SOP: Assessment of the primary outcome

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Content

Introduction

This Standard Operating Procedure (SOP) is meant as a general guidance on how to assess the primary outcome: hospital-free days within 90 days of randomisation. Details on how to conduct the primary outcome assessment in a blinded manner is described in the 'SOP: Blinding of the primary outcome assessment' (see safeboosc.eu).

Definition of hospital-free days

Hospital-free days are defined as the number of days where the infant is not at the hospital for any appointments, observation, or hospitalised from the date of randomisation and up until 90 days from the randomisation date.

NB: Hospital-free days before randomisation are not included.

When and who should assess the primary outcome

Hospital-free days should be assessed 90 days after randomisation by a blinded assessor (see 'SOP: Blinding of the primary outcome assessment' for details on blinding). At 90 days after randomisation, the principal investigator (PI) will receive an e-mail stating, that it is time to enter data in the electronic Case Report Form (eCRF). For a detailed description on how to enter data in the eCRF see 'SOP: Manual for OpenClinica' at safeboosc.eu.

Assessment and data entry of the primary outcome is divided into two parts: 1) assessment and data entry in the primary outcome log and 2) data transfer to the eCRF. The two parts are described below. Assessment and data entry in the primary outcome log should be performed by the blinded assessor. Since data transfer to the eCRF on the primary outcome solely relies on what is registered in the primary outcome log, this can be done by the unblinded principal investigator.

Assessment of the primary outcome and data entry in the primary outcome log

Data on the primary outcome must be noted in the primary outcome log. A template is available at safeboosc.eu ('Primary outcome log – template' under 'SOPs and templates').

Data included in the primary outcome log

The following data must be registered in the primary outcome log:

- Participant ID: Available in the eCRF and participant inclusion list.
- Method of contact to parents.
- Date of contact.
- Survival status at 90 days after randomisation.
- Hospital-free days according to clinical records.
- Information from parents on additional days in hospital not reported in clinical records.
- Total number of hospital-free days.
- Investigator: Name and signature.

Procedure for assessment of the primary outcome and data entry in the primary outcome log

Hospital-free days and survival status are assessed through review of clinical records and contact to parents.

Assessing 'Survival status'

If the clinical records include definite up-to-date information about survival status (e.g. through a centralised registry), data on survival status will be included from the clinical records. If not, data on survival status will be included based on the available clinical records and contact with the parents. Survival status will be entered in the primary outcome log. It is the responsibility of the principal investigator to determine if the clinical-records include definite up-to-date information on survival status.

NB: This assessment must be performed by the blinded assessor.

Assessing 'Hospital-free days within 90 days of randomisation'

In the primary outcome log, data on the primary outcome (hospital-free days) will be provided in three parts: 'Hospital-free days according to clinical records', 'Information from parents on additional days in hospital not reported in clinical records', and 'Total number of hospital-free days'.

1. Obtaining data on 'Hospital-free days according to clinical records':
    a. All available clinical records from the day of randomisation until 90 days after randomisation are collected.
    b. The number of hospital-free days based only on review of clinical records is noted in the primary outcome log under 'Hospital-free days according to clinical records'.

    NB: It is important that notes in the clinical records revealing group allocation are not presented to the blinded assessor (see 'SOP: Blinding of the primary outcome assessment').

2. Obtaining data on 'Information from parents on additional days in hospital not reported in the clinical records':
    a. The parents will be contacted (e.g. by phone or email) and asked, if their child has been to a hospital at other times than the days in hospital registered in the clinical records.
    b. Information on additional days in hospital not reported in the clinical records is noted in the primary outcome log under 'Information on additional days in hospital not reported in the clinical records'.

    NB: Contact to parents must be done by a blinded assessor (see 'SOP: blinding of the primary outcome assessment').

    NB: If the infant died during the index admission (noted in the clinical records), parents will not need to be contacted. Death during index admission must be registered in the primary outcome log under 'Method of contact to parents'.

3. Total number of hospital-free days:
    a. The information obtained from the parents on additional days in hospital will supplement the information on hospital-free days based on clinical records. These two sources of information will be combined to obtain the total number of hospital-free days within 90 days of randomisation. This will be entered in the primary outcome log under 'Total number of hospital-free days'.

NB: This assessment must be performed by the blinded assessor.

Data transfer to eCRF in OpenClinica

Data from the primary outcome log must be transferred to the eCRF. This can be done by the principal investigator. See 'SOP: Manual for OpenClinica' on safeboosc.eu, for details on how to enter and use the eCRF.

Examples of different scenarios and how to correctly enter data in the primary outcome log

Death during index admission

Example: an infant was randomised but died during the index admission. The infant will have no hospital-free days after randomisation. Thus, the parents should not be contacted.

The primary outcome log should be completed as follows:

- Method of contact to parents: 6 (no contact since the infant died during index admission).
- Survival status: Dead.
- Hospital-free days according to clinical records: 0
- Information from parents on additional days in hospital not reported in clinical records: Not applicable.
- Total number of hospital-free days: 0

Death during readmission

Example: an infant was discharged from the hospital 14 days after randomisation. Afterwards, the infant was readmitted to the initial hospital (a SafeBoosC-IIIv site) 30 days after randomisation. The infant deceased during the readmission. Before the parents left the hospital again, the blinded assessor asked the parents if any additional days in hospital occurred since their infants' index admission and the present readmission (between day 14 and 30 from randomisation). The parents reported that the infant was hospitalised and observed for 24 hours at a small, regional hospital, due to airway infection and respiratory symptoms.

The primary outcome log should be completed as follows:

- Method of contact to parents: 5 (other).
- Survival status: Dead.
- Hospital-free days from randomisation according to clinical records: 15.
- Information from parents on additional days in hospital not reported in clinical records: 1 day in hospital at other hospital.
- Total number of hospital-free days: 15 – 1 = 14 days.

Discrepancies

Discrepancies may arise if the data provided in the clinical records and the data provided by the parents differ. As a first option, the principal investigator must try to solve the discrepancy. If the discrepancy cannot be solved, it will be handled the following way:

- *Hospital-free days*: If there is any discrepancy between the clinical records and information from parents on days in hospital included in the clinical records, the data in the clinical records will be prioritised. If parents provide information on days in hospital not included in the clinical records (e.g. admissions to different hospitals) this data will be included as well.
- *Survival status*: If there is any discrepancy between the information from the parents and the information from the clinical records on survival status, data from the clinical records will be prioritised if they include definite up-to-date information about survival status (e.g. through a centralised registry). If not, information from the parents will be prioritised.