

ODT Workforce Design Project Phase 2

DCD Triage Development – Summary

Purpose of the Paper

The purpose of this paper is to:

- Provide information related to the purpose of the triage model.
- Provide an overview of the benefits of early DCD screening.
- Outline how the exercise will be undertaken.
- Outline the deliverables and timeline of the workstream.

Background

Work by the Northern and Scotland ODS teams has suggested there are potentially significant benefits to be realised through the use of a DCD triage tool. The teams developed a triage model through analysis of local data and discussion with transplant centres, the resulting tool is used by the teams, at point of referral, to assess the suitability of potential DCD donors in a short timeframe.

The teams have reported that this has;

- Increased donor hospital engagement.
- Increased the morale of staff involved in DCD donation.
- Led to an increased number of eligible donor referrals.

However, whilst the Scotland ODS team report that the model does not exclude suitable DCD donors the data collected by the Scotland team is limited. There are too few referrals to make the data suitable for thorough analysis. The triage tool used by the team includes assumptions which have not been formally validated to ensure that potential DCD donors are not unnecessarily excluded. Further data collection using a national approach is required to validate the variables within the tool and determine if a wider utilisation of a refined triage model is beneficial to ODT.

The ODT SMT considered the triage model and agreed in December 2014 to initiate a desktop data collection exercise to validate the Scotland triage model, to determine any factors that could be used to develop a national triage tool and to identify additional factors that may be implemented as exclusions for approach to donor families. Data collection will begin in March 2015.

The aims of an assessment using a national DCD triage tool are to;

- Reduce the number of cases where families are unnecessarily approached.
- Reduce SN-OD attendance at cases where donation has a minimal chance of occurring.
- Ensure appropriate deployment of the SN-OD workforce during peaks of activity.
- Reduce the number of cases where withdrawal of life sustaining treatment is delayed due to the extended time period invoked by the offering of organs.
- Reduce the costs related to SN-OD travel, donor characterisation and assessment for non-proceeding donors.
- Reduce the use of hospital resources when the patient does not proceed to donation.
- Develop a more efficient and credible DCD service in partnership with key stakeholders.

Objectives

The workstream has the following agreed objectives;

- To collect and collate a comprehensive data set representative of DCD referral process and practices throughout the UK.
- To identify any additional contraindications to approaching families for DCD donation.
- To identify any organ specific contraindications to DCD donation.
- To assess whether a formal triage tool would be a feasible means by which to reduce the number of donor families approached unnecessarily without adversely affecting DCD donor numbers.
- To determine the efficiency savings associated with a reduction in non-proceeding donors.
- To develop recommendations and proposals for DCD donation practice.
- To assess the impact of the proposed changes to donor acceptance on the number of proceeding DCD donors.

Methodology

Data collection

The DCD Triage Data Collection form has been designed to capture all relevant information which could be considered in determining DCD donor suitability. The form will be completed and submitted electronically, for all DCD donor referrals, by the Organ Donation Services (ODS) teams.

The data collection exercise is designed to have minimal operational impact on the DCD donation process. The data can be collected at the time of the potential donation or retrospectively as guidance clarifies that all data should be relevant to time and date of referral.

Specialist Nurses and Team Managers are advised that the triage data collected should not be used to supplement any operational decisions regarding facilitation of the DCD donation process.

Inclusion criteria

All potential DCD referrals made to the ODS teams in the UK.

Exclusion Criteria

All potential DBD referrals.

Timeline

It is planned to undertake data collection for a three month period commencing 9th March 2015. Interim analysis of the financial impact will be undertaken at six weekly intervals followed by full analysis on completion of data collection on 9th June 2015. The full data set will be collated and analysed during June and July 2015. A final report with recommendations and proposals will be submitted to ODT SMT and project board in July 2015.

Sample size

Statistical support and data analysis will be provided by the NHSBT statistical team. It is anticipated that in excess of 1200 DCD referrals will be made to ODS teams during the data collection period and that 110-120 of the referrals will proceed to DCD donation.

Data analysis

NHSBT statistics department is providing statistical support with study design and analysis. A multivariate analysis of factors associated with the binary outcome of DCD donation and/or the binary outcome of transplantation of at least one solid organ from a DCD will be performed. All clinical factors on the DCD triage data collection form will be analysed with the aim of identifying criteria for contraindications to DCD donation and/or transplantation. A separate analysis will be performed to evaluate the resources involved in facilitating non-proceeding DCD donors.

Training

A full training programme for the SN-OD workforce will be undertaken in collaboration between the ODS quality leads and the project team. The project team will be accessible to the ODS teams for any necessary clarification or queries related to the exercise.

Communication plans have been developed for the ODS teams, the critical care community, the transplantation community and the NORS service.

Deliverables

The workstream will provide interim reports and updates to project board on a monthly basis.

Financial reports will be produced at six weeks and at the 3 months (the conclusion of the data collection exercise). The interim report at six weeks will provide approximate costs to the organisation of non-proceeding DCD donors and approximate savings that could be achieved through the application of the findings of the triage exercise. The interim report will be based on assumptions of early data analysis and data from the NHSBT potential donor audit.

The final report will include full costs of non proceeding DCD donation over the project and the costs that could be saved through the recommendations proposed in the final report which will be presented to project board and ODT SMT in July 2015.

The report will provide;

- An overview of the workstream.
- A summary of the findings.
- Detailed recommendations for additional contraindications to DCD donation.
- Detailed recommendations for any organ specific contraindications.
- Efficiency savings that will be realised through implementation of recommendations.
- Options appraisal and proposals for implementation.
- Future monitoring recommendations.
- An outline of any further work to improve and evaluate the triage model.