Telephone consultations in urology: Who, when, where, and why?

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Cite as: *Can Urol Assoc J* 2017;11(12):E453-6. http://dx.doi.org/10.5489/cuaj.4543

Supplementary material available at cuaj.ca

Published online November 1, 2017

Abstract

Introduction: Telephone consultations are part of a strategy to allow access to medical expertise. Telephone consultations have been fee-for-services benefits in the province of Quebec since 2012.[1] Recent studies have shown that adequate communication is one of the most common means to prevent disability and death.[2] We sought to determine the characteristics of phone consultations made to a tertiary centre's urologists and to characterize their experience.
Methods: We performed a prospective study using all billing receipts filed by 15 academic urologists for phone consultations received during a 10-month period. A descriptive analysis was done to collect the principal characteristics of all phone calls received. Moreover, an online survey was distributed to those urologists. The survey was composed of 10 multiple-choice questions to review their personal experience.
Results: A total of 678 billing receipts were analyzed. The most common reasons for calls were lithiasis (11.5%), hematuria (10.5%), and urinary retention (8.4%). Most phone calls (57.7%) were made by emergency physicians and family doctors. The majority (88.7%) of calls were placed between 8:00 am and 5:00 pm. Most of the calls came from the immediate region covered by the group. Our survey demonstrated that urologists pay more attention to document telephone consultations since the introduction of the new remuneration plan. Most urologists found the phone consultations to be relevant.
Conclusions: Lithiasis and hematuria are the primary reasons for telephone consultations. Continuing medical education on these subjects could be worthwhile. The RAMQ remuneration plan has improved documentation of phone consultations by urologists.

Introduction

On October 1, 2012, telephone consultations became a legal fee-for-services benefits by the Régie de l'Assurance Maladie du Québec (RAMQ).[1] This includes all telephone calls to/from a medical specialist to/from another physician or healthcare professional (nurse, pharmacist, etc.) about a challenging diagnostic or treatment, or for advice on a critical condition for a specific patient. The benefit does not include telephone conversations within the same healthcare facility. Both the consultant and the requesting healthcare professional can bill for the phone consultation. Recent studies have shown that adequate communication among healthcare professionals is one of the most valuable strategies to prevent disability and mortality.[2] It also allows easy and rapid access to specialist advice, particularly in more remote facilities;[3,4] however, the potential benefits and use of this kind of communication modality have not yet been demonstrated in the medical literature.

The main objective of our study was to describe the different characteristics of phone consultations made by healthcare professionals to academic urologists in terms of timing and location, type of consultation requests, and professional background. Our secondary endpoint was to report urologists' experience with regard to those phone consultations.

Methods

We retrospectively performed a descriptive analysis using all billing receipts filed by a group of 15 academic urologists in a tertiary centre for the phone calls received from October 15, 2012 to August 1, 2013. This group included pediatric urologists, urologist-oncologists, and other subspecialty urologists from a single institution divided into five different centres. We recorded information about the time of day in which the different phone calls were made or received; the expertise and working region of the healthcare professional seeking advice, and the purpose of the phone consultation.

An online survey composed of 10 multiple-choice questions was also distributed to the 15 urologists to review their personal experience with telephone consultations during the first nine months of this new measure. This included questions about their perception on the amount and type of phone calls they received, as well as their relevance. We also evaluated their knowledge on the new fee-for-services phone consultation benefit details. All the survey results were compiled and descriptive data analyses were performed. This study is a qualitative analysis of the information collected

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through the survey and the billing receipts, which did not necessitate elaborate statistical analysis.

Results

A total of 678 billing receipts were analyzed during a nine-month period. We looked at the specialty of the person requesting a consultation and the results showed that more than half of the reported phone consultations were made by emergency physicians and family doctors (391 phone calls; 57.7%) (Table 1). Most consultations were pursued by a physician, but 7.2% of all phone calls were made by other healthcare professionals, such as nurses, pharmacists, and physical therapists.

As for the timing of phone consultations, the vast majority (88.7%) of the reported calls were placed between 8:00 am and 5:00 pm (Fig. 1). According to the reported billing forms, urologists received a mean of 2.5 phone consultations per day, ranging from one to 11 calls per day. We also looked at where the phone calls came from and noted that most of the calls came from the Capitale Nationale region and the Côte-Nord region (Table 2, Fig. 2).

We recorded more than 50 different reasons for consultations. The most common purpose for phone consultations was urinary lithiasis (n=78, 11.5%). It was followed by hematuria (n=78,10.5%), which can be subdivided in microscopic (n=8, 1.2%) and macroscopic (n=38, 5.6 %). Acute urinary retention was the third most frequent reason for phone consultation (n=57, 8.4%) (Table 3).

The second portion of our study consisted of a 10-question online survey that was answered by 12 of the 15 participating urologists. The results showed that urologists feel they are paying more attention to complete their telephone consultation forms since the RAMQ remuneration plan was initiated. Ninety percent of them believed they were filling out their phone consultations forms less than 50% of the time before the new fee-for-services benefit was implemented. Now, only 10% of them believe they are filling out the forms for less than half of their phone consultations. Most of the urologists consider hematuria as the main reason for a phone consultation (n=5, 42%), followed by urinary lithiasis (16.7%). They also feel that general practitioners are the main users of this communication modality. On a scale of 1–10, where 1 represents non-relevant phone calls, 8/12 urologists believe the phone consultations they received are relevant on a 7–8/ 10 ratio. The rest indicated a 5/10 relevance. As for the knowledge of the new fee-for-services benefits, 90 % of urologists bill more than 50% of their phone consultation, but 75% of them never or occasionally record the phone consultations they are making to another healthcare professional. Most urologists (66.7%) know the correct wage for the fee-for-services benefit when they are consulting.

Table 1. Requesting healthcare professionals (who)

Consulting medical professional	Calls (%)
Emergency and family physician	57.7
Pediatrician	13.9
Urologist	6.9
Internist	6.6
Nurse	4.9
Other surgical specialty	3.5
Others	1.3

Discussion

The new RAMQ fee-for-services benefit for telephone consultation has allowed us to obtain important details about the type of phone consultations and the healthcare professionals that use it the most for urological problems. To our knowledge, a study on phone consultations was never achieved in a surgical specialty field.

Our study demonstrates that emergency physicians and family physicians are the main specialists to seek urological advice, and this is also what Quebec urologists perceived according to our survey. Those first-line practitioners are frequently the first professional met by the patient with an acute problem, such as hematuria and lithiasis. The calls from emergency and family physicians often pertain to acute evaluation and management, but also urgency and means of referral. The calls received are made mostly during working hours (8:00 am to 5:00 pm). The few calls received outside of these hours are for emergency purposes, such as sepsis on obstructed calculus and testicular torsions. Urologists tend to receive less calls from regions where they are full-time urologists in place, such as Saguenay Lac-St-Jean, Chaudière-Appalaches, and Bas St-Laurent. This could explain why they received more phone calls from regions like Côte Nord and Nord du Québec. Interestingly, there were no calls coming from the somewhat remote areas of Gaspésie and Iles-de-la-Madeleine. This could be explained by our lack of recording of all phone calls.

Even though urologists believe most of the phone calls received are relevant, the two main reasons for consultation

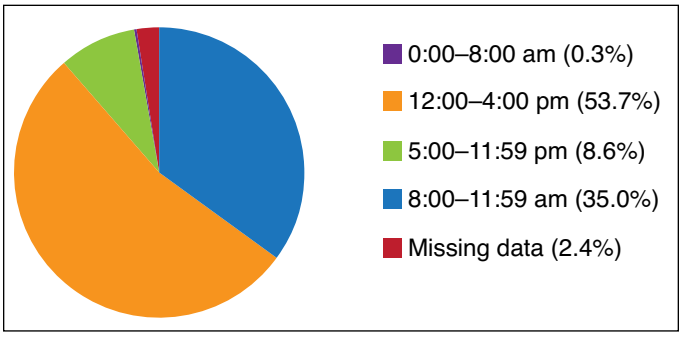

Fig. 1. Distribution of phone consultations in 24 hours (when).

Table 2. Quebec regions the consultations come from (where)

Region	Consultations (%)
03 Capitale Nationale	57.7
09 Côte Nord	13.9
10 Nord du Québec	6.9
12 Chaudière-Appalaches	6.6
2 Saguenay Lac St-Jean	4.9
1 Bas St-Laurent	3.5

Table 3. Reasons for phone consultations (why)

Reason for consultation	Calls (no)	Calls (%)
Lithiasis	78	11.5
Hematuria	71	10.5
Microscopic	8	1.2
Macroscopic	38	5.6
Not specified	25	3.7
Urinary retention and catheter care	57	8.4
LUTS	46	6.8
Postoperative complications	45	6.6
Renal mass	44	6.5
Hydronephrosis	42	6.2
Hydrocele, varicocele et testicular mass	36	5.3
Vesicoureteral reflux	27	4.0
Bladder mass	24	3.5
Acute pyelonephritis	18	2.7

LUTS: lower urinary tract symptoms.

are lithiasis and hematuria. In the past, increased workload has motivated the creation of reference algorithms on common urological health problems distributed in emergency rooms and family practice clinics.[5] There have also been several continuing medical education workshops on these urological topics; however, the results of this study seem to bring into question the efficacy of the algorithms and workshops and the way clinicians use them. There was a need to implement these resources, but we have not yet analyzed their impact on clinical practice. This study emphasizes the need to further evaluate the efficiency of the tools employed in urology education,[6] as physician-to-physician discussion, especially for an acute problem, may result in more successful and satisfactory outcomes than algorithms on a sheet of paper.

The survey showed that urologists believe they are recording more phone consultations since the implementation of the fee-for-services benefit in Quebec. Prior to this measure, the documentation of calls was almost non-existent; however, the study cannot confirm if the participants' impression is an adequate representation of the reality because we cannot ascertain that they documented 100% of the phone consultations they received or made during the study period. With regard to their knowledge of the new fee-for-services benefit, urologists usually do not bill when they are the referent; as the consultant, however, they fill out the form appropriately most of the time and they know the dollar amount of the benefit. Problems remain with the remuneration system since its introduction in October 2012: it could be time-consuming and urologists are lacking some knowledge about the billing system.

Regardless of remuneration, the Canadian Medical Protective Association (CMPA) "recognizes advice given over the telephone or in 'corridor consultations' is an important and necessary part of clinical practice; however, in providing such advice or consults, a physician should be aware that a duty of care may arise."[7] Considering this information, the CMPA encourage physicians to have sufficient information before giving any advice and to make reasonable efforts to document the information and advice given.[7] As we observed in our study, the new remuneration system encourages urologists to document this kind of information, which can further help them if a medico-legal issue should arise.

Telephone consultations are well-used by healthcare professionals. They allow simple and fast access to specialist advice; can prevent unnecessary hospital transfers approximately 50% of the time;[8] and potentially decrease the number of more formal and longer consultations for the specialist.[6] However, the amount of phone calls received by urologists each day can be significant and can increase the daily workload; furthermore, timing is not always appropriate (for example, during surgery, consultation, transportation, etc.). These issues could negatively impact the urologist's

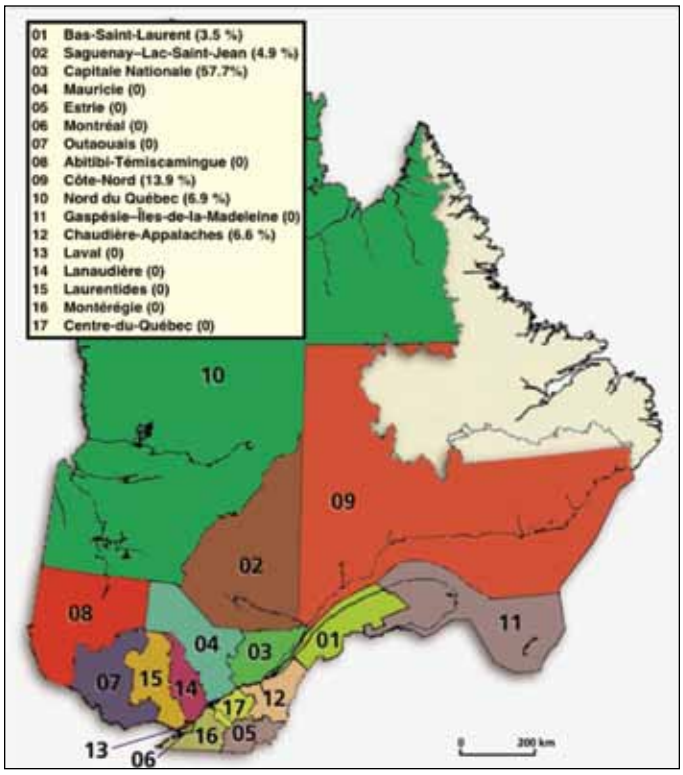

Fig. 2. Quebec administrative regions.

workflow and increase medical errors. Lacmisan and al reported that there is information loss during interruptions, and that multitasking creates higher memory load — both of which contribute to medical error.[9,10] Our results show that urologists can have as many as 11 phone consultations per day. This does not include other phone calls (in-house calls, resident supervision) and other types of interruptions, all of which can negatively impact the therapeutic relationship the urologist develops with his patient.[11] On the other hand, the results of our study show the need for communication between the different healthcare professionals. One solution proposed in the literature to decrease phone call-based disruptions is asking someone else to answer calls when performing a task requiring more concentration or for the physician to provide himself/herself with environmental cues to aid recovery from interuptions.[12]

The results of our study should be interpreted in the light of some limitations. First the retrospective nature of this study introduces recall bias. According to our survey, we potentially missed about 10% of all the phone consultations received. Those missing data could be explained by the lack of knowledge at the introduction of this new benefit and the omission of documenting in specific times (phone call during travelling or in the operating room). It could be interesting to ask the active urologists to repeat the survey and assess any improvement in documenting phone consultations now that the fee-for-services benefit has been implemented for five years. Furthermore, we could not assess the real amount of phone calls received during a full day of work, as we could only use the documented phone consultations, which did not include the estimated 10% missing phone call consultations; however, we believe that most urologists made conscious efforts to document phone consultations and any medical advice given, as recommended by the CMPA.

Conclusion

Telephone consultation to urologists is a communication modality that allows easy access to urological expertise. Our study demonstrates that emergency physicians and family doctors are the principal requesting practitioners. The primary reasons for calling are lithiasis and hematuria, even though algorithms and workshops on these subjects have been largely distributed. The RAMQ remuneration plan has improved documentation of phone consultations by urologists.

Competing interests: Dr. Moore has participated in clinical trials supported by Astellas, Ipsen, and Pfizer. The remaining authors report no competing personal or financial interests.

This paper has been peer-reviewed.

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