

Standard Operating Procedures

WORCESTERSHIRE NHS TRUST VIRTUAL TRAUMA CLINIC SOP

Written by:	Tracey Dennehy
Approved by:	T&O Clinical Governance Meeting
Approved by Medicines Safety Committee: <i>Where medicines included in guideline</i>	
Date of Approval:	12th June 2024
Date of Review: This is the most current document and is to be used until a revised version is available	12th June 2027

Aim and scope of Standard Operating Procedure

To advise emergency care departments within Worcester the referral pathway and treatment for injuries which will be added to Virtual fracture clinic

Target Staff Categories

**Emergency Care Departments
 Minor injuries units
 Trauma Staff**

Key amendments to this Standard Operating Procedure

Date	Amendment	Approved by:
12 th June 2024	New Document	T&O Clinical Governance Meeting

Background

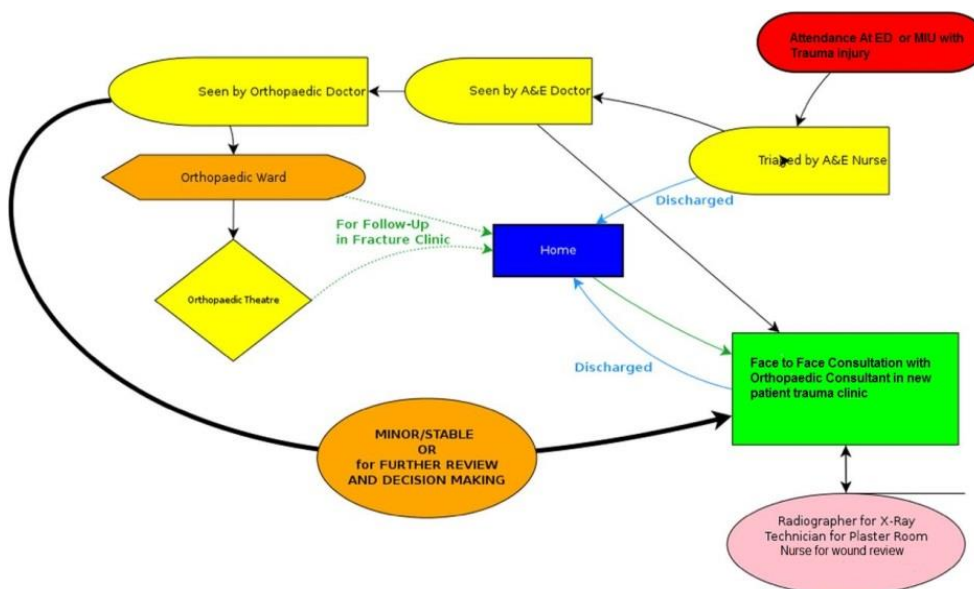
As part of the Trauma and Orthopaedic 5 years strategy we have highlighted the need to improve and future proof the trauma clinic. Over subscription to our trauma clinic has become evident leading to poor patient experience, dissatisfaction and poorer outcomes due to delays in appointment times due to capacity. In August 2013, the British Orthopaedic Association (BOA) Standards for Trauma published guidelines for fracture clinic services (BOAST 7 Guidelines).¹ Specifically, the first point addressed by these guidelines reads as follows:

Following acute traumatic orthopaedic injury, patients should be seen in a new fracture clinic within 72 hours of presentation with the injury. This includes referrals from emergency departments, minor injury units and general practice.

Traditionally, all patients with fractures or soft tissue injuries are seen in a trauma clinic within a few days of attending the Emergency Department, Minor Injury Units (MIU) and GP referrals. Some patients will be discharged at this trauma clinic appointment without any change in their treatment. The Trust is aware from feedback received that this can be frustrating for patients who may have arranged transport, child care cover and time off work in order to attend, as well as possibly experiencing a long wait in the clinic.

In 2021 we introduced virtual trauma clinics to improve the patient experience, improve patient outcome, meet the BOA guidance and will be cost effective without cost implication of additional resources. This has been a success thus far but has greater potential to reduce the necessity for face to face appointments. Therefore, ongoing improvements and developments of the VFC are required to ensure that it provides a quality, safe patient centered service.

Flow Chart of Traditional Clinic attendance



New Pathway for Trauma Patients attending ED or MIU.

Patients presenting to A&E or MIU with acute trauma injury, fracture or trauma condition

Options

Patients don't require T&O input and can be discharged from A&E /MIU
With Patient information and safety net appointment details

All Fractures, Injuries or trauma conditions which are identified as requiring Fracture Clinic should be seen according to the A&E Acute Orthopaedic guideline.

Patients who require surgical management of their fracture or injury but do not require acute admission
Refer to on call team and

Patients require acute admission for injury, fracture or condition
Refer to on call team

Admit to T&O Ward

Patients should be added to the trauma board, clerked and worked up for surgery on ambulatory lists.

Register or TNP refer to FTF clinic or Speciality Orthopaedic clinic for advice and surgical planning

Virtual Fracture Clinic Review

Stable/ Minor injury not requiring follow up

Specialist Review

General Review

Discharge
Virtual Fracture Clinic Discharge following telephone discussion with patient and information

Face to Face Review
Bring back to FTF Consultant led new patient clinic
Consultant led Speciality clinic e.g Hand Clinic and Upper Limb

Follow Up Options
Follow up Trauma Clinic
Or refer to Physio Led service

TNP Trauma Practitioner
VFC (Virtual Fracture Clinic)
FTF Clinic (Face to Face)

The Virtual fracture clinic process

Trauma Patients attending A&E or MIU follow one of four following pathways

1. Minor and or stable injuries

Patients attending A&E following trauma injury, with a fracture or trauma condition will be assessed initially by an A&E doctor, ENP, and. Patients with minor injuries or stable injuries that don't require may be discharged by A&E staff without further follow up or GP follow up under local agreement.

Patients may be referred to Trauma Practitioner (TNP) or Trauma and Orthopaedic doctor for further assessment or advice and may also be discharged with no further follow up.

2. Patient requiring review in virtual fracture clinic

This route is for all trauma injuries, fractures and conditions seen and assessed and requires follow up by the orthopaedic team on call. These are the patients traditionally referred to the face to face new patient trauma clinic. Treatment should follow the **Emergency Department Acute Trauma and Orthopaedic Guidelines for Trauma / Emergency conditions. (Appendix 1)** and **all** patients will be discharged home to be triaged and reviewed in the Virtual fracture clinic. The appointment will be booked by the reception or booking clerks in the ED or MIU. All patients need to be booked on to the next available VFC clinic prior to leaving the department. (appendix 3).

If the guidance suggests VFC pathway for the patient, the patient has to have normal neurology, appropriate splinting / plaster of Paris. Patients should be given a Virtual Fracture Clinic patient information leaflet and have booked an appointment prior to leaving the emergency department. Please ensure contact details are correct.

If face to face clinic is indicated this can only be requested specifically by the orthopaedic registrar. This must be booked and given to the patient prior to the patient leaving the department

The Virtual fracture clinic will be capped at **60** referrals per clinic and if the clinic is full then either added to the following day for assessment. If the patient needs to be seen earlier then can be discussed with the VFC nurses directly.

As the notes from the MIUs were previously given to the patients to bring to the clinics, this will no longer happen therefore the ENPs at the MIUs will fill in electronic VFC referral (Appendix 3) and email the notes to wah-tr.virtualfractureclinicwrh@nhs.net. The emails will be picked up by VFC practitioner. There is no requirement for the clinicians at the main ED to do this as the notes will be sent down to Larkspur suite by the reception staff.

Patients with fracture or injury that will require surgery but not acute admission.

There patient needs to be referred to the on call team for assessment and adding to the trauma board for an ambulatory pathway. This should not delay the patient's pathway through ED. If there is a delay in this process the patient can be sent home for the TNP to arrange to bring the patient back to clinic to clerk the patient and schedule a surgical admission. This needs to be discussed with the trauma practitioner so they can add the patient to the Trauma board. A&E will follow the guidance **Emergency Department Acute Trauma and Orthopaedic Guidelines for Trauma / Emergency conditions. (Appendix 1).**

3. Patients Requiring Acute admission

Patients with acute fracture, injury or condition which require acute admission for treatment or further investigation. Please refer to the trauma and Orthopaedic on call team.

VFC Process

The VFC takes place between 9am -11:00 am Monday to Friday mornings in the new patient fracture clinic at the Worcester site.

In attendance at the virtual fracture clinic will be the Orthopaedic consultant, virtual clinic practitioner / co-ordinator and a plaster technician.

Patient's referral, X-ray images and ED notes will be reviewed in virtual trauma clinic. It is very important to ensure documentation is comprehensive. Side, hand dominance, rotational deformity, neurology, circulation and tendon function should have documented. It is important to document actions around VTE prophylaxis with patients with lower limb immobilisation.

Patients will not need to attend the Hospital when the assessment is taking place; hence the term 'Virtual Clinic.

Following formal formulation of a plan the virtual clinic co-ordinator will contact the patient and communicate this to the patient. They will also arrange any follow up or further investigations and treatments or onward referrals.

The consultant will dictate a letter and on the bottom of the letter will be the following sentence "This patient has been contacted by telephone or letter Virtual fracture clinic co-ordinator and this information has been passed to the patient". Any deviation from the original outcome needs to be documented and scanned in to the patients notes either on VFC treatment prescription or a history sheet.

Patients requiring surgery will be discussed with the Trauma practitioner. They will arrange admission and may be brought in to clinic for a pre op screening. They will be added to the Trauma board by the TNP and depending on the most appropriate treatment pathway arrangements will be communicated with the patient and starting instructions explained. The admission will be arranged by the virtual clinic practitioner / co-ordinator or the trauma practitioner.

Patients may be brought back to the trauma clinic face to face clinic the same day or the following day for treatment. They also may be brought back to the plaster room for review and these patients should be booked on the plaster room review clinic.

Patients are given information leaflets with contact details of the virtual fracture clinic and the Trauma practitioner for if they require additional help or assistance. These telephone numbers will be available between 8:30am-4:00pm Monday to Friday. A generic fracture clinic email will be available out of hours but if patients have an urgent problem they will have to re attend ED or MIU.

Staff involved in Virtual Trauma Clinics

1. A&E doctors
2. A&E practitioners and ENPs at A&E and MIU
3. Consultant Orthopaedic Surgeon
4. Orthopaedic registrars
5. Virtual clinic coordinator
6. Trauma Practitioners
7. A&E, MIU reception staff
8. Trauma clinic reception staff

Clinical Exclusions to Virtual Trauma Clinic

Exclusion:-

Patients seen and assessed by the Orthopaedic team and requested a face to face appointment

Open fractures, these should always be referred to the Orthopaedic on-call team

Septic Joints either native or prosthetic always be referred to the Orthopaedic on-call team

Patients seen in ED who require surgery, have been seen by Orthopaedic registrar or consultant and have a surgical pathway for treatment in place.

Inappropriate referrals and clinical governance

The VFC will be closely monitored to ensure correct patient treatment / pathway and patient safety.

Inappropriate referrals will be communicated back to the emergency department team to ensure patient safety and Datix if appropriate. Audit of the VFC will take place every 6 months and the findings communicated to all teams for learning.

By establishing a virtual fracture clinic, we believe we will be able to provide safe, efficient and appropriate care to trauma patients. This will eliminate unnecessary visits, will reduce waiting time and lead to higher patient satisfaction and will contribute greatly to the Clinical Governance.

Appendix 1 **Emergency Department Acute Trauma and Orthopaedic Guidelines for Trauma /** **Emergency conditions.**

Please try to adhere as much as possible. If in doubt, please consult your ED senior or the Orthopaedic Registrar on-call.

Please fill in referral form and email wah-tr.virtualfractureclinicwrh@nhs.net.

For the Virtual Fracture Clinic please book in via Main reception ED /MUI receptionist desk.

Clinical Exclusions to Virtual Trauma Clinic **Children under 2yrs**

Spine injuries

Exclusion:-

Elderly fragility wedge fracture to be discharged at the discretion of ED Consultant team. Most of these patients will be discharge with pain relief as they are largely stable injuries which are managed conservatively.

Stable injuries such as transvers process fractures and spinous process fractures

Open fractures, these should always be referred to the Orthopaedic on-call team

Exclusion Tuft fractures of digits.

Metastatic disease

Septic Joints either native or prosthetic

Patients seen in ED who require surgery, have been seen by orthopaedic registrar or consultant and have a surgical pathway for treatment in place.

We DO NOT see any of the above injuries in the virtual fracture clinic. Please refer to On call T&O team

Inappropriate referrals and clinical governance

The VFC will monitor any inappropriate referrals to ensure correct patient treatment / pathway and patient safety.

Inappropriate referrals will be communicated back to the emergency department team to ensure patient safety and Datix if appropriate. Audit of the VFC will take place at various intervals and the findings communicated to all teams for learning.

By establishing a virtual fracture clinic, we believe we will be able to provide safe, efficient and appropriate care to trauma patients. This will eliminate unnecessary visits, will reduce waiting time and lead to higher patient satisfaction and will contribute greatly to the Clinical Governance.

1. BOA Standards for Trauma (BOASTs). BOAST 7: Fracture Clinic Services, August 2013. British Orthopaedic Association. <http://www.boa.ac.uk/publications/boast-7-fracture-clinic-services> (cited July 2016). (Appendix)

Appendix 1

Emergency Department Acute Trauma and Orthopaedic Guidelines for Trauma / Emergency conditions.

Please try to adhere as much as possible. If in doubt, please consult your ED senior or the Orthopaedic Registrar on-call.

Please fill in referral form and email wah-tr.virtualfractureclinicwrh@nhs.net, or book directly in to the VFC via Allscripts via Main reception ED /MUI receptionist desk.

Guidance:

Spine

Fracture	Sub category	A&E Management
C-spine fracture		Refer Ortho on-call
L-spine fracture	Stable wedge fracture, spinous process and transverse process fractures	Discretion of the ED consultant team
	All others	Refer Ortho on-call
T-spine fracture		Refer Ortho on-call
Spine sprains/whiplash injuries		Please do not refer to virtual fracture clinic, GP refer into MSK service if necessary
Non-traumatic neck/back pain		Exclude infection Do not refer to virtual fracture clinic GP review or refer to spine service as outpatient
Suspected cauda equina		Refer to ortho on-call

Children's Fracture

Buckle Fractures Distal radius Torus fractures		Futura splint/flexible removable cast (softcast) for 4 weeks Sling Discharge home with advice sheet
Green stick Fractures distal radius	<u>Angulation in one or both bones</u>	Refer ortho on-call
Slipped distal radial epiphysis		Refer ortho on-call
Clavicle fractures	<u>Low energy injuries with intact skin and NV status</u>	Collar and cuff/ poly sling. Discharge Home with written advice sheet and safety netting
Radius and ulna distal 1/3 and shaft fractures	Undisplaced NV intact	Above elbow POP Sling Referral to virtual fracture clinic
Radius and ulna fractures	Displaced	Above elbow POP Sling Refer Ortho on-call

Hand and Wrist

Fracture	Subcategory	A&E Management
High pressure injection injury		Urgent referral to Ortho on-call
Open fracture/joint Possible tendon injury Possible nerve injury Crush injury Concerning open wound Concerning infection Irreducible dislocation	Exclusion Tuft fractures of digits	Refer Ortho on-call
Distal radial fractures – with no median nerve symptoms		Reduce Back slab /futura splint

		<p>If dorsal displacement dorsal slab and if volar displacement for volar slab.</p> <p>If doubts in reduction – refer to ortho on-call</p> <p>If happy - Referral to virtual hand fracture clinic</p>
Injured wrist - no obvious fracture/possible scaphoid		<p>X-Rays AP + Lateral + scaphoid views</p> <p>Document tenderness in anatomical snuff box, scaphoid tubercle and telescoping of thumb</p> <p>Futura splint</p> <p>Referral to virtual fracture clinic</p>
Scaphoid fractures		<p>Scaphoid views scaphoid splint follow scaphoid pathway</p> <p>Referral to virtual fracture clinic</p>
Other carpal fracture/injury – check median nerve	All Hand X-Rays are AP + Oblique + strict lateral	<p>Reduce if needed</p> <p>Futura splint /backslab</p> <p>Referral to virtual fracture clinic</p>
Metacarpal fractures	Neck	<p>Bedford Splint / buddy strapping +-Futura</p> <p>Referral to virtual fracture clinic</p>
5 th metacarpal fractures	Neck	<p>No rotation deformity</p> <p>Bedford splint</p> <p>Written information</p> <p>Discharge with safety netting</p>
	Shaft	<p>Futura splint and buddy strapping</p> <p>Referral to virtual fracture clinic</p>
	Base	<p>Futura splint and neighbour strapping / volar splint</p> <p>Referral to virtual fracture clinic</p>
Phalangeal Tuft fractures	Terminal/distal phalanx Without nail bed injury which would require repair	<p>Trepine if required</p> <p>Consider antibiotics and tetanus if open injury</p> <p>Mallet splint</p> <p>Discharge</p>

Phalangeal fractures	Exclude Avulsion fractures. If no rotational deformity for buddy strapping/Bedford splint and for discharge with advice	Reduce if needed Bedford Splint/ buddy strapping Referral to virtual fracture clinic
Soft tissue Mallet injury		Mallet splint with distal phalanx in extension Referral to Hand therapy team directly from ED referral required for further
Bony Mallet Injury	Consider Displacement of the avulsion fracture and refer to VFC if concerned	Mallet splint with distal phalanx in extension Referral to Hand therapy team directly from ED referral required for further
Thumb fractures/Injuries Mandatory to request X ray of the thumb not the whole hand	Distal phalanx	Reduce if needed Mallet splint – lateral X-Ray in splint Referral to virtual fracture clinic
	Other fracture or ligament injury	Reduce if needed Thumb spica – X-Ray in cast Referral to virtual fracture clinic

Upper Limb

Types of slings:

Broad arm sling



Collar and Cuff



Triangle sling



Fracture	Subcategory	A&E Management
Sternoclavicular joint dislocation		Broad arm / Polysling Analgesia Referral to virtual fracture clinic
Clavicle fractures Isolated clavicle fractures with intact skin and intact NV status	Medial 1/3	Broad arm / Polysling, / double collar and cuff Analgesia Referral to virtual fracture clinic
	Middle 1/3	Broad arm / Polysling, /double collar and cuff Analgesia Referral to virtual fracture clinic
	Lateral 1/3	Broad arm / Polysling, /double collar and cuff Analgesia Referral to virtual fracture clinic
Acromioclavicular joint injuries		Broad arm / Polysling, /double collar and cuff Analgesia Referral to virtual fracture clinic
Soft tissue shoulder injuries	Including proximal biceps tendon injuries and suspected rotator cuff tears.	Collar & Cuff/ poly sling Analgesia Document functional assessment Referral to virtual fracture clinic
Shoulder dislocations	First dislocations	Reduce- check X-Ray Broad arm / Polysling, Analgesia VFC Referral to outpatient physio

Shoulder dislocations	With associated fracture of the proximal humerus	Refer to Ortho on-call
Non traumatic Acute Shoulder pain		Exclude infection (temp, FBC, CRP)- if suspicion of infection – refer to Ortho on call If no signs of sepsis - Collar & Cuff (single or double loop) Analgesia – referral to physio
Proximal humeral fractures	Greater tuberosity	Collar & Cuff Analgesia Referral to virtual fracture clinic
	Surgical neck	Collar & Cuff Analgesia Referral to virtual fracture clinic
Humeral shaft fractures	Open or radial nerve injury	Refer Ortho on-call
	Closed & Radial nerve intact	Collar & Cuff Analgesia Referral to virtual fracture clinic
Distal Biceps tendon rupture		Broad arm / Polysling X-ray before referral Referral to virtual fracture clinic
Distal humeral fracture	Undisplaced & no nerve injury	Above elbow cast 90deg flexion Analgesia Referral to virtual fracture clinic
	Displaced, intra-articular and/or nerve injury	Refer Ortho on-call
Olecranon fractures	Undisplaced	Above elbow backslab Collar and Cuff

		Analgesia Document nerve function clearly Referral to virtual fracture clinic
	Displaced	Refer Ortho on-call
Radial head/neck fractures	Radio humeral joint located & no associated fracture of ulna	Poly sling or Collar & cuff (double loop) Analgesia Discharge with advice
	Radio humeral joint subluxed or dislocated and or associated fracture of ulna	Refer Ortho on-call
Dislocated elbow	If Unstable injury Refer Ortho on-call	Relocate with analgesia in ED Above elbow cast 90deg flexion Sling Analgesia Virtual Fracture Clinic
Radial & ulna shaft fractures	Nightstick ulna (undisplaced)	Above elbow cast (90deg flexion, neutral rotation) Broad arm / Polysling, Analgesia Referral to virtual fracture clinic
	All others	Refer Ortho on-call

Lower Limb

Fracture	Subcategory	A&E Management
Pelvic fracture	Anterior Posterior Compression, LC, pelvic ring fractures	Treat hypovolaemia Refer Ortho on-call
	Low energy, elderly pubic rami fractures	Mobilise FWB, investigate cause of fall, discharge with rapid assessment / frailty or medicine referral if unable to mobilise and be discharged
	Avulsion fractures such as ASIS or AIIS or Ischium	Referral to VFC or discharge if comfortable to mobilise
Acetabular fracture		Refer Ortho on-call
Neck of femur		Refer Ortho on-call
Dislocated Total hip replacement	First dislocation	Refer Ortho on-call For reduction in theatre
	Had previous dislocation	Refer Ortho on-call Even if reduced and patient fit for discharge please give details to Ortho Reg on-call to make out- patient appointment with relevant consultant
Hip pain post fall, no fracture on plain x-ray	If able to fully weight bear	Discharge
	Unable to FWB or SLR	Refer Ortho on-call
Femoral shaft fracture		Refer Ortho on-call
Distal femoral fracture		Refer Ortho on-call
Thigh injury/haematoma	Patient taking anticoagulant therapy	Exclude compartment syndrome Consider stopping anticoagulants Refer Ortho on-call
Thigh injury/haematoma		Exclude compartment syndrome Consider x-ray Initial Referral to virtual fracture clinic for triage
Calf Muscle Tear Gastrocnemius Tear		Weight bear as tolerated

		Consider VTE assessment Refer to VFC
Soft tissue knee injuries	Mild soft tissue knee injury Meniscal injury possibly suspected >40 yrs	Reassure likely to resolve within 3 months Mobilise FWB Referral to Physio Discharge to Outpatient physio
	Patella tendon rupture or quads tendon rupture	Refer Ortho on-call
	?meniscal or ligament, has full extension	ROM Brace if available Requires FTF fracture clinic for clinical assessment Can be referred to VFC for triage if F2F is full Consider VTE prophylaxis
	?meniscal or ligament & block to full extension	Analgesia Consider VTE prophylaxis Requires FTF fracture clinic for clinical assessment Can be referred to VFC for triage if F2F is full
Atraumatic swollen knee	Apyrexial, normal CRP & WCC	Discharge
Atraumatic swollen knee	Pyrexial , deranged CRP and or WCC	Refer to Ortho on-call For aspiration
	Any of the above or recent knee surgery	Refer to Ortho on-call
Patella Fracture	Un-displaced Please document the patient's ability or (lack of) to SLR	ROM Brace Full weight bearing Consider VTE prophylaxis Rom brace 0-20

		FWB Referral to virtual fracture clinic
	Displaced or vulnerable to displacement	Refer to Ortho on-call
Patella dislocation	1st time	Reduce AP, Lateral & Skyline x-ray Double tubigrip or Robert jones bandaging initially form ED Rom brace 0-45 initial form clinic F2F to check SLR Full WB, crutches if needed Consider VTE prophylaxis Referral initially to virtual fracture clinic
	Recurrent	Reduce Double tubigrip or Robert jones bandaging initially form ED AP, Lateral & Skyline x-ray Full WB Consider VTE prophylaxis Elective Knee surgeon referral from GP
Tibial plateau fractures		Refer Ortho on-call Consider VTE prophylaxis Above knee backslab
Tibia	Proximal	Refer Ortho on-call Consider VTE prophylaxis Above knee backslab
	Shaft: Undisplaced	Above knee backslab Consider VTE prophylaxis Refer Ortho on-call
	Shaft: displaced	Reduce & above knee backslab Consider VTE prophylaxis

		Refer Ortho on-call
	Distal/Pilon fractures	Refer Ortho on-call Consider VTE prophylaxis POP backslab Elevation
Proximal and Mid-shaft fibula fractures	Proximal fibula fracture	Screen for ankle pain/possible Maisonneuve injury and/or knee ligament injury Crutches Consider VTE prophylaxis Weight bear as tolerated Referral to virtual fracture clinic
	Mid-shaft fibula fracture	Screen for ankle pain/possible Maisonneuve injury Boot for comfort (optional) Crutches Consider VTE prophylaxis Weight bear as tolerated Referral to virtual fracture clinic
Soft tissue ankle injury/sprain		Compression bandage Black boot if severe Weight bear as tolerated Consider VTE prophylaxis Discharge with patient information leaflet
Ankle fractures	Weber A fibula fracture	Black boot FWB Consider VTE prophylaxis Referral to virtual fracture clinic
	Weber B fibula fracture No talar shift	Black walking boot Consider VTE prophylaxis Weight bear as tolerated Refer to VFC

	Weber B fibula fracture Talar shift	Reduce Backslab Consider VTE prophylaxis Refer Ortho on-call
	Weber C No talar shift	Black boot / backslab Consider VTE prophylaxis Refer Ortho on-call
	Weber C Talar shift	Reduce Backslab Consider VTE prophylaxis Refer Ortho on-call
	Bimalleolar /trimalleolar	Reduce if needed Below Knee Backslab Consider VTE prophylaxis Refer Ortho on-call
	Isolated medial malleolus Undisplaced	Fibula tenderness proximal to distal / exclude associated fibula fracture Black boot Touch weight bearing Consider VTE prophylaxis Referral to virtual fracture clinic
	Isolated medial malleolus Displaced	Refer Ortho on-call
Hindfoot injuries	Talus fractures +/- dislocation	CT Backslab Refer Ortho on-call
Caution in diabetic foot as may represent Charcot. Also need to emphasise the importance of checking the skin over the calcaneus. If in doubt, refer to ortho on call	Small avulsion fractures of talus / calcaneum/ cuboid	Darco shoe. Black boot if struggling with mobility FWB Consider VTE prophylaxis Referral to virtual fracture clinic

	Calcaneus fracture Undisplaced	Black boot / backslab NWB Consider VTE prophylaxis Referral to virtual fracture clinic
	Calcaneus fracture - Displaced	Consider CT Refer Ortho on-call
	Achilles tendon rupture	Initial treatment in equinus POP backslab in ED If diagnosis in doubt consult A&E senior or Ortho Registrar on-call From F2F Refer to specialist physio services via F2F for accelerated Achilles protocol for rebound boot and consideration of USS. Weight bear as tolerated. Prophylactic Rivaroxaban 10mg or Clexane prescribed for 10 days then reassessed in then clinic. F2F appointment
Midfoot injuries	Avulsion fractures of tarsal bones	Darco Shoe Consider VTE prophylaxis Full weight bear Referral to virtual fracture clinic
	Tarsal fractures - Undisplaced	X-Ray AP + AP-Oblique + strict lateral Darco or Plaster shoe Consider VTE prophylaxis NWB Referral to virtual fracture clinic
	Tarsal fractures - Displaced	Backslab CT Consider VTE prophylaxis Refer Ortho on-call

Forefoot injuries	Lis-franc fracture / dislocation Including suspected on basis of mechanism / swelling?	CT Backslab/ black boot Consider VTE prophylaxis Refer Ortho on-call
	Hallux metatarsal fracture	Darco shoe NWB Consider VTE prophylaxis Referral to virtual fracture clinic
	5 th metatarsal neck fracture	Stiff soled (Darco) shoe/walking boot Fwb Consider vte Discharge with advice
	Isolated Lesser metatarsal fractures including base of 5 th MT fractures.	Darco Shoe /walking boot Consider VTE prophylaxis FWB Referral to virtual fracture clinic
Unless high energy injury with suspected compartment syndrome. I prefer referral to ortho on-call	Lesser metatarsal fractures - multiple	Darco shoe Consider VTE prophylaxis NWB Referral to virtual fracture clinic
High energy injury with suspected compartment syndrome.	Lesser metatarsal fractures - multiple	Darco shoe Consider VTE prophylaxis NWB Refer Ortho on-call
	Hallux phalanx fracture - intra-articular	Darco shoe /loose shoe Full weight bear/heel weight bear D/W Ortho SPR if ?needs fixation or Referral to virtual fracture clinic
	Hallus Phalanx undisplaced	Darco Shoe Full weight bear/heel weight bear Discharge

	Lesser phalanx fracture	Undisplaced - Neighbour strap two weeks Full weight bear/heel weight bear Discharge ?displaced – toe deformity – refer to VFC
	Toe dislocations	Reduce – Check X-Ray Neighbour strap two weeks Full weight bear/heel weight bear If injury is stable -discharge home If unstable Refer to VFC

Minor soft tissue injuries. These generally do not require an onward referral and resolve with time. If you think that onward referral to the Virtual fracture is necessary, please be specific as to the injury you want us to manage.

Toe fracture generally is treated symptomatically. Generally, these need reassurances that it will heal with time (approx. 6-12 weeks), analgesia, comfortable footwear and no onward referral. If you think the fracture needs relocation/manipulation/surgical stabilisation then please refer to the Orthopaedic Registrar on-call for further assessment.

Providing an e-mail address and telephone numbers on the referral significantly improves our chance in contacting the patient in a timely manner, so please include on the referral form for every patient possible.

The clinicians would need to fill in the outcome forms as usual following telephone consultation end of clinic to ensure further appointments and outcomes are recorded.

Process for Kidderminster Minor Injuries

Patient seen initially in A&E who requires an appointment in the VFC will require the ENP /Nursing to explain the process of VFC and explain they will be contacted within 48hrs by the VFC co-ordinator following the consultation of the notes and x-rays by the consultant. The patient will be given the virtual fracture clinic patient information leaflet.

The reception staff would check the telephone details are correct.

Reception clerks access new patient trauma clinic on Oasis and access slot. (Please see page 1)

Notes from the attendance will be emailed to wah-tr.virtualfractureclinicwrh@nhs.net in the same way to the fracture clinic in Larkspur suite.

Process for Bromsgrove MIU

Patients seen at Bromsgrove MIU who require an appointment in the VFC will require the ENP /Nursing staff to explain the process of VFC and explain they will be contacted within 48hrs by the VFC co-ordinator following the consultation of the notes and x-rays by the consultant.

The reception staff to ensure that the telephone contact details of the patient are correct and book into the fracture clinic in the usual way by either contacting Larkspur clinic on ext 30373 between 9 am and 5 pm and the Worcester ED reception out of hours.

VFC proforma Appendix 1 to be sent via email to wah-tr.virtualfractureclinicwrh@nhs.net

Process for Malvern community hospital

Patients seen at Malvern MIU who require an appointment in the VFC will require the ENP /Nursing staff to explain the process of VFC and explain they will be contacted within 48hrs by the VFC co-ordinator following the consultation of the notes and x-rays by the consultant.

Reception clerks access new patient trauma clinic on Oasis and access a virtual slot please see page 1) At Weekends and out of hours the ENP will contact the Worcester ED reception to make the VFC appointment.

Notes from the attendance will be emailed to wah-tr.virtualfractureclinicwrh@nhs.net fracture clinic in Larkspur suite.

VFC proforma Appendix 1 to be sent via email to wah-tr.virtualfractureclinicwrh@nhs.net

Process for Evesham Community Hospital

Patients seen at Evesham MIU who require an appointment in the VFC will require the ENP /Nursing staff to explain the process of VFC and explain they will be contacted within 48hrs by the VFC co-ordinator following the consultation of the notes and x-rays by the consultant.

Reception clerks access new patient trauma clinic on Oasis and access a virtual slot please see page 1) At Weekends and out of hours the ENP will contact the Worcester ED reception to make the VFC appointment.

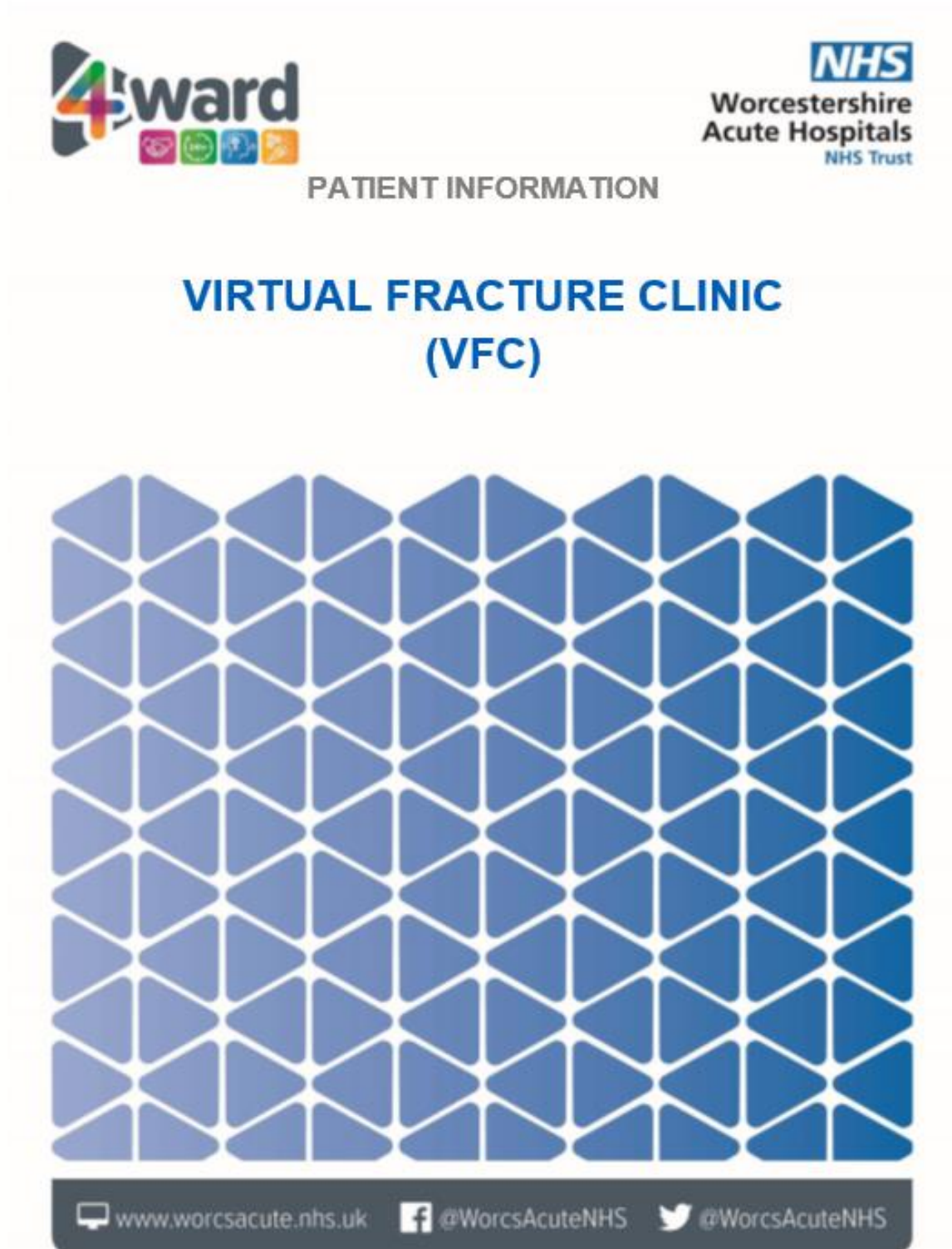
Notes to be accessed locally on patient first

VFC proforma Appendix 1 to be sent via email to wah-tr.virtualfractureclinicwrh@nhs.net

Any issues with booking appointments please contact Larkspur Suite 01905 763333 ext 30373 or email wah-tr.OPA-WRH-TandO@nhs.net.

Appendix 4

Virtual fracture clinic patient information.



Virtual Fracture Clinic (VFC)

Contact details:

Fracture Clinic

Worcester Royal Hospital 01905 760259 or 01905 763333 ext 30761

After your injury the Emergency Department or your G.P. will refer you to the 'Virtual Fracture Clinic' where a senior orthopaedic doctor will assess your injury/broken bone.

What will happen next?

The *Virtual Fracture Clinic* is the core of a new safe, effective and validated method to evaluate your injury by reviewing your X-Rays and the initial assessment from the Emergency Department (A & E); this will be done within 72 hours of your attendance to the Emergency Department.

You will not need to attend the Hospital when the assessment is taking place; hence the term 'Virtual Clinic'

After the assessment:

Dependent on the outcome of the virtual consultation, the virtual fracture clinic co-ordinator will contact you over the phone to discuss your treatment plan or provide advice. There are 3 possible outcomes following this discussion

1. You may be asked to come to the hospital for a new trauma face to face appointment to review your fracture/injury within 48hrs.
2. You may be asked to attend a follow up trauma clinic appointment to review your injury usually between 7 and 14 days.
3. You may at this point be discharged from the clinic, in which case the VFC co-ordinator will contact you to explain this and offer advice.

Please note: some patients with specific injuries may be referred into specialist clinics which may lead to a longer wait."

An appointments booking clerk will contact you to arrange an appointment in most appropriate clinic.

- You might be asked to come on the same day to the hospital for further treatment/investigation these appointments will be telephoned.
- You might receive an appointment letter by telephone or post depending on when the appointment is for.

You and your GP will receive a letter outlining the assessment and outcome.

Prior to leaving the Emergency department please make sure the hospital has an up to date telephone number.

You must bear in mind that the hospital will call you with a withheld number - please do not ignore the number as you won't otherwise be able to receive advice. If phone the call is not answered we will not leave a message but will send you a letter with our advice and further contact details.

If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.

Patient Experience

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

Feedback

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

Patient Advice and Liaison Service (PALS)

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

How to contact PALS:

Telephone Patient Services: 0300 123 1732 or via email at: wah-tr.PALS@nhs.net

Opening times:

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.

Appendix 2

Virtual Fracture Clinic Treatment Documentation

Patient Name

NHS no

Hospital No

DOB.....

VTE assessment Done Yes / No

VTE Prophylaxis Required Yes / No

Name of Drug

Duration of Treatment

Prescription Written

Diagnosis

Treatment and Advice

Neighbour strapping Duration Futura Splint Duration

Black Walking Boot Duration

Weight Bearing Status FWB PWB NWB

Soap Notes

Follow up appointment and instructions

Appointment requested on outcome form

No Further Follow up

Signed **Print name** **Date**

BOAST - Fracture Clinic Services

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[BOAST - Fracture Clinic Services](#)

Background and justification

These guidelines are for the standard of care patients should expect following significant, acute soft tissue or bone injury that requires specialist treatment from a Trauma and Orthopaedic Surgeon in the outpatient setting (fracture clinic). They provide standards that can be audited to evaluate the quality of an outpatient fracture service. They cannot be comprehensive as local facilities and geography will require variation in the configuration of these services. However, the British Orthopaedic Association believes that these are the care standards that all patients in the United Kingdom can expect.

Standards for Practice

1. Following acute traumatic orthopaedic injury, patients should be seen in a new fracture clinic within 72 hours of presentation with the injury. This includes referrals from emergency departments, minor injury units and general practice.
2. Fracture clinics must be consultant-led clinics. All new fracture patients must be seen in a clinic by senior orthopaedic staff or by junior staff directly supervised by these senior staff. If extended scope practitioners are seeing patients, they must have evidence of adequate training and be directly supervised by a consultant orthopaedic surgeon.
3. All new fracture clinic appointments must lead to a management plan, including any clinical interventions, which is communicated to both the general practitioner and patient in writing.
4. Plaster room facilities and the ability to perform plain radiographs must be available during all fracture clinics.
5. Should patients require further imaging, (for example ultrasound, computed tomography (CT) or magnetic resonance imaging (MRI)); this should be performed and reviewed by the clinical team within an appropriate time scale. Surgery in many cases is time-critical and waiting

time for imaging must not result in undue delay. Local referral and reporting protocols should be in place to avoid delays.

6. In fracture clinics, there should be the ability to make direct referrals to physiotherapy and occupational therapy departments.
7. Patients being seen in follow-up fracture clinics should be under the care of a named consultant with all images and medical records available to ensure continuity of care. When transfer of care is appropriate (either due to the nature of the injury or geography), then all images and medical records should be available to the subsequent clinic.
8. Fragility fracture and falls prevention (Fracture Liaison Services) should be fully integrated into fracture clinics, allowing screening of all patients and onward referral where appropriate.
9. There must be a system in place that allows patients rapid access back to the fracture clinic if they have problems related to their initial presenting injury.
10. For common injuries, patient information booklets and exercise sheets should be provided. When the treatment involves cast splintage, slings or appliances, then written care instructions should be provided.
11. Complex Regional Pain Syndrome should be identified early and there should be an agreed protocol for analgesia and therapy with the local pain clinic.
12. Patients seen in fracture clinic who require operative intervention, should have a planned admission for their treatment within a maximum time period set by the surgeon(s) that will not compromise patient safety or outcome.
13. There should be local referral guidelines for fracture clinics and any re-design that deviates from these recommendations should be prospectively evaluated to support the change of practice.

Evidence base

This guideline is based upon professional consensus, as there are very few scientific studies in this area.