

ORIGINAL ARTICLE

Within-team Patterns of Communication and Referral in Multimodal Treatment of Chronic Low Back Pain Patients by an Integrative Care Team

综合护理小组对慢性腰痛患者的多形式治疗之组内沟通和推介模式

Patrones intragrupales de comunicación y referencia en el tratamiento multimodal de pacientes con dolor lumbar crónico por un equipo de atención integral

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ABSTRACT

Background: Nonspecific chronic low back pain (CLBP) is a highly prevalent and costly public health problem with few treatment options that provide consistent and greater than modest benefits. Treatment of CLBP is shifting from unimodal to multimodal and multidisciplinary approaches, including biopsychosocially-based complementary and integrative care. Multidisciplinary approaches require unique levels of communication and coordination amongst clinicians; however, to date few studies have evaluated patterns of communication and decision making amongst clinicians collaborating in the care of challenging patients with CLBP.

Methods: As part of an observational study evaluating the effectiveness and cost-effectiveness of an integrative, team-based care model for the treatment of CLBP, we used multiple qualitative research methods to characterize within-team cross-referral and communication amongst jointly-trained practitioners representing diverse biomedical and complementary disciplines. Patterns of communication and coordinated care are summarized for 3 cases of CLBP treated by multiple members (≥ 3) of an integrative medical team embedded within an academic hospital.

Results: Patients were aged from 36 to 88 years with varied comorbidities. Qualitative content analysis revealed 5 emergent themes regarding integrative patient care and treatment decision in this clinic: (1) the fundamental importance of the

clinic's formal teamwork training; (2) the critical communicative and collaborative function of regular team meetings; (3) the importance to patient care goals of having the varied disciplines practicing "under one roof"; (4) a universal commitment to understanding and treating patients as whole persons; and (5) a shared philosophy of helping patients to help themselves. These key themes are all interconnected and form the foundation of the clinic's culture.

Conclusions: Our qualitative findings provide context for current trends in enhancing patient-centered, coordinated, and team-based care; efforts towards better understanding interprofessional communication; overcoming barriers to successful collaboration; and identifying best practices for fostering clinical teamwork and a strong team identity. Our findings also support the need for further qualitative research, in combination with quantitative research, for evaluating the effectiveness and cost-effectiveness of resource-intensive integrative models for the treatment of chronic conditions.

摘要

背景：非特定慢性腰部疼痛病（CLBP）很常见，是花费巨大的公众健康问题，其长期见效的治疗方式很少。CLBP 的治疗方法正从单一形式转为多形式和跨学科，包括基于身心的辅助和综合护理。跨学科的方法需要临床医生之间有独特的沟通和协调；但迄今为止，在临床医生共同照料

严重的 CLBP 患者方面，很少有研究对医生之间的沟通和决定模式进行过评价。

方法：我们采用了多重定性研究办法，对小组内医生的相互推介和沟通特性加以总结，以对综合小组式护理模式治疗 CLBP 的有效性和成本效益进行研究（作为观察研究的一部分）。组内医生均共同接受培训，且代表各个生物医学领域和辅助学科。从三例 CLBP 治疗总结出了医生的沟通和协调护理模式；这三例中的患者均得到小组的多位 (≥ 3) 医生的治疗；该综合医疗小组从属于一间教学医院。

结果：患者年龄为36至88岁，各患有不同的并存病。定性内容分析显示，此诊所的综合病患护理和治疗决定表现出五个主题：1) 诊所正式的小组工作会议培训极其重要；2) 定期小组会议具有极其重要的沟通和协作功能；3) 不同学科在议具有极其重要的沟通和协作功能主题价通和推介；4) 需要统一决心，将患者作为一个完整的人来进行理解和治疗；以及 5) 共同享有理念，要帮助患者以让他们自己帮助自己。这些主题都是相互关联的，并且是形成诊所文化的基础。

结论：我们的定性发现为目前的趋势提供了背景；目前趋势是要加强与患者为中心、协调一致的小组式护理；要更好地做到行业间的理解交流；克服困难以达到成功协作；以及确定出最佳的方法来促进诊所内的小组合作和小组身份认同感。我们的发现也说明，需要进行更多的定性研究，以便与定量研究一并来衡量，在治疗慢性病时资源密集的整体模式之有效性和成本效益。

SINOPSIS

Antecedentes: el dolor lumbar crónico (Chronic low back pain, CLBP) no específico es un problema de salud de gran prevalencia y coste público con pocas opciones terapéuticas que proporcionen beneficios consistentes y evidentes. El tratamiento del dolor lumbar crónico está cambiando desde enfoques unimodales a enfoques multimodales y multidisciplinarios, incluida la atención de tipo biopsicosocial complementaria e integral. Los enfoques multidisciplinarios requieren niveles únicos de comunicación y coordinación entre médicos; sin embargo, hasta la fecha pocos estudios han evaluado los patrones de comunicación y toma de decisiones entre los clínicos que colaboran en la atención de pacientes con dolor lumbar crónico difíciles.

Métodos: como parte de un estudio observacional que evalúa la efectividad y rentabilidad de un modelo integral de atención para el tratamiento del dolor lumbar crónico realizado en equipo, utilizamos múltiples métodos de investigación cualitati-

vos para caracterizar las referencias cruzadas y la comunicación intragrupal entre médicos que representan diversas disciplinas biomédicas y complementarias que habían recibido formación conjuntamente. Los patrones de comunicación y atención coordinada se resumen para tres casos de dolor lumbar crónico tratado por varios (3) miembros de un equipo médico integral que formaba parte de un hospital docente.

Resultados: los pacientes tenían edades comprendidas entre los 36 y los 88 años, y diversas comorbilidades. El análisis cualitativo del contenido reveló cinco temas emergentes respecto a la atención integral del paciente y la decisión acerca del tratamiento en esta práctica clínica: 1) la importancia fundamental del adiestramiento formal del equipo de trabajo; 2) la función de comunicación y colaboración crucial que representan las reuniones regulares del equipo; 3) la importancia para los objetivos de atención del paciente de tener las diversas disciplinas ejerciendo “bajo el mismo techo”; 4)

un compromiso universal para comprender y tratar a los pacientes como personas completas; y 5) una filosofía compartida de ayudar a los pacientes a ayudarse a sí mismos. Todos estos temas clave están interconectados y constituyen la base de la cultura de la práctica clínica.

Conclusiones: nuestros hallazgos cualitativos proporcionan contexto para las tendencias actuales de potenciar la atención centrada en el paciente, coordinada y realizada en equipo; los esfuerzos hacia una mejor comprensión de la comunicación interprofesional; la superación de las barreras para conseguir una colaboración que tenga éxito; y la identificación de las mejores prácticas para fomentar el trabajo en equipo clínico y una fuerte identidad grupal. Nuestros hallazgos también respaldan la necesidad de una mayor investigación cualitativa, junto con la cuantitativa, para evaluar la efectividad y rentabilidad de los modelos integrales que consumen grandes cantidades de recursos para el tratamiento de las afecciones crónicas.

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BACKGROUND

Chronic low back pain (CLBP) is a prevalent, costly, and highly significant health problem. Despite considerable investment over the past few decades, basic and clinical research has not translated into a decreased prevalence of CLBP or to the development of unimodal therapies that result in consistently and markedly improved efficacy.¹ CLBP is increasingly viewed as a complex biopsychosocial phenomenon in which anatomical injury interplays with psychosocial factors including previous pain experiences, beliefs and fears about CLBP, general and psychosocial health, job satisfaction, economic status, education, ongoing litigation, and social wellbeing.^{2,3} This framework has catalyzed a shift in the focus for treating CLBP to a multimodal and multidisciplinary model, integrating pain management

with physical, psychosocial, and behavioral strategies that address a patient's welfare in a holistic context.⁴

Multimodal and multidisciplinary care models for treatment of CLBP are quite varied, but common to all are interdisciplinary groups of clinicians responsible for coordinated and integrated care. Recent studies have begun to identify facilitators and barriers to effective collaboration among members of integrative medicine teams.⁵⁻⁷ However, reports that outline the collaboration process among biomedical and complementary and alternative medicine (CAM) practitioners within academically affiliated integrative medicine teams are particularly sparse.⁵⁻⁷ Better understanding of patterns of communication and referrals among members of interdisciplinary teams—including types of information shared, manner in which effective information-sharing is accomplished, how such information informs treatment strategy, and facilitators and barriers to effective communications—could lead to more effective and cost-effective patient centered care.

In 2007, the Brigham and Women's Hospital (BWH, Boston, Massachusetts) and the Harvard Medical School (HMS, Boston) launched the Osher Clinical Center for Complementary and Integrative Medical Therapies (OCC) as the clinical branch of the Osher Center for Integrative Medicine (Boston). The clinic is situated within the ambulatory center of BWH and fully integrated with respect to shared use of electronic

medical records (EMR) and physical plant. OCC clinical services include acupuncture, chiropractic, craniosacral therapy (CST), dietary and nutritional consultation, integrative medicine (IM) consultation and health coaching, massage and movement therapies, mindfulness-based stress reduction, occupational therapy consultation, psychiatry, tai chi, and yoga therapy (Box). A unique feature of the clinic was its prior assembly and extensive training of an interdisciplinary team of clinicians. This training process is summarized in the Box and described in detail elsewhere.⁸

Box Osher Center of Integrative Medicine Clinical Services (a) and Key Features of Team Training (b)

a. Clinician Type (no. of practitioners)

Acupuncturist (2)
 Chiropractor (3)
 Craniosacral therapist (1)
 Massage therapist (3)
 Medical Director/Integrative medicine consults (internist) (1)
 Movement (+ massage) therapist (1)
 Nutritionist (2: 1 staff, 1 consulting)
 Occupational therapist/integrative health coach (1)
 Psychiatrist, mindfulness-based stress reduction instructor (1)
 Yoga (+ massage) therapist (1)
 Tai chi instructor (1)

b. Key Features of Clinician Training Curriculum

- Peer-to-peer model: all clinicians are peers, teachers, learners
- Non-hierarchical communication
- Didactic and experiential teaching/learning approaches
- Teamwork training; promotion of team identity formation
- Self- and group-reflective practice
- Shared patient intake, assessment, management
- Full-team case conferences, all perspectives invited

In 2011, Osher Center researchers were awarded a National Institutes of Health (NIH) grant to conduct an observational study of CLBP treated by the OCC multidisciplinary clinical team. A secondary aim of this study was to characterize the flow of patients, communication and referral patterns, modes of thought and decision-making among OCC clinicians, and how varied disciplinary perspectives contribute to integrative care for back pain patients whose care is overseen by multiple clinicians. To best capture these features of clinician interaction, a sub-study was initiated using qualitative methods and is reported here. A sampling of unique case descriptions is included to illustrate patterns of decision-making, referral, and treatment trajectories typical of multimodal treatment of complex patients at the OCC.

METHODS

The qualitative study took place from May 2012

through June 2013 as part of a larger observational study of 150 consecutive CLBP patients treated at the OCC; the parent study is still ongoing, and results will be presented elsewhere. Both studies were approved by the Partners institutional review boards, and all patients signed an informed consent document. Every fifth patient enrolled in the CLBP study was also followed in the embedded qualitative study, up to a total of 18, sufficient to reach saturation in mapping typical treatment trajectories followed by LBP patients at the OCC. Sub-study data sources included the progression of all 18 patients, whose treatment courses were monitored as a means of tracking clinician interactions in patient care. Three of the most complex of these cases are described in this paper to illustrate referral patterns and multimodal treatment trajectories. These cases were selected on the basis of being the first 3 participants in the parent CLBP study receiving treatment from 3 or more non-MD OCC clinicians.

An ethnographer (BO'C) who has been documenting the creation of the clinic since its inception oversaw collection and analysis of qualitative data for this study. Data collection entailed participant-observation and annotation of monthly case-conference meetings where complex patients were discussed collectively; clinicians' chart-assisted written recall reports; and email-requested impressionistic (vs clinical) summaries with subsequent face-to-face and email clarifications of key points between the ethnographer and the clinicians. These data sources were triangulated with ongoing direct chart review of clinicians' EMR progress notes. All spoken word data were manually annotated or recorded and subsequently transcribed verbatim by the ethnographer. For both documentary and participant observation data repetitive themes relating to clinician decision-making, team treatment, and internal referral were identified by the ethnographer using conventional content analysis.⁹⁻¹¹

All patients in our observational study were treated naturalistically according to the treatment strategy inherent to OCC. This approach begins at first contact with front-desk staff. Patients expressing a preference for a particular clinician are booked with that clinician for intake. Patients unsure about clinicians or modalities that might be appropriate for them are triaged by front desk staff through a series of questions about symptoms and preferences with respect to available treatment modalities. Patients uncertain about CAM providers are booked for first appointment with the clinic's medical director, a medical doctor, for an integrative medicine consult. For many patients, availability of insurance coverage is the determining factor in selecting treatment modalities.

The first clinician to see any patient acts as the intake clinician for that patient, taking an initial history and making the patient's initial assessment. For all CLBP patients, the clinic uses a multipage self-report health history/patient information form with a battery of back pain-specific questions; patients are asked to fill this form out at or before their initial visit. At subsequent

visits, clinicians also conduct their own histories and assessments using their own preferred formats. Red flags for underlying medical problems (eg, indications of infection, fracture, malignancy, or impending neurological catastrophe such as *cauda equina* syndrome, a medical emergency) trigger prompt referral to a medical doctor. Otherwise, the intake clinicians formulate a treatment plan in accordance with their assessments, referring the patient to other OCC clinicians for serial or conjoint care as the patient’s history, presenting complaint, and payment preferences indicate.

SAMPLE CASE NARRATIVES

Three case narratives, incorporating clinician comments and paired with treatment trajectory maps (Figures 1-3) are presented to illustrate courses of treatment for complex patients. Quotation marks in text below identify verbatim quotes from specific OCC clinicians, indicated with letter superscripts and identified by discipline in the Table.

Case 1

Ms A was a 36-year-old former teacher referred by a physician at a nearby mind-body health center for stress management and help dealing with episodes of severe neuropathic pain and paresthesias following an occipital head injury 6 years previously. Her pain was complicated by severe sleep disorders and ongoing

Table Identification of Quoted Osher Clinical Center Clinicians by Discipline

UID	Clinician/Discipline
a	Psychiatrist
b	Chiropractor 1
c	Acupuncturist 1
d	Yoga therapist/massage therapist
e	Craniosacral therapist
f	Medical director
g	Movement therapist/massage therapist
h	Chiropractor 2
i	Chiropractor 3
j	Acupuncturist 2
k	Occupational therapist/health coach
m	Consulting nutritionist

Abbreviation: UID, unique identifier.

chronic fatigue. When she came to the OCC, she was unable to walk more than 3 blocks without intolerable pain, and needed the help of her significant other with most activities of daily living. Her intake visit was with the OCC psychiatrist, also a certified mindfulness meditation instructor specializing in pain management and a mind-body therapeutic approach.

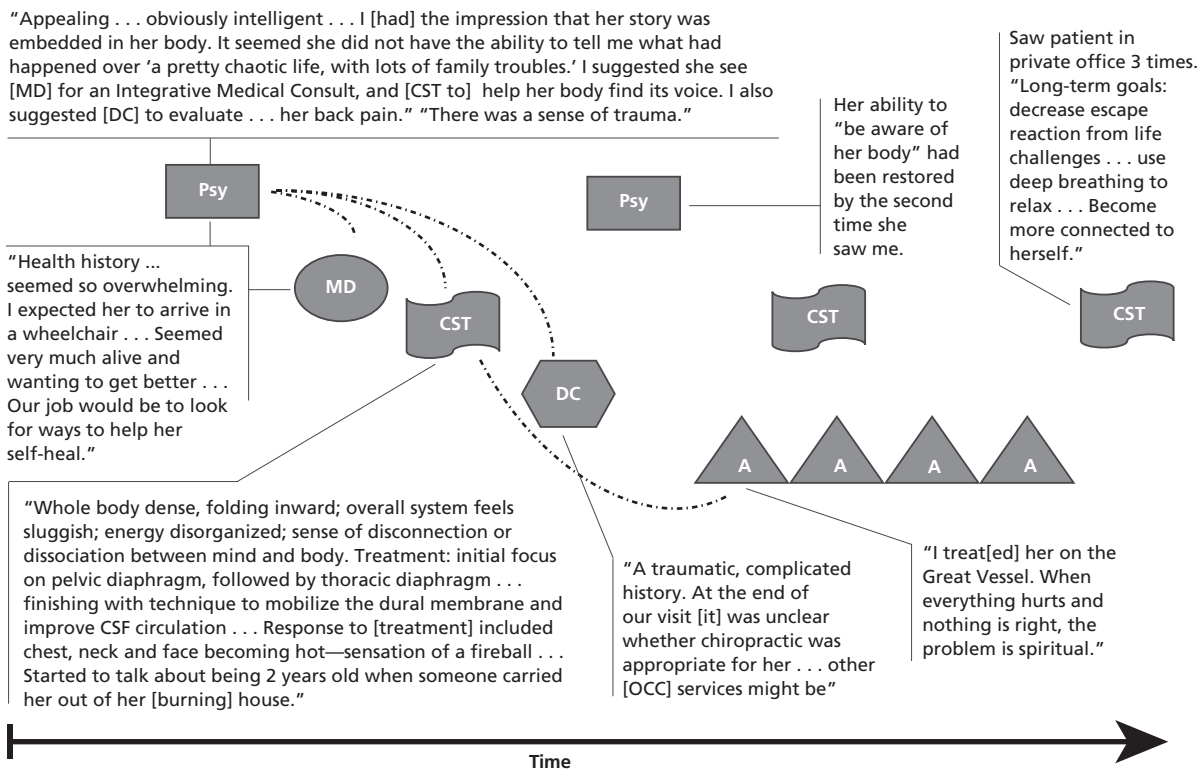


Figure 1 Schema of Ms A’s flow through Osher Clinical Center (OCC) over the course of treatment.

Labeled shapes represent clinical visits with respective OCC practitioners. Dotted lines represent referrals between practitioners. In quotation marks are representative comments from the respective members of the interdisciplinary team.

Abbreviations: A, acupuncturist; CSF, cerebrospinal fluid; CST, craniosacral therapist; DC, chiropractor; MD, medical director; Psy, psychiatrist.

The psychiatrist felt that Ms A’s “story was embedded in her body,”^a with which she was significantly out of touch. Ms A was unable to describe much of her own history but gave an impression of substantial trauma. His treatment plan recommended that Ms A see him again in 6 weeks and in the interim that she see other team members: the craniosacral therapist “to help her body find its voice”^a; an acupuncturist to quiet the neuropathic symptoms; a chiropractor to evaluate her back pain; and an integrative medicine consult with the clinic’s medical director to discuss other treatment options available at the OCC.

Over 22 weeks, Ms A saw the psychiatrist twice, the medical director once, an acupuncturist 4 times, and the craniosacral therapist 6 times. A chiropractor also evaluated Ms A in 1 visit and concluded that chiropractic was not indicated for her. At this stage, Ms A moved out of state. She stated that she felt better than she had in years: her ability to think clearly had greatly improved, she was able to “listen to her body,”^a and her sleep patterns had begun to normalize.^a

Case 2

Ms B, a 63-year-old retired education administrator active in community volunteer work, presented to the OCC for CLBP of 20 years’ duration. She had back and knee osteoarthritis pain when walking and needed to shift positions frequently when sitting because of pain in her right back and buttock, radiating downward into her upper right leg. Her pain had recently worsened

and was interfering with many activities of daily living. She had previously found some intermittent relief with chiropractic and temporary symptom relief from both massage and acupuncture.

She began her OCC treatment course with a chiropractor. Her goal was “getting past back pain”^b; simultaneously, she feared any exercise or movement that might exacerbate her pain. She went weekly or twice weekly for chiropractic treatment with steady, incremental improvement but plateaued around visits 9 and 10. The chiropractor then referred her to a team massage therapist for evaluation. She found Ms B to have relatively low somatic awareness, but ready to dedicate herself to getting better. She referred Ms B on for a therapeutic trial (8 sessions) of acupuncture as more likely to be helpful.

The acupuncturist likewise assessed Ms B as lacking somatic awareness while also having a relatively “high degree of pain tolerance.”^c He noted that acupuncture would be helpful for her current situation. He suggested biweekly massage “to address circulation and muscular adhesions”^c and yoga to help strengthen her body, balance her hips, help her become more limber, and move with less pain. Ms B followed up with the team’s yoga therapist, whose impression was that she carried herself stiffly, “like a person who has not moved smoothly or well for a long time.”^d His treatment plan aimed to reduce pain, improve balance and stability, and increase mobility. In addition, he recommended massage to reduce muscle contractures and

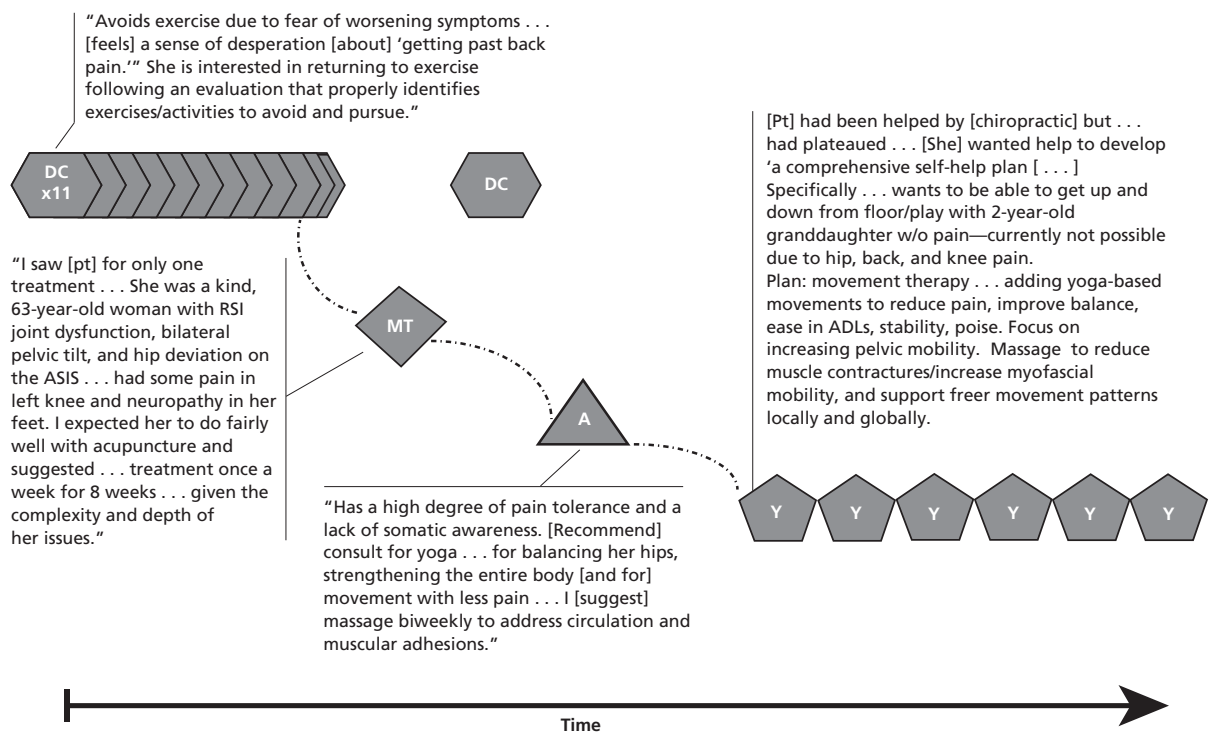


Figure 2 Schema of Ms B’s flow through Osher Clinical Center (OCC) over the course of treatment.

Labeled shapes represent clinical visits with respective OCC practitioners. Dotted lines represent referrals between practitioners. In quotation marks are representative comments from the respective members of the interdisciplinary team.

Abbreviations: A, acupuncturist; ADLs, activities of daily living; ASIS, anterior superior iliac spine; DC, chiropractor; MT, massage therapist; Y, yoga therapist.

“support freer movement patterns locally and globally.”^d At Ms B’s sixth yoga therapy appointment, he suggested she join the yoga class available at the OCC to consolidate her gains and acquire some additional self-care skills. At this juncture, Ms B stopped coming to the OCC, did not join the yoga class, and did not return to acupuncture or massage.

Case 3

Mr C, a 79-year-old man, was referred to the OCC by a nearby health center. His initial appointment was with the medical director for an IM consult. Mr C had experienced severe CLBP for 11 years, following a herniated disc. He had had a laminectomy and fusion surgery, and facet and epidural blocks that had provided relief in the past but no longer did so. He reported his back pain at 10/10, worsened by standing and walking. All standing activities were affected, and he was not able to walk more than half a block without reaching an intolerable level of pain. Additional complicating factors included arthritis in his feet and low back, and bipedal neuropathy. Mr C was affable and outgoing; he liked to be busy, active, and engaged. His pain had forced him to give up favorite activities of tennis and skiing, although he was able to exercise on a stationary bike and did so daily.

The medical director suggested that Mr C pursue a mind-body program and consider medication or a nutritional supplement for arthritis pain and depressed

mood. He suggested that Mr C be assessed by a chiropractor and decide together with him at that visit whether he might also undertake movement therapy and/or CST. Mr C, who self-described as “a control freak,”^e was very open to trying new treatment approaches but preferred to try them singly so that he could personally assess how well a particular approach addressed his pain and restrictions. Although he had visited a chiropractor previously and not found relief, and was skeptical that it would help him, Mr C agreed to see an OCC chiropractor. His treatment goal was to be able to walk more and to stand and chat at social gatherings without being stopped by pain.

Mr C completed 8 chiropractic visits over 4 weeks but was disappointed that his relief lasted only a day or 2 posttreatment. He took careful notes at each visit, recorded specific instructions, kept a symptom diary, and reported compliance with all recommended home exercise regimens. Mr C then re-consulted the medical director to discuss next steps. He stated that the quality of the chiropractic treatment he had received had “completely changed my opinion of chiropractic”^f despite not having achieved his treatment goals.

He next opted for a trial of movement therapy, which he pursued weekly for 7 weeks. The movement therapist’s plan was to help Mr C learn alternative ways of moving and standing that did not involve muscle strain, to envision “relaxing into a posture.”^g Although Mr C achieved this during a number of individual vis-

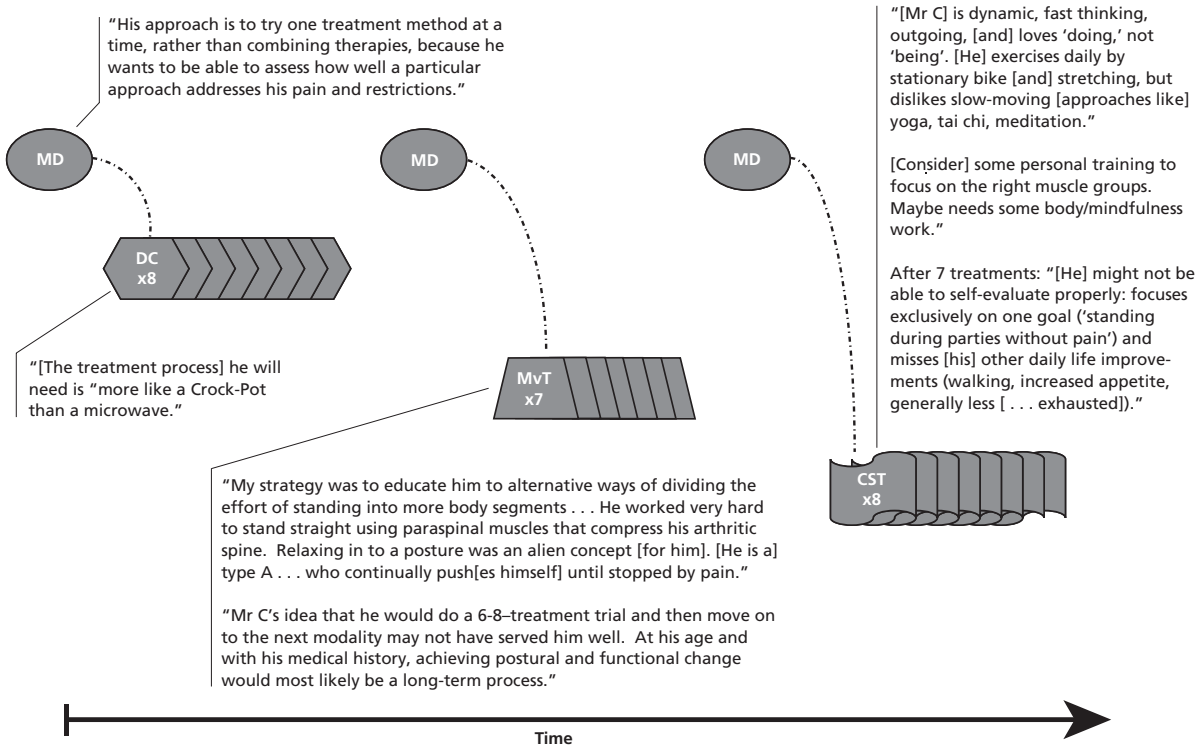


Figure 3 Schema of Mr C’s flow through Osher Clinical Center (OCC) over the course of treatment.

Labeled shapes represent clinical visits with respective OCC practitioners. Dotted lines represent referrals between practitioners. In quotation marks are representative comments from the respective members of the interdisciplinary team.

Abbreviations: CST, craniosacral therapist; DC, chiropractor; MD, medical director; MvT, movement therapist.

its, he did not consolidate his gains or maintain the changes from one visit to the next.

Mr C re-consulted the OCC medical director. He again expressed respect and appreciation for the treatment he had received, but noted that he had experienced “minimal lasting benefit.”^f He reported that a mind/body program he was pursuing was “somewhat enjoyable [but] not my thing.”^f Mr C moved next to CST, and the medical director suggested he also consider tai chi or aquatic physical therapy.

He received 8 CST treatments over the course of 4 months. During treatments, he gained greater joint mobility over the course of each session and reported reduced pain for 3 to 4 days following each session. However, he did not reach his primary goal of being able to “stand at parties”^e without pain. Mr C discharged himself from the OCC following his trial of these 3 therapies for 7 to 8 treatments each.

RESULTS

Five prominent themes regarding patient care and treatment decision making emerged from our qualitative analysis: (1) fundamental importance of the team training in which the clinicians had participated prior to the opening of the clinic; (2) critical function of the clinic’s regularly scheduled case conferences and team meetings for gaining new insights into (a) particular patients, and (b) colleagues’ treatments/rationales; (3) importance of clinicians’ presence “under one roof” to meeting patient care goals; (4) OCC commitment to understand and treat patients as whole persons; and (5) a shared philosophy of helping patients to help themselves.

These key themes are all interconnected and form the foundation of the OCC clinical culture.

Team Training

OCC clinicians continually reference their intensive training together as fundamental to their sense of team identity and their ability to formulate integrative treatment plans for patients. Having learned with and from each other about each discipline represented and optionally experienced treatments from one another has created for OCC clinicians a broad and inclusive frame of reference for treatment decision making—a kind of team intelligence.¹² This enables individual clinicians to gauge most effective treatment plans “using all the resources the OCC can bring to bear.”ⁱ Intake clinicians may generate multiple referrals at the initial patient visit; treating clinicians become aware during a patient’s course that other therapies may be valuable to switch to or add to the plan.

Clinicians report thinking about patients differently now than they did before their training and ongoing experience of the distributed cognition¹³ of the team. They practice “so differently here than [they] would in other settings,”^a which they believe contributes significantly to a high quality of patient care. Even when conjoint treatment is not feasible because of

scheduling difficulties or costs, “integration isn’t only in how we refer; it’s . . . in how we think and what we’re aware of when we approach a patient.”^g As a result of the clinicians’ perspectives having been “front-end loaded with 14 weeks of . . . training together,”ⁱ “sometimes the integration is happening whether we are aware of it or not, in our thinking.”^j

Shared knowledge and perspective make it possible for any OCC clinician to be a patient’s intake clinician and suggest a multimodal plan: “[W]e all have the ability . . . to say ‘here are your options at the Osher Center.’”^h Their experiential foundation strongly shapes referral patterns: “I *know* the people here and what they have to contribute [and even if] I’m not sure something can help, I will . . . make a trial referral”^j (emphasis original to speaker). One clinician noted, “The best hand-offs are to someone you know.”^a In-house referrals are greatly preferred for this reason: “I had to insist that [patient] go to acupuncture in our clinic, because we know each other for 10 years, and we know how”^e each team member works.

Sometimes it is the integrative approach that actually makes possible the success of a treatment plan. Ms A illustrates this well; her initial referral to the OCC was primarily for stress management as an approach to neuropathic pain of complex origins. For the psychiatrist to best help her, he sought “someone who can put their hands on her and have a conversation with her physical self . . . because she was not able to tell me about her physical symptoms.”^a He referred Ms A to the team CST “to help her body find its voice.”^a In contrast, clinicians felt that Mr C’s insistence on separating therapeutic trials of different modalities “may not have served him well”^g because it was dis-integrating, foreclosing possibly beneficial synergies.

Case Conferences/Team Meetings

From the beginning of the training program, OCC clinicians have come together in weekly hour-long team meetings for continuing education, case conferences, and strategic planning. “Patients know we communicate”^g and that their cases may be discussed in insight-building conferences. This is considered fundamental to optimal patient care and a feature that sets the OCC apart from more conventional clinical settings. Team meetings continually reinforce team identity, conjoint learning, flat hierarchy, and the strength of team intelligence that are integral to OCC clinical culture. Conference discussions create a fuller understanding of patients for each treating clinician, providing “a 360° picture,”^a “a synergistic and amplifying effect”^g in information gathering that enhances treatment planning.

Being Under One Roof

OCC clinicians note the importance of being present in the same location. In addition to team meetings and case conferences, important face-to-face clinical communications take place “in the hallways.”^c As a matter of OCC process and patient flow, clinicians go

to the waiting room to greet their patients and walk them back to their treatment rooms. This path takes all clinicians and patients at some point through a single hallway. One clinician notes that she “does a lot” just walking patients in and out from the waiting room, “introducing them to other clinicians as we pass in the hallway.”^k These informal encounters facilitate “warm hand-offs”^m to in-house referrals, as patients are introduced in a relaxed and sociable manner to other practitioners they will see clinically. Backstage, hallway introductions contribute to “the success at the OCC of the hand-offs,”^m which in more conventional medical settings are often weak links in care coordination and have made hand-offs a focal point of patient-centered care and patient safety efforts.¹⁴⁻¹⁶

Patients as Whole Persons

“[E]ssential to the OCC approach to patient care and pain treatment [is] our real effort to take in the whole person,” including deliberately seeking and “respond[ing] to the patient’s perspective.”^f A whole-person philosophy of patient care is a defining characteristic of many CAM systems in their own right, and of the meaning of the term “integrative” (as opposed, for example, to “interdisciplinary/ multidisciplinary”).^{17,18} Treatment planning and coordination, decision-making, and assessment of patient outcomes are rooted in a broad, biopsychosocial framework. As the sample case narratives indicate, many orders of facts and details are considered clinically relevant and contributory to the delivery of optimal care.¹⁷

The whole-person approach precludes “creat[ing] a recipe”^e for categorizing patients as “types” or as instances of a particular clinical problem; “[T]here is no algorithm, no one-size, no prescriptive treatment.”^f OCC treatment and management plans are individualized to specific patients and their constellations of presentation, limitations, comorbidities, and personal goals for care. It is a guiding principle that this approach provides for best care. Responding to patients’ individual perspectives and goals can also be frustrating for clinicians, as illustrated by Mr C. His narrow focus on the goal of being able to stand without pain in social gatherings overshadowed other benefits he achieved: being able to walk farther without pain, sleeping better, having more energy, and improving his appetite. Sometimes clinicians have to remind themselves that “the patient’s main goal may be different from ours.”^e

Helping Patients Help Themselves

Central elements of the OCC’s founding philosophy include treating suffering as well as pain; providing encouragement and support; enhancing coping abilities; and encouraging patients to engage in appropriate self-care. Fear is a common element in the suffering of patients who are in pain—fear that it will never end, that it will get worse, that it will ruin their lives, that it will overtake them entirely. One of the critical factors in responding to patients’ needs and fears about

their pain is “how they are ‘held’ by us”^d and encouraged to be active agents in their own healing. OCC clinicians work to enhance patients’ abilities to achieve self-efficacy: “We . . . work to change a patient’s paradigm toward . . . healing possibilities.”ⁱ Even if desired outcomes of pain elimination or reduction cannot be achieved, patient support and enhanced coping abilities are always goals of care.

DISCUSSION

The 5 key themes emerging from our study of OCC clinicians are echoed elsewhere in the literature on health professions education, integrative care, and teamwork. Health profession education always includes, in addition to specific bodies of knowledge and practice, intentional socialization into specific roles, norms, and shared values.^{19,20} Interdisciplinary and interprofessional education (IPE) and training involve their own kinds of socialization: development of a shared mental model for teamwork.^{21,22} Recent healthcare IPE in the United States and Canada has focused largely on collaborative practice within a flat, non-hierarchical structure.²³⁻²⁶ Interdisciplinary forums like team meetings and case conferences are essential elements of optimal teamwork and collaborative care, as they provide crucial communication venues.^{23,26,27} Previous studies suggest that regular in-person contact among practitioners encourages a higher level of integration.^{7,28,29} Other qualitative studies have shown consensus among practitioners working in similar settings about the imperative role of dedicated meeting times.³⁰

Co-presence that allows clinicians to “bump into each other” in unplanned moments in a single clinical setting offers another opportunity for spontaneous exchanges and “curbside” consultation, as well as for general collegiality that reinforces team identity, as noted by others.^{6,30-32} Additionally, perception and engagement of patients as active members of their healthcare team is a well-recognized feature of both individual CAM systems and of IM settings,^{17,27} and contributes to overall patient satisfaction.³³

Gaboury³⁰ reported that “[c]apacity to acknowledge one’s own limits was identified as a major personality characteristic that stimulates appropriate patient referral and safer care for the patient” in integrative care settings. Perusal of our clinicians’ referral patterns during data analysis illustrated that OCC clinicians recognize when their own specialties are not likely to be helpful to patients and refer them on accordingly.

We also noted that, for several reasons, the ideal of team-based care is not always realized. Some patients have fairly straight-forward courses that respond to single or dual treatment modalities; some do not respond well, and some patients opt not to add or move on to other modalities because of costs. Presently, medical insurances accepted at the OCC cover only medical and chiropractic services; other modalities must be paid out of pocket. The more clinicians/modal-

ities involved, therefore, the greater the cost to the patient. Previous studies have suggested that the state of reimbursement for such services is an obstacle to integrative collaboration.^{30,32}

Integrative care models vary widely in terms of training requirements, referral, communication, shared decision making, and reporting authority.^{32,34,35} Ours is an unusual example because of the duration and depth of OCC teamwork training, which affected the creation and maintenance of a vigorous team identity.

LIMITATIONS

This study has methodological limitations that may have narrowed our findings. Original design included direct interviews with back pain patients as well as referring physicians in addition to OCC clinicians; funding limitation resulted in evaluating only OCC clinician perspectives. Additionally, a single ethnographer conducted the data gathering and analysis, which may have introduced bias. All findings were returned to the clinician group for comment and approval of accuracy in an effort to correct for bias. In team meetings, clinicians critiqued 2 previous drafts of this paper for accuracy; their suggested corrections have been incorporated. Finally, our findings represent only a single integrative medicine clinic; further research will be needed to evaluate how our findings generalize across other academic settings and patient populations.

CONCLUSIONS

Our qualitative findings present novel and unique insight into how CAM and conventional medical treatments and practitioners interact, communicate, and cross-refer within an integrative medical center embedded within an academic medical center. Current trends in healthcare are moving increasingly toward patient-centered, coordinated, and team-based care spanning healthcare disciplines. It is likely that opportunities and incentives provided under the Affordable Care Act will broaden and escalate the pace of these changes. Newly created patient-centered medical homes, accountable care organizations, and team-based models reflect some of these incentives. In this environment, it is important to better understand communication and collaboration among clinicians; to overcome barriers to interprofessional communication; and to identify best practices for fostering teamwork and a well-functioning team identity.

The highly integrated patient management and treatment approach we have qualitatively described may result in improved clinical experiences for patients as well as for clinicians. However, it is not yet known whether well-trained teams of conventional and complementary care practitioners will enhance outcomes in this population of patients whose pain problems are often refractory to treatment and/or whether such team approaches will prove cost-effective. Both of these questions will be addressed by our parent quantitative observational study but remain understudied at present.

Authors' Contributions

DME, JBE, PMW conceived of the parent observational study with the embedded qualitative substudy. CL and KO created the figures mapping treatment trajectories, and BO'C oversaw qualitative data collection and completed all qualitative analysis and synthesis. DL led clinical team meetings and directed clinical care. BO'C and PW jointly drafted the manuscript with additional input from DME, JBE, DL, and KO.

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