

*nzhis*

New Zealand Health Information Service

# LABORATORY CLAIMS DATA WAREHOUSE

## DATA DICTIONARY

**Version 2.0**

**April 2005**



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**Reporting environments**

Reporting environments such as Business Objects and data extracts will not necessarily contain all data described in this Data Dictionary.

**Publications**

A complete list of NZHIS's publications is available from New Zealand Health Information Service, PO Box 5013, Wellington, or on NZHIS's web site at <http://www.nzhis.govt.nz/publications/publications.htm>.

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# Introduction

**Basis**

This revised dictionary builds on the information that was previously published each year in the Laboratory Claims Data Warehouse (Labs) Data Dictionary.

**Objectives**

The objectives of the New Zealand Health Information Service (NZHIS) Data Dictionaries are to:

- describe the information available within the National Collections
- promote uniformity, availability and consistency across the National Collections
- support the use of nationally agreed protocols and standards wherever possible
- promote national standard definitions and make them available to users.

It is hoped that the greater level of detail along with clear definitions of the business rules around each element will assist with providing and using the data.

**Audiences**

The target audiences for NZHIS Data Dictionaries are data providers, software developers, and data users.

**New format**

All data element definitions in the NZHIS Data Dictionaries are presented in a format based on the Australian Institute of Health and Welfare National Health Data Dictionary. This dictionary is based on the ISO/IEC Standard 11179 *Specification and Standardization of Data Elements*—the international standard for defining data elements issued by the International Organization for Standardization and the International Electrotechnical Commission.

The format is described in detail in Appendix A of this dictionary.

**Changes to dictionary format**

A more rigorous approach to recording changes in the data elements has been introduced in these dictionaries along with background material on the features of time-series data for each element.

In summary, the changes to the data dictionaries include:

- standardisation of the element names so that, for instance, a healthcare user's NHI number is referred to as NHI number in all collections
- elements are listed alphabetically within each table, and the tables are organised alphabetically
- each table is described
- verification rules, historical information, and data quality information are included
- alternative names for the elements are listed
- information about how the data is collected is given
- related data, and references to source documents and source organisations are included
- an alphabetical index is included
- code tables are included with the element, or a reference given to the NZHIS web site (for large or dynamic code tables).

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## Laboratory Claims Data Warehouse (Labs)

<b>Scope</b>	<b>Purpose</b> <p>The Laboratory Claims Data Warehouse (Labs) allows the Ministry of Health and DHBs to monitor the primary-care test subsidies.</p> <b>Content</b> <p>Labs contains claim and payment information for laboratory tests that have been processed by the HealthPAC General Transaction Processing System (GTPS). It also contains laboratory test information from Pegasus IPA and Medlab South.</p> <p>As at October 2004, this amounted to over 134 million rows of claim and payment data. Between 1.5 and 2 million are added a month.</p>
<b>Start date</b>	Labs was established in 2000 and contains data from July 1997.
<b>Guide for use</b>	<p>Labs contains claim and payment information that has been audited against the HealthPAC Payments system, and some DHBs.</p> <p>Until late 2003, Labs is known to incorrectly attribute laboratory test costs to DHBs. This happens when the DHB is identified by the domicile codes of the providers who ordered the tests, and some providers order tests from laboratories funded by other DHBs. The error range is from 10 to 15 percent. After the introduction of the Funding DHB field, this data will become accurate.</p> <p>Labs is unable to report on primary care organisations (PCOs), as up-to-date PCO membership data is not currently maintained.</p> <p>All attributes are stored as they were at the time of the transaction, that is, they do not reflect current values, unless explicitly stated, for example, ethnicity, gender and geographic information.</p>
<b>Contact information</b>	For further information about this collection or to request specific datasets or reports, contact the NZHIS Analytical Services team on ph 04 922 1800, fax 04 922 1897, or e-mail <a href="mailto:inquiries@nzhis.govt.nz">inquiries@nzhis.govt.nz</a> , or visit the NZHIS web site <a href="http://www.nzhis.govt.nz">www.nzhis.govt.nz</a> .
<b>Collection methods – guide for providers</b>	Data is sourced from HealthPAC, Pegasus Health and Medlab South.
<b>Frequency of updates</b>	Labs receives monthly extracts from HealthPAC, Pegasus Health and Medlab South.
<b>Security of data</b>	<p>The Labs database is accessed by authorised NZHIS staff for maintenance, data quality, audit and analytical purposes.</p> <p>Authorised members of the Ministry of Health and District Health Boards have access to the data for analytical purposes, via the Business Objects reporting tool and the secure Health Information Network (HIN). Business Objects contains a subset of the data described in the Data Dictionary.</p>

***Privacy issues***

The Ministry of Health is required to ensure that the release of information recognises any legislation related to the privacy of health information, in particular the Official Information Act 1982, the Privacy Act 1993 and the Health Information Privacy Code 1994.

Information available to the general public is of a statistical and non-identifiable nature. Researchers requiring identifiable data will usually need approval from an Ethics Committee.

In 2004 claims, the encrypted NHI number is stored for approximately 88 percent of laboratory test records. (In earlier years, it varied, dropping to as low as 13 percent in 1997 claims.) Identifying information is only held for health providers who request the test and not for the pathologist performing the test.

***National reports and publications***

NZHIS releases monthly standard reports for DHBs via the HIN.

***Data provision***

Customised datasets or summary reports are available on request, either electronically or on paper. Staff from the NZHIS Analytical Services team can help to define the specifications for a request and are familiar with the strengths and weaknesses of the data.

The NZHIS Analytical Services team also offers a peer review service to ensure that NZHIS data is reported appropriately when published by other organisations.

There may be charges associated with data extracts.

## Laboratory table

<b>Table name:</b>	Laboratory table		
<b>Name in database:</b>	dim_laboratory	<b>Version:</b> 2.0	<b>Version date:</b> 08-Feb-2005
<b>Definition:</b>	The laboratory reference table.		
<b>Guide for Use:</b>	Sourced from HealthPAC.		
<b>Primary Key:</b>	dim_laboratory_key		
<b>Business Key:</b>	Laboratory code		
<b>Relational Rules:</b>	This dimension table is linked via its primary key (dim_laboratory_key) to the foreign key (dim_laboratory_key) in the fact_lab_transaction table.		

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## Laboratory code

### Administrative status

<b>Reference ID:</b>	A0206	<b>Version:</b> 2.0	<b>Version date:</b> 08-Feb-2005
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### Identifying and defining attributes

<b>Name:</b>	Laboratory code		
<b>Name in database:</b>	lab_code		
<b>Other names:</b>			
<b>Element type:</b>	Data element		
<b>Definition:</b>	A code that identifies a laboratory that performs tests. Some laboratories share a code, where they belong to the same laboratory company, ie the codes do not uniquely identify Laboratory Facilities		
<b>Context:</b>	The lab codes were originally assigned to each lab facility. Lab codes were dropped by HealthPAC with the transition of lab claiming to GTPS.		

### Relational and representational attributes

<b>Data type:</b>	varchar	<b>Field size:</b> 5	<b>Layout:</b> AAAAA
<b>Data domain:</b>	See the Laboratory code table on the NZHIS web site at <a href="http://www.nzhis.govt.nz/documentation/codetables.html">http://www.nzhis.govt.nz/documentation/codetables.html</a> . For further information or a printed copy of the code table, contact the Publications Officer. Contact details are given at the front of this dictionary.		
<b>Guide for use:</b>	The laboratory facility. This previously came from HealthPAC's Pronet laboratory claiming system. Since the introduction of GTPS, which does not contain laboratory codes, this is derived from the first characters of the Laboratory claim reference field.		
<b>Verification rules:</b>			
<b>Collection method:</b>			
<b>Related data:</b>			

### Administrative attributes

<b>Source document:</b>	
<b>Source organisation:</b>	

## Laboratory description

### Administrative status

**Reference ID:** LD0102

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Laboratory name

**Name in database:** lab\_description

**Other names:**

**Element type:** Data element

**Definition:** The descriptive name of the laboratory using this code.

**Context:**

### Relational and representational attributes

**Data type:** varchar                      **Field size:** 50                      **Layout:** Free text

**Data domain:**

**Guide for use:** This is often (but not always) the name of the laboratory company, not the laboratory facility. The relationship between the two is not maintained in Labs. Some values are null.

**Verification rules:**

**Collection method:**

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**



## Laboratory region

### Administrative status

**Reference ID:** 2005

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Region

**Name in database:** lab\_region

**Other names:**

**Element type:** Data element

**Definition:** This is a code that represents the RHA where the laboratory is located.

**Context:** The old Regions are still used to group results by some analysts

### Relational and representational attributes

**Data type:** integer

**Field size:**

**Layout:**

**Data domain:**

**Guide for use:** This field is not maintained, as RHA's were abolished in 1998. As new laboratory codes are introduced the percentage of labs records with RHA values declines.

**Verification rules:**

**Collection method:** Now may be assigned manually, to allow analysis by Region.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Laboratory Test table

<b>Table name:</b>	Laboratory Test table		
<b>Name in database:</b>	dim_laboratory_test	<b>Version:</b> 2.0	<b>Version date:</b> 08-Feb-2005
<b>Definition:</b>	A reference table of the tests for which costs of administering can be claimed from heallthpac.		
<b>Guide for Use:</b>	Sourced from HealthPAC.		
<b>Primary Key:</b>	dim_laboratory_test_key		
<b>Business Key:</b>	Laboratory test code		
<b>Relational Rules:</b>	This dimension table is linked via its primary key (dim_laboratory_test_key) to the foreign key (dim_laboratory_test_key) in the fact_lab_transaction table		

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## Laboratory test

### Administrative status

<b>Reference ID:</b>	LD0301,LD0413	<b>Version:</b> 2.0	<b>Version date:</b> 08-Feb-2005
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### Identifying and defining attributes

<b>Name:</b>	Laboratory test code
<b>Name in database:</b>	lab_test
<b>Other names:</b>	
<b>Element type:</b>	Data element
<b>Definition:</b>	A unique code that identifies a laboratory test.
<b>Context:</b>	

### Relational and representational attributes

<b>Data type:</b>	varchar	<b>Field size:</b> 5	<b>Layout:</b> AAAAA
<b>Data domain:</b>	See the Laboratory Test code table on the NZHIS web site at <a href="http://www.nzhis.govt.nz/documentation/codetables.html">http://www.nzhis.govt.nz/documentation/codetables.html</a> . For further information or a printed copy of the code table, contact the Publications Officer. Contact details are given at the front of this dictionary.		
<b>Guide for use:</b>	Every test (for example, Glucose tolerance test standard, Iron binding capacity serum) has a unique identifier.		
<b>Verification rules:</b>			
<b>Collection method:</b>			
<b>Related data:</b>			

### Administrative attributes

<b>Source document:</b>	
<b>Source organisation:</b>	

## Laboratory test description

### Administrative status

**Reference ID:** LD0303

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Laboratory test description

**Name in database:** test\_description

**Other names:**

**Element type:** Data element

**Definition:** A description of the test.

**Context:**

### Relational and representational attributes

**Data type:** varchar                      **Field size:** 100                      **Layout:** free text

**Data domain:**

**Guide for use:** For example, Glucose tolerance test standard, Iron binding capacity serum.

**Verification rules:**

**Collection method:**

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Laboratory test group

### Administrative status

**Reference ID:** LD0302

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Laboratory test type

**Name in database:** test\_grp

**Other names:**

**Element type:** Data element

**Definition:** A code that groups this test with other tests of a similar type.

**Context:**

### Relational and representational attributes

**Data type:** varchar **Field size:** 5 **Layout:** AAAAA

**Data domain:**

B	Biochemistry tests
BA	Biochemistry, adrenal tests
BE	Biochemistry, electrolyte tests
BF, X	Biochemistry, faeces tests
BG	Biochemistry, glucose tests
BH	Biochemistry, haemopoietic tests
BL	Biochemistry, lipid tests
BM	Biochemistry, monitoring tests for drugs
BP	Biochemistry, protein tests
BR	Biochemistry, renal tests
BS	Biochemistry, blood gas assays
BT	Biochemistry, thyroid tests
BU	Biochemistry, uncategorised tests
BV	Biochemistry, liver tests
BX	Biochemistry, reproductive system tests
BZ	Biochemistry, enzyme tests
C	Cytology and morbid histology
D	Diagnostic immunological & serological tests
H	Haematology tests
L	Other group tests
M	Microbiology tests
S	Other group test

**Guide for use:**

**Verification rules:**

**Collection method:**

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Laboratory test group description

### Administrative status

**Reference ID:** LD0304

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Laboratory test type name

**Name in database:** group\_description

**Other names:**

**Element type:** Data element

**Definition:** A description for the group ( of tests).

**Context:**

### Relational and representational attributes

**Data type:** varchar                      **Field size:** 80                      **Layout:** free text

**Data domain:**

**Guide for use:** For example, Biochemistry adrenal, Biochemistry glucose, Haematology tests.

**Verification rules:**

**Collection method:**

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Laboratory Transaction Fact table

**Table name:** Laboratory Transaction Fact table

**Name in database:** fact\_lab\_transaction

**Version:** 2.0

**Version date:** 08-Feb-2005

**Definition:** The laboratory transaction table contains a record for each test performed by a laboratory, for a patient referred by a provider.

**Guide for Use:** Sourced from HealthPAC, MedLab South and Pegasus Health.

Refer to the SHARED DIMS Data Dictionary for the Dimension tables used by this datamart.

**Primary Key:** This table has no primary key.

**Business Key:**

**Relational Rules:** The Fact table has several foreign keys to dimension tables. These are:

KEY	LINKED TO
dim_affiliation_key	dim_affiliation table
dim_age_band_key	dim_age_band table
dim_claim_received_dat_key	dim_claim_received_date table
dim_contract_details_key	dim_contract_details table
dim_dhb_reference_key	dim_dhb_reference table
dim_geo_key	dim_geo table
dim_health_care_user_key	dim_health_care_user table
dim_laboratory_key	dim_laboratory table
dim_laboratory_test_key	dim_laboratory_test table
dim_payee_key	dim_payee table
dim_payment_date_key	dim_payment_date table
dim_provider_key	dim_provider table
dim_visit_date_key	dim_visit_date table

## Age at visit

### Administrative status

**Reference ID:** CD0202

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Age

**Name in database:** age\_at\_visit

**Other names:**

**Element type:** Data element

**Definition:** The age of the Health Care User at the date of visit

**Context:**

### Relational and representational attributes

**Data type:** integer

**Field size:**

**Layout:**

**Data domain:** 0 to 105

**Guide for use:**

**Verification rules:**

**Collection method:** The age at Visit is calculated as the difference between the visit date (supplied by HealthPAC, Medlab South and Pegasus) and the Health Care Users date of birth.

If no valid HCU Id ( NHI Number) is supplied on the transaction, no age can be calculated.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Amount paid EXCL

### Administrative status

**Reference ID:** LD0421

**Version:** 2.0

**Version date:** 09-Feb-2005

### Identifying and defining attributes

**Name:** Amount paid EXCL

**Name in database:** amount\_paid\_excl

**Other names:**

**Element type:** Data element

**Definition:** The amount paid to the laboratory by HealthPAC for performing the test, exclusive of GST.

**Context:**

### Relational and representational attributes

**Data type:** numeric                      **Field size:** 13.2                      **Layout:** NNNNNNNNNNN.NN

**Data domain:** 0.00 to 9999999999.99

**Guide for use:** Determined by a contract (Laboratory Test Schedule) between the laboratory and HealthPAC.

**Verification rules:**

**Collection method:** Supplied by HealthPAC, Medlab South and Pegasus in the extract files.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Claim ID

### Administrative status

**Reference ID:** LD0405

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Claim ID

**Name in database:** claim\_id

**Other names:**

**Element type:** Data element

**Definition:** The identifier of the claim provided by the claiming laboratory, under which payment for this test was made.

**Context:**

### Relational and representational attributes

**Data type:** varchar

**Field size:** 10

**Layout:** AAAAAAAAAA

**Data domain:**

**Guide for use:** One claim contains a batch of laboratory tests.

**Verification rules:**

**Collection method:** Supplied by HealthPAC, Medlab South and Pegasus in the extract files.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**



## Claim received date

### Administrative status

**Reference ID:**

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Date

**Name in database:** claim\_received\_date

**Other names:**

**Element type:** Data element

**Definition:** The date the claim was received for payment processing at HealthPAC.

**Context:**

### Relational and representational attributes

**Data type:** datetime      **Field size:** 11      **Layout:** dd-mon-ccyy

**Data domain:**

**Guide for use:**

**Verification rules:**

**Collection method:** Supplied by HealthPAC, Medlab South and Pegasus in the extract files.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Contract number

### Administrative status

**Reference ID:**

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Contract number

**Name in database:** contract\_number

**Other names:**

**Element type:** Data element

**Definition:** The number of the contract that was the basis for the claiming for payment of this laboratory test .

**Context:**

### Relational and representational attributes

**Data type:** varchar

**Field size:** 11

**Layout:**

**Data domain:**

**Guide for use:** This is the business key for the Contract Details table.

**Verification rules:** HealthPAC-generated number.

**Collection method:** Supplied by HealthPAC in the extract files; Medlab South and Pegasus do not supply this.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Contract version

### Administrative status

**Reference ID:**

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Contract version

**Name in database:** contract\_version

**Other names:**

**Element type:** DATA ELEMENT

**Definition:** The version number of the contract.

**Context:**

### Relational and representational attributes

**Data type:** varchar

**Field size:** 2

**Layout:** AA

**Data domain:**

**Guide for use:**

**Verification rules:**

**Collection method:** Supplied by HealthPAC in the extract files; Medlab South and Pegasus do not supply this.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Data source

### Administrative status

**Reference ID:**

**Version:** 1.0

**Version date:** 07-Apr-2005

### Identifying and defining attributes

**Name:** Data Source

**Name in database:** data\_source

**Other names:**

**Element type:** Data element

**Definition:** A flag that describes the source system that provided the lab transaction details to the warehouse.

**Context:**

### Relational and representational attributes

**Data type:** char

**Field size:**

**Layout:**

**Data domain:** HealthPac Labs claims from HealthPAC  
 Medlab South Labs claims from Medlab South  
 Pegasus Labs claims from Pegasus  
 North (Historical)

**Guide for use:** HealthPAC initially inherited two payment systems from the RHA's, North ( pronet) and South. Data was eventually processed through only the south system. Finally labs claims were redirected to process through Proclaim.  
 Some providers have subsequently stopped using HealthPAC to pay for lab claims, and submit details of their payments to the data warehouse separately

**Verification rules:**

**Collection method:** Derived by NZHIS based on where the extract files come from.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## DSS start update time

### Administrative status

**Reference ID:**

**Version:** 1.0

**Version date:** 19-May-2005

### Identifying and defining attributes

**Name:** DSS update time

**Name in database:** dss\_start\_update\_time

**Other names:**

**Element type:** Data element

**Definition:** This timestamp field indicates when the batch load job started. Each record in the batch is given this timestamp to help users identify the records in the batch.

**Context:**

### Relational and representational attributes

**Data type:** datetime                      **Field size:** 8                      **Layout:** CCYYMMDD

**Data domain:** Valid dates

**Guide for use:** DSS is Decision Support System.

**Verification rules:** WhereScape Red field.

**Collection method:**

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Encrypted NHI number

### Administrative status

**Reference ID:** A0319

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Encrypted NHI number

**Name in database:** encrypted\_hcu\_id

**Other names:** Encrypted HCU identifier, Encrypted NHI, etc. See other names for the NHI number under Guide for use.

**Element type:** Data element

**Definition:** The NHI number in encrypted form.

**Context:** The NHI number is the cornerstone of NZHIS's data collections. It is a unique 7-character identification number assigned to a healthcare user by the National Health Index (NHI) database. The NHI number uniquely identifies healthcare users, and allows linking between different data collections. It is encrypted in Labs to ensure privacy of individual records.

### Relational and representational attributes

**Data type:** varchar

**Field size:** 11

**Layout:** AAAAAAAAAAAA

**Data domain:** System-generated

**Guide for use:** THE NHI NUMBER

The NHI number is also known as National Health Index, HCU identifier, NHI, HCU, HCU Number, Healthcare User identifier, HCU identification number, NMPI number, Hospital Number, Patient Number.

When duplicate records for a healthcare user are merged, one of their NHI numbers will be deemed to be the master (or primary), and the others become event (or secondary) NHI numbers. This does not affect which NHI numbers are used in local systems.

The NHI number that is sent in by the data provider is encrypted during the loading process. Only this encrypted NHI number is stored.

For the analysis of healthcare information relating to a unique individual, the master NHI number should be used. Please contact [inquiries@nzhis.co.nz](mailto:inquiries@nzhis.co.nz) for further information on how to obtain the master encrypted NHI number if you are performing your own data extraction.

The Privacy Commissioner considers the NHI number to be personally identifying information (like name and address) so, if it is linked to clinical information, it must be held securely and the healthcare user's privacy protected. The Encrypted NHI number is not considered personally identifying.

NZHIS will return data containing unencrypted NHI numbers to providers who have sent it in. Information available to the general public is of a statistical and non-identifiable nature. Researchers requiring identifiable data will usually need approval from an Ethics Committee.

#### VALIDATION

The first three characters of an NHI number must be alpha (but not 'I' or 'O'). The 4th to 6th characters must be numeric. The 7th character is a check digit modulus 11.

#### ENCRYPTION

The NHI number is encrypted using a one-way encryption algorithm. The aim is to provide an encrypted number that can be sent across public (unsecured) networks.

**Verification rules:** Must be registered on the NHI before use.

There is a verification algorithm which ensures that the NHI number is in the correct format and is valid.

**Collection method:** NHI numbers are often included on patient notes and other patient documentation. New numbers can be allocated by health providers who have direct access to the NHI Register.

The NHI number is supplied by HealthPAC, Medlab South and Pegasus in the extract files then encrypted by NZHIS.

**Related data:**

**Administrative attributes**

**Source document:** <http://www.nzhis.govt.nz/nhi/> for more information on the NHI number

**Source organisation:** NZHIS

## Funding DHB

### Administrative status

**Reference ID:**

**Version:** 1.0

**Version date:** 05-Apr-2005

### Identifying and defining attributes

**Name:** DHB SSSG

**Name in database:** funding\_dhb\_code

**Other names:**

**Element type:** Data element

**Definition:** A three letter code identifying the DHB that paid for this lab test.

**Context:** Labs claim for payment for performing tests from HealthPAC. During payment processing Healthpac determine which DHB will pay for the claims made by the lab. This is the funding DHB.

### Relational and representational attributes

**Data type:** char

**Field size:** 3

**Layout:** AAA

**Data domain:**

NLD	Northland
NWA	Waitemata
CAK	Auckland
SAK	Counties Manukau
WKO	Waikato
LKS	Lakes
BOP	Bay of Plenty
TRW	Tairāwhiti
TKI	Taranaki
HWB	Hawkes Bay
WNI	Whanganui
MWU	MidCentral
HUT	Hutt
CAP	Capital and Coast
WRP	Wairarapa
NLM	Nelson Marlborough
WCO	West Coast
CTY	Canterbury
SCY	South Canterbury
OTA	Otago
SLD	Southland
MOH	Ministry of Health
OVS	Overseas

**Guide for use:** Funding DHBs were not added to the collection till late 2003. Prior to this the funding DHB was derived from the domicile code of the referring Provider. This was known to be not fully accurate, with error rates in the range of 10 - 15 percent.

**Verification rules:**

**Collection method:** Supplied by HealthPAC and Medlab South in the extract files; Pegasus does not supply this.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**



## HealthPAC claim ID

### Administrative status

**Reference ID:**

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** ID

**Name in database:** hpac\_claim\_id

**Other names:**

**Element type:** Data element

**Definition:** An identifier allocated by HealthPAC during payment processing to identify the claim that this lab transaction was processed in.

**Context:**

### Relational and representational attributes

**Data type:** varchar                      **Field size:** 20                      **Layout:** Free text

**Data domain:**

**Guide for use:** Used to identify records for update.

**Verification rules:**

**Collection method:** Supplied by HealthPAC and Medlab South in the extract files; Pegasus does not supply this.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Laboratory code

### Administrative status

**Reference ID:** LD0101, LD0429

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Laboratory code

**Name in database:** laboratory\_code

**Other names:**

**Element type:** Data element

**Definition:** The code used by the laboratory that performed the test to identify itself. Many laboratories share codes with other laboratories that belong to the same company.

**Context:**

### Relational and representational attributes

**Data type:** varchar

**Field size:** 5

**Layout:** AAAAA

**Data domain:**

**Guide for use:** The laboratory facility.

In the LD Laboratory table, this previously came from HealthPAC's Pronet laboratory claiming system. Since the introduction of GTPS, which does not contain laboratory codes, this is derived from the first characters of the Laboratory claim reference field.

**Verification rules:** This must be a valid code in the laboratory table.

**Collection method:** Supplied by HealthPAC, Medlab South and Pegasus, in the extract files.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Number of tests

### Administrative status

**Reference ID:** LD0414

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Number of tests

**Name in database:** number\_of\_tests

**Other names:**

**Element type:** Data element

**Definition:** The number of sets of results provided by this test. Usually a specimen is tested only once using a the test procedure. Where the test is performed multiple times the number of tests will be greater than one

**Context:**

### Relational and representational attributes

**Data type:** integer

**Field size:**

**Layout:**

**Data domain:** 0 to 99

**Guide for use:** In some cases the patients specimen is subjected to multiple occurrences of the test. The claim will therefore be for each run of the test.

**Verification rules:**

**Collection method:** Supplied by HealthPAC, Medlab South and Pegasus, in the extract files.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Payment date

### Administrative status

**Reference ID:**

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Date

**Name in database:** payment\_date

**Other names:**

**Element type:** Data element

**Definition:** The date the payment was made for this lab transaction.

**Context:**

### Relational and representational attributes

**Data type:** datetime                      **Field size:** 11                      **Layout:** dd-mon-ccyy

**Data domain:**

**Guide for use:**

**Verification rules:**

**Collection method:** Supplied by HealthPAC, Medlab South and Pegasus, in the extract files.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Provider registration number

### Administrative status

**Reference ID:**

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Provider registration number

**Name in database:** provider\_registration\_number

**Other names:**

**Element type:** Data element

**Definition:** The professional registration number of the provider who referred the patient to the laboratory for tests.

**Context:**

### Relational and representational attributes

**Data type:** varchar                      **Field size:** 10                      **Layout:**

**Data domain:**

**Guide for use:** Medical Council, Nursing Council or Dental Council registration number.

**Verification rules:** '99999' in the Provider registration number indicates that a value was not supplied.

**Collection method:** Supplied by HealthPAC, Medlab South and Pegasus, in the extract files.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Provider type

### Administrative status

**Reference ID:**

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Provider type

**Name in database:** provider\_type

**Other names:**

**Element type:** Derived data element

**Definition:** A code for the registration body of the provider who referred the patient for tests.

**Context:**

### Relational and representational attributes

**Data type:** varchar **Field size:** 10 **Layout:** AAAAAAAAAA

**Data domain:** D represents Dental Council of NZ (Dental)  
M represents Medical Council of NZ (MCNZ)  
N represents Nursing Council of NZ (NCONZ)  
O represents Organisation.

**Guide for use:** Information is sent by HealthPAC and may not point to a Provider Key in the dim\_provider table.  
There are many records with invalid provider types codes sourced from the old Health Benefits data.

**Verification rules:**

**Collection method:** Derived from the Health professional group code.

**Related data:** provider\_type\_desc

### Administrative attributes

**Source document:**

**Source organisation:**

## Referral ID

### Administrative status

**Reference ID:** LD0412

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Referral ID

**Name in database:** referral\_id

**Other names:**

**Element type:** Data element

**Definition:** A number that identifies the referral that this lab transaction is a part of.

**Context:**

### Relational and representational attributes

**Data type:** varchar

**Field size:** 10

**Layout:** AAAAAAAAAA

**Data domain:**

**Guide for use:**

**Verification rules:**

**Collection method:** Supplied by HealthPAC, Medlab South and Pegasus, in the extract files.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Test code

### Administrative status

**Reference ID:** LD0301,LD0413

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Laboratory test code

**Name in database:** test\_code

**Other names:**

**Element type:** Data element

**Definition:** A unique code that identifies the laboratory test that was performed in this lab transaction

**Context:**

### Relational and representational attributes

**Data type:** char                      **Field size:** 3                      **Layout:** AAA

**Data domain:** See the Laboratory Test code table on the NZHIS web site at <http://www.nzhis.govt.nz/documentation/codetables.html>. For further information or a printed copy of the code table, contact the Publications Officer. Contact details are given at the front of this dictionary.

**Guide for use:** Every test (for example, Glucose tolerance test standard, Iron binding capacity serum) has a unique identifier.

**Verification rules:**

**Collection method:** Supplied by HealthPAC, Medlab South and Pegasus, in the extract files.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**



## Visit date

### Administrative status

**Reference ID:**

**Version:** 2.0

**Version date:** 08-Feb-2005

### Identifying and defining attributes

**Name:** Date

**Name in database:** visit\_date

**Other names:**

**Element type:** Data element

**Definition:** The date of visit of the HCU to the referring practitioner.

**Context:**

### Relational and representational attributes

**Data type:** datetime      **Field size:** 11      **Layout:** dd-mon-ccyy

**Data domain:**

**Guide for use:**

**Verification rules:**

**Collection method:** Supplied by HealthPAC, Medlab South and Pegasus, in the extract files.

**Related data:**

### Administrative attributes

**Source document:**

**Source organisation:**

## Appendix A: Data Dictionary Template

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<b>Introduction</b>	This appendix explains how data element attributes are organised in the data dictionary template.
<b>Order of elements</b>	Within the dictionary, elements are organised by table, and then alphabetically. An alphabetical index at the back of the data dictionary is provided to assist the user in finding specific elements.
<b>Template:</b>	
<b>Administrative status</b>	The operational status (eg, CURRENT, SUPERSEDED) of the data element. No SUPERSEDED data elements will be included in the Dictionaries.
<b>Reference ID</b>	A code that uniquely identifies the data element. If the data element is used in more than one collection, it should retain its Reference ID wherever it appears.
<b>Version number</b>	<p>A version number for each data element. A new version number is allocated to a data element/concept when changes have been made to one or more of the following attributes of the definition:</p> <ul style="list-style-type: none"> <li>– name</li> <li>– definition</li> <li>– data domain, eg, adding a new value to the field.</li> </ul> <p>Elements with frequently updated code tables, such as the Facility code table, will not be assigned a new version for changes to data domain.</p>
<b>Version date</b>	The date the new version number was assigned.
<b>Identifying and defining attributes</b>	
<b>Name</b>	A single or multi-word designation assigned to a data element. This appears in the heading for each unique data definition in the Dictionaries. Previous names for the data element are included in the Guide for Use section.
<b>Data element type</b>	<p>DATA ELEMENT—a unit of data for which the definition, identification, representation and permissible values are specified by means of a set of attributes.</p> <p>DERIVED DATA ELEMENT—a data element whose values are derived by calculation from the values of other data elements.</p> <p>COMPOSITE DATA ELEMENT—a data element whose values represent a grouping of the values of other data elements in a specified order.</p>
<b>Definition</b>	A statement that expresses the essential nature of a data element and its differentiation from all other data elements.
<b>Context</b>	A designation or description of the application environment or discipline in which a name is applied or from which it originates. This attribute may also include the justification for collecting the items and uses of the information.

**Relational and representational attributes**

<b>Data type</b>	The type of field in which a data element is held. For example, character, integer, or numeric.
<b>Field size</b>	The maximum number of storage units (of the corresponding data type) to represent the data element value. Field size does not generally include characters used to mark logical separations of values, eg, commas, hyphens or slashes.
<b>Layout</b>	The representational layout of characters in data element values expressed by a character string representation. For example: <ul style="list-style-type: none"><li>- 'CCYYMMDD' for calendar date</li><li>- 'N' for a one-digit numeric field</li><li>- 'A' for a one-character field</li><li>- 'X' for a field that can hold either a character or a digit, and</li><li>- '\$\$\$,\$\$\$,\$\$\$' for data elements about expenditure.</li></ul>
<b>Data domain</b>	The permissible values for the data element. The set of values can be listed or specified by referring to a code table or code tables, for example, ICD-10-AM 2nd Edition.
<b>Guide for use</b>	Additional comments or advice on the interpretation or application of the data element (this attribute has no direct counterpart in the ISO/IEC Standard 11179 but has been included to assist in clarification of issues relating to the classification of data elements). Includes historical information, advice regarding data quality, and alternative names for this data element.
<b>Verification rules</b>	The rules and/or instructions applied for validating and/or verifying elements, in addition to the formal edits.
<b>Collection method</b>	Comments and advice concerning the capture of data for the particular data element, including guidelines on the design of questions for use in collecting information, and treatment of 'not stated' or non-response (this attribute is not specified in the ISO/IEC Standard 11179 but has been added to cover important issues about the actual collection of data).
<b>Related data</b>	A reference between the data element and any related data element in the Dictionary, including the type of this relationship. Examples include: 'has been superseded by the data element...', 'is calculated using the data element...', and 'supplements the data element...'.

**Administrative attributes**

<b>Source document</b>	The document from which definitional or representational attributes originate.
<b>Source organisation</b>	The organisation responsible for the source document and/or the development of the data definition (this attribute is not specified in the ISO/IEC Standard 11179 but has been added for completeness). The source organisation is not necessarily the organisation responsible for the ongoing development/maintenance of the data element definition. An example of a source organisation is the National Data Policy Group (NDPG).

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## Appendix B: Logical Groups of Elements

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**Laboratory**

Laboratory code  
Laboratory description

**Laboratory Test**

Laboratory test  
Laboratory test description  
Laboratory test group  
Laboratory test type description

**Claim**

Amount paid EXCL  
Claim received date  
Claim ID  
Contract number  
Contract version  
Funding DHB  
HealthPAC claim ID  
Payee number

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## Appendix C: Code Table Index

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Code table	Location
Laboratory Test code table	See the NZHIS web site.
Laboratory Test Type code table	See <i>Laboratory Test Group</i> on page 6.

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**Code tables on website**

For code tables on the NZHIS web site go to <http://www.nzhis.govt.nz/documentation/codetables.html>. For further information or a printed copy of the code table, contact the Publications Officer. Contact details are listed at the front of this dictionary.

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## Appendix D: List of Dimensions

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**Dimension tables** The Laboratory Claims datamart has a number of shared Dimension tables. The definitions for these dimensions are held in a separate data dictionary called "SHARED Dimensions".

The table below lists the dimensions within this datamart.

Dimension Table	Description
dim_affiliation	This table holds combinations of all possible ethnic codes and gender.
dim_age_band	This table holds records of all possible ages grouped into bands.
dim_claim_received_date	This table holds date records used as a reference for when the claim was received.
dim_contract_details	This table holds a list of all contract numbers and descriptions.
dim_dhb_reference	This table holds a list of all DHB codes and names.
dim_geo	This table holds a geographical breakdown of NZ domicile codes and areas.
dim_health_care_user	This table holds information about people who have received healthcare directly from healthcare providers.
dim_payee	This table holds a list of persons or organisations who receive payment from HealthPAC for claims.
dim_payment_date	This table holds date records used as a reference for when the payment was made.
dim_provider	This table holds a list of all healthcare providers..
dim_visit_date	This table holds date records used as a reference for when the visit occurred.

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## Appendix E: Alphabetical Index of Data Elements

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# Appendix F: LABS Data Model

