Nighthawk Guide for Referrers
Medica Radiology Out of Hours Reporting.

Introduction

This document describes the Medica NightHawk Out of Hours service. The Radiologists delivering the service are all GMC Registered and experience at Emergency Radiology

Nighthawk Referral Protocols Agreed Scope of Service between Worcester Hospitals and Medica

Protocol = refer direct to local radiographer
Discuss = telephone Medica to discuss with Medica radiologist 03330 100999 or 03333 111999

Examination	Provided Out of hours?	Protocol/ Discussion	Indications	Notes
CT Brain Adult	YES	Protocol	NICE guideline • trauma • stroke. Suspected subarachnoid haemorrhage	NICE guideline CG176 – Trauma NICE guideline CG68 – Stroke TIA patients should **not** have CT scan unless there is clinical suspicion of an alternative diagnosis that CT could detect or there is a need to exclude haemorrhage to allow patient management. See NICE guideline NG128
CT Brain Paediatric	YES	Discussion with Medica radiologist IR(ME)R	NICE guideline trauma	Examples of indications • Decreased conscious levels if raised intracranial pressure • Suspected intracranial abscess or of unknown cause (RCPCH) • Status epilepticus in a non-epileptic • Hydrocephalus with blocked shunts • Orbital cellulitis with complications
CTA Neuro (Arch-Carotid)	YES	Discussion		NICE guideline NG128

Examination	Provided Out of hours?	Protocol/ Discussion	Indications	Notes
CT Cervical Spine Adult	YES	Protocol	NICE – Spinal injury	NICE guideline NG41
CT Cervical Spine Children	YES	Discussion Consultant or Registrar referral	NICE – Spinal injury	NICE guideline NG41
CT Major Trauma/MTC	YES	Before 9:00pm - Protocol After 9:00pm - Discussion	Trust/TARN Major Trauma Pathway	Please use the SIP Report Template Guidance on using the SIP Report Tool can be seen here
CT Abdomen and pelvis	YES	Discussion Consultant or Registrar referral	Acute laparotomy pathway could be referred by protocol	Discussion advised where there are significant positive findings
CTPA	YES	Discussion	Hypoxia/haemodynamic compromise in a high risk patient	Accepted if haemodynamic compromise and immediate thrombolysis is being considered. Severe hypoxia and ventilation Some cases of chest pain where cardiologist wishes to exclude PE prior to intervention
CT KUB	YES	Protocol	Trust protocol	Emergency cases where patient may come to harm if scan delayed e.g. renal obstruction and suspected sepsis, single kidney
CT AORTA	YES	Discussion with vascular team	Suspected aortic dissection. Includes CT Angiogram Aorta for aortic leak	Acute dissection protocol including pre contrast (based on RCEM/RCR bfcr216)

Examination	Provided Out of hours?	Protocol/ Discussion	Indications	Notes
CT Angiogram peripheral	YES*	Discussion		Referred following local vascular surgical/vascular IR review *Please check cover with NH team – see guidance; is there local review/reporting protocol?
CT Lumbar/ Thoracic spine	YES	Discussion	# or suspected #. To assist in management	
CT Pelvis	YES	Protocol	#Neck of femur – suspected or surgical planning for known #	
CT MSK other	YES	Before 9:00pm - Protocol After 9:00pm - Discussion	Suspected # or surgical planning for known #	?shoulder, knee, ankle
MRI Lumbar Spine	YES	Protocol	Suspected cauda equina syndrome[1]	CT is a second line when MRI not possible e.g. pacemaker. Consider contrast if suspected sepsis or tumour.

Examination	Provided Out of hours?	Protocol/ Discussion	Indications	Notes
MRI Whole Spine	YES	Protocol	Suspected cord compression e.g. due to: Primary or secondary tumour Sepsis – discitis or spinal osteomyelitis Trauma: for neurological compromise; Indeterminate fracture evaluation.	CT is a second line when MRI not possible e.g. pacemaker. IV contrast should normally be given. If suspected discitis, to include STIR sagittal sequences as well.
MRI head	YES	Discussion	For urgent cases only of stroke that are not suitable for CT head e.g. young patients with stroke or TIA Cases of suspected subdural or SAH where the diagnosis is not clear on CT.	For discussion only allowed via the stroke team (not CNS) and for cases where there may be an indication for thrombolysis/thrombectomy where the answer is not clear on CT/CTA head. If late presentation of SAH/SDH where the patient's management is changed e.g. requiring neurosurgery or urgent neuro intervention e.g. cerebral angio/clipping/coiling
PF NG Tube	YES	Protocol		
PF AXR	YES	Protocol	For super strong magnets and flat disc batteries where there is a risk of bowel injury	

Footnote 1: Cauda Equina Definitions

Society of British Neurological Surgeons Definitions (2014)	
CESR: cauda equina syndrome with retention	Back pain with unilateral or bilateral sciatica, motor weakness of the legs, sensory disturbance in the saddle region, loss of anal tone and established loss of urinary control i.e. painless retention and overflow
CESI: incomplete cauda equina syndrome	As above BUT with altered urinary sensation instead of established loss of control, e.g. loss of desire to void, diminished sensation, poor stream, need to strain. Painful retention may precede painless retention in some cases
CESS: suspected cauda equina syndrome	Cases of severe back pain and leg pains with variable neurological symptoms and signs, and a SUGGESTION of sphincter disturbance.

Footnote 2: Incomplete cover

There are a very small number of specialist CT/MRI examinations, which rarely, Medica cannot report. These are CT Angio peripheral, CT Angio neuro (arch-carotid) and very rarely MRI spine for cord compression/cauda equina.

You will be advised when you refer the case if we do not have full cover through the entire night for these cases. We will ask you when the case is likely to be scanned so that we can assess cover.

In the rare circumstances where we do not have cover, please indicate whether you would like to Medica radiologist to justify the study, so that the patient can be imaged and then you will take alternative (local) steps to obtain a report.

Your NightHawk Service Times:

	Start	Finish (next day)
Monday	24 hrs	
Tuesday		
Wednesday		
Thursday		
Friday		
Saturday		
Sunday		
Bank Holiday		

Important Contact Numbers:

Worcester Royal
Switchboard – 01905 763333
Stroke Team – 01905 761488
CT Radiographer on-call – via switchboard ext 39084
CT Scanner 1 – 01905 760721
CT Scanner 2 – 01905 733921
Radiographer in A/E x-ray – via switchboard
A&E Resus – switchboard x30501
A&E Majors – switchboard x30692
MAU – switchboard x30032, 39934, 39018
Acute Stroke Unit:- switchboard x39595, 39551
ITU – switchboard x30561, 39551
Surgical Decisions Unit – switchboard x30164, 39485

Alexandra Hospital, Redditch
Switchboard Number – 01527 503030 (NB. if you need to talk to the local On Call Radiologist, ensure you ask for the Radiologist covering the Alex, not Royal Worcs).
CT Radiographer on-call – via switchboard ext 44651
CT scanning room – 01527 512064 or switchboard x42064
Radiographer in A/E x-ray – via switchboard x44651
A&E – switchboard x42030
MAU (male) – switchboard x42091
MAU (female) – switchboard x42102
ITU – switchboard x44136
Resus– switchboard x44204
EDU (in A&E) – switchboard x44330

Explanatory Notes

Referral

There are two referral pathways– either **Protocol** or **Discussion**:

- A Medica NightHawk Administrator will advise if:
  - The referral should be made by protocol directly to the radiographer
  - The referral is outside the agreed guidance scope within this document

PROTOCOL	DISCUSSION
You refer these CT scans directly to your CT radiographer. A discussion between the referrer and Medica is not required. These patients fulfil agreed clinical criteria for the CT scan e.g. NICE guidelines for CT Head. This process has been locally approved.	You will need to discuss with the Medica NightHawk Radiologist. This is to ensure that the study is *justified* and for the Medica radiologist to ask additional questions • A Medica NightHawk Administrator will ask you: ○ If you are the referring Registrar or Consultant (If both in theatre then by delegation)

Take the request to the radiographer	○ For patient details, your name and contact number ○ Relevant clinical history and PMH ○ Blood results: HB, Wbc, lactose etc • Take the request to the radiographer with the Medica reference once you have agreement from the Medica radiologist • The referrer and not Medica will inform the radiographer of the justification

The Report

The Medica Radiologist will report the cases directly into your Radiology Information System (RIS). If your RIS system is down they will call you with the report. A written copy will need to be entered into the Radiology Information System by local Radiology staff the following working day.

If you would like to discuss a case following receipt of the report or you wish to seek clarification at a later stage, please telephone Medica and ask to speak to the Medica Radiologist.

The primary report for stroke will be telephoned to you as soon as possible; the full report follows within 30 minutes.

The primary report for Major Trauma will appear on your Radiology Information system as soon as possible; the full report follows within 60 minutes.