



Queen's chiropractic practice-based research network: preliminary results

Simon French^{1,2}; Peter Beliveau¹ I) Department of Public Health Sciences, Queen's University; 2) School of Rehabilitation Therapy, Queen's University

Background

Practice-based research in the chiropractic profession is desperately needed. Chiropractic is traditionally an under-researched profession and there is only scant reliable information available for even the most fundamental aspects of chiropractic clinical practice, including who seeks the care of chiropractors, for what reasons and what care is provided. The objectives of this study were to 1) Develop a practice based research network (PBRN) of chiropractors in the Queen's University region; and 2) Conduct practice-based research in the PBRN to better understand the nature of chiropractic members' clinical practice.

Methods

We invited 20 chiropractors to participate in the PBRN. Chiropractors recorded consecutive patient encounters on hand written paper encounter forms until 100 encounters were recorded, or when four weeks recording had elapsed. Three inter-related data collections were undertaken including chiropractor characteristics, encounter data, and patient characteristics. Data were analyzed using summary statistics and adjusted for clustering.



Figure 1: Flowchart of Chiropractor Participation

O-COAST (Onter	io Chiropractic Obce	rvation & Analysis S	STudy)	Incounter No	wher:					opractor ID:
START time FINISH time: I : Lawren	Patient Date of Birth.	Patient Postal Code:		Height Weight	_ ten _ te	Publicat reports 		skawater.	Comorbi 1 2 1	dies
DAAGNOSIS 1			Duration:	, Nen	old 🗌	Work related	NVA related	Patient referred (BOM (cher		orivit Medical secondars
Techniques and care p								Other chinese actor		Other patient
	ctivat C Fierdio focks C Drop							Patient referred 10 (sheds at		
Mobil 0	focks 🗌 🛛 Drop	Acapanet	Other LL	iner probl_						
Other recommendation	ans/actions:							Other chirogracter Other unerunkt		
D44500952			Terration"	moblem	anter 1	work related.	MVA related.	imaging ordered/done today	¢ 1	odysta Baprodu Problem
14454056 Z			days industry			• N		1	-	123
	civat 🗌 Herdin		Modelines -					Additional provider(s) sees 1	y patient .	et encounter Disposit, Problem
Mabi 🗌 👘	niacka 🗆 🛛 Brag	acapanet 🗆	CERN []	plane specifi				Barris and Annual States	-	manufact Distance Training
Other recommendation	ans/actions:									123
								Check all that apply: Patient gaid		Orech all that apply: New Patient
Discoute a			Denation:			Vork related:		Extended health inc paid workers comp paid	🗆	Aboriginal Non-English Speaking Background
Techniques and care p			Modelities 🗆					MVX paid		tooled
	ntivat 🗌 – HexDi Blocks 🗌 – Drog						_	veterans affair paid		follow-up appt:
Other recommendation	ans/actions:							Other Uner unit		What is the intent of care today? Acute care 🗆 Supportion care
										Weinessinaintenance care
	e following do you usually Grain Milk and		a normal anni, hear man a mgage in maderate to a			al annels, bear ma musade and bare		Which of the following best describes your smaking?	32	icate have many standard clinks yo a had on each day in the part T da
			I minutes ar mare? nor 3 smet 3 sines per week 5 or 6 sines per week nos every day ore than once every day			per week	l	Never unaked Used to smoke New smoke occasionally New unake regularly		·· by by by by by by b

Results

Chiropractor Participants (Figures 1 and 4)

Study participants were similar to all chiropractors in Ontario, Canada, with respect to sex distribution. Chiropractors who completed the study differed with respect to age, with a mean age of 39 years compared to 45 years of all Ontario chiropractors.

Patients (Figure 3)

- > The majority (68%) of patients between the ages of 25 to 64.
- > In 54% of encounters the patient was female.
- > 95% of encounters were by patients previously seen by the chiropractor.



Figure 3: Characteristics of Patients Seen

	- 1	
Chiropractor Characteristics	Mean	Range
Age in years	39	28 - 56
Years in practice	12	2 - 30
Number of patient care hours worked each week	12	2 - 23
Number of patients seen each week	36	7 – 70
	Number	%
Female	3	33
Male	6	67
Graduated in Canada	6	67
Holds postgraduate qualification	4	44
Involved in teaching	1	11
Solo practitioner	2	22
Consults in a language other than English	2	22

Figure 4: Chiropractor Characteristics

Encounters (Figures 5 to 7)

- The most frequent problem managed by participating chiropractors was back syndrome without radiating pain (20%).
- > 88% of encounters were due to musculoskeletal complaints.
- the most common forms of care provided were soft tissue therapy (68%), manual adjustment (57%), and mobilization (47%).

Problems Managed	No. per 100 encounters (n=1012)		
Back syndrome without radiating pain	20.34		
Back symptom/complaint	12.93		
Neck syndrome	12.54		
Sprain/strain of joint	8.29		
Back syndrome with radiating pain	5.92		

Figure 5: Five Most Frequent Problems

Reasons for Encounter	No. per 100 encounters (n=1018)
Musculoskeletal	88.12
General	7.37
Neurological	3.93
Circulatory	0.20
Skin	0.20

Figure 6: Top Five Reasons for Encounter by ICPC Chapter



Discussion

70

50

Increasing practice-based research in the chiropractic profession is essential, and the PBRN model may facilitate this. This first step to understand the chiropractor and patient profile of members within the network will lead to opportunities to conduct further research projects within the network.