



PharmaNet

Professional and Software Compliance Standards

Volume 3 – Technical Rules

Pharmacy

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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 *healthnetBC* Products and Services Catalogue web site. <http://healthnet.hnet.bc.ca/catalogu/index.html>

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 Hospital Admitting (HA), Emergency Department (ED), Medical Practice (MP), 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 Hospital Admitting (HA), Emergency Department (ED), Medical Practice (MP), 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 through out *healthnetBC*.

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 Pharmacies, Out-Patient Pharmacies and In-Patient Hospital Pharmacies.

For the purposes of these standards:

- A community pharmacy dispenses prescriptions medication directly to the patient for use at home and processes the prescription through PharmaNet.
- A hospital pharmacy is classified as 'Out-Patient' if it dispenses medications for at home use to Out-Patients and connects to PharmaNet for the purposes of updating the PharmaNet patient record and adjudicating PharmaCare claims on-line. This designation of 'Out-Patient' must be approved by the CPBC.
- A hospital pharmacy is classified as 'In-Patient' if it does not dispense Out-Patient prescriptions for at home use, update patient records on PharmaNet, or perform on-line adjudication through PharmaNet for Out-Patient prescriptions. In-Patient Hospital pharmacies most commonly dispense medication for Hospital Admitting (HA), Emergency Department (ED).
- If an In-Patient hospital pharmacy performs services to patients that are billed to PharmaCare, and wishes to bill PharmaCare for these services through *healthnetBC*, the In-Patient pharmacies are considered Out-Patient pharmacies for the purposes of these *healthnetBC* compliance standards. They are granted limited access to PharmaNet.

2 TRANSACTION DETAILS

2.1 General Processing Rules

2.1.1 Interpreting Transaction Responses

There are several ways to determine whether a *healthnetBC* 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

2. The ZCE Segment (Claim Response Elements)

The ZCE segment is used for the transmission of claims information (i.e., TAC transaction). It contains two field which indicate the action taken with the claim:

- a) Response code field. Up to five CPhA response codes could be listed (i.e., 'A3' which translates to 'Identical claim has been processed')
- b) Response status field.'

A complete list of response statuses and response codes may be found in the Canadian Pharmaceutical Association Pharmacy Claim Standard.

The most complicated message is related to the filling of a prescription. In this case, the input message may be TAC/TDU/TRP. This combination would only be deemed successful if the Response status field in ZZZ for TAC was '0'.

- a) Transaction text field in ZZZ for TAC was blank
- b) Response status field in ZZZ for TDU was '0'
- c) Transaction text field in ZZZ for TDU was blank or '0 – Operation Successful'
- d) Response status field in ZZZ for TRP was '0'
- e) Transaction text field in ZZZ for TRP was blank or '0 – Operation Successful'
- f) Response status field in ZCE was either 'A (Accepted as transmitted-no adjustments), or 'V' (Reversal Accepted); and
- g) All five response codes in ZCE are blank.

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 response status field not equaling 'Y' for each ACG segment returned
3. A response status field not equaling 'Z' for each ZCH segment returned
4. A transaction text field not equaling 'blanks' or 0 – Operation Successful' for each ZZZ segment returned
5. A response status field in the ZCE segment (if returned) not equal to 'A' or 'V' and the response codes field in the ZCE segment (if returned) is not blank.

2.1.3 Combinations of Transactions

Where combinations are permitted, *healthnetBC* requires only one ZCA segment.

1. TAC/TDU (update 01, 04)
2. TAC/TDU (reversal 11)
3. TAC/TDU/TRP (update 01, 04)
4. TAC/TDU/TRR (update 01, 04)
5. TAC/TDU/TRS (update 01, 04)
6. TDU/TRP (inquiry 00)
7. TDU/TRR (inquiry 00)
8. TDU/TRS (inquiry 00)

2.1.4 Trace Numbers

Trace numbers are used on *healthnetBC* for auditing purposes. They are also used to track what happened with a transaction when it was processed by *healthnetBC*. 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 Provider, 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 be 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), CRS will return the consolidated PHN. If it appears the merge has been done incorrectly, or the Provider is aware of an incorrect PHN, the Provider must contact the PharmaNet Help Desk or the CPBC to request a correction or unmerge.

If the Provider 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 MoHS to search for PHNs which must be merged on their local system. This option would usually only be considered for large *healthnetBC* 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. CPBC
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 Access Restrictions

There must be no ability to invoke the In-Patient or Out-Patient Hospital Pharmacy software and access PharmaNet from areas of a hospital other than the In-Patient or Out-Patient Hospital Pharmacy. If the software is not installed on the local computer, then access to the software on a LAN must be limited to only the pharmacist and / or computer within the In-Patient or Out-Patient Hospital Pharmacy. The pharmacist must be also instructed to not access PharmaNet using the local software from any other areas of the hospital when requiring PharmaNet access. The following are examples of how this might be accomplished:

- a) Restrict access to the application by IP address
- b) Restrict access to the application
- c) Have an administrative user install a software based key, with an expiry date on each machine that is authorized to use the software.
- d) Use a parallel port or Universal Serial Bus (USB) hardware lock to restrict access to specific work stations. CPBC

2.1.9 Network Down

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

SSOs must ensure that their local systems can recover from unexpected loss of PharmaNet connections or power failures (e.g., 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). The transaction will have been processed by PharmaNet.

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 Provider, reversing the transaction, re-transmitting the transaction, etc.).

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

2.1.10 Community Pharmacy Processing Without the Network

If the local system is working but is unable to connect to PharmaNet, the Provider will have the following options available to them:

1. Not fill any prescriptions until PharmaNet is available
2. Fill prescriptions and treat all patients as cash customers. Batch the transactions and send them as pay cardholder; or,
3. Fill prescriptions and apply the Provider's judgment on how to treat each patient (e.g., if the Provider knows that the patient is Plan A, then charge accordingly and send the transactions as pay provider).

On both the local system and PharmaNet, the software does not allow processing a prescription without a PHN. When PharmaNet is unavailable, the Provider cannot search for an existing PHN, or assign a new one.

1. When PharmaNet is unavailable and the patient's PHN is not known the Provider enters PHN 9999999999998, allowing the local software to complete the prescription. When PharmaNet becomes available and the batched transaction is submitted to PharmaNet, it will be rejected. When this occurs, the Provider must search for the correct PHN, or assign a new PHN following TPH procedures and submit the PharmaCare claim.
2. If the connection is down, the Provider is responsible for collecting pertinent information from the client prior to filling the prescription. When the connection becomes available and transactions are sent, the Provider will review the DUE results. If further information or verification is required, a stand-alone TRP may be requested. CPBC

2.1.11 Community Pharmacy Recovery

All prescriptions filled during a network outage must be submitted to PharmaNet within 24 hours of reconnecting to the network. This is accomplished by the submission of a batch of prescriptions to PharmaNet, or the re-transmission of specific claims, or both.

Details related to the re-transmission of prescriptions can be found earlier in this document.

1. Prescriptions dispensed in a network down situation may be batched and handled without direct operator intervention. In such cases, the profile request may be omitted, but all DUE messages returned by PharmaNet must be retained on the local system and reviewed by the Provider. The DUE messages may only be deleted once this review has occurred. The Provider may then request a stand-alone profile request (TRP, TRR, or TRS) to verify the DUE messages. CPBC
2. The process to be used for data recovery after a network down situation is a batch process from the perspective of the local software only. PharmaNet will not distinguish prescriptions and PharmaCare claims submitted in this manner from those normally processed in an interactive fashion at the pharmacy.
3. The local system may provide a facility of this sort, but it is not a mandatory requirement for certification, if an alternate method of updating PharmaNet is provided (such as a provider initiated process).
4. The following process is suggested for a pharmacy batch function:
 - a) Submit prescription for all processing in one message (including Patient Profile Request (optional), perform DUE check, adjudicate PharmaCare claim.
 - b) The network response will either be successful or not. A successful transaction set will have a unique patient, a unique drug, a unique practitioner, and be successfully adjudicated.
 - c) On completion of the batch process, the transaction sets will be reviewed by the dispensing Provider and professional decisions made on further action for each of the prescriptions; and,

- d) Reversal messages must be transmitted for any prescriptions which are changed in the review process.

If the local software does submit a TRP during a network down situation, the local software must ensure that after reviewing the results, the patient profiles are not stored on the local system. The software must also ensure that the patient profiles are not printed at any time.

2.1.12 Backup

The local system must provide the ability to backup and recover all relevant data files. The backup process will utilize either diskette or tape based media. Simple backup to hard disk is not acceptable.

A recovery process of appropriate files must be available. Examples of a suitable backup and recovery process are utilizing the MSBACKUP facility to backup the directories on a workstation that contain the actual data files. Another process could be built into the application code that will prompt the provider to backup certain data files and / or recover certain data files from external media.

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

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

2.2 Transaction Permissions by Provider

The following matrix indicates which PharmaNet transactions are permitted by each Provider type. Each row lists all existing *healthnetBC* transactions (functions) and each column represents current Provider types. The intersection indicates approved transactions for the Provider type.

LEGEND	
X	NOT PERMITTED. Compliance evaluations will ensure the local software does not allow this function.
M	MANDATORY- This function must be provided for use by the Provider type
O	OPTIONAL. This function may be provided for use by the Provider type; Approvals are in place; MoHS will manage roll out and priorities

Note: If an In-Patient hospital pharmacy dispenses, to Out-Patient, medications that are billed to PharmaCare, and wishes to bill PharmaCare through PharmaNet, these In-Patient pharmacies are considered Out-Patient pharmacies for the purposes of these PharmaNet Standards.

The PharmaNet Client Registry transactions described in this document may be replaced with their corresponding Health Registry transactions as follows:

PHARMANET TRANSACTION	HEALTH REGISTRY TRANSACTIONS
TID – Patient Identification	R03 – Get Person Demographics
TPA – Patient Address Update	R07 – Update Person Address
TPH – PHN Assignment	R02 – Record New Person
TPN – Patient Name Search	R09 – Search for Person

Use of the Health Registry transactions is mandatory in software installed at new agency sites where the use of HNSecure was permitted six months prior to the new installation.

Health Registry transactions are documented in the current version of the Application Services Professional and Software Compliance Standards, Health Registry Standard.

TRANSACTION ACCESS PERMISSIONS			
Transaction	Provider		
	Community Pharmacy ¹	Out-Patient Hospital Pharmacy	In-Patient Hospital Pharmacy
TAC/TDU - Adjudicate Claims and Drug Utilization Evaluation (DUE) Update	M	M	X
TCP Patient Keyword	M	M	X ²
TDR Drug Monograph Information	M	M	O
TDT Daily Totals Inquiry	M	M	X
TDU DUE Inquiry	M	M	O
TDU DUE Update	M	M	X
TDU DUE Reversal	M	M	X
TDU/TRP,TRR,TRS Combination	O	O	O
TID Patient Identification	M	M	M
TIP Prescriber Identification	M	M	O
TMU Medication Update	X	X	X
TMU Medication Update Reversal	X	X	X
TPA Patient Address Update	M	M	O
TPE Patient Eligibility	X	X	X
TPH PHN Assignment	M	M	X
TPI Patient Clinical Information Update	M	M	M ³
TPM Profile Mailing Request	M	M	X
TPN Patient Name Search	M	M	M
TRP Patient Profile Request	M	M	M
TRR Patient Profile Request (Most Recent Only)	O	O	O
TRS Patient Profile Request (Filled Elsewhere)	O	O	X

¹ This includes Non-pharmaceutical Suppliers and Dispensing Physicians.

² Although TCP is not permitted, the processing rules listed may apply to other transactions.

³ Discontinuation of Prescription Status or adding Prescription Comments is not permitted by In-Patient Hospital Pharmacies.

2.3 Specific Transaction Details

2.3.1 Local System Master Files

1. Changes to the local software data records (e.g., PHN merges, change to a Drug Identification Number (DIN) must only result from a deliberate procedure by a Pharmacist or on a specific documented direction to another computer operator designated by a Pharmacist.
2. Any alterations or deletions to the master files (practitioner, DIN, drug, SIG codes or glossaries) must not alter any previous patient medication history.
3. Changes made to master files (practitioner, DIN, drug, SIG codes or glossaries) must record the identification of the Pharmacist responsible for the change and the date of the change.
4. All patient information fields (name, address, phone number, date of birth, comments, allergies, clinical conditions and PHN) must permit changes. Any change to these fields must be reflected in that patient's prescription history. CPBC

2.3.2 Data Retention

1. Local systems must be capable of complying with the legal requirements of recording and retaining all information as required by the Bylaws, and other provincial and federal legislation, including but not limited to, the *Pharmacy Operations and Drug Scheduling Act (PODS)*, the *Controlled Substances Act* and regulations, and the *Food and Drugs Act* and regulations thereto. All prescriptions and patient records must be retained for a period of not less than three years.
2. The local software must store for each original prescription or refill prescription dispensed:
 - a) The generic name of the drug and the manufacturer and the strength
 - b) The DIN
 - c) The quantity of the drug dispensed
 - d) The dosage instructions

- e) The dispensing date
- f) The prescription number
- g) The intended duration of therapy, specified in day
- h) Date and source of the discontinuation, if applicable
- i) Identification of prescribing or authorizing practitioner. CPBC

3. Local Patient record requirements

The patient record on the local system must contain the following patient information:

- a) Patient surname, given name, and where applicable, another given name or initial
- b) PHN as assigned by BC MoHS
- c) Patient date of birth
- d) Patient address
- e) Patient telephone number (when available)
- f) Patient gender
- g) Any reported characteristics of the patient that could be determinants in the appropriate drug therapy, such as physical assessment and / or laboratory test data; pregnancy; breast feeding; idiosyncratic responses; allergies; weight; alcohol, tobacco or other drug consumption; or other health conditions (when available)
- h) The date and source of the reported characteristics in the point above. CPBC

2.4 Print Standards

The printing of any information returned from PharmaNet, with the exception of patient education monographs and daily totals, is not permitted.

2.4.1 Prescription Label Requirements

For all medications provided directly to patients (e.g., Community Pharmacy or Out-Patient hospital pharmacy) the prescription label must contain:

1. Name of the person for whom the drug is dispensed (minimum of full first name and last name)
2. Name of the prescriber (minimum of first initial and full last name)
3. Name, address and phone number of the pharmacy
4. Prescription number
5. Current dispensing date
6. Unless the practitioner otherwise instructs:
 - a) For single entity products, the generic name of the drug followed by the brand name or the manufacturer name or the DIN
 - b) For multiple entity products, the brand name or all ingredients listed followed by the manufacturer name or the DIN
 - c) For compounded preparations, all ingredients
 - d) Quality and strength of drug
 - e) Practitioner's directions for use
7. Any information required by good pharmacy practice
8. Where the package size is too small (full label is put on larger container and patient is instructed to always keep the medication in larger container):
 - a) Prescription number
 - b) Current dispensing date
 - c) Full name of the person for who the drug is dispensed

- d) Name of the drug
- 9. For medications administered in the hospital or clinic to Out-Patients (i.e., medications not taken home by the patient) the prescription label must contain, at a minimum, the following elements:
 - a) Unique patient identifier
 - b) Medication name and parenteral vehicle, if applicable
 - c) Medication strength(s)
 - d) Dosage, if information about current dose is not supplied by MAR
 - e) Frequency, if applicable
 - f) Route of administration or dosage form as appropriate
 - g) Date dispensed. CPBC

2.4.2 Receipts Minimum Print Standards

- 1. A receipt must be issued for all claims, other than Plan B claims and must display the following values:
 - a) DIN or CDIC Number
 - b) Drug Cost (if additional charges to the prescription, i.e., an upcharge or compounding fee are transmitted and not identified individually on the receipt, then this label must contain the cost of all values associated with the total cost of the drug including values submitted in the upcharge and/or compounding fee fields.
 - c) Dispensing Fee
 - d) Brand Name and Strength or Generic Name and Manufacturer and Strength
 - e) PharmaCare Pays
 - f) Third party payer 1
 - g) Third party payer 2
 - h) Third party payer 3
 - i) Third party payer 4 CLHIA

- j) Patient Pays
- k) Patient Last Name, First Name or Initial, Middle Initial (optional)
- l) PHN
- m) Pharmacy Code
- n) Practitioner Last Name, First Name or Initial, Middle Initial (optional)
- o) Prescription Date
- p) Prescription Number
- q) Quantity
- r) Store Name
- s) Total Claim
- t) Days Supply*

* Note: Some third party adjudicators require the days supply value in order to properly adjudicate a claim on behalf of a client, however, this is not a mandatory field.

2. OFFLINE must appear in the applicable adjudication fields when on-line adjudication is not available.
3. Information printed on receipts must be clearly legible, with a font size not less than 6 points.
4. These requirements are a combination of rules defined by PharmaCare and the Canadian Life and Health Insurance Association (CLHIA).

2.4.3 Adjudication Examples

ADJUDICATION RESULTS						RECEIPT DISPLAY							
EX	PNET	ADJ 1	ADJ 2	PAPER	PATIENT	DRUG COST	DISP FEE	TOTAL	PNET	ADJ 1	ADJ 2	PAPER or COLLECT	PATIENT
1	10.00	2.00	N/A	N/A	2.78	11.28	3.50	14.78	10.00	2.00			2.78
2	10.00	2.00	2.78	N/A	0.00	11.28	3.50	14.78	10.00	2.00	2.78		0.00
3	0.00	DOWN	UP	N/A	14.78	11.28	3.50	14.78	0.00	OFF LINE	OFF LINE		14.78
4	0.00	2.00	DOWN	N/A	12.78	11.28	3.50	14.78	0.00	2.00	OFF LINE		12.78
5	0.00	2.00	2.78	8.00	2.00	11.28	3.50	14.78	0.00	2.00	2.78	8.00	2.00
6	*****	N/A	N/A	14.78	0.00	11.28	3.50	14.78	0.00			DIA VAC WCB RCMP FORCES ICBC	0.00
7	DOWN BATCH 04	UP	UP	N/A	14.78	11.28	3.50	14.78	OFF LINE	OFF LINE	OFF LINE		14.78
8	DOWN BATCH 01 (senior)	UP	UP	N/A	3.50	11.28	3.50	14.78	OFF LINE	OFF LINE	OFF LINE		3.50
9	DOWN BATCH 04	N/A	N/A	UP	14.78	11.28	3.50	14.78	OFF LINE			OFF LINE	14.78
10	DOWN BATCH 01 (senior)	N/A	N/A	UP	3.50	11.28	3.50	14.78	OFF LINE			OFF LINE	3.50
11	0.00	N/A	N/A	10.00	4.78	11.28	3.50	14.78	0.00			10.00	4.78

DEFINITIONS

- PNET = PharmaNet
 - ADJ 1 = Third Party Adjudicator #1
 - ADJ 2 = Third Party Adjudicator #2
 - PAPER = Electronic Collection or Paper Submission by Pharmacy
 - N/A = Client does NOT have a Third Party Adjudicator
 - ***** = Submitted Zero Dollars (100% federally insured)
 - 0.00 = Accepted Amount
 - DOWN = Third Party Adjudicator not responding
 - UP = Third Party Adjudicator available
 - DOWN BATCH 01 = Transaction Batched & Transmitted to PharmaNet as a Pay Provider Claim
 - DOWN BATCH 04 = Transaction Batched & Transmitted to PharmaNet as a Pay Cardholder Claim
- Note: DE intervention code may be used in place of submitting zeroes in the drug cost and dispensing fee fields.

2.4.4 Drug Upcharge

The drug cost field on the receipt must include the values transmitted in the drug cost field (Actual Acquisition Cost), the upcharge field and the compounding fee field of the transaction unless all three fields are displayed individually.

2.4.5 Printing a Medication Administration Record (MAR)

A MAR record must include the:

1. Residents full name
2. Resident's location within the LTC facility, where possible
3. Name of the resident's medical practitioner
4. Substances to which the resident is known to be allergic
5. Month for which the record is to be used
6. Name and strength of all medications currently being administered including those to be administered on a 'when necessary' basis
7. Full directions for use
8. The original dispensing date. CPBC

2.4.6 Printing from the Local Database

The patient record must contain only those prescriptions filled by that pharmacy. No PharmaNet records may be printed. 'This is not an official record' must be printed on the patient record. CPBC

2.4.7 Profile Print Requirements for Out / In-Patient Hospital Pharmacy

The printed profile must contain:

1. Type of profile requested
2. All patient demographics
3. Date / time printed
4. User ID of operator
5. Pharmacy code and name of the hospital pharmacy department
6. All data fields labeled as 'Mandatory Display'. CPBC

2.4.8 Medication Reconciliation Print Requirements

The optional Medication Reconciliation Report must contain all data fields labeled as 'Y - Mandatory for Medication Reconciliation' in the tables in section 3.17.7 Mandatory Medication Reconciliation Print Standards.

3 PROCESSING RULES & MANDATORY SCREEN DISPLAYS

3.1 Refusal to Fill Claim – TAC/TDU

A Pharmacist may choose not to fill a prescription. In order to process a 'refusal to fill', an original claim must have been sent (TAC/TDU), then reversed (TAC/TDU Reversal) then submitted again with a special services fee code (TAC/TDU Refusal to Fill).

3.1.1 Processing Rules

1. In order for a Special Services Fee to be claimed the original prescription claim must be reversed, and the claim sent again with the Special Services Code (SSC), Intervention and Exception Codes and Special Services Fee in the ZCD segment for adjudication.
2. Special Services Fees are paid only if there has been a successful adjudication by PharmaCare with Plan Pays amount results greater than \$0.
3. Any Special Services Fee request associated with a refusal to fill will result PharmaNet matching on the date of service, pharmacy ID and Rx number, as well as the transaction code 11 (reversal) on the PharmaCare claims history file.
4. The status of a prescription on the local system where a Special Services Fee Claim has been successful must be 'Not Filled', rather than 'Reversed' or 'Discontinued'.
5. The local software must not use a default intervention code.
6. The local software must provide the ability to reverse a Special Services Fee Claim.
7. The Special Services Fee Claim can be reversed by submitting a reversal using the same data fields as the original reversal.
8. The fee for the Special Services Claim must not exceed double the dispensing fee submitted on the original prescription.
9. There can only be one special services code per prescription.

3.1.2 Refusal To Fill – Mandatory Screen Display Standards

INFORMATION RETURNED BY PharmaNet	OUTPUT	MANDATORY DISPLAY	DISPLAY ON FIRST SCREEN PRESENTED
Drug Cost (AAC) Submitted (input ZCD)		Y	N
Cost Upcharge (input ZCD)		Y	N
Compounding Charge (input ZCD)		Y	N
Special Services Fee Submitted (input ZCD)		Y	N
Professional Fee Submitted (input ZCD)		Y	N
Adjudication Date	ZCE	Y	N
Reference Number	ZCE	Y	N
Drug Cost Accepted	ZCE	Y	N
Special Services Fee Accepted	ZCE	Y	N
Professional Fee Accepted	ZCE	Y	N
Plan Pays (PharmaCare)	ZCE	Y	N
Other Payer (when applicable)	ZCE	Y	N
Copay to Collect	ZCE	Y	N
Patient Pays		Y	N
Mandatory Display of Response Message Status.	ZCE, ZZZ	Y	Y

3.2 Adjudicate a Claim – TAC/TDU

3.2.1 Business Overview

The TAC portion of the TAC/TDU transaction represents the financial component of a claim and the TDU portion of the DUE. To process a full prescription, a TAC and TDU must be transmitted. TAC can not be independently transmitted, therefore, this section covers details for the combined TAC/TDU transaction.

3.2.2 Processing Rules

1. The prescription record must contain the following:
 - a) Name, initials and address of the patient
 - b) Prescription dispensing date
 - c) Prescription number
 - d) Generic name, strength and dosage form of the drug
 - e) DIN
 - f) Quantity of the drug dispensed
 - g) Intended duration of therapy, specified in days
 - h) Date and reason for early discontinuation of therapy
 - i) Directions to the patient
 - j) ID of prescribing or authorizing practitioner
 - k) ID of the Pharmacist dispensing the prescription; and,
 - l) Refill authorization, where applicable, should include the number of refills and the interval between refills.
2. The patient profile (TRP, TRR, TRS) must be displayed by the local software prior to the dispensing of any prescription. The only approved exceptions of this rule are for prescriptions filled for animals, for batched long term care prescriptions, and for prescriptions batched during a network down situation.

3. The software must not provide functionality or means for the Pharmacist to omit the TRP, TRR, TRS transaction except as noted earlier.
4. The local system must provide quantity and days supply to PharmaNet.
5. All prescriptions dispensed as well as those refused to fill due to Pharmacist intervention must be transmitted to PharmaNet. The local software must not provide functionality of means to prevent a Pharmacist from transmitting a prescription to PharmaNet.
6. The local software must fully expand SIG codes (i.e., directions for use) to text prior to transmission to PharmaNet. No abbreviations or special characters are permitted in the directions for use on the local system or PharmaNet.
7. Prescription record data must be assigned a prescription number which is unique within the pharmacy.
8. Prescriptions dispensed for animals (written by veterinarians) must be transmitted to PharmaNet and recorded on the local system. CPBC

3.2.3 Adjudication Date Field

The adjudication date field within the ZCE segment is usually the same as the system date the transaction was processed by the adjudication server.

An exception to this is if a claim request is sent to PharmaNet between the hours of 00:00:00 (midnight) and 00:30:00, the adjudication date returned in the ZCE segment is actually the previous day.

For example, if the systems time is 00:15:00 on September 12, 1996, and a claim is submitted to PharmaNet, the adjudication date returned in the ZCE segment is 19960911, regardless of what is submitted in the ZCB segment as the provider transaction date.

Another example, if the system time is 00:45:00 on September 12, 1996, and a claim is submitted to PharmaNet, the adjudication date returned on the ZCE segment is 19960912, regardless of what is submitted in the ZCB segment as the provider transaction date.

1. The local software must store the returned adjudication date instead of defaulting to the local system date.

3.2.4 Adjudicate a Claim

1. A prescription claim will always carry the responsible Pharmacist's diploma number. CPBC
2. The SSO must not supply any software to the pharmacy which could be used to alter adjudication result information from PharmaNet or other adjudicators.
3. Claims adjudicated on-line use the Canadian Pharmacists Association (CPhA) claim adjudication standards.
4. The standard period used for aggregation of PharmaCare claims that are adjudicated on-line is the business day, or 00:30:00 to 00:29:50 PDT daily.
5. For insurers other than PharmaCare that provide on-line claim adjudication via an electronic submission by the pharmacy, the claim portion of the prescription will be submitted to PharmaNet, and the portion unpaid by PharmaCare will be submitted by the pharmacy to the other insurer(s) for adjudication. Any unpaid portion will be collected at the pharmacy.
6. All PharmaNet compliant software that is modified to electronically submit or electronically batch the unpaid claim portion on-line to other adjudicator(s) must be compliance evaluated by the compliance team.
7. Regardless of who pays for the medications, by law, all prescriptions must be submitted to PharmaNet for update to the patient's medication profile. CPBC

3.2.5 Days Supply

1. The days supply field on the ZCD segment is mandatory with each prescription submitted. This may be achieved on the local software by either:
 - a) The Pharmacist 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).
 - c) The Pharmacist 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.

Note: For DUE Inquiry, quantity and days supply are only necessary if dosage range checking is desired.

3.2.6 Quantity

1. The local software must have the ability to transmit a quantity with a decimal point to PharmaNet.
2. The local profile, label and receipt must display the decimal quantity dispensed and transmitted. CPBC

3.2.7 Prescriber Name Edit

The prescriber name edit applies to all TAC/TDU transactions sent to PharmaNet.

1. The 10 byte Prescriber ID in the ZCD segment in a TAC/TDU transaction will contain the 5 byte prescriber license number followed by the first 5 bytes of the prescriber's last name.
2. 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 '70 No match to Prescriber ID and Name found'.
3. The error could be the Prescriber ID. It must be the prescriber's license number, not the MSP number. The error could be the spelling of the last name. A TIP transaction will display the spelling that PharmaNet expects.

3.2.8 Drug Utilization Evaluation (DUE)

1. Days supply for each prescription is mandatory.
2. For TDU Update, leaving the display of warning messages will be done by a deliberate keystroke that indicates the Pharmacist has acknowledged receipt of the messages only after the last message has been displayed (i.e., all messages must be displayed without allowing escape). CPBC
3. DUE functions are only performed on valid DINs. DUE will not be performed on PINs or Pharmacist defined DINs, which have been put in the system temporarily by PharmaCare.
4. During batch processing (i.e., System Down, Long Term Care), all DUE responses returned by PharmaNet must be retained for later review by the dispensing Pharmacist. CPBC
5. Prescription details for DUE responses are returned in reverse chronological order by expiry date. The expiry date is calculated by PharmaNet 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
Duration of Therapy	up to 1 encounter
Too Soon/Too Late (Compliance)	up to 1 encounter

7. DUE messages from TDU update may be stored on the local system after review by the pharmacist. The message returned when a prescription is filled must be reviewed before storage (except in a batch situation).
8. The following is a brief description of each type of DUE encounter.

Drug-to-Drug Interaction

Effective April 1, 2004, the PharmaNet drug-to-drug interaction module (DDIM) was upgraded and now returns:

- Severity levels instead of significance levels to rank the clinical significance of the drug-to-drug interactions. The new severity levels do not directly correspond to the significance levels previously used
- Clinical Effect codes in place of Clinical Effect descriptions.
- Drug-Drug Interaction Reference Category Indicators in place of category descriptions.

Severity Level	Description	Encounters Returned
1	Contraindicated drug combination	Drug combination is clearly contraindicated in all cases and should not be dispensed or administered to the same patient.
2	Sever interaction (<i>interaction</i>)	<p>Action is required to reduce risk of severe adverse interaction. Indicates drug combinations that can produce serious consequences in most patients, but that can be monitored and/or the agent(s) titrated, significantly minimizing the risk of adverse effects.</p> <p>The drug combination may be absolutely contraindicated in some patients, but not in all patients. The information required to identify those patients in whom the combination is contraindicated is provided in the corresponding DDIM monograph. Drugs that must never be given at the same time, but can be administered on a staggered schedule, are also included in the DDIM monograph.</p>
3	Moderate interaction	<p>Assess risk to patient and take action as needed.</p> <p>Indicates interactions of moderate severity. The clinician should assess the individual patient characteristics and take action as needed. The action required can include discontinuation of one or both agents, adjusting dosage, altering the administration schedule or performing additional patient monitoring.</p>

Clinical Effect Codes and Drug-Drug Interaction Reference Category Codes

In the upgraded module, because of space limitations in the record, abbreviated codes will be returned instead of the current category descriptions. The codes and their corresponding descriptions are listed below.

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
MSL	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	Invitro / Animal Study
R	Review
Blank	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 neither 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.

Duration of Therapy

Duration of Therapy module has been discontinued by First DataBank (FDB) and effective September 5, 2002, PharmaNet will no longer perform the Duration of Therapy check.

This module may be replaced in an upcoming PharmaNet release, with an enhanced Dosage Range Check Module (DRC), however, until this aspect of PharmaNet is upgraded, the Duration of Therapy check on PharmaNet will return zeros in the Drug Utilization Evaluation (DUE) DOT response for all drugs.

Refill Too Soon / Too Late (Compliance)

Compliance checking is done for refills or partial refills (as indicated by a refill indicator value of 'R' or 'Q' respectively). The Date of Service of the current medication is checked against the Expiry Date of the most recent historical medication with the same GCN Sequence Number, to see if the refill is being dispensed 'Too Soon or Too Late'.

If the Dispensing Date is less than the Too Soon Date minus a tolerance, a DUE response status of 'D7' (Refill Too Soon) is returned.

If a current claim is submitted more than 14 days before the expiry of the days' supply of such a previous claim, PharmaNet automatically adjudicates the claim to zero and the CPhA "CL – Exceeds Good Faith Limit" is returned.

If the Dispensing Date is greater than the Too Late Date plus a tolerance, a DUE response status of 'DE' (Fill / Refill – Non-compliant) is returned.

3.2.9 TDU Specific

1. For the TDU input message, the Practitioner ID used in the ZZZ segment will be the same as the Pharmacist ID in the ZCD segment.
2. A prescription record will not be accepted unless the patient, the prescribing practitioner, the drug or product, quantity, days supply and the Pharmacist is identified on the prescription.

3.2.10 Duplicate Prescription Claims

1. A duplicate prescription is defined as being a second prescription coming from the same pharmacy, with the same PHN, DIN and Provider Transaction Date. If a duplicate prescription is sent, PharmaNet will set the Response Status field of the ZZZ segments to 1, and the TDU ZZZ segment's Transaction Text field will contain the message '121 This is a Duplicate Prescription'.
2. The transaction will not be logged on either the medication history or the PharmaCare claims history.
3. The local software must not use a default intervention code.

3.2.11 Insurers Other than PharmaCare

A coordination of benefits (COB) structure has been included in the PharmaNet system that will distribute claims to interested insurers based on the identity (PHN) of the patient. The operational use of this feature will not impact the pharmacy inputs, but will change the nature of the response to a claim request. The full CPhA set of segments will be included in the response for each insurer who adjudicated the claim.

1. In some cases PharmaCare is not the primary insurer (first payer) for a patient's claim. Patients may be eligible through federal plans (e.g., DIA, VAC, Armed Forces, RCMP, etc.). These claims are not adjudicated through PharmaNet, nor are they accumulated towards a PharmaCare deductible. However, the patient's medication profile on PharmaNet and the local system must be updated. The responses for these claims include:

ZZZ segment Response Status of: 0

ZCA segment BIN of: 000002 (VAC)
 000003 (DIA)
 000004 (Armed Forces)
 000005 (RCMP)

ZCE segment Response Status of: R

Response Code of: E1 (Host Processing Error - Do Not Resubmit)

2. The returned E1 response code is the result of the COB router attempting to send an adjudication request to a third party connected computer which is not on-line. The returned information can then be interpreted by the pharmacy software and a meaningful message displayed for the Bank Identification Number (BIN) other than '000001'.

Note: If the above response is returned with a BIN of '000001' in the ZCA segment then the Host Processing Error must be displayed because a serious error has occurred.

3. In the future, PharmaNet will communicate with many adjudicators. These adjudicators are identified by their BIN.. The COB Router has been built to handle the future environment. When a message is sent to PharmaNet, the COB Router checks the COB table for the PHN to determine who should adjudicate the claim first. If PharmaCare is not the first payer, the router will send the TAC to the appropriate adjudicator. Currently, insurers are not identified on the COB table, therefore the 'Host Processing Error' response code is returned.
4. The local system must have the ability to submit claims to a first payer other than PharmaCare (e.g., BC Cancer Agency, WCB, ICBC, BC Transplant Society, etc.). These claims must be transmitted to PharmaNet with zeros in the Drug Cost and Professional Fee fields in the ZCD segment. This will satisfy the mandatory updating of the patient's medication history while providing the pharmacy with the necessary claim information. These claims do not accumulate towards the PharmaCare deductible.
5. The process used to submit zero drug cost and zero professional fee must be provided by the software and easy to use with the ability to select this function on an individual prescription basis. If the claim is also being transmitted to a third party insurer, the true value of the submitted drug cost and dispensing fee must be recorded on the local system as well as on the receipt.

6. When the third party insurer's adjudication service is unavailable or responding with a response code indicating:
 - a) The claim could not be processed
 - b) The claim could not be captured
 - c) Manual submission is required,

The pharmacy software must display OFFLINE in the applicable third party payers field. The pharmacy software must not provide any opportunity for estimated dollar amounts to be inserted in either the PharmaCare Pays or Other Payer portions of the claim.

7. If a reversal is required the prescription must be reversed from all insurers to which it was submitted.
8. When a third party insurer is not electronically connected (uses a paper claim) then the applicable third party payers field on the receipt must display the amounts claimed to the adjudicator.
9. PharmaCare and external carriers may use different PINs to identify non-pharmaceutical products. The SSO software must send all transactions to PharmaNet using the valid PharmaCare PINs. The software must automatically convert PharmaCare PINs to accommodate other organizations requirements. The label, receipt and local system must record the PharmaCare PINs. CPBC
10. The transmission and update sequence must be in the following order, PharmaNet, third party (when applicable) and then local system. All systems must remain in sync with transmission of new and reversed prescriptions. The software that provides automatic transmissions and updates to both third party carriers and local system must recognize an out of sync condition and halt processing.
11. The pharmacy software must prevent any modification of prescription records after successful submission to PharmaNet and before transmission to third party insurers and local system, other than the refill status field.
12. After a receipt has been issued and provided to the patient, no further electronic adjudication to third party carriers is permitted. The pharmacy software may allow for multiple third party connection attempts, however, once a receipt is provided to the client, further transmissions are prohibited.

3.2.12 Business Rules

1. The pharmacy software that assembles and dispatches third party claims, and processes the responses must, as a minimum, do the following:
 - a) Insert, without operator intervention or modification, the 'PharmaCare Pays' dollar amount returned by PharmaNet into the claim to the third party insurer.
 - b) Display to the Pharmacist, and print on the customer's receipt, the dollar amount paid by each adjudicator, clearly labeling each third party(s) adjudication amounts separately.
 - c) When the third party insurer's adjudication service is unavailable or responding with a response code that indicates the claim could not be processed, captured or requires manual submission (e.g., A6), the pharmacy software must display OFFLINE.
 - d) The software must not provide any opportunity for estimated dollar amounts to be inserted in either the PharmaCare Pay or third party portions of the claim.
 - e) When paper submissions are required, the software must display the amount being claimed in the third party portion(s) of the claim
 - f) When electronic collection (not on-line adjudication) to the Medical Services Branch of Health Canada for Non-Insured Health Benefits (for registered Indians and Inuit), formerly known as the Department of Indian Affairs (DIA), or Veterans' Affairs Canada (VAC) is available, the software must display DIA or VAC, etc., or the amount claimed accordingly in the applicable third party payer field on the receipt.
 - g) When a zero drug cost and zero dispensing fee are transmitted to PharmaNet, the receipt must display the drug cost and dispensing fee submitted to both federal and private third party insurer's, and,
 - h) Receipts must display N/A or remain blank when patient has no third party coverage.

2. Adjudication Examples

ADJUDICATION RESULTS						RECEIPT DISPLAY							
EX	PNET	ADJ 1	ADJ 2	PAPER	PATIENT	Submit DRUG COST	Submit DISP FEE	TOTL	PNET	ADJ 1	ADJ 2	PAPERor COLLECT	PATIENT
1	10.00	2.00	N/A	N/A	2.78	11.28	3.50	14.78	10.00	2.00			2.78
2	10.00	2.00	2.78	N/A	0.00	11.28	3.50	14.78	10.00	2.00	2.78		0.00
3	0.00	DOWN	UP	N/A	14.78	11.28	3.50	14.78	0.00	OFF LINE	OFF LINE		14.78
4	0.00	2.00	DOWN	N/A	12.78	11.28	3.50	14.78	0.00	2.00	OFF LINE		12.78
5	0.00	2.00	2.78	8.00	2.00	11.28	3.50	14.78	0.00	2.00	2.78	8.00	2.00
6	*****	N/A	N/A	14.78	0.00	11.28	3.50	14.78	0.00			DIA VAC WCB RCMP FORCES ICBC	0.00
7	DOWN BATCH 04	UP	UP	N/A	14.78	11.28	3.50	14.78	OFF LINE	OFF LINE	OFF LINE		14.78
8	DOWN BATCH 01 (senior)	UP	UP	N/A	3.50	11.28	3.50	14.78	OFF LINE	OFF LINE	OFF LINE		3.50
9	DOWN BATCH 04	N/A	N/A	UP	14.78	11.28	3.50	14.78	OFF LINE			OFF LINE	14.78
10	DOWN BATCH 01 (senior)	N/A	N/A	UP	3.50	11.28	3.50	14.78	OFF LINE			OFF LINE	3.50
11	0.00	N/A	N/A	10.00	4.78	11.28	3.50	14.78	0.00			10.00	4.78

DEFINITIONS

PNET	=	PharmaNet
ADJ 1	=	Third Party Adjudicator #1
ADJ 2	=	Third Party Adjudicator #2
PAPER	=	Electronic Collection or Paper Submission by Pharmacy
N/A	=	Client does NOT have a Third Party Adjudicator
*****	=	Submitted Zero Dollars (100% federally insured)
0.00	=	Accepted Amount
DOWN	=	Third Party Adjudicator not responding
UP	=	Third Party Adjudicator available
DOWN BATCH 01	=	Transaction Batched & Transmitted to PharmaNet as a Pay Provider Claim
DOWN BATCH 04	=	Transaction Batched & Transmitted to PharmaNet as a Pay Cardholder Claim

Note: DE intervention code may be used in place of submitting zeroes in the drug cost and dispensing fee fields.

The drug cost field on the receipt must include the values transmitted in the drug cost field (Actual Acquisition Cost), the upcharge field and the compounding fee field of the transaction unless all three fields are displayed individually.

3. When the adjudicator that determines benefits first (primary carrier) or the first third party is unavailable, adjudication to subsequent secondary carrier(s) is halted. The receipt must indicate OFFLINE in the applicable adjudicator(s) field(s) on the receipt.
4. Where the Pharmacist is aware that a patient is federally insured or has primary coverage other than PharmaCare, the software must prevent PharmaNet adjudication. The process used to prevent PharmaNet adjudication is to submit a zero drug cost and zero professional fee or a 'DE' intervention code to PharmaNet.
5. The process used to submit zero drug cost and zero professional fee must be provided by the software with the ability to select this function on an individual prescription basis. If the claim is also being transmitted to a third party insurer, the true value of the drug cost and dispensing fee must be recorded on the local system as well as on the receipt.
6. PharmaCare and third party carriers may use different PINs to identify non-pharmaceutical products. The SSO software must send all transactions to PharmaNet using the valid PharmaCare PINs. The software must automatically convert PharmaCare PINs to accommodate other organizations requirements. The label, receipt and local system must record the PharmaCare PINs. CPBC
7. Modification of the prescription history for a dispensed prescription on the local software is prohibited. If an error related to DIN, drug name, strength, quantity, practitioner ID or instructions for use is identified, the Pharmacist must reverse the prescription on PharmaNet, applicable third party carriers and on the local system; make the necessary corrections then transmit the new prescription. The only field that may be modified without reversing the prescription is the refill authorization field. CPBC
8. A Response Code E1 – Host Processing Error can be caused by two circumstances:
 - a) The adjudication server of PharmaCare is not responding, or
 - b) An error that is related to the lack of an on-line connection to a third party adjudicator. To determine which reason applies to the claim, check the BIN field of the ZCA segment on the response. If the BIN has a value of '1', then the PharmaCare adjudication server encountered an error. If the BIN value is anything other than a '1', then the BIN value will identify the specific adjudicator. The Pharmacist should be alerted to call the Help Desk immediately if the BIN value is '1' since the PharmaCare adjudication server failed to respond.

3.2.13 Multiple Prescriptions

1. A TRP, TRR, or TRS is required when filling a prescription. If multiple, consecutive prescriptions are being filled for the same patient it is acceptable to fill all subsequent prescriptions using a TAC/TDU combination transaction without the TRP/TRR/TRS portion.

Acceptable Methods Of Filling Multiple, Consecutive Prescriptions For Same Patient		
Method 1 (Preferred)	First Prescription	TAC/TDU/TRP or TAC/TDU/TRR or TAC/TDU/TRS
	Second Prescription	TAC/TDU
	Third Prescription	TAC/TDU
Method 2 (Acceptable) Note: Using this method, access to the patient's profile is logged on PharmaNet and documented on the patient's profile when printed by the CPBC.	View Profile	TRP or TRR or TRS
	First Prescription	TAC/TDU
	Second Prescription	TAC/TDU
	Third Prescription	TAC/TDU
Method 3 (Not Recommended)	First Prescription	TAC/TDU/TRP or TAC/TDU/TRR or TAC/TDU/TRS
	Second Prescription	TAC/TDU/TRP or TAC/TDU/TRR or TAC/TDU/TRS
	Third Prescription	TAC/TDU/TRP or TAC/TDU/TRR or TAC/TDU/TRS

2. Two prescriptions processed simultaneously on different terminals in the same store should be treated as separate transactions. One set of prescriptions will be processed by PharmaNet ahead of the other set. If there is a DUE interaction problem between the drugs being prescribed at the two different terminals it will be caught when the second set is transmitted to PharmaNet.

3.2.14 Optional Field Edits

1. If the patient last name, first name, date of birth or gender is used as input and does not match *healthnetBC* data, the transaction is not rejected, but the appropriate response codes will be returned in the ZCE segment.

Note: Some patient records on *healthnetBC* have a known year and month of birth but an unknown day of birth. In this situation, the day of birth is set to '01'. Therefore, if the local system sends in a claim with the full date of birth, including the day and the data on *healthnetBC* has the day of birth as '01', then a response code is returned because the patient date of birth does not match.

Some patient records on *healthnetBC* have the patient's gender set to 'U' (unknown). Therefore a claim sent to *healthnetBC* with the known gender (e.g., M or F) will cause a response code in the ZCE segment since it is not an exact match.

Only the first two characters of the last name and the first character of the first name are checked against the patient's record.

2. If an invalid date (e.g., future date) is entered as the patient date of birth, the transaction is rejected.

3.2.15 Plan B Claim (Long Term Care)

1. The process to be used for Plan B prescription processing is a batch process from the perspective of the local software only. PharmaNet will not distinguish prescriptions and PharmaCare claims submitted in this manner from those normally processed in an interactive fashion at the pharmacy. The pharmacy system may provide this function, but it is not a mandatory requirement.
2. Prescriptions for Plan B may be batched and handled without direct operator intervention. In such cases, the profile request may be ignored, but all DUE message returned by PharmaNet must be retained on the local system and the Pharmacist must review the DUE results and determine if a stand-alone Patient Profile transaction (TRP/TRR/TRS) is required to verify DUE warnings, etc.
3. A TRP, TRR, TRS is not required for LTC prescriptions. On completion of the batch process, the transaction sets will be reviewed by the Pharmacist and a professional decision made on further action for each prescription.
4. Reversal transactions must be submitted for any prescriptions requiring changes in the review process. CPBC
5. The Group Number or Code field on the ZCC segment must correspond to the LTC facility contracted to the PharmaNet participant sending the transaction.
6. Receipts are not required for Plan B adjudication unless the prescription is not a benefit under Plan B.
7. If a profile request is made with the batched prescriptions, the results must not be stored on the local system or printed at any time. CPBC

3.2.16 Payee Different from Patient

1. Any PharmaCare claim that is to be paid to the patient must be identified as such. The CPhA transaction code for a pay patient PharmaCare claim is '04'. When the payee is different from the patient, the payee must be

identified, by PHN in the Client ID # field of the ZCC segment. Usually the payee and the patient will have the same PHN.

Example: If a prescription for a child is transmitted as '04 - pay patient', the cheque is normally made payable to the parent. Therefore, the parent's PHN should be entered in the Client ID field of the ZCC segment and the child's PHN entered in the Provincial Health Care ID field. The PHN entered in the Client ID field must be a member of the same MoHS MSP family coverage as the child's PHN. This coverage is edited through adjudication.

3.2.17 Refills and Part fills

1. A refill prescription will be identified using the original prescription number.
CPBC
2. An 'N' for a new prescription or 'R' for a refill is required in the New / Refill Code field.
3. A part fill refers to a prescription that has been divided to allow multiple dispensing (i.e., a prescription for 100 tablets could be filled as 5 'part fills' of 20 tablets each). The first part fill would use 'P' in the New / Refill Code field while the 4 subsequent part fills would use 'Q' in the New / Refill Code field.
4. When processing subsequent part fills ('Q' in the New / Refill Code field) it is generally better to use the same prescription number. The exception to this is narcotics, where the Bureau of Drug Surveillance requires a separate prescription for each.
5. When the quantity on a refill is changed the software must force the Pharmacist to review and edit if necessary the days supply.
6. It is acceptable to make a change to the quantity for a prescription refill provided that the local software is capable of retaining a record of the quantity dispensed on each previous fill.
7. When changes are made to the quantity for a refill, the historical record of that prescription must not change and the local profile displayed to the Pharmacist must show the details of the most recent dispensing event.
8. The software must not permit a change on a prescription refill to DIN, prescriber or instructions for use. Changes to these fields require the generation of a new prescription.

9. When an original prescription or a previously dispensed prescription that included an intervention code is refilled, the software may default to transmission of that intervention code. If this is done, providers must be prompted to review the previous intervention code and change it, if necessary, before transmitting to PharmaNet. CPBC

3.2.18 Transfer of Refill Authorization

1. The local system of the pharmacy providing the transfer must cancel the transferred refill authority.
2. The record on the local system must contain the date of the transfer, identification of both pharmacies and Pharmacists involved in the transfer. CPBC

3.2.19 Veterinary Prescriptions

1. If the Prescriber ID Reference identifies a veterinarian (first character V) on the input message, the output message will return response code '60' (Prescriber Licensing Authority Code Error).

The PharmaCare claim will be adjudicated to zero and return a response status of 'B' (Accepted with Rx Price Adjustment). SSOs may wish to translate the standard CPhA response '60' into a more meaningful message for the Pharmacist when it is applied to a veterinary prescription.

2. If the Prescriber ID Reference (in the ZCD segment) identifies a veterinarian (first character V) on the input message, no DUE functions will be performed, however the submission of the TDU is still required.
3. Veterinarian prescriptions do not require a profile display.

3.2.20 Consolidated PHNs

1. When the PHN returned is different from the PHN that was submitted, the local software must clearly indicate to the Pharmacist that a consolidated PHN has been returned. The message displayed should advise the Pharmacist to perform a patient identified (TID) transaction prior to updating the local system with the new PHN in order to confirm the PHN has been correctly consolidated.

3.2.21 Miscellaneous Items

1. For privacy reasons the following two data fields embedded in the data fields Message Data Lines 1, 2 and 3 (ZCE segment) must not be stored on the local pharmacy systems by the local software:

- a) Plan
- b) Accumulated Expenditure

Both fields apply to an individual prescription at the time it adjudicates on PharmaNet. Because both fields can change between prescriptions submitted on the same day they can not be used to determine how the same prescription or another prescription for that patient might adjudicate in the future.

Information provided on each of the message lines are:

Message Line 1

1. Plan (plan the claim adjudicated under)
2. S/A (Y or N if a special authority exists)
3. EXP (expiry date of the S/A (if one exists))
4. DRUG (accepted drug cost)

Message Line 2

1. ACC EXP (accumulated expenditure for the family prior to this claim)
2. RBP (Y or N if the drug was reduced to RBP pricing)
3. LCA (Y or N if the drug was reduced to LCA pricing)
4. BEN (Y or N if the drug is a benefit)

Message Line 3

1. Restriction (could be none, patient or pharmacy)
 2. FEE (accepted dispensing fee)
2. If the software stores the adjudication results, these must reflect the accurate values returned by all payers.

3.2.22 Sale of Inventory

1. The local software must record the sale of emergency quantities of all drug inventories. This must be handled by functionality separate from 'filling of a prescription'. These transactions must not be transmitted to PharmaNet. These sales must be auditable through inventory facilities. The transactions must be reported under Bureau of Drug Surveillance (BDS) requirements, if appropriate. CPBC

3.2.23 Trial Prescriptions

1. Trial prescriptions are sent to PharmaNet with the code 'MT' in the Intervention and Exception Codes field of the ZCD segment and the trial portion of the prescription in the quantity field (e.g., for a prescription of 100 pills with a trial portion of 7 pills, a new prescription should be sent to PharmaNet with a quantity of 7 and the value of 'MT' in the Intervention and Exception Codes field). Assuming there are no problems, the balance of the prescription should be transmitted using the same prescription number, a quantity of 93, and a blank in the Intervention and Exception Code field.

3.2.24 Mandatory Screen Display Standards

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

INFORMATION RETURNED BY PharmaNet	OUTPUT	MANDATORY DISPLAY	DISPLAY ON FIRST SCREEN PRESENTED
Drug Cost (AAC) Submitted (input ZCD)		Y	N
Cost Upcharge (input ZCD)		Y	N
Compounding Charge (input ZCD)		Y	N
Special Services Fee Submitted (input ZCD)		Y	N
Professional Fee Submitted (input ZCD)		Y	N
Adjudication Date	ZCE	Y	N
Reference Number	ZCE	Y	N
Drug Cost Accepted	ZCE	Y	N
Special Services Fee Accepted	ZCE	Y	N
Professional Fee Accepted	ZCE	Y	N
Plan Pays (PharmaCare)	ZCE	Y	N
Other Payer (when applicable)	ZCE	Y	N
Copay to Collect	ZCE	Y	N
Patient Pays		Y	N
Mandatory Display of Response Message Status.	ZCE, ZZZ	Y	Y

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

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 ⁴	ZPB3 Block 2	Y	N
Drug Discontinuation Source ³	ZPB3 Block 2	Y	N
Directions ³	ZPB3 Block 2	Y	N
healthnetBC Participant Message	ZPI	Y	N
Mandatory Display of Response Message Status.	ZCE	Y	Y

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.

3.3 Re-transmit a Claim

This section describes the process to be followed in the event that a response is not received for a message submitted to PharmaNet or to receive a second response from PharmaNet if necessary.

3.3.1 Re-transmit the Input Message

If the SSO's software does not receive a response from a transaction submitted to PharmaNet, the transaction must be sent to PharmaNet again in the form of a re-transmission transaction. The re-transmission transaction must be identical to the original transaction except an 'R' is required in the Response Status field of each ZZZ segment. This identifies a re-transmission as opposed to a new transaction.

This functionality is a mandatory function of the SSO's software and applies only to prescription combination transactions:

- a) TAC, TDU
- b) TAC, TDU, TRP
- c) TAC, TDU, TRR; and
- d) TAC, TDU, TRS

3.3.2 Response from Network

When a TDU is re-transmitted, and if the PharmaCare claim has already been processed (i.e., an exact match is found on the Medication History table) the re-transmitted PharmaCare claim will not be added to the Medication History table a second time. DUE processing will be redone.

If an exact match is not found, the transaction will be processed as a new prescription.

When a TAC is re-transmitted, and if the PharmaCare claim has already been processed (i.e., an exact match is found on the Claims History table) the re-transmitted PharmaCare claim will not be added to the Claims History table a second time. The original PharmaCare claim results will be returned.

If an exact match is not found, the transaction will be processed as a new prescription.

3.4 Reverse a Claim

Reversing a claim will modify the original prescription on the patient's medication history and claims history records to a status of reversed, and will automatically cause a billing correction.

3.4.1 Processing Rules

1. The most recent PharmaCare claim matching the information criteria will be reversed.
2. The local software must not reverse a prescription off the local system that has not been reversed from PharmaNet and appropriate third party insurers.
3. Modification of the prescription history for a dispensed prescription on the local software is prohibited. If an error related to DIN, drug name, strength, quantity, practitioner ID or instructions for use is identified, the Pharmacist must reverse the prescription on applicable third party carriers, PharmaNet, and on the local system; make the necessary corrections then transmit the new prescription. The only field that may be modified without reversing the prescription is the refill authorization field. CPBC
4. A reversal requires both the Provider Transaction Date (ZCB) and the Adjudication Date (ZCE) be part of the input. Both dates must be the same as the original transaction. These are normally the same, but in the case where PharmaNet is not available when a transaction is processed, it is possible for the offline processing to occur the following day, creating a different Adjudication Date than the Provider Transaction Date. The following example should cover all cases:

Day 1 – Fill the prescription with the Provider Transaction Date set to Day 1. However, as the network is not available, the prescription is filled but the transaction is not sent.

Day 2 – The transaction is sent to the network. In the message returned from the network the ZCB will have the Provider Transaction Date set to Day 1. The ZCE segment will have the Adjudication Date set to Day 2.

Day 3 – The Pharmacist reverses the transaction. On input, the ZCB has a Provider Transaction Date set to Day 1 and the ZCE has the Adjudication Date set to Day 2. The output from PharmaNet will have the ZCB Provider Transaction Date set to Day 1 and the ZCE Adjudication Date set to Day 3.

In this example, the Provider Transaction Date will always be Day 1, because that is the day the prescription was filled. The original Adjudication took place on Day 2. The reversal on Day 3 reverses the adjudication that occurred on Day 2. The output from the reversal has an adjudication date of Day 3 because that is the day that the reversal occurred.

5. The local software must not use a default intervention code.
6. When the PHN returned is different from the PHN that was submitted, the local software must clearly indicate to the Pharmacist that a consolidated PHN has been returned. The message displayed should advise the Pharmacist 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.

3.4.2 Mandatory Screen Display Standards

The following defines the minimum mandatory display standards for a successful TAC/TDU reversal transaction.

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

3.5 Patient Keyword Maintenance - TCP

This transaction adds or updates the Patient Keyword but cannot remove it. To remove a Patient Keyword call the PharmaNet Help Desk.

3.5.1 Processing Rules

1. If the current Patient Keyword sent does not match the keyword on PharmaNet, the following message will be returned '17 Field Keyword contains invalid value'.
2. Keywords may be one to eight characters, using any combination of alpha, numeric or special characters.
3. Alpha characters must be in UPPER CASE when the keyword is transmitted.
4. The local software must prevent the use of Health Level 7 (HL7) encoding characters (| ^ ~ \ &).
5. The patient's keyword is added by submitting a TCP (Change Patient Keyword) transaction. The Current Patient Keyword field will be blank and the keyword to be added will be entered in the New Patient Keyword field.
6. If a patient has previously set a Patient Keyword, that keyword must be included in any network request for a medication profile (either printed or on-line) or drug utilization evaluation.
7. If the PHN submitted on a TCP has been merged, the following message is returned '42 This PHN has been collapsed'. Please enter correct PHN'.
8. Keywords stored on the local system must only be available to the Pharmacist where the keyword transaction was completed. CPBC
9. A keyword protected patient record cannot be accessed without inclusion of the correct keyword in the network service request.
10. Once a keyword is established, that keyword is required for changing a patient's keyword, accessing patient profiles, executing a DUE check, requesting a patient profile mail-out, and filling a prescription.

3.5.2 In-Patient Pharmacy

1. It is not permissible to store a patient’s keyword on the local system. Keywords can not be shared among pharmacists sharing patient information. This restricts access to the patient’s record and medication profile to Pharmacist(s) chosen by the patient and therefore protects their right to privacy.
2. The TCP transaction is not permitted for In-Patient hospital pharmacies, however the processing rules may apply to other interactions.

3.5.3 Mandatory Screen Display Standards

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

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

3.6 Drug Monograph Information - TDR

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 all three types of patient education monographs.
5. The software must provide functionality to print patient education monographs.
6. If a drug monograph is requested, with or without generic equivalents, it must be presented to the Pharmacist.
7. It is not required for drug monographs to be printed, but the local software must provide print functionality. CPBC

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 Adjudication Reconciliation – TDT

This function provides the pharmacy with information regarding claim submissions.

1. The local software must include facilities for daily reconciliation of receivables and PharmaCare claims. This will be done using CPhA Daily Totals messages.
2. A request for a daily summary total will match against the daily totals stored in the local computer. Totals and mismatches are printed.
3. There are four different transactions available:
 - a) TDT30 – Daily Totals provides total number of claims, same day reversals, and prior day reversals for a particular adjudication date.
 - b) TDT31 – Claim Details provides a list of claims processed for a particular day as well as the amount paid by PharmaCare for each of them.
 - c) TDT32 – Same Day Reversals provides a list of claims that were reversed on the same day for a particular day, as well as the dollar amount of each reversed claim.
 - d) TDT33 – Prior Day Reversals provides a list of claims that were reversed from a previous day, as well as the dollar amount of each reversed claim.

3.7.1 Processing Rules

1. The Beginning of Record and End of Record fields refer to the selection of prescription numbers which are to be returned in the response. The selection will be based on a prescription number greater than the Beginning of Record prescription number and less than or equal to the End of Record prescription number. Note that this is not an inclusive selection, but that the first Prescription Number returned is equal to the Beginning of Record plus 1. The following example demonstrates this:

Input:	Beginning of Record	=	001001255
	End of Record	=	001001262

This input will result in the return of seven prescriptions from, and including, 001001256 through 001001262.

2. Regardless of the values entered in the Beginning and End of Record fields, the CPhA Standards state that detail records will be returned in groups with a maximum of fourteen (14) prescriptions per transaction. Additional prescriptions may be processed by submitting more than one TDT transaction. This may be done by changing the Beginning of Record field to the last prescription number already received and submitting the transaction again. This procedure may be repeated until a prescription matching the End of Record field is returned.

The first transaction with this input will return fourteen (14) prescriptions, from 001001256 through 001001269. Changing the Beginning of Record field to 00100269 and submitting a second transaction will result in the remaining five (5) prescriptions, 001001270 to 001001274, being returned.

3. It is recommended that when assigning prescription numbers, the local system assign each number only once. This will ensure that all prescriptions are returned when a detail request is made. If a prescription number is reused, a situation may arise where some prescriptions may not be included in the results of a TDT detail transaction. The following is an example of how this might happen:

Prescription #14 is submitted and then reversed, leaving a record on PharmaNet. Because #14 was reversed, it is then used again, for a successful transaction. This leaves 2 records with a prescription #14 on PharmaNet. If 0 is then entered in the Beginning of Record field, the first fourteen (14) prescriptions, including the reversed prescription #14 but not the second, will be returned. As #14 is the last prescription number received, #14 would then be used as the Beginning of Record on the next

request. This causes the first prescription number returned to be #15 (14 plus 1), thus missing the second prescription #14.

4. When prescription numbers are entered in the Beginning of Record and End of Record fields, all prescriptions for that day within that range or the first fourteen (14) will be returned, whichever occurs first. This means the claim will show up on a 31 and the reversal will show up on a 32 or 33. To ensure that all claims, refills and / or reversals for the given day are included in the results, submit the transaction using a Beginning of Record of 000000000 and an End of Record of 999999999.

3.7.2 Mandatory Screen Display Standards

The format for displaying or reporting information returned by any of the four TDT transactions is provided by the SSO. The only mandatory display requirement is the display of response message status. It is also recommended that the screen or report provide all necessary fields to enable reconciliation of daily transactions.

3.8 Inquiry – TDU

DUE functions are only performed on valid DINs. DUE will not be performed on PINs or Pharmacist defined DINs, which are temporary PharmaCare entries.

3.8.1 Processing Rules

1. Leaving the display of warning messages will be done by a deliberate keystroke that indicates the Pharmacist has acknowledge receipt of the messages. The pharmacist is allowed to clear the DUE message at any time.
2. TDU messages from TDU inquiry must not be stored on the local system.
CPBC
3. Except in the case of In-Patient pharmacies, DUE messages may be stored on the local system after review by the Pharmacist. The messages returned must be reviewed first before storage.
4. The local software may calculate the days supply when the instructions for use are entered as a code (SIG). The Pharmacist must have the ability to review the value calculated and correct it, if necessary, prior to sending to PharmaNet.
5. 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.

6. Prescription details for DUE responses are returned in reverse chronological order by expiry date. The expiry date is calculated by PharmaNet by adding the Days Supply to the Dispensing Date.
7. The DUE messages must be displayed in the order returned by PharmaNet. CPBC 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
Duration of Therapy	up to 1 encounter

8. Compliance checking is not performed on a TDU Inquiry.
9. When the PHN returned is different from the PHN that was submitted, the local software must clearly indicate to the Pharmacist that a consolidated PHN has been returned. The message displayed should advise the Pharmacist 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 Interaction

Effective April 1, 2004, the PharmaNet drug-to-drug interaction module (DDIM) was upgraded and now returns:

- Severity levels instead of significance levels to rank the clinical significance of the drug-to-drug interactions. The new severity levels do not directly correspond to the significance levels previously used
- Clinical Effect codes in place of Clinical Effect descriptions.
- Drug-Drug Interaction Reference Category Indicators in place of category descriptions.

Severity Level	Description	Encounters Returned
1	Contraindicated drug combination	Drug combination is clearly contraindicated in all cases and should not be dispensed or administered to the same patient.
2	Sever interaction	<p>Action is required to reduce risk of severe adverse interaction. Indicates drug combinations that can produce serious consequences in most patients, but that can be monitored and/or the agent(s) titrated, significantly minimizing the risk of adverse effects.</p> <p>The drug combination may be absolutely contraindicated in some patients, but not in all patients. The information required to identify those patients in whom the combination is contraindicated is provided in the corresponding DDIM monograph. Drugs that must never be given at the same time, but can be administered on a staggered schedule, are also included in the DDIM monograph.</p>
3	Moderate interaction	<p>Assess risk to patient and take action as needed.</p> <p>Indicates interactions of moderate severity. The clinician should assess the individual patient characteristics and take action as needed. The action required can include discontinuation of one or both agents, adjusting dosage, altering the administration schedule or performing additional patient monitoring.</p>

Clinical Effect Codes and Drug-Drug Interaction Reference Category Codes

In the upgraded module, because of space limitations in the record, abbreviated codes will be returned instead of the current category descriptions. The codes and their corresponding descriptions are listed below.

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
MSL	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	Invitro / Animal Study
R	Review
Blank	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 neither 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.

Duration of Therapy

Duration of Therapy module has been discontinued by First DataBank (FDB) and effective September 5, 2002, PharmaNet will no longer perform the Duration of Therapy check.

This module may be replaced in an upcoming PharmaNet release, with an enhanced Dosage Range Check Module (DRC), however, until this aspect of PharmaNet is upgraded, the Duration of Therapy check on PharmaNet will return zeros in the Drug Utilization Evaluation (DUE) DOT response for all drugs.

Refill Too Soon / Too Late (Compliance)

Compliance checking is done for refills or partial refills (as indicated by a refill indicator value of 'R' or 'Q' respectively). The Date of Service of the current medication is checked against the Expiry Date of the most recent historical medication with the same GCN Sequence Number, to see if the refill is being dispensed 'Too Soon or Too Late'.

If the Dispensing Date is less than the Too Soon Date minus a tolerance, a DUE response status of 'D7' (Refill Too Soon) is returned.

If the Dispensing Date is greater than the Too Late Date plus a tolerance, a DUE response status of 'DE' (Fill / Refill – Non-compliant) is returned.

3.8.2 Mandatory Screen Display Standards

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

INFORMATION RETURNED BY PharmaCare	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
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
healthnetBC Participant Message	ZPI	Y	N
Mandatory Display of Response Message Status.	ZZZ	Y	Y

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.

3.9 TDU/TRP, TRR, TRS Combinations

3.9.1 General Processing Rules & Mandatory Displays

TDU/TRP, TDU/TRR, TDU/TRS combinations are the same as TDU Inquiry and are the same as TDU Inquiry and Stand-alone TRP or TRR or TRS Patient Profile Requests.

3.10 Patient Identification – TID

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

3.10.1 Processing Rules

1. When the PHN returned is different from the PHN that was submitted, the local software must clearly indicate to the Pharmacist that a consolidated PHN has been returned. The message displayed should advise the Pharmacist 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 MoHS patient address record on *healthnetBC* must cause a comparison between the latest mailing address on the local software and the MoHS patient address record. This comparison can be done automatically by the software or manually by the pharmacist. If these records do not match, the Pharmacist must update the incorrect or out of date record(s) on both systems. CPBC
3. Any access to the patient address record on CRS must cause a comparison between the latest mailing address on the local software and the CRS patient address record. This comparison can be done automatically by the software or manually by the Pharmacist. If these records do not match, the Pharmacist must have the ability to update the incorrect or out of date record(s) on both systems.

3.10.2 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
<i>healthnetBC</i> Participant Message	ZPI	Y	N
Mandatory Display of Response Message Status.	ZZZ	Y	Y

3.11 Prescriber Identification – TIP

This function may be used to obtain information on a Provider (e.g., physician, pharmacist, podiatrist, dentist, veterinarian, etc.) by either searching a 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 *healthnetBC*.

3.11.1 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.

3.11.2 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
healthnetBC Participant Message	ZPI	Y	N
Mandatory Display of Response Message Status.	ZZZ	Y	Y

3.12 Patient Address Update – TPA

This transaction is used by the Pharmacist to update a patient’s address on *healthnetBC*. It uses the PHN of the patient to find the existing address.

3.12.1 Processing Rules

1. A TPA request coming through PharmaNet will be processed by CRS. If CRS is not available, the TPA update process will be process via PharmaNet’s ‘Stand-in’ function.

2. To ensure that the address is updated correctly on *healthnetBC*, 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 an unstructured field.
3. All changes to the patient's mailing address maintained on the local system should be transmitted to *healthnetBC*.
4. The local software must provide the ability to capture a local phone number for a patient.
5. Canada post mailing standards must be used for Canadian addresses. 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.
6. 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.

Please note this is presently not working correctly. PharmaNet returns an error if the postal code is left blank. Pharmacists should be instructed to enter their facility's postal code if the patient's zip code or equivalent code is not available.

7. 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

3.12.2 Mandatory Screen Display Standards

This table defines the minimum mandatory display standards for a successful TPA transaction, as well as those field which must be displayed on the first screen of information presented. CPBC

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

3.13 PHN Assignment – TPH

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

3.13.1 Processing Rules

1. The local system must enforce a TPN transaction prior to a TPH transaction (assigning a PHN).
2. Prior to assigning a PHN, the local system software must prompt the Pharmacist 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?’

3. The default condition must be set to ‘N’ to cancel the transaction. The Pharmacist must enter ‘Y’ to cause the transaction to proceed.
4. Names must begin with A – Z.
5. Date of birth must not be greater than current date and must be in valid date format.
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

7. All PHNs assigned by *healthnetBC* must be stored on the local system as part of the patient’s demographic data.

3.13.2 Mandatory Screen Display Standards

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

INFORMATION RETURNED BY <i>healthnetBC</i>	OUTPUT	MANDATORY DISPLAY	DISPLAY ON FIRST SCREEN PRESENTED
Personal Health Number	ZCC	Y	Y
Mandatory Display of Response Message Status.	ZZZ	Y	Y

3.14 Patient Profile Information Update – TPI

A patient profile information update transaction is used to add or change profile information on the patient's record.

3.14.1 General Processing Rules

The local system must be capable of capturing information on adverse drug reactions, clinical conditions and discontinuation of a prescription as well as the transmission of information to PharmaNet. CPBC

3.14.2 Discontinue Prescription(s)

1. To discontinue a prescription, the Drug Discontinued Date and Drug Discontinued Code must be input on the ZPB3 sub-segment. For the prescription to be discontinued, the following fields supplied as input must match a prescription on the patient's medication profile.
 - a) In ZCB Pharmacy ID Code of the originating pharmacy
 - b) In ZCC PHN of patient
 - c) In ZPB3 DIN and Date Dispensed.
2. If prescriptions are discontinued on the local system, the software must automatically transmit the discontinuation to PharmaNet to keep both patient records 'in sync'. CPBC
3. A prescription may only be discontinued:
 - a) By the pharmacy that originally filled it
 - b) If the original prescription is recorded on PharmaNet.

3.14.3 Clinical Conditions

1. Clinical conditions recorded on the local system must be transmitted to PharmaNet either by the pharmacist or automatically by the software.
CPBC
2. A clinical condition may be added without a comment by entering the clinical condition, chronic indicator, date reported and the source of the information.
3. A clinical condition may be added with a comment by entering the clinical condition, chronic indicator, date reported, source of information, comment text, practitioner ID reference, practitioner ID and date entered.
4. Clinical conditions returned by PharmaNet must not be stored on the local system.
5. For In-Patient hospital Pharmacies, clinical conditions recorded on the local system may be transmitted to PharmaNet either by the pharmacist or automatically by the software. CPBC

3.14.4 Adverse Reactions

1. An adverse reaction is added by entering the DIN, date reported and the source of the information.
2. Adverse drug reactions recorded on the local system must be transmitted to PharmaNet either by the pharmacist or automatically by the software.
CPBC
3. The comment may be added or changed on an existing adverse drug reaction by entering the DIN, comment text, practitioner ID reference, practitioner ID and date entered.
4. Adverse drug reactions returned by PharmaNet must not be stored on the local system.
5. For In-Patient hospital Pharmacies, adverse drug reactions recorded on the local system may be transmitted to PharmaNet either by the pharmacist or automatically by the software. CPBC

3.14.5 Mandatory Screen Display Standards

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

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

3.15 Profile Mailing Request – TPM

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

3.15.1 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 Pharmacist that a consolidated PHN has been returned. The message displayed should advise the Pharmacist 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. When requesting a PharmaNet patient profile, the Pharmacist 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

4. For a print out of the local profile, the patient must request the print out from the Pharmacist. This print out must not contain the profile data sent by PharmaNet and it must indicate that 'this is not an official PharmaNet record'.
5. Printing of the PharmaNet patient record is not permitted. CPBC

3.15.2 Mandatory Screen Display Standards

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

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

3.16 Patient Name Search – TPN

The Patient Name Search uses the name, date of birth and gender to find the patient's record and PHN on *healthnetBC*.

3.16.1 Processing Rules

1. A TPN transaction coming through PharmaNet will be processed by CRS. If CRS is not available, the search will be processed by PharmaNet's '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 Pharmacist 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 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.
11. The local system's patient record must include the PHN. CPBC

3.16.2 Mandatory Screen Display Standards

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

INFORMATION RETURNED BY <i>healthnetBC</i>	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

3.17 Patient Profile Request – TRP / TRR / TRS

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

3.17.1 Processing Rules

1. The mandatory requirements for display of the TRP, TRR, TRS responses which must be displayed to the Pharmacist prior to allowing them to exit or escape out of the information are:
 - a) All clinical conditions (all ZPB1)
 - b) All adverse reactions (all ZPB2)
 - c) The most recent 15 prescriptions returned by PharmaNet (ZPB3).
2. Within each of the clinical conditions, adverse reactions and medication history information, the minimum information that must be presented to the Pharmacist is included as ‘Display on first screen presented’ in the Mandatory Screen Display Standards for TRP, TRR, TRS. Other mandatory display information must be available for access by the Pharmacist.

3. The sequence of display must be ZPB1, then ZPB2, then ZPB3, etc.
4. The Pharmacist must be able to scroll up and down within the displayed information if the information is presented on more than one page.
5. A PharmaNet profile (TRP/TRR/TRS) must be displayed by the local software for prescriptions dispensed, regardless of the functionality used by the pharmacist to generate the fill process (i.e., selection of refill by prescription number; selection from the local profile; or generation of a new prescription). CPBC
6. 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, TRR and TRS.
7. The TRP, TRR, TRS 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.
8. When a name is supplied in the ZCC segment, the name is checked against the *healthnetBC* data for the identified PHN. If the first initial of the first name supplied does not match the *healthnetBC* first initial for the patient, the following warning message is returned '3052 Warning, First name does not match supplied'.
9. 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 *healthnetBC*, the following warning message is returned '3053 Warning, Last name does not match supplied'.
10. The TRP transaction will return prescriptions dispensed during the previous fourteen (14) months.
11. When the PHN returned is different from the PHN that was submitted, the local software must clearly indicate to the Pharmacist that a consolidated PHN has been returned. The message displayed should advise the Pharmacist 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.
12. Adverse drug reactions and clinical conditions returned by PharmaNet must not be stored on the local system.

13. The patient profile (TRP/TRR/TRS) must be displayed by the local software prior to the dispensing of any prescription. The only approved exceptions of this rule are for prescriptions filled for animals; long term care prescriptions; multiple, consecutive prescriptions being filled for the same person; and prescriptions batched during a network down situations.
14. The software must provide no functionality or means for the Pharmacist to omit the TRP, TRR, TRS transaction except as noted above.
15. The printing of the PharmaNet patient record in community pharmacies is not permitted.
16. The software must store prescriptions entered locally. The software must not capture or store profile data transmitted by PharmaNet. Profile data is for display purposes only, and must be treated as transient data to support the current transactions. Retention of an electronic copy of the patient profile is not permitted.
17. The medication history portion of the medication profile may be summarized for the Pharmacist by the DIN. If the record is summarized, the most recent dispensing date of the DIN as well as all other mandatory first screen requirements must be displayed. All of the other mandatory display requirements must be accessible to the Pharmacist.
18. If multiple prescriptions are filled for a patient, the patient profile request may be bypassed after the first prescription has been filled and the patient profile displayed once.
19. The total number of prescriptions should be presented with the first page of detail or first page of summary.
20. If prescriptions are filled for the same patient on different terminals within the pharmacy, the patient record must be displayed on each terminal.
21. Pharmacists must be allowed to break out of the full display of the patient record after all the clinical condition information, all the adverse reaction information and the most recent 15 prescriptions returned by PharmaNet have been displayed.
22. Stand alone full patient profiles (TRP) must be available on the local software.
23. Retention of an electronic copy of the PharmaNet profile is not permitted.
CPBC

3.17.2 Local System Requirements

1. The patient record on the local system must contain the following patient information:
 - a) Patient surname, given name, and where applicable, another given name or initial
 - b) PHN as assigned by MoHS
 - c) Patient date of birth
 - d) Patient address
 - e) Patient telephone number (when available)
 - f) Patient gender
 - g) Any reported characteristics of the patient that could be determinants in the appropriate drug therapy, such as physical assessment and / or laboratory test data; pregnancy, breast feeding; idiosyncratic responses; allergies; weight; alcohol, tobacco or other drug consumption; or other health conditions (when available).
 - h) The date and source of the reported characteristics indicated above. CPBC

3.17.3 General Processing Rules – TRR & TRS

1. Implementation of these two transactions is optional.
2. If a TRR or TRS is implemented, then a stand-alone TRP must also be made available.
3. It is permissible for a Pharmacist to review only the minimum mandatory display of profile data, and then to proceed with filling the prescription. However, the local software must be able to display the entire profile by paging down to further screens full of profile data should the Pharmacist choose to do so.
4. The TRR and TRS 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 or TRS instead of TRP.

3.17.4 Processing Rules – TRR

1. If the Pharmacist chooses to see more profile data than is provided by the TRR transaction, then the SSO's software must acquire the complete patient profile, via a TRP transaction, and be capable of displaying it to the Pharmacist. Alternatively, this could also be accomplished by using a combination of local profile data and data returned by the TRS transaction.
2. If the maximum number of prescriptions are returned (currently 15), then the SSO's software must indicate to the Pharmacist that there may be more profile data available.
3. 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)

3.17.5 Processing Rules – TRS

1. The TRS transaction will return all prescriptions that were filled for the patient at all pharmacies in the province except the pharmacy sending the transaction.
2. The locally filled patient record must be displayed when using the TRS transaction (this does not apply to In-Patient hospital medications). If using TRS, there are two options for patient profile display.
 - a) May blend the local profile with the PharmaNet patient profile; or
 - b) If not blending, must present the local profile and then the PharmaNet patient profile.
 - c) If blending the local profile with the PharmaNet patient profile, the software must distinguish between the local and PharmaNet records. CPBC
3. When a TRS transaction returns successfully, the following message is returned in the transaction text field of the ZZZ segment '3049 Operation Successful: Rx's not filled here'.

3.17.6 Mandatory Screen Display Standards

This table defines the minimum mandatory display requirements for TRP. 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	Y
Generic Name/Manuf 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/Manuf ¹	ZPB3	Y	Y
Same Store Indicator	ZPB3	Y	Y
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).

3.17.7 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 Provider	Y
Acknowledgement of PharmaNet as source of data for the report	Y
<p>Data set limitations/filters -</p> <p>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.</p> <p>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)."</p>	Y
<p>Disclaimer:</p> <p>**** Do not assume the patient is currently taking these medications or in these doses ***</p> <p>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."</p>	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).

4 PHN Check Digit Number Routine

The following PHN Check Digit Number Routine should be implemented on the local software. The PHN used by *healthnetBC* 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.