

Interprofessional Attitudes and Interdisciplinary Practices for Older Adults With Back Pain Among Doctors of Chiropractic: A Descriptive Survey



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ABSTRACT

Objective: The purpose of this study is to report on attitudes of doctors of chiropractic (DCs) toward integrative medicine and their self-reported interdisciplinary practices for older adults with back pain.

Methods: This descriptive survey was conducted with licensed DCs in a Midwestern community in the United States. Respondents completed a 53-item postal survey of demographics, practice characteristics, referral and co-management patterns, attitudes toward interdisciplinary practice, and the Integrative Medicine-30 Questionnaire (IM-30). Descriptive statistical analysis was performed.

Results: Fifty-seven DCs completed the survey (29% response). Geriatric-focused chiropractic practices were uncommon (<15%), although 56% reported that 25% to 49% of the patients treated each week were older adults. Respondents had a moderate orientation toward collaboration with other health care providers (IM-30 mean [standard deviation] 61.3 [11.5]). The IM-30 subscales placed DCs high on measures of integrative medicine safety; moderate on patient-centeredness, openness to working with other providers, and referral readiness; and low on learning from alternative paradigms. Doctors of chiropractic most referred older patients to neurologists, family physicians, massage therapists, orthopedists, and other chiropractors. Doctors of chiropractic reported the highest levels of co-management with family physicians, physical therapists, and massage therapists. Most DCs (92%) were confident in their own ability to manage back pain in older adults, with modest confidence expressed for treatments from professionals using manual therapies. Most (77%) responded that older patients would experience the most improvement if DCs collaborated with another chiropractor, rather than with medical professionals.

Conclusion: Doctors of chiropractic in one geographic community are moderately oriented toward interprofessional practice with other health care providers for older adults with back pain. Follow-up studies in representative national and international samples are recommended. (*J Manipulative Physiol Ther* 2019;42:295-305)

Key Indexing Terms: *Chiropractic; Integrative Medicine; Geriatrics; Referral and Consultation; Attitude of Health Personnel*

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Paper submitted January 23, 2018; in revised form July 2, 2018; accepted November 2, 2018.
0161-4754

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<https://doi.org/10.1016/j.jmpt.2018.11.011>

INTRODUCTION

Older people, most typically defined as persons aged 65 years or older, report back pain at prevalence rates equal to those of working-age adults (25%-33% annually) but may experience disproportionate negative sequelae from spine-related conditions owing to their longer duration of symptoms, increased pain severity, and greater limitations in functional status.¹⁻³ Further, older people report high rates of comorbidity, which may complicate the treatment of back pain and affect the clinical outcomes achieved by those treatments. As a result, older patients may seek care from multiple provider types or may give up on health care seeking for their back pain complaints altogether.

When a decision to seek health care is made, older adults often choose to use chiropractic care for their musculoskeletal complaints, including back and neck

pain.⁴⁻⁶ Many older adults report improvements in their chief complaints after receiving chiropractic care.⁶⁻⁹ Doctors of chiropractic (DCs) treat older adults using spinal manipulation, manual therapies, and exercise and lifestyle recommendations, among other treatments.^{5,10-12} Chiropractors also may refer older patients or co-manage treatment with other health care professionals.¹⁰⁻¹² Referral is the practice of sending a patient to another provider or setting for services the referring source is not prepared to offer.¹³ In contrast, co-management is a clinical practice style “where two or more physicians actively collaborate in caring for patients with regular communication and consultation.”¹⁴

Best-practice documents state that DCs may institute co-management when older patients do not demonstrate clinical improvements, if symptoms worsen after a trial of care, when a patient requests a collaborative approach, or when comorbid conditions necessitate such arrangements.^{10,12} And yet, research suggests that interdisciplinary practice between chiropractors and other health providers is limited,¹⁵⁻¹⁷ particularly for older patients.^{4,5,18,19} Therefore, the purposes of this study were to (1) describe DC attitudes toward integrative medicine and interprofessional care for older adults with back pain, and (2) identify DC self-reported interdisciplinary referral and co-management patterns for older patients.

METHODS

The study design was a descriptive survey of licensed DCs practicing in the Quad Cities region of the states of Iowa and Illinois located in the Midwestern United States. The survey was implemented as part of a broader, federally funded research project that included a randomized controlled trial (RCT) of 3 patient-centered professional practice models for managing low back pain in older adults that included care delivery by doctors of chiropractic and/or medical physicians.^{20,21} The study received ethical approval from the institutional review boards of Genesis Health System and Palmer College of Chiropractic. We use the terms *older adult* or *older person* to designate a person who is age 65 years or older and the term *geriatrics* to describe the branch of health care dealing with the diseases and care of older adults.

Sample

We developed a mailing list of DCs working within 25 miles (40 km) of the Quad Cities from the local, paper-bound telephone directory and the online National Directory of Chiropractors (n = 280). We removed DCs who provided clinical services at clinics affiliated with Palmer College of Chiropractic (n = 22) from this list because these individuals were invited to complete a similar survey as part of the randomized controlled trial. From this retained list (n = 258), many invitations (n = 59) were undeliverable, with returned letters listing the intended recipient as deceased (n = 4) or no

longer with a practice (n = 14), or that were marked “returned to sender” by the post office (n = 41). We estimate that 199 chiropractors received the postal survey.

Instrument

The researcher-designed, self-report survey instrument consisted of a multipage paper form with 53 items including demographic and practice characteristics, attitudes about referral and co-management of older patients, current referral and co-management practices, and a questionnaire on provider attitudes toward integrative medicine. This instrument, the Integrative Medicine Questionnaire (IM-30), was validated previously with DCs, eliciting respondents’ attitudes toward integrative medicine, including openness to working with alternative paradigm practitioners, readiness to refer patients, willingness to learn from alternate paradigms, patient-centered care, and safety of integrating complementary and alternative and conventional therapies.^{22,23} The IM-30 scores range from 0 to 100, with higher scores suggesting more acceptance for integrative medicine.²³ We assessed attitudes toward working with other health care providers using investigator-designed questions that were piloted with chiropractic clinicians working in the research center for understandability, clarity, and ease of use. Respondents rated their comfort and confidence in co-managing an older person with back pain with other health care professionals on 5-point Likert-type scales (not at all comfortable or confident to extremely comfortable or confident).²⁴ Respondents rated the level of improvement in the quality of care expected from working with other providers on a 4-point Likert-type scale (no improvement to significant improvement). Respondents also reported current referral and co-management patterns with each health care provider type.^{16,17} Lastly, respondents rated the importance of various information exchange methods (eg, referral letters, x-ray reports) for successful co-management of back pain in older adults using a 5-point scale (not at all important to extremely important).

Data Collection and Analysis

The postal survey included an invitational letter, a survey instrument with instructions, and a stamped return envelope. Surveys included a code number to assess response; surveys returned as undeliverable were re-mailed after an internet search for a more current address for the practice location. We did not attempt additional follow-ups with other survey nonresponders. Descriptive analyses were performed using SAS 9.2 (SAS Institute, Cary, North Carolina). We combined comfort and confidence scores of 3, 4, or 5 (confident/comfortable to extremely confident/comfortable); quality improvement scores of 3 or 4 (noticeable to significant improvement); and information importance scores of 3, 4, or 5 (important to extremely important) to simplify results presentation.

Table 1. Respondent Demographic and Practice Characteristics (n = 57)^a

Characteristics	Variable	n (%)
Age, mean (SD)	Years	49.5 (11.4)
Sex	Male	39 (68)
	Female	18 (32)
Race	White	51 (89)
	Black/African-American	2 (4)
	American Indian/Alaska Native	1 (2)
	Other/multiple races	3 (6)
Ethnicity	Non-Hispanic/Latino	54 (95)
	Hispanic/Latino	1 (2)
DC licensure	Yes	57 (100)
Clinical practice, mean (SD)	Years	19.9 (11.6)
Practice setting (mark all that apply)	Chiropractic clinic	55 (96)
	Multispecialty clinic	1 (2)
	Hospital	1 (2)
	Integrative health care center	0
	Other setting	3 (5)
Other clinicians working in your practice setting, mean (SD)	Number	0.9 (1.1)
Patients age 65 years or older seen per week in clinical practice (%)	<25	17 (30)
	25-49	32 (56)
	50-74	6 (11)
	>75	1 (2)
Patients with back pain or musculoskeletal problem seen per week in clinical practice (%)	<25	2 (4)
	25-49	4 (7)
	50-74	14 (25)
	>75	35 (61)

DC, doctor of chiropractic; SD, standard deviation.

^a Some items contained missing data

RESULTS

Demographic and Practice Characteristics

Table 1 depicts the demographic and practice characteristics of survey respondents. We received 57 useable surveys for a response rate of 29%. The sample was 68% male, 89% white, and 95% non-Hispanic or Latino. The mean (standard deviation [SD]) age of respondents was 49.5 (11.4) years. The mean (SD) time in clinical practice

was 19.9 (11.6) years. Most respondents (96%) were engaged in private practice, usually in single provider offices. Additional practice settings included hospitals (2%), multispecialty clinics (2%), or other setting (5%). Respondents reported most of their patients were seeking care for back pain or other musculoskeletal conditions (86%). Geriatric specialization was uncommon, with less than 15% of respondents reporting practices composed of

Table 2. Respondent Attitudes Toward Integrative Medicine (n = 57)

Integrative Medicine-30 (IM-30) Questionnaire Subscale	Mean (SD)
Learning from alternate paradigms	46.1 (20.4)
Readiness to refer patients to other paradigms	60.5 (16.6)
Awareness and openness to working with practitioners from other paradigms	60.8 (20.3)
Patient-centered care	67.3 (20.7)
Safety of integrative medicine	80.1 (13.0)
Overall IM-30 score (0-100)	61.3 (11.5)

IM-30, Integrative Medicine-30 Questionnaire; SD, standard deviation.

primarily older adults. In a typical week, most chiropractors (56%) reported that 25% to 49% of their patients were ages 65 years or older.

Integrative Medicine Attitudes

Respondents scored a mean (SD) overall score of 61.3 (11.5) on the IM-30, suggesting a moderate orientation toward engaging in collaborative practice with providers trained outside of the field of chiropractic (Table 2). Respondents scored high on the *safety* subscale (80.1 [13.0]), indicating support for the safety of combining complementary with conventional treatments. Moderate *patient-centered care* scores (67.3 [20.7]) suggest that respondents tailored their treatments to individual patient needs. Respondents also scored in the moderate range on subscales for *openness to working with other practitioners* (60.8 [20.3]) and *readiness to refer* patients to other practitioners (60.5 [16.6]). Relatively low scores on *learning from alternative paradigms* (46.1 [20.4]) hinted that these respondents might be less accepting of knowledge derived from disciplines outside of the chiropractic profession.

Interdisciplinary Co-management Attitudes

Doctors of chiropractic rated their comfort in co-managing older adults with back pain as moderate to high for all provider groups identified in the survey (Table 3). Respondents reported the highest comfort levels with co-managing older patients with other DCs, followed by family medicine physicians, neurologists, massage therapists, and orthopedists. Doctors of chiropractic were less comfortable with co-managing older patients with advanced practice nurses and physician assistants.

Most chiropractors (92%) reported confidence in their own ability to treat back pain in older adults, although 8% of respondents were not confident treating back pain in this patient population. Respondents also were confident that other chiropractors could treat back pain in older adults

(95%). Moderate confidence ratings (58%-66%) were reported for the ability of other health care professionals to treat back pain when those providers had specific training in manipulative, manual, or mind-body therapies, including physical therapists, osteopathic physicians, acupuncturists, and massage therapists (Table 3). Other providers whose clinical focus is on the neurologic or musculoskeletal system, such as pain specialists, neurologists, orthopedists, and occupational therapists, also gained moderate confidence ratings (50%-55%) for their back pain treatments. Respondents reported low confidence (27%-33%) in the ability of primary care providers (advanced practice nurses, physician assistants, and family medicine MDs) and mental health specialists to treat back pain in older persons.

Respondents (77%) anticipated that the greatest improvements in the quality of care for back pain patients would be achieved if they co-managed care with other chiropractors (Table 3). Moderate improvements (53%-67%) in care quality were projected from collaboration with providers who incorporated manual or mind-body therapies (eg, physical therapists, massage therapists, occupational therapists, acupuncturists, or doctors of osteopathy) or who specialized in neurological or musculoskeletal techniques (eg, neurologists, pain specialists, orthopedists). Lesser degrees of improvement in care quality were reported for back pain co-management conducted with primary care (family medicine physicians, physician assistants, and advanced practice nurses) and mental health providers (39%-49%).

Interprofessional Co-management Practices

Respondents most often referred patients for back-related conditions to neurologists, family medicine doctors of medicine, massage therapists, orthopedists, and other chiropractors (Fig 1). Few referrals were made to mental health providers, occupational therapists, and physician assistants, while no referrals were made to advanced practice nurses. Three respondents (5%) reported they had never referred a patient to another health care provider for

Table 3. Chiropractor Attitudes on Co-management of Older Adults With Back Pain With Other Health Care Providers (%)

Provider Type	Comfort in Co-managing With Provider Type ^a	Confidence in Treating Ability of Provider Type ^b	Quality of Care Improvement From Co-management ^c
Doctor of chiropractic	86	95	77
Family medicine	80	33	49
Neurologist/neurosurgeon	78	53	62
Massage therapist	77	66	62
Orthopedic surgeon	71	50	60
Physical therapist	63	58	67
Pain specialist	69	55	60
Acupuncturist	76	64	58
Doctor of osteopathy	71	60	53
Mental health provider	74	29	39
Occupational therapist	67	50	60
Physician assistant	56	29	43
Advanced practice nurse	58	27	41

MD, doctor of medicine.

^a Missing data ranged from 4-9 respondents by provider type on comfort question.

^b Missing data ranged from 2-8 respondents by provider type on confidence question.

^c Missing data ranged from 6-11 respondents by provider type on quality of care question.

evaluation or treatment of a back-related condition. Chiropractors reported much less co-management of back problems with other providers than referrals, with co-management occurring more often with family medicine doctors of medicine, physical therapists, and massage therapists. Seven respondents (12%) reported that they had never co-managed a back pain patient with another provider.

Table 4 presents additional details of the respondents' interprofessional co-management practices for the care of older patients with back pain. In the past year, respondents reported making relatively few recommendations to older patients that they should visit a medical doctor about a health problem (Table 4). Such recommendations were made to older patients in general a few times per year (46%), at least once a month (35%), at least once a week (14%), and on a daily basis with their older patients (4%). Chiropractors recommended older patients discuss the following health concerns with their primary medical doctors: back problems (53%), headaches (35%), neck problems (30%), other musculoskeletal problems (44%), other painful conditions (49%), or other health conditions (65%).

Chiropractors considered radiographs or radiographic reports (96%), past health history (91%), medications

(89%), laboratory reports (89%), treatment plans (87%), case reports (84%), and referral letters (60%) as key health records needed for the co-management of older adults with back pain (Table 4). Respondents preferred to share clinical information with other providers through mailed or faxed documents (98%), telephone calls (76%), electronic medical records (75%), or electronic mail (66%), with face-to-face consultations (45%) the least preferred method.

DISCUSSION

Older adults have expressed interest in receiving collaborative health care from DCs and medical physicians.¹⁹ Doctors of chiropractic may hold varying attitudes toward integrative models of professional practice, although few studies have assessed such perspectives.²⁵ Our survey found that DCs working in a limited geographic area were moderately oriented toward engagement in interdisciplinary practice with other health care providers, as measured by the IM-30 instrument.²³ In our study, respondents scored highly on a subscale for the perceived safety of integrative medicine, moderately on subscales for openness to interprofessional practice and readiness to refer, and low on the willingness to learn from other

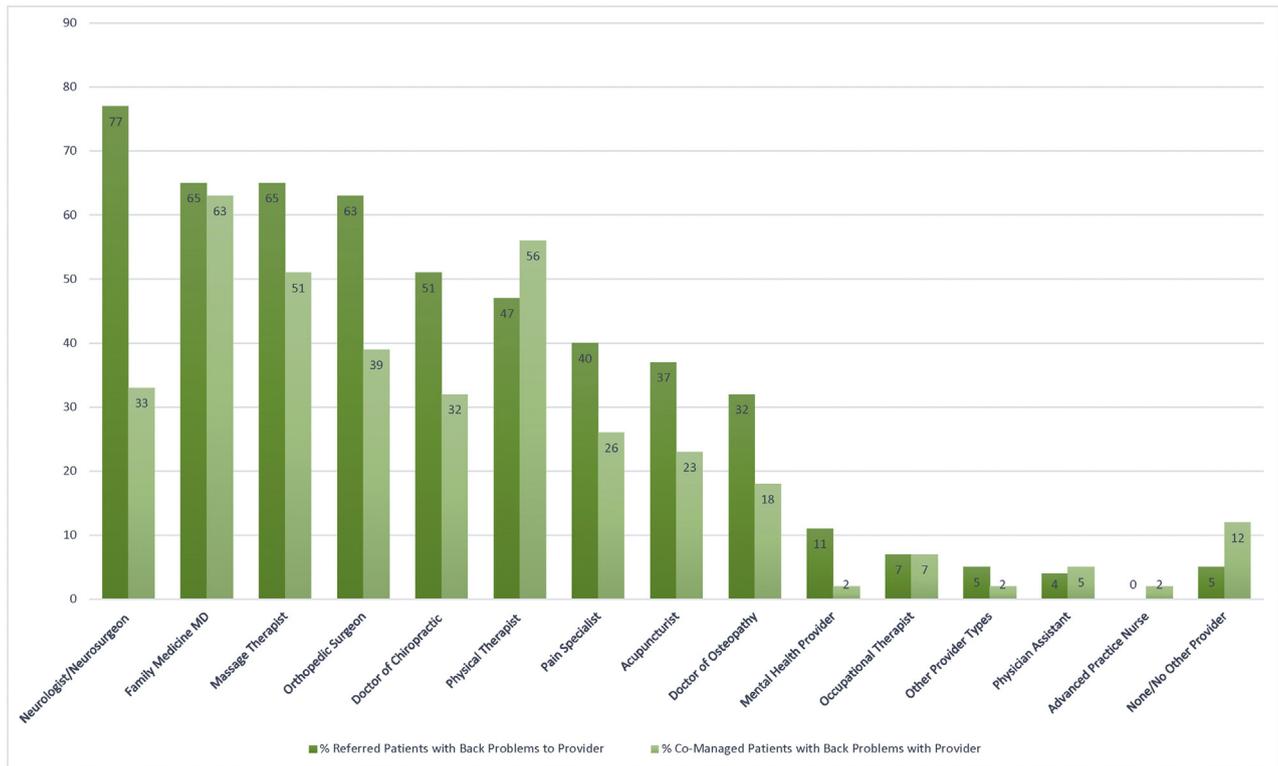


Fig 1. Referral and co-management patterns of doctors of chiropractic for older patients with back pain. MD, doctor of medicine.

paradigms subscale. Comparable attitudes toward interdisciplinary practice were reported in previous studies of DCs using this instrument²³ and chiropractic students using a similar questionnaire.²⁶ Such low scores suggest the possibility that DCs might have a strong preference for not working with other health care professionals, particularly with the high number of solo clinician practices (75%) and generally low referral rates (<1/month) to most health professional types reported by chiropractors in a recent practice analysis survey.²⁷ However, these low-to-moderate scores also might be due to the relative lack of opportunity chiropractic students and practitioners have to learn from and work with other health care professionals in their initial training or subsequent clinical practice. Examples of interprofessional education that include chiropractic students or clinicians are not reported widely in the literature,²⁸ although published examples suggest positive responses to such exchanges from the professionals involved.²⁹⁻³¹

Little is known about how chiropractors treat, refer, or co-manage older patients in real-world settings.^{5,32} In this study, respondents' attitudes toward integrative medicine were reflected in their self-reported practice characteristics. These DCs indicated they more often referred older patients as opposed to co-managing care

with other health care providers. This finding is consistent with population-based analyses of Medicare claims data that reported very low rates (4.9%-10.9%) of concurrent care for older patients between DCs and other providers, including primary care physicians, physical therapists, or orthopedists.¹⁸

The reasons why the DCs in this study did not report more frequent co-management of older adults with other health care providers are unclear. Although the severity or complexity of back conditions in some older adults might not warrant a team-based approach to care, research suggests that older patients with back pain, including chiropractic users, might be at risk for specific types of functional declines and increased health services use.^{3,33,34} For instance, among Medicare beneficiaries with uncomplicated back pain, older adults who use chiropractic care reported comparable outcomes in activities of daily living and lower body function as nonusers, but had higher risks for declines in self-reported health as those who used medical care only.³³ In contrast, older chiropractic users who completed the 2012 National Health Interview Survey reported significant functional limitations of the lower body, including difficulty walking without equipment, walking longer distances, and in climbing stairs, which were paired with high rates of cardiovascular, cancer,

Table 4. *Chiropractor Interprofessional Co-management Practice Characteristics (n = 57)^a*

Characteristics	Variable	n (%)
Recommended older patient visit a medical doctor about a health problem in past year	A few times	26 (46)
	Monthly	20 (35)
	Weekly	8 (14)
	Daily	2 (4)
Recommended older patient discuss a health concern with medical doctor in past year	Back problems	30 (53)
	Headaches	20 (35)
	Neck problems	17 (30)
	Musculoskeletal condition	25 (44)
	Other painful condition	28 (49)
	Other health condition	37 (65)
	Have not recommended a medical doctor	0
Key health records needed for co-management of older adults with back pain (important to extremely important)	Radiographs or x-ray reports	52 (96)
	Past health history	51 (91)
	Medications	48 (96)
	Laboratory reports	48 (89)
	Treatment plans	46 (87)
	Case reports	46 (84)
	Referral letters	33 (60)
	Have not recommended a medical doctor	0
Preferred methods for sharing clinical information with other providers	Mailed or faxed documents	54 (98)
	Telephone calls	42 (76)
	Electronic medical records	39 (75)
	Electronic mail (email)	35 (66)
	Face-to-face consultation	24 (45)
Have not referred any patients to other health care providers for back problems	Yes	3 (5)
Have not comanaged any patients with other health care providers for back problems	Yes	7 (12)

^a Some items contained missing data that were not included in calculation of percentages.

diabetes, and arthritis comorbidities. In addition, 23% of those older chiropractic users had an emergency room visit, with 11% admitted to the hospital in the prior 12 months. These findings are consistent with the characteristics of older patients who were part of the Back Complaints in Elders cohort study.³ The Back Complaints in Elders study noted that both younger old (age >55-74 years) and older

old (age ≥75 years) reported moderate levels of back pain and disability and considerable use of pain medications (72% of all patients).³ The older old cohort also experienced greater disability levels, additional musculoskeletal disorders, poorer bone quality, and more comorbidity.³ In another study, Medicare beneficiaries who had higher continuity of care scores had lower rates of

preventable hospitalizations.³⁵ These previous studies suggest that chiropractors might engage in routine, ongoing, interprofessional co-management of their older patients to promote optimal health outcomes of this population. This interpretation of these data is supported by additional work by our team, in which both medical doctors and doctors of chiropractic noted that knowledge of each profession's treatment protocols, mutual goals for patient care, health care record exchanges, and direct communication between providers can support older adults in achieving their care goals, although organizational structures to support such interdisciplinary collaboration are needed.³⁰

Health care services for older people, particularly those with functional limitations, will continue to expand as the prevalence of arthritis-related disability is estimated to increase to 25 million older adults by the year 2030.^{36,37} Although most DCs in our study were confident in their ability to treat back pain in older patients, some expressed a lack of confidence in this area. This finding is not surprising given that older people have longer health histories, are more likely to have simultaneously occurring and potentially overlapping medical conditions, may experience and express pain differently than younger people, are subject to unique risks from health care interventions, and may require special treatment adaptation owing to age-related or comorbid health conditions.¹¹

Chiropractors in general may need additional education on the care of older patients beyond that offered during chiropractic training, as considerable gaps in that training are known to exist. For example, a syllabi review of 18 chiropractic colleges found that only 61% of these programs had a designated geriatrics course and that just 28% of those courses included any clinical content, described by the authors as "meager experiences limited to shadowing a doctor, or interviewing one or two elderly patients."^{38(p33)} Chiropractic colleges might implement standalone courses with strong clinical components that emphasize community-based geriatric rotations, hands-on experiences with older adults, geriatric standardized patients, and interactive learning as used in other health disciplines.^{39,40} Such programs not only should focus on the diagnosis and treatment of spinal pathologies and musculoskeletal conditions, but also prepare DCs to assess co-morbid conditions in older people, promote mobility and prevent falls,⁴¹ identify when referral or co-management is necessary, and link older people with needed community services.^{42,43} Clinical experiences in which chiropractic students care for older patients alongside primary care providers, mental health specialists, and social services professionals could develop these needed skill sets for managing the health of older persons and increase chiropractors' confidence and comfort in working with

other health care providers and potentially improve clinical outcomes.

Limitations and Future Studies

This survey was designed as a descriptive study of a local practice community of DCs, as context for a randomized controlled trial of interprofessional care for older adults, which will limit the generalizability of our findings outside of this unique practice setting. The major strength of this study was triangulation of self-reported clinical practice patterns with a validated instrument (IM-30) to assess DC attitudes toward integrative medicine. Respondents appeared to have little difficulty completing the IM-30, and our findings are consistent with other studies that have used the tool, suggesting this instrument may be useful for assessing DC attitudes toward interprofessional care in representative samples. Respondent demographics in our survey also were similar to those from a national practice survey of US chiropractors, which was another strength of this study.²⁷ A limitation of the present study was its modest response rate (29%), which is lower than reported rates of surveys with DCs.⁴⁴ Financial incentives, follow-up mailings, or online surveys may have bolstered the response.⁴⁵ We were surprised by the number of undeliverable surveys (23% of mailing list), especially those that indicated a provider was no longer associated with a particular office. A follow-up study might explore the circumstances and impacts of DCs' decisions to establish, change, or close practice locations.

Missing data (10%-16%) were notable for questions about confidence and comfort working with selected providers, including advanced practice nurses, physician assistants, osteopathic physicians, physical therapists, acupuncturists, and mental health professionals. We cannot determine whether respondents skipped these questions owing to unfamiliarity with these providers or for other reasons. Chiropractors soon may be in a position to more easily collaborate with these varied provider types owing to recent clinical practice guideline updates and trends in health services delivery. For example, the clinical guideline on low back pain from the American College of Physicians now encourages nonpharmacologic therapies, such as acupuncture, spinal manipulation, guided exercise, and cognitive behavioral strategies, as first-line treatments.⁴⁶ Acupuncturists, physiotherapists, osteopathic physicians, and psychologists likely would provide patients with these treatments. Further, midlevel providers like nurse practitioners and physician assistants have experienced expanded scopes of practice with increased autonomy and prescriptive authority⁴⁷ that may affect patterns of referral and co-management to, from, and with

chiropractors. Chiropractic educational institutions and continuing education providers might consider adding curricula on interprofessional practice to address these and other recent changes in the health care environment.^{29,30,48}

Although geriatric-focused chiropractic practices were uncommon in this sample (less than 15%), most respondents reported that between 25% and 49% of the patients they treated each week were persons over 65 years old. This figure is significantly higher than the reported average percentage of older patients (14.7%) seen by DCs in the most recent practice analysis survey.²⁷ One reason for this might be that chiropractors with an expressed interest in caring for older patients were more likely to respond to this survey. However, this finding also is consistent with a study that reported an increased supply of DCs was associated with increased chiropractic use among Medicare beneficiaries.⁴⁹ Our sample was derived from a chiropractic practice community situated in a relatively small geographic area (Quad Cities of Iowa and Illinois) with a very high proportion of older adults who use chiropractic care and a corresponding high supply of chiropractors.^{50,51} This unique context may limit the generalizability of our findings. Thus, future studies might assess DC attitudes and practice patterns in the care of older persons in more representative national and international settings. Researchers also might consider conducting qualitative interviews with DCs to better understand the reasons for their attitudes about co-management of older adults with other health care professionals. Such data could inform curricular design for didactic and clinical training of DCs to better manage and co-manage older patients.

CONCLUSION

The chiropractors from the small, Midwestern US demographic region who completed this postal survey reported that they engaged in the interprofessional co-management of older adults with various health care professionals, most often primary care and specialist physicians. However, DCs were most comfortable and confident in the treatment abilities of other manual therapists, most often other chiropractors. Doctors of chiropractic may benefit from interdisciplinary geriatric education programs that enhance their knowledge about team-based collaboration with biomedical providers and integrative medicine strategies for the care of older people with back pain. Health care delivery systems that bring together manual therapists with different expertise may be a starting point to develop effective collaboration models for doctors of chiropractic working with older adults.

ACKNOWLEDGMENTS

The authors thank K Reeder, PhD, RN, FAHA, for her comments on an early draft of this paper; Lance Corber, MSITM, for his work related to data management for this study; and Ying Cao, MS, for his statistical analysis on this project.

FUNDING SOURCES AND CONFLICTS OF INTEREST

The study received direct funding from the US Department of Health and Human Services, Health Resources and Services Administration, Grant# R18HP15126, Co-Management of Older Adults with Low Back Pain by Medical Physicians and Doctors of Chiropractic. The project was conducted in a facility constructed with support from the National Center for Research Resources, National Institutes of Health (Grant# C06 RR015433). Dr. Goertz reports grants from HRSA during the conduct of the study; and personal fees from Palmer College of Chiropractic, personal fees from PCORI, personal fees from American Chiropractic Association, personal fees from Spine IQ, and personal fees from Prezacor, Inc, from outside the submitted work. Dr. Hondras reports grants from Health Resources & Services Administration during the conduct of the study. Dr. Salsbury reports grants from Health Resources and Services Administration during the conduct of the study. Dr. Lyons reports grants from Health Resources & Services Administration during the conduct of the study. Dr. Killinger reports grants from Health Resources & Services Administration during the conduct of the study. Dr. Vining reports grants from Health Resources and Services Administration during the conduct of the study. Dr. Wallace reports grants from Health Resources & Services Administration during the conduct of the study.

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Data collection/processing (responsible for experiments, patient management, organization, or reporting data): S.A.S., C.M.G.

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Practical Applications

- Older adults represented a substantial proportion of weekly chiropractic visits per chiropractors' self-reported practice patterns.
- Scores on a validated, integrative medicine scale showed a moderate orientation among chiropractors toward collaboration with other health care providers in the care of older persons.
- Chiropractors self-reported higher rates of referral to other health care providers than co-management of older patients, with levels varying considerably by provider type.
- Chiropractic graduate education and interdisciplinary continuing education focused on evidence-based approaches to back pain may facilitate collaborate care for older adults between chiropractors and other health care professionals.

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