

# **Ensuring Safe & Efficient Communication of Medication Prescriptions**

**in Community and Ambulatory Settings**

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**Alberta College of Pharmacists (ACP)  
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College of Physicians and Surgeons of Alberta (CPSA)**



## Guiding Principles for Ensuring Safe and Efficient Communication of Medication Prescriptions in Community and Ambulatory Settings

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### Preamble:

Medication errors are a major source of potential harm to patients. Current literature on medication safety highlights two potentially error prone practices:

- 1) The use of *verbal prescriptions*; and
- 2) The communication of prescriptions to a pharmacist through an *intermediary*.

*(Source: Lesar, 2003 Nov.; Koczmara, Jelincic & Perri, 2006).*

The use of verbal prescriptions (spoken aloud in person or by telephone) introduces a number of variables that can increase the risk of error. These variables include:

- Potential for misinterpretation of orders because of accent or pronunciation;
- Sound alike drug names;
- Background noise;
- Unfamiliar terminology; and
- Patients having the same or similar names.

Some medication dosages are also more prone to error. For example, numbers in the teens such as 15 and 16 may be heard and transcribed as 50 and 60. Once received, a verbal prescription must be reduced to writing which adds further complexity and risk to the prescribing process. No one except the prescriber can verify the accuracy of a verbal order against what was intended, and identification of an error in a verbal prescription by a prescriber relies on their memory of what was spoken.

Medication safety literature recognizes that the more direct the communication between a prescriber and a pharmacist, the lower the risk of error. The introduction of intermediaries into the prescribing process has been identified as a prominent source of medication error. Communicating a prescription by telephone through an intermediary:

- Blurs accountability;
- Further increases the risk of miscommunication;
- Reduces the effectiveness of the prescription confirmation process; and
- Lessens the likelihood that effective communication occurs if questions arise about a prescription.

*(Source: Lesar, 2003, Nov.)*

Medication safety literature also recognizes that the patient represents an untapped resource for reducing the incidence of medication errors. Patients can and should be supported to question why they are receiving a medication, verify that it is the appropriate medication, dose, and route, and alert the health professional involved in prescribing, dispensing, or administering a medication to potential problems such as allergies or past drug-drug interactions.

*(Source: CARNA, 2005)*

The *Food and Drugs Act* (R.S., 1985) provides the following key definitions:

*“Prescription” means an order given by a practitioner directing that a stated amount of any drug or mixture of drugs specified therein be dispensed for the person named in the order.*

*“Practitioner” means a person authorized by the law of a province of Canada to treat patients with any drug listed or described in SCHEDULE F to the Regulations.*

This information is available online at: <http://laws.justice.gc.ca/en/F-27/C.R.C.-c.870/237615.html#rid-237621>.

There is significant legal risk associated with the use of intermediaries because current legislation does not support or is silent on the role of intermediaries in the communication of medication prescriptions. Given this level of risk, we recommend that health professionals involved in the communication of medication prescriptions in community and ambulatory settings apply the core principles outlined in this document.<sup>1</sup>

The Alberta College of Pharmacists (ACP), the College and Association of Registered Nurses of Alberta (CARNA) and the College of Physicians and Surgeons of Alberta (CPSA) developed these core principles to support the delivery of safe, efficient and timely care to Albertans. The principles provide guidance to health professionals involved in the prescribing and management of medication prescriptions in community and ambulatory practice settings.

As this document was written during the transition to new legislation and to new technology such as e-prescribing, the ACP, CARNA and CPSA are committed to updating these principles on a regular basis, incorporating new practices and standards as they evolve.

In endorsing these principles, these organizations also acknowledge that some period of transition and redesign of processes may be required. Practitioners are encouraged to work collaboratively in addressing needed changes and to consult with their professional colleges for advice as required.

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<sup>1</sup> **Note:** The core principles outlined in this document can contribute to best practices for verbal communication of prescriptions to health providers in hospitals and other in-patient facilities. However, adherence to the specific policies of those institutions is essential.

## Core Principles for Safe Communication of Medication Prescriptions in Community and Ambulatory Settings:

1. To minimize the risk of error, medication prescriptions must be issued clearly and completely. (See Appendix A)
2. Health professionals involved in the management of medication prescriptions have a responsibility to question any medication prescription issued by another health professional if they believe that it may not be safe or may otherwise not be in the patient's best interest.
3. In-hand delivery of a written prescription to the pharmacist by the patient/guardian is preferred over a verbal prescription order.
4. The faxed communication of a medication prescription from the prescriber's office to the pharmacist is preferred over a verbal prescription order when in-hand delivery of a written prescription by the patient/guardian is not possible. (See Appendix B)
5. Verbal communication of prescriptions must be limited to situations where immediate written or faxed communication is not feasible.
6. If necessary, verbal prescriptions communicated by telephone to a pharmacy are best conveyed by direct communication between the authorized prescriber and the pharmacist.
7. The accuracy of a verbal prescription should be confirmed using strategies such as a 'read back' of the prescription and/or a review of the indication for the medication. (See Appendix C)
8. The use of an intermediary to communicate verbal prescriptions between a prescriber and a pharmacist must be a last resort.<sup>2</sup> Patient safety and well-being is of utmost importance in making a decision to use an intermediary. When filling a medication prescription on an urgent basis, the benefit to the patient must be weighed along with the recognition of the legal risk incurred by the intermediary and the prescriber. If a decision to use an intermediary is made, the use of the intermediary must be done according to the guidelines outlined below:
  - a) Communication of verbal prescriptions through intermediaries does not diminish the prescriber's responsibility for accuracy and appropriateness of prescribing or the responsibility to be available if the pharmacist requires direct communication with the prescriber.

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<sup>2</sup> **Note:** For the purpose of these principles, *intermediary* refers to any individual "third party" or "agent" who communicates a medication prescription on behalf of a prescriber to a pharmacist. Intermediaries also refer to electronic devices such as voice messaging systems and telephone answering devices used to receive medication prescriptions.

- b) New prescriptions may be transmitted to a pharmacist through an intermediary only:
    - i) In unusual or urgent situations.<sup>3</sup>
    - ii) By a regulated health professional intermediary who speaks directly with a pharmacist. Under no circumstances may two intermediaries be used.
  - c) A prescriber's authorization to refill an existing prescription may be transmitted through an intermediary only:
    - i) Following approval and documentation by the prescriber.
    - ii) If there are no changes to the prescription
  - d) Communication via an intermediary should include the indication for which the medication is being prescribed as well as the name and credential of the intermediary.
  - e) Intermediaries must not communicate verbal prescriptions for narcotics or controlled drugs, including benzodiazepines and other Targeted Substances as defined in the *Controlled Drugs and Substances Act* and its Regulations.  
(<http://laws.justice.gc.ca/en/C-38.8/> )
  - f) A new prescription that is communicated verbally to a pharmacist through an intermediary must be confirmed as soon as possible through direct communication between the prescriber and the pharmacist or via fax. Recommended time is within 24 hours.
9. A prescription that is communicated verbally must be documented by the prescriber issuing the order and the person receiving the order as per their professions' standards of practice.

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<sup>3</sup> **Note:** Unusual situations are circumstances that are not typical or that are out of the ordinary. Urgent/Emergent situations are circumstances that call for immediate action or attention.

## Appendix A

### Determining currency, authenticity and completeness of prescriptions

HPA Standards for Pharmacist Practice	
<b>STANDARD 5</b> <b>Pharmacist's duties before dispensing a drug</b>	
<b>5. A pharmacist must not dispense a drug or blood product under a prescription unless the pharmacist has determined that the prescription is current, authentic, complete and appropriate.</b>	
<b>APPLICATION OF STANDARD 5</b>	
<b>Determining the currency of a prescription</b>	
5.1 A pharmacist must review the prescription to determine when it was written.	
5.2 A pharmacist must not dispense a drug or blood product under a prescription that was issued more than one year before the date the drug or blood product is to be dispensed.	
5.3 A pharmacist must not refill a prescription for	
(a) a benzodiazepine or other targeted substance, as defined in the regulations to the <i>Controlled Drugs and Substances Act</i> , for a period greater than 12 months, or	
(b) a schedule 1 drug for a period greater than 18 months after the prescription was first filled.	
<b>Determining the authenticity of a prescription</b>	
5.4 A pharmacist must determine the authenticity of a prescription by taking reasonable steps to:	
(a) identify the prescriber,	
(b) determine whether the prescriber is legally authorized to prescribe the drug or blood product for which the prescription has been given, and	
(c) assess whether the prescription has been altered, forged or stolen.	
<b>Determining the completeness of a prescription</b>	
5.5 A pharmacist must determine the completeness of a prescription by ensuring that the prescription includes:	
(a) name and address of the patient;	
(b) drug or blood product name;	
(c) drug strength, if applicable;	
(d) dosage form, if applicable;	
(e) route of administration, if applicable;	
(f) quantity of drug or blood product to be dispensed;	
(g) directions for use;	
(h) number of refills authorized and interval between each refill, if applicable;	
	(i) prescriber's name and phone number;
	(j) prescriber's signature, in the case of a written prescription; and
	(k) the date of the prescription.
	<b>Factors to be considered in determining the appropriateness of a prescription</b>
5.6 A pharmacist must determine the appropriateness of a prescription for the condition being treated by considering relevant factors that a reasonable pharmacist would consider in the circumstances including, but not limited to, whether:	
(a) the prescription is accurate;	
(b) the prescription orders a drug or blood product for an indication that is:	
(i) approved by Health Canada,	
(ii) considered a best practice or accepted clinical practice in peer-reviewed literature; or	
(iii) part of an approved research protocol;	
(c) the dose, frequency and route of administration are appropriate;	
(d) there is therapeutic duplication;	
(e) there are actual or potential adverse reactions, allergies or sensitivities;	
(f) there are actual or potential drug interactions;	
(g) the regimen for administration is practical, based on the patient's functional ability;	
(h) the patient's organ function, such as renal and hepatic function, will tolerate the drug or blood product;	
(i) the results of laboratory or other tests, if applicable, support that prescription; and	
(j) other patient-specific characteristics such as age; pregnancy or lactation status; cognitive, mental and physical challenges; lifestyle; cultural beliefs or living environment may negatively affect the appropriateness of the drug or blood product.	
	<b>Verbal order to be reduced to writing</b>
5.7 If a pharmacist receives a verbal order for a drug or blood product from a prescriber, the pharmacist must reduce the prescription to writing and initial the prescription.	

(Source: ACP Standards for Pharmacist Practice, 2007)

## **Appendix B**

### **Guideline for facsimile (Fax) transmission of prescriptions – July 2007**

#### **Introduction:**

*Facsimile transmission* (faxed) means transmission of the exact visual image of a document by way of electronic equipment.

Faxed prescriptions may be accepted as equivalent to a written prescription. The prescriber and the dispenser must ensure that the process of faxing provides for patient confidentiality, authenticity, validity and security of the prescription; and that the patient is free to use the pharmacy of their choice.

Faxed prescriptions are permitted for all classes of drugs, including triplicate prescription medications provided the following requirements are met:

#### **Prescriber Responsibilities:**

1. The prescription must be sent to only one pharmacy.
2. The prescription must be sent directly from the prescriber using a secure, confidential, reliable and verifiable fax machine with no intervening person having access to the prescription drug order.
3. The prescriber must only send the prescription to a licensed or publicly funded pharmacy.
4. The prescription must include the following legal requirements of a complete prescription:
  - Date of issue.
  - Name and address of the patient.
  - Name of drug or ingredient(s) and strength, if applicable.
  - Dosage form, if applicable.
  - Quantity of drug to be dispensed.
  - Route of administration, if applicable.
  - Directions for use.
  - Number of refills authorized and interval between each refill, if applicable.
  - Prescriber's name and phone number.
  - Prescriber's signature.
5. In addition to the legal requirements of a prescription, the transmission must also include the following:
  - The prescriber's address, fax number and phone number.
  - The time and date of the fax transmission.



- The name and fax number of the pharmacy intended to receive the transmission.
  - The signature of the sender verifying that:
    - i) The prescription represents the original of the prescription drug order;
    - ii) The addressee is the only intended recipient and there are not others; and
    - iii) The original prescription will be invalidated, securely filed and not transmitted elsewhere at another time.
6. For triplicate prescription medications, the prescriber should fax the top copy of the TPP prescription so that the TPP prescription's unique number and the prescriber's TPP registration number are included with the transmission.
  7. After successful transmission, the original written prescription must be invalidated and retained with the patient record.
  8. A sample form is provided. (See Appendix B-1)

#### **Receiving Pharmacist's Responsibilities:**

1. The equipment for receipt of the faxed prescription must be located within a secure area to protect the confidentiality of the prescription information.
2. The origin of the transmission and the legitimacy and authenticity of the prescription must be verified.
  - Faxes can be accepted from a practitioner registered to practice in any Canadian province or territory.
3. The prescription drug order must be maintained on permanent quality paper by the pharmacy and retained as required in the *Standards for Pharmacist Practice (2007)*.

**Appendix B-1**

**Model form for initiating medication orders and renewals**

**PRESCRIBER'S LETTERHEAD**

Prescriber Name/ Clinic Name  
Prescriber address  
Prescriber telephone number  
Prescriber fax number

**Confidential fax transmission to:**

Pharmacy Name: \_\_\_\_\_

Fax Number: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Name of person transmitting fax: (print)  
\_\_\_\_\_

Signature of person transmitting fax:  
\_\_\_\_\_

**Patient Given Name and Surname:** \_\_\_\_\_

**Patient address:** \_\_\_\_\_

**Rx #1**

**Refill** \_\_\_\_\_ **times every** \_\_\_\_\_ **day**

**Rx #2**

**Refill** \_\_\_\_\_ **times every** \_\_\_\_\_ **day**

**Prescriber Certification**

- This prescription represents the original of the prescription drug order.
- The pharmacy addressee noted above is the only intended recipient and there are no others.
- The original prescription has been invalidated and securely filed, and it will not be transmitted elsewhere at another time.

Practitioner / Prescriber Name (print name) \_\_\_\_\_ Registration # \_\_\_\_\_

Practitioner / Prescriber Signature \_\_\_\_\_ Date \_\_\_\_\_

## **Appendix C**

### **Additional Resources and Information**

Verbal prescribing should be a choice of last resort. A prescriber issuing a verbal medication prescription by telephone should communicate the prescription only to qualified professionals who have knowledge of pharmacology. Communicating about medication prescriptions with other health professionals, clerical staff and unregulated care providers who do not have knowledge of pharmacology is inappropriate because the risk of error increases when the individual accepting a medication prescription does not know the medication and its action.

### **Safety recommendations for practitioners receiving verbal medication prescriptions by telephone include:**

- Ensure telephone orders are complete (e.g. patient name, medication, dose, time(s)/frequency, and route).
- Reduce the order to writing.
- Read back all telephone orders.
- Read back should include:
  - spelling of the drug name;
  - spelling of patient/client name; and
  - dose confirmation expressed as a single digit.
- Verify indication for medication(s) ordered. Ask questions as needed.
- Consider review by a second practitioner before initiating an order.
- Call prescriber if any questions or concerns arise.

### **Safety recommendations for prescribers issuing medication prescriptions by telephone include:**

- The caller should introduce themselves indicating their name, credentials, and if they are a prescriber's agent, identify who they are calling on behalf of. Identification can be further clarified by providing a return telephone number at which the prescriber can be contacted and the prescriber's business address.
- When calling in a telephone order, confirm patient identity.
- Spell the name of the medication(s).
- Consider providing both generic and trade names of the medication for clarity.
- Avoid truncating, using abbreviations, short forms or acronyms for drug names to avoid confusion.
- Avoid confusion with spoken numbers by restating the dosage in single digits. If a dose range is ordered, include this in the verification.
- Provide complete dosage and route for all medications ordered and comply with formulary guidelines.
- Avoid abbreviations for the dose frequency.
- Provide the indication for medication(s) ordered.
- Obtain a read back of the entire telephone order.

- Ensure the order is clear and understandable to the person receiving the telephone order.
- Provide identity confirmation when communicating with a retail pharmacist in the community.

(Adapted from: Koczmar, Jelincic, & Perri, 2006)

### **Minimizing Fax Transmission Errors:**

Fax transmission errors can be minimized by:

#### **Administrative procedures:**

- Double-check the recipient's fax number before transmission.
- Use a pre-printed confidentiality statement on all fax cover sheets.
- Review faxed prescriptions for *fax noise* (refers to random marks and streaks that can appear on faxes).

#### **Physical safeguards and technical security mechanisms:**

- Place fax machines in areas that require security keys, badges or similar mechanisms in order to gain access.
- Periodically remind regular fax recipients to communicate changes in their fax number.

#### **Technical security services**

- Ensure storage and regular review of fax transmittal summaries and confirmation sheets.
- Pre-program and verify frequently used destination numbers in order to minimize the potential for human error.
- Ensure regular maintenance is scheduled for fax machines.

### **OIPC Guidelines on Facsimile Transmission:**

The Office of the Information and Privacy Commissioner of Alberta provides *Guidelines on Facsimile Transmission* which set out guidelines for public bodies and custodians to use when developing systems and procedures to maintain the confidentiality and integrity of personal information received and transmitted by fax. These guidelines are available at: [http://www.oipc.ab.ca/ims/client/upload/Guidelines\\_on\\_Facsimile\\_Transmission.pdf](http://www.oipc.ab.ca/ims/client/upload/Guidelines_on_Facsimile_Transmission.pdf).

## **References**

Alberta College of Pharmacists. (April 2007). *Health Professions Act: Standards for Pharmacist Practice*.

College and Association of Registered Nurses of Alberta. (2005). *Medication administration: Guidelines for registered nurses*. Edmonton, AB.

*Facsimile Transmission of Prescriptions*, Alberta College of Pharmacists, Approved April 5, 2002.

*Facsimile Transmission of Prescriptions*, CPSA Guideline, College of Physicians & Surgeons of Alberta, March 1999.

*Food and Drugs Act*, (R.S., 1985, c.F-27)

*Government Organization Act*, R.S.A. (2000), c. G-10.

Koczmar, C., Jelincic, V., & Perri, D. (2006). Communication of medication orders by telephone – “Writing it right”. [Electronic version] *CACCN Dynamics*. 17 (1). 20-24. Retrieved July 19, 2006, from <http://www.ismp-canada.org/download/CACCN-Spring06.pdf>

Lesar, T. S. (2003, Nov.). 40 of K. *AHRQ Web M&M: Morbidity & Mortality Rounds on the Web*. Retrieved July 11, 2006, from <http://webmm.ahrq.gov/printview.aspx?caseID=36>

*Transfer of Authority to Fill Prescriptions by Facsimile Transmission Model Policy*, National Association of Pharmacy Regulatory Authorities (NAPRA) Approved 1997, revised 2001.