Occupational Therapy in Primary Care: Determining Receptiveness of Occupational Therapists and Primary Care Providers

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Abstract

Background: Primary care (PC) is an emerging practice setting for occupational therapy; however, few occupational therapists currently practice in this setting due to barriers, including uncertainty about reimbursement and the role of occupational therapists. This pilot study aimed to determine if PC providers and occupational therapists are receptive to occupational therapists as integrated interprofessional PC team members if barriers to inclusion are addressed.

Method: After a brief educational paragraph explaining potential occupational therapy contributions to PC teams, the participants accessed a link to survey questions regarding their personal level of receptiveness to occupational therapy in PC. The questions comprised Likert scale and open-ended answers.

Results: Of the Likert scale responses, 94%-99% provided by occupational therapists and 82%-97% provided by PC providers indicated possibly or yes to the inclusion of occupational therapists on the PC team. The descriptive responses were primarily supportive.

Discussion: The majority of the occupational therapists and PC providers surveyed indicated support for including occupational therapists in primary care. This indicates that when barriers are addressed, occupational therapists and PC providers are receptive to the inclusion of occupational therapists as members of the interprofessional PC team.

Keywords

Credentials Display

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Drawing on definitions from the Institute of Medicine and the Patient Protection and Affordable Care Act, the American Occupational Therapy Association (AOTA), through their primary care position paper, defines primary care as "the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community" (Roberts, Farmer, Lamb, Muir, & Siebert, 2014, p. 1). Historically in primary care (PC), patients are scheduled for short visits with the physician in a small exam room. Nearly half of these visits are for acute medical needs; the remainder are for preventative care or chronic care management (Bodenheimer & Smith, 2013).

PC is an emerging practice area for occupational therapists (OTs). However, despite the OT's broad skill set, and considering that OTs enhance the interprofessional PC team by addressing patient issues that impact health behaviors, impede function, and affect quality of life (Dahl-Popolizio, Manson, Muir, & Rogers, 2016), there are still few OTs practicing in this field (Donnelly, Brenchley, Crawford, & Letts, 2013, 2014). There are barriers to the inclusion of OTs as members of the interprofessional PC team in the form of perceptions of primary care providers (PCPs) and OTs, including uncertainty about what OTs can contribute in the PC setting and how the service will be funded or reimbursed (Bodenheimer & Smith, 2013; Donnelly et al., 2013; Muir, Henderson-Kalb, Eichler, Serfas, & Jennison, 2014). These barriers must be explored and addressed if OTs are to be recognized as members of the interprofessional PC team.

Although OTs are gradually being incorporated into interprofessional PC teams in countries such as Canada, the United Kingdom, and Australia (Cook & Howe, 2003; Dahl-Popolizio et al., 2016; Donnelly et al., 2013, 2014; Letts, 2011; Mackenzie & Clemson, 2014; Mackenzie, Clemson, & Roberts, 2013; Tracy, Bell, Nickell, Charles, & Upshur, 2013; Wood, Fortune, & McKinstry, 2013), the role of OTs in PC needs to be better defined in the United States (Dahl-Popolizio et al., 2016). Many PCPs do not use OTs in PC because they do not understand the occupational therapy scope of practice or the potential role of OTs as members of the interprofessional PC team (Donnelly et al., 2013; Wood et al., 2013). As a result, OTs are overlooked and underused in this setting (AOTA, 2013; Dahl-Popolizio et al., 2016; Donnelly et al., 2013, 2014; Mackenzie et al., 2013). When PCPs have a good understanding of the role of OTs, referrals for occupational therapy services increase; conversely, when PCPs have a poor understanding, the referral rate decreases, resulting in underuse of OTs (Donnelly et al., 2013; Metzler, Hartmann, & Lowenthal, 2012).

Donnelly, Leclair, Wener, Hand, and Letts (2016) completed the first national survey of OTs working in PC in Canada. They discovered wide variability in the activities that OTs were providing. The specific role of OTs in PC depends on the nature and the needs of the community, the interprofessional PC team, and the patient population. This diversity supports the role of OTs as generalists in PC, as they provide intervention

across the life span (Donnelly et al., 2014; Donnelly Leclair, Wener, Hand, & Letts, 2016; Muir, 2012). Using their diverse skill set as generalists to address the plethora of issues that present to PC, OTs in this setting work at the top of their license, meaning that they use their full educational skill set to meet the whole person needs of the individuals and populations of PC. This diverse skill set allows the OTs to complement the interprofessional PC team by helping the team meet the many and diverse patient issues that complicate patient health and result in increased health care costs (Dahl-Popolizio et al., 2016). Considering the barrier of uncertainty regarding the role of OTs in PC, OTs must articulate their skills and contributions to educate the interprofessional PC team about their potential contributions both to patient care and to the team itself in this emerging practice setting.

The AOTA has examined and articulated the fit that OTs have in PC (Roberts et al., 2014). There are many articles providing evidence for and supporting the emergence of PC as a practice setting for OTs. These articles also provide multiple examples of what occupational therapy in PC might look like (AOTA, 2014; Dahl-Popolizio et al., 2016; Muir, 2012; Muir et al., 2014; Roberts et al., 2014). OTs offer a unique contribution—their diverse scope of practice and unique whole person approach addresses patient habits and routines, as well as environmental factors that affect health across the life span and in the context of the patient's life, family, and community (Dahl-Popolizio et al., 2016). According to the AOTA (2014), clinical domains can include life context, physical environments, performance skills, patterns,

occupations, and client factors. This broad contextual view of the patient provides a unique lens through which the OTs view, interact with, and treat each patient. Because of this unique view, OTs can help patients who most frequently present to PC offices, and as a result help the interprofessional PC team meet the patients' needs (Dahl-Popolizio et al., 2016). Common issues OTs address include illness, chronic care coordination, self-management, and behavioral health issues that affect patient health. As key members of the interprofessional PC team, OTs in this setting address many personal health issues, such as the promotion of healthy living and the prevention of injury, re-injury, disease, and disability. The OTs' educational background in addressing client issues related to physical, psychological, social, and cognitive function facilitates the role of occupational therapy in the PC setting (Dahl-Popolizio et al., 2016; Metzler et al., 2012; Muir, 2012). See the Appendix for a case study example of occupational therapy in PC.

The literature supports the cost-effectiveness of occupational therapy in the treatment of chronic illness (Metzler et al., 2012; Rexe, Lammi, & von Zweck, 2013), which affects a large segment of PC populations. With interventions that improve the quality of life of patients and caregivers, OTs provide cost-effective interventions that address many issues faced by the health care system, including issues and conditions common to PC settings, such as chronic pain, chronic disease, age-related decline, falls prevention, and more (Dahl-Popolizio et al., 2016; Hart & Parsons, 2015).

Although the health care system in the United States is gradually moving away from the fee-for-service reimbursement model, this model is still the most common payment structure. Altschuler, Margolius, Bodenheimer, and Grumbach (2012) suggested that PCPs delegate responsibilities that do not require the skill set of the physician to other members of the interprofessional PC team. However, physicians are less likely to delegate billable services to other clinicians unless those clinicians are also able to bill for their services (Bodenheimer & Smith, 2013). Therefore, reimbursement concerns are a barrier that OTs must address when educating physicians regarding what they bring to the interprofessional PC team. Chapter 15 of the *Medicare Benefit Policy Manual* (Centers for Medicare and Medicaid [CMS], 2016) defines the role of OTs as providers (Section 230). PC comprises various practice types of solo and group practice models. This CMS (2016) document also defines these models in the PC setting and outlines how a therapist can bill Medicare appropriately in this setting (Section 230.4). This document is a useful tool to assist therapists in educating the interprofessional PC team regarding reimbursement for their services, and thus can effectively address this barrier.

The literature supports the contention that OTs have a role in PC and that there are barriers to the inclusion of OTs in PC. This exploratory pilot study aimed to answer the research question: If the barriers to inclusion and the uncertainty about occupational therapy's role and reimbursement are addressed, are PCPs and OTs receptive to OTs as integrated interprofessional PC team members?

Method

Design

The study consisted of a cross-sectional, descriptive group comparison design using surveys to gather data. The Arizona State University Institutional Review Board determined this study exempt.

Procedures

The researchers decided that a survey format would allow them to use national databases to recruit participants; no appropriate existing survey was found. In collaboration with PCPs and OTs, the researchers developed parallel surveys with questions specific for each provider group to gauge their receptiveness to OTs in PC. The beginning of each survey included a brief educational paragraph reflecting information relevant to each target group regarding the role and value of occupational therapy in PC. In addition to the demographic questions, both surveys consisted of five forced-choice questions and two open-ended questions. The open-ended questions encouraged the respondents to add information they believed relevant to the study. The forced-choice questions used a 5-point Likert scale where $1 = no$, $2 = probably\ not$, $3 = possibly$, $4 = yes$, $5 = no\ opinion$. The questions to the PCPs focused on whether the PCP, the interprofessional PC team, and the patients could benefit from an OT on the team and whether funding an OT was a barrier. The questions to the OTs focused on whether they believed they are prepared for and should be members of the interprofessional PC team and if they believed

reimbursement was a barrier. The survey was open for 12 weeks, from February to May, 2016. Only data from that period was included in the analysis.

Participants and Recruitment

Our target population included PCPs and OTs. The PCPs included medical doctors (MD), doctors of osteopathic medicine (DO), nurse practitioners (NP), and physician assistants (PA). The OTs included occupational therapists, occupational therapy assistants, and occupational therapy students. Because few OTs currently work in PC, we disseminated the OTs survey to a broad population of OTs across all practice settings. We wanted to understand the receptiveness of OTs across settings to considering PC as a potential work setting, because if more OTs are to work in PC, then they will have to transition from other settings. We included responses received from students for a similar reason: to determine the receptiveness of students to PC as a potential post-graduation work setting. We excluded from the data analysis any respondents who did not fit into the categories of PCP working in PC, occupational therapist, occupational therapy assistant, or occupational therapy student.

An email with a brief explanation and a link to an electronic survey created through SurveyMonkey® was distributed to the respondents through the national professional association email listservs of the following organizations: the American Academy of Family Physicians, the Collaborative Family Healthcare Association, and each American Occupational Therapy Association Special Interest Section. Anyone receiving the email through any of these listservs could respond;

however, we included only those respondents from our target populations, as outlined above, in our data analysis. We also sent the survey by email to OTs and PCPs who were personal contacts of the researchers, and snowball sampling was encouraged to expand the reach. The first page of the survey included a consent form. Submission of the survey indicated consent. The respondents received only one request to complete the survey; there were no follow-up or reminder emails sent, as access to the professional listservs was limited to one time. As the survey was disseminated via national email listservs, and snowball sampling was encouraged, it is impossible to determine a response rate.

Data Analysis

The responses for each forced-choice question were analyzed using frequency percentages, and the responses to open-ended questions were analyzed by coding and identifying themes. To ensure accurate interpretation of the coding categories, two of the researchers (SDP and SW) independently reviewed the comments then grouped them thematically. These two researchers compared their results. A third researcher (SM) served as an arbitrator in order to reach a consensus when there was disagreement. The themes were developed based on the comments received. The comments were reviewed and categorized according to whether they were supportive of OTs in PC without reservation, with reservation, or if they were unsupportive. The responses that were supportive with reservation were further categorized based on the nature of the reservation, such as reimbursement concerns and uncertainty regarding the role of OTs in PC.

Results

One-hundred and eleven individuals completed the survey. Seventy-one respondents completed the OT survey and 40 respondents completed the PCP survey. All of the OT respondents met the inclusion criteria while 34 of the 40 PCP respondents met the inclusion criteria. The sample size was 105. The OT respondents included 65 (91.5%) occupational therapists, three (4.2%) occupational therapy assistants, and three (4.2%) occupational therapy students. The PCP respondents included 17 (50%) MDs, four (11.8%) DOs, nine (26.5%) NPs, and four (11.8%) PAs.

The majority of the PCPs' responses (82%-97%) to each question were 3 or 4 on the Likert scale, indicating an overall receptiveness to OTs on the interprofessional PC team. Table 1 provides details regarding the breakdown of the PCP responses to each of the survey questions.

Table 1

Quantitative Questions Asked of PCP Participants with Likert-scale Answer Options

Questions	Answer Options	n (%)
If the OT saw your patients who didn't need your diagnostic or prescriptive skill set first, and then sent them to you only if they still had needs requiring the skill set of a PCP, would this help you streamline your practice?	No Probably not Possibly Yes No opinion	0 (0.0) 4 (11.8) 10 (29.4) 18 (52.9) 2 (5.9)
Can you envision patients or populations in your practice that would benefit from the skill set of an OT?	No Probably not Possibly Yes No opinion	0 (0.0) 0 (0.0) 6 (17.6) 27 (79.4) 1 (2.9)
Would you be open to working with an OT as a member of your interprofessional primary care team?	No Probably not Possibly Yes No opinion	0 (0.0) 1 (2.9) 2 (5.9) 31 (91.2) 0 (0.0)
Do you think it would help you, or your primary care team, to have someone with the OT skill set described above on your interprofessional primary care team?	No Probably not Possibly Yes No opinion	0 (0.0) 1 (2.9) 8 (23.5) 25 (73.5) 0 (0.0)
If funding an OT in your practice was not a concern, would that increase the likelihood that your practice would hire an OT?	No Probably not Possibly Yes No opinion	0 (0.0) 2 (5.9) 9 (26.5) 20 (58.8) 3 (8.8)

Note. N = 34.

Nine of the PCP respondents provided additional descriptive information through comments to the open-ended questions. The descriptive responses suggested that only one respondent was not receptive to hiring OTs. Four of the nine respondents supported OTs as members of the interprofessional PC team, with two of these four respondents suggesting that PCPs need further education regarding the role that OTs can fill in this setting. Three of the respondents were generally supportive of OTs in PC but gave explanations regarding concerns or reservations about working with OTs. Two of the respondents suggested they already refer out to OTs as indicated, or their pediatric patients obtain services through avenues outside of their office. One answer suggested that the respondent viewed OTs in the same light as he or she viewed medical or mid-level students, as a role requiring time-consuming supervision. Table 2 illustrates these results.

Table 2

Categories of Descriptive Responses Provided by PCPs (n = 9)

Category	Number of responses (out of 9)	Percentage
Supportive of OTs in PC	4	44
Supportive with concerns (categorized as follows):	4	44
• Unsure what OT can do in PC	3	
• Define roles (especially if behavioral health is already there)	1	
Unsupportive	1	11
• Would contract with them, not hire them		

The majority of the OTs' responses (94%-99%) to each question were 3 or 4 on the Likert scale, indicating an overall receptiveness to OTs on the interprofessional PC team. Table 3 outlines these results and provides a breakdown of the responses of the OTs to each survey question.

Table 3

Quantitative Questions Asked of OT Participants with Likert-scale Answer Options

Questions	Answer Options	n (%)
I can envision myself and/or other OTs working in primary care settings.	No	2 (2.8)
	Probably not	2 (2.8)
	Possibly	15 (21.1)
	Yes	52 (73.2)
	No opinion	0 (0.0)
With my OT education, training, and skill set I feel prepared to work in a primary care setting.	No	1 (1.4)
	Probably not	0 (0.0)

	Possibly	23 (32.4)
	Yes	45 (63.4)
	No opinion	2 (2.8)
If OTs were able to obtain reimbursement without difficulty, I believe that OTs could and should be in primary care.	No	0 (0.0)
	Probably not	1 (1.4)
	Possibly	5 (7.0)
	Yes	65 (91.5)
	No opinion	0 (0.0)
If the other health care providers in primary care had a better understanding of OT, I believe OTs would have a larger presence in primary care.	No	0 (0.0)
	Probably not	0 (0.0)
	Possibly	11 (15.5)
	Yes	59 (83.1)
	No opinion	1 (1.4)
I believe OT should be part of the interprofessional primary care team.	No	0 (0.0)
	Probably not	1 (1.4)
	Possibly	4 (5.6)
	Yes	66 (93.0)
	No opinion	0 (0.0)

Note. $N = 71$.

Twenty-one of the OT respondents provided additional descriptive information. These responses indicated that 95% of the respondents support the concept of OTs in PC. Twelve of these respondents provided supporting comments as well as additional thoughts about the role of OTs in PC. Eight of the 12 respondents provided supporting comments with some concerns outlined. The concerns related to methods for reimbursement and cost-effectiveness, as well as the level of preparedness of OTs for the PC setting. One respondent was not supportive and reported doubt about the patients' acceptance of OTs in this role as an explanation for his/her concerns about OTs being on the interprofessional PC team. Table 4 illustrates these results with categories of the descriptive responses.

Table 4

Categories of Descriptive Responses Provided by OTs (n = 21)

Category	Number of responses (out of 21)	Percentage
Supportive of OTs in PC	12	57
Supportive with concerns (categorized as follows):	8	38
• Reimbursement/cost-effectiveness	3	
• OTs preparedness/skill set for PC	2	

• PC is a different practice model	1	
• PC not yet accessible for OTs	1	
Unsupportive		
• Don't think it will work in practice	1	4

Discussion

Bodenheimer and Sinsky (2014) report wide-spread burnout and fatigue in PCPs and staff working in PC, and that "burnout is associated with lower patient satisfaction, reduced health outcomes, and it may increase costs" (p. 573). To reduce burnout and fatigue, these authors recommend team documentation, pre-visit planning, preventative care, chronic care health coaching by other providers, and increased efficiency through co-located care. OTs in PC could help to meet these needs. The results of our study indicate that with an increased awareness of the potential OTs' contributions to patient care, PCPs would be receptive to having OTs on their team.

The PCP respondents believed, in general, that their patient populations and their interprofessional PC team could benefit from the skill set of OTs, and the majority of the PCP respondents would be open to working with OTs as team members. OTs are well trained in the skilled documentation required by regulators and payers, which addresses one of the recommendations of Bodenheimer and Sinsky (2014). By seeing some patients before the physician, the OT could complete a general musculoskeletal assessment and an occupational profile focusing on activities of daily living, functional mobility, safety, and health

behaviors. Once this information is in the medical record, the physician can focus on acute medical needs. More than 82% of the PCP respondents believed that having OTs see patients who did not require the skill set of the PCP might help streamline their practice. When appropriate, the OT could be the primary provider for a set panel of patients and work with them in pre-visit planning, preventative care, and chronic disease management. More than 97% of the PCP respondents are willing to work with an OT, and more than 85% indicated that if funding for an OT was not a concern, the chance that their practice would hire an OT would increase. This further supports the concept that addressing the barriers discussed here can result in an increased presence of OTs on the interprofessional PC team.

The responding OTs overwhelmingly stated that OTs should be members of the interprofessional PC team. In general, the OT respondents could envision themselves or other OTs working in the PC setting. The majority of the respondents felt that if OTs were able to receive reimbursement without any difficulty, then OTs should be in PC. The OT respondents also believed that OTs would have a larger presence in PC if other health care providers in PC had a better

understanding of occupational therapy's scope of practice.

The findings of this study are consistent with and support the suggestions in the literature advocating that OTs have a distinct role in PC, and that with their diverse skill set, they complement the interprofessional PC team, addressing health conditions and issues that impede daily activities (Dahl-Popolizio et al., 2016; Roberts et al., 2014). This includes the benefits that OTs offer the PC patients and the interprofessional PC team, such as streamlining the practice and meeting the diverse needs of patients in this setting (Dahl-Popolizio et al., 2017; Donnelly et al., 2013, 2014; Metzler et al., 2012; Muir et al., 2014). Overall, the responses from the OTs and the PCPs were positive and demonstrated the receptiveness of both groups to include OTs in PC. The number of respondents that indicated possibly as a response, though not as many as the number who indicated yes, suggests that there continues to be uncertainty that must be addressed prior to integrating OTs effectively as members of the interprofessional PC team. The study outcomes also support the need to address the barriers that are limiting the inclusion of OTs in PC if we are to achieve the goal of increasing the presence of occupational therapy as an integrated interprofessional PC team member. To increase the presence of OTs in this setting, both groups of professionals require additional education regarding the roles that OTs can fill. In addition, OTs, PCPs, and their respective professional organizations must work with payers to address reimbursements challenges.

Limitations

This pilot study was limited by convenience sampling, non-random selection, and the inability to reach entire populations of interest. This was primarily due to our lack of funding, with recruitment limited to free online sources, such as listservs and email, and the limited availability of those sources. The lack of ability to provide follow-up reminders may have resulted in a small sample relative to the population of interest as well. From some of the comments, it appeared that some of the respondents did not read or completely understand the consent form and introductory paragraph. The potential bias that only OTs and PCPs who already had a favorable view of the role of occupational therapy in PC took the time to respond to the survey must be considered when contemplating these results. We attempted to limit this bias, as the listservs used for both groups were general and not focused on interprofessional PC teams.

Implications for Future Research

Future research on a larger scale is necessary to determine how the profession can overcome the barriers of lack of knowledge regarding the role of OTs in PC and uncertainty regarding reimbursement for occupational therapy services. If we are to supply the workforce, and should OTs become recognized members of the interprofessional PC team, then future research is also required to determine the willingness of current OTs to change practice settings, as well as the willingness of occupational therapy students to consider PC as a potential practice setting. With a larger study, more demographic information regarding the current practice settings of the

respondents would be helpful to determine if OTs from specific settings are more inclined to consider changing practice settings to PC. This information will be important for effective workforce development in this emerging setting.

Conclusions

The results of this study indicate that if barriers are removed, both OTs and PCPs are receptive to including OTs on the interprofessional PC team. The most common barriers discussed were uncertainty about funding and what the OTs can contribute to the interprofessional PC team. Findings suggest that educating both OTs and PCPs about how to overcome these barriers is a necessary step to advance the movement to include OTs as recognized members of interprofessional PC teams.

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Appendix

Case Study of Occupational Therapy in PC

Ally, a 22-year-old college student, came to the PCP with complaints of generalized anxiety and the new onset of panic attacks. The OT was present for the entire physician exam, including questions about routines and habits. Ally disclosed that she was very concerned about her grades in college and was staying up most nights to study, averaging about 3 hr of sleep each night. Recently, she had been sleeping through her alarm and missing her 8 a.m. class, which put her further behind. After consultation with the OT, the PCP decided to give Ally a small daily dose of an anti-anxiety medication, as long as she agreed to get at least 6 hr of sleep each night.

After the PCP moved on to the next patient, the OT provided education on the importance of sleep, especially how lack of sleep was likely negatively impacting cognition and concentration and, subsequently, school performance. The OT used a handout to educate Ally about sleep hygiene, with a specific focus on establishing a consistent, realistic bedtime routine. Together, Ally and the OT designed a very specific bedtime routine that Ally committed to following every weeknight for 3 weeks. The OT called Ally after 1 week to identify any challenges with the routine and made suggestions for adjustments.

When Ally returned to the PC office after 3 weeks for a medication review, the OT again saw the patient with the physician. Ally reported that she was able to follow the new routine nearly every weeknight, as agreed. She had not had a single panic attack, and her overall levels of anxiety had reduced to a manageable level, although she requested to stay on the anti-anxiety medication. Ally asked if the OT could help her with establishing a schedule for studying. The physician moved on to the next patient and the OT stayed in the room to design the next steps of Ally's intervention. At this point, follow up for this issue was done with the OT; the PCP was then free to see other patients requiring the diagnostic and prescriptive skill set of a physician.