

## TACKLING AKI: AUDIT SUPPORT INFORMATION

CENTRE CODE	FRI: Frimley BRA: Bradford ASP: Ashford and St Peters LGI: Leeds General Infirmary LSJ: Leeds St James'
AUDIT PERIOD	<ul> <li>Enter number corresponding to the audit period as below</li> <li>May 2015 (baseline)</li> <li>August 2015</li> <li>November 2015</li> <li>February 2016</li> <li>May 2016</li> <li>August 2016</li> <li>August 2016</li> <li>November 2016 (post intervention at all sites)</li> </ul>
HIGHEST AKI STAGE DURING HOSPITAL ADMISSION	Number field either 1,2 or 3 (placed at top of the form as 10 cases from each stage required for each audit period)
DATE OF HIGHEST AKI STAGE	Date field: DDMMYYYY
NHS NUMBER	10 digit number
DATE OF BIRTH	Date field: DDMMYYYY
ETHNICITY	As per NHS definitions
GENDER	Male or female (male=1, female =0)
DATE OF HOSPITAL ADMISSION	Date field: DDMMYYYY
ROUTE OF HOSPITAL ADMISSION	<ul> <li>a) Elective (planned) admission =1 or Non-elective (emergency) admission =2</li> <li>b) Admission source: route via which patient entered hospital. Emergency Department (=1), Direct to Admission Unit (=2, either medical or surgical), Direct to ward without passing through ED or MAU/SAU (=3), Transfer from other hospital (=4)</li> </ul>



WARD DESCRIPTOR AT TIME OF AKI ONSET	ED (=1), MAU (=2), SAU (=3), Nephrology ward (=4), General medicine ward (=5), High dependency (level 2) unit (=6), Intensive care unit (=7), General surgical ward (=8) Other (=99)
INITIAL AKI STAGE	First AKI warning stage during hospital admission (as per NHS England AKI Warning Stage algorithm) i.e. AKI stage at onset of AKI. Number field either 1,2 or 3
DATE OF INITIAL AKI STAGE	Date field: DDMMYYYY
DURATION OF AKI	<ul> <li>a) Definition: number of days until serum creatinine returns to within 27micromol of baseline level for that individual. For the purposes of this audit, baseline defined as most recent stable creatinine level prior to AKI.</li> <li>b) Response options: 1 (=1-2days), 2 (=2-4days), 3 (= &gt;4days), 99 (=not possible to define duration, e,g, creatinine not repeated, patient discharged prior to AKI resolution)</li> </ul>
WAS AKI RECOGNISED DURING HOSPITAL ADMISSION?	<ul> <li>a) Definition: AKI recorded in hospital notes at any point during admission including discharge summary, use of AKI care bundle, investigation requested specifically for AKI</li> <li>b) Response options: 0 (=no), 1 (=yes within &lt;6hrs), 2 (=yes between 6-12hrs), 3 (=yes between 12-24hrs), 4 (yes between 24-48hrs), 5 (=yes &gt;48hrs), 6 (=yes but timing not known)</li> </ul>
WAS CAUSE OF AKI RECORDED?	<ul> <li>a) Definition: cause of AKI recorded in hospital notes at any point during admission including discharge summary</li> <li>b) Response options: 1 (=yes), 0 (=no)</li> </ul>
IF CAUSE OF AKI WAS RECORDED ENTER CAUSATIVE FACTORS	Enter as recorded in the hospital notes ONLY (text field)
DID PATIENT DIE DURING ADMISSION?	If patient died during index hospital admission: yes(=1), no(=0), transferred to another hospital (=2)
WAS AKI CARE BUNDLE USED?	<ul> <li>a) Definition: AKI care bundle incorporated into patient record</li> <li>b) Response options: 0 (=no), 1 (=yes started within &lt;6hrs), 2 (=yes started between 6-12hrs), 3 (=yes started between 12-24hrs), 4 (yes started between 24-48hrs), 5 (=yes started &gt;48hrs), 6 (=yes but timing not known)</li> <li>If the audit period is occurring before your centre has implemented the care bundle answer no for all cases.</li> </ul>



WAS THE AKI CARE BUNDLE COMPLETED?	<ul> <li>a) Definition: All fields of AKI care bundle completed/signed for – this is an 'all or none' assessment</li> <li>b) Response options: 1 (=yes, 100% complete), 0 (=no, partially completed), 99(=care bundle not utilised)</li> <li>If the audit period is occurring before your centre has implemented the care bundle answer no for all cases.</li> </ul>
DID THE PATIENT RECEIVE A FLUID BALANCE ASSESSMENT?	<ul> <li>a) Definition: any one of: patient examination incorporating assessment of volume status (including euvolaemia), clinical impression that includes reference to volume status, treatment plan includes correction of over- or underhydration</li> <li>b) Response options: 0 (=no), 1 (=yes within &lt;6hrs), 2 (=yes between 6-12hrs), 3 (=yes between 12-24hrs), 4 (yes between 24-48hrs), 5 (=yes &gt;48hrs), 6 (=yes but timing not known)</li> </ul>
DID PATIENT RECEIVE URINALYSIS AT THE TIME OF OR FOLLOWING AKI?	<ul> <li>a) Definition: urinalysis (urine dipstick testing) results recorded in medical or nursing record</li> <li>b) Response options: 0 (=no), 1 (=yes within &lt;6hrs), 2 (=yes between 6-12hrs), 3 (=yes between 12-24hrs), 4 (yes between 24-48hrs), 5 (=yes &gt;48hrs), 6 (=yes but timing not known), 99(=not possible due to anuria). Urinary ACR/PCR is not equivalent and should not be counted as an acceptable alternative, urinalysis occurring before onset of AKI should not be counted</li> </ul>
WAS THE PATIENT RECEIVING ANY OF THE FOLLOWING MEDICATIONS AT TIME OF AKI?	<ul> <li>Yes(=1) or No(=0) for each of the following classes of medications:</li> <li>a) ACE inhibitors e.g. ramipril; lisinopril; trandolopril; enalapril; captopril etc.</li> <li>b) Angiotensin receptor blockers e.g. candesartan; irbesartan; losartan; telmisartan; olmesartan; valsartan etc.</li> <li>c) Non-steroidal anti-inflammatory drugs (NSAID) e.g. ibuprofen; diclofenac; naproxen; indomethacin, meloxicam etc.</li> <li>d) Mineralocorticoid receptor blockers e.g. spironolactone; eplenerone</li> <li>e) Loop diuretic e.g. frusemide, bumetanide</li> <li>f) Thiazide diuretic e.g. bendrofluazide; indapamide; hydrochlorothiazide</li> <li>g) Aminoglycoside e.g. gentamicin; amikacin</li> <li>h) Trimethoprim</li> </ul>
DID THE PATIENT RECEIVE A MEDICATION REVIEW AT TIME OF OR AFTER AKI?	<ul> <li>a) Definition: treatment plan includes cessation of relevant medication*, treatment plan includes avoidance of relevant medication, relevant medications stopped within 24hrs of first AKI warning stage result, documented pharmacy review</li> <li>b) Response options: 0 (=no), 1 (=yes within &lt;6hrs), 2 (=yes between 6-12hrs), 3 (=yes between 12-24hrs), 4 (yes between 24-48hrs), 5 (=yes &gt;48hrs), 6 (=yes but timing not known)</li> </ul>



DID THE PATIENT RECEIVE RENAL IMAGING?	<ul> <li>Not all AKI stage 1 patients need renal imaging, so score these patients as 'no AKI stage 1'</li> <li>a) Definition: renal ultrasound/CT/MRI imaging following onset of AKI</li> <li>b) Response options: 0 (=not done), 1 (=yes within &lt;6hrs), 2 (=yes between 6-12hrs), 3 (=yes between 12-24hrs), 4 (yes between 24-48hrs), 5 (=yes &gt;48hrs), 6 (=yes but timing not known) 98(=no AKI stage 1), 99(=not appropriate – AKI stage 1 or senior clinician decision)</li> </ul>
DID THE PATIENT RECEIVE SPECIALIST INPUT?	<ul> <li>Not all AKI stage 1 patients need renal imaging, so score these patients as 'no AKI stage 1/2'</li> <li>Specialist input may be advice or review by nephrology, critical care outreach team (CCOT) or intensive care teams, or transfer to nephrology unit, high dependency or intensive care unit. If more than one of these happened, score that corresponding to highest level of input (transfer &gt; seen by &gt; telephone advice).</li> <li>a) Definition: medical record contains documentation of telephone discussion with nephrology/ICU SpR or more senior, nephrology/ICU review or transfer to nephrology ward/ICU</li> <li>b) Response options: 1(=yes, discussion with nephrology), 2(=yes, seen by nephrology), 3(yes, discussion with ICU/outreach), 4(seen by ICU/outreach), 5(transfer to more specialist area; includes renal ward, high dependency or ICU), 0(=no), 99(=not appropriate – AKI stage 1/2 or senior clinician decision)</li> </ul>
WAS PATIENT CATHETERISED AS PART OF AKI CARE?	<ul> <li>Included as a balancing measuring (an increase in unnecessary urinary catheterization would be an unintended consequence)</li> <li>a) Definition: new urinary catheter placed as part of AKI management plan, or new urinary catheter placed within 48hrs of AKI onset</li> <li>b) Response options: Yes(=1 to relieve bladder outflow obstruction), Yes(=2 for any other reason including fluid balance monitoring), No(=0), Not possible(=99 e.g. long term catheter already in place, urinary diversion etc.)</li> </ul>