Data Format Standard

Clinical Performance Indicators

Version 2.3

Version Control

Version Number	Author	Effective Date	Elements Changed
Draft	HealthPAC	1 July 2004	Initial release
1.0	HealthPAC	1 July 2004	Definitions finalised
1.1	HealthPAC	1 July 2004	• Sample data corrected • Read codes reworded • Mental Health Read codes corrected
1.2	HealthPAC	1 July 2004	Corrected delimiter errors in samples
1.3	HealthPAC	6 February 2006	Updated to reflect changes as documented in 2nd Phase CPI Reporting Change to Requirements: Reference Document (dated 25 August 2005 2. Definition Table added • PHOCARE Reporting Group defined and added as Selection Criteria to CPI queries • Appendix F (Clinical Performance Indicators) updated to reflect changes additions/deletions/amendments)
1.4	HealthPAC	10 February 2006	1. File Format section updated to reflect changes as agreed upon for the Service Utilisation, and Immunisation Reports 2. Definition Table format changed to clarify/emphasize differences in definitions applicable to Mixed PHOs
1.5	HealthPAC	7 June 2006	Update changes to reflect decision by PHO Performance Management Advisory Group to omit the following indicators: • Query — Depression recorded in the past 5 years • Query — Anxiety recorded in the past 5 years

Version Number	Author	Effective Date	Elements Changed
			• Query — Substance Abuse recorded in the past 5 years
			• All reference to these indicators deleted from Version 1.5.
1.6	HealthPAC	1 August 2006	Update in Appendix E Reporting Groups to extend the ethnicity band to PHOETHNIC: Ethnicity – Level 2
1.7	HealthPAC	25 October 2006	• Update File Name convention to reflect the report is CPI and not SU. • Replaced PHOAGE with PHOCPIAGE to accurately reflect the different age sets between SU and CPI. • Removed (in no particular order): from query sets as it is necessary to place the columns in order. • Corrected PHOETHNIC: Ethnicity – Level 2 table to show the correct definitions. • Amendment in Report Data Set section on page 7 to acknowledge that all rows regardless of whether there is a zero value need to be included in report. • Amendment to Appendix B Samples to ensure that Number of Practices included in Clinical Performance Indicator report query is present in sample. • Made changes to Appendix B to ensure that all query descriptions are the same as in Appendix F.
1.8	PHO Performance Programme	1 July 2008	• Removed all references to "registered patients". Registered patients are not to be counted for any Query. • Appendix B Samples updated to reflect changes in Appendix F.

Version Number	Author	Effective Date	Elements Changed
			• Appendix F, Queries F3, F10 and F11 have been reworded for improved clarity • Appendix F, Query F13 added • Appendix F, Value and Value2 definitions have been redefined for many Queries • Appendix F, READ codes removed from all Queries to reflect that READ codes are not the only codes that may be used by PMS systems.
1.9	PHO Performance Programme	January 2009	• Removed "5 to 14 yrs" age band from Appendix B2 Sample Data, and replaced with "15 to 19 yrs" • Appendix F3 changed from "annual review in last reporting period" to annual review in the last year"
1.10	PHO Performance Programme	September 2009	• Note 1.9 sent out with previous documentation. • All changes from versions 1.7 – 1.9. • Appendix F, Query F14 added
1.11	PHO Performance Programme	April 2010	• Inclusion of queries pertaining to the Phase Two smoking indicators
1.12	PHO Performance Programme	August 2011	• Change to description and definition of Query F11
2.0	PHO Performance Programme	July 2012	Complete rewrite of CPI Data Format Standard to enable the CPI Report to be utilized for the purposes of collecting data to multiple levels of aggregation

Version Number	Author	Effective Date	Elements Changed
2.1	PHO Performance Programme	May 2015	New numerator to measure the population that has been given brief advice or smoking cessation support in the last 15 months. 1. Added sequence 19 and 20 under table 5.4.2. DHX-DHB Aggregated Data 2. Added field notes 5.4.3.19 DHX-19 and 5.4.3.20 DHX-20 3. Added sequence 19 and 20 under table 5.6.2. PRX – Practice Aggregated Data 4. Added field notes 5.6.3.19 PRX-19 and 5.6.3.20 PRX-20 5. Added 5.7.2 PAX – Patient Level Data 6. Added sequence 15 and 16 under table 5.7.2. PAX – Patient Level Data 7. Added field notes 5.7.3.15 PAX-15 and 5.7.3.16 PAX-16
2.2	Ministry of Health	December 2015	• Changes to reflect discontinuation of the PHO Performance Programme and establishment of the Integrated Performance Incentive Framework (IPIF). • Changes to file naming convention and removal of references to TEST data.
2.3	Ministry of Health	October 2017	• Changes to reflect discontinuation of IPIF and establishment of System Level Measures (SLM)

Table of Contents

1. Clinical Performance Indicator (CPI) Report

1.1 Function

The function of the Clinical Performance Indicator (CPI) report is to provide clinical data from the PHO to:

- the Ministry of Health, and
- the funding District Health Board(s)

for the purpose of:

- contribution towards the measurement of the Minister of Health's Health Targets,
- contribution towards the measurement of DHB indicators of performance,
- and contribution towards measurement of System Level Measures (SLM) .

The CPI report is generated by the PHO (or their representative MSO) on a quarterly basis and provided to the Ministry of Health.

The PHO Service Agreement specifies that PHO aggregated CPI data will be supplied by the PHO to the Ministry of Health on a quarterly basis. The PHO (with agreement from their Clinical Governance body) may choose to submit lower levels of data (practice/patient) using the CPI Report to take advantage of additional analysis and reporting services that the Ministry of Health may be able to provide.

1.2 File Naming Convention

CPI reports will be named using the convention of:

For initial submissions:	CPI_*PERORG_YYYYMMDD*
For resubmissions:	CPI_*PERORG_YYYYMMDD_resubmitted*

Where *PERORG* is the PHO's Perorg ID, and *YYYYMMDD* is the date of the last day of the quarter for which the CPI report has been generated for.

File types may be either '.psv' **or** '.csv' and must not be zipped.

1.3 Submission

PHOs (or their representative MSO) will submit their CPI reports to the Ministry of Health via the secure FTP process established by the Ministry of Health. *Information regarding the FTP process is available from the Ministry of Health's Sector Services business unit.*

The CPI report must be forwarded to the Ministry of Health by the dates set out in the table below

Quarter Start	Quarter End	Submission Deadline
1 Jan	31 Mar	5pm 20th April
1Apr	30 Jun	5pm 20th July
1 Jul	30 Sep	5pm 20th October
1 Oct	31 Dec	5pm 20th January

1.4   Delimiters

1.4.1   Segment Terminator

Carriage Return (ASCII 13) or Line Feed (ASCII 10) will be used as the Segment Terminator. The Segment Terminator is mandatory, except at the end of the message file.

1.4.2   Field Delimiter

Vertical Line "|" (ASCII 124) will be used as the Field Delimiter. The Field Delimiter is mandatory between segments. The last field in a segment will not be followed by a Field Delimiter.

2.   Message Segment Definitions

Segments are logical groupings of related items of information. They are the building blocks of the CPI report. The following table outlines the segments that are to be used to construct the CPI report.

Segment ID	Segment Name	Description
MSH	Message Header	Data that specifies the sender/receiver, purpose and formatting syntax
DSX	Data Sets	Data that specifies the time period and aggregation levels
DHH	DHB Header	Data that specifies the DHB that following segments relate to
DHX	DHB Aggregated Data	Clinical data for PHO enrolled patients (aggregated to DHB)
PRH	Practice Header	Data that specifies the practice that following segments relate to
PRX	Practice Aggregated Data	Clinical data for PHO enrolled patients (aggregated to practice)
PAX	Patient Level Data	Clinical data for a specific PHO enrolled patient

2.1   CPI Report Structure

In the following table Braces, {...}, indicate one or more repetitions of the enclosed group of segments. The group may contain only a single segment. Brackets, [...], show that the enclosed group of segments is optional. If a group of segments is optional and may repeat it is enclosed in brackets and braces.

Segment ID	Segment Name	Required?
MSH	Message Header	Mandatory
DSX	Data Sets	Mandatory
{		
DHH	DHB Header	Mandatory
{[DHX]}	DHB Aggregated Data	Conditional
{		
PRH	Practice Header	Conditional
{[PRX]}	Practice Aggregated Data	Conditional
{[PAX]}	Patient Level Data	Conditional
}		
}		

Refer to Appendix A for some CPI report examples.

2.1.1 Notes on CPI Report Structure

- The geocoded address of the practice will determine which DHB the enrolled population of that practice belongs to
- The DSX segment will determine the level of data aggregation (patient, practice, or PHO) within the CPI report
- If the DSX-3 field contains a value of "PHO", the DHH and DHX segments are required. The PRH,PRX and PAX segments must not be used
- If the DSX-3 field contains a value of "PRACTICE", the DHH, PRH and PRX segments are required. The DHX and PAX segments must not be used
- If the DSX-3 field contains a value of "PRACTICE", practice data must be provided for every practice within the PHO
- If the DSX-3 field contains a value of "PATIENT", the DHH, PRH and PAX segments are required. The DHX and PRX segments must not be used
- If the DSX-3 field contains a value of "PATIENT", a PAX segment must be generated for every patient enrolled with the PHO

2.2 Segment descriptions

The segment descriptions are in a standard format using the following sub-sections.

2.2.1 Function

Contains a brief description of the type of data the segment contains or purpose for which it is intended.

2.2.2 Table of fields

This sub-section lists the fields contained within each segment, with column headings having the following meanings:

Column Header	Description
SEQ	The sequence number showing the ordinal position of the data element within the segment.
LEN	The maximum length of the data element. The minimum length of the data element may be less than the value of LEN, unless specifically noted in the data element's Field Notes section.
DT	The Data Type of the data element
Field Name	The unique descriptive name for the data element.

Column Header	Description
Usage	Not all the data elements are used in the transaction set defined in this document. Possible values are: M mandatory C conditional on event trigger O optional X not used

2.2.3 Field notes

The field notes provided expand on the information shown in the table of fields giving:

- A more descriptive meaning of the field's purpose
- valid values that can be used to populate the field

2.3   Data Type Descriptions

2.3.1 NM – numeric

A number represented as a series of ASCII numeric characters consisting of an optional leading sign (+ or -), the digits and an optional decimal point. In the absence of a sign, the number is assumed to be positive. If there is no decimal point the number is assumed to be an integer. Leading zeros, or trailing zeros after a decimal point, are not significant. For example the following two values with different representations, "01.20" and "1.2", are identical. Except for the optional leading sign (+ or -) and the optional decimal point (.), no non-numeric ASCII characters are allowed.

2.3.2 ST – string data

String data is left justified with trailing blanks optional. Any displayable (printable) ASCII characters (hexadecimal values between 20 and 7e, inclusive, or ASCII decimal values between 32 and 126), except the defined delimiter characters, are allowed.

2.3.3 DT – date

A date represented as a series of ASCII numeric characters in the format of YYYYMMDD, where:

- YYYY represents the year
- MM represents the month of the year
- DD represents the day of the month

3. Message Segments

3.1 MSH – Message Header

3.1.1 Function

This segment specifies details required for the receiving system to process the file appropriately.

3.1.2 Table of Fields

The following table outlines the detailed data that is required for the Message Header.

Sequence	Len	DT	Field Name	Usage
1	6	ST	PHO ID	M
2	50	ST	Sending Application	M
3	8	DT	Message Date	M
4	50	ST	Message ID	M
5	1	ST	Processing ID	M
6	10	ST	Version ID	M

3.1.3 Field Notes

MSH-1 - PHO ID
The PHO's Perorg ID.

MSH-2 – Sending Application
The name and version of the software system that created the CPI report.

MSH-3 – Message Date
The date that the CPI report was created.

MSH-4 – Message ID
Unique identifier for the message, created by the sending system.

MSH-5 – Processing ID
Code to identify if the CPI report is a production file.

Valid Values	Description
P	Production file

MSH-6 – Version ID
The version number of the CPI Data Format Standard that the CPI report complies to.

3.2 DSX – Data Sets

3.2.1 Function

This segment specifies the time period that the CPI report has been generated for, and the level of data aggregation that has been provided in the CPI report.

3.2.2 Table of Fields

The following table outlines the detailed data that is required for the Data Sets.

Sequence	Len	DT	Field Name	Usage
1	8	DT	Start Date	M
2	8	DT	End Date	M
3	10	ST	Aggregation	M

3.2.3 Field Notes

DSX-1 – Start Date

The date of the first day of the reporting period for which the CPI report has been generated.

DSX-2 – End Date

The date of the last day of the reporting period for which the CPI report has been generated.

DSX-3 – Aggregation

Code to identify the level of data aggregation within the CPI report.

Valid Values	Description
PHO	PHO aggregated data
PRACTICE	Practice aggregated data
PATIENT	Patient level data

3.3 DHH – DHB Header

3.3.1 Function

This segment specifies the DHB that the proceeding PHO aggregated, practice aggregated, or patient level population data belongs to.

3.3.2 Table of Fields

The following table outlines the detailed data that is required for the DHB Header.

Sequence	Len	DT	Field Name	Usage
1	3	ST	DHB Code	M

3.3.3   Field Notes

DHH-1 – DHB Code

Code to identify the DHB that the proceeding PHO, Practice or patient data applies to.

Valid Values	Description
CAK	Auckland DHB
BOP	Bay of Plenty DHB
CTY	Canterbury DHB
CAP	Capital Coast DHB
SAK	Counties Manukau DHB
HWB	Hawkes Bay DHB
HUT	Hutt DHB
LKS	Lakes DHB
MWU	Mid Central DHB
NLM	Nelson Marlborough DHB
NLD	Northland DHB
OTA	Southern DHB
SCY	South Canterbury DHB
TRW	Tairawhiti DHB
TKI	Taranaki DHB
WKO	Waikato DHB
WRP	Wairarapa DHB
NWA	Waitemata DHB
WCO	West Coast DHB
WNI	Whanganui DHB

3.4   DHX – DHB Aggregated Data

3.4.1   Function

The purpose of this segment is to provide data for the measurement of CVD, diabetes and smoking. Data is provided for a number of clinical measures that is aggregated to DHB level (for the PHO to which the CPI report has been generated), using the criteria of ethnicity, age band, gender and quintile.

3.4.2   Table of Fields

The following table outlines the detailed data that is required for the DHB Aggregated Data.

Sequence	Len	DT	Field Name	Usage
1	2	NM	Ethnicity	M
2	11	ST	Ageband	M
3	1	ST	Gender	M
4	1	NM	Quintile	M

5	5	NM	Population	M
6	5	NM	Smoking status ever recorded	C
7	5	NM	Current smoking status recorded	C
8	5	NM	Current smoker within the last 15 months	C
9	5	NM	Brief advice to stop smoking	C
10	5	NM	Smoking cessation support or referral	C
11	5	NM	Diabetes ever recorded	C
12	5	NM	Diabetes follow-up	C
13	5	NM	Diabetes patients with HbA1c test result less than 64mmol/mol (8%)	C
14	5	NM	Stroke ever recorded	C
15	5	NM	Myocardial infarction ever recorded	C
16	5	NM	Heart failure ever recorded	C
17	5	NM	Ischaemic CVD ever recorded	C
18	5	NM	CVD risk recorded in the last 5 years	C
19	5	NM	Brief advice to stop smoking in the last 15 months	C
20	5	NM	Smoking cessation support or referral in the last 15 months	C

3.4.3 Field Notes

DHX-1 – Ethnicity

Code to identify the ethnicity of enrolled patients.

Valid Values	Description
10	European (Not Further Defined)
11	New Zealand European / Pakeha
12	Other European
21	NZ Maori
30	Pacific Island (Not Further Defined)
31	Samoan
32	Cook Island Maori
33	Tongan
34	Nuiean
35	Tokelauan
36	Fijian
37	Other Pacific Island
40	Asian (Not Further Defined)
41	South East Asian
42	Chinese
43	Indian
44	Other Asian
51	Middle Eastern
52	Latin American / Hispanic

Valid Values	Description
53	African (or cultural group of African origin)
54	Other
99	Not stated

DHX-2 – Ageband

Code to identify the age (within a particular age band) of enrolled patients.

Valid Values	Description
0 to 4	Aged 0 to 4 at end of period
5 to 9	Aged 5 to 9 at end of period
10 to 14	Aged 10 to 14 at end of period
15 to 19	Aged 15 to 19 at end of period
20 to 24	Aged 20 to 24 at end of period
25 to 29	Aged 25 to 29 at end of period
30 to 34	Aged 30 to 34 at end of period
35 to 39	Aged 35 to 39 at end of period
40 to 44	Aged 40 to 44 at end of period
45 to 49	Aged 45 to 49 at end of period
50 to 54	Aged 50 to 54 at end of period
55 to 59	Aged 55 to 59 at end of period
60 to 64	Aged 60 to 64 at end of period
65 to 69	Aged 65 to 69 at end of period
70 to 74	Aged 70 to 74 at end of period
75 to 79	Aged 75 to 79 at end of period
80 to 84	Aged 80 to 84 at end of period
85 and over	Aged 85 or over at end of period

DHX-3 – Gender

Code to identify the gender of enrolled patients.

Valid Values	Description
F	Female
M	Male

DHX-4 – Quintile

Code to identify the quintile (deprivation decile) of enrolled patients.

Valid Values	Description
0	Not geo-coded
1	Decile 1 or 2 (least deprived)
2	Decile 3 or 4
3	Decile 5 or 6
4	Decile 7 or 8
5	Decile 9 or 10 (most deprived)

DHX-5 – Population

Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in DHX-4

DHX-6 - Smoking status ever recorded

Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4
- Have a smoking status system code (refer to section 3.1 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded

DHX-7 - Current smoking status recorded

Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4
- Have a current smoking status system code (refer to section 3.13 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded, and this code is their most recently recorded smoking status code

DHX-8 - Current Smoker within the last 15 months

Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4
- Have a current smoking status system code (refer to section 3.13 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded, where this code was the most recent smoking status code anytime in the last 15 months

DHX-9 – Brief advice to stop smoking

Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4

- Have a smoking brief advice system code (refer to section 3.14 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard*) recorded in the last 12 months
- Have been counted in field DHX-8

DHX-10 - Smoking cessation support or referral
Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4
- Have a smoking cessation support or referral system code (refer to section 3.15 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded in the last 12 months
- Have been counted in field DHX-8

DHX-11 - Diabetes ever recorded
Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4
- Have a diabetes system code (refer to section 3.3 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded

DHX-12 - Diabetes follow-up
Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4
- Have had an annual diabetes review recorded as completed in the system in the last 12 months (refer to Appendix B for the definition of an annual diabetes review)
- Have been counted in DHX-11

DHX-13 - Diabetes patients with HbA1c test result less than 64mmol/mol (8%)
Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4
- Have had an HbA1c test result of 64 mmol/mol (8%) or less in the last year
- Have been counted in DHX-11

DHX-14 - Stroke ever recorded

Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4
- Have a stroke system code (refer to section 3.4 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded

DHX-15 - Myocardial infarction ever recorded

Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4
- Have a myocardial infarction system code (refer to section 3.5 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded

DHX-16 - Heart failure ever recorded

Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4
- Have a heart failure system code (refer to section 3.6 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded

DHX-17 - Ischaemic CVD ever recorded

Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4
- Have an ischaemic CVD system code (refer to section 3.12 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded

DHX-18 - CVD risk recorded in the last 5 years

Count of the enrolled population whose demographics match the values in the following fields

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3

- Their quintile matches the value in field DHX-4
- Have had their CVD risk recorded in the last 5 years (up to and including the last day of the reporting period).

Note: A patient's CVD risk must be calculated and recorded in accordance with "The Assessment and Management of Cardiovascular Risk" (NZ Guidelines Group, December 2003).

DHX-19 – Brief advice to stop smoking in the last 15 months
Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4
- Have a smoking brief advice system code (refer to section 3.14 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard*) recorded in the last 15 months
- Have been counted in field DHX-8

DHX-20 - Smoking cessation support or referral in the last 15 months
Count of the enrolled population who match the following criteria:

- Their ethnicity matches the value in field DHX-1
- Their ageband matches the value in field DHX-2
- Their gender matches the value in field DHX-3
- Their quintile matches the value in field DHX-4
- Have a smoking cessation support or referral system code (refer to section 3.15 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded in the last 15 months
- Have been counted in field DHX-8

3.5   PRH – Practice Header

3.5.1   Function

This segment specifies the practice that the proceeding aggregated or individual patients are enrolled with.

3.5.2   Table of Fields

The following table outlines the detailed data that is required for the Practice Header.

Sequence	Len	DT	Field Name	Usage
1	7	ST	Practice ID	M
2	35	ST	Practice Name	M

3.5.3 Field Notes

PRH-1 – Practice ID

The PHO's unique internal identifier for the practice. This code must be same as the practice code used in the PHO enrolment register.

PRH-2 – Practice Name

Name of the practice within the PHO. This value must be same as the practice name used in the PHO enrolment register.

3.6   PRX – Practice Aggregated Data

3.6.1   Function

The purpose of this segment is to provide data for the measurement of CVD, diabetes and smoking. Data is provided for a number of clinical measures that is aggregated to practice level, using the criteria of ethnicity, ageband, gender and quintile.

3.6.2   Table of Fields

The following table outlines the detailed data that is required for the Practice Aggregated Data.

Sequence	Len	DT	Field Name	Usage
1	1	NM	Ethnicity	M
2	11	ST	Ageband	M
3	1	ST	Gender	M
4	1	NM	Quintile	M
5	7	NM	Population	M
6	7	NM	Smoking status ever recorded	C
7	7	NM	Current smoking status recorded	C
8	7	NM	Current Smoker within the last 15 months	C
9	7	NM	Brief advice to stop smoking	C
10	7	NM	Smoking cessation support or referral	C
11	7	NM	Diabetes ever recorded	C
12	7	NM	Diabetes follow-up	C
13	7	NM	Diabetes patients with HbA1c test result less than 64mmol/mol (8%)	C
14	7	NM	Stroke ever recorded	C
15	7	NM	Myocardial infarction ever recorded	C
16	7	NM	Heart failure ever recorded	C
17	7	NM	Ischaemic CVD ever recorded	C
18	7	NM	CVD risk recorded in the last 5 years	C
19	7	NM	Brief advice to stop smoking in the last 15 months	C
20	7	NM	Smoking cessation support or referral in the last 15 months	C

3.6.3 Field Notes

PRX-1 – Ethnicity

Code to identify the ethnicity of patients enrolled with the practice.

Valid Values	Description
10	European (Not Further Defined)
11	New Zealand European / Pakeha
12	Other European
21	NZ Maori
30	Pacific Island (Not Further Defined)
31	Samoan
32	Cook Island Maori
33	Tongan
34	Nuiean
35	Tokelauan
36	Fijian
37	Other Pacific Island
40	Asian (Not Further Defined)
41	South East Asian
42	Chinese
43	Indian
44	Other Asian
51	Middle Eastern
52	Latin American / Hispanic
53	African (or cultural group of African origin)
54	Other
99	Not stated

PRX-2 – Ageband

Code to identify the age (within a particular age band) of patients enrolled with the practice.

Valid Values	Description
0 to 4	Aged 0 to 4 at end of period
5 to 9	Aged 5 to 9 at end of period
10 to 14	Aged 10 to 14 at end of period
15 to 19	Aged 15 to 19 at end of period
20 to 24	Aged 20 to 24 at end of period
25 to 29	Aged 25 to 29 at end of period
30 to 34	Aged 30 to 34 at end of period
35 to 39	Aged 35 to 39 at end of period
40 to 44	Aged 40 to 44 at end of period
45 to 49	Aged 45 to 49 at end of period
50 to 54	Aged 50 to 54 at end of period

Valid Values	Description
55 to 59	Aged 55 to 59 at end of period
60 to 64	Aged 60 to 64 at end of period
65 to 69	Aged 65 to 69 at end of period
70 to 74	Aged 70 to 74 at end of period
75 to 79	Aged 75 to 79 at end of period
80 to 84	Aged 80 to 84 at end of period
85 and over	Aged 85 or over at end of period

PRX-3 – Gender

Code to identify the gender of patients enrolled with the practice.

Valid Values	Description
F	Female
M	Male

PRX-4 – Quintile

Code to identify the quintile (deprivation decile) of patients enrolled with the practice.

Valid Values	Description
0	Not geo-coded
1	Decile 1 or 2 (least deprived)
2	Decile 3 or 4
3	Decile 5 or 6
4	Decile 7 or 8
5	Decile 9 or 10 (most deprived)

PRX-5 – Population

Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in PRX-4

PRX-6 - Smoking status ever recorded

Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have a smoking status system code (refer to section 3.1 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded

PRX-7 - Current smoking status recorded

Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have a current smoking status system code (refer to section 3.10 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded, and this code is their most recently recorded smoking status code

PRX-8 - Current Smoker within the last 15 months
Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have a current smoking status system code (refer to section 3.1 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded, where this code was the most recent smoking status code anytime in the last 15 months

PRX-9 – Brief advice to stop smoking
Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have a smoking brief advice system code (refer to section 3.11 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded in the last 12 months
- Have been counted in field PRX-8

PRX-10 - Smoking cessation support or referral
Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have a smoking cessation support or referral system code (refer to section 3.12 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded in the last 12 months
- Have been counted in field PRX-8

PRX-11 - Diabetes ever recorded
Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2

- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have a diabetes system code (refer to section 3.3 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded

PRX-12 - Diabetes follow-up
Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have had an annual diabetes review recorded as completed in the system in the last 12 months (refer to Appendix B for the definition of an annual diabetes review)
- Have been counted in PRX-11

PRX-13 - Diabetes patients with HbA1c test result less than 64mmol/mol (8%)
Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have had an HbA1c test result of 64 mmol/mol (8%) or less in the last year
- Have been counted in PRX-11

PRX-14 - Stroke ever recorded
Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have a stroke system code (refer to section 3.4 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded

PRX-15 - Myocardial infarction ever recorded
Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have a myocardial infarction system code (refer to section 3.5 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded

PRX-16 - Heart failure ever recorded
Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have a heart failure system code (refer to section 3.6 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded

PRX-17 - Ischaemic CVD ever recorded

Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have an ischaemic CVD system code (refer to section 3.9 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded

PRX-18 - CVD risk recorded in the last 5 years

Count of the population enrolled with the practice whose demographics match the values in the following fields

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have had their CVD risk recorded in the last 5 years (up to and including the last day of the reporting period).

Note: A patient's CVD risk must be calculated and recorded in accordance with "The Assessment and Management of Cardiovascular Risk" (NZ Guidelines Group, December 2003).

PRX-19 – Brief advice to stop smoking in the last 15 months

Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have a smoking brief advice system code (refer to section 3.11 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded in the last 15 months
- Have been counted in field PRX-8

PRX-20- Smoking cessation support or referral in the last 15 months

Count of the population enrolled with the practice who match the following criteria:

- Their ethnicity matches the value in field PRX-1
- Their ageband matches the value in field PRX-2
- Their gender matches the value in field PRX-3
- Their quintile matches the value in field PRX-4
- Have a smoking cessation support or referral system code (refer to section 3.15 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded in the last 15 months
- Have been counted in field PRX-8

3.7 PAX – Patient Level Data

3.7.1 Function

The purpose of this segment is to provide data for the measurement of CVD, diabetes and smoking. Data is provided for a number of clinical measures for individual patients enrolled with the PHO.

3.7.2 Table of Fields

The following table outlines the detailed data that is required for the Patient Level Data.

Sequence	Len	DT	Field Name	Usage
1	20	ST	Patient ID	M
2	1	NM	Smoking status ever recorded	M
3	1	NM	Current smoking status recorded	M
4	1	NM	Current Smoker within the last 15 months	M
5	1	NM	Brief advice to stop smoking	M
6	1	NM	Smoking cessation support or referral	M
7	1	NM	Diabetes ever recorded	M
8	1	NM	Diabetes follow-up	M
9	1	NM	Diabetes patients with HbA1c test result less than 64mmol/mol (8%)	M
10	1	NM	Stroke ever recorded	M
11	1	NM	Myocardial infarction ever recorded	M
12	1	NM	Heart failure ever recorded	M
13	1	NM	Ischaemic CVD ever recorded	M
14	1	NM	CVD risk recorded in the last 5 years	M
15	1	NM	Brief advice to stop smoking in the last 15 months	M
16	1	NM	Smoking cessation support or referral in the last 15 months	M

3.7.3   Field Notes

PAX-1 – Patient ID

Practice's unique internal identifier for the patient. This ID must be same as the patient NHI number used in the PHO enrolment register.

PAX-2 - Smoking status ever recorded

Patient has had a smoking status system code (refer to section 3.1 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded.

Valid Values	Description
0	No
1	Yes

PAX-3 - Current smoking status recorded

Patient has had a current smoking status system code (refer to section 3.1 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)*recorded, and this code is their most recently recorded smoking status code.

Valid Values	Description
0	No
1	Yes

PAX-4 - Current Smoker within the last 15 months

Patient has had a current smoking status system code (refer to section 3.1 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded, where this code was the most recent smoking status code anytime in the last 15 months.

Valid Values	Description
0	No
1	Yes

PAX-5 – Brief advice to stop smoking

Patient has:

- had a smoking brief advice system code (refer to section 3.11 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded in the last 12 months
- has a value of "1" in field PAX-4

Valid Values	Description
0	No
1	Yes

PAX-6 - Smoking cessation support or referral

Patient has:

- had a smoking cessation support or referral system code (refer to section 3.12 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded in the last 12 months
- has a value of "1" in field PAX-4

Valid Values	Description
0	No
1	Yes

PAX-7 - Diabetes ever recorded

Patient has had a diabetes system code (refer to section 3.3 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded.

Valid Values	Description
0	No
1	Yes

PAX-8 - Diabetes follow-up

Patient has:

- had an annual diabetes review recorded as completed in the system in the last 12 months (refer to Appendix B for the definition of an annual diabetes review)
- has a value of "1" in field PAX-7

Valid Values	Description
0	No
1	Yes

PAX-9 - Diabetes patients with HbA1c test result less than 64mmol/mol (8%)

Patient has:

- had an HbA1c test result of 64 mmol/mol (8%) or less in the last year
- has a value of "1" in field PAX-7

Valid Values	Description
0	No
1	Yes

PAX-10 - Stroke ever recorded

Patient has had a stroke system code (refer to section 3.4 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* ever recorded.

Valid Values	Description
0	No
1	Yes

PAX-11 - Myocardial infarction ever recorded

Patient has had a myocardial infarction system code (refer to section 3.5 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard*) ever recorded.

Valid Values	Description
0	No
1	Yes

PAX-12 - Heart failure ever recorded

Patient has had a heart failure system code (refer to section 3.6 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard*) ever recorded.

Valid Values	Description
0	No
1	Yes

PAX-13 - Ischaemic CVD ever recorded

Patient has had an ischaemic CVD system code (refer to section 3.9 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard*) ever recorded.

Valid Values	Description
0	No
1	Yes

PAX-14 - CVD risk recorded in the last 5 years

Patient has had their CVD risk recorded in the last 5 years (up to and including the last day of the reporting period).

Valid Values	Description
0	No
1	Yes

Note: A patient's CVD risk must be calculated and recorded in accordance with "The Assessment and Management of Cardiovascular Risk" (NZ Guidelines Group, December 2003).

PAX-15 – Brief advice to stop smoking in the last 15 months

Patient has:

- had a smoking brief advice system code (refer to section 3.11 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard*) recorded in the last 15 months
- has a value of "1" in field PAX-4

Valid Values	Description
0	No
1	Yes

PAX-16 - Smoking cessation support or referral in the last 15 months

Patient has:

- had a smoking cessation support or referral system code (refer to section 3.12 of *Code Mappings for Data Transfer Specification and Clinical Performance Indicator Data Format Standard)* recorded in the last 15 months
- has a value of "1" in field PAX-4

Valid Values	Description
0	No
1	Yes

Appendix A   CPI Report Structure Examples

- **PHO Aggregated Data, PHO doesn't cross DHB boundaries:**

```
MSH|123456|PPP_TEST_APP|20120718|00000324|P|2.0
DSX|20120401|20120630|PHO
DHH|CAK
DHX|…
…
DHX|…
```

- **PHO Aggregated Data, PHO lies within three DHB boundaries:**

```
MSH|987654|PPP_TEST_APP|20120719|00000325|T|2.0
DSX|20120401|20120630|PHO
DHH|CAK
DHX|…
…
DHX|…
DHH|SAK
DHX|…
…
DHX|…
DHH|NWA
DHX|…
…
DHX|…
```

- **Practice Aggregated Data, 3 Practices in PHO, PHO doesn't cross DHB boundaries:**

```
MSH|555555|PPP_TEST_APP|20120714|00000358|P|2.0
DSX|20120401|20120630|Practice
DHH|OTA
PRH|001|Dr Smith's Practice
PRX|…
…
PRX|…
PRH|002|Dr Wilson's Practice
PRX|…
…
PRX|…
PRH|003|Dr Who's Practice
PRX|…
…
PRX|…
```

- **Practice Aggregated Data, 4 Practices in PHO, PHO lies within 2 DHB boundaries:**

```
MSH|123321|PPP_TEST_APP|20120720|00000369|P|2.0
DSX|20120401|20120630|Practice
DHH|CAP
PRH|PracA|Dr Adam's Practice
PRX|…
…
PRX|…
PRH|PracB|Dr Beth's Practice
PRX|…
…
PRX|…
DHH|HUT
PRH|PracC|Dr Charlie's Practice
PRX|…
…
PRX|…
PRH|PracD|Dr Debbie's Practice
PRX|…
…
PRX|…
```

- **Patient Level Data, 2 Practices in PHO, PHO doesn't cross DHB boundaries:**

```
MSH|987789|PPP_TEST_APP|20120709|00000311|T|2.0
DSX|20120401|20120630|Patient
DHH|WKO
PRH|MC1|City Medical
PAX|…
..
PAX|…
PRH|MC2|Main St Medical
PAX|…
…
PAX|…
```

- **Patient Level Data, 5 Practices in PHO, PHO lies within three DHB boundaries:**

```
MSH|888888|PPP_TEST_APP|20120720|00000378|P|2.0
DSX|20120401|20120630|Patient
DHH|BOP
PRH|10000|Dr Earth
PAX|…
…
PAX|…
PRH|20000|Dr Fire
```

```
PAX|…
…
PAX|…
DHH|LKS
PRH|30000|Dr Wind
PAX|…
…
PAX|…
DHH|HWB
PRH|40000|Dr Water
PAX|…
…
PAX|…
PRH|50000|Dr Heart
PAX|…
…
PAX|…
```

Appendix B   Definition of a diabetes annual review

The definition of an annual diabetes review* (DAR) is:

- A diabetes eye check (check of your retinas) within the last two years
- The sensation and circulation of your feet checked
- Your blood pressure checked
- An HBA1c level done (this checks your average blood glucose levels over the previous 6 weeks)
- Your cholesterol levels checked
- Your height and weight checked
- Your kidney function checked

* From the Diabetes New Zealand website; www.diabetes.org.nz