# Acute Kidney Injury Care Bundle

**NOTE:** Minimum requirement to complete the first five sections of the care bundle and place AKI sticker in patient clinical documentation.

<table>
<thead>
<tr>
<th>Date:</th>
<th>Time:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location:</td>
<td></td>
</tr>
<tr>
<td>Started by:</td>
<td>(Print Name)</td>
</tr>
</tbody>
</table>

## Reason for starting bundle:
- [ ] AKI Stage 1
- [ ] AKI Stage 2
- [ ] AKI Stage 3

## Complete for all AKI Stages

<table>
<thead>
<tr>
<th>Review</th>
<th>Respond</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABCDE Assessment</td>
<td>[ ] Call for help to resuscitate if patient critical</td>
</tr>
<tr>
<td>Observations check MEWS score</td>
<td>[ ] Prompt treatment of sepsis (Start Sepsis six care bundle if signs of sepsis)</td>
</tr>
<tr>
<td>Look for signs of sepsis</td>
<td>[ ] Fluid challenges if hypovolaemic/hypotensive</td>
</tr>
<tr>
<td>Volume status assessment</td>
<td>[ ] Relieve obstruction</td>
</tr>
<tr>
<td>Fluid balance chart</td>
<td>[ ] If BP low hold BP lowering medication</td>
</tr>
<tr>
<td>Abdominal palpation looking for full bladder or perform bladder scan</td>
<td>[ ] Consider stopping nephrotoxics (e.g. NSAIDs, ACE Inhibitors, Diuretics, Angiotensin receptor blockers, Gentamicin, PPI)</td>
</tr>
<tr>
<td>Medication review</td>
<td>[ ] Check for dose adjustment in AKI</td>
</tr>
<tr>
<td>Urine Dipstick (Document full result in notes)</td>
<td>[ ] Send Urine ACR if proteinuria</td>
</tr>
<tr>
<td>[ ] Send Urine MC+S if haematuria, suspicion of crystalluria or infection</td>
<td>[ ] Consider vasculitis / renal screen if haematuria or proteinuria (ANA, ANCA, antiGBM, complement C3/C4, Immunoglobulins, serum &amp; urine electrophoresis)</td>
</tr>
</tbody>
</table>

### Blood gas (K⁺, HCO₃⁻, lactate)
- [ ] Correct blood abnormalities & add relevant bloods tests (Bone, LFTs, CK)
- [ ] Consider underlying diabetes if elevated
- [ ] Consider underlying CKD if chronically high

### USS KUB within 6hrs if pyonephrosis or high suspicion of upper urinary tract obstruction
- [ ] Contact urology if obstruction

**Note:** The Renal Team is available 24hours via UHCW Switchboard (dial 1140)

## In discharge summary:
Patients who develop AKI even when kidney function returns to normal are at significant risk of developing CKD.

In discharge summary please document:
- AKI Stage 1, 2, 3
- Type of medication review undertaken
- Give clear follow up information to GP including further blood tests
- Consider O.P referral to renal team when eGFR ≤30 in adults who have recovered from AKI

**Horizontal Referral**
- **To ITU**
  - AKI Stage 3
  - Fluid unresponsive hypotension (<80 <100mmHg in 2hrs)
  - Fluid unresponsive oliguria in 4hrs (<20 ml/hr or anuria in 2hrs)
  - Worsening Base excess ≥-6
  - AKI with multi organ failure
  - Severe poisoning

- **To Renal**
  - Likely intrinsic kidney disease
  - Complications of AKI refractory to medical treatment: K⁺>6.5; anuric; pulmonary oedema; pericarditis; encephalopathy; severe acidosis pH <7.15, HCO₃ <15

- **To Urology**
  - Likely pyonephrosis, or obstructed single kidney, or obstruction not relieved by catheter

**Within 24hrs of starting bundle**
- **To Renal**
  - AKI with no clear cause
  - Inadequate response irrespective of creatinine
  - AKI Stage 3
  - Existing CKD 4/5
  - Kidney transplant
  - Positive ANA/ANCA
  - Proteinuria +/- haematuria
  - Systemic disease causing AKI (myeloma, vasculitis, connective tissue diseases, rhabdomyolysis, HUS, TTP, accelerated hypertension)

- **To Urology**
  - Obstruction on ultrasound scan

Version 1.1