



Telemedicine for patient education

An Interprofessional, Advanced Clinician  
Practitioner in Arthritis Care (ACPAC) -  
led program about inflammatory arthritis

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Telemedicine Program Manager

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“...I heard of the seminar.....once I saw it was at St. Michael’s, and in Toronto, **I would have found it difficult to get there.....I would [not have been able to] attend just because of the drive.** We’re seniors and it would be a challenge to drive into Toronto..”

*-RxEd Participant*



Name \_\_\_\_\_  
Address \_\_\_\_\_ Date \_\_\_\_\_

**R<sub>x</sub>** For Education

A  
Workshop  
for  
Patients  
with  
Inflammatory  
Arthritis

MD \_\_\_\_\_  
Signature \_\_\_\_\_

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# St. Michael's Hospital

- Academic health sciences centre, fully affiliated with the University of Toronto
- Home to the Li Ka Shing Knowledge Institute



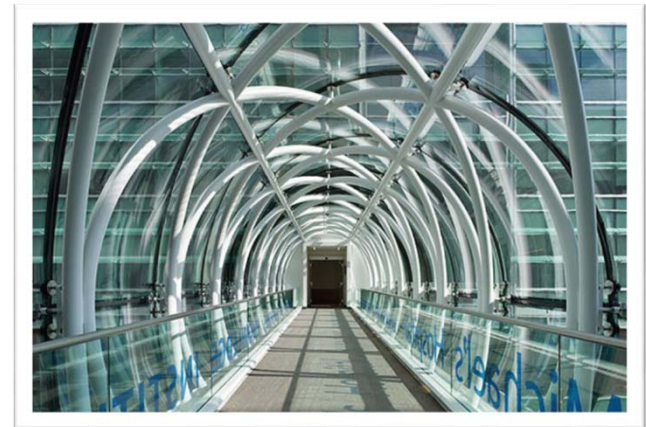
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# ACCESS



***Increasing access to inflammatory arthritis education in rural communities in Ontario using telemedicine***

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# Disclosures

This study is funded by CIORA  
(Canadian Initiative for Outcomes in Rheumatology Care)



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# Study Objectives

To evaluate the **feasibility** of using telemedicine (TM) to deliver RxEd.

- a) To explore the **process** of delivering an interprofessional program via TM.
- b) To explore **participants' perceptions** of the RxEd program delivered using TM technology.



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What you should know following this presentation

**RxEEd?**

**Outcomes?**

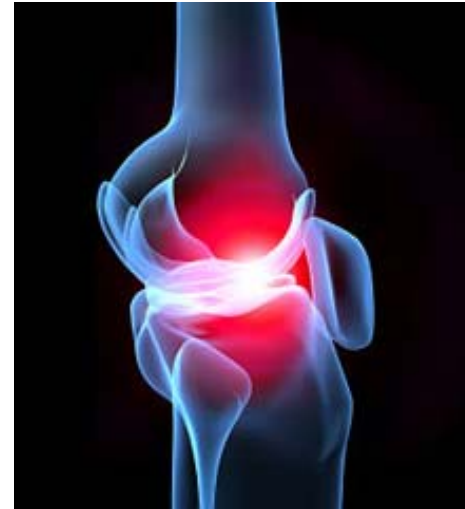
**Interventions?**





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# Inflammatory Arthritis

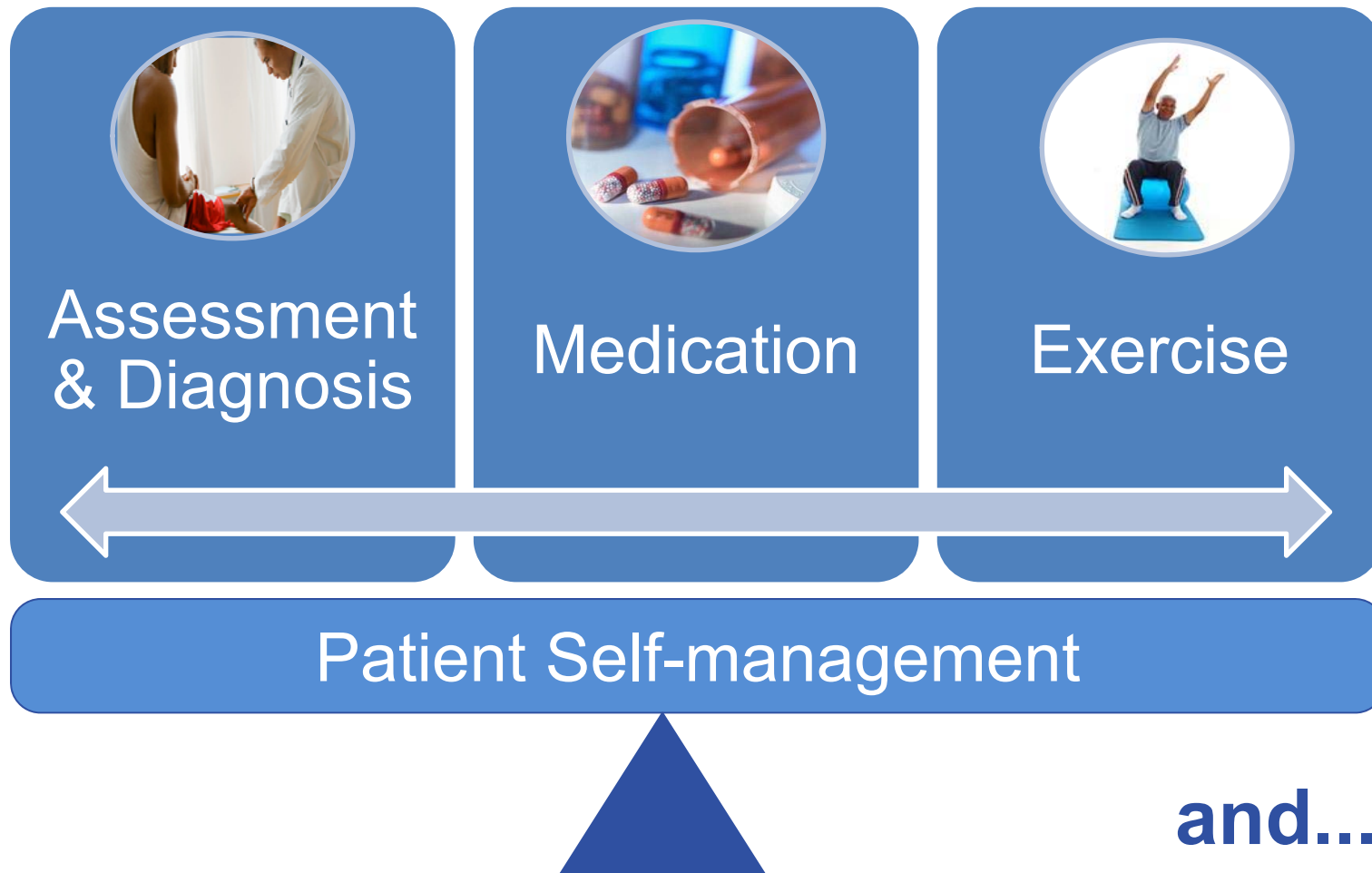


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# Management of Inflammatory Arthritis



# “Prescription for Education” Team (Martin Family Centre Arthritis Care)



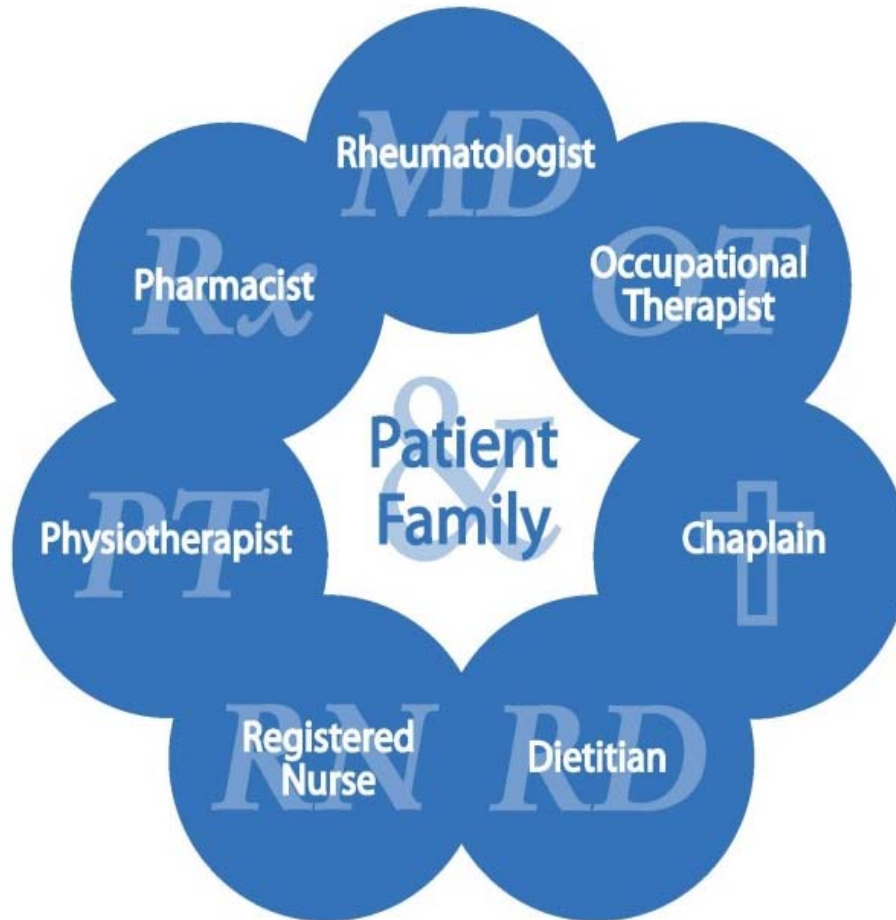
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# Prescription for Education (RxEd)



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# The Journal of Rheumatology

## The Journal of Rheumatology

Prescription for Education: Development, Evaluation, and Implementation of a Successful Interprofessional Education Program for Adults with Inflammatory Arthritis

Carol A. Kennedy, Dorcas E. Beaton, Kelly Warmington, Rachel Shupak, Caroline Jones and Sheilah Hogg-Johnson

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# Even with RxEd, a problem remains...

Population of Ontario: 13.6 million

Population living in rural, remote and northern areas: 1.9 million

## CANADA



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# One solution ...



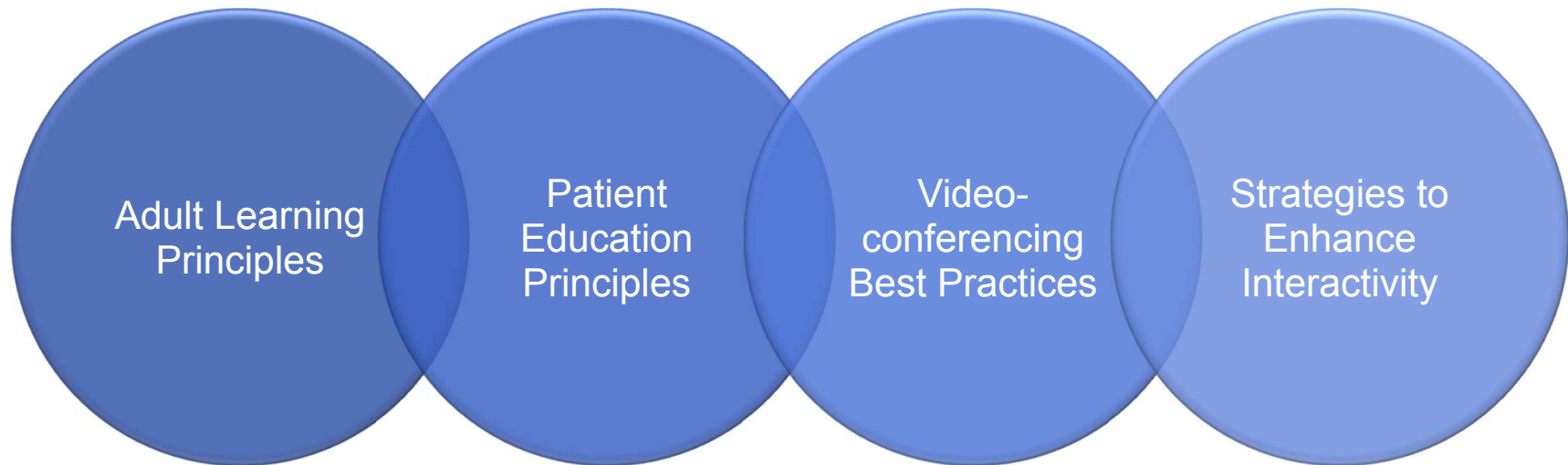
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# Videoconferencing 101 Content





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# Methodology: Mixed Methods Approach

## Quantitative



## Qualitative



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# Inclusion Criteria

≥ 18 years of age

✓ **Inflammatory arthritic disorders**

✓ Gout

✓ *Psoriatic arthritis*

✓ **Lupus**

✓ **Rheumatoid arthritis**



# Participating Communities

	# of attendees		
	Session 1 (Oct 2012)	Session 2 (May 2013)	Session 3 (Oct 2013)
<b>In-person site:</b>			
St. Michael's	12	11	16
<b>Telemedicine sites:</b>			
Thunder Bay	9	8	6
Sault Ste. Marie	10	3	2
Sudbury	10	8	8
Orangeville	8	9	6
Timmins	N/A	16	5
Brampton	N/A	3	N/A
<b>Total:</b>	<b>49</b>	<b>58</b>	<b>43</b>

**6 TM sites**

**Total 150 participants**

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# Participants' Perceptions

## $\delta$ In-person and remote (TM) sites

I would recommend this program to other people with inflammatory conditions $\delta$  (n=116)

Overall, today's session met my expectations $\delta$  (n=114)

## \*Remote (TM) sites only

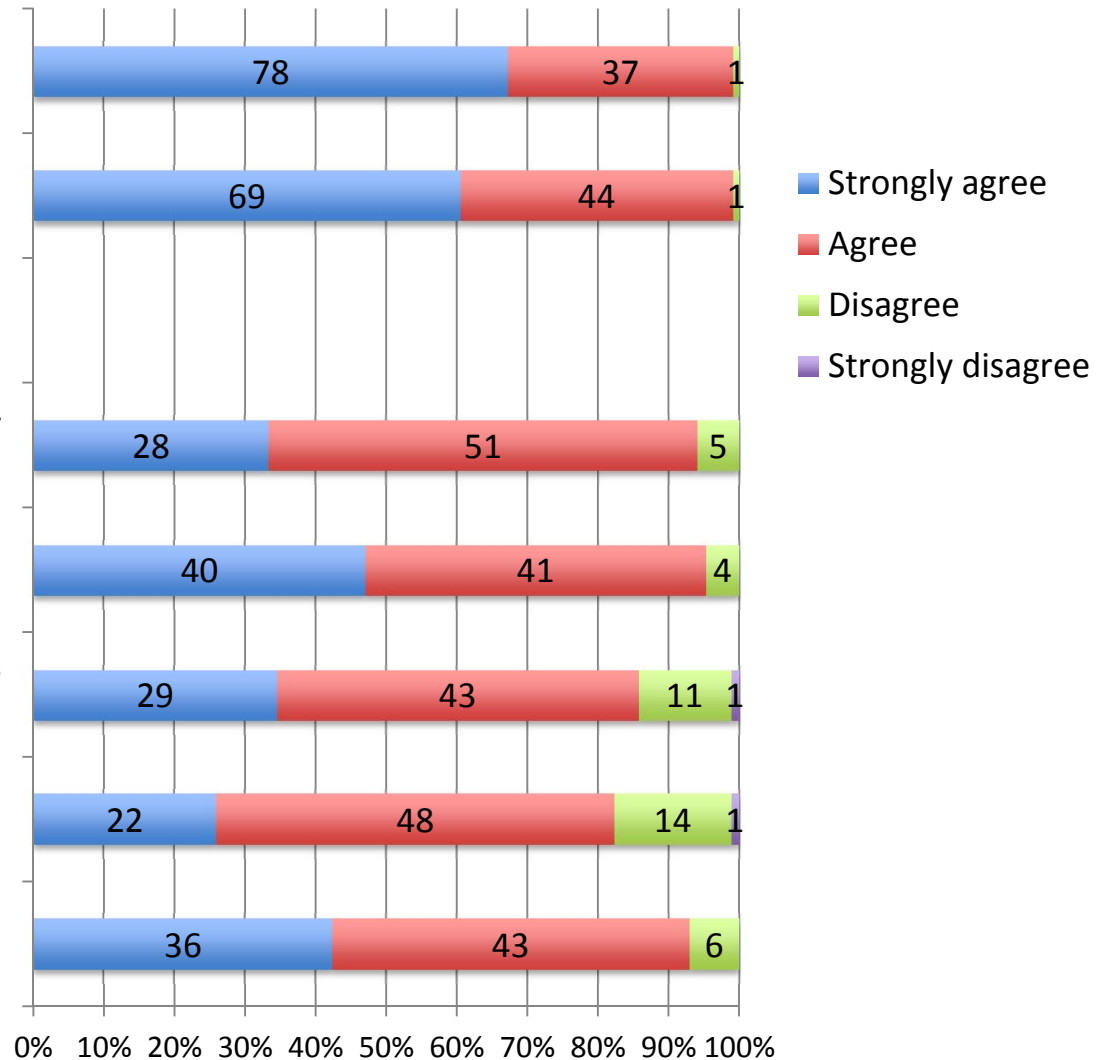
Interaction between sites was adequately facilitated\* (n=84)

I could see slides clearly\* (n=85)

I could see who was speaking at the remote sites\* (n=84)

I could hear the discussion between participants at different sites clearly\* (n=85)

I could hear the presenter clearly\* (n=85)



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## Participant Feedback: Need for Information

*[T]he fact that it was available in the outlying areas...was excellent for us and **we so appreciate having the opportunity to participate...***

*“I was basically **getting information** on arthritis and that type of stuff that we **don’t get here**. Being up north we see doctors, but they don’t totally explain how arthritis works.”*



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## Participant Feedback: Local Facilitation

*“I think sometimes we're a bit nervous when we want to ask questions, so it was **helpful to have the instructors who were at each area [remote site] kind of repeat the question.**”*



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## Participant Feedback: Local Facilitation & Peer Support

*“You probably could have sat at home and watched it on your computer. But I don’t think it would have had the same **opportunity for reinforcement, either by the facilitator or by the other people in the group.**”*



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## Participant Feedback: Peer Support

*“the greatest value I got out of it was **being there with people** who were further down the path than I was - who were saying ‘it’s going to get better’.”*





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## Educator and Co-facilitator Feedback: Quality of videoconference

***“Easy to use, it helped to have the telemedicine learning session prior to the education day. The tips that were provided were helpful and allowed for more comfort with the technology and hopefully a more successful day for the participants.”***



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## Educator and Co-facilitator Feedback: Quality of education via videoconferencing

***“[Only one] presenter flipped back and forth between themselves and the slides. We watched the slides for the duration of each presentation. This makes for a boring presentation...”***

***“The camera was pointed at the side of their head...it didn't feel like they were speaking to us.”***



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## Educator and Co-facilitator Feedback: Small group learning and activities

*“It was **easy to interact** with the other sites.”*

*“I was **impressed with the level of interaction** and how smoothly the videoconference seemed to function”*



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# Conclusions

- It is feasible to **effectively facilitate** RxEd via videoconferencing
- **Data and feedback** was useful in **improving subsequent** RxEd sessions
- Educators were able to **adapt their teaching approaches**
- All participants and educators perceived there was value in the **RxE**d program
- Most importantly, **access** to RxEd was increased to rural and remote communities



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## Next Steps

- Further enhance RxEd program
  - Open to other rural/remote sites
- Explore options for ‘repackaging’ RxEd
  - self-directed small group education with professionals
  - Several half day workshops
  - Online resources
- Continue program evaluation



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# Acknowledgements

## Study Investigators:

- Carol Kennedy, BScPT, MSc
- Kelly Warmington, MEd, PMP
- Carol Flewelling, BSc, MEd
- Rachel Shupak, MD
- Angelo Papachristos, BScPT
- Caroline Jones, BScPT
- Denise Linton, HBSc
- Dorcas Beaton, BScOT, MSc, PhD
- Sydney Lineker, BScPT, MSc, PhD

## Collaborators:

- St. Michael's Telemedicine team
  - Rashmi Bhide, Mark Kinach, Frank Yu
- Educators and co-facilitators
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Thank you.....



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