

The Primary Care Prescribing Psychologist Model: Medical Provider Ratings of the Safety, Impact and Utility of Prescribing Psychology in a Primary Care Setting

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Abstract Family medicine providers at a large family medicine clinic were surveyed regarding their impression of the impact, utility and safety of the Primary Care Prescribing Psychologist (PCPP) model in which a prescribing psychologist is embedded in a primary care clinic. This article describes the model and provides indications of its strengths and weaknesses as reported by medical providers who have utilized the model for the past 2 years. A brief history of prescribing psychology and the challenges surrounding granting psychologists the authority to prescribe psychotropic medication is summarized. Results indicate family medicine providers agree that having a prescribing psychologist embedded in the family medicine clinic is helpful to their practice, safe for patients, convenient for providers and for patients, and improves patient care. Potential benefits of integrating prescribing psychology into primary care are considered and directions for future research are discussed.

Keywords Prescribing psychology ·
Primary care psychology · Medical psychology ·
Health psychology · Primary care behavioral health

Introduction

The practice of medicine continues to evolve as new specialties emerge and scopes of practice are expanded. Prescription privileges for non-MD subspecialties have become increasingly common. For example, the Washington State Department of Health (WSDH) lists the following non-physician professions as having restricted or unrestricted prescriptive authority in the State: Advanced Registered Nurse Practitioners (ARNPs), Physician Assistants (PAs), Certified Registered Nurse Anesthetists (CRNAs), Dentists (DMDs), Naturopathic Doctors (NDs), and Optometrists (ODs) (WSDH, 2010). Psychologists have joined these non-physician professions in seeking limited prescription privileges. Currently, psychologists are credentialed to prescribe psychotropic medication in two states, one US territory, three military branches, and some federal agencies, including the Indian Health Service. Psychologists are actively seeking prescription privileges in other states and federal programs. The purpose of this study is twofold: (1) describe a service delivery model in which a prescribing psychologist is integrated into a primary care clinic, and (2) describe the experiences, attitudes and opinions of medical providers who have worked within this service delivery model for the past 2 years.

Prescribing Psychology: History and Controversy

Between 1991 and 1997 the Department of Defense (DOD) launched a controversial and ambitious program called the Psychopharmacology Demonstration Project (PDP) which is described in detail elsewhere (Laskow & Grill, 2003; Newman, Phelps, Sammons, Dunivin, & Cullen, 2000; Sammons, 2010; Sammons & Brown, 1997). The goal of the PDP was to train psychologists to become independent

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prescribers of psychotropic medication. Four evaluation reports were generated for the PDP between 1996 and 1999 [American College of Neuropsychopharmacology (ACNP), 1988; Government Accountability Office (GAO), 1997, 1999; Vector Research, 1996].

A review of the four PDP evaluation reports highlights several important facts. First, each of the four independent evaluations concluded the Project psychologists were well trained in the practice of prescribing psychotropic medication. Second, the PDP was not advanced to widespread implementation, due *not* to problems training psychologists to competently prescribe, but due to considerations of military readiness and cost. As a result of these findings, proponents of prescribing psychology continued to work on expanding their scope of practice to include the prescription of psychotropic medication in civilian sectors, as well as government institutions. These psychologists are described as either “medical psychologists” (MP) or “prescribing psychologists” (RxP). In this article psychologists with prescription privileges will be referred to as either “prescribing psychologists” or “RxPs.”

Controversy regarding prescription privileges for psychologists tends to revolve around issues of training, consumer safety, questions about the motivation of psychologists who seek prescription privileges, concerns that prescribing psychology will weaken the strong behavioral/psychosocial (nonmedical) roots of traditional clinical psychology, and other issues (e.g., DeNelsky, 1996; Dozois & Dobson, 1995; Hayes, 1995; Heiby, 2002, 2010; Lavoie & Barone, 2006; Pollitt, 2003; Robiner et al., 2002; Stuart & Heiby, 2007). Opposition has not only come from organized psychiatry (e.g., see the online position statement by the Federation of Texas Psychiatry, 2009). There has been organized opposition within the ranks of psychology to prescription privileges, for example the formation of Psychologists Opposed to Prescribing Privileges for Psychologists (POPPP, 2007). Van Winkle (2010), a proponent of RxP, proposes that “Psychology appears to be on the verge of an identity crisis” (p. 64). Heiby (2010) has argued that the training, as based on the curriculum developed by the American Psychological Association (APA, 1996, 2009) is substandard. Robiner et al. (2002) expressed concern about the quality and quantity of RxPs training in physiology and medicine and the potential safety risk to patients.

Proponents of prescribing psychology often emphasize the positive evaluation results of the PDP (e.g., Project psychologists were well trained in the practice of prescribing psychotropic medication) (ACNP, 1988; GAO, 1997, 1999; Vector Research, 1996). McGrath and Muse (2010) report that psychologists have been prescribing “for years without one single documented major adverse event” (p. 112). One estimate suggests that “civilian (psychology) prescribers have already written hundreds of thousands of

prescriptions” (McGrath, 2010, p. 4). Dr. Daniel Carlat (2010), a psychiatrist who is the editor-in-chief of The Carlat Report, a monthly psychiatric practice newsletter and advocate of prescribing psychology, has made several points in his arguments in favor of RxP that include: (1) “...it is clear that prescribing psychologists have already established a track record of safely and competently prescribing psychotropics” (2) “...it is becoming increasingly clear that the argument about patient safety is a red herring and masks the actual resistance” and, (3) psychiatrists’ opposed to RxP “...major concern has to do with economics and prestige” (p. 13).

Behavioral Health Needs in Primary Care Settings

The burden of behavioral health care frequently falls to the primary care provider (PCP) in the absence of adequately available or accessible behavioral health care. Some argue this burden could be addressed by increasing the amount of training family physicians have in prescribing psychotropic medication (Stuart & Heiby, 2007), thereby continuing to rely on PCPs to make up for deficits in the availability of psychopharmacological services. This does not address the need for additional behavioral health services (e.g., cognitive behavioral therapy) and results in continued demand on the PCPs. Data from the National Prescription Audit (NPA) Plus database indicates 472 million prescriptions for psychotropic medications were written between August 2006 and July 2007. Of these, 59 % were written by general practitioners, 23 % by psychiatrists, and 19 % by other physicians and non physician medical providers (Mark, Levit, & Buck, 2009). Further, the data indicate general practitioners prescribed 65 % of the anxiolytics, 62 % of the antidepressants, 52 % of stimulants, 37 % of antipsychotics and 22 % of “antimania” drugs. In addition, other estimates have suggested that up to 66 % of psychotropic prescriptions are ordered by PCPs (Beardsley, Gardocki, Larson, & Hidalgo, 1988). This is not surprising considering that up to two-thirds of patients seen by PCPs are experiencing emotional and behavioral problems (Fries, Koop, & Beadle, 1993).

The demands on PCPs are substantial as the overall need for behavioral health care is increasing. A recent Centers for Disease Control and Prevention (CDC) report indicated that between 2005 and 2008 antidepressant medication was the third most prescribed category of drug taken by people aged 18–44 (Pratt, Brody, & Qiuping, 2011). Further, antidepressant use has increased almost 400 % since the early 1990s, 11 % of Americans aged 12 years and older take antidepressants, less than one-third of Americans who take one antidepressant have seen a “mental health professional” in the past year, and, for those taking more than one antidepressant, less than half have seen a mental health

professional in the past year (Pratt et al., 2011). In their review, Luoma, Martin, and Pearson (2002) examined studies of completed suicides and determined that about one half to two-thirds of persons who completed suicide had visited their physician within the previous month. Further, between 10 and 40 % had seen their PCP the week prior to completing suicide. These statistics must be interpreted in the context that behavioral health issues are only one of many responsibilities shouldered by primary care medical providers. Clearly, there is a need to assist PCPs in meeting these increasing and time consuming behavioral health demands.

Models of Primary Care Psychology

The concept of providing collaborative behavioral health care in a primary care setting is not new; a variety of models have been developed in the past several decades (Blount, 2003; Blount et al., 2007). Collaborative models include the *coordinated care model* in which the PCP and behavioral health provider work in separate locations and share patient information as needed. In the *co-located care model* the PCP and behavioral health provider share space and communicate regularly, but keep separate records. In the *integrated care model* the PCP and behavior health provider work in a shared system, share the same medical record, engage in developing a shared treatment plan, and the behavioral health provider is seen as a member of the primary care team (Hunter, Goodie, Oordt, & Dobmeyer, 2009).

One integrated care model, the Primary Care Behavioral Health (PCBH) model (Robinson & Reiter, 2007; Strosahl & Robinson, 2008), has been used in several healthcare systems including the Veterans Administration, Kaiser Permanente, and the US Air Force and Navy. Hunter et al. (2009) identify key elements of the PCBH model: (1) the behavioral health provider, called the behavioral health consultant (BHC), is a primary care team member; (2) the BHC consults with PCPs; (3) the BHC provides a focused initial assessment of the patient in a 15–30 min session and develops a treatment plan; (4) feedback is provided to the PCP; (5) the BHC then either treats the patient using a focused approach in one to four sessions lasting 15–30 min; or, (6) refers the patient to other providers such as specialty care psychologists, counselors, psychiatric providers, group therapists, or psychoeducators. Hunter and colleagues also note that for chronic behavioral health conditions patients may be seen intermittently over a longer period of time that could span several months to years (Hunter et al., 2009).

Models of Prescribing Psychology

The advent of psychologists' obtaining prescription privileges has led some to investigate how to best integrate

traditional clinical psychology and health psychology with psychopharmacological treatments. Levine and Foster's (2010) Psychobiosocial model emphasizes increased focus on psychological interventions (vs. a medication only approach), the importance of the relationship with the patient to promote collaboration in treatment, and the integration of psychotropic medication across the various phases of the therapy as appropriate. The prescribing psychologist utilizes a thorough clinical interview, various assessment tools and integrates evidence-based psychological and psychopharmacological treatments. In the Psychobiosocial model the use of psychotropic medication is viewed as only one tool among many to address the patient's behavioral health.

Combining Primary Care Psychology and Prescribing Psychology

McGrath and Sammons (2011) have proposed that prescribing psychology and primary care psychology are complementary paths that can be integrated to better serve patients and provide improved behavioral health resource support to PCP. At the same time they acknowledge that the field of psychology will have to make adjustments in training, continue to pursue legislation permitting psychologists to prescribe, educate the primary care community about the role RxPs can play, learn to deal with more medically complex patients and understand the culture and practices in primary care (McGrath & Sammons, 2011).

The inclusion of prescribing primary care psychology in integrated service delivery models seems ideal. Some form of the PCBH model (Robinson & Reiter, 2007; Strosahl & Robinson, 2008) is likely to be applied as there is a great deal of overlap and shared goals. However, there are some differences in how a prescribing primary care psychologist will provide services and how a primary care psychologist functions.

Patient Centered Medical Homes and Behavioral Health

RxP skill sets may be especially applicable to developments within the primary care medical community. One trend in healthcare involves the creation of Patient Centered Medical Homes (PCMH) in primary care clinics. For example, the National Committee for Quality Assurance (NCQA) is a private, non-profit organization that describes the PCMH as a primary care program that establishes a set of guidelines for organizing care around patient needs, interdisciplinary team work and coordination, and following patient care over time (NCQA, 2007). NCQA is a national organization setting standards and providing recognition to those primary care departments and/or hospitals that can demonstrate that they have met those standards.

On their website the NCQA PCMH 2011 Advisory Committee emphasizes the need for the integration of behavioral health into primary care settings (NCQA, 2007). RxPs can help primary care clinics meet this goal by integrating comprehensive behavioral health care into the patient-centered care model.

Description of the Primary Care Prescribing Psychologist (PCPP) Model

The present service delivery model, the PCPP, is currently practiced by one of the authors (Shearer) who has an independent prescribing certificate from New Mexico and is credentialed to prescribe as a DOD civilian psychologist based on guidelines established by the US Army Medical Command (Department of the Army, 2009). The PCPP model is one of integrated care in which the PCP and prescribing psychologist work side by side in the same shared space, and use the same medical record for treatment documentation. The model is an adaptation of the PCBH model (Robinson & Reiter, 2007; Strosahl & Robinson, 2008) and the Psychobiosocial model (LeVine & Foster, 2010). The PCPP model practiced by the provider in the current study involves the integration of the RxP into the treatment team, and the use of unspecified and flexible modes of treatment, which may involve psychotherapy, psychotropic management or both, for a non-targeted population. McGrath and Sammons (2011) identify this approach as differentiating primary care psychology from standard mental health or health psychology models.

All referrals to the RxP originate from PCPs. Location of the RxP within the Family Medicine clinic promotes ease of access for consultation as well as treatment and patient co-management. In some cases behavioral health and/or psychopharmacological consultation alone is sufficient. Otherwise, PCP referrals to the RxP are seen the same day (if emergent/urgent) or at the next available appointment if non-urgent. Following an intake assessment and psychosocial interventions (e.g., cognitive behavioral therapy) as needed, the patient either continues to be seen by the prescribing psychologist or is referred to the most appropriate resource (psychiatric providers, specialty psychology providers, social workers, community support, etc.). The PCPs receive feedback on the therapeutic plan, anticipated length of treatment, next scheduled appointment and are notified if any psychotropic medications are modified or started. Informed consent is addressed verbally and in writing and documented in the patient's electronic medical record. The record also includes information about the indications for a particular medication (if prescribed), the risks, benefits, side effects, typical length of time to onset of therapeutic response, and potential alternative courses of treatment.

As a patient's condition improves a collaborative plan for relapse prevention including maintenance and proper termination is addressed. This may involve longer intervals between sessions, tapering of medication, identifying various resources and determining what may be appropriate for a maintenance dosage, etc. Patients are able to access the RxP if needed in the future, but may also be referred to other community resources such as psychiatric providers, psychologists, or social workers.

One important difference from the primary care psychology models (e.g., Strosahl & Robinson, 2008) is that the PCPP does not conduct abbreviated, problem focused intakes. Rather, the PCPP model holds that a comprehensive intake should be conducted to obtain accurate diagnoses that will guide decisions regarding treatment, consultation and referrals. An RxP must obtain, as available, current and past medical history, current medications, allergies, substance use/abuse, as well as a psychiatric history with an understanding of how the patient responded to psychological treatment and/or psychotropic medication in the past. In contrast to the PCBH model (Robinson & Reiter, 2007; Strosahl & Robinson, 2008) in which the psychologist is purposefully brief and limits the focus to one or two issues, prescribing psychologists in the PCPP model have a broader scope. An additional difference between the PCBH model and the PCPP model involves the time span over which patients are seen. Although therapy may be brief and limited at times, the prescription of psychotropic medication may require months to determine the appropriate medication at the most effective dose.

Despite these differences it is the similarities between primary care psychology and primary care prescribing psychology that are most notable. After the initial intake the RxP is likely to utilize the 15–30 min follow up sessions to focus on specific issues. PCP access to the RxP is emphasized. Depending on the primary care setting and needs, RxPs may become more behavioral health consultants versus behavioral health providers. Complex and long term behavioral health issues may be referred to specialty psychologists, psychiatrists, or other community behavioral health resources as available.

Key Components

The key features of the PCPP model include shared office space, reception, charting system and scheduling. There is an open door policy to decrease barriers for PCPs to access behavioral health and psychotropic medication consultation. The model employs a biopsychosocial approach to assessment and treatment. This approach emphasizes psychotherapeutic approaches first and prescribing capacities second, as the patient is considered in the broader context of biology, environment and social interactions. All

referrals originate with a PCP which ensures an initial medical visit before being seen by the RxP. The initial comprehensive clinical interview focuses on the referral question and identifies whether there are any undiagnosed mental health issues contributing to the referral concern. Additional information is obtained as indicated (e.g., lab tests, collaborative information). The treatment plan is developed based on diagnosis. A triage approach is used to determine if the RxP will treat the patient or refer to a specialty provider as appropriate. Feedback on referrals is provided to the PCP via direct verbal consultation or documentation within the medical chart to identify: diagnosis and treatment plan including therapy goals, medication modifications and referrals to other specialty providers. With regard to prescribing psychotropic medication, the RxP continuously documents tolerance/side effects, therapeutic response, and any changes to the current medication regimen. Psychosocial treatment provided by the RxP is time limited and delivered in 15, 30 and sometimes 45 min appointments. Ongoing reciprocal consultation between the PCP and RxP is seen as vital to the collaborative treatment model. The research described below was undertaken to provide feedback on the response of medical providers to the PCPP model.

Method

Participants

Eligible participants were all medical providers ($n = 65$) working in the Family Medicine clinic of a large Army medical center that implemented use of a clinic-integrated prescribing psychologist (RxP) approximately 2 years prior to the study. Forty-seven providers completed the anonymous online survey yielding a response rate of 72.3 %. Respondents identified themselves as follows: 46.8 % ($n = 22$) Staff Physician, 25.5 % ($n = 12$) Resident, 14.9 % ($n = 7$) ARNP, 8.5 % ($n = 4$) PA, and 4.3 % Other ($n = 2$). On average, providers reported 11 years experience treating patients ($SD = 9.29$; range 0–38). Providers report *consulting* with a RxP in the prior 6 months on an average of 9.38 cases ($Mdn = 5$, range = 0–100) and *referring*, on average, 10.8 cases to a RxP in the past 6 months ($Mdn = 8$; range 0–40).

Procedure

All providers working in the Family Medicine Department were invited via email to participate in an anonymous, voluntary online survey of their impressions of the impact, safety, and utility of embedding a RxP in the primary care clinic. The email contained a link to a twenty-item survey

designed to assess these impressions. Responses were aggregated for analysis. The Madigan Healthcare System Institutional Review Board approved the research protocol.

Measure

As nearly all published research on RxP centers on whether prescription privileges should be granted to psychologists, there was not an existing standardized measure suitable to assess attitudes and perceptions post-implementation. Subsequently, the survey consisted of twenty items written by the authors, and designed to assess providers' impressions of prescribing psychology following integration of a RxP in the clinic. In addition to fourteen items scored on a 5-point Likert scale (see Table 1), and three free-response items, an additional three items assessed respondent professional status, frequency of consultation, and number of patients referred to the RxP.

Results

Table 1 provides a summary of survey results. 95.6 % ($n = 44$) of respondents reported consultation with a RxP to be helpful. Similarly, respondents reported confidence in the ability of the RxP to make appropriate referral decisions (93.6 % *agree* or *strongly agree*), prescribe appropriate medications and dosages (95.7 %), and have adequate knowledge of medical terminology (97.9 %). The majority of respondents (87.2 %) indicated their patients' care has improved as a result of an embedded RxP, and nearly all respondents (93.6 %) reported confidence that it is safe to refer their patients to a RxP for psychotropic medication management.

Results indicate embedding a RxP in a Family Medicine clinic can be particularly helpful in managing patients who are in crisis. Respondents reported they are more comfortable managing a mental health crisis in their clinic when consultation with a RxP is available. On average, respondents indicate they "neither agree nor disagree" to the statement, "I am confident managing a mental health crisis in my clinic" ($M = 3.43$; $SD = .853$). When the statement is modified to include consultation (i.e., "I am confident managing a mental health crisis in my clinic when consultation with a RxP is available"), on average, respondents "agree" ($M = 4.32$; $SD = .695$). A paired-samples t test indicated significant mean differences ($t(46) = 5.968$, $p < .001$).

Out of five potential benefits of an embedded RxP, the greatest number of respondents (87.2 %) identified improved patient access to Behavioral Health care as having a "large benefit." Further, 74.5 % of respondents

Table 1 Survey responses of medical providers

	Strongly disagree n (%)	Disagree n (%)	Neither ^a n (%)	Agree n (%)	Strongly agree n (%)
I find it helpful to consult with a prescribing psychologist about patients with psychiatric issues ^b	0 (0)	1 (2.2)	1 (2.2)	18 (39.1)	26 (56.5)
I am confident in the ability of a prescribing psychologist to identify when patients need to be referred for additional medical evaluation	0 (0)	0 (0)	3 (6.4)	14 (29.8)	30 (63.8)
I am confident managing a mental health crisis in my clinic	0 (0)	8 (17.0)	14 (29.8)	22 (46.8)	3 (6.4)
I believe the prescribing psychologist has adequate knowledge of medical terminology	0 (0)	0 (0)	1 (2.1)	18 (38.3)	28 (59.6)
I am confident it is safe to refer my patients to a prescribing psychologist for psychotropic medication management	0 (0)	1 (2.1)	2 (4.3)	14 (29.8)	30 (63.8)
I believe my patients' care has NOT improved as a result of the availability of a prescribing psychologist in the family medicine clinic	25 (53.2)	16 (34.0)	5 (10.6)	1 (2.1)	0 (0)
I am confident managing a mental health crisis in my clinic when consultation with a prescribing psychologist is available	0 (0)	1 (2.1)	3 (6.4)	23 (48.9)	20 (42.6)
I am concerned patients will be prescribed inappropriate medications and/or dosages if I refer them to a prescribing psychologist	23 (48.9)	22 (46.8)	0 (0)	2 (4.3)	0 (0)
Please rate the following potential benefits of having a prescribing psychologist embedded in the family medicine clinic					
Improves patient care	0 (0)	0 (0)	2 (4.3)	10 (21.3)	35 (74.5)
Decreases time I spend managing patients with psychiatric symptoms	1 (2.1)	0 (0)	8 (17.0)	8 (17.0)	30 (63.8)
Improves access to Behavioral Health care	0 (0)	0 (0)	1 (2.1)	5 (10.6)	41 (87.2)
Decreases number of patients I refer out for psychiatric care in the community	0 (0)	1 (2.1)	2 (4.3)	12 (25.5)	32 (68.1)
Improves ease of access for me to obtain psychiatric consultation	0 (0)	0 (0)	6 (12.8)	6 (12.8)	35 (74.5)
Compared to other mental health prescribers , prescribing psychologists provide care that is:					
	Less skilled n (%)		Similarly skilled n (%)		More skilled n (%)
	3 (6.4)		30 (63.8)		14 (29.8)

^a Neither agree nor disagree

^b One respondent indicated "NA-I have not consulted with a prescribing psychologist"

identified improved patient care and improved access to psychopharmacologic consultation as being large benefits. Decreasing the time spent managing patients with psychiatric symptoms and decreasing the number of patients referred out for psychiatric care in the community were identified as either “moderate” or “large” benefits by 80.9 and 93.6 % of respondents, respectively. The majority of respondents (93.6 %) viewed RxP to be “similarly skilled” or “more skilled” when compared to other mental health prescribers.

Correlational analyses were conducted to assess the relationship between provider behaviors (i.e., referring and consulting) and number of years in practice with attitudes and opinions regarding RxP. Significant correlations were found between number of patients referred to the RxP and belief that an embedded RxP improves patient care ($r = .303$; $p < .05$) and confidence in the ability of RxP to identify when patients need to be referred for a medical evaluation ($r = .380$; $p < .05$). All other correlations were non-significant.

Three independent raters reviewed the free-response items to categorize responses into themes. Intraclass correlation (ICC) analyses indicate good to excellent reliability among raters for the three questions (ICC’s ranged from .715 to .937). Responses to the question, “What is MOST helpful about having a RxP embedded in the Family Medicine clinic?” were categorized as 31.1 % “Access” (e.g., “decreased barrier for patient access to care”), 25.1 % “Consultation” (e.g., “greater access for curbside consultation that impacts care”), 18 % “Team/Collaboration” (e.g., “work together on tough patients”), 11.5 % “Patient Comfort” (e.g., “less perceived stigma”), 10.9 % “Expertise/Competence” (e.g., “competent selection and titration of psychoactive medications”), and 3.3 % “Crisis Management” (e.g., “will promptly make time to see that patient if they are in crisis”).

Responses to the question, “What is LEAST helpful about having a RxP embedded in the family medicine clinic?” were categorized as 44.8 % “None,” 35.2 % “Not enough prescribing psychologists” (e.g., “demand easily outstrips supply when one provider serves a large portion of the clinic”), 6.7 % “Logistics” (e.g., “No clinician has time built into their day to run around consulting someone. We’re on a q20 treadmill. Who are they kidding?”), 6.7 % “delay referral” (e.g., “Some patients need psychiatry referral, and using the psychologist could possibly delay this referral.”), 3.8 % “Losing Skills” (e.g., “Possibly us as physicians losing our skill set in dealing with patients with mental health needs”), and 2.9 % “Patient Comfort” (e.g., “Some of the patients are uncomfortable about being identified as a patient of a mental health provider and don’t like to be seen walking with the provider...”).

Responses to a final question, “Any additional comments?” were categorized as 84.2 % “Positive” (e.g., “Having a RxP readily available in the clinic is invaluable. Even if I don’t go to consult him/her, the knowledge that they are there gives me a tremendous confidence boost.”), 1.8 % “Negative” (e.g., “I wish we could have more access to and training from our RxP in the residency program.”), and 14 % “Other” (e.g., “I think these providers could be a wonderful asset...The mental health providers that I have worked with, embedded in clinics, have often segregated themselves and been looked upon as an extra body that is around. I always found that unfortunate...”).

In sum, respondents reported they agreed that having a RxP embedded in the family medicine clinic was helpful to their practice, safe for patients, convenient for providers and patients, and improved patient care.

Discussion

This article describes the implementation of the PCPP model at a large Northwestern hospital. The present model is similar in many respects to primary care psychology models, but has some notable differences arising from the addition of medication management to the psychologist’s treatment resources. Some key features that appear to have contributed to the success of this model include full integration of the RxP into the primary care clinics, immediate access to the RxP for consultation by PCPs, access to psychological and psychotropic treatment for patients (including same day crisis interventions), a biopsychosocial approach that encompasses both clinical psychology and clinical psychopharmacology, reciprocal collaboration with PCPs, and providing timely feedback to referring PCPs. A primary difference between primary care psychology and primary care prescribing psychology as practiced in this model involves the need for a comprehensive intake by RxPs.

A secondary goal of the article is to evaluate the impact, utility and safety of RxP in a primary care setting. It was our hope that a survey of PCPs would shed light on questions raised by opponents of RxP. Namely: (1) Can RxPs prescribe safely? (2) How does the RxPs skill in prescribing compare to that of other prescribers of psychotropic medication? (3) Does the presence of an RxP improve patient care? (4) Will psychologists become “junior psychiatrists”? and (5) Is RxP training adequate?

A survey of PCPs working with a RxP over several years was determined to be one reasonable way to begin addressing these questions. A survey of PCPs is practical given that the PCPP model calls for integrating the RxP into the primary care setting. PCPs in this system are responsible for the total physical health of their patients.

The PCPs saw and evaluated patients shared with the RxP many times over the span of several years which allowed them to develop an internal assessment of RxP safety and effectiveness. The perceptions of the PCPs are not based on a hypothetical situation, rather they are based on day-to-day experience spanning two years of side-by-side practice with a RxP.

Can RxPs Prescribe Safely in a Primary Care Setting?

Because PCPs practice physical medicine they are well situated to determine if patients' health and wellbeing is at risk due to inappropriate prescribing by an RxP or other provider. The PCP respondents overwhelmingly (93.6 %) reported confidence that it is safe to refer their patients to a RxP for psychotropic medication management. Ninety-five percent of respondents reported confidence that the RxP will prescribe appropriate medications and dosages. The worry that the RxP would misdiagnose or fail to identify the presence of a physical health problem did not appear to be a significant concern. In fact, PCP respondents indicated 93 % confidence in the RxP to determine when patients need to be referred for additional medical evaluation. These data suggest that the PCPs in this survey found the RxP to not only prescribe safely, but to be capable of working collaboratively by identifying when further medical evaluation was potentially indicated. The proximity of the RxP to the PCPs further enhanced the ability to work as part of a patient-centered team in which collaboration is the norm, not the exception.

How does the RxP's Skill in Prescribing Compare to that of Other Prescribers of Psychotropic Medication?

The average rating of surveyed PCPs indicated that the RxP was perceived as slightly more than "similarly skilled" to other mental health prescribers. Overall, 93 % of responders indicated that the RxP was similarly or more skilled as compared to other prescribers of psychotropic medication. This suggests that based on PCP ratings in this study, RxPs might adequately fill the role of psychopharmacologic prescriber in many settings; perhaps most importantly in primary care clinics. The doctoral level skills in psychological evaluation, diagnosis, research, supervision, testing and assessment, ethics and psychosocial treatment that RxPs possess can only enhance patient care.

Does the Presence of a RxP Improve Patient Care in a Primary Care Setting?

Questions about safety, access and knowledge are moot if patient care is not improved by the presence of the RxP. In

this survey 87 % of PCP respondents disagreed or strongly disagreed with the statement that "patients' care has NOT improved" with the presence of an RxP in the primary care clinics. In another assessment of patient care 96 % of respondents rated *improved patient care* as a moderate to large benefit. Of this 96 %, 74 % rated the presence of an RxP as improving patient care as a large benefit. Access to care is also an important issue in behavioral health. Approximately 98 % of survey responders indicated that improved patient access to behavioral health care was a moderate or large benefit of the presence of a RxP.

Will Psychologists Become "Junior Psychiatrists"?

The PCPP model presented in this article clearly describes the importance and continued emphasis on psychosocial treatment. A review of the qualitative data in the "Results" section reveals that the overwhelming response of those surveyed was very positive regarding the presence of an RxP in the primary care clinics. This is an indirect, but powerful, measure of the positive response the PCPs had to the PCPP model which includes a primary emphasis on psychosocial treatment in addition to medication management. The ability to prescribe psychotropic medication is viewed in this model as an additional tool to be used in conjunction with psychosocial interventions as appropriate. In some cases psychosocial treatment alone will be the treatment of choice. The RxP is able to integrate the use of psychosocial interventions and psychopharmacological intervention in a manner that does not overemphasize the utility of medication.

Is the Current Training of RxPs Adequate?

This question has received a great deal of attention as it is perhaps at the core of every concern raised by those who object to prescribing psychology. Focus has often been on the number of hours provided in the training, the specific coursework provided, the depth and breadth of topics, and how it compares to other training programs that are successfully training non-physician prescribers to practice effectively. In the absence of other more specific data, the controversy has often come to rest on the amount of training. Some have argued that the adequacy of RxP training has already been addressed by approximately 20 years of psychologists prescribing "without one single documented major adverse event" (McGrath 2010, pp 40). It is notable that the current training recommended by APA (APA, 2009) is considered less comprehensive than that provided in the Department of Defense Psychopharmacology Demonstration Project. This difference has led to speculation by some that the current training model cannot be measured by the success of the PDP.

Determining the overall adequacy of RxP training is beyond the scope of the present study. Rather, this survey provides some initial, positive indications regarding RxP training. Based on the confidence ratings in this study, the RxP was judged by primary care medical providers, the majority of whom are physicians, to practice safely and effectively. Another measure of training is the RxP's ability to effectively communicate and collaborate with medical providers. The respondents almost unanimously rated the RxP as having adequate knowledge of medical terminology (98 %). It is important to note that these ratings were achieved in context of a comprehensive RxP model (PCPP) specifically designed for primary care medical settings.

While confidence ratings are only a first step in collecting and reporting data regarding the performance of an RxP service delivery model, it is important to note that for a sample of providers who are actually working within the PCPP model, feared consequences did not occur. Interestingly, when asked open-ended questions about the benefits and deficits of the PCPP model, providers did not identify the concerns typically presented in debates about the appropriateness of the use of RxPs. In contrast, a common complaint among the medical providers was that the clinic did not have enough RxPs on staff. This suggests that at least in this clinic, medical providers are concerned about getting more RxP assistance, not issues of RxP safety and performance.

Limitations and Future Directions

There are several important limitations to the present study. The study is based on survey data which is typically less reliable and valid than direct measurement. Further, this study is an assessment of the satisfaction of providers working within a specific service delivery model (PCPP); the present study does not evaluate patient outcome for those treated within this model. The study evaluates PCP ratings of the PCPP model as practiced by one RxP in a single family medicine department. This limits the generalizability of these results to other RxPs and settings. Although great effort was made to demonstrate that the survey was both anonymous and voluntary it is possible that respondents felt pressure to respond in a positive or negative manner. Also, because the survey target was the only practicing RxP in the primary care clinics it may be that respondents rated the RxP based on personal attributes, or other variables, rather than professional skills.

The positive results of this study suggest that increased and ongoing advocacy for prescribing psychology should shift the focus to what RxPs CAN do rather than on outdated arguments about safety, training and scope of practice. As the psychiatrist, Dr. Daniel Carlat (2010) has pointed out, "...prescribing psychologists have already

established a track record of safely and competently prescribing psychotropics" (p. 13). The passage of the Accountable Care Act (ACA, 2010), coupled with the movement to integrate psychology in primary care, give RxPs a unique position from which to provide much needed comprehensive behavioral health care to patients.

These survey results are a good starting point for additional studies of RxPs across settings, training programs, and patient demographics. Future studies should investigate patient outcome data, independent evaluation of prescription error rates, prescribing patterns, cost effectiveness, patient access issues, and others.

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