PEER REVIEW HISTORY

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ARTICLE DETAILS

TITLE (PROVISIONAL)	Supporting the Spread and Scale-up of electronic consultation across Canada: a cross-sectional analysis
AUTHORS	Liddy, Clare; Bello, A; Cook, Jean; Drimer, Neil; Dumas Pilon, Maxine; Farrell, Gerard; Glassford, Jodi; Ireland, Laurie; McDonald, Rana; Nabelsi, Véronique; Oppenheimer, Luis; Singer, Alexander; Keely, Erin

VERSION 1 - REVIEW

REVIEWER	Mary Carter
	University of Bath
REVIEW RETURNED	22-Jan-2019

GENERAL COMMENTS	METHODS: Although New Brunswick is described as a province which has launched eConsult services, the authors do not
	explicitly explain why it was not included in the sample. RESULTS: The results for the top 5 specialties in each province are presented in the narrative, but not in a table (which would be
	easier to read).
	The authors include information about how the e-Consult
	implementation was promoted in only two of the provinces. It would have been useful to explore this aspect of the
	implementation for all 4 participating provinces, as it could have a crucial effect on uptake.
	CONCLUSION: The authors' claims are strongly stated, and perhaps should be more cautious. The limitations are not explored
	or described in sufficient detail.

REVIEWER	Hannah Edwards
	University of Bristol, UK
REVIEW RETURNED	23-Jan-2019

GENERAL COMMENTS	This is a very interesting paper on the implementation and use of an eConsult system that allows primary care doctors to communicate with specialists regarding patient care and referrals.I just a few minor comments for the authors:
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	1. For international readers, it would be very useful to add a brief paragraph in the introduction, outlining the nature of the Canadian healthcare system (e.g. in contrast to fully publically funded systems like the English NHS, and to private healthcare systems as in the US).
	2. In the methods it would be useful to have a little more detail on how both PCPs and specialists were recruited / enrolled to take part. Then in the results it would be good to see the proportion of all those eligible / approached that actually did enrol in the system.
	3. Were any ethical approvals necessary for the PCP surveys? Just adding a line to specify if they were required (and obtained) or not would be good.
	4. A key point about the benefit of the service is regarding reducing waiting times to access specialist advice. Is there is any baseline data on average wait times for access to specialists in Canada? If so it would be very interesting to report this too, so any reduction in times with the eConsult tool can be highlighted.
	5. The format of figures 2-5 is quite hard to read in Black and White. It might be simpler to give this information in tables.
	6. In figure 3 (or the text) it would be good to have more detail on what is included in "confirmed course of action" and "new/additional course of action". These ware quite broad categories and if the data is there, I'd be really interested in seeing this broken down further.
	7. In figure 4, can you add the category "referral not originally contemplated, but needed". This is reported in the results text but not the figure.
	8. Figure 6 - might be interesting to add cumulative enrolment over time.
	I recommend that this paper be published with just some minor revisions / additional information as detailed above.

VERSION 1 – AUTHOR RESPONSE

Reviewer 1

#	Comment	Response
1	METHODS: Although New Brunswick is described as a province which has launched eConsult services, the authors do not explicitly explain why it was not included in the sample.	While eConsult has been launched in New Brunswick, at the time of the study, the service did not yet have sufficient data to merit inclusion. We have noted this in the methods section to improve clarity (Page 6):
		"While an eConsult service has been implemented in New Brunswick as well using the BASE™ model, the service

		[
		had only minimal data at the time of this study and was thus excluded."
	RESULTS: The results for the top 5 specialties in	Good suggestion. We have moved this
2	each province are presented in the narrative, but not	information into Table 1 (Page 9).
	in a table (which would be easier to read).	
	The authors include information about how the e-	We have added details regarding
	Consult implementation was promoted in only two of	promotion strategies used in NL and AB
	the provinces. It would have been useful to explore	(Pages 13-14):
	this aspect of the implementation for all 4	
	participating provinces, as it could have a crucial	"AB Netcare eReferral engaged in a
	effect on uptake.	number of promotional activities aimed
		at physicians and clinical support staff,
		including presentation at local and provincial conferences, publication
		through regional authorities (e.g.
		Alberta Medical Association, Alberta
		College of Physicians and Surgeons)
		and service-affiliated websites (e.g.
1		AHS, Alberta Netcare eReferral and
		Calgary Zone Specialist LINK), in-
		person training, and webinars. The AB
_		team worked collaboratively with the
3		primary care networks and various
		specialty groups in the province to engage physicians to facilitate adoption
		of eReferral.[] In NL, promotional
		activities included presentations (e.g.,
		NL Medical Association Annual General
		Meeting, Nurse Practitioner's
		Professional Practice Group NL,
		Primary Healthcare Partnership Forum,
		NL College of Family physicians Annual
		Scientific Assembly), publications disseminated through the NL Medical
		Association (e.g., President Letters,
		eUpdates, page on the NL Medical
		Association website dedicated to
		eConsult) and outreach to local PCPs
		and specialists."
<u> </u>		
	CONCLUSION: The authors' claims are strongly	We have qualified our conclusions to
	stated, and perhaps should be more cautious. The limitations are not explored or described in sufficient	provide a more balanced assessment (Page 17):
1	limitations are not explored or described in sufficient detail.	
1		"The eConsult service has been
4		successfully implemented in four new
		provinces across Canada, three using
		the BASE™ model (MB, QC, NL) and
1		one incorporating eConsult capabilities
		into an existing eReferral platform (AB).
		Implementation strategies and scope

	varied, but services demonstrated consistency on several key metrics, most notably case outcomes. Further
	time and research is needed to assess the long-term sustainability of these services and their impact on outcomes affecting patient health."

Reviewer 2

#	Comment	Response
	For international readers, it would be very useful to add a brief paragraph in the introduction, outlining the nature of the Canadian healthcare system (e.g. in contrast to fully publically funded systems like the English NHS, and to private healthcare systems as in the US).	A good suggestion. We have added a description of the Canadian healthcare system to the Methods section under Settings, where it seemed most appropriate (Pages 6-7):
1		"The Canadian healthcare system is publically funded, and provides universal access to a host of clinical services, including primary care, specialty care, and emergency medicine. Other elements of healthcare, such as pharmaceuticals and allied health services, are not universally funded. While the federal government provides funding, each province and territory is responsible for overseeing the administration of healthcare in its jurisdiction, with the exception of some specialty populations where care is managed federally (e.g. First Nations communities, members of the military, and inmates of federal penitentiaries). As such, the exact healthcare context varies slightly between the provinces participating in this study."
2	In the methods it would be useful to have a little more detail on how both PCPs and specialists were recruited / enrolled to take part. Then in the results it would be good to see the proportion of all those eligible / approached that actually did enrol in the system.	While we speak to each service's recruitment efforts in the Implementation section, we unfortunately do not have data on the number of PCPs and specialists contacted versus those who were enrolled. This is further complicated by the fact that not all recruitment was through direct contact, but included

		presentations and other forms of broad outreach. We agree that a more in- depth exploration of these techniques would be an interesting avenue for further study.
	Were any ethical approvals necessary for the PCP surveys? Just adding a line to specify if they were required (and obtained) or not would be good.	We have added a statement to this effect (Page 8):
3		"The Ottawa Health Science Network and Bruyère Research Ethics Boards provided ethics approval for this project."
4	A key point about the benefit of the service is regarding reducing waiting times to access specialist advice. Is there is any baseline data on average wait times for access to specialists in Canada? If so it would be very interesting to report this too, so any reduction in times with the eConsult tool can be highlighted.	A good suggestion. We have added detail in the introduction highlighting wait times for specialist care in Canada.
5	The format of figures 2-5 is quite hard to read in Black and White. It might be simpler to give this information in tables.	The figures will be available in colour. As such, we have elected to keep them in place of tables, as we find they offer a more dynamic presentation of the data.
6	In figure 3 (or the text) it would be good to have more detail on what is included in "confirmed course of action" and "new/additional course of action". These ware quite broad categories and if the data is there, I'd be really interested in seeing this broken down further.	Unfortunately, the only data we could include in the analysis was PCPs' response to the question, which was worded in the same way that we present it in the manuscript. While it would be interesting to review the question and response for every case in each of those categories and compare them, such an endeavor is outside of the scope of this study.
7	In figure 4, can you add the category "referral not originally contemplated, but needed". This is reported in the results text but not the figure.	This category is present, but is labelled as "referral not originally contemplated but completed."

8	Figure 6 - might be interesting to add cumulative enrolment over time.	Good suggestion. We have made this change to Figure 6.

VERSION 2 – REVIEW

REVIEWER	Hannah Edwards
	University of Bristol, UK
REVIEW RETURNED	27-Feb-2019

GENERAL COMMENTS	The authors have responded well to all of the comments from the
	first review. I recommend that this paper is accepted for
	publication.