Appendix 1 to Fuhrmann A, Batash R, Scharzkopf R, et al. Patient willingness to contribute to the cost of novel implants in total joint arthroplasty: the Canadian experience. *Can J Surg* 2019.

DOI: 10.1503/cjs.007118

Online appendices are unedited and posted as supplied by the authors.

Patient Decision-Making Questionnaire Subject ID:

This questionnaire asks you to choose between hypothetical scenarios involving cash prizes of different sizes, and includes questions about your physical activity, spending habits, and basic demographic information.

Please answer every question. Fill in only one answer per question unless instructed otherwise.

Today's Date: ☐☐ / ☐☐ / ☐☐ *(MM/DD/YY)*

A. HYPOTHETICAL PRIZES

1. Imagine you have won a contest that offers you a choice between two cash prizes: you can claim a smaller amount immediately, or you can wait and claim a larger amount later. Please answer the following questions.

   a. If you could choose between receiving $100 now or receiving $200 later, what is the longest period of time you'd be willing to wait for the $200? *(answer in days, weeks, months, or years)*

   I would be willing to wait for _____

   b. If you could choose between receiving $1,000 now or receiving $1,500 later, what is the longest period of time you'd be willing to wait for the $1,000? *(answer in days, weeks, months, or years)*

   I would be willing to wait for _____

   c. If you could choose between receiving $10,000 now or receiving $50,000 later, what is the longest period of time you'd be willing to wait for the $50,000? *(answer in days, weeks, months, or years)*

   I would be willing to wait for _____

2a. Now imagine that you could choose between receiving $100 now or receiving a larger amount after six months. What is the smallest amount of money that you

Appendix 1 to Fuhrmann A, Batash R, Scharzkopf R, et al. Patient willingness to contribute to the cost of novel implants in total joint arthroplasty: the Canadian experience. *Can J Surg* 2019.

DOI: 10.1503/cjs.007118

Online appendices are unedited and posted as supplied by the authors.

think would be worth waiting six months for?

I would be willing to wait six months for $_____

b. If you could choose between receiving $1,000 now or receiving a larger amount after one year, what is the smallest amount of money that you think would be worth waiting one year for?

I would be willing to wait one year for $_____

c. If you could choose between receiving $10,000 now or receiving a larger amount after five years, what is the smallest amount of money that you think would be worth waiting five years for?

I would be willing to wait five years for $_____

B. PHYSICAL ACTIVITY

1. Thinking about the last month, about how many times did you participate in vigorous activities that lasted at least 10 minutes? By vigorous, we mean activities that caused large increases in breathing, heart rate, or leg fatigue, or that caused you to perspire?
   - 1☐ 0 times (skip to question 2)
   - 2☐ 1-3 times in the last month
   - 3☐ 1-2 times per week
   - 4☐ 3-4 times per week
   - 5☐ 5 or more times per week

1a. About how long did you spend doing this vigorous activity each time?
   - 1☐ 10-30 minutes
   - 2☐ 31-60 minutes
   - 3☐ More than 60 minutes

2. Think about the walking you have done in the last month. About how many times did you walk for at least 10 minutes or more without stopping? Do not include times when the walking was strenuous enough to count as vigorous activity above (i.e. it caused large increases in breathing, heart rate, or leg fatigue, or caused you to perspire).
   - 1☐ 0 times (skip to question 3)
   - 2☐ 1-3 times in the last month

Appendix 1 to Fuhrmann A, Batash R, Scharzkopf R, et al. Patient willingness to contribute to the cost of novel implants in total joint arthroplasty: the Canadian experience. *Can J Surg* 2019.

DOI: 10.1503/cjs.007118

Online appendices are unedited and posted as supplied by the authors.

3☐ 1-2 times per week 4☐ 3-4 times per week 5☐ 5 or more times per week
2a. About how long did you spend walking each time? 1☐ 10-30 minutes 2☐ 31-60 minutes 3☐ More than 60 minutes
3. Think about how much time you spend moving around on your feet, standing, and sitting on an average day in the past month.

Appendix 1 to Fuhrmann A, Batash R, Scharzkopf R, et al. Patient willingness to contribute to the cost of novel implants in total joint arthroplasty: the Canadian experience. *Can J Surg* 2019.

DOI: 10.1503/cjs.007118

Online appendices are unedited and posted as supplied by the authors.

3a. About how many hours per day did you spend moving around on your feet while doing things? Please report only the time that you are actually moving.

1☐ Not at all
2☐ Less than 1 hour per day
3☐ 1-3 hours per day
4☐ 3-5 hours per day
5☐ 5-7 hours per day
6☐ More than 7 hours per day

3b. About how many hours per day did you spend standing?

1☐ Not at all
2☐ Less than 1 hour per day
3☐ 1-3 hours per day
4☐ 3-5 hours per day
5☐ 5-7 hours per day
6☐ More than 7 hours per day

3c. About how many hours did you spend sitting?

1☐ Not at all
2☐ Less than 3 hours per day
3☐ 3-6 hours per day
4☐ 6-8 hours per day
5☐ More than 8 hours per day

4. On average, about how many flights of stairs do you climb each day? (1 flight = ~10 steps)

I climb about _____ flights of stairs per day.

Appendix 1 to Fuhrmann A, Batash R, Scharzkopf R, et al. Patient willingness to contribute to the cost of novel implants in total joint arthroplasty: the Canadian experience. *Can J Surg* 2019.

DOI: 10.1503/cjs.007118

Online appendices are unedited and posted as supplied by the authors.

5. Please compare the amount of activity you just reported for a typical month with the amount of physical activity you do during each season of the year. For each season, please indicate whether you typically do more, less, or the same amount of activity by checking one box per row:

Season	Activity level				
	A lot more	**A little more**	**The same**	**A little less**	**A lot less**
Spring					
Summer					
Autumn					
Winter					

Appendix 1 to Fuhrmann A, Batash R, Scharzkopf R, et al. Patient willingness to contribute to the cost of novel implants in total joint arthroplasty: the Canadian experience. *Can J Surg* 2019.

DOI: 10.1503/cjs.007118

Online appendices are unedited and posted as supplied by the authors.

C. SPENDING HABITS

1. How much did you pay for your TV ?
   - 1☐ Less than $500
   - 2☐ $500 - $1,000
   - 3☐ $1,000 - $2,000
   - 4☐ More than $2,000
   - 5☐ Don’t own a TV

2. How often do you typically purchase a new TV ?
   - 1☐ Every year
   - 2☐ Every 1-3 years
   - 3☐ Every 4-6 years
   - 4☐ Less often than every 6 years

3. How much are you willing to pay for a newer TV model?
   - 1☐ Less than $500
   - 2☐ $500 - $1,000
   - 3☐ $1,000 - $2,000
   - 4☐ More than $2,000

4. Approximately how much did you pay for the car you typically drive?
   - 1☐ Less than $10,000
   - 2☐ $10,000 - $25,000
   - 3☐ $25,000 - $50,000
   - 4☐ More than $50,000
   - 5☐ Don’t own a car

5. How often do you typically purchase or lease a new car?
   - 1☐ Every year
   - 2☐ Every 1-3 years
   - 3☐ Every 4-6 years
   - 4☐ Every 6-10 years
   - 5☐ Less often than every 10 years

6. How much are you willing to pay for a car model that comes “fully loaded” with options over the base model?
   - 1☐ Less than $1,000
   - 2☐ $1,00 - $2,500

Appendix 1 to Fuhrmann A, Batash R, Scharzkopf R, et al. Patient willingness to contribute to the cost of novel implants in total joint arthroplasty: the Canadian experience. *Can J Surg* 2019.

DOI: 10.1503/cjs.007118

Online appendices are unedited and posted as supplied by the authors.

3☐ $2,500 - $5,000
4☐ More than $5,000

Appendix 1 to Fuhrmann A, Batash R, Scharzkopf R, et al. Patient willingness to contribute to the cost of novel implants in total joint arthroplasty: the Canadian experience. *Can J Surg* 2019.

DOI: 10.1503/cjs.007118

Online appendices are unedited and posted as supplied by the authors.

D. IMPLANT CHOICE

Now imagine that you are a patient with advanced hip/knee arthritis considering a total hip/knee replacement to reduce your pain and improve your functional status. Please answer the following questions.

1. Sometimes the hospital, or the surgeon has a say in which particular implant a patient receives. Please indicate how comfortable you would be with each person or institution selecting your implant for you by placing an X on the scales below. On these scales, 0 means you would be very uncomfortable with that person or institution making the choice, and 100 means you would be very comfortable.

1a. How comfortable would you be with your hospital selecting your implant?

Very Uncomfortable 0 50 100 Very Comfortable

1b. How comfortable would you be with your surgeon selecting your implant?

Very Uncomfortable 0 50 100 Very Comfortable

Appendix 1 to Fuhrmann A, Batash R, Scharzkopf R, et al. Patient willingness to contribute to the cost of novel implants in total joint arthroplasty: the Canadian experience. *Can J Surg* 2019.

DOI: 10.1503/cjs.007118

Online appendices are unedited and posted as supplied by the authors.

There is usually more than one implant option available for each surgery. We can compare the standard implant that is typically used with newer implants using two very important qualities.

How long does it last? Many studies in humans show that the standard prosthesis lasts about 15 years before it needs to be replaced surgically. Newer implants are designed to last longer, but these newer implants do not yet have long term data available and are therefore not yet covered by OHIP although they have been approved by Health Canada.

What are the risks? With the standard prosthesis, the risk of serious complications in the first year after surgery is 3% (e.g. heart attack, pneumonia, blood clot, or death).

Selecting one of the newer implants would require you to pay an additional co-pay out of your own pocket.

In each comparison below, please indicate if you'd be willing to pay more to choose the newer implant over the standard implant. If you select the newer implant, please indicate the highest additional co-pay you would accept to choose the newer prosthesis (i.e. the most additional money you'd be willing to pay before the new implant is no longer worth it).

2. Please examine the implant options below:

Option 1: Standard Implant

- Lasts: 15 years (shown in clinical studies with human subjects)
- Risk of serious complications: 3%

Option 2: New implant

- Lasts: 25 years (suggested in laboratory studies; no studies in human subjects)
- Risk of serious complications: 3%

2a. Would you be willing to pay an additional co-pay to select Option 2?

1 ☐ Yes
2 ☐ No

If you answered Yes, what is the highest additional amount you would be willing to pay to select Option 2 over Option 1?

The highest additional amount I would be willing to pay is $_____

Appendix 1 to Fuhrmann A, Batash R, Scharzkopf R, et al. Patient willingness to contribute to the cost of novel implants in total joint arthroplasty: the Canadian experience. *Can J Surg* 2019.

DOI: 10.1503/cjs.007118

Online appendices are unedited and posted as supplied by the authors.

3. Please examine the implant options below:

Option 1: Standard Implant	**Option 2: New implant**
• Lasts: 15 years (shown in clinical studies with human subjects) • Risk of serious complications: 3%	• Lasts: 25 years (suggested in laboratory studies; no studies in human subjects) • Risk of serious complications: 5%

3a. Would you be willing to pay an additional co-pay to select Option 2?

1☐ Yes
2☐ No

If you answered Yes, what is the highest additional amount you would be willing to pay to select Option 2 over Option 1?

The highest additional amount I would be willing to pay is $_____

4. Please examine the implant options below:

Option 1: Standard Implant	**Option 2: New implant**
• Lasts: 15 years (shown in clinical studies with human subjects) • Risk of serious complications: 3%	• Lasts: 15 years (suggested in laboratory studies; no studies in human subjects) • Risk of serious complications: 1%

4a. Would you be willing to pay an additional co-pay to select Option 2?

1☐ Yes
2☐ No

If you answered Yes, what is the highest additional amount you would be willing to pay to select Option 2 over Option 1?

The highest additional amount I would be willing to pay is $_____

Appendix 1 to Fuhrmann A, Batash R, Scharzkopf R, et al. Patient willingness to contribute to the cost of novel implants in total joint arthroplasty: the Canadian experience. *Can J Surg* 2019.

DOI: 10.1503/cjs.007118

Online appendices are unedited and posted as supplied by the authors.

E. LIVING SITUATION, SOCIAL and EMOTIONAL HEALTH
1. What is your current weight? _____ pounds
2. What is your current height? _____ feet _____ inches
3. What is your current age? _____ years
4. What gender are you? 1☐ Male 2☐ Female
5. What is the highest level of education you achieved? (fill in one circle only) 1☐ Did not graduate from high school 2☐ Graduated from high school, but did not attend college or technical school 3☐ Graduated from high school and attended college or technical school 4☐ Graduated from high school and graduated from college or technical school
6. What is your employment status? 1☐ Employed full-time 2☐ Employed part-time 3☐ Not currently working
7. What is your approximate annual household income? 1☐ Less than $30,000 2☐ $30,000 - $50,000 3☐ $50,000 - $80,000 4☐ $80,000 - $100,000 5☐ $100,000 - $150,000 6☐ Greater than $150,000
8. What is your race? (fill in all that apply) 1☐ White 2☐ Black 3☐ Hispanic 4☐ Asian 5☐ Native American 6☐ Other (please specify):_____

Appendix 1 to Fuhrmann A, Batash R, Scharzkopf R, et al. Patient willingness to contribute to the cost of novel implants in total joint arthroplasty: the Canadian experience. *Can J Surg* 2019.

DOI: 10.1503/cjs.007118

Online appendices are unedited and posted as supplied by the authors.