Appendices

Section 1 (pages 2-12)

Scleroderma survey (screenshots)

Section 2 (pages 13-14)

GRIPP2-Short Form Checklist for the Reporting of Patient Engagement in Research

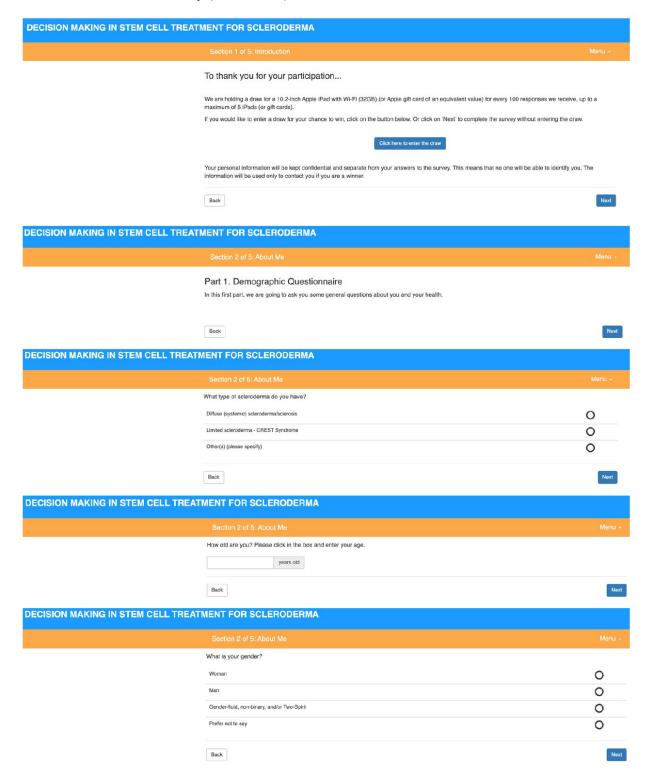
Section 3 (pages 15-18)

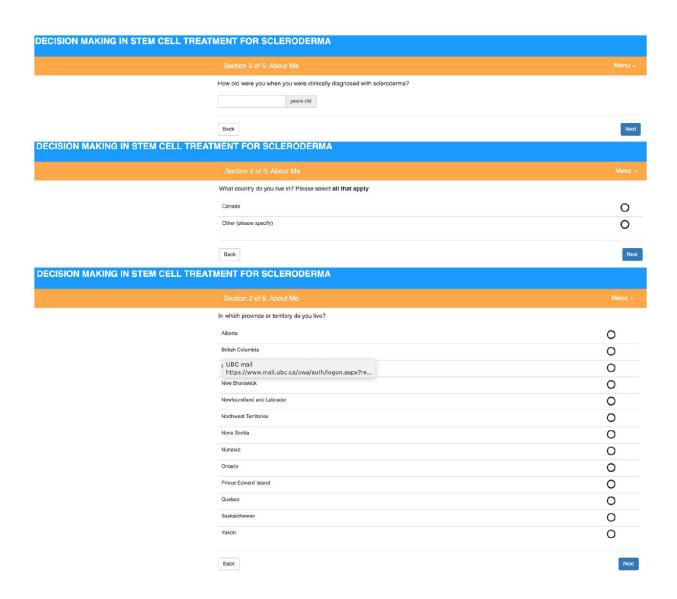
Boxplots of the distribution of out-of-pocket costs by community size

Section 4 (page 19)

Exponentiated regression coefficients and confidence intervals [CI]s for multivariate models exploring the relationship between community size and out-of-pocket costs

Section 1. Scleroderma survey (screenshots)





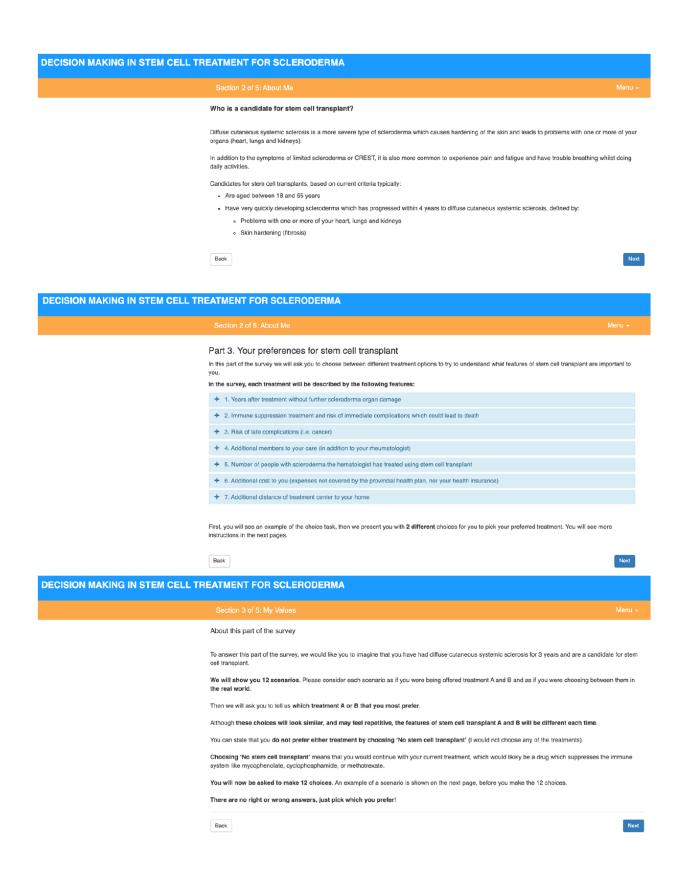
DECISION MAKING IN STEM CEL	L TREATMENT FOR SCLERODERMA	
	Section 2 of 5: About Me	Menu •
	In which province or territory do you live?	
	Alberta	0
	Brilish Columbia	0
	Manitoba	0
	New Brunswick	0
	Newfoundland and Labrador	0
	Northwest Territories	0
	Nova Scotia	0
	Nunavut	0
	Ontario	0
	Prince Edward Island	0
	Quabec	0
	Saskatchowan	0
	Yukon	0
	Back	Next
	Del.X	Wex
	Section 2 of 5: About Me Do you live in a remote, rural, or metropolitan area? Remote Rural	O O
	Metropolitan	0
	Back	Next
ECISION MAKING IN STEM CEL	L TREATMENT FOR SCLERODERMA	
	How do you identify? Please select all that apply.	
	Aboriginal or indigenous	0
	African American or Black	0
	Asian	0
	Caucasian	0
	Hispanic or Latino(a)	0
	South Asian	0
	How I identify is not listed here	0
	Prefer not to say	0
	Баск	Next





DEGICION MAKING IN STEM OF L. T	DE ATMENT FOR COLERONERMA	
DECISION MAKING IN STEM CELL TH	REALMENT FOR SCLEHODEHMA	
	Have you had to forgo any expenditures in the last year in order to afford the cost of your medical care for scieroderma/CREST syndrome (e.g.	. education, food,
	etc.)?	
	Yes No	
	Back	Next
DECISION MAKING IN STEM CELL T	REATMENT FOR SCIERODERMA	
BEGISTON MARING IN STEM SEEL II	TEATHERT FOR GOLLTONE THINA	
	Part 9. Leaving about stam call transplant on an antion to tract diffuse adjacedorm	
	Part 2. Learning about stem cell transplant as an option to treat diffuse scleroderm	la
	Before we ask you about your preferences for stem cell transplant, we are going to give you some information about stem cell transplant and	ask you to answer
	knowledge questions about what you have read. This is so we can see if we are communicating the information well.	
	Back	Next
DECISION MAKING IN STEM CELL T	REATMENT FOR SCLERODERMA	
	General information about Stem Cell transplant	
	Stem cell transplant is a relatively recent option for people with diffuse scleroderma and although it is already offered in some centers in Cal underway to uncover the full potential of the therapy.	nada, research is still
	Stem cells are collected from a person's blood, the person then receives chemo- and sometimes radiotherapy to eliminate their dysfunction.	al immune system
	and then the stem cells are re-introduced into the person's body to help rebuild a healthy immune system.	
	The treatment requires a long hospital stay of one month, and about four additional months of staying in the hospital's proximity as an outpart.	tient for monitoring.
	For example, currently eligible patients in British Columbia are being offered treatment in Calgary, which typically means a 5 month stay award to the control of Carotha and the control of Carotha and the control of Caro	ay from their home. In
	addition, follow-up visits are required 6 months, one year and then annually after the transplant.	
	True or False:	
	Same people who receive stem cell transplant for scleroderma are discharged and can go home in the week after the treatment.	
	True	0
	False	0
	Back	Next
DECISION MAKING IN STEM CELL TR	REATMENT FOR SCLERODERMA	
	Section 2 of 5: About Me	Menu -
	The benefits that people might expect after being treated with stem cell transplant?	
	People who are diagnosed with diffuse scleroderma face a high risk of their organs becoming affected, which in turn affects their life expectancy	Racquise stem
	cell transplant gives the person new blood cells, the immune system is 'rebooted' to stop the progression of scleroderma.	. Docado Siem
	This means that after treatment, although there may be some residual symptoms of the disease, the disease can go into remission for a long time.	ne. If this
	happens, it is expected that the person will live longer.	
	True or False:	
	Stem cell transplant might increase the life expectancy of a person who was diagnosed with diffuse scleroderma.	
	True	0
	False	0
	Back	Next

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DECISION MAKING IN STEM CELL TREATMENT FOR SCLERODERMA

Section 3 of 5: My Values

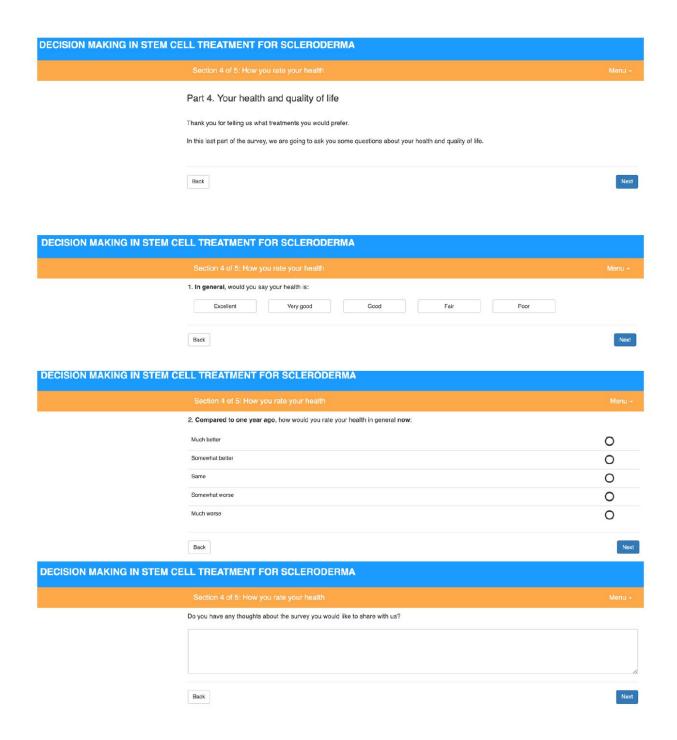
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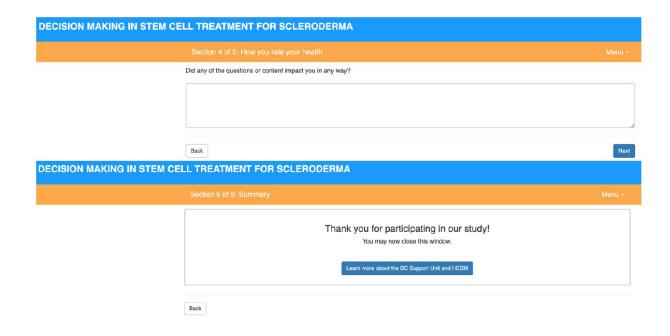
Imagine that you have had diffuse cutaneous systemic sclerosis for 3 years and are a candidate for stem cell transplant.

Which treatment do you prefer?

Question 1 of 12

		Stem cell transplant A	Stem cell transplant B	No stem cell transplant	
ears after treatment without urther scleroderma organ lamage	0	5 years	2 years	1 year	
mmune suppression treatment ind risk of immediate omplications	6	Chemotherapy: Risk of complications which could lead to death: 10% (10 in 100) Click here for more information	Low dose chemotherapy and full body irradiation: Risk of complications which could lead to death: 5% (5 in 100) Click here for more information	No additional risk of immediate complications	
.ate complications (i.e. cancer)	0	Risk of late complication from treatment (e.g cancer) in the future: 20% (20 in 100)	Risk of late complication from treatment (e.g. cancer) in the future: 5% (5 in 100)	No additional risk of late complication	
Feam care (in addition to the standard medical care)	0	No additional team members	Extended medical team: Rheumatologist Hematologist Cardiologist Respirologist Nurse	No additional team members	
Number of people with scleroderma the hematologist has treated using stem cell transplant	0	5 or more patients	5 or more patients	No information	
Additional cost to you expenses not covered by the provincial health plan, nor your health insurance)	0	\$5,000 - \$10,000	\$1,000 - \$5,000	No additional costs	
Additional distance of treatment center to your home	0	Between 50 and 300 km	Between 300 and 1,000 km	0 km	
			Which treatment do you prefer?		





Section 2. GRIPP2-Short Form Checklist for the Reporting of Patient Engagement in Research

Sec	ction and Topic	Item
1.	Aim	Report the aim of PPI in the study.
		Researchers and Canadian patients with scleroderma co-developed and distributions an international online survey to understand the preferences of people with scleroderma for autologous stem-cell transplant treatment. Based on their own personal experience living with Scleroderma, the patient partners identified a need to better understand the burden in accessing care and treatment. As a first step, the patients wanted to understand how the financial out-of-pocket costs associated with treatment. This included medical, non-medical, and travel and accommodation costs. Further, through their lived experience the patient partners recognized that this burden is likely exacerbated for those living in smaller communities and wanted to estimate the extent of this inequity.
2.	Methods	Provide a clear description of the methods used for PPI in the study
		Throughout the research process, patient partners and researchers met several times per year through teleconference meetings and communicated regularly through email. The survey was codeveloped by the patient partner and researchers, including the questions related to cost. The patient partners reviewed the online survey and provided feedback to ensure the questions were clear and accessible. After data collection was complete, the patient partners supported the analysis and interpretation of the data. They also contributed to writing of the manuscript, particularly in putting the findings within the broader literature and understanding the implications for policy makers
3.	Study Results	Outcomes—Report the results of PPI in the study, including both positive and negative outcomes
		Patient partners contributed by identifying the research question, developing the survey, including the specific questions related to and cost. Further, they reviewed the results and provided important information to outline the policy implications. Patient partners also help write and subsequently review this final manuscript and chose the target journal.
4.	Discussion and Conclusions	Outcomes—Comment on the extent to which PPI influenced the study overall. Describe positive and negative effects.
		The patient partners were the driving force in conducting this research which lends credibility to the findings. It was their input that led to the inclusion of questions related to cost, and their idea to approach this question with an equity lens. Furthermore, the policy insight through work with the Scleroderma society helped us shape the findings in a way that is relevant to policy makers, in particular thinking about the implications for virtual care which is a key policy priority given the pandemic.
5.	Reflections/critical perspective	Comment critically on the study, reflecting on the things that went well and those that did not, so others can learn from this experience.

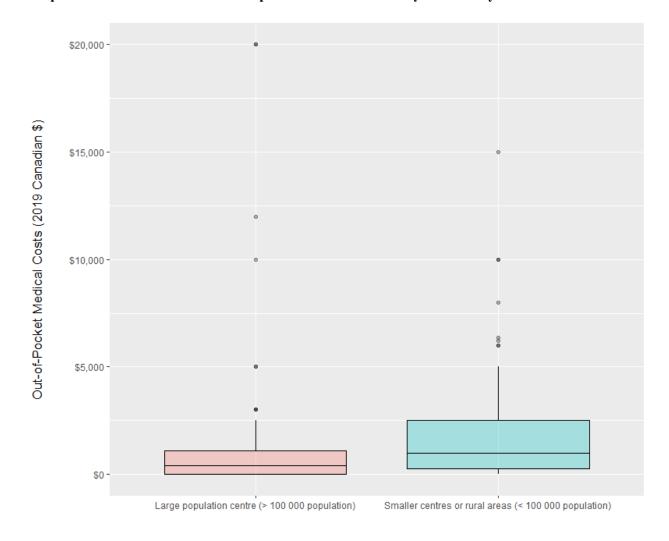
Our sample appears to be representative of the Canadian scleroderma community based on demographic and clinical characteristics (gender and age) when compared with a prior survey. However, due to our recruitment strategy our sample came almost exclusively from three Canadian provinces. As such, our results may not be representative of all Canadians.

Despite being open for several months, we received only 120 Canadian respondents to the survey. This may reflect that this analysis was only one part of a larger survey that included questions related to treatment preferences. As a result of the sample size, we dichotomized the indicator for community size (small vs large) which may mask some important differences in cost, particularly for those living in rural/remote communities.

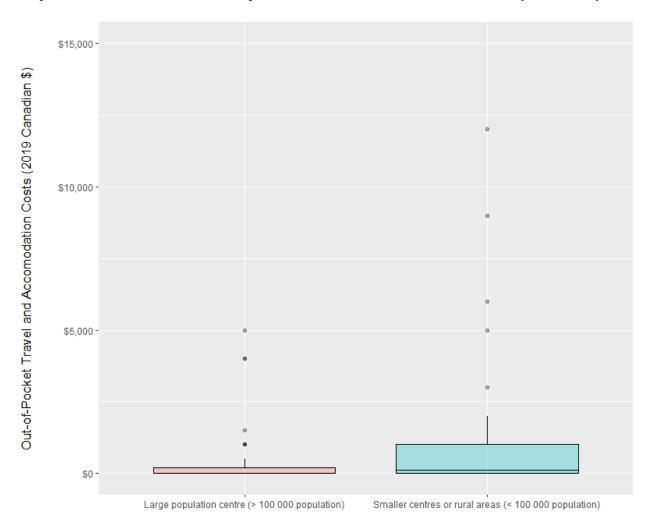
Despite these challenges, this is the first Canadian study to provide an estimate of the burden to access care for those living with Scleroderma. This was a research question identified by patients and can be used to inform future research to improve outcomes and equity.

Section 3.

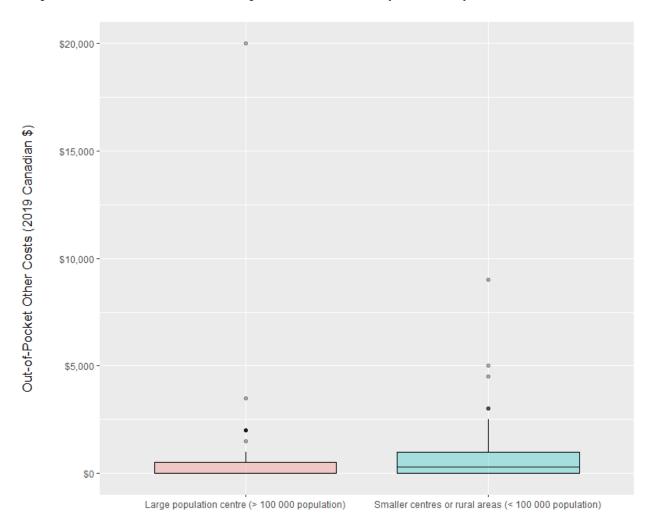
Boxplots of the distribution of out-of-pocket "medical costs" by community size



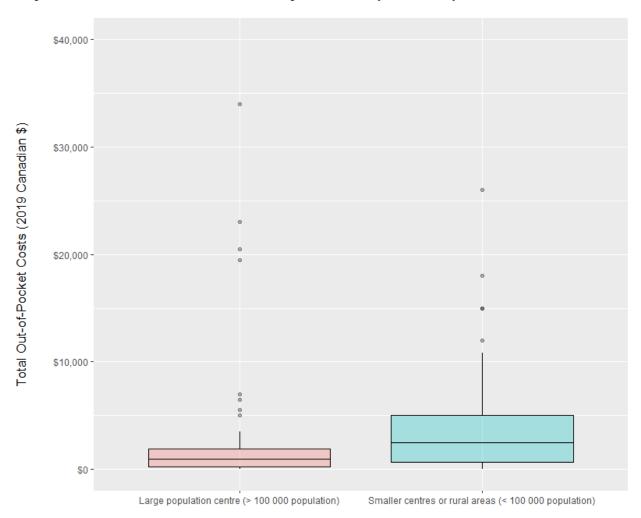
Boxplots of the distribution of out-of-pocket "travel and accommodation" costs by community size



Boxplots of the distribution of out-of-pocket "other" costs by community size



Boxplots of the distribution of "total" out-of-pocket costs by community size



Section 4. Exponentiated regression coefficients and confidence intervals [CI]s for multivariate models exploring the relationship between community size and out-of-pocket costs

	Total Costs		Medical Costs		Travel/Accommodation Costs		Other Costs	
	logistic: OR [CI]	glm: exp^{β} [CI]	logistic: OR [CI]	glm: exp^{β} [CI]	logistic: OR [CI]	glm: exp^{β} [CI]	logistic: OR [CI]	glm: exp^{β} [CI]
Community Size								
Large Urban Centre ≥100k (reference)	-	-	-	-	-	-	-	-
Smaller Urban Centre or Rural Area<100k	2.19 [0.77-6.64]	1.53 [0.77-3.01]	3.56 [1.51-8.86]	0.83 [0.39-1.75]	2.17 [0.99-4.87]	2.77 [1.14-6.27]	1.78 [0.81-4.00]	0.96 [0.36-2.47]
Age (per decade)	0.78 [0.48-1.24]	0.93 [0.68-1.27]	0.68 [0.45-1.01]	1.2 [0.86-1.66]	0.77 [0.53-1.10]	0.90 [0.63-1.29]	0.82 [0.57-1.17]	0.85 [0.51-1.37]
Gender								
Female (reference)	-	-	-	-	-	-	-	-
Male	0.50 [0.14-2.08]	0.91 [0.37-2.71]	0.53 [0.16-1.77]	1.26 [0.46-4.18]	0.38 [0.11-1.19]	3.04 [0.81-17.14]	0.35 [0.10-1.10]	0.95 [0.22-7.23]
Household Income (per \$1,000)	1.01 [0.97-1.06]	0.97 [0.95-1.00]	0.99 [0.96-1.02]	0.97 [0.95-1.01]	0.96 [0.91-0.99]	0.99 [0.96-1.04]	0.96 [0.91-1.00]	1.00 [0.93-1.09]
Scleroderma Type								
Limited (reference)	-	-	-	-	-	-	-	-
Diffuse/Other	2.02 [0.72-5.97]	1.27 [0.68-2.36]	1.37 [0.59-3.25]	1.35 [0.71-2.55]	0.76 [0.35-1.66]	1.18 [0.55-2.57]	1.62 [0.74-3.61]	0.89 [0.33-2.32]
Self-reported Health								
Excellent; Very Good; Good (reference)	-	-	-	-	-	-	-	-
Fair; Poor	0.46 [0.20-1.19]	0.53 [0.18-1.57]	0.47 [0.19-1.35]	1.14 [0.40-3.33]	0.92 [0.37-2.91]	0.5 [0.17-1.42]	0.76 [0.19-4.29]	0.46 [0.20-1.19]
Observations	120	101	120	83	120	62	120	60

OR: odds ratio; glm: generalized linear model; CI: confidence interval