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Treating Chronic Pain at a Federally Qualified Health Center: Staff Perspectives

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Treating Chronic Pain at a Federally Qualified Health Center: Staff Perspectives

by

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Presented to the Faculty of the
Graduate Department of Clinical Psychology

George Fox University

In partial fulfillment

of the requirements for the degree of

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in Clinic Psychology

Newberg, Oregon

May, 2016

Treating Chronic Pain at a Federally Qualified Health Center: Staff Perspectives

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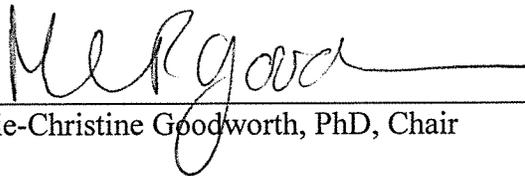
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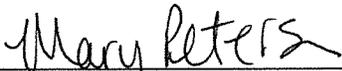
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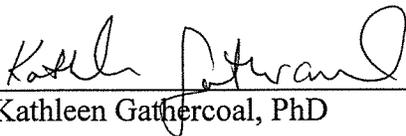


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Abstract

Although half of all patients with chronic pain seek treatment with their primary care practitioner, many physicians report being overburdened, with limited confidence in their training in the treatment of chronic pain. Opiate monotherapy remains the most common treatment utilized, despite strong correlations with addiction issues and increased distrust between patients and providers. In response to these issues, multidisciplinary stepped-care approaches utilizing psychoeducation, cognitive therapies, movement-based therapy, pharmaceutical treatment, yoga, and acupuncture have been developed. However, treatment within Federally Qualified Health Centers (FQHC) are complicated by financial constraints and high complexity in patient populations. This study examined the perspectives of staff members at an FQHC in Portland, Oregon on barriers to chronic pain treatment as well as the perceived efficacy and feasibility of potential interventions. Surveys including Likert-type responses and a free response section were administered in staff meetings, collected by team coordinators, and at other times convenient to the respondent. After survey results were analyzed, semi-structured

interviews were conducted with a selection of participants' representative of the various roles within the clinic. Themes derived from this approach highlighted a need for training for all staff, concerns regarding utilization of resources, desirability of non-opioid treatments, increased care coordination and policy adherence, and treatment for opioid dependence, distress regarding opioid-based treatment, and concern regarding the impact of systemic, financial, and legal barriers. Recommendations are discussed, specifically as they relate to the FQHC.

Keywords: chronic pain, primary care, opioids, federally qualified health centers, multidisciplinary treatment, stepped-care, program evaluation, grounded theory, survey, interview

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Chapter 1

Introduction

Chronic pain is a major area of research and concern within the U.S. healthcare system and affects approximately 100 million patients in the United States (Tsang et al., 2008). The majority of disability in the United States can be attributed to some form of pain (Chelimsky et al., 2013). Chronic pain is typically characterized as pain lasting in excess of three to six months that has not resolved with the healing of the source of the pain (Turk & Okifuji, 2001) and can result from a wide variety of illnesses and injuries and involves many different parts of the body (Marcus, 2009). The financial impact of these large numbers is reflected in the exceptionally high cost of treatment and lost productivity; estimates range from \$100 billion to as many as \$635 billion annually (Baumeister, Knecht, & Hutter, 2012; NIH Guide, 1998; Rasu, Sohraby, Cunningham, & Knell, 2013; Slomski, 2011).

Burden on Patients

In addition to the physical experience of pain, nearly half of all patients with chronic pain also have anxiety-related diagnoses, while 30-60% struggle with depression (Bair, Robinson, Katon, & Kroenke, 2003). Patients with mental health comorbidities experience increased pain, are higher utilizers of healthcare, and experience worsened treatment outcomes versus those without (Bair, Wu, Damush, Sutherl, & Kroenke, 2008; Kroenke et al., 2013). Beyond the direct experience of pain, patients with chronic pain frequently report increased disability due to their pain. These pain-related disabilities impact activities within the home, work and school settings,

and can involve maladaptive behaviors, loss of social connection, and disrupted sleep patterns (Dworkin & Sherman, 2001; Otis & Hughes, 2010).

Traditional Treatments

Chronic pain treatment has historically emphasized symptom reduction through surgical, medical, or pharmacological interventions, which are considered the preferred approach of the medical model of illness. Opiates have been used to treat pain for millennia (Rosenblum, Marsch, Joseph, & Portenoy, 2008). Although numerous alternate treatments exist, the limited training received by primary care providers (PCPs) in the treatment of chronic pain often results in opiate monotherapy, which remains the most common treatment utilized (Kahan, Mailis-Gagnon, & Tunks, 2011). Opiate therapy consists of drugs like morphine, oxycodone, hydrocodone, fentanyl, and methadone (Nicholson, 2003).

Problems with Opiate Monotherapy

Opioid prescription rates have strong correlations with addiction issues and increased distrust between patients and providers (Kahan et al., 2011; Martell et al., 2007; Upshur, Bacigalupe, & Luckman, 2010). These problems have only increased with time: the numbers of first time prescription opioid abusers increased by 382% from 1990 to 2004, emergency room visits related to prescription opioid abuse increased by 45% from 2000 to 2002, and substance abuse treatment admissions primarily for prescription opioid abuse increased by 186% from 1997 to 2002 (Rosenblum et al., 2008). Despite the existence of guidelines managing prescription opioid use, provider adherence to standard of care regarding opioid prescriptions has been shown to vary significantly (Anderson, Wang, & Zlateva, 2012).

Burden on Providers and Health Care System

Roughly half of all patients with chronic pain seek treatment with their primary care practitioner (Barry et al., 2010; Breuer, Cruciani, & Portenoy, 2010), however many physicians report limited confidence in their training in the treatment of chronic pain (Anderson et al., 2012; Chelimsky et al., 2013; Ponte & Johnson-Tribino, 2005). PCPs are frequently overburdened, leading them to commonly prioritize what may be perceived as more pressing or immediate concerns. This limits the amount of time available to address the patient's complex chronic pain related concerns (Otis, Macdonald, & Dobscha, 2006). Moreover, patients with chronic pain are frequently seeking care not only for their pain, but also for their associated comorbidities of anxiety and depression (Chelimsky et al., 2013).

Gate-Control Theory

The gate-control theory of pain provides insight into how biopsychosocial factors, including anxiety and depression, can combine to contribute to a patient's experience of pain (Melzack & Wall, 1967). Gate control theory asserts that neurological "gates" regulate the experience of pain, and are opened or closed depending on a variety of biological, cognitive, and affective variables. In people with flexible and adaptive responses to pain, such as the use of distraction, pacing, or diaphragmatic breathing, the patient is able to accommodate to their pain, closing gates and thus decreasing their experience of pain. Specific biopsychosocial factors have been associated with opening these gates, thus increasing the experience of pain. These include anxiety, depression, hopelessness, smoking, obesity, alcohol abuse, malnutrition, presence of distress, fear-avoidance, and inadequate sleep (Philips, 1987; Ramond et al., 2011; van Hecke, Torrance, & Smith, 2013).

Treatment Incorporating the Biopsychosocial Model

Interventions focusing on education, behavioral change, and cognitive restructuring are useful for addressing these patterns to reduce a patient's experience of pain, and can be used to promote increased patient activation in their care. Patients with chronic pain often endorse the belief that their pain can only be treated pharmaceutically, fostering passivity. This can lead to hypervigilance when the patient is constantly giving their attention to observing their body in anticipation of pain, indirectly increasing the experience of pain (Crombuz, Eccleston, Van Damme, Vlaeyen, & Karoly, 2012). As patients avoid activities that they fear may cause pain, they generalize this avoidance to other aspects of life. This loss of previously consistent patterns can involve the loss of motivation, positive mood, social connections, and physical well-being. A multi-modal model of treatment addresses these concerns by promoting active involvement in patients' care by introducing novel educational, behavioral, and cognitive treatment options, resulting in a beneficial impact on their experience of pain (Philips, 1987).

Multidisciplinary Approach

In response to issues related to opioid monotherapy, including high psychological comorbidity, reduced patient engagement, low provider adherence to incorporating behavioral treatment, and high financial burden, this traditional model of chronic pain treatment has expanded to become a multidisciplinary approach. Built on increased awareness of the impact of psychosocial factors, this newer treatment paradigm combined the skillsets of physicians, pharmacists, nurses, behavioral health consultants (BHCs), and case managers to more thoroughly assess and treat patients with chronic pain (O'Donohue, Byrd, Cummings, & Henderson, 2005; Otis, Reid, & Kerns, 2005). The multidisciplinary treatment of chronic pain

prioritizes increased patient activation and functioning rather than focusing solely on pain management. In pursuit of this goal, practitioners utilize varied forms of treatment including psychoeducation, cognitive therapies, movement-based therapy, and pharmaceutical treatment, with some expanding this menu to include yoga and acupuncture.

Psychoeducation. One of the best ways to reduce the risk of acute pain transitioning into chronic pain is to provide psychoeducation. Messages that provide reassurance that most patients recover from their acute pain, an emphasis on return to normal activity levels, and discussion of the impact of positive beliefs are particularly important in limiting development of chronicity (Duckworth, Iezzi, & Sewell, 2009; Hasenbring & Pincus, 2015; Kirby, Dunwoody, & Millar, 2009). Messages from providers have been demonstrated to be impactful in other medical contexts, suggesting that pain-related psychoeducation will be more likely to induce change if given by medical providers (Duckworth et al., 2009). If pain does transition from acute to chronic, more detailed psychoeducation can be provided in group therapy settings. Both provider-led and peer-led psychoeducation groups have demonstrated efficacy in reducing patients' experience of pain (Otis et al., 2005; Duckworth et al., 2009; Von Korff et al., 1998).

Cognitive therapies. Therapeutic interventions based on cognitive behavioral therapy (CBT) and acceptance and commitment therapy (ACT) are strongly effective in the treatment of patients with chronic pain (Marcus, 2009; Moore, Von Korff, Cherkin, Saunders, & Lorig, 2000; Otis et al., 2005). CBT interventions emphasize changing the patient's beliefs regarding their pain, while ACT interventions emphasize pain acceptance and present-focused living (Hayes et al., 1999). Both of these therapeutic techniques have the added benefit of being effective in the treatment of the comorbid anxiety and depression that many pain patients experience. Despite the

demonstrated efficacy of these therapeutic approaches to the treatment of chronic pain, patient commitment to treatment has proven to be a barrier to successful treatment. Motivational interviewing (MI; Miller & Rollnick, 2012) is increasingly used within medical care settings (Otis et al., 2006) due to its efficacy in increasing patient activation. Increased patient activation has been associated with a variety of health improvements, including readiness to change (Fowles et al., 2009). All members of an integrated care team, including medical assistants, registered nurses, providers, and BHCs, can effectively utilize MI at their points of patient contact to promote involvement of the patient in their care, improving the likelihood that the patient will benefit from their treatment plan.

Movement-based therapy. Increased level of activity is strongly associated with positive outcomes in patients with chronic pain, leading to an emphasis on the use of exercise and physical therapy (Duckworth et al., 2009; Marcus, 2009; Murphy, Kratz, Williams, & Geisser, 2012). However, recent research has highlighted the importance of individualized levels of intensity to avoid overuse (Daenen, Varkey, Kellmann, & Nijs, 2015; Hasenbring et al., 2015; Hodges & Smeets, 2015). Ideally, this involves a dedicated physical therapy regimen that can aid the patient in increasing their activity appropriately without causing increased pain. By working with patients to raise activity levels in small increments, physical therapists help patients to avoid overuse. The patient may misinterpret their pain from overuse, affirming their belief that being active involves pain. If unchecked, this dynamic may limit efficacy of interventions designed to change these beliefs (Crombuz et al., 2012).

Pharmaceutical treatment. Although opioid medications have demonstrated strong efficacy in reducing pain when compared with other medications, ongoing issues related to

misuse and addiction (Cicero, Surratt, Inciardi, & Alvaro, 2007; Morasco & Dobscha, 2008; Reid et al., 2002) suggest that they be reserved only for “severe, disabling pain with clear pathology” (Marcus, 2009, p. 121). Additionally, opioid use in higher doses meant to counter tolerance has the paradoxical effect of actually increasing a patient’s sensitivity to pain (Ossipov, Lai, Vanderah, & Porreca, 2003). Other medications demonstrated to be effective in the treatment of chronic pain include nonsteroidal anti-inflammatory drugs (NSAIDs), antiepileptics, tricyclic antidepressants, selective norepinephrine reuptake inhibitors (SNRIs), selective serotonin reuptake inhibitors (SSRIs), and topical creams and patches (Marcus, 2009; Rasu et al., 2013).

Alternative treatments. Yoga and acupuncture have found research support in certain pain conditions, and are often utilized alongside conventional treatments (Frank et al., 2014; Chou et al., 2007).

Role of nursing. Within integrated care settings, nurses are well positioned to coordinate the many facets involved in treating chronic pain (Adams, Poole, & Richardson, 2006; Richardson, Adams, & Poole, 2006). Moreover, nurses are equipped to support the patient-provider relationship, facilitate effective communication, provide reassurance and can aid in training coping strategies to combat patients’ anxiety. An emphasis on the connection between the skillset of nurses and the effective components of motivational interviewing and cognitive therapy has led to the development of nurse-led chronic pain treatment programs similar in structure to those headed by behavioral health consultants (BHCs).

Behavioral health consultant role. BHCs are qualified mental health professionals who work alongside providers, nurses, and medical assistants within an integrated care setting (Otis et

al., 2005). They utilize behavioral planning, psychoeducation, and brief individual psychotherapy to address patient's mental, social, and physical health needs. BHCs can work with patients to identify impairments they are experiencing, utilize motivational interviewing to help patients arrive at workable goals, and facilitate treatment planning between providers. BHCs can support the work of physical therapists by incorporating pacing into their work with patients, helping reduce the risk of patients overexerting and experiencing increased pain. They can also work with patients to overcome occupational challenges by developing coping plans tailored to the patient's individual challenges and by connecting them with community resources (Duckworth et al., 2009).

Stepped care. Given the lack of resources available to providers operating within a primary care practice, a structured approach to care is essential. The stepped care approach to chronic pain seeks to limit the intensity of treatment if possible, assigning increased resources only if expected improvement is not realized (Duckworth et al., 2009; Otis et al., 2006). One such stepped care treatment plan for chronic pain, proposed by Otis et al. (2006), begins with education, encouragement of increased activity, and referral to self-help resources. This step is predicted to have the highest rate of success with patients with less intense pain, who take a more active approach to their care, are more open to non-medicinal treatment, and are not experiencing significant emotional distress. The second step incorporates more individually tailored treatments to address specific functional impairments. Following reassessment of the patient's goals, a treatment plan would be formulated incorporating such steps as involvement in psycho-educational groups, sometimes peer-led (Duckworth et al., 2009; Otis et al., 2005), and a course of brief, individual therapy. The final step, targeted at patients who continue to report high levels

of pain-related distress and disability, primarily consists of additional, more intensive psychotherapy to address the patient's particular distress and multidimensional impairment.

Federally Qualified Health Centers

Unfortunately, the majority of stepped-care methodologies have traditionally assumed that patients involved in these treatments are able to incorporate their own motivation and to take an active role in their care. Though patients vary significantly in their level of engagement in their pain management, patients of lower socioeconomic status generally demonstrate less activation and experience worse health outcomes than wealthier patient groups (Greene & Hibbard, 2012). Additionally, patients with comorbid conditions including mental health conditions or history of substance abuse are assumed to require the highest level of care (Otis et al., 2005). Federally qualified health centers (FQHC's) are placed in a uniquely difficult situation given these statistics. FQHC's are especially restricted by financial constraints and high complexity in their patient populations. They are required to "serve an underserved area or population, offer a sliding fee scale, provide comprehensive services" (HSRA, n.d.) and are intended to provide a "safety net" for patients who would otherwise be unable to receive services (Centers for Medicare & Medicaid Services, 2013; Humphreys & McLellan, 2010). Patients of FQHC's are "predominantly low income, minority, and uninsured or rely heavily on public insurance" and are often treated for mental health and substance abuse related concerns (Lardiere, Jones, & Perez, 2011, p. 3). Research on chronic pain treatment in FQHC's has identified high levels of utilization for patients with chronic pain, with correspondingly low rates of referrals to pain specialty clinics (Anderson et al., 2012). Providers also reported low levels of confidence in both their ability to treat chronic pain and the availability of resources to aid in

treatment. These results suggest that the treatment of chronic pain within FQHC's is a more significant challenge, requiring more specific program development to address the difficulties of limited resources and complex patients.

Program of Focus for Current Research

Oregon Health and Science University's Family Medicine at Richmond clinic is an FQHC in Portland, Oregon. Approximately five years ago, a comprehensive protocol for the treatment of chronic pain was developed by this clinic. It highlighted non-pharmaceutical treatments first, and stipulated that any patients prescribed opiates would be required to be involved with behavioral health as well as be concurrently engaged in non-pharmaceutical treatments including physical therapy, exercise, yoga, chiropractics, acupuncture, and relaxation. It also involved stipulations requiring random drug tests and a signed contract stipulating that care could be terminated if these terms were not upheld. However, over time this protocol has been utilized with reduced consistency.

Many treatment plans for chronic pain have high expectations of patient and provider accountability, and require a high burden of organization and time commitment not often possible for PCPs (Otis et al., 2005). The specific barriers that are affecting this particular clinic are not known, but common challenges for clinics providing chronic pain treatment include trust issues, perceived lack of expertise, difficulty treating comorbidities involving pain, substance abuse, and mental health concerns, problems with opiate misuse and addiction, lack of time, and inadequate staff support (Barry et al., 2010).

Program Evaluation

This program evaluation will serve to examine staff perceptions of the efficacy of potential interventions for the treatment of chronic pain, including professional and peer led psychoeducational groups, cognitive behavioral therapy, movement-based therapy, non-opioid pharmaceutical treatment, yoga, acupuncture, and nurse- or BHC-led care programs. It will also assess perspectives of barriers that may be preventing effective treatment, including those listed above, identified by Barry et al. (2010). Additionally, it will provide recommendations for ways to improve the treatment of chronic pain within the clinic, and will advocating a stepped-care approach to treating patients with chronic pain that emphasizes ease of implementation and increasing levels of intensity depending on individual patients' needs.

Chapter 2

Methods

Participants

Staff working at an FQHC in Portland, Oregon were recruited for this study. All employees were eligible to respond to the survey. Interviews were conducted with a sampling of staff. Employees working at the site for less than 60 days were excluded. The FQHC clinic includes a large number of employees, from front desk staff, to nurses, to pharmacists, to medical doctors. The survey respondents were divided into three groups depending on their job title: Direct-Service, Support, and Non-Clinical. Information regarding demographic variables (age, gender identity), hours per week in-clinic, and number of years working in healthcare were collected.

Measures

This study utilized a survey (Appendix A) intended to address the participants' perspectives of chronic pain treatment at the FQHC. This survey was developed in collaboration with the FQHC Behavioral Health Director for the purpose of highlighting the needs of the clinic based on staff perceptions. It included three sections of questions with Likert-type answers ranging from "*Strongly Disagree*" through "*Strongly Agree*" and one final free-response section. The first section asked about the participants' perspectives on common barriers to effective chronic pain treatment that may be present at the clinic. The second section asked the participant to rate the perceived effectiveness of potential interventions intended to address these barriers. The third section asked the participant to rate the perceived feasibility of these same potential

interventions. Finally, the free-response section allowed participants to make any additional comments they would like regarding the treatment of chronic pain at the FQHC. Upon initial administration, participants reported confusion about the wording of the item “Please rate the following on this statement: ‘This is an effective intervention for the treatment of chronic pain at our clinic.’” This item was revised for clarity, and the remainder of the surveys were administered with this updated instrument (Appendix B). After the survey was administered, preliminary results were written up and reported to clinic leadership. Semi-structured interviews addressing expected and unexpected results, as well as areas of further interest to the interview subject, were conducted with a sample of participants reflective of the overall clinic staff population using this document (Appendix C).

Research Design

Participation in the survey and subsequent interviews was voluntary, with no reward for participation. Surveys were administered in staff meetings, collected by team coordinators, and at other times convenient to the respondent. Informed consent was explained at the top of the survey, and implied by the respondent’s participation. After preliminary results of the survey were analyzed, follow-up semi-structured interviews were conducted with a representative sample of the clinic staff. These were recorded and subsequently transcribed. Once the survey administration has been completed, grounded theory (Charmaz, 2006) was utilized to derive themes from the free-response section of the survey. The author and a second party independently derived themes before consolidating results to ensure the integrity of the process. Themes from the semi-structured interviews were derived the same way, and a third-party auditor verified the results.

The purpose of this study was to describe the perspectives of staff members regarding barriers to chronic pain treatment, the perceived efficacy and feasibility of interventions to target these barriers, and to identify differences in perceptions between staff roles. This study will assist in informing the development of new chronic pain treatment programs for the FQHC.

Chapter 3

Results

Demographics

Eighty-seven surveys were completed by staff at the FQHC. 70.1% identified as female, 21.8% as male, 1.1% as female-to-male transgender, and 6.9% declined to state (see Table 1). Reported ages of participants spanned from 20 to 59 years, with a mean of 36.3. Of respondents who listed hours worked per week, 26.5% worked less than 30 hours per week, and 73.5% worked 30 hours or more per week. The reported number of years working in healthcare ranged from 6 months to 40 years, with a mean of 10.3 years. Of these participants, 10 were selected for follow-up semi-structured interviews based on job role to ensure a balanced sample (see Table 2).

Table 1

Survey Demographics

	<i>n</i>	Percentage
Gender		
Female	61	70.1
Male	19	21.8
Other	1	1.1
Missing	6	6.9
Hours Per Week		
0-29	22	25.3
30+	61	70.1
Missing	4	4.6

Table 2

Descriptive Data

	Minimum	Maximum	Mean	Std. Deviation
Age	20	59	36.33	9.44
Years in Healthcare	.50	40	10.27	8.45

Survey Results

Since the survey was revised to include a small clarification in the instructions partway through administration due to feedback from some participants, the results from the participants who were administered the survey without clarification and the results from the participants who were administered the survey with the clarification were compared using an ANOVA. No significant differences were found, so the results of all participants, regardless of whether or not they received clarification in the revised form, were analyzed together.

Descriptives and frequencies were utilized for illustrating which barriers are deemed most relevant, which interventions are considered most helpful, and which interventions are considered most feasible to implement.

Barriers. With the exception of “My own understanding about the treatment of chronic pain,” all barriers were endorsed by participants as affecting the ability of the clinic to effectively treat chronic pain (see Figure 1). The two highest-endorsed barriers were “Patients who struggle with substance abuse” and “Opiate misuse.” Direct-service staff rated “Patients who also have mental health conditions” as a significant barrier to effective care. Non-clinical staff were less likely to endorse a barrier overall, with the exception of “Not enough time with the patient to address chronic pain-related concerns.”

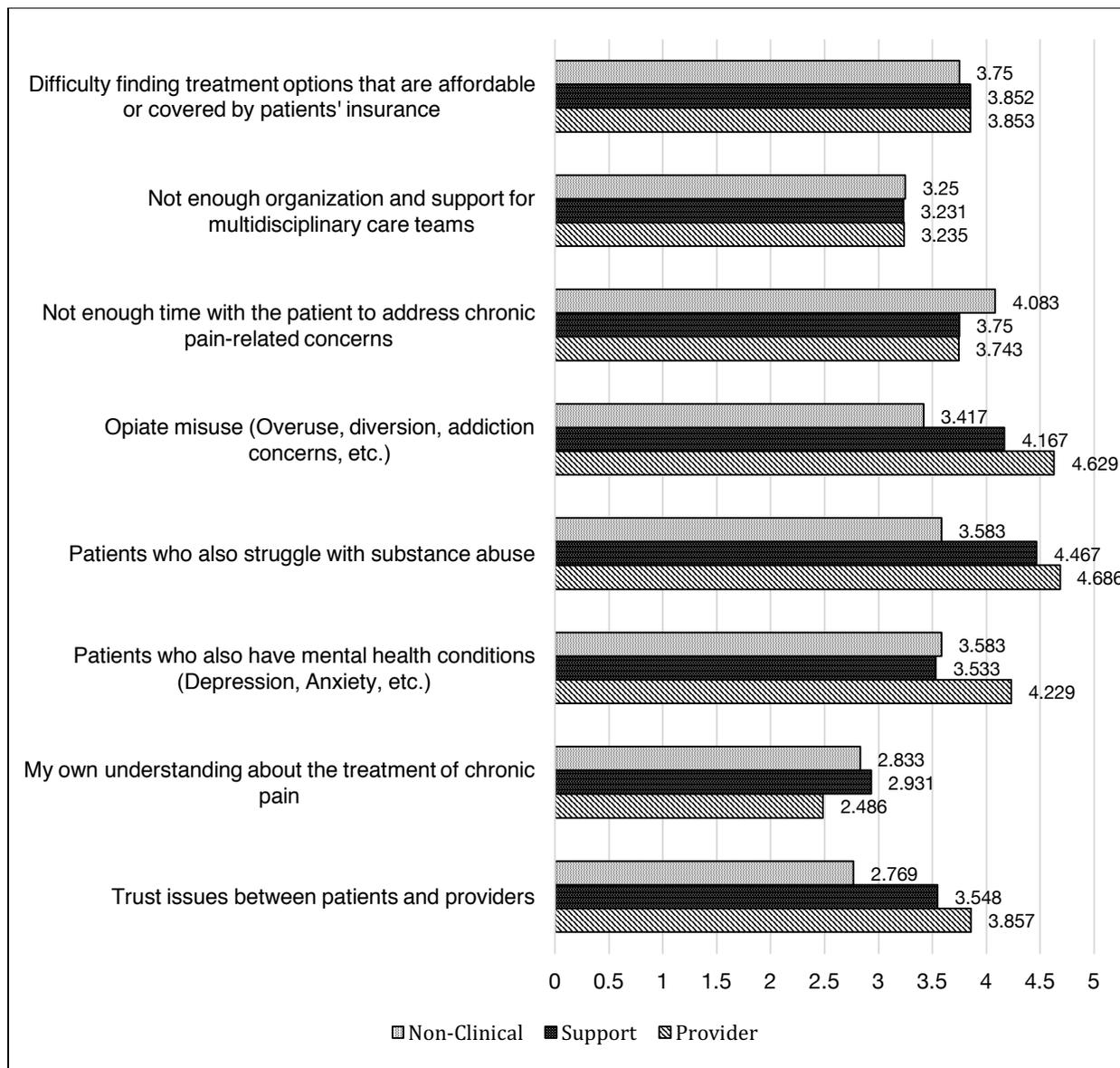


Figure 1: Survey responses for "This is a significant barrier to caring for our patients with chronic pain at our clinic."

Efficacy and feasibility. Broadly, all items were viewed as possibly effective and feasible, though there were notable distinctions between them. Of care coordination interventions, BHC-led care coordination was rated higher than Nurse-led (see Figure 2 and

Figure 3); free response results specifically highlighted concern for the significant busyness experienced by nurses presently in the clinic. “Providers educating and reassuring patients about chronic pain outcomes” was highly endorsed by Support and Non-clinical groups, but not by the Direct-service staff who would be doing the education and reassurance (see Figure 2 and Figure 3). Yoga, Acupuncture, and Cognitive Behavioral Therapy were all highly rated, which may reflect currently available treatments at FMR (see Figure 2 and Figure 3). Acceptance and Commitment Therapy and Motivational Interviewing both received particularly high rates of “Don’t Know” Responses, indicating a lack of familiarity with these options (see Figure 2 and Figure 3). Physical therapy was well endorsed as an effective intervention (see Figure 2), but its feasibility was rated lower (see Figure 3). Lastly, “Structure and system for random drug testing” had a particularly low rate of endorsement among Direct-Service staff versus other staff (see Figure 2 and Figure 3).

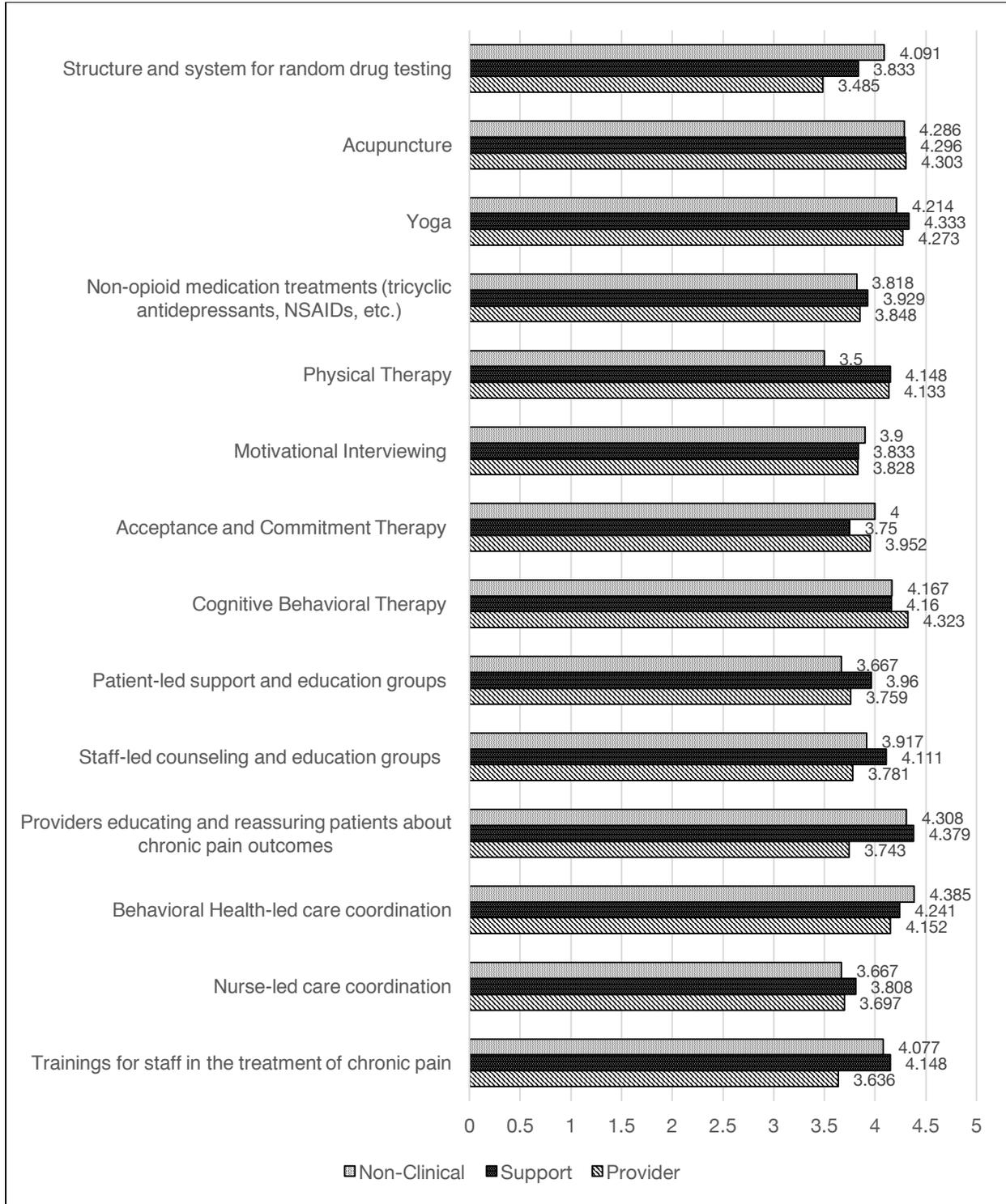


Figure 2: Survey responses for “This is/would be an effective intervention for the treatment of chronic pain at our clinic.”

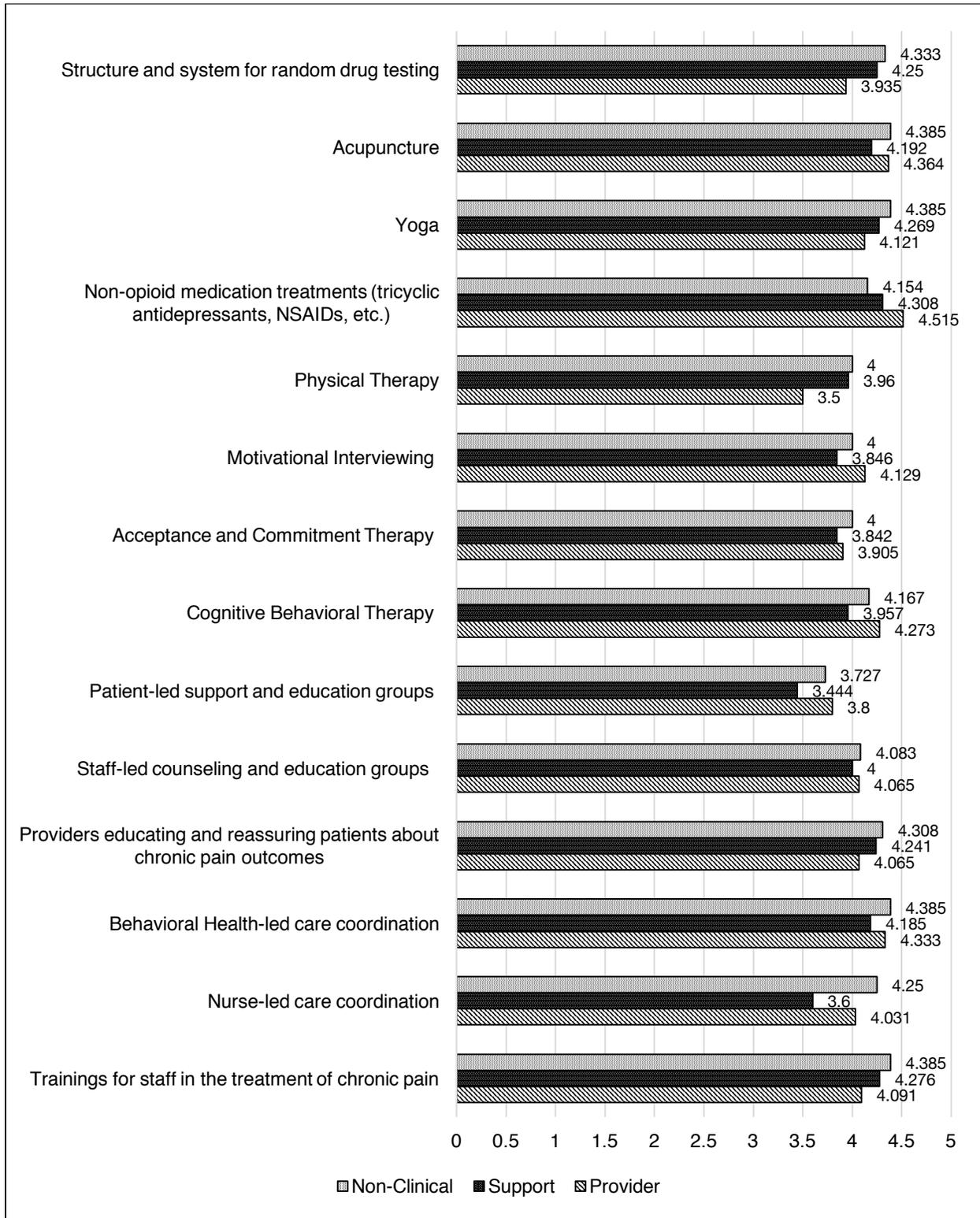


Figure 3: Survey responses for "This intervention is feasible to implement at our clinic."

Grounded theory is a qualitative research methodology characterized by the use of induction rather than deduction, openness throughout the process, immediate analysis of data to inform questions, deriving and comparing codes, recursive process, and eventual production of theoretical concepts from themes (Charmaz, 2006). It is the most utilized method of qualitative analysis in medical research literature (Sbaraini, Carter, Evans, & Blinkhorn, 2011) and was used in this study to derive themes from survey free-response content as well as semi-structured interviews.

Free response. Grounded theory was utilized to inductively arrive at thematic concepts from free response content. Responses in this category broadly aligned with quantitative results, with particular concern regarding opioids and time constraints for nurse-led care coordination. Additional themes included desire for increased access to specialty pain providers both at FMR and in the community, endorsement of physical therapy as a desirable intervention, and a general concern that higher level, systemic change would have to occur before any changes could reasonable take place at the FQHC.

Semi-Structured Interview Results

Grounded theory was again utilized to analyze the content of the semi-structured interviews for conceptual themes.

Training and utilization concerns related to non-opioid treatment options. While many of the clinic's staff have substantial understanding of the biopsychosocial model and relationships between chronic pain, substance abuse, mental health, and trauma, this knowledge is not universal. Basic training for all staff roles, specific to the needs and expectations for that

role, would ensure all staff are equipped to work effectively with patients who struggle with chronic pain.

Starting maybe at PAS, so when they talk to patients on the phone they know how to advise. Because they're often times the front line, so maybe they might be able to direct them to their PCP, to ask questions about medication options, or if they could even inform them that we do have different things like acupuncture and yoga here. What is their role and their responsibility to help us with the best patient care . . . moving up to every other department here at the clinic (Team Coordinator, personal communication, March 8, 2016).

However, knowledge and availability of holistic, biopsychosocial treatments of chronic pain in the clinic does not mean that these are well utilized, either by providers or patients. While this clinic is stronger in this than most, there is a belief among staff that both knowledge and utilization of chronic pain treatments options at the clinic could be improved.

It also doesn't surprise me that mental health overlaps with pain and substance use.

Obviously there are such vast connections between mental health and trauma. There's substance use and pain. And I think that as a society, and as a medical system, we have poor understanding of that and even poorer ability to connect all of those pieces and come up with realistic treatment plans. Even in a place like Richmond, which is seen as being innovative and embracing holistic therapy, that's still an everyday challenge (Registered Nurse, personal communication, March 8, 2016).

Providers desire non-opioid treatment options; increasing patient buy-in and motivation is necessary. The high rates of endorsement of non-opioid treatments by participants

in the survey and in interviews likely reflects a desire to find anything that might help patients' pain that lacks the harmful components of opioid-based treatment.

I guess then you know, subsequently, that people are interested in essentially all of the other modalities of pain treatment. Because again, I think it's just not surprising that people are scrambling for different ways to handle this . . . anything that will help more than will harm. So that's the difference between opiates and acupuncture. Opiates, people feel like its going to, people will tell you that it makes my life better from day to day, but we know watching them from year to year to year that it makes their life worse, whereas . . . with exercise, you feel worse from day to day to day, but you end up getting better from year to year to year. So I think people are just hoping to find something with lesser harms that might be a benefit to the patient (Medical Doctor, personal communication, March 8, 2016).

Certain non-opioid treatments, including yoga, acupuncture, and CBT, are viewed as particularly effective. This appears to be based on interactions with patients who have described positive experiences. Notably, these are also available in-clinic at no cost, limiting barriers of access and financial expense.

We know it [acupuncture and yoga] works because we see patients with chronic pain that have seen changes. And because I used to sit upstairs in the fishbowl the whole time, I got to know our acupuncture patients, and yea I could see the change in them. And their response (Patient Access Services Specialist, personal communication, March 8, 2016).

Physical therapy is also a desirable treatment, but access is difficult due to the need for an outside referral. Bringing physical therapy into the clinic, much as CBT, yoga, and acupuncture are, may help with challenges related to access.

While these alternative treatments are desired by providers, patient buy-in is especially necessary for non-opioid treatments. They frequently require active participation, a higher burden of time due to multiple sources of treatment, and delayed benefit compared to opioid-based treatment. More understanding of what factors are associated with patient buy-in would be beneficial for building increased follow-up with non-opioid treatments. Punishment-based motivators, such as a strict no-show policy and random drug testing, may not be helping encourage buy-in; positive reinforcement may be explored as an alternate approach to encouraging compliance.

Improved procedures, such as care coordination and policy adherence guidelines, may improve follow-up and trust issues. Increased structure with how chronic pain is treated may help with treatment adherence and fewer problems with miscommunication or unclear expectations between providers and patients. However, flexibility for the provider to individualize treatment is seen as necessary. One way to find this balance would be to utilize existing policy protocols, but with increased oversight to ensure they are being used appropriately.

I'm not sure if . . . anybody is going into the charts to make sure they've met the other criteria in the policy. Like, have they had a urine drug screen in the last 12 months, you know, were they referred to behavioral health, are they participating in some of these other therapies? But . . . what it actually says is your provider may encourage you to

participate in all this other stuff. So it's not like they have to, it's just they can encourage. Because certainly everyone's a little bit different and we sort of tailor people's treatment to their individual situation. But yea, is there any sort of check and balance system with that? Eh, it's loose. It's pretty loose (Family Nurse Practitioner, personal communication, March 8, 2016).

Dedicated care coordination may aid in identifying this balance by working collaboratively between patients and providers to identify goals. Staff demonstrated a preference for care coordination being done collaboratively by nurses and behavioral health consultants. Their distinct expertise would allow for comprehensive treatment, and such a system could be structured similarly to existing workflows for blood clotting, hypertension, or diabetes management.

Opioid-based chronic pain treatment causes significant relational distress.

Conversations about chronic pain are experienced as almost always involving discussion of opioids and substance abuse. Staff associate opioid treatment with significant relational and moral distress. It contributes to adversarial relationships between patients and providers, and prompts concern that even with the best intentions, patients are harmed by this treatment.

I just think there are huge problems with “what is chronic pain,” what exactly are we treating with chronic opiates, the use of chronic opiates for whatever the problem is that the patient is ultimately trying to address or fix in their life. Opiates probably aren't the best tool for doing that, but because it's the main tool that's been available to us for the last 20 years, it is mainly what people have reached for, causing great moral distress . . . And why does it cause them distress? Well, because I think they have a sense, a

sensitivity to the fact that this isn't really helping this person, and it is disrupting our doctor-patient relationship, because you always wonder A) am I being played? B) is the patient really, maybe playing themselves, just not realizing it? (Medical Doctor, personal communication, March 8, 2016).

Both providers and patients are affected, and this often bleeds into other interactions, such as complaints to the clinic or potentially abusive interactions with front office staff.

This distress from adversarial relationships feed into an assumption of negative intent on behalf of providers. As a result, some forms of misuse, commonly characterized as abuse, may have more to do with insufficient understanding between patients and providers. Rather, it could be viewed as the patient's best attempt to improve their pain, given limited resources.

Finding effective, non-pathologizing treatment for chronic pain-related opioid dependence and addiction is a significant concern. If opioid alternatives are not available or not seen as efficacious, problems with dependence are likely to develop. Treatment of this chronic pain-related opioid dependence is a challenge, as pain related dependence overlaps with addiction, but is not inherently the same. Simply involving such patients in addiction treatment could be pathologizing and cause damage to the provider-patient relationship. Medication assisted treatment (MAT) is well supported for treating opioid dependence, and is both established and well utilized by the clinic. However, limited availability and potential legal barriers might hinder its use for chronic pain related opioid dependence.

You know we have all these other nurse practitioners and PAs who are not federally not allowed to prescribed Suboxone, even if we might want to, to meet that need . . . I'd love

to see policy change on that issue in particular, to kind of open up some doors to offer this to more people (Family Nurse Practitioner, personal communication, March 8, 2016).

Barriers to change exist on all levels, from clinic policy to financial and legal issues.

Staff perceive many barriers that impede the ability of the clinic to make changes. Some, such as legal or financial barriers that affect access to substance abuse treatment, are not likely to be changeable without substantial effort over a long period of time. Large, high-level changes, such as FDA or CareOregon policy changes, should be taken into account when planning.

Well I guess my hesitation has a little bit to do with the fact that CareOregon is supposedly going to cut down on their opiate treatment options, and so I guess I don't really know how to start forming a question on that (Team Coordinator, personal communication, March 7, 2016).

Others, such as clinic-specific barriers with no-show policies or space and time restrictions, may be addressable. This is especially true with regard to long-term planning, in the five to ten-year window.

I feel like our no-show policy really hurts this population a lot, you know I think our chronic pain folks are really disadvantaged in a lot of ways. Sometimes they have a really hard time getting here because of their chronic pain, and you know maybe that means they miss appointments or they come later to their appointments ... so that doesn't suit them very well. It's a complicated issue. A really complicated issue (Family Nurse Practitioner, personal communication, March 8, 2016).

Chapter 4

Discussion

Problems with opioids and substance abuse were perceived as significant barriers to the treatment of chronic pain, and occupied a considerable portion of interview content. Concerns reported reflected those found in research, notably with regard to misuse, addiction, diversion, and damage to the patient-provider relationship (Kahan et al., 2011; Matthias, Parpart, & Nyland, 2010; Robinson, 2013; Upshure et al., 2010). Treatment options specifically for opioid-related concerns were limited to increased structure and support for random drug testing. Notably, random drug testing was not a highly supported intervention among direct-service staff. This is not consistent with prior research (Barry et al., 2010), and may be reflective of a sense that drug testing is less of a treatment and more of a means of policy enforcement. A notable area of interest arose through interviews in exploring the possible utility of medication assisted treatment (e.g., Suboxone) for treating patients with chronic-pain related opioid dependence. However, concern for possible legal barriers preventing the use of substance abuse treatment for chronic pain patients was prevalent. Non-opioid medications were endorsed as efficacious, though not notably so. This may reflect difficulty switching patients from opioids to non-opioid medications, rather than being indicative of a belief that they do not help chronic pain.

Co-morbid mental health conditions were viewed as a high barrier, consistent with prior research (Bair et al., 2003; Bair, Wu, Damush, Sutherl, & Kroenke, 2008; Chelimsky et al., 2013; Ramond et al., 2011; van Hecke et al., 2013). Mental health-related treatment options were

inconsistently endorsed by staff; CBT, well supported by research (Marcus, 2009; Moore et al., 2000; Otis et al., 2005). was endorsed as both effective and feasible, whereas ACT and MI received particularly high rates of “don’t know” responses. This may indicate that staff are not familiar with these treatment methodologies, although they are well validated in research (Hayes et al., 1999; Otis et al., 2006). It would be useful to know why CBT was more well-known, even among support and non-clinical groups, in order to develop knowledge of ACT and MI. Other holistic interventions assessed included both staff and patient led support and education groups, acupuncture, yoga, and physical therapy. Neither of the two group options was endorsed particularly highly, and they received limited attention in the interviews. This may be an education issue, specifically that staff may not have sufficient understanding of what goes on in a group. Alternately, this may reflect a lack of patient enthusiasm about group options. Acupuncture and yoga were among the most consistently highly endorsed interventions assessed. This result is inconsistent with the literature, which is light on empirical support for these options (Chou et al., 2007; Frank et al., 2014). However, it is likely that support for these options is primarily due to positive experiences within the FQHC. As both options are available at no cost to patients at the FQHC, staff have heard patients’ opinions on both, and have reported seeing the changes themselves. Physical therapy was endorsed as potentially efficacious, consistent with research literature (Duckworth et al., 2009; Marcus, 2009), but not as feasible to implement at the FQHC. Interview content suggests that this is due to space limitations, and may also reflect difficulty with patients accessing outside referrals versus in-clinic options.

Other barriers, including trust issues, time limitations, inadequate organization, or difficulty with finding covered treatment options, were also moderately endorsed by staff.

Concern with trust issues was aligned opioid-related concerns in interviews, and was more highly endorsed by direct-service staff than by other groups. One potential intervention involving trust between patients and providers—providers educating and reassuring patients about chronic pain outcomes—received a lower rate of endorsement from direct-service staff versus other roles. It is possible that this reflects unrecognized challenges in the relationship between patients and providers. Time limitations and inadequate organization for multidisciplinary care teams were primarily addressed through care-coordination related interventions. In this area, behavioral health-led care coordination was more highly endorsed than nurse-led in survey responses. However, this may be due to the high workload experienced by nursing staff rather than a statement on their perceived abilities. Interview content supported this view, and pointed towards a preference for collaboration between nurses and BHCs to allow both of their skillsets to come together to allow for more ideal patient care. While many concerns were expressed regarding space and time restraints at the FQHC, staff did not identify feasible ways to address this concern, barring major changes to the structure of the clinic.

Of the assessed barriers, staff identified their own understanding of chronic pain treatment as the least impactful. This is inconsistent with prior literature, which highlights a sense of PCPs not being adequately prepared to treat pain (Anderson et al., 2012; Chelimsky et al., 2013; Kahan et al., 2009). This low endorsement was also inconsistent with interview content, which frequently highlighted a need to identify appropriate training goals for each position, as well as endorsement of trainings as an effective and feasible intervention for the clinic. Interview subjects also reported surprise at the low rate of endorsement, and discussed an ongoing need for more training specific to staff roles. High rates of “don’t know” responses for

ACT and MI interventions also suggests that further training would be beneficial. However, interview subjects demonstrated strong understanding of biopsychosocial conceptualizations of chronic pain, as well as awareness of the treatment options currently extant at the FQHC. It may be that knowledge was endorsed at a low rate because staff view themselves as having more understanding than other clinics, and are not experiencing it as a barrier to their ability to care for patients.

Implications

Taken together, the results of the survey and semi-structured interviews are useful in highlighting where staff are experiencing difficulty in treating chronic pain, as well as which potential interventions are both feasible and likely to be utilized. Overall, staff are experiencing many barriers preventing them from effectively caring for patients with chronic pain, and view all interventions as efficacious and feasible. As such, it is prudent to address the most impactful barriers and the interventions most likely to succeed.

High levels of concern for the role of opioids and substance abuse in the treatment of chronic pain stand out, as does the relative lack of available interventions to address them. While the FQHC would strongly benefit from expanding and adapting existing opioid dependence treatment options to work with patients with chronic pain, significant barriers regarding limited access and legal difficulties currently exist. However, as federal and state level regulations shift regarding opioid treatment, the FQHC would strongly benefit from exploring ways to incorporate its strong MAT program in a non-pathologizing way to aid patients in transitioning from opioids to non-opioid treatments.

Staff at the FQHC demonstrate strong awareness of the interplay between chronic pain, mental health, trauma, and substance abuse. Moreover, the FQHC is well equipped with alternative chronic pain treatment options available within the clinic, including access to BHCs, yoga, acupuncture, and groups. There is both an in-house psychiatric mental health nurse practitioner as well as a pharmacy, and staff work together within a collaborative care model. However, knowledge of and access to holistic treatment options does not mean they are well utilized. The clinic would benefit from increased structure in accessing these treatments, including care coordination and oversight to ensure treatment contracts are used appropriately. Staff are strongly in support of care-coordination run collaboratively by BHCs and RNs, who already work together on other areas of health-management. This is feasible within the clinic without considerable personnel or systemic changes.

Although staff are generally knowledgeable regarding holistic conceptualization and treatment of chronic pain, there are no guidelines regarding the expected knowledge of the staff in various roles within the clinic. All staff have a part to play in how patients experience care, be they front desk staff, medical assistants, pharmacy techs, billing specialists, or medical providers. Patients with chronic pain undergo a unique struggle that affects most parts of their lives, and clinic staff are in a position to come alongside and help minimize those impacts in their respective positions. Developing a standardized training model, specific to role, would ensure that all staff have adequate knowledge to positively affect the care of patients with chronic pain.

Lastly, as the treatment of chronic pain is currently undergoing large shifts on a national level away from opioids, it is likely that barriers to care will shift as well. Staff would benefit from considering not only those treatment options that are possible currently, but any that may be

helpful regardless of feasibility. This is particularly relevant for purposes of advocacy and planning for the direction the clinic will be taking over the next 5-10 years.

Recommendations

The purpose of this evaluation was to develop recommendations for improving the treatment of chronic pain specific to the requirements and limitations of a particular FQHC. Due to significant constraints due to financial, time, and space limitations, the FQHC may benefit from using any or all of the following recommendations. Additionally, a recommendation for a possible stepped-care methodology is presented

Clinic recommendations. It is recommended that trainings specific to the needs of each staff role are developed to ensure all staff are equipped to contribute to the effective care of patients with chronic pain. This may aid in facilitating access to non-opioid treatment options, and may reduce negative patient experiences due to uninformed staff. In this way, all patients with chronic pain experience a safe, knowledgeable space. Collaboration with providers from pain clinics may be effective to aid in developing these trainings.

It is recommended that the FQHC develop increased structure and care coordination in support of the holistic and multi-disciplinary treatment of chronic pain. This may involve RN/BHC collaboration similar to existing models of care. Care coordination would focus on developing and following up on patient-specific treatment plans incorporating existing treatment options available in the FQHC, such as behavioral health, yoga, and acupuncture. When possible, outside pain clinics covered by patients' insurance may be preferable to limit risk of overburdening internal resources. Existing chronic pain contracts may continue to be utilized, but

under oversight of care coordinators to ensure non-opioid treatment options are being effectively utilized.

It is recommended that when in-clinic treatment is not possible, efforts are made to improve ease of access to treatment options not available on-site, such as physical therapy. While it may not be feasible to bring them on-site, any reduction in barriers preventing patients from accessing off-site options would be beneficial. While increased care coordination would aid in this, it may also involve further collaboration and communication between clinics, or exploration of how to assist patients with establishing care with a new provider.

It is recommended that the clinic consider ways to support patients struggling with chronic-pain related opioid dependence. Methods for doing so are largely outside the scope of this study, but the FQHC does have a substantial MAT program for treating opioid dependence. While limitations exist regarding access to this program, it may be beneficial and more likely to lead to positive outcomes when reduction or cessation of opioids is required.

Stepped-care. The following assumes implementation of the preceding proposed interventions. It is recommended that a stepped-care approach to chronic pain treatment begin with referral to BHCs for psychoeducation and self-care guidelines, including management of sleep, diet, and exercise. If further needs are present, such as difficulty with managing and directing care, co-morbid mental health conditions, or substance abuse, it is recommended that patients be engaged with chronic pain care coordination, detailed above. An individualized collaborative care plan should be developed with the patient, care coordinator, and PCP. At that point, referrals to appropriate resources—such as in-clinic behavioral health treatments, community mental health, detox, substance abuse treatment, physical therapy, or outpatient pain

clinics, among others—should take place. Non-opioid medications should be considered by the PCP, opioids may be reserved as a last option if other treatment methods are unsuccessful, or if the patient is unable to participate in them due to physical limitations.

Limitations of Approach

Due to policies limiting access to patients for research purposes at this FQHC, this evaluation focused on staff perspectives, and did not incorporate patient perspectives. It is possible that patients have different perspectives about barriers they experience to their care, as well as which treatment options are most helpful to them. Additionally, no chart review was conducted to examine opioid prescription rates, rates of referral to non-opioid treatments, or the actual utilization of these treatments. No outcome data regarding impact of treatment was assessed.

Areas for Further Evaluation

Further evaluation incorporating the perspectives of patients with chronic pain would address one of the limitations to this approach, and would provide a more nuanced understanding of the challenges involved in treating chronic pain in an FQHC. As prescribing standards shift and treatment moves towards multidisciplinary, holistic care, evaluation of rates of utilization and outcomes would aid in identifying which interventions are demonstrating the greatest effect. This would in turn inform recommendations for other clinics undergoing similar transitions.

Nutrition and sleep are aspects of holistic care that were not addressed by this study. Further evaluation could consider the impact of sleep interventions performed by PCPs or BHCs, or the interest in involving a nutritionist with multidisciplinary treatment.

Increased understanding of factors that predict chronicity could aid providers in identifying patients who are more likely to struggle with acute pain becoming chronic. If these factors were better understood, providers may be able to refer patients to BHCs for preventative care or to aid in a smooth transition into chronic pain treatment. Given that time is a significant limitation in primary care, the development of an accurate and discriminatory screening tool could aid in this process.

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Appendix A

Initial Survey

I am being asked to answer questions on a survey about the treatment of chronic pain at OHSU Family Medicine at Richmond. It will take 10-15 minutes to complete. The information I provide will help improve our treatment of patients with chronic pain. I understand that I can decide to take part or I can choose not to. I also know that I can stop at any time. I can either write my answers or tell them to the researcher. I will not put my name on the survey and no one will be told what my answers are. No one at the clinic will see my individual results. They will only see all of the results combined together. I know I can ask the researcher, Nate Goins, M.A., questions about this study. He may be contacted by email at goinsn@ohsu.edu.

I am agreeing to participate by continuing to answer the following questions.

Job Title: _____
Gender: _____ **Age:** _____
Number of years since starting work in health care: _____
Number of hours per week in clinic: _____

As a staff member working at a clinic that cares for patients with chronic pain, we value your thoughts about how our clinic provides treatment for our patients. Based on your experience with the treatment of patients with chronic pain at OHSU's Family Medicine at Richmond, please respond to the following:

Please rate the following on this statement: "This is a significant barrier to caring for our patients with chronic pain at our clinic."	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know Enough to Answer
Trust issues between patients and providers	SD	D	N	A	SA	DK
My own understanding about the treatment of chronic pain	SD	D	N	A	SA	DK
Patients who also have mental health conditions (Depression, Anxiety, etc.)	SD	D	N	A	SA	DK
Patients who also struggle with substance abuse	SD	D	N	A	SA	DK
Opiate misuse (Overuse, diversion, addiction concerns, etc.)	SD	D	N	A	SA	DK
Not enough time with the patient to address chronic pain-related concerns	SD	D	N	A	SA	DK
Not enough organization and support for multidisciplinary care teams	SD	D	N	A	SA	DK
Difficulty finding treatment options that are affordable or covered by patients' insurance	SD	D	N	A	SA	DK

Please rate the following on this statement: "This is an effective intervention for the treatment of chronic pain at our clinic."	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know Enough to Answer
Trainings for staff in the treatment of chronic pain	SD	D	N	A	SA	DK
Nurse-led care coordination	SD	D	N	A	SA	DK
Behavioral Health-led care coordination	SD	D	N	A	SA	DK

Providers educating and reassuring patients about chronic pain outcomes	SD	D	N	A	SA	DK
Staff-led counseling and education groups	SD	D	N	A	SA	DK
(Continued) Please rate the following on this statement: "This is an effective intervention for the treatment of chronic pain at OHSU FMR."	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know Enough to Answer
Patient-led educational and support groups	SD	D	N	A	SA	DK
Cognitive Behavioral Therapy	SD	D	N	A	SA	DK
Acceptance and Commitment Therapy	SD	D	N	A	SA	DK
Motivational Interviewing	SD	D	N	A	SA	DK
Physical Therapy	SD	D	N	A	SA	DK
Non-opioid medication treatments (tricyclic antidepressants, NSAIDs, etc.)	SD	D	N	A	SA	DK
Yoga	SD	D	N	A	SA	DK
Acupuncture	SD	D	N	A	SA	DK
Structure and system for random drug testing	SD	D	N	A	SA	DK

Please rate the following on this statement: "This intervention is feasible to implement at our clinic."	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know Enough to Answer
Trainings for staff in the treatment of chronic pain	SD	D	N	A	SA	DK
Nurse-led care coordination	SD	D	N	A	SA	DK
Behavioral Health-led care coordination	SD	D	N	A	SA	DK
Providers educating and reassuring patients about chronic pain outcomes	SD	D	N	A	SA	DK
Staff-led counseling and education groups	D	D	N	A	SA	DK
Patient-led support and education groups	SD	D	N	A	SA	DK
Cognitive Behavioral Therapy	SD	D	N	A	SA	DK
Acceptance and Commitment Therapy	SD	D	N	A	SA	DK
Motivational Interviewing	SD	D	N	A	SA	DK
Physical Therapy	SD	D	N	A	SA	DK
Non-opioid medication treatments (tricyclic antidepressants, NSAIDs, etc.)	SD	D	N	A	SA	DK
Yoga	SD	D	N	A	SA	DK
Acupuncture	SD	D	N	A	SA	DK
Structure and system for random drug testing	SD	D	N	A	SA	DK

Is there anything else regarding the treatment of chronic pain that you would like to add?

Appendix B

Revised Survey

I am being asked to answer questions on a survey about the treatment of chronic pain at OHSU Family Medicine at Richmond. It will take 10-15 minutes to complete. The information I provide will help improve our treatment of patients with chronic pain. I understand that I can decide to take part or I can choose not to. I also know that I can stop at any time. I can either write my answers or tell them to the researcher. I will not put my name on the survey and no one will be told what my answers are. No one at the clinic will see my individual results. They will only see all of the results combined together. I know I can ask the researcher, Nate Goins, M.A., questions about this study. He may be contacted by email at goinsn@ohsu.edu.

I am agreeing to participate by continuing to answer the following questions.

Job Title: _____
Gender: _____ **Age:** _____
Number of years since starting work in health care: _____
Number of hours per week in clinic: _____

As a staff member working at a clinic that cares for patients with chronic pain, we value your thoughts about how our clinic provides treatment for our patients. Based on your experience with the treatment of patients with chronic pain at OHSU's Family Medicine at Richmond, please respond to the following:

Please rate the following on this statement: "This is a significant barrier to caring for our patients with chronic pain at our clinic."	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know Enough to Answer
Trust issues between patients and providers	SD	D	N	A	SA	DK
My own understanding about the treatment of chronic pain	SD	D	N	A	SA	DK
Patients who also have mental health conditions (Depression, Anxiety, etc.)	SD	D	N	A	SA	DK
Patients who also struggle with substance abuse	SD	D	N	A	SA	DK
Opiate misuse (Overuse, diversion, addiction concerns, etc.)	SD	D	N	A	SA	DK
Not enough time with the patient to address chronic pain-related concerns	SD	D	N	A	SA	DK
Not enough organization and support for multidisciplinary care teams	SD	D	N	A	SA	DK
Difficulty finding treatment options that are affordable or covered by patients' insurance	SD	D	N	A	SA	DK

Please rate the following on this statement: "This is/would be an effective intervention for the treatment of chronic pain at our clinic."	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know Enough to Answer
Trainings for staff in the treatment of chronic pain	SD	D	N	A	SA	DK
Nurse-led care coordination	SD	D	N	A	SA	DK
Behavioral Health-led care coordination	SD	D	N	A	SA	DK

Providers educating and reassuring patients about chronic pain outcomes	SD	D	N	A	SA	DK
Staff-led counseling and education groups	SD	D	N	A	SA	DK
(Continued) Please rate the following on this statement: "This is an effective intervention for the treatment of chronic pain at OHSU FMR."	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know Enough to Answer
Patient-led educational and support groups	SD	D	N	A	SA	DK
Cognitive Behavioral Therapy	SD	D	N	A	SA	DK
Acceptance and Commitment Therapy	SD	D	N	A	SA	DK
Motivational Interviewing	SD	D	N	A	SA	DK
Physical Therapy	SD	D	N	A	SA	DK
Non-opioid medication treatments (tricyclic antidepressants, NSAIDs, etc.)	SD	D	N	A	SA	DK
Yoga	SD	D	N	A	SA	DK
Acupuncture	SD	D	N	A	SA	DK
Structure and system for random drug testing	SD	D	N	A	SA	DK

Please rate the following on this statement: "This intervention is feasible to implement at our clinic."	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Don't Know Enough to Answer
Trainings for staff in the treatment of chronic pain	SD	D	N	A	SA	DK
Nurse-led care coordination	SD	D	N	A	SA	DK
Behavioral Health-led care coordination	SD	D	N	A	SA	DK
Providers educating and reassuring patients about chronic pain outcomes	SD	D	N	A	SA	DK
Staff-led counseling and education groups	SD	D	N	A	SA	DK
Patient-led support and education groups	SD	D	N	A	SA	DK
Cognitive Behavioral Therapy	SD	D	N	A	SA	DK
Acceptance and Commitment Therapy	SD	D	N	A	SA	DK
Motivational Interviewing	SD	D	N	A	SA	DK
Physical Therapy	SD	D	N	A	SA	DK
Non-opioid medication treatments (tricyclic antidepressants, NSAIDs, etc.)	SD	D	N	A	SA	DK
Yoga	SD	D	N	A	SA	DK
Acupuncture	SD	D	N	A	SA	DK
Structure and system for random drug testing	SD	D	N	A	SA	DK

Is there anything else regarding the treatment of chronic pain that you would like to add?

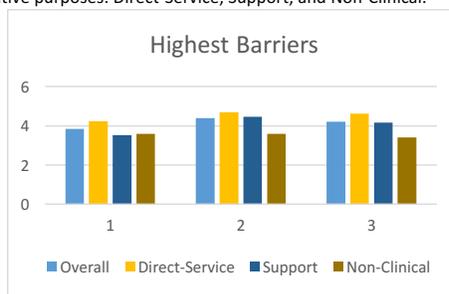
Appendix C

Preliminary Survey Results Single Sheet

Preliminary Result Summary of Chronic Pain Survey

Review of Methods: The survey asked questions divided into three areas: **Barriers** to treatment, **Perceived Efficacy** of a possible intervention, and **Perceived Feasibility** of the same interventions. A 5-point scale from “Strongly Disagree” to “Strongly Agree” was utilized, with an additional “Don’t Know” option intended to gain insight in which areas staff may be less aware. A free response section gathered additional information. 87 responses were obtained, representing a wide variety of staff roles at FMR. These were first placed into smaller groups by role, then these groups were combined to form larger groups for comparative purposes: Direct-Service, Support, and Non-Clinical.

Barriers: The two greatest barriers were (2) “Patients who struggle with substance abuse” (90.2% rated Agree or Strongly Agree (A or SA)) and (3) “Opiate misuse” (87.8% rated A or SA). Direct-service staff also rated (1) “Patients who also have mental health conditions” (91.4% A or SA) as a strong barrier. Notably, respondents did not endorse “My own understanding about the treatment of chronic pain” as a barrier.



Efficacy and Feasibility: Broadly, all items were viewed as possibly efficacious and feasible. BHC-led care coordination was rated more highly than Nurse-led;

free response results highlighted concern for nurse’s significant busyness. Support and Non-Clinical groups highly rated “Providers educating and reassuring patients about chronic pain outcomes,” but Direct-Service staff did not. Yoga, Acupuncture, and Cognitive Behavioral Therapy were rated highly by all groups, which reflects currently available treatments at FMR. Acceptance and Commitment Therapy (ACT) and Motivational Interviewing (MI) both received high rates of “Don’t Know” Responses, indicating a lack of familiarity with these options. “Structure and system for random drug testing” had a particularly low rate of endorsement among Direct-Service staff versus Support and Non-Clinical groups. “Physical Therapy” was somewhat highly endorsed for efficacy, but not considered feasible at FMR compared to other interventions.

Free Response: Responses broadly aligned with other results, with particular concern regarding opioid prescriptions and misuse and time constraints for nurse-led care coordination. Additional themes included desire for increased access to specialty pain providers both at FMR and in the community, and a general concern that higher level, systemic change (CCO, Medicare, infrastructure) would have to occur before any changes could reasonable take place at FMR.

Summary of Preliminary Results: Substance use and concerns with opioid misuse represent the greatest barrier experienced by staff at FMR, though concern for mental health problems is close behind. Though many aspects of non-opioid based treatment were endorsed, the only intervention that would directly address substance related concerns, random drug testing, was not rated highly by Direct-Service staff. Care coordination, highly endorsed by all groups, appears to be perceived as both more efficacious and more feasible if done by BHCs than by RNs. Interestingly, although research literature on acupuncture and yoga is relatively light, these were among the highest endorsed interventions. Physical therapy, considered efficacious and highlighted in free-response content, was ranked lower than other options for feasibility. While CBT was highly endorsed as an intervention, literature suggests a shift towards “third-wave” treatments, including ACT and MI—the two items with the highest rates of “Don’t Know” responses. If there is a lack of knowledge in this area, however, staff are not experiencing it as a barrier to their ability to care for our patients with chronic pain.

Next Steps: Brief semi-structured interviews with representative sample of staff:

- 1) Is there anything here that is surprising to you?
- 2) Is there anything here that is not surprising to you?
- 3) If you were in charge of taking these findings and deciding what more we need to know, what would you be asking?

Appendix D

Curriculum Vitae

Nathan K. Goins

426 Wynooski St., Unit B, Newberg, OR 97132
Cell: (559) 250-3072, Email: ngoins12@georgefox.edu

Education

2012-Present **Doctoral Candidate, Clinical Psychology**

- George Fox University, Newberg, Oregon
- Graduate Department of Clinical Psychology: APA Accredited
- PsyD anticipated May 2017
- Emphasis: Health Psychology
- Advisor: Marie-Christine Goodworth, PhD

2014 **Master of Arts, Clinical Psychology**

- George Fox University, Newberg, Oregon

2009 **Bachelor of Arts, Psychology**

- Concentration: Therapeutic and Community Psychology
- Point Loma Nazarene University, San Diego, California

Supervised Clinical Experience

2014-Present **Oregon Health and Science University's Family Medicine at Richmond**
Portland, Oregon

Title: Behavioral Health Consultant

Treatment Setting: Urban, Federally Qualified Health Center, Primary Care

Populations: Religious, Racial, Socioeconomic, and Sexual Orientation -diverse
population ranging in age from birth through end-of-life

Supervisors: Joan Fleishman, PsyD; Glenna Andrews, PhD

- Warm Handoffs and brief follow-up therapy utilizing CBT, ACT, Mindfulness, and Interpersonal interventions
- DBT skills group
- Worked with anxiety, mood disorders, psychotic disorders, trauma, substance use, personality disorders, resourcing, diabetes management, and chronic pain
- Integrated within multidisciplinary treatment teams including medical providers, nurses, and psychiatric providers
- Frequent didactic trainings, weekly individual supervision

2014-Present **Behavioral Health Crisis Consultation Team**

Newberg, Oregon

Title: Behavioral Health Intern, QMHP

Treatment Setting: Rural Hospitals

Populations: Religious, Racial, Socioeconomic, and Sexual Orientation -diverse population ranging in age from children through geriatrics

Supervisors: Mary Peterson, PhD, ABPP; William Buhrow, PsyD; Joel Gregor, PsyD

- Administer risk assessments for emergency department patients
- Suicidal and homicidal ideation, psychosis, substance use, neurocognitive disorders
- Use of SAAP and CAMS assessment methodologies to determine level of risk
- Crisis intervention, case management, interprofessional collaboration
- Mini Grand-Rounds style case presentation incorporating DRSMAP and biopsychosocial case conceptualization

2013-2014 **Oregon State University Counseling and Psychological Services**

Corvallis, Oregon

Title: Practicum Counselor

Treatment Setting: University Counseling Center

Populations: Religious, Racial, Socioeconomic, and Sexual Orientation -diverse population of Traditional Undergraduate, Non-Traditional Undergraduate, and Graduate Students

Supervisors: Staci Wade-Hernandez, PsyD; James Van Dyke, PhD; Lisa Bruna, MA

- Short-term individual therapy utilizing CBT, ACT, and Mindfulness
- Weekly SMART (REBT) substance abuse group
- Primarily work with anxiety, depression, adjustment, anger issues, addiction, student outreach, and stress reduction
- Intake interviews, treatment plan development, weekly individual and group supervision

2013 **George Fox University Graduate Department of Clinical Psychology**

Newberg, Oregon

Title: Pre-Practicum Therapist

Treatment Setting: University Counseling

Populations: George Fox University undergraduate students

Supervisors: Carlos Taloyo, PhD; Tim Cooper, MA

- Provided weekly pseudo-therapy for two undergraduate students
- Intake interviews, treatment plans, report writing, weekly supervision
- Group and individual supervision with video review and case presentation

Supervisory Experience

2015-Present **Clinical Team, George Fox University**
Newberg, Oregon

Title: Fourth Year Oversight

Treatment Setting: Doctoral Program, Clinical Psychology

Supervisor: Mark McMinn, PhD

- Oversight of second year PsyD student
- Weekly individual meetings to aid in theory, clinical skills, and professional development
- Participated in evaluation process for student's clinical work as presented to the team

Teaching Experience

2015 **Cognitive Behavioral Psychotherapy**
George Fox University Graduate Department of Clinical Psychology
Newberg, Oregon

- Guest lectures, demonstration role-plays, student feedback on in-vivo training exercises
- Course provides framework in conceptualization and treatment from first through third wave cognitive therapies, including REBT, CBT, ACT, DBT, and Mindfulness-based therapies
- Graduate Assistant, Supervisor: Mark McMinn, PhD

2015 **Guest Lecturer, Theories of Personality and Psychotherapy**
George Fox University Counseling Degree Program
Portland, Oregon

- Solution-Focused Therapy
 - Adapting Theoretical Orientation to Primary Care Practice
-

Research Experience

Publications and Presentations

Fleishman, J., O, M., & Goins, N. (2015, October). *DBT skills group: A primary care success story at an FQHC*. Symposium conducted at the 2015 Collaborative Family Health Association Conference, Portland, OR.

Malone, M., & Goins, N. (2015, October). *Factors that affect recidivism for psychiatric patients in the emergency department*. Poster presented at the 2015 Collaborative Family Health Association Conference, Portland, OR.

Houbjerg, C., Goins, N., Malone, M., & Goodworth, M.C. (2014, May). *Persistent pain in primary care: A patient-centered multidisciplinary approach*. Poster presented at the 2014 Oregon Psychological Association Conference, Portland, OR.

Ongoing Research Experience

2013-Present Dissertation Title: *Treating chronic pain at a Federally Qualified Health Center: Staff perspectives*.

Summary: The present study is designed to evaluate staff perspectives on chronic pain treatment to aid in developing an effective, site-appropriate, and feasible stepped-care treatment plan for patients within an FQHC population.

Committee Chair: Marie-Christine Goodworth, PhD

Committee Members: Mary Peterson, PhD, ABPP; Kathleen Gathercoal, PhD

Dates of Expected Completion:

- Proposal Approved: April 29, 2015
- Data Collection: December 2015
- Data Analysis: March 2016
- Anticipated Defense: May 2016

Other Research Experience

2013-Present **Research Vertical Team**

George Fox University Graduate Department of Clinical Psychology
Newberg, OR

- Collaboratively work with members of each cohort to develop and implement dissertations, posters, and symposium presentations
- Areas of interest include: Primary Care, Pediatrics, Palliative Care, Risk Assessment, Neuropsychology, Caregiver Concerns
- Chairperson: Marie-Christine Goodworth, PhD

- 2007-2008 Goins, N., West, J., Ford, H., Johnson, K., & Sparks, C. *Stress, coping, and cognitive dissonance*.
- Undergraduate research project
 - Principle Investigator

Professional Trainings

Primary Care and Health Psychology Training

- 2015 Foundational Routines of Patient Centered Care
- Collaborative Family Health Association Conference, Portland, Oregon
 - Alexander Blount, EdD; Ronald Adler, MD, FAAFP
- 2015 The ACE Study: Linking Childhood Trauma to Long-Term Health and Social Consequences
- Collaborative Family Health Association Conference, Portland, Oregon
 - Vincent J. Felitti, MD
- 2015 Engaging Important Stakeholders to Assess Gaps in Primary Care for Dementia: Considering the Forest as Well as the Trees
- Collaborative Family Health Association Conference, Portland, Oregon
 - Christina L. Vair, PhD; Laura O. Wray, PhD
- 2015 Let's Talk! Questions and Answers Regarding How to Convert Clinical Practice into Research and Program Evaluation
- Collaborative Family Health Association Conference, Portland, Oregon
 - Jeffrey L. Goodie, PhD, ABPP; Jennifer Funderburk, PhD; Christina Studts, PhD, LCSW; R. William Lusenhop, MSW, PhD, LICSW
- 2015 A Model of Integrated Behavioral Health in a Pediatric Primary Care Setting
- Collaborative Family Health Association Conference, Portland, Oregon
 - Carol Lilly, MD, Mph; Carrie Adams, PhD
- 2015 Swimming in the "Deep End": Psychiatric Consultation for Complexity, Ambiguity and Education
- Collaborative Family Health Association Conference, Portland, Oregon
 - Lori Raney, MD; Margie Kaems, LCSW; Rusty Kallenberg, MD; Rachel Robitz, MD
- 2013 Action and Commitment in Psychotherapy: A Mindful Approach to Rapid Clinical Change
- George Fox University, Newberg, Oregon
 - Brian Sandoval, PsyD; Juliette Cutts, PsyD

Child and Adolescent Training

- 2015 Let's Talk About Sex: Managing Emerging Sexuality
 - George Fox University, Newberg, Oregon
 - Joy Mauldin, PsyD
- 2014 "Face Time" in an Age of Technological Attachment
 - George Fox University, Newberg, Oregon
 - Doreen Dodgen-McGee, PsyD
- 2014 Understanding and Treating ADHD in Children
 - George Fox University, Newberg, Oregon
 - Erika Doty, PsyD
- 2014 Learning Disabilities: A Neuropsychological Perspective
 - George Fox University, Newberg, Oregon
 - Tabitha Becker, PsyD

Assessment Training

- 2014 WISC-V: Overview and Demonstration of Upcoming Revisions
 - Northwest Psychological Assessment Conference, Newberg, Oregon
 - Patrick Moran, PhD
- 2014 Woodcock Johnson-IV: A New Era of Assessment and Interpretation
 - Northwest Psychological Assessment Conference, Newberg, Oregon
 - Stephanie Rodriguez, EdS
- 2014 Assessing Therapeutic Outcomes: Improving Your Effectiveness in Clinical Practice
 - Northwest Psychological Assessment Conference, Newberg, Oregon
 - Carlos Taloyo, PhD

Other Related Training

- 2015 Spiritual Formation and Psychotherapy
 - George Fox University, Newberg, Oregon
 - Barrett McRay, PhD
- 2015 Credentialing, Banking, the Internship Crisis, and Other Challenges
 - George Fox University, Newberg, Oregon
 - Morgan Sammons, PhD

- 2014 Evidence-Based Treatments for PTSD in Veteran Populations: Clinical and Integrative Perspectives
 - George Fox University, Newberg, Oregon
 - David Beil-Adaskin, PhD
- 2014 DSM-V Training: Essential Changes in Form and Function
 - George Fox University, Newberg, Oregon
 - Jeri Turgeson, PsyD; Mary Peterson, PhD, ABPP
- 2013 The Person of the Therapist
 - George Fox University, Newberg, Oregon
 - Brooke Kuhnhausen, PhD
- 2014 Suicide Assessment
 - Oregon State University Counseling and Psychological Services, Corvallis, Oregon
 - Jim Gouveia, LCSW-ACSW
- 2013 Afrocentric Approaches to Clinical Practices
 - George Fox University, Newberg, Oregon
 - Danette Haynes, PhD; Marcus Sharp, PhD
- 2013 Trauma Treatment
 - Oregon State University Counseling and Psychological Services Sexual Assault Support Services, Corvallis, Oregon
 - Judy Neighbors, PhD

Professional Memberships and Honor Societies

- 2012-Present American Psychological Association, Student Affiliate
- 2015-Present APA Division 38 – Society for Health Psychology
- 2015-Present Collaborative Family Health Association, Student Member
- 2014-Present GDCP Clinical Health Psychology Student Interest Group
- 2007-09 Psi Chi, Point Loma Nazarene University Chapter
 - Vice President 2008-09

Community Involvement

- 2012-2013 Serve Day, George Fox University

- 2013 Peer mentor to incoming PsyD students
- George Fox University Graduate Department of Clinical Psychology

Honors and Awards

- 2015 Collaborative Family Health Association Conference Student Volunteer Scholarship Recipient
- 2009 Point Loma Nazarene University Cum Laude
- 2005-06 Point Loma Nazarene University Deans List

Assessment Training

- 16 Personality Factor Questionnaire
- Adult Behavior Checklist
- Adaptive Behavioral Assessment System II
- Behavioral Assessment System for Children 2
- Behavioral Rating Inventory of Executive Function
- California Verbal Learning Test-2
- Conner's Continuous Performance Test II
- Conner's 3rd Edition
- Delis-Kaplan Executive Function System
- House-Tree-Person Test
- Medical Symptom Validity Test
- Millon Adolescent Clinical Inventory
- Millon Clinical Multiaxial Inventory-III
- Mini Mental Status Exam 2
- Minnesota Multiphasic Personality Inventory 2 & MMPI-Restructured Forms
- Minnesota Multiphasic Personality Test-Adolescent
- Peabody Picture Vocabulary Test 4
- Personality Assessment Inventory
- Personality Assessment Inventory-Adolescent
- Rey-Osterrieth Complex Figure Test
- Robert's Apperception Test for Children 2
- Test of Memory and Malingering
- Wechsler Abbreviated Scale of Intelligence-II
- Wechsler Adult Intelligence Scale IV
- Wechsler Individual Achievement Tests-III
- Wechsler Intelligence Scale for Children-4
- Wechsler Memory Scales
- Wide Range Assessment of Memory and Learning 2
- Wide Range Intelligence Test
- Wide Range Achievement Test 4
- Woodcock-Johnson III Tests of Cognitive Abilities
- Woodcock-Johnson III Tests of Achievement

Population-Based Screener Training

- Adult Neuropsychological Questionnaire
- Barkley Adult ADHD Rating Scale-IV
- Beck Depression Inventory-2
- Brown Attention Deficit Disorder Scales
- Center for Epidemiologic Studies Depression Scale
- CRAFT Screening Test
- General Anxiety Disorder-7

- Montreal Cognitive Assessment
- Mood Disorder Questionnaire
- NICHQ Vanderbilt Assessment Scales
- Outcome Rating Scale
- Pain Disability Index
- Patient Activation Measure
- Patient Health Questionnaire-9
- Pediatric Symptom Checklist
- PTSD Checklist
- Saint Louis University Mental Status Exam
- SBIRT Screeners
- Session Rating Scale
- Spence Children's Anxiety Scale
- Tampa Scale for Kinesiophobia

References

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