



THE CLINICAL TERMS VERSION 3 (THE READ CODES)

INCORPORATION OF EARLIER VERSIONS OF THE READ CODES (THE SUPERSET)

APRIL 2008

Purpose of this document

This document is one of a series that, taken together, describe the contents, structure and function of Clinical Terms Version 3 (The Read Codes).

This introduction is intended to provide information on Clinical Terms Version 3. It is also a guide to the other available documents each of which is updated independently. For this reason, different chapters may have different version numbers.

INFORMATION

Distribution	On request
Author	UK Terminology Centre
Further Copies From	UK Terminology Centre Helpdesk Service Support Unit Prospect House, Floor 2 Fishing Line Road Redditch Worcestershire B97 6EW Tel: +44 (0) 1392 206248 Fax: +44 (0) 1392 206945 E-mail: datastandards@nhs.net Internet: http://www.connectingforhealth.nhs.uk/systemsandservices/data/readcodes
Date of Issue	April 2008
Reference Number	171v1.0

Table of Contents

Table of Contents	3
1. Introduction	4
2. What is the Need to Incorporate Earlier Read Code Versions into CTV3?	4
3. Incorporation of 4 Byte and Version 2 into CTV3	5
3.1 Incorporation of 4 Byte Read Codes into CTV3	5
3.2 Incorporation of Version 2 Read Codes into CTV3	5
3.3 Incorporation of Read Terms from Earlier Versions	6
3.4 Incorporation of Read Concepts from Earlier Versions	7
3.5 Incorporation of Version 2 Drugs and Appliances into CTV3	8
4. Consequences for CTV3 Users	9
4.1 Read Codes made Extinct	9
4.2 Description Changes	12
5. Term Correction	12
6. Summary	12
Appendix A	13
A.1 Changes in CTV3 File Structure	13
A.2 File Release Format of the Term Mapping File, the Redundant Codes Mapping File and the Description Change File	14
A.3 Where should Users go for Further Advice?	19
Appendix B	19
B.1 Implications for Users of CTV3 prior to March 1998	19
B.2 Users of CTV3 Releases March 1997 or earlier	20
B.3 Users of the CTV3 October 1997 Release	23
B.4 Where Should Users go for Further Advice?	24
B.5 Loading the CTV3 March 1998 Release	25

1. Introduction

This document is a summary of the principles relating to the incorporation of the codes, terms and concepts of the earlier versions of the Read Codes (4-Byte Set and 5-Byte Set) into the October 1997 and subsequent releases of Clinical terms Version 3 (The Read Codes) – CTV3 – thus making it a Superset of all versions.

Appendices are included detailing changes to existing files, namely the *Concept* and *Descriptions* files and explanations of the new files necessary to implement the Superset. The *Redundant Codes Mapping file* (Previously known as the *Persistent – redundant file*) is also described for completeness; however, this file has been available since the initial release of CTV3 and it is an important file irrespective of recent Superset developments.

The reader is advised to refer to the document entitled “Clinical Terms Version 3 – Mapping Change: Description Change File”.

2. What is the Need to Incorporate Earlier Read Code Versions into CTV3?

During 1996, following independent advice and considerable discussion amongst a sample group of users and suppliers, it was considered necessary that CTV3 should be enhanced to become a true ‘Superset’ incorporating all the material contained in previous versions of Read (namely, 4 Byte and Version 2). The principal reasons for this conclusion were:

- To better support migration from earlier versions of Read to CTV3
- To better support analysis of datasets containing data from a variety of versions of Read
- To improve support for messaging using Read

The CTV3 October 1997 data satisfies these requirements and contains within it:

- All codes from the 4 Byte set and Version 2
- All terms from the 4 Byte set and Version 2*
- All concepts from the 4 Byte set and Version 2

**All terms relating to the September 1997 releases of the 4 Byte set and Version 2 have been included and all subsequent release updates. Future releases of CTV3 will continue to be updated to contain all new additions to*

the 4 Byte set and Version 2. However, the CTV3 October 1997 release does not include all previous terms from the 4 Byte set and Version 2 that were changed or removed in previous releases. Exact 'Drug' term strings have not been incorporated into CTV3 (see section 3.5).

In many cases, moving to CTV3 will benefit analysis and reporting of old codes because:

- Redundancy in the 4 Byte set and Version 2 is resolved by the use of the Redundant Codes Mapping file
- The CTV3 hierarchy is a more complete classification because of its potentially unlimited depth and flexible structure
- The CTV3 hierarchy is pure sub-type hierarchy, e.g. 'Not constipated' is not found under 'Constipation' (as in earlier versions)

3. Incorporation of 4 Byte and Version 2 into CTV3

This is managed in slightly different ways for each of the earlier versions.

3.1 Incorporation of 4 Byte Read Codes into CTV3

CTV3 incorporates all 4 Byte codes and terms. All 4 Byte Read Codes are reached via the **Redundant Codes Mapping file**. The 4 Byte Read Code has had a preceding dot added and placed in this file against a persisting CTV3 Read Code.

Example:

	4 Byte Read Code	Redundant V 3 Read Code	Persisting V 3 Read Code
Bronchoscopy	3624	.3624	X00qf
Hysterectomy	7CB.	.7CB.	X403B

3.2 Incorporation of Version 2 Read Codes into CTV3

Version 2 Read codes are integrated into CTV3 in two ways. Most codes are integrated directly.

Example:

	V 2 Read Code	V 3 Read Code
Leukoplakia of cervix	K552.	K552.
Hypertensive heart disease	G21..	G21..

Therefore, in this circumstance the Version 2 codes are re-used in CTV3.

The remaining codes are integrated indirectly via the Redundant Codes Mapping file in a similar fashion to the 4 Byte set (see Section 3.1) where duplication of concepts occurred in Version 2.

Example:

Tuberculous meningitis has two Read Codes in Version 2. In CTV3 it has only one current/optional code (F004.)

	V 2 Read Code	V 3 Read Code
Meningitis – tuberculous	F004.	F004.
Tuberculous meningitis	A130.	F004.

The other code (A130.) is reached via the *Redundant Codes Mapping file* (see Appendix A.2.2).

There are approximately 25 000 entries in the *Redundant Codes Mapping file*.

3.3 Incorporation of Read Terms from Earlier Versions

The following files generate the appropriate term identifier in CTV3 from the Read Code and term derived from the earlier Read version.

4 Byte Mapping file

Read Code* | Term | CTV3 Term_id

Example:

F111. | Bacterial meningitis | Y009Y

*The Read Code will be in the same format as the 4 Byte release, i.e. with a trailing dot. In CTV3 this trailing dot is removed and replaced by a preceding dot. This is to clearly distinguish 4 Byte Read Codes from Version 2 Read Codes (as the earlier version Read Codes in the 4-Byte Set and 5-Byte Set do not usually label the same concept in both versions).

Version 2 Mapping file

Read Code | Term Code | Term_long_V2** | CTV3 Term_id

Example:

A1201 | 00 | Tuberculous empyema | Y105V

** The term of the longest form, i.e. 30, 50 or 198 characters as appropriate.

In the case of drugs please see section 3.5.

3.4 Incorporation of Read Concepts from Earlier Versions

The hierarchy depth within the 4 Byte and Version 2 code sets is limited by the actual length of the Read Code (4 levels in the 4-Byte Set and 5 levels in the 5-Byte Set). Therefore, in order to incorporate additional detail in the past, some terms have been added to concepts that are not strictly synonymous (so called 'synonym impurity'). CTV3 does not have these limitations because the hierarchy is represented as a set of parent-child links with potentially unlimited depth. When incorporating these mixed, impure, concepts from earlier versions, they have been given a concept status of **Extinct** and their complex meaning captured in a new preferred term. The ampersand (&) is used in the sense of 'including'.

Example:

In the 4 Byte set 'Corneal operation' has an impure synonym of 'Keratoplasty':

4 Byte Set

Corneal operation [737.]

Keratoplasty (impure synonym)

In CTV3, this 4 Byte Read Code **[737.]** has been made redundant to an extinct persisting code [XE0Kg]. The true meaning of the concept is expressed by an unambiguous new preferred term 'Corneal operation (& keratoplasty)'.

CTV3

Corneal operation [X00wX]

Keratoplasty [X00Wa]

Corneal operation (& keratoplasty) [XE0Kg] = [.737.]

The terms 'Corneal operation' and 'Keratoplasty' are also attached to other concepts which express their pure individual meanings. This means that extinct concepts are unusual in that some synonyms may also exist as preferred terms to other (current or optional) Read Codes (see Appendix A.2). These extinct concepts have been inserted within the CTV3 hierarchy as closely as possible in accordance with the pure 'type of' structure. However, the hierarchical positions of extinct codes are often a compromise because of their ambiguous meaning and some can only be sensibly placed at a relatively high level within the thesaurus.

Example:

In version 2 the disorder '*Whooping cough*' has an impure synonym of the organism *Bordetella*:

Read Code	Term_id	V3 Term	Status
A33..	00	Whooping cough	Pref
A33..	11	<i>Bordetella</i>	Syn

In CTV3, this ambiguous code has been made extinct because of this synonym impurity. It has been given a parent of:

XaBEy Extinct cross type infection and organism

Extinct codes should not be made available for user choice within a CTV3 system for data entry, **but attention has been given to their placement for analysis.**

Codes from other versions may be analysed directly just as in their native context, or else in combination with other concepts within CTV3. However, it is clear that any analysis across Read versions will need to be carefully thought through. The recording of information using a particular version of Read is influenced by the choices available at that particular time and given different choices, the user may have selected different concepts.

3.5 Incorporation of Version 2 Drugs and Appliances into CTV3

Due to the cessation of monthly maintenance of the CTV3 DAAD in July 2006 it is not recommended to migrate systems from earlier versions of Read drugs to CTV3 drugs. The Version 2 in CTV3 format data is not intended for use in live Clinical Systems and is produced merely to satisfy the Superset principle.

All codes and concepts from the Version 2 Drug and Appliance Dictionary have also been included in the full CTV3 release (herein referred to as the *Integrated release*). The concept match between Version 2 of the Read Codes and CTV3 is exact without the synonymy problems found in the clinical chapters of the Thesaurus. Furthermore, most changes between the Version

2 and CTV3 Drug and Appliance terms are difference in text case and plurality, which (in the case of the Drug and Appliance Dictionary) are not considered significant.

Example:

'PARACETAMOL 500mg tablets' (Version 2)

Is considered to be the same as

'Paracetamol 500mg tablet' (CTV3)

For these reasons, the exact Drug and Appliance term strings were not incorporated into CTV3 up to (and including) the October 2006 release.

However further to the cessation of maintenance of the monthly CTV3 Drug and Appliance Dictionary in July 2006, all six-monthly Clinical Terms Version 3 integrated releases from April 2007 onwards contain a simple conversion of Version 2 DAAD terms to CTV3 file format, auto-populated to satisfy the "Superset" principle.

In terms of Editorial Policy this means from the April 2007 integrated releases onwards the format for all newly added terms will follow Version 2 Editorial Policy and utilise capitalisation for name and plurality for dose form (as per Version 2 above).

See 174(The_Drug_and_Appliance_Dictionary) for more information

4. Consequences for CTV3 Users

Users who have used CTV3 releases prior to October 1997 should consult NHS Connecting for Health before loading the October 1997 or March 1998 releases.

4.1 Read Codes made Extinct

During the early stages of the Clinical Terms Project, all Version 2 codes were integrated into CTV3 on the basis of informed opinion as to their intended meanings. Having considered the requirements for a Superset approach, some of the initial integration decisions were no longer appropriate since they did not precisely identify or allow for any inherent ambiguities in Version 2.

As part of the Superset development, such codes will have their ambiguous meaning restored, as derived from their source version and be made **extinct**. In addition, new codes have been generated (if not already existing) to represent separately each of the disparate meanings.

Whilst this strategy has the desired effect of preserving the composite concept, it does have the consequence of changing the meaning of some released CTV3 codes, i.e. those that have original Version 2 codes and which are ambiguous or which have a different meaning in Version 2.

Example:

G30.. was used to represent 'Acute myocardial infarction' in CTV3, but within Version 2 this same code has the impure synonym 'Cardiac rupture after acute myocardial infarction'. As part of the Superset work the ambiguity of this concept has been identified by rendering the code G30.. extinct, within CTV3 giving it a new preferred term and repositioning it in the hierarchy. The pure concept 'Acute myocardial infarction' has been retained within its correct position within the CTV3 hierarchy with the same terms attached, but has been allocated a new Read Code XE0Uh. This is illustrated below:

March 1997 CTV3 release

Read Code	Term_id	V3 Term	Status
G30..	Y202N	Acute myocardial infarction	Pref
G30..	Y202P	AMI – Acute myocardial infarction	Syn
G30..	Y202O	MI – Acute myocardial infarction	Syn

October 1997 CTV3 release

Read Code	Term_id	V3 Term	Status
XE0Uh	Y202N	Acute myocardial infarction	Pref
XE0Uh	Y202P	AMI – Acute myocardial infarction	Syn
XE0Uh	Y202O	MI – Acute myocardial infarction	Syn

October 1997 CTV3 release

Read Code	Term_id	V3 Term	Status
G30..	YE0Qe	(Myocard inf (& [ac] [silent] [card rupt]) or (coron thromb))	Pref
G30..	Y202N	Acute myocardial infarction	Syn
G30..	YMK5V	Attack – heart	Syn
G30..	Y203J	Cardiac rupture after acute myocardial infarction	Syn
G30..	Ya0rZ	Heart attack	Syn
G30..	Y202O	MI – Acute myocardial infarction	Syn
G30..	Y2034	Silent myocardial infarction	Syn
G30..	Ya0vv	Coronary thrombosis	Syn

G30.. has had its full, ambiguous (previous version) meaning restored and all its terms from the source version attached as synonyms. It has been given the concept status of **extinct**. The new preferred term is a reflection of all the terms in the source version. This concept and its preferred term should not be used in CTV3 systems for data capture. It is positioned in the most appropriate place in the hierarchy as a child of Disorder of heart (X2003).

4.2 Description Changes

When terms move from one Read Code to another, when Read Codes are made extinct, when synonym impurity is corrected or when Read Codes are made *redundant*, then these changes in the *Descriptions* file are recorded in the **Description change file**, (formerly known as the *Term re-allocation file*, see Appendix A, section A.2.3).

5. Term Correction

Changes in the text string have occasionally been made in the past and some will continue to be made in the future, but are restricted in CTV3 to those terms arising *de novo* from the various terms projects (or added in thereafter) and do not include those inherited from either the 4 Byte or Version 2 sets. These inherited terms are 'carried through' into CTV3 without alteration.

All changes in the text string are inspected and either passed, or failed, by two Read Code authors as part of the formal quality assurance process. As a general rule, most changes are purely typographical in nature and no change is ever permitted which could, in the opinion of either inspecting author, potentially alter the perceived meaning of the term in question.

Typical permitted term changes might include simple spelling errors (e.g. 'rhuematic', 'accommodation', etc.) inconsistent spelling variants (e.g. anemia versus anaemia), inappropriate use of upper case letters 'mid-term' (e.g. X-Ray) and the removal or addition of hyphenation or spacing as required (e.g. in-vivo, in vivo; infra red, infrared, etc.).

6. Summary

Clinical Terms Version 3 (The Read Codes) now includes all codes, terms and concepts from the earlier versions of the Read Codes (since the October 1997 release of CTV3 and the September 1997 releases of 5-Byte Set and 4-Byte Set). This will facilitate migration and messaging to CTV3.

The incorporation of these earlier versions and the quality criteria adopted, have implications for users who have used CTV3 releases prior to October 1997.

Users should consult NHS Connecting for Health before loading the October 1997 or March 1998 releases.

The purity of CTV3 concepts has been systematically reviewed and improved and ambiguous code meanings in the 4 Byte Set and in Version 2 have been identified. The ambiguous codes have been labelled as extinct and placed appropriately within the hierarchy for the analysis of historic data. The identification of this ambiguity has also involved the movement of some terms from one Read Code to another.

Appendix A

A.1 Changes in CTV3 File Structure

These were first notified in January 1997.

A.1.1. Concept File – Additional Flag

An additional flag has now been added to denote that a concept is **Extinct**. Therefore, a concept can be labelled with a flag in the `concept_status` field in one of four ways:

- **Current** concept (`concept_status = C`)
- **Redundant** concept (`concept_status = R`)
- **Optional** concept (`concept_status = O`)
- **Extinct** concept (`concept_status = E`)

This flag will be used for concepts imported from older Read Code versions that have an ambiguous meaning in order that they can be integrated into CTV3.

Descriptions involving *Extinct* concepts

Each row in the *Descriptions* file contains a relationship between a concept (denoted by a Read Code) and a Term (denoted by a term identifier). Each of these relationships is marked as preferred (`desc_type = P`) or synonymous (`desc_type = S`). Currently, there are two rules governing assignment of preferred and synonymous relations.

- Only one term may be a preferred term for a concept
- The preferred term may not exist as a synonym to another concept

However, in the case of **extinct** concepts only, the second rule does not apply. Thus, a preferred term for a Read concept may also be a synonym for an **extinct** concept. This is to allow all of the terms from older Read code sets to be retained against their original concepts (and codes) in order to assist migration to CTV3, whilst at the same time permitting their allocation to unambiguous CTV3 concepts as well.

A.2 File Release Format of the Term Mapping File, the Redundant Codes Mapping File and the Description Change File

The files are of variable length fields, delimited with the vertical bar \ (ASCII value 7C hex) which itself will not be an allowable character in any of the data fields. The file will contain one record per line, delimited with a carriage/line feed.

A.2.1 Term Mapping Files

All terms from earlier Read versions starting with the September 1997 release are now included in CTV3. To assist developers and users, two files are provided that allow mapping of earlier version Read Codes and terms to CTV3 term identifiers.

4 Byte Read Code and Term to CTV3 Term Identifier File Description

File Name: **fbtermv33.v3**

File description: This file contains the Read Code/Term combination from 4 Byte set with a map to a CTV3 Term identifier.

Field Number	Title	Size	Unique*
1	READ_CODE	5 characters	#
2	TERM	30 characters (var)	#
3	TERM_ID	5 characters	
4	RELEASE	10 characters	#

*The combination of fields required to be unique are denoted '#' in last column.

File field description:

READ_CODE

This field is the concept code from 4 Byte set with a trailing dot e.g. '7123.'

TERM

This is the term description of the Read Code in the 4 Byte set.

TERM_ID

This is the five character term identifier code from CTV3 that Refers to the term in the 4 Byte set.

RELEASE

This field denotes the release date when the mapping took place

Using the International Standards Organisation (ISO) 8601
Format YYYY-MM-DD. For example, the first day of May 1997 is
Represented as:

1997-05-01

Version 2 Read Code and Term Code to CTV3 Term Identifier File Description

File name: **v2termv.v3**

File description: This file contains the Read Code/Term code
Combination from Version 2 with a map to a CTV3
Term identifier. The map relates to the longest
term variant in both versions.

Field Number	Title	Size	Unique*
1	READ_CODE	5 characters	#
2	TERM_CODE	2 characters	#
3	TERM_LONG_V2	198 characters (var)	
4	TERM_ID	5 characters	
5	RELEASE	10 characters	#

*The combination of fields required to be unique are denoted '#' in last
column.

File field description:

READ_CODE

This field is the five character concept code from Version 2.

TERM_CODE

This is the term description of the term attached to a Read Code
in Version 2.

TERM_LONG_V2

This is the 'longest' term in Version 2 that corresponds to the
Read Code | Term code description in Version 2.

TERM_ID

This is the five character code term identifier in CTV3 that refers
to the term in Version 2.

NB The match is to the longest term only. Shorter term variants (if they
exist) may differ in Version 2 from the CTV3 terms.

RELEASE

This field denotes the release date when the mapping took place using the International Standard Organisation (ISO) 8601 format YYYY-MM-DD. For example, the first day of May 1997 is represented as:

1997-05-01

4 Byte Read Code and Term to CTV3 Term Identifier File Description (Scottish)¹

File name: **fbtmscot.v3**

File description: This file contains the Read Code/Term combination from 4 Byte set with a map to a CTV3 Term identifier reflecting Codes/terms from the Scottish GP 4 Byte Set.

Field Number	Title	Size	Unique*
1	READ_CODE	5 characters	#
2	TERM	30 characters (var)	#
3	TERM_ID	5 characters	
4	RELEASE	10 characters	#

*The combination of fields required to be unique are denoted '#' in last column.

Version 2 Read Code and Term Code to CTV3 Term Identifier File Description (Scottish)

File name: **v2tmscot.v3**

File description: This file contains the Read Code/Term code Combination from Version 2 with a map to a CTV3 Term identifier. The map relates to the longest term variant in both versions. This reflects codes/terms found in the Scottish Version.

Field Number	Title	Size	Unique*
1	READ_CODE	5 characters	#
2	TERM_CODE	2 characters	#
3	TERM_LONG_V2	198 characters (var)	
4	TERM_ID	5 characters	

¹ This file is necessary as the earlier Read Code version administrative sections in Scotland differ from those used in England (i.e. within the administration chapters of 4-Byte Set and 5-Byte Set, codes differ in Scotland and England)

5	RELEASE	10 characters	#
---	---------	---------------	---

*The combination of fields required to be unique are denoted '#' in last column.

A.2.2 Redundant Codes Mapping File

Redundant Codes Mapping File Description

File name: **redun.map**

File description: This file is made available to map redundant codes to persistent codes. It shows the equivalence of meaning between concepts represented by these codes.

Field Number	Title	Size	Unique*
1	PERSISTING_READ_CODE	5 characters	
2	REDUNDANT_READ_CODE	5 characters	#

*The field required to be unique is denoted '#' in last column.

File field description:

PERSISTING_READ_CODE

This field is the concept code that is the conceptual equivalent the REDUNDANT_READ_CODE

REDUNDANT_READ_CODE

This field is the concept code that represents a conceptually duplicate concept. In the case of a 4 Byte Read Code there is a dot preceding the Read Code.

A.2.3 Description Change File (formerly known as the *Term Re-allocation File*)

NHS Connecting for Health has produced a file to inform CTV3 users and developers of changes in the *Descriptions file* or of re-allocation of terms in-between releases. E.g. the March 1998 release contained all *Descriptions* file changes since the October 1997 release.

For further information see the document entitled "Clinical Terms Version 3 – Managing Change: Description Change File".

Description Change File Description

The format of the file is as follows:

File name: **dcf.v3**

File description: This file contains the term re-allocations of CTV3
Read Codes

Field Number	Title	Size	Unique*
1	V3_TERM_ID	char (5)	#
2	READ_CODE_PREV	char (5)	#
3	READ_CODE_NOW	char (5)	#
4	MAP_STATUS	char (1)	
5	RELEASE	char (10)	#

*The combination of fields required to be unique are denoted '#' in last column.

File field description:

V3_TERM_ID

This denotes the Term identifier in CTV3 whose attachment to a Read coded concept has changed since the previous release.

READ_CODE_PREV

This denotes the Read Code for the attached term in the previous release.

READ_CODE_NOW

This denotes the Read Code for the attached term this release.

MAP_STATUS

There are four options for this field: S, A, O, R

S denotes a single change in *Descriptions* where synonym impurity has been corrected

A denotes a change in *Descriptions* where the term is now attached to more than one Read Code

O denotes a change in *Descriptions* because a term has been made obsolete (NB Terms O = obsolete, Concepts O = Optional)

R denotes a change in *Descriptions* because a Read Code has been made redundant

Example:

In the *Description change file* there is the following:

Ya4kb | X00hM | XaD2K | S | 1998-03-01

This means that 'Replacement of grommet in tympanic membrane' (term_id = Ya4kb) has moved from Read Code X00hM to Read Code XaD2K on 1 March 1998.

The *MAP_STATUS* 'S' denotes that the term has been detached from the original Read Code then moved to one other Read Code only.

RELEASE

This refers to the date when the V£_TERM_ID became re-allocated to READ_CODE_NOW.

This field denotes the release date when the mapping took place using the International Standards Organisation (ISO) 8601 format YYYY-MM-DD. For example, the first day of May 1997 is represented as:

1997-05-01

A. 3 Where should Users go for Further Advice?

System developers are strongly advised to discuss migration and updating issues with NHS Connecting for Health. Clinical users should first discuss their updating needs with their system suppliers/developers.

Appendix B

B.1 Implications for Users of CTV3 prior to March 1998

Who should read this appendix?

This document is important for all developers/users of Clinical Terms Version 3.

- If your system has data stored using releases up to and including the March 1997 release of CTV3 please start at **Section 2**.
- If your system has data stored using or including the October 1997 release of CTV3 please go straight to **Section 3**.
- If you are developing a system based on CTV3, but have no data stored please go straight to **Section 3**.

In all cases you are strongly advised to consult with NHS Connecting for Health before loading the October 1997 or March 1998 release into a live system.

B. 2 Users of CTV3 Releases March 1997 or earlier

In making CTV3 a Superset of earlier Read Code versions, it had been necessary to ensure that codes from these earlier versions have had their meaning preserved. During the early stages of the Clinical Terms Projects, all Version 2 concepts were integrated into CTV3 on the basis of informed opinion as to their intended meanings. Having considered the requirements for a Superset approach, some of these initial integration decisions were deemed no longer appropriate since they do not precisely identify or allow for any inherent ambiguities in Version 2.

B2.1 Read Code Re-allocation

As an essential consequence of the creation of the superset, some concepts have had replacement Read Codes issued.

Example:

March 1997 CTV3 release

Read Code	Term_id	V3 Term	Status
G30..	Y202N	Acute myocardial infarction	Pref
G30..	Y202P	AMI – Acute myocardial infarction	Syn
G30..	Y202O	MI – Acute myocardial infarction	Syn

October 1997 CTV3 and subsequent releases

Read Code	Term_id	V3 Term	Status
XE0Uh	Y202N	Acute myocardial infarction	Pref
XE0Uh	Y202P	AMI – Acute myocardial infarction	Syn
XE0Uh	Y202O	MI – Acute myocardial infarction	Syn

Therefore, the Read Code for this concept G30... has been replaced with XE0Uh.

In addition, some Read Codes used in clinical records and protocols may have had their meaning changed (as defined by the preferred term) so as to revert to the full meaning within the original source version.

Example:

March 1997 CTV release

Read Code	Term_id	V3 Term	Status
G30..	Y202N	Acute myocardial infarction	Pref

October 1997 CTV3 and subsequent releases

Read Code	Term_id	V3 Term	Status
G30..	YE0Qe	(Myocardial infarction (& [acute] or [silent] or [cardiac rupture following])) or (coronary thrombosis)	Pref

Whilst this has the desired effect of preserving concepts, it does have the consequence of reverting the meaning of some released CTV3 concepts to that of the original Version 2 codes.

NHS Connecting for Health has provided a file, the Concept re-allocation file (see Section 2.4) which lists the codes affected and the replacement Read Codes.

B.2.2 Changes Resulting from the Concept Re-allocation File

In order to preserve the meaning of codes recorded in clinical records, it will be necessary to use a *Concept re-allocation file* to provide for old Version 2 codes stored in clinical records that now have a re-allocated CTV3 code.

The consequences of code re-allocation are as follows:

- Re-allocated codes will be replaced by the codes in all CTV3 files where the former existed previously; e.g. *Concept, Descriptions, Template, Hierarchy, Cross-mapping files* e.g. ICD-10, OPCS-4.
- The Read Code that has been replaced will then be inserted with its original and full Version 2 meaning in an appropriate position within the CTV3 hierarchy.
- Most of these replaced Read Codes will have a concept_status – 'E' to denote that they are *Extinct*.
- If the *Extinct* Read Code has a cross-map in Version 2, the same cross-map will be present in CTV3 as a *default* within the constraints of the differences in approach to mapping inherent within the two versions.

When loading a new release of CTV3, the system administrator needs to be aware of the following in respect of the *Concept re-allocation file*:

- Read Codes in patient records may have been re-allocated.

- Read Codes used in protocols, care plans, pro-formas and standard reports etc. may have also been re-allocated.
- **The replaced Read Codes will continue to exist in CTV3.** However, they will have a **different meaning to the releases prior to October 1997**. The meaning of these replaced Read Codes will be as in the current Version 2 release.

B.2.3 Concept Re-allocation File Description

This file is released once only for the benefit of those sites who have used CTV3 prior to October 1997 to store data.

File name: **conrf.v3**

File description: This file contains those codes in CTV3 that have been restored to their full meaning as per the source version, together with codes that have replaced them in CTV3.

Field Number	Title	Size	Unique*
1	READ_CODE_OLD	5 characters	#
2	READ_CODE_NEW	5 characters	
3	RELEASE	10 characters	#

*The combination of fields required to be unique are denoted '#' in last column.

File field description:

READ_CODE_OLD

This is the five character concept code that has been reverted to its original meaning.

READ_CODE_NEW

This field is the five character code that has replaced READ_CODE_OLD.

RELEASE

This field denotes the release date when the re-allocation took place using the International Standard Organisation (ISO) 8601 format YYYY-MM-DD. For example, the first day of March 1998 is represented as:

1998-03-01

The total number of entries in the Concept re-allocation file is 5004. This will not change.

B.2.4 Concept Re-allocation File Usage

The essential question is:

Have Read Codes that occur in 'READ_CODE_OLD' field of this file been used previously in patient records, protocols etc. in data collected/used/derived from releases of CTV3 prior to October 1997?

If the answer to this question is 'Yes' then these Read Codes will have been replaced in releases after March 1997 by the Read Code in the 'READ_CODE_NEW' field.

- **To continue using the 'READ_CODE_OLD' is not an option as its meaning will have changed since the March 1997 release.**
- **It is essential that the Read Code selected and stored at the time of data entry is archived in such a way that the original record is preserved.**

B.3 Users of the CTV3 October 1997 Release

One of the features of CTV3 is that it is dynamic to accommodate advances in clinical knowledge and to permit error correction. One feature of this flexibility is the capability of moving and copying terms from one Read Code to another. This results in a change in the *Descriptions files*. The *Descriptions file* contains all Read Codes | term identifier combinations in the CTV3 release.

To help users keep track of these changes, NHS Connecting for Health has provided a file: *Description change file* (dcf.v3) on the release CD-ROM.

Between the October 1997 and March 1998 release there were 1745 term re-allocations.

B.3.1 Description Change File Description

The file description is contained in earlier in this document and is explained in more detail in the document "Clinical Terms Version 3 – Managing Change: Description Change File".

B.3.2 Description Change File Usage

The essential questions are:

- Have any Read Code | term identifier combinations, that occur in 'READ_CODE_PREV | V3_TERM_ID' fields of this file been used in data collection, for example; in patient records, protocols etc., that has been derived from previous releases of CTV3?
- Have these Read Code | term identifier combinations been used before the date shown in the 'release' field?

If the answer to both these questions is 'Yes' then the user needs to be aware of term re-allocations that are contained in the *Description change* file.

If the 'map_status' flag = S

The term has been moved to one and only one other concept in this release. The term is no longer attached to the Read Code that is present in your records.

If the 'map_status' flag = A

Then the term has been moved and is attached to more than one concept in this release, one of which *may be* the Read Code | term identifier in your records.

If the 'map_status' flag = O

Then the term has been made obsolete. It no longer occurs in the Description file and will not be keyable when the new release is loaded. (It will, of course, be present in the terms file).

If the 'map_status' flag = R

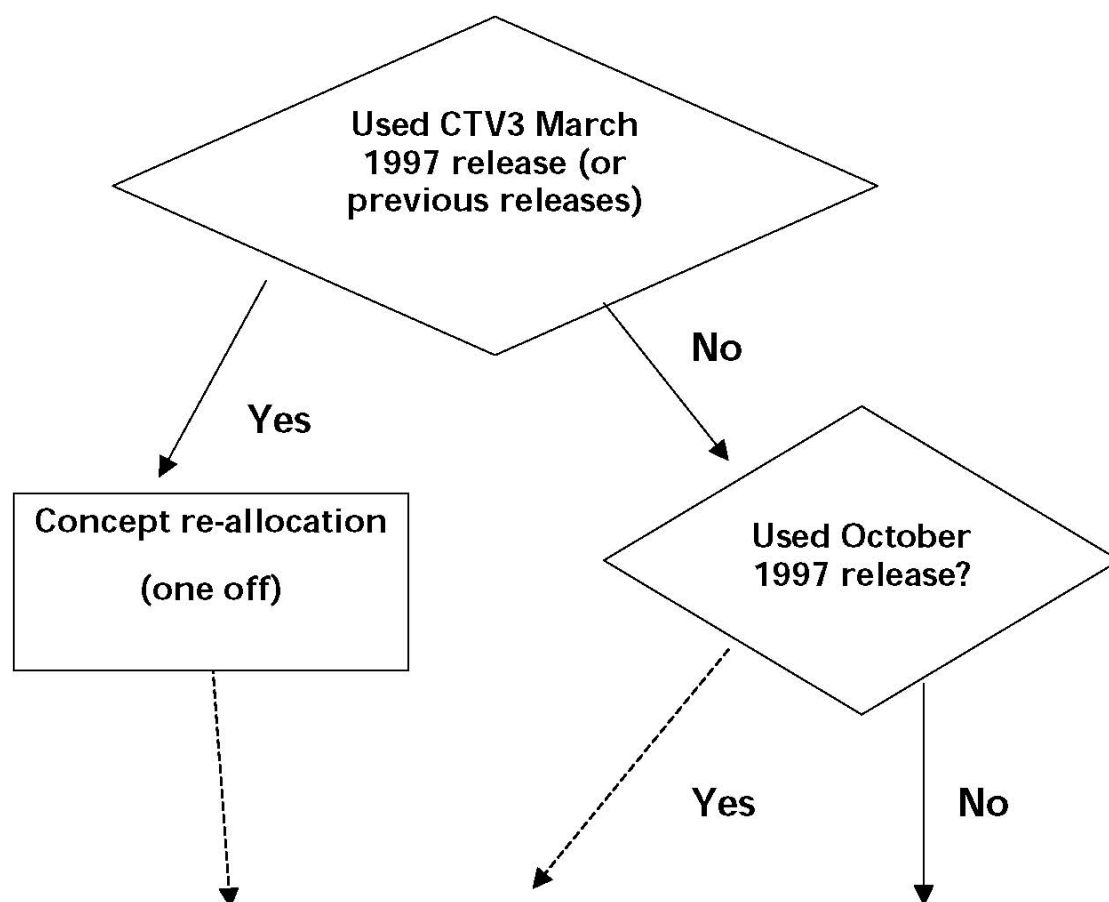
The 'READ_CODE_PREV' has been made redundant and so the terms are now attached to the 'READ_CODE_NOW'.

The changes in Descriptions in CTV3 are discussed more fully in the document "Clinical Terms Version 3 – Managing Change: Description Change File".

B. 4 Where Should Users go for Further Advice?

System developers are strongly advised to discuss loading the March 1998 release with NHS Connecting for Health. Clinical users should first discuss their updating requirements with their system suppliers/developers.

B.5 Loading the CTV3 March 1998 Release



Term re-allocation using Description change file No term re-allocation required for March 1998 release

