



## Manchester Triage System (MTS) IT Specification

It is **essential** that any implementation of the Manchester Triage System is **licenced**. <u>Full details of licencing can be found here</u>. You should obtain the licence before commencing any development so that you have access to an MTS lead who can provide you with the up-to-date presentational flowcharts.

This document gives a detailed list of the functionalities that are required for system sign-off. These should guide the development of the software solution. When you are ready for sign-off you should contact your designated MTS lead and they will arrange for the review and approval meeting. Please note that a system will not be signed off if the licencing is not in place.

## **Specification and functionality checklist**

| Minimum requirements for the database |                                                                                          | <b>√</b> |
|---------------------------------------|------------------------------------------------------------------------------------------|----------|
| 1.                                    | Includes hospital identification including multi-site sub-identification                 |          |
| 2.                                    | Includes unique identification of individual triage practitioners                        |          |
| 3.                                    | Ability to view the number of patients categorised into the five triage categories (Red, |          |
|                                       | Orange, Yellow, Green and Blue) over specified time periods i.e. a tracking screen       |          |
| 4.                                    | Ability to effect individualised and team audit                                          |          |

| Mini | mum functionalities for correct IT software application function                                                                                                                                                                                                                                  | ✓ |
|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
| 5.   | At the start of the development process obtain the up-to-date presentational flowcharts from MTG/ALSG (see above).                                                                                                                                                                                |   |
| 6.   | The patient presentation charts are presented in their entirety and accurately within the software application in the order they appear in the system. The algorithms must be requested from MTG/ALSG at the time of software development to ensure that the current version is used (see above). |   |
| 7.   | <ul> <li>Ability to record (both mandatory fields):</li> <li>Initial complaint (obtained at registration or reception)</li> <li>Presenting complaint (this maybe be changed from initial complaint as decided by the triage practitioner)</li> </ul>                                              |   |
| 8.   | After selection of presenting complaint, the corresponding presentation flowchart should appear and include all discriminators in the priority order as shown in the flowcharts                                                                                                                   |   |
| 9.   | <b>One discriminator</b> should be selected and this then results in the automatic determination of the triage priority (colour).                                                                                                                                                                 |   |
|      | There should be no option to select more than one discriminator.                                                                                                                                                                                                                                  |   |
|      | Once the discriminator is selected, there should then be no option to continue through an algorithm i.e. the next step in the process should be activated.                                                                                                                                        |   |
|      | There should be no option in the system to overide the MTS discriminator and associated priority.                                                                                                                                                                                                 |   |





| Mini | mum functionalities for correct IT software application function                                                                                                                                                                                                                                                                                                                                                                         | <b>✓</b> |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| 10.  | Pain assessment both subjective (patient pain assessment) and objective (triage practitioner pain assessment) are both mandatory fields.  The parameters of pain within the pain ruler should be computed as follows:  • Mild pain (green priority 4) pain ruler 1, 2, 3 & 4                                                                                                                                                             |          |
|      | <ul> <li>Mild pair (green priority 4) pair ruler 1, 2, 3 &amp; 4</li> <li>Moderate pain (yellow priority 3) pain ruler 5, 6 &amp; 7</li> <li>Severe pain (orange priority 2) pain ruler 8, 9 &amp; 10</li> </ul>                                                                                                                                                                                                                         |          |
|      | OPTIONAL: Consider adding a field after the pain scores are recorded where the behavioural objectives can be quickly selected to record any variance between subjective and objective pan scores                                                                                                                                                                                                                                         |          |
| 11.  | Once the two pain scores are entered, the objective score will be the default. It should not be possible for the triage practitioner to proceed unless these have been entered.  Mandatory fields                                                                                                                                                                                                                                        |          |
| 12.  | Mandatory fields  Some of the discriminators imply the measurement of one or more clinical parameters.  These must be entered to be able to continue with the triage process within the application.                                                                                                                                                                                                                                     |          |
| 13.  | There should be fields for data entry for: <ul> <li>pain: subjective and objective</li> <li>respiratory rate</li> <li>heart rate</li> <li>temperature</li> <li>blood glucose</li> <li>blood pressure: systolic and diastolic</li> <li>peripheral pulse oximetry</li> <li>peak expiratory flow rate</li> </ul>                                                                                                                            |          |
| 14.  | <ul> <li>conscious level (GCS) and pupil response</li> <li>Visual acuity</li> <li>OPTIONAL: GCS can be sub-divided as Best Verbal, Best Motor and Best Eye Opening scores and then calculated by the software.</li> <li>14a. OPTIONAL: Inclusion of a calculated section for adult observations, e.g.early warning score (EWS) is a possible addition. There could be a trigger for EWS calculated by the</li> </ul>                     |          |
|      | software based on clinical observations. The choice of tool used should be decided in negotiation with end users.  Any calculated observations must be disabled for all paediatric patients < 16 years of age to prevent inacccurate clinical observations being calculated                                                                                                                                                              |          |
| 14.  | 14b. OPTIONAL: Inclusion of an age specific calculated section for paediatric observations, e.g.Paediatric early warning score (PEWS). There could be a trigger for PEWS calculated by the software based on clinical observations. The choice of paediatirc physiological measurement tool used should be decided in negotiation with end users.  Specific age parameters will need to be used as dictated by the users chosen clinical |          |
| 15.  | observation tool 15a. OPTIONAL: Inclusion of a sepsis flag for adults. There could be a trigger for possible sepsis calculated by the software based on clinical observations. This should be in                                                                                                                                                                                                                                         |          |





| Min | imum functionalities for correct IT software application function                                                                                                                                                                                               | ✓ |
|-----|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|     | negotiation with end users. This must be disabled for all paediatric patients < 16 years of age                                                                                                                                                                 |   |
| 15. | 15b. OPTIONAL: Inclusion of a sepsis flag for children. There could be a trigger for possible sepsis calculated by the software based on clinical observations. This should be in negotiation with end users.  Specific age parameters will need to be used.    |   |
| 16. | It should be possible to go back during the triage process and update and/or correct registered variables, without losing data.                                                                                                                                 |   |
| 17. | After completion of a triage episode it is locked and retained and cannot be changed.                                                                                                                                                                           |   |
| 18. | All clinical documentation of the triage episode must contain the following mandatory fields:  • Time of triage                                                                                                                                                 |   |
|     | Identification of the triage practitioner                                                                                                                                                                                                                       |   |
|     | Initial complaint                                                                                                                                                                                                                                               |   |
|     | Presenting complaint                                                                                                                                                                                                                                            |   |
|     | The chosen discriminator                                                                                                                                                                                                                                        |   |
|     | Priority/colour                                                                                                                                                                                                                                                 |   |
|     | The parameters measured within the triage process                                                                                                                                                                                                               |   |
| 19. | It must be possible to repeat triage the same patient.                                                                                                                                                                                                          |   |
| 20. | It is mandatory that the triage practitioner has quick access to the 'Discriminator Dictionary'. This should be provided by for example a 'hover' or a 'right mouse click' on the discriminator or a drop-down menu at the end of a priority row.               |   |
| 21. | If Emergency Care Data Set (ECDS) chief complaint is to be selected during the triage episode this can be built into the system. However any ECDS data collection <b>MUST</b> appear at the end of the triage episode and have no influence on the MTS process. |   |
| 22. | There should be a link to clearly defined patient dispositions mapped to priority. The implementing organisation should have the ability to define and adjust these patient dispositions/streams e.g. Resus, Majors, Urgent Treatment Centre, Primary Care.     |   |
| 23. | Addition of an area of freetext to record essential information                                                                                                                                                                                                 |   |
| 24. | The version under review must have incorporated all current updates and demonstrate they have clear plans in place to meet the terms of the contact relating to roll out of Safety Updates to all users within 28 days and General Updates within 3 months.     |   |