

R42 – PHN Lookup

1 General

Standards for messaging to and from Ministry of Health applications using HL7 are described in a series of business and technical volumes. Volumes 1, 2, 5, 6 and 7 are common for all application interfaces. Volumes 3 and 4 are customized to the requirements of particular business areas. This message specification is a component of Volume 4 – HL7 Message Specifications.

A catalogue of all supported messages and message interactions can be found in Volume 1.

All documentation is available on the *healthnetBC* web site <http://healthnet.hnet.bc.ca/catalogu/tech/compdocs.html>

1.1 Corrections and updates

Corrections and update notes can be found at the end of this document. A vertical line in the outside boarder denotes corrections within the document. ¹

1.2 R42 - Transaction Overview

This message is related to establishment and maintenance of insurance premium payment contracts.

This transaction will return the PHNs associated with a particular contract. The MSP Group Number and MSP Contract Number are accepted as input, and the transaction will return the PHNs and demographic information for all people, active and inactive, on the contract. A maximum of 50 persons are returned. The first person in the returned list will be the subscriber/contract representative. The remaining persons will be grouped in the following order:

- Spouses
- Remaining dependents

2 Sending System

2.1 R42 - Processing Rules – Sending System

No Processing Rules have been defined at this time.

2.2 R42 - Minimum Display/Print Standards – Sending System

- For each submission of this transaction, an indication of success or failure must be either:
 - Displayed to the user, if transaction submitted on-line, or
 - Printed on a paper report or logged in a file, if transaction submitted in batch.

Success or failure can be determined by using the tests below:

- **Success** = MSA segment present and Acknowledgement Code on MSA = “AA” (application accept),
- **Failure** = no MSA segment or Acknowledgement Code on MSA not = “AA” (application accept). Acknowledgement Code may be “AE” (application error) or “AR” (application reject). Refer to 'MSA Segment' in Volume 5 for more information on acknowledgement code use.

For a transaction failure:

- The following data elements must be displayed to the user, reported or logged (see above):

Information Returned by <i>healthnetBC</i>	Mandatory Display	Display on First Screen?	Segment	Field
Text Message	Y	Y	MSA	Text Message (see segment for field decomposition rules)
All information, warning, error messages on ERR	Y	Y	ERR	Error Code and Location: Identifier of Code Identifying Error, Text of Code Identifying Error

segment				
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For a transaction success:

- The following data elements must be displayed to the user, reported or logged (see above):

Information Returned by <i>healthnetBC</i>	Mandatory Display	Display on First Screen?	Segment	Field
No additional data elements have been determined at this time.				

2.3 R42 - Transaction Summary - Sending System

The following specification illustrates the structure of the HL7 transaction.

{ } denotes one or more repetitions of the enclosed segment(s)

[] denotes that the enclosed segments are optional

Refer to the *healthnetBC* Fixed Length Segment Definitions section of this document for more details on each of the segment definitions.

Input Transaction (R42)

MSH	Message Header	Required
ZHD	<i>healthnetBC</i> Message Header	Required
IN1	Insurance	Required

2.4 R42 - Transaction Segments and Fields - Sending System

MSH	Required						
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
-	Segment Id	R					"MSH"
1	Field Separator	R					" "

MSH	Required						
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
2	Encoding Characters	R					"^~\&"
3	Sending Application	R					<ul style="list-style-type: none"> Namespace ID (15) - Business application that originated the transaction; user defined/assigned
4	Sending Facility	R					<ul style="list-style-type: none"> Namespace ID (20) - Sending Network Facility ID; <i>healthnetBC</i> assigned
5	Receiving Application	R					<ul style="list-style-type: none"> Namespace ID (15) - Business application that will accept the transaction; valid value is "RAIPHN-LOOKUP"
6	Receiving Facility	R					<ul style="list-style-type: none"> Namespace ID (20) - Receiving Network Facility ID; <i>healthnetBC</i> assigned
7	Date/Time of Message	R					Date/Time transaction was sent from sending system (24) - YYYYMMDDHHMMSS.SSSS+/-ZZZZ
8	Security	R					User ID that uniquely identifies sending system user (20)
9	Message Type	R					<ul style="list-style-type: none"> Message Type (3) - Transaction Identification; valid value is "R42" <i>Trigger Event (3) – Not Supported</i> ²
10	Message Control ID	R					Unique transaction number (20) - see MSH definition for more information
11	Processing ID	R					<ul style="list-style-type: none"> Processing ID (1) - valid values are "D", "E", "T", "P"
12	Version ID	R					HL7 version supported by <i>healthnetBC</i> (8) - valid value is "2.3"

ZHD		Required					
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
-	Segment Id	R					"ZHD"
1	Business Event Date/Time	R					Date/Time business event occurred that "created" this transaction (19) - YYYYMMDDHHMMSS+/-ZZZZ
2	Business Organization	R			HNET :XON		Business organization that originated the transaction; <i>healthnetBC</i> assigned <ul style="list-style-type: none"> Organization Name – Not Supported ³ Organization Name Type code – Not Supported ID Number (20) - Organization ID; required
3	Business User Group	R					Service Permission Group that user belongs to (30)
7	Software Version Number	R					Latest version number of sending application software that has been compliance tested by <i>healthnetBC</i> (15)

IN1		Required					
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
-	Segment ID	R					"IN1"
1	<i>Set ID – IN1</i>	-					<i>Not Supported</i> ²
2	<i>Insurance Plan ID</i>	-					<i>Not Supported</i> ²
3	<i>Insurance Company ID</i>	-					<i>Not Supported</i> ²
8	Group Number	R					Group Number (7)
36	Policy Number	R					Contract Number (9)

3 Receiving System

3.1 R42 - Processing Rules – Receiving System

1. A maximum of 50 records will be returned on output – one record for contract representative / subscriber and up to 49 for dependents.
2. Person information on output is contained on the PID and ZIA segments for the subscriber and on the NK1 and the ZIA segments for each dependent. For each returned dependent, the Set ID - NK1 on NK1 and Set ID - ZIA on ZIA will be set to the same number, starting from 1 and incrementing by 1 for each record that is returned, up to the maximum that can be returned by the transaction.

3.2 R42 - Transaction Summary – Receiving System

The following specification illustrates the structure of the HL7 transaction.

{ } denotes one or more repetitions of the enclosed segment(s)

[] denotes that the enclosed segments are optional

Refer to 'Appendix A, *healthnetBC* Fixed Length Segment Definitions' for more details on each of the segment definitions.

Output Transaction (R42)

MSH	Message Header	Required
MSA	Message Acknowledgement	Required
[{ ERR }]	Error	Optional, Repeats, minimum 0, maximum 10 ⁴
[Optional, if person record found, then Required
ZTL	<i>healthnetBC</i> Control	Required
PID	Person Identification	Required
ZIA	<i>healthnetBC</i> Person Identification Extension	Required
[{		Optional, repeats minimum 0, maximum 49 for spouse(s) and dependents ⁵
NK1	Next of Kin/Associated Parties Segment	Required
ZIA	<i>healthnetBC</i> Person Identification Extension	Required
}]		
]		

3.3 R42 - Transaction Segments and Fields - Receiving System

MSH	Required						
Seq	Field	Req/Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
-	Segment Id	R					"MSH"
1	Field Separator	R					" "
2	Encoding Characters	R					"^~\&"

MSH		Required					
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
3	Sending Application	R					= Receiving Application on MSH input, "HNCLIENT", "HNGATE" For more information on "HNCLIENT/HNGATE" values, see 'No Response from the Network' in Volume 5.
4	Sending Facility	R					= Receiving Facility on MSH input or Network Facility ID of HNCLIENT/HNGATE if Sending Application on MSH = "HNCLIENT" or "HNGATE". For more information on "HNCLIENT/HNGATE" values, see 'No Response from the Network' in Volume 5.
5	Receiving Application	R					= Sending Application on MSH input
6	Receiving Facility	R					= Sending Facility on MSH input
7	Date/Time of Message	R					Date/Time transaction was sent from receiving system (24) - YYYYMMDDHHMMSS.SSSS+/-ZZZZ
8	Security	O					= Security on MSH input
9	Message Type	R					<ul style="list-style-type: none"> Message Type (3) - Transaction Identification; valid values are "R42", "ACK" Trigger Event (3) – Not Supported ² For more information on "ACK" Message Type, see 'No Response from the Network' in Volume 5.
10	Message Control ID	R					Unique message number (20) - see MSH definition for more information
11	Processing ID	R					= Processing ID on MSH input
12	Version ID	R					= Version ID on MSH input

MSA	Required						
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
-	Segment ID	R					"MSA"
1	Acknowledgement Code	R					Indication of success/failure of transaction (2) - valid values are "AA", "AE", "AR"; receiving applications will set "AA" for successful completion and "AE" for application errors; "AR" is set by the infrastructure for invalid transactions or transactions that cannot make it through to the receiving application.
2	Message Control ID	R					= Message Control ID on MSH input (20)
3	Text Message	R					Error code (8) + English message text (72) - Format of error code is AMMMnnnZ where A is an application identifier, MMM is a module or sub-system identifier, nnn is a sequential number and Z is either "E" = error, "W" = warning, "I" = Information

ERR	Optional, Repeats - minimum 0, maximum 10 ⁴						
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
-	Segment ID	R					"ERR"
1	Error Code and Location	R	1-1				Refer to 'Error Handling' in Volume 5 for more information on error message formats <ul style="list-style-type: none"> • Segment ID (3) – optional; segment where error occurred • Sequence (4) – optional; occurrence of segment in transaction where error occurred • Field Position (4) – optional; field in segment where error occurred • Identifier of Code Identifying Error (8) – Message Number; required; reference table HNET:9000 for valid values; ERR segents are returned in "E", "W", "I" order • Text of Code Identifying Error (72) – Message Text; required • Alternate Identifier of Code Identifying Error (15) – Alternate Message Number; optional; must be logged if present in transaction

ERR							
Optional, Repeats - minimum 0, maximum 10							
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
							<ul style="list-style-type: none"> • Alternate Text of Code Identifying Error (255) – Alternate Message Text; optional; must be logged if present in transaction • Name of Alternate Coding System of Code Identifying Error (8) – optional; name of system that generated Alternate Identifier of Code Identifying Error

ZTL							
Required							
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
-	Segment ID	R					"ZTL"
1	Transaction Segment Count	R		1			<ul style="list-style-type: none"> • Quantity (3) - Number of records that matched the search criteria; required; valid values are 0 to 50 • Units (2) - required; valid value is "RD"

Reference Transaction Summary - Receiving System for more information on following segments. Optional, if person record found, then Required

PID		Required					
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
-	Segment ID	R					"PID"
2	External Patient ID	R					<ul style="list-style-type: none"> Personal Health Number (PHN) ID (10) - Personal Health Number (PHN); required Namespace ID of Assigning Authority (5) - Identifier Issuing Jurisdiction; required; valid value is "BC" Identifier Type Code (2) - required; valid value is "PH"
3	<i>Patient ID – (Internal ID)</i>	-					<i>Not Supported</i> ²
5	<i>Patient Name</i>	-					<i>Not Supported</i> ²
7	Date of Birth	R					<ul style="list-style-type: none"> CCYYMMDD (8) - required
8	Sex	O					Gender (1) - valid values are "F", "M", "U"

ZIA		Required					
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
-	Segment ID	R					"ZIA"
15	Extended Person Name	R	1-1				<ul style="list-style-type: none"> Family Name (35) – required First Given Name (15) – required Second Given Name (15) – optional Third Given Name (15) – optional

Reference Transaction Summary - Receiving System for more information on following segments. Repeats minimum 0, maximum 49 for spouse(s) and dependents⁵

NK1		Required					
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
-	Segment ID	R					"NK1"
1	Set ID - NK1	R		2			(3) - valid values are 1 through 49; equals Set ID - ZIA on ZIA for same spouse or dependent; refer to Processing Rules for information on how this field is set/used
15	Sex	R					Gender (1) - valid values are "F", "M"
16	Date/Time of Birth	R					<ul style="list-style-type: none"> YYYYMMDD (8) – required
33	Next of Kin/Associated Party's Identifiers	R	1-1				<ul style="list-style-type: none"> Dependent's Personal Health Number (PHN) ID (10) – Personal Health Number (PHN); required Namespace ID of Assigning Authority (5) - Identifier Issuing Jurisdiction; required; valid value is "BC" Identifier Type Code (2) - required; valid value is "PH"

ZIA		Required					
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
-	Segment ID	R					"ZIA"
15	Extended Person Name	R	1-1				<ul style="list-style-type: none"> Family Name (35) – required First Given Name (15) – required Second Given Name (15) – optional Third Given Name (15) – optional

ZIA	Required						
Seq	Field	Req/ Opt	# of Reps	Proc Rule	Data Type	Table	Field Notes
22	Set ID - ZIA	R		2			(3) - Valid values are 1 through 49; equals Set ID - NK1 on NK1 for same spouse or dependent; refer to Processing Rules for information on how this field is set/used

DOCUMENT MODIFICATION HISTORY		
Version	Release Date	Description
1.0	January 2000	Original document
2.0	January 9, 2004	<ul style="list-style-type: none"> Added 'General Introduction' Added reference 'Data Type' and 'Table' columns into segment tables Correction to v 1.0: Repeating Group {nk1,zia} on response message incorrectly shown as required. This is an optional group as there may not be any dependent information returned by the query. Other corrections to published specification, as described below. Unless otherwise noted, these corrections do not reflect changes to the supported message specification. (New and superseded messages are described in Volume 1.) Message components or vocabulary marked for future release (from earlier publication) have either been removed entirely or marked as Not Supported. Any substantive changes to these specifications in future will be released as new messages in order to provide for backward compatibility

Corrections and Update Notes

¹ 02/Nov/27 – example of correction

² This HL7 required component is not supported for this message.

³ Not Supported' components added for complex datatype to clarify the component structure. No functional change.

⁴ Minimum cardinality on ERR segment corrected to read 0, instead of 1. This optional segment may not be present in some messages.

⁵ Text correction: this optional group was previously described as Required but may not be present in all messages (i.e., no spouse or dependants).