Cheat sheet for quality tools

### Quality tools – Qualitative data

#### Aim statement

**Specific**
- Measurable
- Aspirational
- Realistic
- Time based

**Aim statement**
Participants at each table think about the problem that they have in their area of work. Depending on the scope of problem it may be suitable for a CPI project.

Participants think of an ‘Aim’ statement for their project.

With the facilitator, the team then decide whose project will be worked on for the rest of the day’s workshop.

**Problem identification and “Aim” statement**
The team write on butchers paper their problem followed by an ‘Aim’ statement which meets the SMART criteria.

#### Flow charting

**Flow charting**
The team write a high level flow chart on butcher’s paper, outlining the current process.

A more detailed level flow is then completed, on the current process (this allows for a common understanding of the problem). It also identifies whether there is a process in place and where there are gaps, variation or areas for concern.

#### Brain storming

**Brain storming**
Participants, write (in silence, to cut through the authority gradient) on ‘post it notes’ all the reasons / causes they think of, that contribute to the problem (one idea per ‘post it note’, as many ‘post it notes’ as needed, ideas need to be specific).

E.g. “Education” although a good idea is not specific enough, it needs to be “education not available to staff”, “education not available to patients” “materials provided for education inadequate” etc.

#### Affinity diagram

**Affinity diagram**
The affinity process follows brain storming. The ‘post it notes’ are all stuck on a flat surface in no particular order. Team members silently begin to read and then arrange the ‘post it notes’ under similar care processes or pathways.

A main category heading is assigned at the end of this process. The resulting chart is called an Affinity Diagram.
**Ishikawa (cause & effect / fishbone) diagram**
Place ‘post it notes’ into categories (team to decide 6-8 category headings) then used to populate Ishikawa diagram (on butchers paper).

This is an inter-relationship diagram.

**Multi voting (1 vote per post it)**

<table>
<thead>
<tr>
<th>Staffing</th>
<th>Transport</th>
<th>Patient factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td>X</td>
<td>X</td>
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</table>

Multi voting (consensus method for prioritising issues)
The number of ‘post it’ votes are counted (removing any absolute double ups), the idea is to remove half of the original ‘post it notes’ (e.g. if there are 42 ‘post it notes’ the first time around you want to end up with 21 ‘post it notes’ for the next round of voting).

To achieve this participants must vote on the (e.g. 42) ‘post it notes’. They are allowed 21 votes each to distribute amongst e.g. 21 ‘post it notes’ of the 42 ‘post it notes’ on the table. This demonstrates what individual participants perceive contributes most to the problem (from their own perspective).

At the end of the voting the ‘post it notes’ are counted, the 0, 1 and 2’s are discarded and the participants get half of the remaining ‘post it notes’ as votes for the next round.

The removed ‘post it notes’ must not be thrown away but kept to one side for review later to ensure that a really important issue was not inadvertently discarded

If there are more than 30 ‘post it notes’ left at this stage then this part of the voting process would be repeated. The remaining ‘post it notes’ would then be counted, again the 0, 1 and 2’s are discarded and the participants get half of the remaining ‘post it notes’ for the weighted voting.

**Weighted voting**

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Weighted voting
In this round if there are 20 ‘post it notes’ left then each participant would have 10 votes each to distribute amongst the ‘post it notes’. The number of votes in this round can be allocated to the most important issue that each participant feels is the main contributor/s to the problem. This is a weighted voting round and the participants can put all of their votes on the single most important issue or between a number of different issues

**Pareto chart**
The remaining ‘post it notes’ (having removed any post it notes with zero votes) are used to complete the Pareto chart. The total on the left hand side should be the number of votes each person had on the last round of voting multiplied by the number of participants voting. If there were 10 votes per person (on the last round of weighted voting) and 6 participants then the number up the left axis would be 60. The number up the right hand side will be 100%.