Evaluating urologist perspectives on the CUA BPH surgical decision aid for maintenance and feedback: A survey-based study

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KEY MESSAGES

- The CUA developed a surgical decision aid (DA) to support BPH treatment decisions, though its adoption among urologists varies.
- Most urologists who implemented the DA found it useful, well-balanced, appropriately detailed, and easy to understand, with accurate outcomes.
- Barriers to implementation include time constraints, workflow integration, language challenges, and lack of information on newer surgical techniques.
- Suggested improvements include adding up-to-date information, incorporating treatments like iTIND, PAE, and other MISTs, and adding a QR code to facilitate patient access.

INTRODUCTION

Benign prostatic hyperplasia (BPH) affects a large proportion of aging men and can lead to bothersome lower urinary tract symptoms (LUTS) negatively impacting quality of life (QOL). Managing this condition, especially surgically, requires significant informed and shared decision making between the patient and their urologist due to the many available surgical options, each with their unique set of risks, benefits, and long-term functional outcomes.[1]

The Canadian Urology Association (CUA) BPH surgical decision aid (DA) was developed to assist urologists and patients in making informed decisions about the management of their LUTS.[2-4] Given the tool's recent introduction

in 2021, it is important to assess how well it has been received by clinicians. The objective of this research letter is to evaluate urologists' perspectives on the CUA BPH surgical DA, focusing on its perceived utility, implementation challenges, and areas for improvement. Drawing on their feedback, we present the suggested updates and refinements aimed at enhancing the tool's effectiveness in facilitating shared decision-making for BPH management.

METHODS

The survey was developed based on a review of the literature and designed to capture physician perceptions of the decision aid. Coauthors participated in discussions to identify key areas of importance, including overall impressions and potential areas for improvement. The survey included questions designed to assess the awareness and implementation of the DA, challenges encountered during its use, its impact on clinical practice, and respondents' overall impressions of the tool. Additionally, demographic information of the participants was collected. Both French and English versions of the survey were made available. REDCap was used to build the survey and capture data.[5] The questionnaire was disseminated through several channels, including Twitter (May 21st and September 10th, 2024), the Canadian Endourology Group's mailing list (July 10th, 2024), and word of mouth.

RESULTS

Demographics

In total, 27 urologists responded to the survey. Most respondents originated from Canada (67%), were aware of the DA (85%), and had BPH as their primary clinical focuses (78%). Most respondents practiced in an academic setting (55%) (Table 1) and learned about the DA from a colleague (n=7) or from Twitter (n=6) (Figure 1A).

Implementation

Among the 23 "aware" urologists, 14 (61%) implemented it in their practice. Of these 14 individuals, most usually implement it (43%) (Figure 1B). Those who implemented it primarily did so when patients requested more information about available surgical options (n=13) (Figure 1C).

Of the 14 urologists who implemented the DA, 50% reported using it when patients had multiple treatment options based on size, anatomy, or clinical scenarios and wanted to compare procedures. 29% used the DA prior to their consultations, while 50% reported using it during. One respondent integrated a DA link on their website, and another had an EMR template to send to patients.

Barriers to implementation

For those who did not implement the DA, reasons included language barriers (n=1), the inclusion of treatment options unavailable in the public system (n=1), and difficulties integrating it into their workflow (n=2). Two respondents felt it would require additional appointments to address patient questions, and one noted it could not be provided before surgical consultations. Three respondents noted they don't offer many of the surgical options featured in the DA, with one adding that the outcomes didn't align with their clinical experience. Another believed it was unnecessary or biased, omitting key points affecting decision-making.

Urologists who implement the DA in their practice identified two major barriers: time constraints and lack of reimbursement (Figure 1D). Additional barriers included missing procedures, patient digital literacy, and patients not consulting the DA despite recommendations.

Perception

71% of the 14 urologists who implemented the DA found it useful (Figure 2A. 22% felt it slightly decreased counselling time (Figure 2B). 89% felt the DA was well-balanced (Figure 2C). 89% found the length appropriate (Figure 2D). 70% felt the information provided was suitable (Figure 2E). 59% agreed that the language is simple and accessible (Figure 2F). 48% agreed that outcomes reported were accurate (Figure 2F).

Inaccuracies, limitations, and areas for improvement

The two most frequently suggested areas of improvement are the inclusion of a scannable QR code for easy patient access (n=4), and the addition of iTIND (n=3), prostatic artery embolization (PAE) (n=2), and emerging minimally invasive surgical techniques (MISTs) (n=2). Five respondents found that there were inaccuracies in the data reported, specifically regarding GreenLight outcomes, robotic prostatectomy, retreatment rate with Rezum and Aquablation, and urinary incontinence rates after enucleation. See Table 2.

DISCUSSION

The CUA BPH surgical DA is generally well-received, with most urologists finding it useful and balanced. Barriers such as time constraints, lack of reimbursement, and workflow challenges limit its broader adoption. The DA is typically used at the time of selection of surgical treatment. Most respondents appreciate its ability to streamline consultations, though a few respondents note concerns about the DA's relevance, missing procedures, and language accessibility. Overall, the DA is valued but could benefit from certain improvements.

Accessibility

The primary concern raised by survey respondents is the accessibility of the DA. Many indicated that including a QR code or handout would be beneficial for patients, along with a more memorable URL to simplify online access. Additionally, translating the DA and creating a

shorter version of the DA was suggested. These strategies represent the most significant opportunity for enhancement and dissemination of the DA.

Previous research has found that purchasing DAs and financing their distribution are barriers to accessibility and patient uptake. One solution discussed was to reimburse practitioners for using these tools to provide decisional support.[6] Contrary to the claims made by previous studies, most respondents who implemented the CUA's DA expressed neutrality or disagreement about the non-billable status of decision aid use as a barrier to implementation.

Awareness

Other studies have identified awareness of DAs a major barrier to their implementation.[6] Although only 11% of respondents were unaware of the existence of the DA, these results are skewed by the large proportion of Canadian respondents. Increasing publicity and accessibility using aforementioned strategies can improve awareness and develop skills required for shared decision-making in BPH patients.[6]

Incorporation into workflow

Several of respondents highlighted workflow as a barrier to implementation. This can be broken down further into 1) Failing to fit into general practice context, 2) Scarcity of time, and 3) Pre-existing clinical care processes.[6] Solutions to overcoming these obstacles include providing educational support models on how to properly use and implement the DA. These models can be free-standing, clinic or hospital-based, or insurance-based.[6]

Knowledge and skill

Several respondents expressed confusion about how to generate a patient summary and compare other procedures to M-TURP, which the DA can already facilitate. A simple solution to this problem is to make the DA more user-friendly for physicians and to provide instructional material on how to effectively use it. These strategies have been used previously to encourage DA usage and enhance shared decision-making.[6]

Quality and maintenance

In addition to accessibility, available information on newer surgical methods such as iTIND and MISTs were suggested areas of improvement. As new data continually emerges regarding these techniques, including the latest data may mislead patients. More long-term data and outcomes need to be established to provide a clearer picture before adding these surgical options to the DA.[7,8] Other studies have found this to be a limitation of DAs in general, especially when new evidence is rapidly arriving.[6] One strategy to overcome these challenges is to develop minimal quality standards that are designed to assess the quality of decisional tools, such as the CREDIBLE criteria which summarize the key characteristics of a credible patient DA.[6]
On this note, notwithstanding the perceived inaccuracies in the displayed data, it is important to understand that the goal of the DA is to guide patients and providers using evidence from the

literature. While the exact numbers or percentages may vary, especially as new data is constantly arising, the DA aims to provide estimates that assist in decision-making for both patients and providers.

Cognitive interviewing

Previous efforts to refine existing DAs have focused on enhancing their clarity and effectiveness, primarily through cognitive interviewing, a technique used to understand the thought processes of DA users as they interpret DA items.[9,10] This targeted technique presents a possible future avenue for amelioration of the CUA's DA.

Overall, while the CUA BPH surgical DA is generally appreciated its broader adoption is hindered by certain challenges, which if addressed will support better decision-making for both patients and providers.

Beta testing

Future directions for the CUA BPH surgical DA include conducting beta testing to evaluate its impact on key outcomes such as decision conflict, decision satisfaction, and overall shared decision making. This testing will be conducted in a real-world setting to assess feasibility and practical integration into clinical workflows, and to determine how useful the DA is for patients in making informed surgical decisions.[11]

Study limitations

This study has several limitations that should be considered. First, the sample size was small, with only 27 urologists participating, which limits the generalizability of the findings. A larger sample would provide a more representative view of urologists' perspectives on the CUA BPH surgical decision aid across diverse practice settings and geographic regions. Additionally, the study relied on voluntary participation, which introduces response bias, as those who are already familiar with or using the decision aid may have been more likely to respond. The survey employed a convenience sampling method, distributed through specific channels such as Twitter and mailing lists. However, given that the urologists using this tool are highly specialized in BPH management, the sample does reflect a targeted subset of practitioners. The utmost effort was made to contact all relevant urologists directly to ensure that the most appropriate participants were included. Despite this, a broader sample from different settings could enhance the generalizability of the findings.

CONCLUSIONS

The CUA BPH surgical decision aid is generally well-received by urologists, with many finding it useful in facilitating shared decision-making. However, barriers such as time constraints, workflow integration, and the lack of reimbursement hinder its broader adoption. Feedback highlighted areas for improvement, including the addition of newer treatment options and enhanced accessibility features. Continued refinement of the decision aid, incorporating

emerging techniques and ensuring user-friendliness, will further enhance its effectiveness in clinical practice.

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FIGURES AND TABLES

Figure 1. Demographics and decision aid (DA) implementation. (A) What did you learn about the BPH DA? (B) How often do you incorporate the DA in your clinical practice when counseling BPH patients about surgery? (C) Under which circumstances do you opt to use the DA? (D) Barriers to implementation (among urologists who have implemented the DA)?

Figure 2. Overall perception of the decision aid (DA). (A) How useful would you say the DA is for counseling patients o the various surgical treatment options available? (B) How would you say the DA has affected the duration of patient counseling? (C) Do you believe the DA one surgical procedure over another? (D) The length of the DA was...; (E) The amount of information provided was...; (F) I agree with the outcomes reported (rates of benefits and risks) and the level of the language used is simple and accessible.

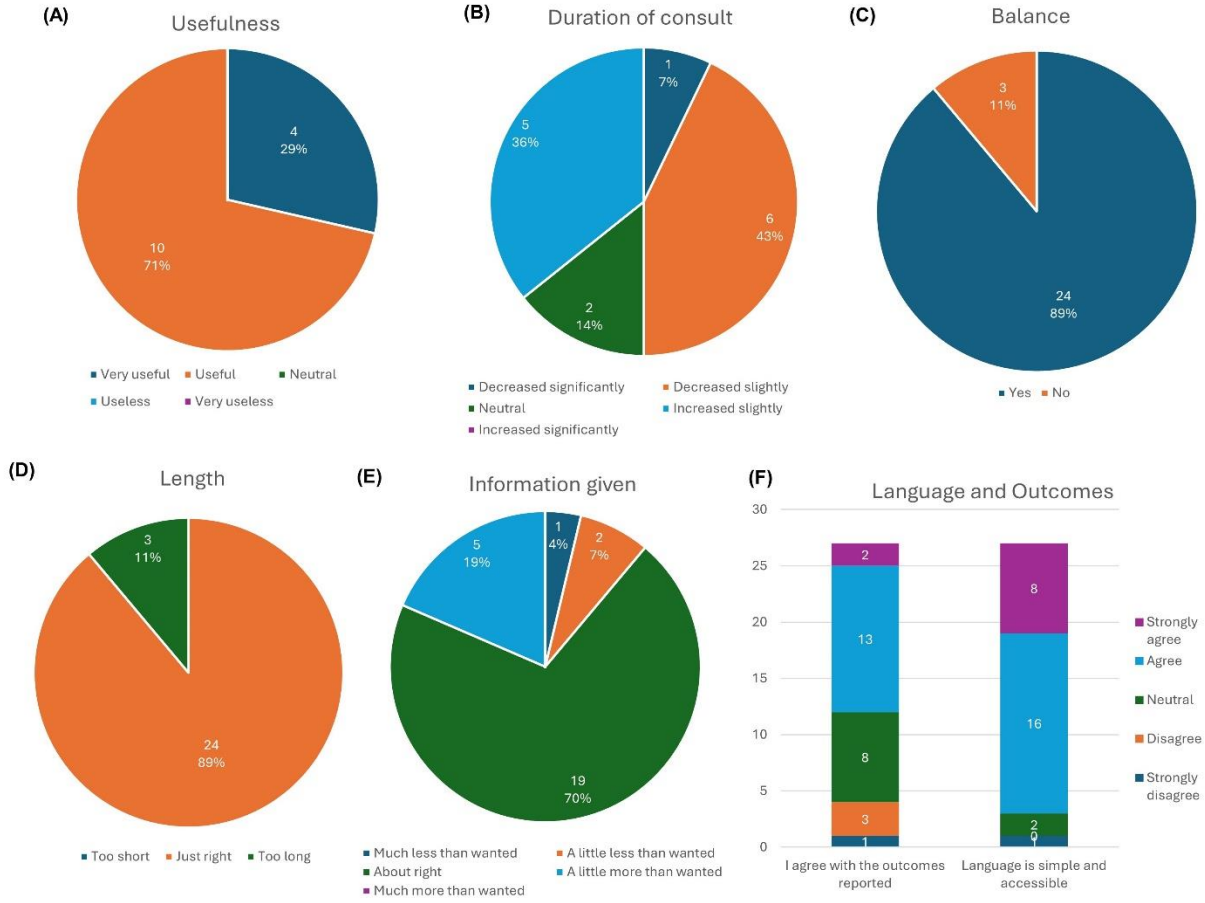

Table 1. Respondent Demographics			
		n	**%**
Total respondents		27	100.0
Aware of BPH Surgical DA			
	Yes	23	85.2
	No	3	11.1
	N/A	1	3.7
Country of origin			
	Canada	18	66.7
	U.S.	3	11.1
	Brazil	1	3.7
	Uzbekistan	1	3.7
	U.K.	1	3.7
	Singapore	1	3.7
	N/A	2	7.4
Type of practice			
	Community practice	10	37.0
	Academic practice	15	55.6
	Both	1	3.7
	Neither	1	3.7
Surgical treatments offered			
	Monopolar TURP	12	44.4
	Bipolar TURP	23	85.2
	Greenlight PVP	12	44.4
	Enucleation	11	40.7
	Urolift	4	14.8
	Rezum	12	44.4
	Aquablation	2	7.4
	iTIND	4	14.8
Clinical Focuses			
	Kidney stone disease	16	59.3
	Benign prostatic hyperplasia	21	77.8
	Urologic oncology	10	37.0
	Female urology and Reconstruction	5	18.5
	Infertility and Sexual health	2	7.4
	General urology	12	44.4

	Transplant	3	11.1
	Neurourology	1	3.7
	Laparoscopic urology	1	3.7
Cases treated medically annually			
	<10	0	0.0
	10–49	3	11.1
	50–99	2	7.4
	100–149	6	22.2
	150–199	1	3.7
	200+	14	51.9
	N/A	1	3.7
Cases treated surgically annually			
	<10	0	0.0
	10–49	7	25.9
	50–99	9	33.3
	100–149	1	3.7
	150–199	5	18.5
	200+	4	14.8
	N/A	1	3.7

PVP: photoselective vaporization of the prostate; TURP: transurethral resection of the prostate.

Table 2. Inaccuracies, limitations, and suggested improvements to the DA

Main category	**Subcategory**	**Occurrences**
Improvements		
	Include evolving MISTs	2
	Include PAE	2
	Include iTIND	3
	Include estimated costs	1
	Discuss recovery times	1
	Generate summary	1
	Create QR code	4
	Create mobile app	1
	Make a shorter version	1
	Reference for wait times in patient's area	1
	Add illustrations for procedures	2

	Reduce bias and provide appropriately referenced validated outcome measures	1
	Use an easy to remember URL	1
	Compare all procedures to M-TURP	1
	Make the DA easier to find online	1
	Provide audio and video content explaining navigation and treatment options	1
	Translate to languages other than English or French	2
	Avoid vague/ambiguous language	1
	Provide patient with summary of their choices	1
Inaccuracies		
	Inaccuracies in data reported	5
	Lack of data on newer therapies	1
	Distinguish between complications involving erections vs. ejaculation	
Limitations		
	Many procedures are not available in public practice	1
	Robotic simple prostatectomy is rarely performed in Canada	1

DA: decision aid; MIST: minimally invasive surgical therapies; PAE: prostatic artery embolization; TURP: transurethral resection of the prostate.