Surgical wait times for patients with urological cancers: a survey of Canadian surgeons

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Background: *The wait times for urological cancer surgeries in Canada has increased over the past 2 decades. This is of concern to patients, physicians and other key stakeholders because there is evidence that delaying surgery beyond a recommended threshold could have a negative impact on clinical outcomes. To address these trends, a Canadian surgical wait times (SWAT) initiative has been undertaken to develop a consensus document and make recommendations on appropriate wait times. As a first step, the SWAT steering committee determined that current wait times estimates were required for the four key disease sites; prostate, bladder, kidney and testes. To obtain such data, a survey of Canadian urological surgeons was undertaken.*

Methods: *A structured electronic mailing strategy was adopted as recommended by Dillman (1978). Standardized data collection forms were sent to members of the Canadian Urological Association (CUA) and attendees to the 2005 CUA meeting. Survey items consisted of respondent demographic data, information on surgical wait times for the four key disease sites and potential barriers to timely cancer surgery.*

Results: *One hundred and five urological surgeons responded to the survey. There was considerable variation in wait times between and within the four disease sites with bladder and kidney cancer surgeries displaying the widest range. Operating room availability and staging tests were identified as the most significant barriers to efficient cancer surgery.*

Conclusions: *The wide variation in wait times identified in this study suggest that the overall time to treatment from referral is beyond the duration considered by many experts and by the Canadian Society of Surgical Oncology to be acceptable. These issues need to be addressed through a partnership between the key stakeholders in order to reduce the potentially negative impact on clinical outcomes and patient quality of life.*

Key Words: urological cancers, surgery, wait times

Introduction

In the early 1990s, there was evidence that waiting times for radiation therapy in Canada was unacceptably high and the problem was progressively worsening.[1,2] The duration of wait time (i.e. in excess of 3 weeks for most tumors) was in contrast to The Committee on Standards of the Canadian Association of Radiation Oncologists, which recommended that the interval between referral and consultation should not exceed 2 weeks and that the interval between consultation and initiation of radiotherapy should also not exceed 2 weeks.[1] The majority of patients treated in Ontario met these standards in 1982, but by 1991 few patients received care within the recommended time interval.[1] The need to reduce waiting times for

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radiation therapy was further supported with the publication of studies suggesting that treatment delay has a negative impact on patient outcomes.[3-5]

The concern of increasing wait times has also been extended to surgical procedures for urological cancers.[6] The clinical impact of prolonged surgical wait times on patient clinical outcomes has been controversial.[7-9] Taking radical prostatectomy (RP) as an example, Nam and colleagues identified a trend for a reduced risk of recurrence free survival at 10 years in patients who had surgery within 3 months of diagnosis compared a group who had surgery beyond 3 months (hazard ratio = 1.46; P=0.09).[10] In contrast, other investigators failed to find an association between surgical delay of up to 5 months and disease recurrence.[11,12]

Despite this controversy, one impact of treatment delay for cancer surgery that has been demonstrated is the effect it has on patient quality of life.[13,14] Using the Short Form-36 (SF-36), one study compared health related quality of life in patients on waiting lists for prostatectomy to a general sample of the New Zealand population.[15] The patients on waiting lists had lower scores in all dimensions of quality of life (e.g. physical functioning, social functioning, mental health etc.) with the exception of vitality. Qualitative data collected from patients on waiting lists included anger expressed towards public health agencies because of long waiting times for surgery, lack of information from the hospital concerning their position on the list and disruptions in the planning of family events such as holidays. Overall, these data imply that prolonged wait times for urological cancer surgeries can have a substantial impact on most dimensions of patient quality of life. What is particularly discouraging is a recent Ontario study, which demonstrated an almost doubling of wait times for RP from 1996-2000 compared to 1980-1995 (median = 91 days versus 55 days; $P < 0.001$).[16] Taking these findings along with the potential impact that prolonged wait times can have on clinical outcomes, there is a need to assess the problem, identify solutions and develop recommendations on what the maximum wait times should be for the four key disease sites; prostate, bladder, kidney and testes.

To address the above challenges, a Canadian surgical wait times (SWAT) initiative was recently undertaken. The SWAT initiative is composed of a steering committee and a scientific advisory committee. The SWAT initiative, whose members consist of urological oncologists, surgeons and methodologists is mandated to review the current literature on the surgical wait times for urological cancers and then develop a consensus document that can serve as a guide for patients, physicians and other key stakeholders in the Canadian health care system. As a first step, the SWAT steering committee determined that current wait time estimates were required for the four key disease sites. To obtain this information in a timely manner, a survey of Canadian urological surgeons was undertaken.

Methods

Target population

The survey population consisted of Canadian urological surgeons whose practice included patients with prostate, bladder, kidney or testicular cancer. Access to these individuals was obtained by contacting attendees to the 2005 Canadian Urological Association (CUA) annual meeting in Ottawa and through the CUA, a national organization that keeps up-to-date registries of Canadian members in all the provinces.

Questionnaire development

A questionnaire was developed to capture data from across the country on surgical wait times, potential barriers to timely cancer surgery and respondent's involvement on the development of guidelines/ criteria for urological surgical wait time management. This information was primarily captured through the presentation of case studies in each of the four disease sites. The final survey used in the study can be found at the end of this manuscript. In addition, data relevant to diagnostics was also captured in the survey. Demographic data from respondents consisted of province, setting, year entering practice and the proportion of their surgical caseload being urological oncology.

Questionnaire administration

After assessing for face and content validity, the survey was made available to potential respondents electronically though the distribution of an active web-link. Respondents were contacted directly during the 2005 CUA conference and asked to complete the survey. In addition, electronic mail was sent out to potential respondents who were CUA members and had valid e-mail accounts within the member's database. Respondents were monitored for survey completion using a structured survey strategy as recommended by Dillman.[17] An introduction explaining the nature of the study was presented and respondents were assured that complete confidentiality would be maintained and that neither hospital names nor their name would appear in any publication,

presentation or report. Two weeks after the initial email contact, a follow-up e-mail was sent to those subjects who had not completed the survey. At 1 month following the original contact, each non-responder was once again contacted by e-mail and asked to complete the survey.

Statistical analysis

All data were presented as descriptive statistics as means, medians, or proportions. Parametric and non-parametric inferential statistics were used in an exploratory analysis to compare differences in wait times between practice settings and the different regions of Canada. All of the statistical analyses were performed using Stata, release 8.0 (Stata Corp., College Station, Texas, USA).

Results

A total of 105 surgeons responded to the survey and complete responses were received in 94.3% of cases. A description of the survey population is presented in Table 1. Fourteen of 105 respondents (13.3%) were from British Columbia, 14.3% were from Alberta, Saskatchewan or Manitoba, 47.6% were from Ontario, 15.2% were from Quebec and 9.5% practiced in the Atlantic provinces. There was a balanced distribution with respect to year entering practice (last 5 years versus prior to 1980). Approximately 34.3% of respondents were associated with university-affiliated institutions while there were slightly more who practiced (i.e. 48.6%) in community hospitals, Table 1. Guideline development is important in the Canadian

TABLE 1. **Respondent characteristics and institutional information**

Characteristic (n = 105)	**Distribution (n)**
Completed the survey in full	94.3% (99)
Average time to complete the survey (range)	5.9 min (3-15)
Provincial distribution	
British Columbia	13.3% (14)
Alberta	10.5% (11)
Saskatchewan and Manitoba	3.8% (4)
Ontario	47.6% (50)
Quebec	15.2% (16)
Atlantic Provinces	9.5% (10)
Year entering practice	
2000-2005	19.0% (20)
1995-1999	15.2% (16)
1990-1994	14.3% (15)
1985-1989	14.3% (15)
1980-1984	19.0% (20)
Prior to 1980	18.1% (19)
Practice setting	
University affiliated teaching hospital	34.3% (36)
Community	48.6% (51)
Combination of the above	17.1% (18)
Involvement in the development of guidelines for urological cancer surgical waiting times management in the past 24 months	20.0% (21)
Proportion of surgical caseload being urological oncology	
< 20%	13.3% (14)
20% to 50%	50.5% (53)
51% to 75%	13.3% (14)
> 75%	22.9% (24)

urological setting and 21 of 105 surgeons (20.0%) had been involved in guideline development for urologic cancer surgical wait time management in the past 24 months. The magnitude of respondent's urological cancer practice was then assessed. Urological cancer made up a substantial portion (i.e. at least 50%) of the practice in 38 of 105 respondents, Table 1.

Presentation of case studies: prostate cancer

The next part of the survey was the presentation of case studies in each of the four tumor types. The case studies presented patients with a progressively worsening prognosis. In the first prostate cancer case describing a 58-year old man with an elevated PSA (6.2 ng/ml), normal DRE and TRUS biopsy revealing 2/6 cores with Gleason 6/10 disease, the most common waiting time indicated by 51.4% of respondents was between 1 to 2 months, Table 2. However, it was interesting to note that the wait time could be 3 to 6 months as reported by 12.4% of respondents. The second case study in prostate cancer was similar to the first, but with this patient, his PSA is 11 ng/ml and TRUS biopsy reveals 3/6 cores with Gleason 7/10 disease. The findings were similar to the first case where the most common waiting time reported by 53.3% of respondents was 1 to 2 months, Table 2.

The final case study for this disease site was a similar patient as above, but with the PSA being 7 ng/ml and TRUS biopsy revealing 2/6 cores with Gleason 8/10 disease. For such a patient, with factors indicating a more aggressive disease, the most common waiting time as indicated by 51.4% of surgeons was 1 to 2

TABLE 2. **Presentation of case studies: prostate cancer**

Outcomes	**Distribution (n)**
Case #1	
A 58-year old is seen with an elevated PSA (6.2 ng/ml) and normal DRE. TRUS biopsy reveals 2/6 cores with Gleason 6/10 disease. He elects to undergo radical prostatectomy. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?	
< 1 month	6.7% (7)
1-2 months	51.4% (54)
2-3 months	27.6% (29)
3-6 months	12.4% (13)
Not applicable or missing	1.9% (2)
Case #2	
A 58-year old is seen with an elevated PSA (11 ng/ml) and normal DRE. TRUS biopsy reveals 3/6 cores with Gleason 7/10 disease. He elects to undergo radical prostatectomy. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?	
< 1 month	10.5% (11)
1-2 months	53.3% (56)
2-3 months	24.8% (26)
3-6 months	8.6% (9)
Not applicable or missing	2.9% (3)
Case #3	
A 58-year old is seen with an elevated PSA (7 ng/ml) and normal DRE. TRUS biopsy reveals 2/6 cores with Gleason 8/10 disease. He elects to undergo radical prostatectomy. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?	
< 1 month	21.0% (22)
1-2 months	51.4% (54)
2-3 months	19.0% (20)
3-6 months	3.8% (4)
> 6 months	1.0% (1)
Not applicable or missing	3.8% (4)

months. Approximately 21% of respondents indicated that surgery would be performed within 1 month of decision to operate. Overall, only 4.8% of respondents stated that the patient would have to wait beyond 3 months for the operation, Table 2.

Presentation of case studies: bladder cancer

The data collected was continued with the presentation of three case studies for bladder cancer. In the first case describing a 68-year-old female with gross hematuria who was found to have a bladder tumor on cystoscopy that is suspicious for invasive disease, the most common wait time as reported by 47.6% of surgeons was 2 to 4 weeks, Table 3. Only 3.8% of respondents indicated a wait of more than 8 weeks for surgery for such a patient. Evaluating a similar patient with superficial high grade TCC (lamina propria invasion, i.e. T1G3) but who has failed BCG, the results indicated that 61% of patients would receive surgery within 6 weeks. However, 31% of respondents stated that wait times would be at least 6 weeks for this patient, Table 3.

The final case evaluated was once again a 68-year-old female but with a palpable bladder mass on EUA and pathology consistent with muscle invasive urothelial carcinoma. For this patient, who presents with an overall poorer prognosis, the most common wait time would be approximately 2 to 4 weeks as

TABLE 3. **Presentation of case studies: bladder cancer**

Outcomes	**Distribution (n)**
Case #1	
A 68-year old female with gross hematuria is found to have a bladder tumor on cystoscopy that is suspicious for invasive disease. Typically ***in your practice***, how much time would elapse before transurethral bladder tumor resection (TURBT)?	
< 1 weeks	0.0% (0)
1-2 weeks	21.9% (23)
2-4 weeks	47.6% (50)
4–8 weeks	26.7% (28)
> 8 weeks	3.8% (4)
Not applicable or missing	0.0% (0)
Case #2	
A 68-year old female with superficial high grade TCC (lamina propria invasion, i.e. T1G3) who has failed BCG agrees to undergo cystectomy. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?	
< 2 weeks	1.0% (1)
2-4 weeks	18.1% (19)
4-6 weeks	41.9% (44)
6-8 weeks	19.0% (20)
> 8 weeks	12.4% (13)
Not applicable or missing	7.6% (8)
Case #3	
A 68-year old female with a palpable bladder mass on EUA and pathology consistent with muscle invasive urothelial carcinoma agrees to undergo cystectomy. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?	
< 2 weeks	1.9% (2)
2-4 weeks	39.0% (41)
4-6 weeks	28.6% (30)
6-8 weeks	14.3% (15)
> 8 weeks	8.6% (9)
Not applicable or missing	7.6% (8)

reported by 39% of the sample. The findings also revealed that the wait time would be in excess of 8 weeks as reported by 8.6% of surgeons, Table 3.

Presentation of case studies: kidney and testicular cancer

The final section of the questionnaire presented three case studies for kidney cancer and a single case for testicular cancer, Table 4. The first kidney cancer case was a 63-year-old female with a 3 cm solid enhancing renal mass who wishes to have surgical treatment. The data revealed that the wait time for this patient would typically be 1 to 2 months from the decision to operate until the actual surgery, with the majority of patients (i.e. 87.3%) receiving the intervention within the first 3 months, Table 4. Evaluating the second case,

TABLE 4. **Presentation of case studies: kidney and testicular cancer**

Outcomes	**Distribution (n)**
Case #1	
A 63-year old female with a 3 cm solid enhancing renal mass wishes to have surgical treatment. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?	
< 1 month	4.8% (5)
1-2 months	56.8% (59)
2-3 months	25.7% (27)
3-6 months	12.4% (13)
Not applicable or missing	1.0% (1)
Case #2	
A 57-year old male is diagnosed with a 9 cm solid enhancing renal mass. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?	
< 2 weeks	5.7% (6)
2-4 weeks	37.1% (39)
4-6 weeks	31.4% (33)
6-8 weeks	18.1% (19)
> 8 weeks	5.7% (6)
Not applicable or missing	1.9% (2)
Case #3	
A 65-year old male is diagnosed with a 10 cm solid enhancing renal mass with an early IVC thrombus (infrahepatic). Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?	
< 2 weeks	12.3% (13)
2-4 weeks	39.0% (41)
4-6 weeks	18.1% (19)
6-8 weeks	5.7% (6)
Would refer	17.1% (18)
Not applicable or missing	7.6% (8)
Case # 4	
A 25-year old with a 2 week history of a testicular mass is seen in your office. Clinical exam and ultrasound are consistent with a testicular tumor. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?	
< 1 week	50.5% (53)
1-2 weeks	32.4% (34)
2-3 weeks	11.4% (12)
> 3 weeks	4.8% (5)
Not applicable or missing	1.0% (1)

which was a 57-year-old male with a 9 cm solid enhancing renal mass, 74.2% of respondents indicated that the surgery would be performed within 6 weeks, Table 4.

The final patient with kidney cancer was a 65-year-old male with a 10 cm solid enhancing renal mass with an early IVC thrombus (infrahepatic). In this patient, who would be considered to have to least optimal prognosis of the three cases, 39.0% of surgeons stated that he would be expected to have an average wait of 2 to 4 weeks, Table 4. It is interesting to note that 17.1% of surgeons would refer this patient to another service.

The final case in this section of the questionnaire was a 25-year-old man with a 2-week history of a testicular mass. The clinical exam and ultrasound are consistent with a testicular tumor. The results suggested that the average wait time for this patient would be relatively short with 50.5% of surgeries being performed with the first week and only 4.8% of patients would have to wait more than 3 weeks, Table 4.

Diagnostic test waiting time and barriers to efficient cancer surgery

Diagnostic tests, characterized by staging CT scan and tumor biopsy can also contribute to increased waiting times for patients with urological cancers. The latter section of the survey was designed to capture this relevant information. In the case of staging CT scan for the abdomen for muscle invasive bladder cancer, the most common wait time as indicated by 56.2% of respondents would be 2 to 4 weeks and 19.1% of cases would have wait times beyond 4 weeks, Table 5. The

TABLE 5. **Diagnostic test waiting time and barriers to efficient cancer surgery**

Outcomes	**Distribution (n)**
If you require a staging CT scan of the abdomen for muscle invasive bladder cancer, typically how long do you wait for the study?	
< 2 weeks	24.8% (26)
2-4 weeks	56.2% (59)
4-6 weeks	14.3% (15)
> 6 weeks	4.8% (5)
Pathology	
How long before pathology is available on a TUR bladder tumor?	
< 1 week	25.7% (27)
1-2 weeks	66.7% (70)
2-4 weeks	5.7% (6)
> 4 weeks	1.9% (2)
How often do you need to cancel/delay scheduled surgeries to accommodate oncological cases of "higher priority"?	
Never	3.8% (4)
Almost never	19.1% (20)
Sometimes	36.2% (38)
Often	27.6% (29)
Most of the time	10.5% (11)
Not applicable or missing	2.8% (3)
[1]Median ranking of most to least common barriers to efficient cancer surgery (1= most common, 5 = least common)	
Operating room availability	1
Staging tests	2
Ancillary consultations	3
Patient factors	4
[2]Other	4

[1]Statistically significant rank order effect with operating room having the highest ranking ($P < 0.001$).
[2]Bed availability, anesthesia shortages etc.
Analysis performed with Friedman's nonparametric ANOVA for repeated measures within a sample.

wait time for biopsy on a TUR bladder tumor was then evaluated. The majority of surgeons (i.e. 92.4%) stated that the results of the biopsy would be available to them within 2 weeks. Only in 1.9% of cases would the results require a wait of more than 4 weeks, Table 5. Respondents were then asked how often would they need to cancel or delay scheduled surgeries to accommodate cancer cases of higher priority. The survey revealed that 38.1% of surgeons stated that such delays would occur "often" of "most of the time", Table 5.

The final part of the study was intended to identify and rank the most to lease common barriers to efficient cancer surgery. The findings revealed a statistically significant rank order effect where the two most common causes of surgical delays were operating room (OR) availability and staging tests, Figure 1. Ancillary consultations, patient factors and other barriers such as bed availability and anesthesia shortages were the least common causes of surgical delays, Table 5.

Evaluation of wait times between institutional settings and geographic regions

The final phase of the study was an exploratory analysis comparing wait times (for all patient cases) between institutional settings (teaching hospital versus community versus combination of the two) as well as geographic regions (Western Canada versus Ontario versus Quebec versus Atlantic provinces). In the first analysis, the cases with a statistically significant differences in wait times was in prostate cancer case number 1, where the 58-year old man had a PSA of 6.2 ng/ml and TRUS biopsy revealed 2/6 cores with Gleason 6/10 disease as well as all cases of kidney cancer. For the prostate cancer patient, there was a statistically significant trend where the wait time would be longer in teaching hospitals compared to the other types of institutions. In the latter institutions, the patient would receive surgery within 2 months in 70.6% and 72.3% of cases while only 33.3% of respondents in teaching hospitals indicated that the patient would receive surgery within that time period

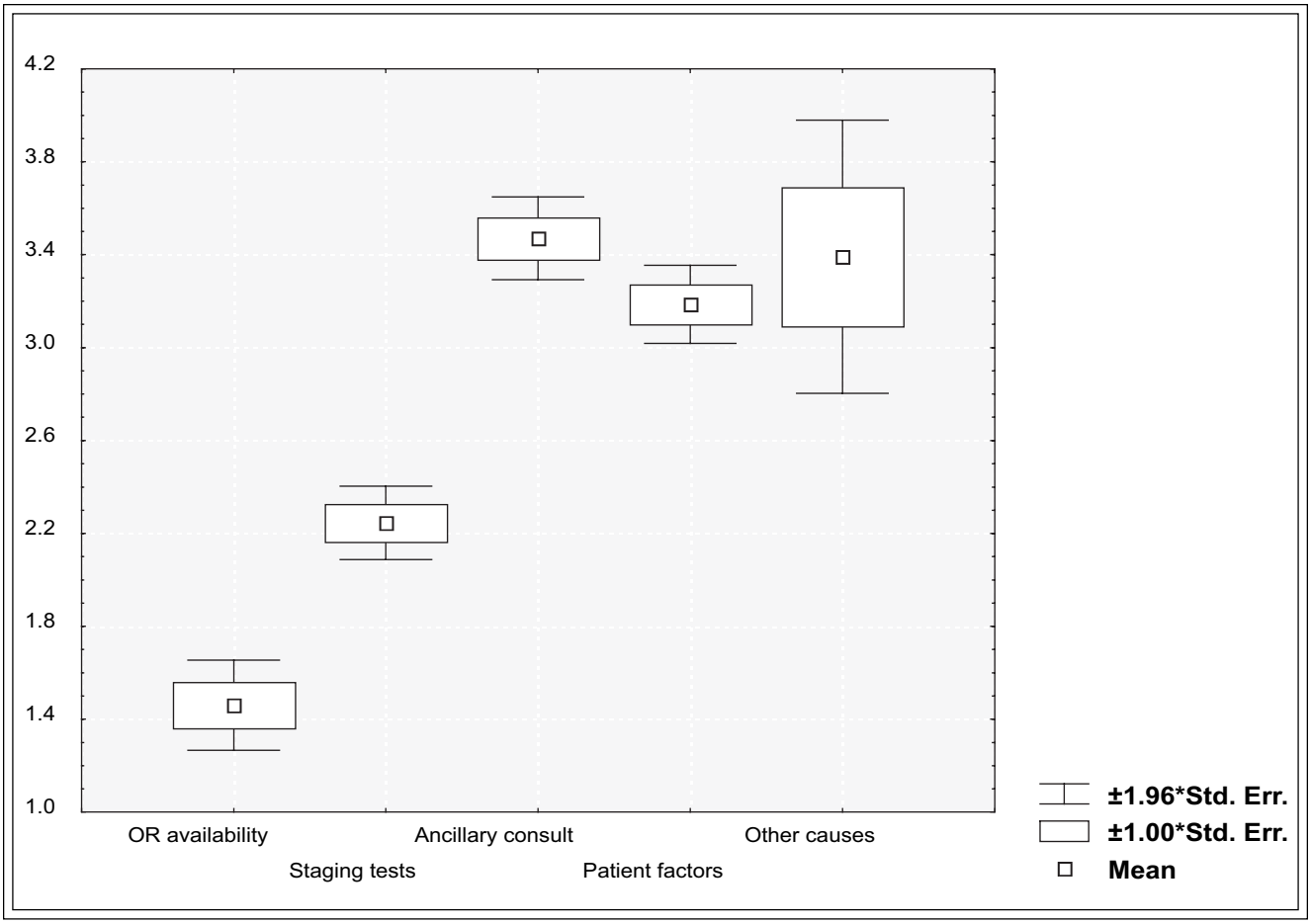

Figure 1. Box and Whisker plot of mean rank scores of barriers to efficient cancer surgery.

(P=0.015). In the first two cases of kidney cancer the wait times also tended to be longer in teaching hospitals compared to the other institutions (P < 0.02). However it was interesting to note that with the third kidney cancer case, which was a 65-year male with a 10 cm solid enhancing renal mass with an early IVC thrombus (infrahepatic), the wait times tended to be shorter in teaching hospitals where surgery would be performed within 4 weeks in 66.7% of cases compared to 38% and 61.1% in community hospitals and combination institutions (P = 0.002).

The final exploratory analysis was a comparison of wait times for the various cases between Western Canada, Ontario, Quebec and the Atlantic provinces. The only case that reached statistical significance was the first prostate cancer case where the 58-year-old man had a PSA of 6.2 ng/ml and TRUS biopsy revealed 2/6 cores with Gleason 6/10 disease. The results suggested that the wait time would be 2 months or less in 82.8% of cases in Western Canada compared to 46.0%, 62.5% and 40.0% in Ontario, Quebec and the Atlantic provinces respectively (P = 0.012). Similar results were observed for the first case of kidney cancer, but the differences failed to reach statistical significance. Nevertheless, it is important to recall that this analysis was exploratory and that its findings needs to be confirmed through a patient based follow up study.

Discussion

A survey of Canadian urological surgeons was conducted to estimate wait times for urological cancer procedures. The findings revealed that for the three types of prostate cancer presented, at least 85% of patient types evaluated would receive surgery within 3 months of the decision to operate. This funding is comforting because two epidemiological studies have suggested that a wait time of up to 3 months is acceptable for patients undergoing RP.[9,10] In the case of bladder cancer, the impact of waiting time on patient outcome is controversial, highly complex and a decision on optimal wait times cannot be made with the existing evidence.[18-20] In the current study, a delay beyond 4 weeks was identified for the most severe case by approximately 52% of respondents. In the kidney cancer cases evaluated, there was considerable variance in the duration of delay, which was affected by patient disease severity. However, 51.3% of respondents stated that the most severe case would be treated within 4 weeks. Testicular cancer is also associated with controversy and conflicting results with respect to the impact of prolonged wait times on patient outcome.[21-24] Our study revealed that approximately 83% of patients in need surgery would be treated with 2 weeks.

There is evidence that wait times for urological surgeries such as RP are progressively increasing in Canada and the median time to treatment from referral is going beyond the duration considered by many experts and by the Canadian Society of Surgical Oncology (CSSO) to be acceptable.[9,16,25] The CSSO recommends that the time from treatment decision to surgery should not exceed 14 days.[25] Our results are consistent with earlier reports of prolonged wait times for urological cancers.[6] Given available resources and the potential for additional government funding to reduce wait times, difficult decisions need to be made as to which of the urological cancers should be prioritized. Given the many unknowns with respect to clinical outcomes and the impact of prolonged wait time, the findings of the current study indicated that bladder and kidney cancer surgeries have the widest variability in wait times across the country. As a result, these two disease sites may be the most problematic in this country.

Wait times for urological cancer in Canada appears to be longer than in other countries. In one recent study from the United Kingdom, the overall median wait times for prostatectomy, cycstectomy, nephrectomy and orchidectomy was 39 days respectively.[7] Therefore, this growing problem needs to be addressed by all of the key stakeholders to reduce the potentially negative impact on clinical outcomes and patient quality of life.[9,14,15] The SWAT initiative has been mandated to provide the necessary evidence and recommendations on appropriate wait times. This information will assist in the appropriate allocation of health care resources needed to address the problem.

There are a number of limitations in this study that need to be addressed. The sample size was relatively small and may not have had sufficient representation from the Prairie and Atlantic provinces. These factors may compromise the generalizablity of the results to the rest of Canada. We relied on data from urological surgeons instead of patient chart audits or large electronic databases. Therefore, it was not possible to obtain point estimates on wait times.

In conclusion, the findings of our survey are consistent with previous reports that wait times for the various types of urological cancer surgeries may be beyond the recommended duration. As an important first step, the SWAT initiative was launched to provide the necessary guidance and recommendations to the federal and provincial governments. Through a

partnership between the key stakeholders, it is the vision of SWAT to ultimately improve the care and quality of life of our patients. □

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Final survey used in the study

Section 1: Professional information (please check).

In which province do you practice?: _____
Newfoundland
Nova Scotia
New Brunswick
Prince Edward Island
Quebec
Ontario
Manitoba
Saskatchewan
Alberta
British Columbia
NWT/Yukon/Nunavut

What year did you enter practice?: _____
2000-2005
1995-1999
1990-1994
1985-1989
1980-1984
Prior to 1980

What setting best describes your practice?
University ❑
Community ❑
Combination community and teaching hospital ❑
Other: _____ ❑

What proportion of your surgical case-load is urologic oncology?
< 20% ❑
20% to 50% ❑
51% to 75% ❑
> 75% ❑

In the past 2 years, have you been directly involved in the development of guidelines/criteria for urologic cancer surgical wait time management?
Yes ❑ No ❑

Section 2: Presentation of Case Studies

Prostate Cancer

A 58 y.o. is seen with an elevated PSA (6.2 ng/ml) and normal DRE. TRUS biopsy reveals 2/6 cores with Gleason 6/10 disease. He elects to undergo radical prostatectomy. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?

< 1 month ❑
1-2 months ❑
2-3 months ❑
3-6 months ❑
> 6 months ❑
N/A ❑

A 58 y.o. is seen with an elevated PSA (11 ng/ml) and normal DRE. TRUS biopsy reveals 3/6 cores with Gleason 7/10 disease. He elects to undergo radical prostatectomy. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?

< 1 month ❑
1-2 months ❑
2-3 months ❑
3-6 months ❑
> 6 months ❑
N/A ❑

A 58 y.o. is seen with an elevated PSA (7 ng/ml) and normal DRE. TRUS biopsy reveals 2/6 cores with Gleason 8/10 disease. He elects to undergo radical prostatectomy. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?

< 1 month ❑
1-2 months ❑
2-3 months ❑
3-6 months ❑
> 6 months ❑
N/A ❑

Bladder Cancer

A 68y.o. female with gross hematuria is found to have a bladder tumour on cystoscopy that is suspicious for invasive disease. Typically ***in your practice***, how much time would elapse before transurethral bladder tumour resection (TURBT)?

< 1 weeks ❑
1-2 weeks ❑
2-4 weeks ❑
4–8 weeks ❑
>8 weeks ❑
N/A ❑

A 68y.o. female with superficial high grade TCC (lamina propria invasion, ie. T1G3) who has failed BCG agrees to undergo cystectomy. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?

< 2 weeks ❑
2-4 weeks ❑
4-6 weeks ❑
6-8 weeks ❑
>8 weeks ❑
N/A ❑

A 68y.o. female with a palpable bladder mass on EUA and pathology consistent with muscle invasive urothelial carcinoma agrees to undergo cystectomy. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?

< 2 weeks ❑
2-4 weeks ❑
4-6 weeks ❑
6-8 weeks ❑
>8 weeks ❑
N/A ❑

Kidney Cancer

A 63 y.o. female with a 3 cm solid enhancing renal mass **wishes** to have surgical treatment. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?

< 1 month ❑
1-2 months ❑
2-3 months ❑
3-6 months ❑
> 6 months ❑
N/A ❑

A 57 y.o. male is diagnosed with a 9 cm solid enhancing renal mass. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?

< 2 weeks ❑
2-4 weeks ❑
4-6 weeks ❑
6-8 weeks ❑
>8 weeks ❑
N/A ❑

A 65 y.o. male is diagnosed with a 10 cm solid enhancing renal mass with an early IVC thrombus (infrahepatic). Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?

< 2 weeks ❑
2-4 weeks ❑
4-6 weeks ❑
6-8 weeks ❑
Would refer ❑
N/A ❑

Testis Cancer

A 25 y.o. with a 2 week history of a testicular mass is seen in your office. Clinical exam and ultrasound are consistent with a testicular tumour. Typically ***in your practice***, how much time would elapse between the decision to operate and the date of surgery?

< 1 week ❑
1-2 weeks ❑
2-3 weeks ❑
>3 weeks ❑

Section 3: Diagnostics: Radiology

If you require a staging CT scan of the abdomen for muscle invasive bladder cancer, typically how long do you wait for the study?

< 2 weeks ❑
2-4 weeks ❑
4-6 weeks ❑
>6 weeks ❑

Pathology: How long before pathology is available on a TUR bladder tumour?

< 1 week ❑
1-2 weeks ❑
2-4 weeks ❑
>4 weeks ❑

How often do you need to cancel/delay scheduled surgeries to accommodate oncologic cases of "higher priority"?

Never ❑
Almost never ❑
Sometimes ❑
Often ❑
Most of the time ❑

Please rank the most to least common (1-5) barriers to efficient cancer surgery (1= most common, 5 = least common).

O.R. availability Patient factors
Staging tests Ancillary consultations
Other:

Thank you **for participating. Your responses are very important.**