

Appendix 5: How to select records and count referrals of children in Child Health Check and Chart Review databases for analysis of follow-up care for children

The Chart Review collection is useful because it allows the monitoring of follow-up care of children after their CHC. However, in order to trace the follow-up path for each child, it is necessary to match up the chart review (CR) records with CHC records and use consistent terminology and approaches to counting records.

A5.1 Selecting CHC records

Many children have had multiple CHCs. For the purpose of follow-up analysis, only information from the first valid CHC was used for a child who had multiple checks. This is because this is the check at which the majority of diagnoses and referrals were made. Only **the first CHC record for a child** was selected for linking to the Chart Review database.

However, if the first CHC conducted for a child was recorded on a non-standard form and a subsequent CHC for that child was recorded on a standard form, the later CHC was selected instead. This is because non-standard forms did not include information on referrals.

A5.2 Selecting one CR record for each CHC

After a CHC, a child was expected to have an initial and then an exit chart review to assess the follow-up care he or she had received. The ideal scenario was that all children would have an initial and exit CR (together referred to as a 'complete' CR), and that this information could be included in a single CR record for that CHC for that child. However, this was frequently not the case. Some children had only an initial CR. Some children had two 'initial' CR forms sent in for the same CHC. Other children had an exit chart review containing information that was inconsistent with the initial CR form that had been previously processed.

For these reasons, some CHCs were found to have more than one CR record linked to them. The AIHW was advised by DHF that in the event of duplicate CR records, the CR record with the latest CR date or with modifications will be the most correct and up to date.

In accordance with these considerations, the AIHW established a set of selection criteria to select the most appropriate CR records for cases when there were multiple CR records for a CHC for a child. The selection criteria for duplicate CR records are listed below:

- If only the initial CR section of a CR form has been completed, and both the initial and exit CR sections have been completed on another form, then select the form with both initial and exit CR information (this is a complete chart review).

- If both the initial and exit CR sections have been completed in both forms, then select the one with the latest exit CR date.
- If the initial and exit CR dates are the same or missing, select the CR record which was updated most recently. If there is no date of update on the CR form, select the record that was most recently entered in the AIHW database.

A5.3 Linkage between CHC database and CR records and case inclusion for this report

After the CR database was created following the selection process described above, the CR records were linked to the CHC database by HRN and the date of CHC. For the purpose of this report, only children who had a complete chart review after their first CHC were included in the analysis. Children who had only an initial or no chart review following their first CHC were excluded from the linked data set.

A5.4. Counting referrals

A5.4.1 Referrals made at the CHC

'Referrals' given at the CHC were counted using the referral status recorded on the CHC forms, which included only the first CHC for each child. Referrals from subsequent CHCs were counted only if the first CHC was conducted using a non-standard CHC form.

A5.4.2 'Additional' referrals made at CR

There were a number of referrals that were recorded on the CR form, but were not recorded on the corresponding CHC forms. The following possible scenarios could explain these cases:

- A referral given at the CHC was not noted on the CHC forms. The doctor who conducted the CHC wrote a referral letter for the child during the CHC, but this was not recorded on the CHC form.
- When the CHC was recorded on a non-standard form, referral information was recorded in a manner that was not possible to analyse.
- New referrals were made at the initial CR, according to children's need, which were not recorded on their CHC forms.
- A subsequent referral was made by the clinician to whom the child had a referral from the CHC.

In all of the above situations, referrals were considered as '**additional referrals**' given at CR.

A5.5 Creating a ‘master file’ with information from all CRs for a child

A primary aim of the follow-up collections was to determine the extent of follow-up and outstanding referrals for each child at the end of the 2-year initiative. Sometimes referrals were given at a child’s first CHC, but the child was not seen for the referred condition until some point after the exit chart review was conducted. The child’s visit to the service may have been recorded in chart reviews following their subsequent CHCs.

Therefore to capture the most current information about referral and follow-up status for each child, a **Chart Review ‘master file’ for each child** who had a complete chart review after their first CHC was created containing information from all CR records for that child – including CRs conducted after their later CHCs. The process for creating this file was to follow the above CR selection rules to select the most correct CR record for each CHC, and then examine these records collectively, to identify the maximum number of services provided to those children.

A5.6 Determining follow-up status for children with referrals

A referral given to a child at any point in the CHCI process was expected to be followed up. That is, the child was expected to be ‘seen’ by the service to which they were referred. Based on whether or not it was followed up, a referral could be categorised in one of two ways: ‘seen’, or ‘outstanding’.

After identifying the referral status and creating a master CR file, children with referrals were linked to the master CR file by HRN and type of referral. If at any point after a child was referred to a service, a CR form reports that the child has visited that service for their condition, that child is regarded as ‘**seen**’ for that referral.

On other hand, any referral to a service at which a child has not yet been seen, according to the most current information available, was regarded as an ‘**outstanding**’ referral.

There were two exceptions to the definition of outstanding referral:

- A child had not been seen for a particular referral, but the CR clinician determined that follow-up was no longer necessary (for instance, if a condition resolves of its own accord). In that case, this referral is not considered ‘outstanding’ but was defined as ‘no longer require follow-up’.
- Children received referrals at their CHC, but these referrals were not mentioned in their chart reviews. Therefore, it was not possible to determine the follow-up status of their referrals.

A5.7 Determining whether further action is required for each child

As well as information on a child's health conditions, referrals and visits to services, a CR form also included a question about whether further action was required for that child. Referrals requiring further action included the following situations:

- referrals that were made at CHC that are outstanding
- additional referrals that were made at CR which are outstanding
- children still need to be followed up after they were seen by the clinician who they were referred.