### KQuIP Hub: Pro forma for measurements and tools, relevant for use in the renal setting

<table>
<thead>
<tr>
<th>Name of measurement / tool</th>
<th>Haemodialysis Trigger Tool</th>
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<tbody>
<tr>
<td>Variable to be measured</td>
<td>Adverse Events during Haemodialysis Treatments</td>
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</table>
| Brief description of the measure / tool | The Haemodialysis Trigger Tool is a measure of the safety of haemodialysis treatments that has been adapted from the Global Trigger Tool. It provides monthly monitoring of haemodialysis treatments to identify the frequency of harm events. Harm is classified as discomfort or injury from the perspective of the patient.

The tool identifies:
- Whether a potential harm event has occurred (known as a trigger)
- Whether the trigger has actually led to harm happening to the patient
- The level of harm the patient experienced

Monitoring of a sample of haemodialysis treatments can be collated into a harm rate for each month and used to monitor the frequency of specific harm events.


| Relevance to the renal community | Haemodialysis is a high risk treatment, with many adverse events that are considered an acceptable consequence of haemodialysis. These adverse events can cause injury and harm to patients, affecting their experience of haemodialysis. The haemodialysis trigger tool to monitor a random monthly sample of haemodialysis treatments, to identify how many harm events occur during haemodialysis and what these harm events are. |
### Relevance for a renal related QI project

Describe how the measure / tool could be used in a renal QI project. This may not be exhaustive but may inspire others.

- The result of monthly monitoring using the haemodialysis trigger tool can be used to:
  - Focus the development of QI interventions to reduce common harm events
  - Provide on-going monitoring of the impact of interventions on the frequency of these harm events
  - Provide on-going monitoring of harm events to allow identification and response to increasing harm events

### Accreditation (e.g. endorsed by a recognised organisation)

None

### Validation (e.g. scientific and/or clinical validation)

The Haemodialysis Trigger Tool was developed by a local group of haemodialysis nurses and renal consultants. This was then piloted before completion, as described in Fielding et al [1].

### Impact upon the patient pathway

Is this part of patient’s normal care or in addition to this? How much will it alter the patient’s care?

None – haemodialysis treatments occur as normal and data collection occurs retrospectively from medical and nursing records.
The haemodialysis trigger tool is designed to be used by haemodialysis nurses.

A recommended process is:

1. A number of in-patient stays / treatments are selected for audit
2. Each treatment / in-patient stay is examined for the presence of triggers. Triggers are defined by the trigger tool – a list of potential harms.
3. Triggers indicate harm could have happened and prompt further investigation into the treatment.
4. Further investigation examines whether any harm has occurred. Harm is defined as anything:
   - Caused by a medical intervention
   - Resulting in discomfort to the patient
   - That often requires an intervention to rectify
5. Any harm identified is graded as:
   - Temporary requiring intervention
   - Temporary requiring hospitalisation
   - Permanent harm
   - Requiring life sustaining treatment
   - Resulting in death
6. Each patient audited is entered onto a spreadsheet. Collation of all the patient treatments / in-patient stays audited generates:
   1) Harm rate for period / treatments audited
   2) List of harms that occurred for period / treatments audited

Once the monthly process has been adapted to the local area, nurses will require knowledge of the process.

<table>
<thead>
<tr>
<th>Resources needed</th>
<th>Equipment and Consumables</th>
<th>Haemodialysis Trigger Tool Spreadsheet to collate results</th>
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</thead>
<tbody>
<tr>
<td>E.g. Medicines, devices, healthcare professionals</td>
<td>Time</td>
<td>Monitoring 5 treatments takes approximately 20-30 minutes</td>
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<tr>
<td>Training</td>
<td>Licenses</td>
<td>None</td>
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</table>
### How to access the measurement / tool

Available on the KQuIP hub

Contact katie.fielding@nhs.net for further information

### Main strengths of the measurement / tool

- Allows monitoring of adverse events on haemodialysis
- Does not interrupt the patient’s haemodialysis treatment and requires no extra intervention, except nurses to complete the tool.
- The results are relevant to the MDT involved in haemodialysis.

### Main limitations of the measurement / tool

- The trigger tool methodology is recognised to have issues with inter-assessor reliability [2]. It involves a subjective assessment of whether harm has occurred as a consequence of the trigger.
- For this reason trigger tools are not recommended to compare harm rates between units, but can assess the trend of harm events over time using the same pool of assessors [3].
- As data collection occurs retrospectively from documentation, the monitoring is reliant on accurate and complete documentation.

### References

