



Ministry of
Health



PharmaNet

Professional and Software Compliance Standards

Volume 3 – Technical Rules

THIS IS A DEPRECATED LEGACY DOCUMENT

For the latest conformance standards refer to:

<https://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/software/conformance-standards/>

Community Health Practice Access

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CONTENTS

1	GENERAL INFORMATION	5
1.1	THE VOLUMES	5
1.2	THE AUDIENCE	6
1.3	THIS DOCUMENT	6
1.4	PHARMA.NET OPERATION INFORMATION	7
2	TRANSACTION DETAILS	8
2.1	GENERAL PROCESSING RULES	8
2.1.1	<i>Interpreting Transaction Responses</i>	<i>8</i>
2.1.2	<i>Mandatory Display of Response Message Status</i>	<i>9</i>
2.1.3	<i>Combinations of Transactions</i>	<i>9</i>
2.1.4	<i>Trace Numbers</i>	<i>10</i>
2.1.5	<i>Multiple PHNs</i>	<i>10</i>
2.1.6	<i>PharmaNet Participant Messaging</i>	<i>11</i>
2.1.7	<i>Truncating</i>	<i>11</i>
2.1.8	<i>Network Down</i>	<i>12</i>
2.1.9	<i>Backup</i>	<i>13</i>
2.2	TRANSACTION PERMISSIONS BY PRACTITIONER	14
2.3	DETECTION OF BROWSING – PHARMA.NET ACCESS RECONCILIATION	15
3	PROCESSING RULES & MANDATORY SCREEN DISPLAYS	17
3.1	PATIENT IDENTIFICATION – TID	17
3.1.1	<i>Processing Rules</i>	<i>17</i>
3.1.2	<i>Mandatory Screen Display Standards</i>	<i>17</i>
3.2	PATIENT NAME SEARCH – TPN	18
3.2.1	<i>Processing Rules</i>	<i>18</i>
3.2.2	<i>Mandatory Screen Display Standards</i>	<i>19</i>
3.3	PATIENT ADDRESS UPDATE – TPA	20
3.3.1	<i>Processing Rules</i>	<i>20</i>
3.3.2	<i>Mandatory Screen Display Standards</i>	<i>21</i>
3.4	PHN ASSIGNMENT – TPH	22
3.4.1	<i>Processing Rules</i>	<i>22</i>
3.4.2	<i>Mandatory Screen Display Standards</i>	<i>23</i>
3.5	PRESCRIBER IDENTIFICATION – TIP	23
3.5.1	<i>Processing Rules</i>	<i>23</i>
3.5.2	<i>Mandatory Screen Display Standards</i>	<i>24</i>
3.6	DRUG MONOGRAPH INFORMATION - TDR	25
3.6.1	<i>Processing Rules</i>	<i>25</i>
3.6.2	<i>Mandatory Screen Display Standards</i>	<i>26</i>
3.7	DRUG UTILIZATION INQUIRY – TDU	27
3.7.1	<i>Processing Rules</i>	<i>27</i>
3.7.2	<i>Mandatory Screen Display Standards</i>	<i>31</i>
3.8	PROFILE MAILING REQUEST – TPM	32
3.8.1	<i>Processing Rules</i>	<i>32</i>

3.8.2	<i>Mandatory Screen Display Standards</i>	33
3.9	PATIENT PROFILE REQUEST – TRP / TRR.....	33
3.9.1	<i>Processing Rules</i>	33
3.9.2	<i>General Processing Rules – TRR.....</i>	35
3.9.3	<i>Mandatory Screen Display Standards</i>	36
3.9.4	<i>Mandatory Medication Reconciliation Print Standards.....</i>	37
3.10	MEDICATION UPDATE – TMU	39
3.10.1	<i>Processing Rules</i>	39
3.10.2	<i>Mandatory Screen Display Standards</i>	42
3.11	MEDICATION UPDATE REVERSAL – TMU.....	43
3.11.1	<i>Processing Rules</i>	43
3.11.2	<i>Mandatory Screen Display Standards</i>	43
4	PHN CHECK DIGIT NUMBER ROUTINE	44

1 GENERAL INFORMATION

The Professional and Software Compliance Standards Document for PharmaNet has been revised into volumes, divided by PharmaNet participant functionality requirements.

The 'library' approach provides more logical formatting while reducing redundancy and repetition.

There are common volumes required by all software developers and both business and technical volumes for the different functions. This enables software developers to download only the necessary volumes. The documentation is available on the Ministry of Health website.

<http://www2.gov.bc.ca/gov/content/health/practitioner-professional-resources/software/conformance-standards/legacy-compliance-standards-for-pharmanet>

1.1 The Volumes

The 6-volume documentation set contains:

Volume 1 – Introduction

Volume 1 introduces the reader to common development components, such as:

- Document Conventions and Structures
- Related Standard
- Contacts
- Support Responsibilities
- Compliance Evaluation Process
- Mandatory policies and procedures to ensure compliance with all standards.

Volume 2 – Business Rules

Volume 2 has been further divided into separate documents for the functionality requirements of Emergency Department (ED), Community Health Practice (COMPAP), and Pharmacy access.

This volume contains the *implementation requirements* and the *business rules* related to the use of the available transactions and the local system requirements.

Volume 3 – Technical Rules

Volume 3 has been further divided into separate documents for the functionality requirements of Emergency Department (ED), Community Health Practice (COMPAP), and Pharmacy access.

This volume contains the *general processing* and the *technical rules* related to the use of the available transactions and the *local system requirements*.

Volume 4 – HL7 Message Catalog

Volume 4 identifies transaction details and message responses, such as:

- Network Transmissions and Responses
- Health Level 7 (HL7) Standards
- Message Formats and Data Definitions
- Input and Output Message Segments and Fields

Volume 5 – Security

Volume 5 provides security objectives, requirements and guidelines and a framework for developing policies and implementing local security controls.

Volume 6 – Glossary

Volume 6 lists a glossary of terms persistent throughout PharmaNet.

1.2 The Audience

The compliance standards documentation is intended for software developers, health care providers, administrators and other health care professionals who share responsibility for implementing compliant software in their organization.

1.3 This Document

This volume contains the technical rules for using the PharmaNet transaction messages for Community Health Practice (COMPAP). Read this volume in conjunction with Volume 2 – Business Rules (Community Health Practice Access) and Volume 4 – HL7 Message Catalog.

1.4 PharmaNet Operation Information

Basic information regarding practitioners and prescribers must exist on PharmaNet before any message from a provider will be accepted for processing. This information may be sent to PharmaNet in an electronic format by authorized individuals. Detailed specifications for this process are described in the document titled 'PharmaNet Practitioner and Operator Data Interface Specifications', available from PharmaCare Operations.

2 TRANSACTION DETAILS

2.1 General Processing Rules

2.1.1 Interpreting Transaction Responses

There are several ways to determine whether a PharmaNet message was successful or not. They are:

1. The ZZZ Segment

Each transaction submitted will include at least one ZZZ segment. The response status field of this segment will contain a value of either 0 or 1 on every response. A value of 0 means the transaction itself was successfully transmitted across the network and a response was received.

Note: Even though the transaction was successful, its intended function might not have been successful (e.g., a record may not have been added because the record already existed).

A value of 1 means the transaction itself was not successful and it did not perform its intended function.

In addition to the response status field, the transaction text field contains a message related to the transaction. If the response status is 0, the transaction text field will contain one of the following:

- a) All blanks (i.e., successful)
- b) '0 – Operation Successful'
- c) A warning message (i.e., '66 – Warning – Last Name and First Name do not match supplied names').

If the response status field is 1, the transaction request was not successful and the transaction text field will contain the application error message.

Examples of these messages are:

108 – No matches found for selection criteria chosen

101 – PRESCRIBER not found

121 – This is a Duplicate Prescription

The most complicated message is related to a combination transaction, such as TDU Inquiry/TRP, TRR Combination. This combination would only be deemed successful if: Response status field in ZZZ for TDU Inquiry was '0'

- a) Response status field in ZZZ for TDU Inquiry was '0';
- b) Transaction text field in ZZZ for TDU was blank or '0 – Operation Successful';
- c) Response status field in ZZZ for TRP or TRR was '0'; and
- d) Transaction text field in ZZZ for TRP or TRR was blank or '0 – Operation Successful'.

2.1.2 Mandatory Display of Response Message Status

Warning and error messages must be displayed and must comply with the minimum mandatory display standards for each transaction. These messages must be triggered by any of the following:

- 1. A response status field not equaling '0' for each ZZZ segment returned
- 2. A transaction text field not equaling 'blanks' or 0 – Operation Successful' for each ZZZ segment returned

2.1.3 Combinations of Transactions

Where combinations are permitted, PharmaNet requires only one ZCA segment.

- 1. TDU/TRP (inquiry 00)
- 2. TDU/TRR (inquiry 00)

2.1.4 Trace Numbers

Trace numbers are used on PharmaNet for auditing purposes. They are also used to track what happened with a transaction when processed by PharmaNet. Trace numbers must be unique for the day, and must be in ascending order. A re-transmit must be sent with the same trace number as the original message (i.e., the local system must store the trace number for as long as there is a possibility of re-transmitting the message).

2.1.5 Multiple PHNs

The local system must be capable of recognizing and clearly indicating to the practitioner, a response (ZCC segment) which has a different Personal Health Number (PHN) from that submitted in the input message (ZCC Segment). In some cases, a PHN may have been assigned to a patient when one already exists for that patient. The multiple PHNs are subsequently merged on CRS to a single PHN record. If a PHN has been merged with another PHN(s), PharmaNet will return the consolidated PHN. If it appears the merge has been done incorrectly, or the practitioner is aware of an incorrect PHN, the practitioner must contact the PharmaNet Help Desk to request a correction or unmerge.

If the practitioner agrees that the PHN merge is appropriate, the local system must have its files updated to reflect the consolidated PHN by choosing one of the following options:

1. The local software can use an 'export log' of PHN merges available from the MoH to search for PHNs which must be merged on their local system. This option would usually only be considered for large PharmaNet participants due to the large number of PHNs on the export log.
2. The local software can recognize a new, merged PHN as part of the PharmaNet response and update local records.

2.1.6 PharmaNet Participant Messaging

1. Messages only need to be displayed at one terminal when they are received.
2. Processing of the current transaction at the designated terminal(s) receiving the message may be completed before displaying the message. However, processing must be interrupted and the message displayed and printed before the next transaction begins.
3. In situations where the designated terminal is processing a batch, the message may be either held until the batch is completed or printed automatically.
4. PharmaNet will not transmit unsolicited messages to the client system. Even the PharmaNet Participant Messaging facility relies on a request to deliver a response.

2.1.7 Truncating

Users should be able to enter the maximum number of characters into every enterable field transmitted to PharmaNet.

The local software should be capable of displaying full field lengths for all fields. Only trailing blanks should be truncated.

No truncating is permitted in the following fields:

1. ZPE: Interaction advisory source
2. ZPE: Interaction advisory code
3. ZPE: Interaction advisory severity
4. ZPE: Interaction advisory text
5. ZPB3: Block 1 (drug information)
6. ZPB#: Block 2 (drug information)
7. ZPD: Generic name / manufacturer
8. ZPD: Dosage form
9. ZPD: Dosage strength description
10. ZPD: Long manufacturer name
11. ZPD: Information text
12. ZPB1: (Rx information)
13. ZPB2: (Rx information) CPBC

2.1.8 Network Down

The local software must maintain any information required to allow business continuation when PharmaNet is unavailable.

Software support organizations (SSOs) must ensure that their local systems can recover from unexpected loss of PharmaNet connections or power failures. For example, the local system may send a transaction to PharmaNet and prior to receiving a response from the network there may be a power failure at the local site. In this case, PharmaNet will have processed the transaction. In other cases, the failure may occur during the sending of a transaction, in which case PharmaNet will not have received the transaction.

One possibility for handling this situation would be for the local system to write a copy of the messages being sent to PharmaNet, to disk prior to transmitting them. After successfully processing the response, this information would be erased. If the power fails prior to completion of the local transaction then the transaction would be available on disk and the local system can take appropriate action on power-up (e.g., alerting the practitioner, reversing the transaction, re-transmitting the transaction, etc.).

A transaction may fail within the DIS module or the Router. The only way for the practitioner to verify the result of the transaction is to inquire on the transaction once the system is back on-line, phone the PharmaNet Help Desk for verification of the transaction, or re-transmit the original transaction.

2.1.9 Backup

The local SSO system must provide the ability to backup and recover audit files.

A recovery process of those files must be available.

A set of complete backup tapes or diskettes should be stored at a different physical location within Canada at all times.

The SSO training package must include the steps necessary to backup and recover data files.

2.2 Transaction Permissions by Practitioner

The following matrix indicates which PharmaNet transactions are permitted for Community Health Practice access.

LEGEND	
X	NOT PERMITTED. Compliance evaluations will ensure the local software does not allow this function.
M	MANDATORY- This function must be provided
O	OPTIONAL. This function may be provided; approvals are in place;

<i>PharmaNet Transaction Access Permissions table</i>		
Transaction		Practitioner
		Community Practice Access
TAC/TDU	ADJUDICATE CLAIMS AND DRUG UTILIZATION EVALUATION (DUE) UPDATE	X
TCP	PATIENT KEYWORD	X ¹
TDR	DRUG MONOGRAPH INFORMATION	O
TDT	DAILY TOTALS INQUIRY	X
TDU	DUE INQUIRY	M
TDU	DUE UPDATE	X
TDU	DUE REVERSAL	X
TDU INQUIRY/TRP,TRR,TRS COMBINATION		O
TID	PATIENT IDENTIFICATION	M
TIP	PRESCRIBER IDENTIFICATION	M
TMU	MEDICATION UPDATE	M
TMU	MEDICATION UPDATE REVERSAL	M
TPA	PATIENT ADDRESS UPDATE	M
TPE	PATIENT ELIGIBILITY	X
TPH	PHN ASSIGNMENT	M
TPI	PATIENT CLINICAL INFORMATION UPDATE	X
TPM	PROFILE MAILING REQUEST	O
TPN	PATIENT NAME SEARCH	M
TRP	PATIENT PROFILE REQUEST	M
TRR	PATIENT PROFILE REQUEST (MOST RECENT ONLY)	M
TRS	PATIENT PROFILE REQUEST (FILLED ELSEWHERE)	X

¹ Although TCP is not permitted, the processing rules listed may apply to other transactions.

2.3 Detection of Browsing – PharmaNet Access Reconciliation

1. The following information must be retained by the local software for each access to PharmaNet data regardless of where the data is stored:
 - a) Network ID as assigned by MoH
 - b) Operator ID
 - c) CPSBC registration number of the practitioner requesting the access
 - d) Date and time
 - e) Patient PHN; and,
 - f) Patient demographic information including name, date of birth, gender, transaction type ID, reason for access.
2. A PharmaNet Access Log Report, containing the above information must be available by:
 - a) Specific date and time
 - b) Date and time range
 - c) PHN; and,
 - d) Patient name.
3. The information used to perform reconciliation is the PharmaNet Access Log Report, and it must be provided by your local system software. This report is either manual or by an automated process, compared to either a patient visit schedule or a record of billing transactions. The result of the reconciliation process is a PharmaNet Access Discrepancy Report. Both the Access Log Reports and the Access Discrepancy Reports must be made available upon demand by the MoH audit / inspection team.
4. The Access Log Report must be available to individual patients requesting a list showing all accesses to their information obtained through PharmaNet.
5. Audit log files must be retained for a period of two years. Audit logs must be kept in a secure, un-tamperable location.

6. The SSO has a responsibility to safeguard this data, and to ensure that it remains in Canada.

3 PROCESSING RULES & MANDATORY SCREEN DISPLAYS

3.1 Patient Identification – TID

This transaction will return a PharmaNet patient record using the patient's PHN.

3.1.1 Processing Rules

1. When the PHN returned is different from the PHN that was submitted, the local software must clearly indicate to the practitioner that a consolidated PHN has been returned. The message displayed should advise the practitioner to perform a patient identification (TID) transaction prior to updating the local system with the new PHN in order to confirm the PHN has been correctly consolidated.
2. The requested patient address record on PharmaNet must cause a comparison between the latest mailing address on the local software and the PharmaNet patient address record. This comparison can be done automatically by the software or manually by the practitioner. If these records do not match, the practitioner must update the incorrect or out of date record(s) on both systems.

3.1.2 Mandatory Screen Display Standards

The following table defines the minimum mandatory display standards for a successful TID transaction. CPBC

INFORMATION RETURNED BY PharmaNet	OUTPUT	MANDATORY DISPLAY	DISPLAY ON FIRST SCREEN PRESENTED
PHN	ZCC	Y	Y
Patient First Name	ZPA	Y	Y
Patient Initials	ZPA	Y	Y
Patient Last Name	ZPA	Y	Y
Patient Date of Birth	ZCC	Y	Y
Patient Gender	ZCC	Y	Y
Patient Address (line 1)	ZPA	Y	Y
Patient Address (line 2)	ZPA	Y	Y
City	ZPA	Y	Y
Postal Code	ZPA	Y	N
Province Code	ZPA	Y	N
PharmaNet Participant Message	ZPI	Y	N
Mandatory Display of Response Message Status.	ZZZ	Y	Y

3.2 Patient Name Search – TPN

The Patient Name Search uses the name, date of birth and gender to find the MoH patient PHN.

3.2.1 Processing Rules

1. A TPN transaction coming through PharmaNet will actually be processed using CRS. If CRS is not available, the search will be processed by PharmaNet via its 'Stand-in' function.
2. SSOs must provide both name search options as follows:
 - a) A CRS search using full surname, complete or partial given name, gender and full date of birth (CCYYMMDD) to return all exact matches, as well as matches where the day (DD) is equal to 01. Note the 'Stand-in' search on PharmaNet will return only the exact matches.
 - b) A CRS search using full surname, complete or partial given name, gender and partial date of birth (CCYY only) to return all exact matches, as well as matches for patients whose date of birth falls within a +/- five (5) year window of the year provided. Note the 'Stand-in' search on PharmaNet will return only exact matches.
3. The following options must be presented to the practitioner for each search:
 - a) Change search criteria; and,
 - b) Select a PHN from the list displayed.
4. Regardless of patient gender entered ('M' or 'F'), the search will return exact matches on the gender provided and any records with a gender of 'U' (unknown). Note the 'Stand-in' search on PharmaNet will return only exact matches.
5. All matches that are returned will be in alphabetic order and where the surname and given names are the same, in ascending order by name and PHN.
6. If no matches are found, the transaction will be completed successfully, the Transaction Segment Count will be zeros and either of the following messages will be returned.

If CRS is available: 'CRNS002 Nothing found matching search parameters'
For Stand-in Processing: '108 No matches found for selection criteria chosen'

7. Both the CRS and 'Stand-in' searches will return up to 25 matches. If the number of matches exceeds 25, the Transaction Segment Count will be zeros and the following message will be returned '106 Selection criteria chosen resulted in too many matches'. In this case, the criteria must be narrowed and the search repeated.
8. The name search will first attempt to find exact matches using all the characters of the given name provided. If no matches are found, then a re-search is automatically done using only the first letter of the given name. This re-search does not function during 'Stand-in' processing.
9. Names must begin with A – Z.
10. Date of birth must not be greater than current date and must be in valid date format.

3.2.2 Mandatory Screen Display Standards

This table defines the minimum mandatory display standards for a successful TPN transaction. CPBC

INFORMATION RETURNED BY PharmaNet	OUTPUT	MANDATORY DISPLAY	DISPLAY ON FIRST SCREEN PRESENTED
PHN	ZCC	Y	Y
Patient Date of Birth	ZCC	Y	Y
Patient Gender	ZCC	Y	N
Patient First Name	ZPA	Y	Y
Patient Initials	ZPA	Y	Y
Patient Last Name	ZPA	Y	Y
Patient Phone Number	ZPA	Y	N
Patient Address Type	ZPA	N	N
Patient Address (line 1)	ZPA	Y	Y
Patient Address (line 2)	ZPA	Y	Y
City	ZPA	Y	Y
Country	ZPA	N	N
Postal Code	ZPA	Y	N
Province Code	ZPA	Y	N
Mandatory Display of Response Message Status.	ZZZ	Y	Y

3.3 Patient Address Update – TPA

This transaction is used by the practitioner to update a patient's address on PharmaNet and CRS. It uses the PHN of the patient to find the existing address.

3.3.1 Processing Rules

1. A TPA request coming through PharmaNet will actually be processed using CRS. If CRS is not available, the TPA update process will be process via PharmaNet's 'Stand-in' function. CRS will be updated once it becomes available.
2. To ensure that the address is updated correctly on PharmaNet and CRS, the complete address must be entered. All required fields and the Address Prefix 2 field (if it contains data), must be filled in. If the Address Prefix 2 field is left blank, it will be updated as blank on the CRS. CRS currently combines the Address Prefix 2, City, Province and Postal Code into unstructured field. PharmaNet stores the address in separate fields.
3. All changes to the patient's mailing address maintained on the local system should be transmitted.
4. Canada post mailing standards must be used for Canadian address. Format for postal code six (6) alphanumeric characters with no spaces (e.g., V9V9V9). Out-of-country zip codes are stored in the postal code field, since the entry of a country code other than Canada eliminates the format checking.
5. The requirements for address verification are:
 - a) If the country is Canada, then the province code must be a legitimate province code
 - b) If the province code is legitimate, then the first position of the postal code must be a legitimate entry for the province; and,
 - c) If the country is something other than Canada, then the postal code is not required.

Note: This is presently not working correctly. PharmaNet returns an error if the postal code is left blank. Practitioner should be instructed to enter their facility's postal code if the patient's zip code or equivalent code is not available.

6. Postal codes must be edited on the local system based on the following:

PROVINCE	PROVINCE CODE	POSTAL CODE FIRST CHARACTER
Alberta	AB	T
British Columbia	BC	V
Manitoba	MB	R
New Brunswick	NB	E
Newfoundland	NL	A
Nova Scotia	NS	B
Northwest Territories	NT	X
Nunavut	NU	X
Ontario	ON	K,L,M,N,P
Prince Edward Island	PE	C
Quebec	QC	G,H,J
Saskatchewan	SK	S
Yukon Territories	YT	Y

3.3.2 Mandatory Screen Display Standards

This table defines the minimum mandatory display standards for a successful TPA transaction. CPBC

INFORMATION RETURNED BY PharmaNet	OUTPUT	MANDATORY DISPLAY	DISPLAY ON FIRST SCREEN PRESENTED
Mandatory Display of Response Message Status.	ZZZ	Y	Y

3.4 PHN Assignment – TPH

This transaction will create a new patient record and assign a PHN.

3.4.1 Processing Rules

1. A TPH request coming through PharmaNet will actually be processed using CRS. CRS assigns the PHN number. If CRS is not available, the TPH update process will be process via PharmaNet's 'Stand-in' function, using a predefined bank of PHN numbers. CRS will be updated once it becomes available.
2. The local system must enforce a TPN transaction prior to a TPH transaction (assigning a PHN).
3. Prior to assigning a PHN, the local system software must prompt the practitioner with the following statement 'This transaction will cause a new PHN to be assigned. Are you certain this patient does not have a PHN – Y/N?'
4. The default condition must be set to 'N' to cancel the transaction. The practitioner must enter 'Y' to cause the transaction to proceed.
5. Names must begin with A – Z.
6. Date of birth must not be greater than current date and must be in valid date format.
7. Postal codes must be edited on the local system based on the following (also see address edit rules under TPA):

PROVINCE	PROVINCE CODE	POSTAL CODE FIRST CHARACTER
Alberta	AB	T
British Columbia	BC	V
Manitoba	MB	R
New Brunswick	NB	E
Newfoundland	NL	A
Nova Scotia	NS	B
Northwest Territories	NT	X
Nunavut	NU	X
Ontario	ON	K,L,M,N,P
Prince Edward Island	PE	C
Quebec	QC	G,H,J
Saskatchewan	SK	S
Yukon Territories	YT	Y

8. All PHNs assigned by MoH must be stored on the local system as part of the patient's demographic data.

3.4.2 Mandatory Screen Display Standards

This table defines the minimum mandatory display standards for a successful TPH transaction. CPBC

INFORMATION RETURNED BY PharmaNet	OUTPUT	MANDATORY DISPLAY	DISPLAY ON FIRST SCREEN PRESENTED
Personal Health Number	ZCC	Y	Y
Mandatory Display of Response Message Status.	ZZZ	Y	Y

3.5 Prescriber Identification – TIP

This function may be used to obtain information on a practitioner (e.g., physician, pharmacist, podiatrist, dentist, veterinarian, etc.) by either searching by name or by the unique identification number assigned by the appropriate regulatory body.

Please note that MSP billing numbers are not used to identify prescribers anywhere on PharmaNet.

3.5.1 Processing Rules

1. Practitioner demographics and practice information is retrieved by either a combination of Practitioner ID Number and Reference ID or by using Family Name and optionally, any or all characters of the First Name.
2. If more than 100 matches are found, none will be returned. The transaction Segment Count will be 100, and the following message will be returned '106 Selection criteria chosen resulted in too many matches'. If less than or equal to 100 matches are found, the number of matches will be returned in the Transaction Segment Count of the ZZZ.
3. If a unique match is found, the response will be the prescriber record. If a unique match is not found, a list (maximum of 100) in alphabetical order by first name of practitioners matching the search criteria will be returned. Where there is more than one record matching on the first name, these records will be displayed in ascending practitioner ID order.

3.5.2 Mandatory Screen Display Standards

The following table defines the minimum mandatory display standards for a successful TIP transaction. CPBC

INFORMATION RETURNED BY PharmaNet	OUTPUT	MANDATORY DISPLAY	DISPLAY ON FIRST SCREEN PRESENTED
Practitioner Id	ZPH	Y	Y
Practitioner Id Ref	ZPH	Y	Y
Practitioner First Name	ZPH	Y	Y
Practitioner Initials	ZPH	Y	N
Practitioner Last Name	ZPH	Y	Y
Type of Address	ZPH	N	N
Address (line 1)	ZPH	Y	N
Address (line 2)	ZPH	Y	N
City	ZPH	Y	Y
Province Code	ZPH	Y	N
Postal Code	ZPH	Y	N
Country	ZPH	N	N
Effective Date	ZPH	N	N
Area Code	ZPH	Y	N
Phone Number	ZPH	Y	N
PharmaNet Participant Message	ZPI	Y	N
Mandatory Display of Response Message Status.	ZZZ	Y	Y

3.6 Drug Monograph Information - TDR

This transaction is optional. If it is implemented, all processing rules must be followed. If this transaction is implemented, it is optional whether to include the Drug to Drug Interaction monograph option.

This transaction will access detailed information about a particular drug.

3.6.1 Processing Rules

1. Drug monograph information may be retrieved by DIN, or brand name, dosage form, strength and units. The recommended method is retrieval by DIN. If the other retrieval method is used, the data transmitted to PharmaNet must match PharmaNet exactly or no match will be found.
2. Drug monograph information comes from FDB in textual form. In order to transmit this data as a response to a TDR request, PharmaNet uses the following process:

- a) Read a line of data from the FDB file, terminate the line with ZPB3
- b) If the line is blank, insert a ZPD3

This means that if there is a blank line between two paragraphs, then there will be two ZPD3s adjacent to each other in the data stream. As well, only the number of characters in the field will be sent in the ZP3. (i.e., if the data supplied has 25 characters, then the ZPD3 will contain only 25 characters and the next ZPD3 will follow).

3. The local software must not permit changes to the PharmaNet drug monographs.
4. The software must provide functionality to retrieve monographs.
5. The software must provide functionality to print monographs.
6. If a drug monograph is requested, with or without generic equivalents, it must be presented to the practitioner.
7. The local software must not allow the practitioner to alter the drug monograph information supplied by PharmaNet.
8. Drug-to-drug interaction monographs may be retrieved by a single DIN or a pair of DINs using the TDR Information type code of "ADIMONOG" in the Information Type code field of the ZPC1 segment.

- a) For the single DIN option, the DIN used will be the DIN entered in the ZPC segment DIN/GP Number/PIN field.
- b) A single ADIMONOG request can result in more than one monograph, therefore a ZPD3 segment containing repeating '*' characters is used to indicate the end of a monograph.
- c) For the two DIN option, the first DIN is entered in the ZPC segment DIN/GP Number/PIN field as described above. The second DIN will be entered in a new field in the ZPC1 segment named DIN/GP Number/PIN 2, located at the end of the segment after the Information type field. The DIN/GP Number/PIN 2 field is identical in format to the DIN/GP Number/PIN field in the ZPC segment (length 8, data type D0).
- d) The monographs are returned in repeating ZPD3 segments.
- e) The new DIN/GP Number/PIN 2 field will not be returned in the ZPD2 segment.

3.6.2 Mandatory Screen Display Standards

The following table defines the minimum mandatory display standards for a successful TDR transaction. CPBC

INFORMATION RETURNED BY PharmaNet	OUTPUT	MANDATORY DISPLAY	DISPLAY ON FIRST SCREEN PRESENTED
DIN/GP#/PIN	ZPD	Y	Y
Generic Name/Manufacturer	ZPD	Y	Y
Dosage Form	ZPD	Y	Y
Drug Strength Description	ZPD	Y	Y
Long Drug Manufacturer Name	ZPD	Y	N
Therapeutic Class	ZPD	N	N
Generic Equivalent:	ZPD1		
DIN/GP#/PIN		Y ¹	Y ¹
Drug Brand Name		Y ¹	Y ¹
Information Source	ZPD2	N	N
Information Type	ZPD2	N	N
Information Text	ZPD3	Y	Y ²
Mandatory Display of Response Message Status.	ZZZ	Y	Y

¹ Mandatory display only if generic equivalent requested from PharmaNet.

² If drug information and information text is too large for first screen or if information regarding generic equivalents is presented first, information text may be presented on subsequent screens.

3.7 Drug Utilization Inquiry – TDU

DUE functions are only performed on valid DINs. DUE will not be performed on PINs (provider defined DINs, which are PharmaCare entries).

3.7.1 Processing Rules

1. Leaving the display of warning messages will be done by a deliberate keystroke that indicates the practitioner has acknowledged receipt of the messages. The practitioner is allowed to clear the DUE message at any time.
2. DUE messages may be stored on the local system after review by the practitioner. The messages returned must be reviewed first before storage.
3. The local software may calculate the days supply when the instructions for use are entered as a code (SIG). The practitioner must have the ability to review the value calculated and correct it, if necessary, prior to sending to PharmaNet.
4. If the Quantity is entered, either Days Supply or Maximum Daily Units / Maximum Daily Unit Code must be entered to enable dosage range checking and duration of therapy DUE checks.
5. Prescription details for DUE responses are returned in reverse chronological order by expiry date. PharmaNet calculates the expiry date by adding the Days Supply to the Dispensing Date.
6. The DUE messages must be displayed in the order returned by PharmaNet. The order is as follows:

Drug to Drug Interactions	up to 10 encounters
Drug to Prior Adverse Reactions	up to 5 encounters
Min/Max Dosages	up to 1 encounter
Duplicate Ingredient/Therapy	up to 10 encounters

7. Compliance checking is not performed on a TDU Inquiry.
8. Duration of Therapy Checking is not performed by PharmaNet.

9. When the PHN returned is different from the PHN that was submitted, the local software must clearly indicate to the practitioner that a consolidated PHN has been returned. The message displayed should advise the practitioner to perform a patient identification (TID) transaction prior to updating the local system with the new PHN in order to confirm the PHN has been correctly consolidated.
10. The following is a brief description of each type of DUE encounter.

Drug-to-Drug Interactions

There are three different severities of drug-to-drug interactions. A DUE response code of 'ME' (Significant Drug-to-Drug potential) is returned for each encounter along with severity level, the clinical effect code and reference category indicator from Evaluations of Drug Interactions published by FDB.

Severity Levels

Severity Level	Description	Encounters Returned
1	Contraindicated drug combination	Return up to 10 Level 1 encounters.
2	Severe interaction	If Level 1 returns less than 10 encounters, then Level 2 encounters will be returned until a maximum of 10 Level 1 and Level 2 encounters are returned.
3	Moderate interaction	If there are less than 10 occurrences of Level 1 and Level 2 encounters, then Level 3 encounters will be returned until a maximum of 10 Level 1, Level 2 and Level 3 encounters have been returned.

Clinical Effect Codes

Clinical Effect Code	Description
ADD	Additive side effects
ARF	Adverse reaction of the former drug
ARL	Adverse reaction of the latter drug
DEF	Decreased effect of the former drug
DEL	Decreased effect of the latter drug
INF	Increased effect of the former drug
INL	Increased effect of the latter drug
MAR	Adverse reaction with both drugs
MXF	Mixed effects of the former drug
MXL	Mixed effects of the latter drug

Drug-Drug Interaction Reference Category Indicators

Indicator	Description
M	Manufacturer Information
T	Human Clinical Trial
C	Case Report
A	Meeting Abstract
I	In vitro / Animal Study
R	Review
Blank (no indicator provided)	No reference available

Drug-to-Prior Adverse Reaction

The GCN Sequence Number of the current medication is compared to the GCN Sequence Numbers of the drugs known to cause a patient's adverse reactions. If a match exists, a DUE response code of 'MM' (Prior Adverse Reaction on Record) is returned to the pharmacy. The response code is returned to the pharmacy, together with the DIN/PIN previously recorded as having created an adverse reaction for the PHN, and an advisory message.

Min/Max Checking

Dose range checking is performed to ensure that the prescribed dose is either too high or too low. If the maximum daily dose is too high, DUE response status 'MJ' (Dose Appears High) is returned. If the maximum daily dose is too low, DUE response status of 'MK' (Dose Appears Low) is returned.

Duplicate Ingredient / Therapy

Duplicate Ingredient

The duplicate ingredient checking is performed only on new prescriptions for ingredient specific overlap of medications. It checks the new medications being dispensed at the ingredient(s) level against the ingredient(s) in the 'active' drugs on the patient record.

If a DUE encounter is found, a DUE response status of 'MS (Duplicate Ingredient)' is returned. A maximum of 10 encounters will be returned. If a match is found for duplicate ingredient checking, no duplicate therapy checking will be performed.

Duplicate Therapy

The duplicate therapy checking is performed only on new prescriptions for therapeutic overlap of medications and only if there were no duplicate ingredients found. It checks the therapeutic class code for the new medication being dispensed against the therapeutic class codes for all 'active' (based on the calculated expiry date) drugs on the patient record.

If a DUE encounter is found, a DUE response status of 'MX' (Duplicate Therapy) is returned. A maximum of 10 encounters will be returned.

3.7.2 Mandatory Screen Display Standards

The following defines the minimum mandatory TDU display standards. CPBC

INFORMATION RETURNED BY PharmaNet	OUTPUT	MANDATORY DISPLAY	DISPLAY ON FIRST SCREEN PRESENTED
PHN	ZCC	N	N
Interaction Advisory Source Reference	ZPE	Y	Y
Interaction Advisory Code ¹	ZPE	Y	Y
Interaction Advisory Severity Level	ZPE	Y	Y
Interaction Advisory Text	ZPE	Y	Y
DUE Response Status	ZPE	Y	Y
DIN/GP#/PIN ²	ZPB3 Block 1	Y	N
Generic Name/Manufacturer ²	ZPB3 Block 1	Y	Y
Same Store Indicator ²	ZPB3 Block 1	N	N
Quantity ²	ZPB3 Block 1	Y	N
Maximum Daily Dose ²	ZPB3 Block 1	Y	N
Prescription Status ²	ZPB3 Block 1	Y	N
Date Dispensed ²	ZPB3 Block 1	Y	N
Intervention Code ²	ZPB3 Block 1	Y	N
Practitioner Id ²	ZPB3 Block 1	Y	N
Practitioner Id Ref ²	ZPB3 Block 1	Y	N
Directions ²	ZPB3 Block 1	Y	N
DIN/GP#/PIN ³	ZPB3 Block 2	Y	N
Generic Name/Manufacturer ³	ZPB3 Block 2	Y	Y
Same Store Indicator ³	ZPB3 Block 2	Y	N
Quantity ³	ZPB3 Block 2	Y	Y
Maximum Daily Dose ³	ZPB3 Block 2	Y	N
Prescription Status ³	ZPB3 Block 2	Y	N
Date Dispensed ³	ZPB3 Block 2	Y	Y
Intervention Code ³	ZPB3 Block 2	Y	N
Practitioner Id Reference ³	ZPB3 Block 2	Y	N
Practitioner Id ³	ZPB3 Block 2	Y	N
Drug Discontinuation Date ³	ZPB3 Block 2	Y	N
Drug Discontinuation Source ³	ZPB3 Block 2	Y	N
Directions ³	ZPB3 Block 2	Y	N
PharmaNet Participant Message	ZPI	Y	N

¹ The interaction advisory code may be translated into text by the software.

² References new drug filled. The information related to this drug may be displayed once at the top of the screen. If this is done, the information must remain on the screen while scrolling through all DUE messages. The other option is to display this information with each DUE message.

³ References historical drug previously filled.

3.8 Profile Mailing Request – TPM

This transaction is optional. If it is implemented, all processing rules must be followed.

This transaction will accept a request to print the patient's profile.

3.8.1 Processing Rules

1. The local system must force the presentation of the patient's name, address, and PHN prior to submitting the TPM request to PharmaNet. This mandatory requirement is best accomplished as follows:
 - a) Transmit a TID – Patient Identification request to PharmaNet
 - b) Confirm with the patient that the data presented is correct
 - c) Transmit a TPA – Update Patient Address request to PharmaNet if an address correction is required; and,
 - d) Transmit a TPM – Profile Mailing request to PharmaNet only after successful completion of above steps.
2. When the PHN returned is different from the PHN that was submitted, the local software must clearly indicate to the practitioner that a consolidated PHN has been returned. The message displayed should advise the practitioner to perform a patient identification (TID) transaction prior to updating the local system with the new PHN in order to confirm the PHN has been correctly consolidated.
3. For a print out of the local profile, the patient must request the print out from the practitioner. This print out must not contain the profile data sent by PharmaNet and it must indicate, 'This is not an official PharmaNet record'.
4. When requesting a PharmaNet patient profile, the Provider must validate the patient's address and PHN on PharmaNet (TID transaction) and update (TPA transaction) if necessary prior to requesting a profile mailing.
CPBC

3.8.2 Mandatory Screen Display Standards

This table defines the minimum mandatory display standards for a successful TPM transaction. CPBC

INFORMATION RETURNED BY PharmaNet	OUTPUT	MANDATORY DISPLAY	DISPLAY ON FIRST SCREEN PRESENTED
PharmaNet Participant Message	ZPI	Y	N
Mandatory Display of Response Message Status.	ZZZ	Y	Y

3.9 Patient Profile Request – TRP / TRR

These functions are used to retrieve a patient's profile.

3.9.1 Processing Rules

1. The functionality to obtain both a full patient profile (TRP) and the most recent patient profile (TRR) must be available in the local software for review by the physician.
2. There is no requirement to fully display the patient record. If displayed, all mandatory display requirements must be satisfied. The practitioner may escape or exit from the information at any time.
3. There is no requirement to fully display the patient record prior to printing.
4. Within each of the clinical conditions, adverse reactions and medication history information, the minimum information that must be presented to the Provider is included as 'Display on first screen presented' in the Mandatory Screen Display Standards for TRP, TRR. Other mandatory display information must be available for access by the Provider. CPBC
5. A query tool may be used on the patient profile to display it in a user-defined format, for example, by date range, alphabetically or summarized by DIN.
6. Only data returned by PharmaNet may be displayed on the patient record or used to filter the patient record.

7. A printed medication profile must be made available.
8. Retaining an electronic 'picture' of the medication profile is permitted. Access to this electronic copy could eliminate the need for a printed medication profile, but is subject to all the same confidentiality, security and retention requirements of a printed profile. The 'picture' must be stored as a single image that cannot be modified or downloaded. The electronic copy must be time stamped and the local system must log all accesses to the electronic copy. A report showing all accesses must be made available upon demand by either the Audit / Inspection Team or the patient. The SSO must not be allowed to access the electronic 'picture'
9. The printed or electronic medication profile must show:
 - a) Type of profile requested (i.e., TRP, TRR)
 - b) Date / time of the print out
 - c) User ID of the operator
 - d) Network facility ID and name of the Community Health Practice
 - e) The College ID and name of the practitioner requesting the profile
 - f) All patient demographics (Patient name, Gender, PHN and Date of Birth); and,
 - g) All data fields labeled as 'Mandatory Display'.
 - h) If the profile has been filtered, the filters must be printed.
10. The optional Medication Reconciliation Report must contain all data fields labeled as 'Y - Mandatory for Medication Reconciliation' in the tables in section 3.9.4 Mandatory Medication Reconciliation Print Standards.
11. No prescription information will be returned when a prescription has been reversed with an intervention code of 'RE' – Data Entry Error. This applies to TRP and TRR.
12. The TRP and TRR transaction uses the drug generic name and manufacturer. This is true in all cases, except for those 'user-defined' drugs entered by PharmaCare. For these exceptions, the first 30 characters of the brand name are returned with the manufacturer.
13. When a name is supplied in the ZCC segment, the name is checked against the PharmaNet data for the identified PHN. If the first initial of the first name supplied does not match the PharmaNet first initial for the

patient, the following warning message is returned '3052 Warning, First name does not match supplied'.

14. If the first two (2) characters of the last name supplied do not match the first two (2) characters of the last name of the patient recorded on PharmaNet, the following warning message is returned '3053 Warning, Last name does not match supplied'.
15. The TRP transaction will return prescriptions dispensed during the previous fourteen (14) months.
16. When the PHN returned is different from the PHN that was submitted, the local software must clearly indicate to the practitioner that a consolidated PHN has been returned. The message displayed should advise the practitioner to perform a patient identification (TID) transaction prior to updating the local system with the new PHN in order to confirm the PHN has been correctly consolidated.

3.9.2 General Processing Rules – TRR

1. The stand-alone TRP must also be made available.
2. The TRR transactions will use the same set of segments that TRP uses, with the exception that the ZZZ segment, both inbound to PharmaNet and outbound will have a transaction ID of TRR instead of TRP.
3. If the practitioner chooses to see more profile data than is provided by the TRR transaction, then the SSOs software must acquire the complete patient profile, via a TRP transaction, and be capable of displaying it to the practitioner.
4. If the maximum number of prescriptions is returned (currently 15), then the SSOs software must indicate to the practitioner that there may be more profile data available.
5. When a TRR transaction returns successfully, the following message is returned in the transaction text field of the ZZZ segment 'Operation Successful: most recent <N1> Rx's'. (N1 represents the system variable, currently set to 15)

3.9.3 Mandatory Screen Display Standards

This table defines the minimum mandatory display requirements for TRP and TRR. CPBC

Information Returned By PharmaNet	Output	Mandatory Display	Display On First Screen Presented
PHN	ZCC	N	N
Clinical Condition Information:	ZPB1		
Patient Condition	ZPB1	Y	Y
Chronic Indicator	ZPB1	Y	Y
Reported By	ZPB1	Y	N
Date Reported	ZPB1	Y	N
Comment Text	ZPB1	Y	N
Practitioner Id Reference	ZPB1	Y	N
Practitioner Id	ZPB1	Y	N
Date entered	ZPB1	Y	N
Adverse Reaction Information:	ZPB2		
DIN/GP#/PIN	ZPB2	Y	N
Generic Name/Manufacturer ¹	ZPB2	Y	Y
Reported By	ZPB2	Y	N
Date Reported	ZPB2	Y	N
Comment Text	ZPB2	Y	N
Practitioner Id Reference	ZPB2	Y	N
Practitioner Id	ZPB2	Y	N
Date Entered	ZPB2	Y	N
Medhist Information:	ZPB3		
DIN/GP#/PIN	ZPB3	Y	N
Generic Name/Manufacturer ¹	ZPB3	Y	Y
Same Store Indicator	ZPB3	Y	N
Quantity	ZPB3	Y	Y
Maximum Daily Dose	ZPB3	Y	N
Prescription Status	ZPB3	Y	Y
Local Prescription Number	ZPB3	N	N
Date Dispensed	ZPB3	Y	Y
Intervention Codes	ZPB3	Y	N
Practitioner Id Reference	ZPB3	Y	N
Practitioner Id	ZPB3	Y	N
Practitioner Family Name	ZPB3	Y	Y
Drug Discontinue Date	ZPB3	Y	N
Drug Discontinue Source	ZPB3	Y	N
Directions	ZPB3	Y	Y
Comment Text	ZPB3	Y	N
Practitioner Id Reference	ZPB3	Y	N
Practitioner Id	ZPB3	Y	N
Date Entered	ZPB3	Y	N
Mandatory Display of Response Message Status.	ZZZ	Y	Y

¹ Generic Name/Manufacturer can not be truncated; and is mandatory for display (can not substitute brand name).

3.9.4 Mandatory Medication Reconciliation Print Standards

These tables define the minimum mandatory print standards for the optional Medication Reconciliation Report.

POS REPORT INFORMATION	MANDATORY FOR MEDICATION RECONCILIATION
Heading:	
Type of Profile Requested (i.e. TRP: last 14 months or TRR: most recent 15 prescriptions)	N
Date / time of print out	Y
User ID of the operator submitting request	Y
Network facility ID and name of the facility	Y
The College ID and name of the responsible practitioner	Y
Acknowledgement of PharmaNet as source of data for the report	Y
Data set limitations/filters - A description of the limitations/filters on the set of medications that have been included on the Medication Reconciliation printout, including any limitations/filters resulting from the transaction used (TRP or TRR), and, from any data elements/values used to further filter the data returned. This could include for example: date dispensed within last x months or prescriptions with status of filled, etc. The following paragraph provides an example of how the filters could be expressed. e.g. "The following is a PharmaNet extract as of <Date> <Time> of the most recent filled or discontinued prescriptions for the above patient in the province of British Columbia over the last x months (up to a maximum of 14)."	Y
Disclaimer: **** Do not assume the patient is currently taking these medications or in these doses *** Please note that changes MAY have been made to the patient's provincial medication records since this report was printed. In addition, it MAY contain discontinued medications and does NOT contain updated instructions the patient may have received from their physician or such items as non-prescription drugs, samples, investigational or clinical trial drugs, complementary and alternative therapies, selected prescriptions obtained through provincial programs (e.g. antiretrovirals), or prescriptions obtained from outside the province or over the Internet."	Y
Patient Demographics:	
Patient Name	Y
Gender	Y
Date of Birth	Y

INFORMATION RETURNED BY PHARMANET	OUTPUT	MANDATORY FOR MEDICATION RECONCILIATION
PHN	ZCC	Y
Clinical Condition Information:		
Patient Condition	ZPB1	Y
Chronic Indicator	ZPB1	N
Reported By	ZPB1	N
Date Reported	ZPB1	N
Comment Text	ZPB1	N
Practitioner Id Reference	ZPB1	N
Practitioner Id	ZPB1	N
Date entered	ZPB1	N
Adverse Reaction Information:		
DIN/GP#/PIN	ZPB2	N
Generic Name/Manuf ¹	ZPB2	Y
Reported By	ZPB2	N
Date Reported	ZPB2	N
Comment Text	ZPB2	N
Practitioner Id Reference	ZPB2	N
Practitioner Id	ZPB2	N
Date Entered	ZPB2	N
Medhist Information:		
DIN/GP#/PIN	ZPB3	N
Generic Name/Manuf ¹	ZPB3	Y
Same Store Indicator	ZPB3	N
Quantity	ZPB3	Y
Maximum Daily Dose	ZPB3	Y
Prescription Status	ZPB3	Y
Local Prescription Number	ZPB3	N
Date Dispensed	ZPB3	Y
Intervention Codes	ZPB3	N
Practitioner Id Reference	ZPB3	N
Practitioner Id	ZPB3	N
Practitioner Family Name	ZPB3	N
Drug Discontinue Date	ZPB3	N
Drug Discontinue Source	ZPB3	N
Directions	ZPB3	Y
Comment Text	ZPB3	N
Practitioner Id Reference	ZPB3	N
Practitioner Id	ZPB3	N
Date Entered	ZPB3	N
Mandatory Display of Response Message Status.	ZZZ	N

¹ Generic name/manufacturer can not be truncated; and is mandatory for display (can not substitute brand name).

3.10 Medication Update – TMU

This transaction is used by a PharmaNet participant to update a patient's medication profile. This transaction was 'cloned' from the DUE Update transaction – TDU. Unlike TDU Update which must be sent to PharmaNet as a TAC / TDU combination, the TMU must be sent as a single transaction (i.e., no combinations of transactions) (see Volumes 2 and 3 of the Pharmacy section for a description of TAC / TDU).

3.10.1 Processing Rules

1. The days supply field on the ZCD segment is mandatory with each medication update. This may be achieved on the local software by either:
 - a) The practitioner directly entering the days supply; or
 - b) The local software calculating the days supply when the instructions for use are entered as a code (SIG). The practitioner must have the ability to review the value calculated and correct it, if necessary, prior to sending to PharmaNet.
2. Days' supply must not default to a value.
3. The local software must not use a default intervention code.
4. Drug information must be entered for valid DINs only, not PINs.
5. The prescriber name edit applies to all TMU transactions sent to PharmaNet. The 10 byte Prescriber ID in the ZCD segment in a TMU transaction will contain the 5 byte prescriber license number followed by the first 5 bytes of the prescriber's last name. The edit matches the prescriber name on the ZCD segment with PharmaNet's prescriber name. If the match is not successful the prescription is rejected with a response code of 'PB no match to Prescriber ID and name found'. The Prescriber ID must be the prescriber's license number, not the MSP number. A TIP transaction request will display the spelling PharmaNet expects.
6. The Practitioner ID used in the ZZZ segment will be the ID of the practitioner working in the Community Health Practice that is responsible for the patient. The College registration number of the responsible practitioner working in the Community Health Practice must be included with every message sent to PharmaNet. This is accomplished by inserting the practitioner's Canadian Pharmacists Association (CPhA) ID, in the Practitioner ID Reference field of the ZZZ segment and the practitioner's college ID in the Practitioner ID field of the ZZZ segment.

The Practitioner's CPhA IDs are published in the Canadian Pharmacists Association guide and the college's registration / practitioner ID are from the respective practitioner's college.

7. If a TMU transaction fails on PharmaNet (or a response is not received), the original TMU may be re-submitted. There is no requirement for the local software to perform a re-transmit of a TMU.
8. Prescription details for DUE responses are returned in reverse chronological order by expiry date. PharmaNet calculates the expiry date by adding the days supply to the Dispensing Date.
9. The DUE messages must be displayed in the order returned by PharmaNet. The order is:

Drug to Drug Interactions	up to 10 encounters
Drug to Prior Adverse Reactions	up to 5 encounters
Min/Max Dosages	up to 1 encounter
Duplicate Ingredient/Therapy	up to 10 encounters
Duration of Therapy	up to 1 encounter
Too Soon/Too Late (Compliance)	up to 1 encounter

10. DUE responses may be retained on the local system for later review by the practitioner.
11. The local software for Community Health Practice Access to PharmaNet must fully expand any SIG codes (directions for use) to text prior to transmission to PharmaNet.
12. No abbreviations or special characters are permitted in the directions for use on the local system or PharmaNet. CPBC
13. DUE messages returned by PharmaNet must be reviewed by a practitioner responsible for the patient. The local software must have the ability to print the messages to a hard copy to be reviewed by a practitioner.
14. A 'prescription' number is required and may be assigned by the local software.
15. Leaving the display of warning messages will be done by a deliberate keystroke that indicates the practitioner has acknowledged receipt of the DUE messages only after the last message has been displayed (i.e., all messages must be displayed and acknowledged without allowing escape).

16. Updating a medication profile may occur when the medication is administered or given as a sample. This is permitted for a Community Health Practice, with the following conditions:
 - a) There must be no opportunity to claim for payment to PharmaCare or other insurers. (i.e., the drug cost and dispensing fee must always be zero with no opportunity to override); and,
 - b) The Prescriber ID and Practitioner ID submitted to PharmaNet must both correspond to the attending practitioner College ID.
17. The local software must not provide functionality to permit changes to previously transmitted transactions. Corrections may be made by reversing medication entries on the profile. Where reversals are not possible (i.e., medication entry was made by a different Community Health Practice, hospital or by a community pharmacy), contact the PharmaNet Coordinator at the CPBC.
18. Some patients may have assigned a Protective Word to their medication profiles. The patient must supply the Protective Word for medication profile access to occur; otherwise no profile access will be permitted.
19. The practitioner ID in the ZCD segment will be 'EROOM' for Community Health Practices use of the TMU transaction.
20. A medication update will not be accepted unless the patient, the prescribing practitioner, the drug or product, quantity, days supply, directions and the practitioner are identified.
21. The local software may print a label reflecting details of the medication administered in a Community Health Practice.

3.10.2 Mandatory Screen Display Standards

The following table defines the minimum mandatory TMU display standards. CPBC

INFORMATION RETURNED BY PharmaNet	OUTPUT	MANDATORY DISPLAY	DISPLAY ON FIRST SCREEN PRESENTED
PHN	ZCC	N	N
Interaction Advisory Source Reference	ZPE	Y	N
Interaction Advisory Code	ZPE	Y	Y
Interaction Advisory Severity Level	ZPE	Y	Y
Interaction Advisory Text	ZPE	Y	Y
DUE Response Status	ZPE	Y	Y
DIN/GP#/PIN ¹	ZPB3 Block 1	Y	N
Generic Name/Manufacturer ¹	ZPB3 Block 1	Y	Y
Same Store Indicator ¹	ZPB3 Block 1	N	N
Quantity ¹	ZPB3 Block 1	Y	N
Maximum Daily Dose ¹	ZPB3 Block 1	Y	N
Prescription Status ¹	ZPB3 Block 1	Y	N
Date Dispensed ¹	ZPB3 Block 1	Y	N
Intervention Codes	ZPB3 Block 1	Y	N
Practitioner Id Reference	ZPB3 Block 1	Y	N
Practitioner Id	ZPB3 Block 1	Y	N
Directions ¹	ZPB3 Block 1	Y	N
DIN/GP#/PIN ²	ZPB3 Block 2	Y	N
Generic Name/Manufacturer ²	ZPB3 Block 2	Y	Y
Same Store Indicator ²	ZPB3 Block 2	Y	N
Quantity ²	ZPB3 Block 2	Y	Y
Maximum Daily Dose ²	ZPB3 Block 2	Y	N
Prescription Status ²	ZPB3 Block 2	Y	N
Date Dispensed ²	ZPB3 Block 2	Y	Y
Intervention Code ²	ZPB3 Block 2	Y	N
Practitioner Id Reference ²	ZPB3 Block 2	Y	N
Practitioner Id ²	ZPB3 Block 2	Y	N
Drug Discontinuation Date ²	ZPB3 Block 2	Y	N
Drug Discontinuation Source ²	ZPB3 Block 2	Y	N
PharmaNet Participant Message	ZPI	Y	N
Mandatory Display of Response Message Status.	ZZZ	Y	Y

¹ References new drug filled. The information related to this drug may be displayed once at the top of the screen. If this is done, the information must remain on the screen while scrolling through all DUE messages. The other option is to display this information with each DUE message.

² References historical drug previously filled.

3.11 Medication Update Reversal – TMU

This function is used to correct a medication update made in error.

3.11.1 Processing Rules

1. The most recent medication entry on the patient's profile that matches the criteria supplied will be reversed.
2. Within the practitioner Transaction Date field of the ZCB segment, the Date of Service of the original medication update must be supplied.
3. The local software must not reverse a medication update from the local system that has not been reversed from PharmaNet.
4. The local software must not use a default intervention code.

3.11.2 Mandatory Screen Display Standards

The following defines the minimum mandatory display standards for a successful TMU reversal transaction.

INFORMATION RETURNED BY <i>HealthnetBC</i>	OUTPUT	MANDATORY DISPLAY	DISPLAY ON FIRST SCREEN PRESENTED
Mandatory Display of Response Message Status.	ZZZ	Y	Y

4 PHN Check Digit Number Routine

The following PHN Check Digit Number Routine should be implemented on the local software. The PHN used by PharmaNet is sent as a 13 digit number. There is a common Mod 11 check that can be applied to the last 10 digits of the PHN.

Input to this routine is the last ten digits of the PHN with no leading zeroes. The number is broken down into single digits and each digit is weighted. The weights are as follows:

Digit (by position)	1	2	3	4	5	6	7	8	9	10
Weight		2	4	8	5	10	9	7	3	

The check digit process should ignore the first digit that is always a 9 and any leading zeroes. Each digit (2-9) is multiplied by its weight and divided by 11. The remainder is loaded into an array. The array values are added to obtain a total. Divide the total by 11, and subtract the remainder from 11 to yield a check digit value. Compare this value to the 10th digit and if equal then the PHN is valid, otherwise the PHN is invalid.

Example:

The PHN in the example is '0009123947241':

PHN	9	1	2	3	9	4	7	2	4	1
Weights		2	4	8	5	10	9	7	3	
Multiply		1x2	2x4	3x8	9x5	4x10	7x9	2x7	4x3	
Product		2	8	24	45	40	63	14	12	
Divide by 11		2 ÷ 11	8 ÷ 11	24 ÷ 11	45 ÷ 11	49 ÷ 11	63 ÷ 11	14 ÷ 11	12 ÷ 11	
Remainder		2	8	2	1	7	8	3	1	

Sum of remainder values is 32.

Divide 32 by 11. The result is a remainder of 10.

Take the remainder (10) from 11. This should match the check digit (tenth place digit) (11-10=1).

If equal then the PHN is valid, otherwise the PHN is invalid.

If the result is 10 or 11, the PHN is not valid, considering the tenth digit is a single number.