

Business Rules: Capitation-based Funding

Version 3.8

Published in November 2004 by the
Ministry of Health
Manatū Hauora
PO Box 5013, Wellington, New Zealand

ISBN 0-478-25759-7
HP 3804

This document is available on the Ministry of Health's website:
<http://www.moh.govt.nz>



MANATŪ HAUORA

Revision History

Date	Version	Description	Author
10 May 2002	3.22	Copy of 3.2.1 from Pilot Added note in Calculate Payment section regarding ability to use other variables as required by funding formulae.	Jon Foley
24 July 2002	3.3	Changed Health Benefits to HealthPAC. Changed business rules regarding HUHC validation and date of last consultation. Added information concerning conditions under which adjustments may be made. Added information to the duplicate matching protocol.	Jon Foley
12 August 2002	3.3.1	Modify 80% Address threshold check to use both Address fields 1 and 2 in the check.	Donna Harrison
21 August 2002	3.3.2	Corrected for implementation of CBF Production Release 1.	Subhasish Dutta
14 October 2002	3.3.3	Changes/clarifications for CBF Production Release 2: <ul style="list-style-type: none"> Note on Date of Register Submission. Organisation payee number in register must mandatorily have associated Payment Reference Data exist in HPAC systems. Practice that is exception must appear in organisation register. 	Subhasish Dutta
1 December 2003	3.4	Changes for CBF Release 4, on account of DAA16 - E over R Deduplication Rules : <ul style="list-style-type: none"> Section 3.4.3 Duplicate Matching, replaced. All reference to PCOs removed as per following recommendation in "DAA16 - Enrolment Business Rules (E over R)2.doc" : <p>Note: The CBF system does not include any PCOs, not is there any intention to include PCOs in the future. Hence, it is recommended that reference to PCOs is dropped from the business rules altogether.</p> <p>Changes to incorporate Version 16.2, Variation 1 of the DHB-PHO Service Agreement</p>	Subhasish Dutta
19 March 2004	3.5	Change for CBF Release 3.5, on account of WR684: <ul style="list-style-type: none"> Section 3.4.1.1 Check CSC Details 	Ronil Bhindi
3 May 2004	3.6	Changes for CBF Release 6, on account of DAA24 – Care Plus	Lynda Kamstra
26 August 2004	3.7	Changes for PMO4 Release 7. New Capitation Detailed Extract Report for Org	Philippa Burcher
October 2004	3.8	New version number to take account of PSAAP agreeing changes made in versions 3.4, 3.5, 3.6 and 3.7	Kate Garland

Contents

Revision History	iii
1 Abstract	1
2 Pre-System Business Rules	1
2.1 PHO business rules	1
3 CBF Business Rules	2
3.1 Pre-process	2
3.2 Load registers	2
3.3 External register validation	5
3.4 Internal register validation	6
3.5 Post-validation process	9

1 Abstract

Capitation Based Funding (CBF) is the funding of primary health care based on number of registered individuals being cared for rather than individual visits like the existing fee for service style of funding. CBF is aimed at encouraging proactive health care in the community.

This document is a summary of the business rules for CBF. These rules are fully documented in CBF's Detailed Requirements Use Cases.

This document should be read in conjunction with the following CBF documentation:

- Message Standard Definition for Electronic Registers (HL7 Data Specification).

2 Pre-System Business Rules

2.1 PHO business rules

Most rules are CBF-wide, however rules around registration and enrolment differ slightly between a Primary Care Organisation and a Primary Health Organisation (PHO).

2.1.1 PHO rules

A PHO can only claim via the Capitation Based Funding system once a contract has been signed and the details of this contract are set up in the Ministry of Health's Contract Management System (CMS).

A PHO cannot submit a register until a CBF mailbox is set up for them on HealthPAC's claims portal.

A PHO must have had contact (consultation or registration/enrolment) with an individual within the last three years as of the date of register submission. If this individual contact rule is not met, the individual should not be included in the register.

A practice, practitioner or individual cannot be added to a register during a capitation quarter. They must be included in the initial (or the replacement if required) register. For information on the time available for submission and resubmission refer to sections 3.2.1, 3.2.2.3 and 3.2.2.4.

2.1.2 PHO registration

PHOs are responsible to ensure that only those individuals who are currently 'registered' with their contracted practitioners are included in the registers sent. The precise rules for determining a 'registered' individual are determined by the PHO.

2.1.3 PHO registration/enrolment

PHOs are responsible to ensure that only those people who are currently registered or enrolled with their primary health providers are included in the registers sent. An enrolled individual is one who has made an informed choice of a PHO or provider as his/her first level services home. The PHO or provider will retain documentation of the individual's choice in the form of a signed enrolment form. The PHO or provider must enrol all its registered people at the next point of contact with the individual, or within three years of the provider joining a PHO.

3 CBF Business Rules

These business rules are integrated into the CBF system at HealthPAC (formerly Health Benefits). For reference purposes, the business rules that follow are detailed within the sub-heading of the detailed requirements use case they reside in.

3.1 Pre-process

3.1.1 Send individual registers

Registers can only be submitted to a HealthPAC Claim Portal CBF mailbox.

Each PHO will receive an acknowledgement message for all registers received by HealthPAC whether they are accepted or rejected. Acknowledgement of receipt does not necessarily mean the file will be accepted. All registers that arrive at a CBF mailbox are processed as full registers.

Any register received in a CBF mailbox during the allowed period for register submission will replace any other register previously received from that same organisation in that same period.

3.2 Load registers

During load into the CBF system registers undergo various file and data checks.

Mandatory fields and their data definitions are outlined in the HL7 Message Standard Definition. A summary follows:

- **Mandatory**
 - Individual ID (internal unique identifier, this is not an NHI)
 - Name (first name, last name)
 - Gender
 - Ethnicity (this is mandatory, but invalid values are accepted)
 - Date of birth
 - Date of registration/enrolment
 - Registration status (must be 'E' or 'R')

- PHO name
 - PHO ID ('perorg id' – this must validate against CMS)
 - Practice ID (internal identifier for PHO. For payment purposes organisation's lead DHB is used)
 - Organisation payee number
 - Payment reference data in CMS corresponding to the organisation payee number
 - Practice set up as an exception must be present in register.
- **Important notes:**
 - CSC and HUHC details are required where applicable. A record with HUHC details must also have an NHI to allow card validation.
 - NHI must be supplied where available. The register must have 70 percent or more records with NHIs to be processed.
 - Residential address is not mandatory, but must meet contractual thresholds (80 percent).

3.2.1 Save and parse individual registers

Registers will be rejected and no further processing will take place where any of the following conditions occur:

- Register format does not meet HL7 Message Standard Definition requirements for CBF registers.
- Initial register is not received at least one full month before first day of payment period.
- Replacement register (if required) is not received within three business days of receipt of error message from HealthPAC.

Where a register rejects, the system will create an acknowledgement message which outlines reason for load failure.

Where a register loads, the CBF system will create a confirmatory acknowledgement message for the organisation. Additional information on the PHO ID, Register ID and counts on successful and rejected individuals, practitioners and practices will be provided subsequently on completion of the necessary processing.

3.2.2 Clean individual registers

The clean individual register phase runs as a part of the message load and checks submitted CBF register data against Message Standard Definition data rules.

3.2.2.1 Register rejects

Registers will be rejected and no further processing will occur where any of the following conditions occur:

- Message header segment is missing or has invalid mandatory data.
- PHO details segment is missing or invalid mandatory data.
- Message has no practice details segments.
- Population of Address Line 1 with Address Line 2 (residential address) are less than 80 percent.
- Population of NHI is less than 70 percent.

3.2.2.2 Register accepts, details reject

Where the above register requirements are met, a register is accepted for detail checking.

Details may be rejected in the following ways.

Practice rejection

A register will still process (unless a new one replaces it within the allowed time), however a practice and all its corresponding practitioner and individual records will be rejected where any of the following conditions occur:

- Practice details segment exists, but contains invalid mandatory data.

Individual rejection

A register will still process (unless a new one replaces it within the allowed time), however an individual record will be rejected where any of the following conditions occur:

- Either individual identification or individual register details segments are missing or contain invalid mandatory data.

3.2.2.3 Register resubmission

Where an error acknowledgement message is returned to the PHO from the Save, Parse and Cleanse Individual Registers use case, the PHO has three business days from receipt of the error message to resubmit a register. This can be performed as many times as necessary within the three business days.

3.2.2.4 Cleansed register acknowledgement

At the end of the register resubmission period (five business days after the initial submission close off date), a register is marked as closed for resubmission and begins validation processing.

An error acknowledgement is sent to the PHO, if required, with details of the rejected segments with the reason for rejection.

3.3 External register validation

3.3.1 Assign geo-codes

Addresses are validated so that deprivation data and funding DHBs can be derived from the individual data.

3.3.1.1 Check geo-codes

Geo-coding will be required, if:

- a new individual record is submitted without one or more of the necessary geo-code data fields **or**
- a new or existing individual, with all of the required geo-code data, but with an Uncertainty Code > 4.

Geo-coding is not required, if:

- for both new and existing individuals, the record's address and geo-code data contain valid values and the Uncertainty Code is <= 4.

3.3.1.2 Geo-code details found

Where the individual residential address is found, each individual record will be geo-coded with the following data:

- latitude
- longitude
- NZDep quintile (where 1 is equal to deciles 1 and 2)
- DHB name
- uncertainty code
- meshblock.

3.3.1.3 Geo-code details not found

'Place' geo-coding will occur in the occasional instance where a street address is not found, but the suburb or city is. Where the 'place' geo-code details are found (uncertainty code = '8' or '9'), the DHB will be assigned based on that data. In this case the deprivation quintile will be set to '0'.

Where 'place' geo-code details are not found (uncertainty code = '10'), the DHB will be assigned based on the PHO's contracted lead DHB and the deprivation quintile will be set to '0'.

Note: This is not provided by point of contact geo-coding but is provided by batch geo-coding.

3.3.2 Validate NHI details

Any new individual record or individual record with a changed NHI must be validated against NZHIS data.

Any individual record with an unchanged NHI, surname, given names, date of birth and gender will remain as is.

3.3.2.1 Details found

Where the individual NHI is found assign primary NHI as returned by NZHIS.

When verifying NHI at NZHIS the date of death will be returned (if present). If date of death is present the individual record will not be removed from the current register however, the individual will not be accepted on any subsequent registers.

3.4 Internal register validation

Note: Date of register submission is the date on which registers begin processing by HealthPAC. This date is fixed for each quarter, and will be communicated to PHOs.

3.4.1 Validate CSC details

All individual records with CSC number and expiry date will be checked against CSC reference data.

3.4.1.1 Check CSC details

For each patient record that contains a CSC Number, the system will validate as follows.

It checks the CSC and the Caregiver reference data for the following:

- Match of Card number and where,
- Expiry Date on the CSC Card reference data is not more than 4 months prior to the date of register submission and the
- Card Status is not (2) "declined" or (6) "cancelled"

Where found the patient record is enriched with validated CSC number and expiry date causing this use case to end.

If:

Not found then search on the following fields:

- CSC_Caregiver:DOB
- CSC_Caregiver:First_Name
- CSC_Caregiver:Surname
- Expiry Date on the CSC Card reference data is not more than 4 months prior to the date of register submission and the
- Card Status is not (2) "declined" or (6) "cancelled"

Else:

Check the CSC Card and Dependent reference data for the following:

- Match of Card number and where
- Expiry date on the CSC Card reference data is not more than 4 months prior to the date of register submission and the
- Card status is not (2) "declined" or (6) "cancelled"

Where found the patient record is enriched with validated CSC number and expiry date causing this use case to end.

Else If:

• Not found then search on the following additional fields:

- CSC_Dependent:DOB
- CSC_Dependent:First_Name
- CSC_Dependent:Surname
- Expiry Date on the CSC Card reference data is not more than 4 months prior to the date of register submission and the
- Card Status is not (2) "declined" or (6) "cancelled"

Where found the patient record is enriched with validated CSC number and expiry date causing this use case to end.

Else If:

Where a CSC number is not found, when an error is returned to the Organisation that no CSC number exists for this patient. This use case ends when the patient record is marked as a non-CSC holder.

3.4.2 Validate HUHC details

All individual records with NHI number, HUHC number, and expiry date will be checked against HUHC reference data and NHI database.

3.4.2.1 Check HUHC details

Where the HUHC number associated with NHI number is found, its expiry date is not more than one month prior to date of register submission and the card is not declined or cancelled, then mark the individual record as a HUHC holder.

Enrich individual record with validated HUHC number and expiry date.

Where an HUHC number is found with a matching DOB and gender, its expiry date is not more than one month prior to date of register submission and the card is not declined or cancelled, then mark the individual record as a HUHC holder.

Enrich individual record with validated HUHC number and expiry date.

3.4.3 Duplicate matching

Once reference validations are complete (NHI, HUHC, CSC, geo-code), all individual records will be cross matched to ensure that an individual record does not exist on more than one register.

Matching will be performed on firstly on primary NHI and then on individual name (first given and surname) and date of birth.

- a) Where a duplicate involves two or more PHOs where the PHOs have recorded a person as registered (the registration status boxes are marked 'R'), the person's record is assigned to the PHO with the most recent date of last consultation. If the date of last consultation on one PHO register is blank, the PHO with the date of last consultation completed will be assigned the person. If the dates of last consultation are the same (or both/all blank), the person is assigned to the organisation with the most recent date of registration.
- b) Where a duplicate involves two or more PHOs where both PHOs have recorded a person as enrolled (the registration status boxes are marked 'E'), the person's record is assigned to the PHO with the most recent date of enrolment. If the dates of enrolment are the same, the person is assigned to the organisation with the most recent date of last consultation. If the date of the last consultation on one PHO register is blank, the PHO with the date of last consultation completed will be assigned the individual.
- c) Where the duplicate involves two or more PHOs where one organisation has recorded the person as enrolled (the registration status box is marked as 'E') and the other organisation(s) has recorded the person as registered (the registration status box is marked as 'R'), the person's record is assigned to the PHO where the person is enrolled.

In the extremely few cases, where the above rules do not resolve duplicates, the individual will be assigned to the PHO that is obtained first by the system.

3.5 Post-validation process

3.5.1 Error messaging

Messages will be sent to the PHO where any data received by HealthPAC has been changed via validation processes.

These error messages are documented in the HL7 Message Standard Definition.

3.5.2 Register processing statistics report

A report summarising the results of register processing on completion will be provided. This report will include:

- message control ID (register identifier) of
- PHO identifier
- payment period start date
- total number of practices
- total number of practitioners
- total number of individuals
- counts of error occurrences.

3.5.3 Calculate payment

Payment is derived from the sum of each individual category, multiplied by their corresponding formula's category payment values.

Each individual record will be assigned an individual category based on a combination of the following sub-categories:

3.5.3.1 Age Group

Age is calculated by difference between first day of payment quarter and date of birth. Age will then fall into one of six groups (0–4, 5–14, 15–24, 25–44, 45–64, 65–120).

3.5.3.2 Gender

Individual gender is either male, female or unknown. A individual with an unknown gender will be assigned the male value.

3.5.3.3 CSC status

Individual CSC status is set to either cardholder or non-cardholder.

3.5.3.4 HUHC status

Individual HUHC status is set to either cardholder or non-cardholder.

3.5.3.5 Quintile

Individual quintile (1–5) is derived from validated geo-code data or set to '0' if not found. Those coded '0' will be counted in the '< quintile 5' deprivation payment category.

3.5.3.6 Ethnicity

Individual ethnicity is derived from the ethnicity fields in the individual register. If any of these fields is Māori or Pacific Island (codes 21, 30–37), the person is coded 'Maori/Pacific Island'. Otherwise, the record is coded as 'non Maori Pacific Island, and this applies to invalid values as well'.

3.5.4 Calculate Care Plus Payment

Payment for Care Plus is derived by calculating the total number of patients eligible for Care Plus by category, subtracting the number of patients who have a HUHC and then comparing this total with the number of patients who have enrolled for Care Plus.

Each patient record will be assigned a patient category based on a combination of the following sub-categories:

3.5.4.1 Age Group

Age is calculated by difference between first day of payment quarter and date of birth. Age will then fall into one of six groups (0 to 4, 5 to 14, 15 to 24, 25 to 44, 45 to 64, 65+).

3.5.4.2 Gender

Patient gender is either Male, or Female. A patient with an Unknown gender will be assigned the male value.

3.5.4.3 Ethnicity

Patient ethnicity is derived from the ethnicity fields in the patient register. If any of these fields is Maori or Pacific Island (codes 21, 30 – 37), the person is coded 'Maori/Pacific Island.' Otherwise, the record is coded as 'non Maori Pacific Island, and this applies to invalid values as well.'

3.5.4.4 Quintile

Patient quintile (1-5) is derived from validated geo-code data or set to '0' if not found. Those coded '0' will be counted in the '< quintile 5' deprivation payment category. For Care Plus only 2 categories are used: <5 and = 5

3.5.5 Funding DHB

The organisation's lead DHB account will be debited for all services associated with each register. The population-based DHB assignment information will be retained for statistical use only.

3.5.6 Make adjustments

Adjustments will be made as simple debit and credit adjustments. Whenever one type of adjustment is made to a PHO, a balancing adjustment must be made from a lead DHB or the Ministry of Health.

Adjustments may be initiated by a lead DHB if the PHO fails to submit part or all of its register on time. The first time the lead DHB applies a penalty because a PHO fails to submit all or part of its register on time, the PHO will receive the same total funding for that part of the register not submitted on time as applied in the previous quarter less a penalty (up to 10% of the estimated management fee payment due for that part of the register not submitted on time; up to 5% if the lead DHB determines that the PHO is only partially responsible for the omission; no deduction if the DHB determine that the omission is not the fault of the PHO). Payment for that part of the register submitted on time will be the total amount due under the standard Capitation Based Funding rules (including the total management fee payable). All adjustments must be received in writing and signed on DHB letterhead to the HealthPAC CBF Administrator and copied to the affected PHO and to the Ministry of Health. If no such adjustment notification is received, no adjustment can be applied.

Any subsequent time a PHOs fails to submit all or part of its register on time, the PHO will receive the same capitation amount for that part of the register not submitted on time as applied in the previous quarter less a penalty (up to 10% of total capitation funding if the lead DHB determine the omission is due to the PHO; up to 5% if the lead DHB determine that the PHO is only partially responsible for the omission; no deduction if the DHB determine that the omission is not the fault of the PHO). Payment for that part of the register submitted on time will be the capitation amount due under the standard Capitation Based Funding rules. All adjustments must be received in writing and signed on DHB letterhead to the HealthPAC CBF Administrator and copied to the affected PHO and to the Ministry of Health. If no such adjustment notification is received, no adjustment can be applied.

Additionally a lead DHB may initiate Adjustments if the PHO fails to comply with reporting requirements. The amount of the penalty can be up to 10% of the total management fee payment due and is determined by the DHB with any adjustment to be notified in writing to the HealthPAC CBF Administrator and copied to the affected PHO and to the Ministry of Health. If no such adjustment notification is received, no adjustment can be applied."

3.5.7 Fee for service wash-ups

Where a GMS fee for service item is paid and both the individual and date of service match a CBF register's payable individual record, the fee for service item's amount paid will be deducted from the next available CBF payment for the corresponding PHO.

Fee for service deductions will be reported to the PHO.

3.5.8 Create reports

Reports will be created for informative purposes for CBF users.

3.5.8.1 PHO reports

- Capitation summary report
- Register processing report
- Buyer created tax invoice
- Fee for service adjustments report
- HL7 output (including error reports)
- Capitation Detailed Extract Report.

3.5.8.2 DHB and Ministry of Health reports

- Capitation payment summary report
- Fee for service adjustments report (summary).

3.5.9 Make payment

Payment is made three times each quarter. These payments are on the 15th day (or next business day) of each month in the payment quarter.

The CBF register payment will be split into three even amounts.

Any adjustments will be applied to the next available payment date at the time of commit.

Any fee for service wash up amounts will be applied to the next available payment date at the time of commit.

A negative balance will result in no payment being made and that balance carrying over until the next payment.