Appendix A: Identify Potential Causes for Symptoms and Treat

The **priority** following identification of a positive screen is to rule out/treat potential causes. As soon as a patient screens positive or delirium is suspected, notify the critical care physician to assess the patient and rule out /treat potential causes (and document findings).

Rule out potential life threatening causes immediately including:

- **Hypoxemia, hypotension, hypoxia, hypercarbia or neurological event**

Rule out and Treat:

I (Iatrogenic Exposure): Could a recent procedure or intervention have caused a complication such as pneumo/hemothorax or bleeding (e.g., insertion or attempted insertion of a feeding tube or invasive line)?

C (Cognitive Impairment): Does the patient have pre-existing dementia, depression or cognitive impairment or a new brain injury?

U (Use of Restraints): Re-evaluate the need for restraints. Restraints can cause/worsen delirium.

D (Drugs): Evaluate the use of sedatives (e.g. benzodiazepines or opiates) and medications with anticholinergic activity. Consider contribution of alcohol, drug or smoking withdrawal. Consider withdrawal from chronically used sedatives or medications.

E (Elderly): Evaluate patients older than 65 years with greater attention.

L (Laboratory Abnormalities for Metabolic Derangements): Consider lab abnormalities such as hyponatremia, azotemia, hyperbilirubinemia, hypocalcemia, metabolic acidosis and liver dysfunction.

I (Infection): Rule out infection. Mental confusion can be the first sign of infection in elderly.

R (Respiratory): Assess for respiratory failure (PCO2 greater than 45 mmHg or PO2 less than 55 mmHg or oxygen saturation less than 88%). Consider causes for hypoxemia or hypercarbia such as COPD (assess for night-time hypoventilation with a.m. gases), ARDS or Pulmonary Embolus.

I (Intracranial Perfusion): Assess for hyper or hypotension and consider neurological causes such as hemorrhage, stroke, tumour or trauma. Consider non-convulsive seizure (especially in depressed level of consciousness in setting of neurological admission).

U (Urinary/Faecal Retention): Evaluate bladder and bowel elimination; fecal/urinary retention is an important cause for agitation. Remove catheters and fecal drainage tubes when no longer needed.

M (Myocardial): Assess for myocardial causes: myocardial infarction, acute heart failure, arrhythmia

S (Sleep and Sensory Deprivation): Disruption in day-night routine and impaired vision or hearing are important triggers for delirium. Control noise levels and content of conversations.