

# Refill Ordering Systems: A Patient Satisfaction Survey

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## INTRODUCTION

As pharmacy departments across Canada face increasing workloads and decreasing resources, measures which improve efficiency without compromising patient care are essential. The pharmacy department at the Cross Cancer Institute (CCI), which services both an ambulatory cancer prescription program as well as inpatients, attempted to overcome these time and staff constraints by implementing a voice mail system in March 1995. The idea came from a team of pharmacy staff members designed to review workflow in the pharmacy department. The main purpose of the voice mail system was to decrease the number of telephone calls handled by pharmacy staff regarding prescription refills.

The voice mail system is on a separate telephone line and allows the patient to leave their prescription information on the system or to talk directly to a pharmacist. The main advantage of a voice mail system versus an answering machine is the feature allowing the patient the option of dialing "0" to talk to a pharmacist when required.

Pharmacy personnel noticed a decrease in telephone calls to the dispensary since voice mail implementation. They were, however, concerned about how patients perceived the system. The voice mail could not be considered successful until it was determined by patients to be a quality service.<sup>1</sup>

A systems evaluation was conducted to assess voice mail success and patient satisfaction. Measuring satisfaction is based on the premise that the information collected can be used to improve services already in place.<sup>2</sup>

The current refill ordering methods available to ambulatory patients at the CCI are: 1) calling the pharmacy and leaving a message on the voice mail system; 2) calling the pharmacy and talking directly to pharmacy staff; 3) using a preprinted mail-in refill request form that is provided with each prescription that includes a refill; 4) visiting the CCI pharmacy in person.

## METHODS

The prescription files from March 1996 were reviewed and a listing of all patients who had received refills was compiled. Telephone numbers for these patients were obtained through medical files. All patients who requested refills during the month of March 1996 and

who had available telephone numbers were included in the survey. Patients not having a telephone number in the CCI computer system were excluded.

Telephone interviews were conducted for the convenience of both the patient and the interviewer. Furthermore, telephone interviews have been shown to have comparable results to personal interviews.<sup>3</sup>

The questions were asked in the same way to all respondents, since the manner in which questions are presented can influence responses about satisfaction.<sup>2,3</sup> As well, all interviews were conducted by the same pharmacy student. Survey questions focused primarily on the voice mail system, problems encountered with it, convenience and ease of use. A copy of the questionnaire used is provided in Appendix A.

## RESULTS

Four hundred and seventeen patients requested refills in March 1996 and telephone numbers were available for 325 of those patients. One hundred and twenty-nine interviews were conducted with the patients. The remaining 196 patients were not included for the following reasons: could not be contacted (178); did not understand the purpose of the survey (11); were unable to speak English (4); did not recall ever requesting refills (2); or refills were being handled by the patient's community pharmacy (1).

Patient population demographics are given in Table I, while Table II shows who requested the refills for the patient. The pattern of use for the different ordering methods before and after voice mail implementation is listed in Table III.

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Patients who had used voice mail consistently had success with it. For example, 91.3% (73) of patients did not experience any technical problems (as defined in the questionnaire) with the system. The instructions on the voice mail were found to be explicit by 93.8% (75) of the population. Only people over 65 years of age had difficulty understanding the instructions primarily because they found them "confusing".

Seventy-nine of 80 voice mail users (98%) found it convenient to be able to leave a message at any time and not have to wait for a pharmacist to answer their telephone call. The one person who found the voice mail inconvenient gave no reason.

Eight suggestions were given for improvement of the voice mail system. Seven patients (5.4%) suggested that a person should answer the telephone. The one other patient suggested extending the allowable time to leave a message.

Of the 59 people who did not use the voice mail system to reorder their prescriptions, 29 (49.1%) visited the pharmacy, 16 (27.1%) mailed in their refill form and 14 (23.7%) called directly to the pharmacy (refer to Table III). Reasons given as to why the voice mail was not used by these respondents are shown in Table IV. Twelve patients (21.8%) of people who did not use voice mail were unaware of the voice mail system and of these 12 patients, 5 had called the pharmacist directly.

Finally, patients were asked how they had previously ordered prescriptions before the voice mail was available (refer to Table III). Since voice mail implementation, 65.0% of respondents discontinued calling the pharmacist directly. The survey also indicated a 39.0% drop in visits to the pharmacy for purposes of requesting refills, and a 31.3% increase in the number of patients who request refills by mail.

## DISCUSSION

The results of this study show that implementation of a voice mail system in an ambulatory pharmacy setting does not adversely affect patient satisfaction with the refill ordering systems. Few respondents offered suggestions for improvement implying satisfaction with the service. By

**Table I. Patient Demographics**

	Female Population	Male Population	Total Population (age)
<40	3	3	6
40-64	13	14	27
65+	25	71	96
Total Population (gender)	41	88	129

**Table II. Who Requests Refills for the Patient?**

Person Who Requests Refills	Number of Responses (n=129)	Percentage of Responses
Self	97	75.2%
Spouse	26	20.2%
Child	4	3.1%
Parent	2	1.6%

**Table III. Methods of Reordering**

Method of Reordering	Before Voice Mail Implementation (n=92)		After Voice Mail Implementation (n=129)*	
	Number of Responses	Percentage of Responses	Number of Responses	Percentage of Responses
Voice Mail	-	-	80	62.0%
Call pharmacy directly	40	43.5%	14	12.4%
Visit pharmacy in person	41	44.5%	29	22.5%
Mail in request form	11	12.0%	16	10.9%

\*respondents could give more than one answer

**Table IV. Reasons For Not Using Voice Mail**

Reasons Why Patients Did Not Use Voice Mail	Number of Responses*	Percentage of Responses
Easier to mail or visit the pharmacy	35	71.4%
Not aware of voice mail	12	24.5%
Prefer to talk to a person	7	14.2%
Already at the CCI for an appointment	7	14.2%
Concerned message would not get to pharmacist	7	14.2%
Enjoyed visiting CCI	3	6.1%
Too complicated	2	4.1%
Hearing problem	2	4.1%
Instructions too fast	1	2.0%
Name of medication too long to pronounce	1	2.0%
Long distance charges for phone call	1	2.0%
Difficulty speaking English	1	2.0%

\*respondents could give more than one answer

extending the time to leave a message and possibly slowing down the instructions, more patients may be encouraged to use the system. These suggestions would be possible to implement in the current system.

One patient voiced concern over the complexity of the instructions. However, the system at the CCI gives the caller only 2 options: leave a message after the tone or dial 0 to contact the pharmacist. The information required on the voice mail is similar to the information required when pharmacy staff answer the telephone, and no extra steps are involved. However, after re-evaluation it was decided that the instructions could not be made simpler.

Some of the respondents used methods other than voice mail because they were unaware of the voice mail system. There is potential to have these people convert from telephoning the pharmacist directly to using the voice mail.

The majority of comments from the people surveyed were positive about the voice mail. Many patients commented on the fact that the system is both efficient and convenient to use. Although questions about the pharmacy personnel were not included in the survey, many patients provided observations on all aspects of the pharmacy as well as their entire CCI experience. Some of the more negative criticisms included having to wait too long for prescriptions. However, the majority of the patients remarked on the quality service they had received, and many patients found the staff accommodating and helpful.

One of the limitations of the survey is the lack of baseline results to compare with the patient satisfaction

survey results. There was not a survey done before voice mail implementation so we cannot compare pre-and post-voice mail satisfaction. However, we can ascertain from the survey the current feelings of the ambulatory patients concerning the voice mail system as well as identify areas for improvement for all refill ordering methods.

Installation of a voice mail system has allowed the pharmacists at the CCI more time to spend on reviewing prescription orders and increasing efficiency in the dispensary. Since the majority of our patients feel the system is both convenient and user-friendly, the voice mail system will continue to be used in its current capacity.

In conclusion, hospital pharmacies that deal with outpatient prescriptions could utilize a voice mail system to deal with the telephone load and, therefore, eliminate a duty performed at this time by pharmacy staff. This idea could ultimately be implemented in a community pharmacy as well. The major limitation of the voice mail system is the lack of patient contact. However, the patient always has the alternative of reaching a pharmacist to ask questions, address drug-related concerns, or be reassured regarding their drug therapy. ☒

## REFERENCES

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### Appendix A. Patient Satisfaction Survey

**PATIENT INFORMATION:** ID NUMBER \_\_\_\_\_

AGE \_\_\_\_\_

GENDER \_\_\_\_\_

*Hi, my name is Teri Walter and I am a pharmacy student working at the Cross Cancer Institute. I am interviewing patients about our process for providing refills and I would like to ask you a few questions. It will just take a few minutes. Would that be ok with you? Is this a good time or would you like me to call back later?*

**QUESTIONS:**

1. Who normally obtains refills for you?

self

other-- specify \_\_\_\_\_

*Would it be alright if I speak to that person about requesting your refills? I can call back later after you check with them to see if it's ok.*

2. How do you usually request refills for your medications from the Cross Cancer Institute pharmacy?

a. TELEPHONE CALL TO VOICE MAIL

i. Do you have any technical problems with the voice mail, such as difficulty hearing the message, or not enough time to leave a message, or any other concerns?

ii. Are the instructions clear?  Yes  No \_\_\_\_\_

iii. Are you able to get through on the first try?  Yes  No \_\_\_\_\_

iv. Are you able to get a pharmacist if required?  Yes  No \_\_\_\_\_

v. Is the convenience of being able to leave a message at any time a benefit to you?  
 Yes  No \_\_\_\_\_

vi. Do you have any suggestions for improvement to the voice mail?

vii. Some people aren't comfortable with using the voice mail. We're interested in knowing your ideas about why this might be. Do you have any ideas?

not aware of service       like to talk to real person

too complicated

other

easier to mail/visit

like to come to CCI

b.  TELEPHONE CALL TO PHARMACIST

THROUGH THE MAIL

VISIT TO THE CCI PHARMACY

\*Why do you prefer to (call pharmacist, visit, or mail) rather than using the voice mail?

not aware of service       like to talk to real person

too complicated

other \_\_\_\_\_

easier to mail/visit

like to come to CCI

*Now I would like to ask you about the way you usually obtained refills before the voice mail became available about 1 year ago.*

3. How did you request refills before the voice mail was available?

came to CCI pharmacy

called pharmacy and talked to pharmacist

requested through the mail

always used the voice mail

4. Just to close up, do you have any suggestions for improving the way in which refill requests are handled?

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*Thank you for your time and helping us better understand how patients feel about our refilling systems.*