardized approach.

STRATEGIC GOALS INCLUDE:

Optimal Health: Reduce unnecessary variation in care during the acute care episode (e.g.- decrease pre-surgical consults of limited usefulness)

Exceptional Experience: Improve patient and family understanding of surgical and post-surgical management of this injury

Organizational Vitality: Reduce LOS and the average cost of the acute care episode. (38% of hip fracture patients are in the BPCI program)

It is expected that this pathway will enable us to reduce delays related to surgical care including consults and pre-operative medical maximization as well as delays related to discharge to SNFs or home.



Measures of Success:

- Patient capture rate
- Decrease LOS
- Average acute care cost per case
- Percentage of DXA scans indicated and ordered
- Percentage of patients aware of their bone health issue at 3 months post injury for those patient who have returned to the home setting

Baseline Measure(s)

- Capture rate above 90%
- LOS reduction of more than 0.5 days
- Acute care cost reduction of 10%
- DXA ordered above 60%
- Patient awareness above 60%

Pathway Contacts

The content of this pathway is developed and maintained by the Musculoskeletal Health line of Christiana Care Health System. Questions or feedback about the content may be directed to:

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CLINICAL PATHWAY

Upon initial evaluation in the ED, with a patient presenting in the Emergency Department with hip pain, the following will be performed.

A. Trauma Alert / Trauma Code Patients

1. Apply/maintain rigid cervical collar and cervical immobilization device (CID) or continuous manual, in-line stabilization of the neck/spine with the patient in a flat, supine position when the potential for spine injury exists as evidenced by:

Mechanism of injury and/or signs/symptoms referable to possible injury to the vertebral column (i.e., occipital pain, neck or back pain, neurologic deficit, paresthesias, etc.).

2. Perform primary survey.* Correcting deficiencies as discovered.
3. Perform secondary survey. Proceed in a systematic fashion from head to toe.

Visually inspect for obvious soft tissue injury such as breaks in the skin or deformity.

Palpate for tenderness, deformity, crepitus and any tightness of the compartments.

Perform ROM tests for extremities looking for ligamentous or bony injury.

Perform and record Neurovascular status in all extremities. This should include: Quality and presence of peripheral pulses, as well as sensory and motor function.



B. Orthopedic concerns

1. If an obvious deformity of the Hip is evident, apply an appropriate traction device to the extremity. Hip fractures ideally should be splinted using Bucks traction or skeletal traction if the patient is in considerable pain. Antibiotics (Ancef and Gentamicin) are indicated for open fractures and should be given as part of the initial Emergency Room care. Tetanus prophylaxis is also indicated in open fractures or patients who require ORIF.
2. Obtain screening AP x-ray of the pelvis.
3. Obtain an AP and Lateral x-ray (in at least two plains) of the affected Hip. Note this may not be possible in the ICU's due to the limitations of portable x-ray equipment.

If x-ray is negative, obtain a review of the x-ray by Radiology.
4. If a vascular injury is suspected other diagnostic tests are indicated and will need to be performed.
5. Obtain Pelvic CT scan if indicated based on physical exam or screening x-ray. If an abdominal /pelvic CT scan is being done as part of the work up it should include 2mm pelvic cuts and femoral cuts to include the lesser trochanter.
6. Tetanus prophylaxis is indicated in open fractures or patients who will require ORIF.
7. Obtain trauma panel or other appropriate blood work up to obtain a baseline and in anticipation of operative intervention.
8. If hemodynamically unstable and unresponsive to initial boluses of crystalloids consider Blood administration. Type and screen two units of packed red blood cells.
9. Once stable and posted to the OR/Floor the following admission/pre-



op orders should be appropriately written in the chart: (see form MD5110)

- A. NPO or NPO after midnight. Intravenous order if not already written.
 - B. Pre-op antibiotics on call to OR. Christiana protocol form # 21611. (see open fractures above)
 - C. Operative permit signed and on the chart for procedure to be performed.
 - D. Lab studies not previously obtained that are appropriate to the patient's age and medical health.
 - E. Documentation of medical clearance if required based on history.
 - F. Consult social work to commence discharge planning
 - F. Initiate CIWA (if needed)
 - G. Apply Cardiac Risk Assessment
 - H. Medicine to perform risk stratification. If low to moderate risk, proceed to the OR. If high risk, either consult Social Work / Physical Therapy / Palliative Care to determine next steps, or if not too high then consult Cardiology if not already engaged. Perform Cardiac diagnostic tests as ordered.
 - I. Proceed to the OR for surgery to be performed
10. Post-operative orders should include:
- A. Weight bearing status and Out-of-Bed order
 - B. Post op antibiotics see form MD 5510, and include duration
 - C. Order and perform PT and OT consults



D. Social Services consult for discharge planning (supervised setting) or Case Management to assist with Home Health set-up.

E. Rehab consult if an appropriate candidate for transfer to rehab.

F. DVT prophylaxis (PCB's and Lovenox etc.) if hematologically stable and no co-morbid factors identified.

G. Foley removal (if applicable) within 24 hours

H. Constipation protocol ordered if not already done.

I. CAM (Delirium) performed by RN

J. Notify Bone Health team, whereby 6 weeks post discharge a Bone Health call will be made to ensure patient follows recommended bone health guidance (see Education Materials)

C. Orthopedic Trauma Service Consult Patients

Utilize the same guidelines as specified above. The primary and secondary surveys are performed prior to radiologic studies. Such studies may be performed in the Radiology Department instead of the resuscitation bay if patient condition permits.

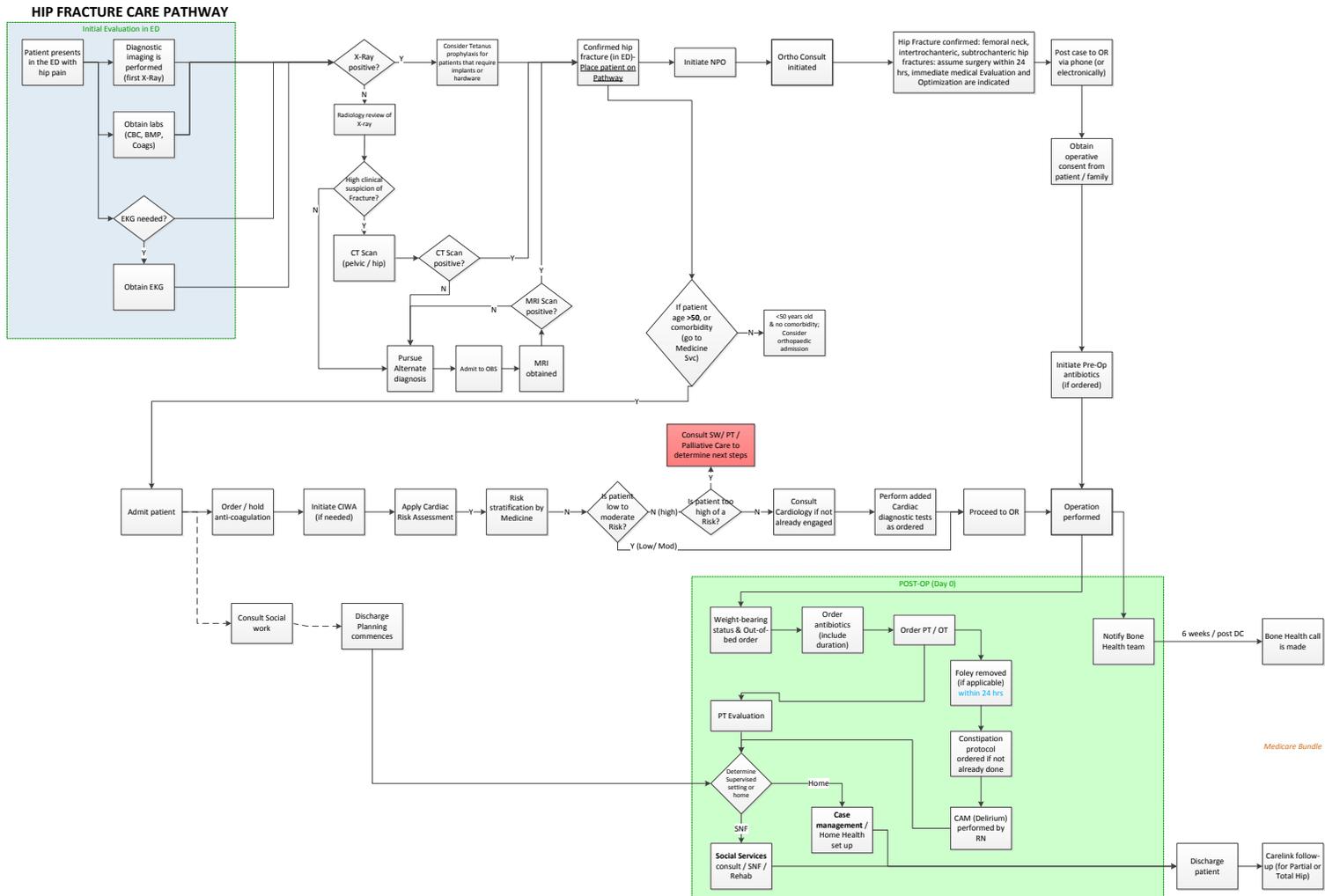
D. Documentation

Neurovascular Status prior to and after each intervention is essential. A complete history and physical should be part of every admission or consult. Important social issues to consider are; home environment and living conditions, occupation, work environment, alcohol, smoking and illegal drug use.



PATHWAY ALGORITHMS

- Will deliver a patient centered value based pathway and algorithms regarding proper utilization of pre-surgical consultants



HEALTH EQUITY CONSIDERATIONS

Insurance and Financial assistance

Patients who are uninsured or underinsured will have the opportunity to meet with a social worker/case manager in the ER. The case manager will assist patients with identifying pharmacies that offer discounts on prescriptions and connect patients with Christiana Care's Health Guides.

Christiana Care's Health Guides can assist patients with financial assistance applications, health insurance, Medicaid and connections to community resources. After being discharged from ER, patients can call 302-320-6586 or email healthguides@christianacare.org to receive this assistance.

Patients who are admitted to the hospital can also receive an inpatient social work/case management consultation. The social worker or case manager will assist patients in connecting to appropriate resources.

Financial assistance information can also be found on www.christianacare.org/financial-assistance-program in English, Spanish, Mandarin, and Cantonese.

Interpreter services

Patients who are non-English speakers will be provided with interpreter services for all aspects of care.

- Delaware Relay Services for the Deaf or hearing impaired. The customer service number is 1-800-676-3777 (TTY/Voice). Spanish 1- 800-676-4290 (TTY/Voz/ASCII). Sprint TTY Operator Service is 1-800-855-4000.



- Patients can be referred to AMO or Westside Health. Social workers are available at both offices for non-English speaking patients to assist with paperwork and community referrals.
- Patients living downstate can be referred to La Esperanza. This service is located in Georgetown Delaware. Their telephone number is 302-854-9262.

Transportation

Patients with transportation issues may request assistance in getting to scheduled appointments.

Patients with Medicaid are able to ride Logisticare for free. The number to call to schedule a pick up date and time is 1-866-412-3778. Patients must provide Medicaid ID number, date and time of appointment. Patients need to be instructed that they must call 3 full days in advance to schedule a ride, unless it is an emergency. Patients are required to be outside 15 minutes early for their scheduled pick up time.



PATIENT EDUCATION MATERIALS

Optional education materials for patients to use:

[-Calcium Facts - What you should know about calcium](#)

[-Osteoporosis Risk Factors- Who gets Osteoporosis?](#)

[-Vitamin D and bone health](#)

[-Osteoporosis Medicines - A quick overview](#)

[-Exercise for your Bone Health](#)

[-About Bone Density Scans](#)



CLINICAL EDUCATION MATERIALS

* Clinical staff education materials to be developed and refined once IT solutions for pathway patient flagging and tracking are determined.

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ACKNOWLEDGEMENTS

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THE CHRISTIANA CARE WAY

We serve our neighbors as respectful, expert, caring partners in their health. We do this by creating innovative, effective, affordable systems of care that our neighbors value.



CHRISTIANA CARE
HEALTH SYSTEM

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