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Abstract

Current models of mental health care often do not address three barriers to mental health: the binary view of mental illness (healthy vs. mentally ill), stigma, and prevention. Care models where some patients are selected for referral or consultation with a mental health professional can reinforce this binary view and the stigma associated with seeing mental health services. By only selecting patients who currently are experiencing mental health problems, current integrated care models do not offer sufficient avenues for prevention.

To address these barriers, this article proposes building on current models through the development of Primary Mental Health Providers (PMHPs). PMHPs - like primary care providers - would provide regular check-ups, assessments, prevention interventions, first line treatment, or referral to more specialized professionals. This universal approach will help decrease the binary view of mental health, decrease the stigma of seeing a mental health professional through universal access, and improve prevention efforts.

Key Words: Integrated Care, Mental Health, Prevention, Stigma, Behavioral Health

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25 The spring 2018 special issue of *Journal of Clinical Psychology in Medical Settings* on
26 “The Primary Care Behavioral Health Model of Integration” featured articles
27 summarizing the Primary Care Behavioral Health (PCBH) model and research
28 surrounding it (Hunter, Reiter, & Dobmeyer, 2018). The PCBH model expands on other
29 integrated models — such as Screening, Brief Intervention and Referral to Treatment
30 (SBIRT), which focuses on substance use (Babor et al., 2007); and the Collaborative
31 Care Model, which focuses on depression and anxiety (Hunter, Dobmeyer, & Reiter,
32 2018) — to reach a wider range of patients and conditions. However, the PCBH model
33 and other integrated care models maintain some fundamental elements of mental health
34 care models that continue to serve as barriers to population mental health. This article
35 highlights how current integrated care models can maintain several fundamental
36 barriers to mental health, and proposes steps to build on current integrated care models
37 to address these barriers.

38

39 **Current Integrated Care Models**

40 Current integrated care models, such as those described in the spring 2018 special
41 issue of *Journal of Clinical Psychology in Medical Settings* (Hunter, Reiter, &
42 Dobmeyer, 2018) and the May-June 2014 special issue of *American Psychologist*
43 (Anderson, 2014) share the idea that there is a significant subset of patients who
44 present to physical health care providers who could benefit from also meeting with a
45 mental health professional (MHP), and having a psychologist or other MHP to

46 collaborate in care would improve health outcomes for these patients (Anderson, 2014;
47 Reiter, Dobmeyer, & Hunter, 2018). Physical health care providers (e.g. primary care
48 physicians, obstetrician/gynecologists, oncologists, etc.) may refer this subset of
49 patients to an on-site MHP for further discussion, support, assessment, and/or
50 treatment of a variety of conditions (McDaniel & deGruy, 2014; Poleshuck & Woods,
51 2014). Mental health concerns, such as depression or anxiety, are often detected
52 through screening questionnaires, which can trigger the physician to refer to the MHP
53 (Poleshuck & Woods, 2014; Reiter et al., 2018). In addition to mental health concerns,
54 physicians may consult with the on-site MHP to discuss behaviors such as eating
55 patterns, substance use, sexual behaviors, and sleep hygiene that may address other
56 medical conditions (Poleshuck & Woods, 2014). Common physical conditions such as
57 pain, chronic illness, pregnancy, and sexual dysfunctions impact, and are impacted by,
58 mental health and patients with these conditions may also be referred to the on-site
59 MHP (Poleshuck & Woods, 2014).

60

61 Integrated practices are now found among family physicians, internists, pediatricians,
62 OB/GYNs, and at VA medical centers (Kearney, Post, Pomerantz, & Zeiss, 2014;
63 McDaniel & deGruy, 2014; Poleshuck & Woods, 2014; Stancin & Perrin, 2014). When
64 mental health providers are in the same location as physical healthcare providers,
65 patients are more likely to attend mental health appointments (R. Basu, Stevens, &
66 Phillip, 2012). Integrated care models such as those at Montefiore Health System, the
67 Department of Veteran Affairs Health Care System, Cherokee Health Systems, and the

68 U.S. Air Force have demonstrated the wide-ranging impact and feasibility of integrated
69 care (Briggs, Hershberg, & Germán, 2016; Germán et al., 2017; Khatri, Perry, &
70 deGruy, 2017; Rowan & Runyan, 2005; Zeiss & Karlin, 2008).

71

72 Reiter et al. (2018) have provided an operational definition of the PCBH model of
73 integrated care used at multiple successful integrated care sites:

74 The PCBH model is a team-based primary care approach to managing
75 behavioral health problems and biopsychosocially influenced health conditions.
76 The model's main goal is to enhance the primary care team's ability to manage
77 and treat such problems/conditions, with resulting improvements in primary care
78 services for the entire clinic population. The model incorporates into the primary
79 care team a behavioral health consultant (BHC)... to extend and support the
80 primary care provider (PCP) and team. The BHC ... assists in the care of
81 patients of any age and with any health condition (Generalist); strives to
82 intervene with all patients on the day they are referred (Accessible); shares clinic
83 space and resources and assists the team in various ways (Team-based);
84 engages with a large percentage of the clinic population (High volume); helps
85 improve the team's biopsychosocial assessment and intervention skills and
86 processes (Educator); and is a routine part of biopsychosocial care (Routine). To
87 accomplish these goals, BHCs use focused (15–30 min) visits to assist with
88 specific symptoms or functional improvement. Follow-up is based in a consultant
89 approach in which patients are followed by the BHC and PCP until functioning or

90 symptoms begin improving; at that point, the PCP resumes sole oversight of care
91 but re-engages the BHC at any time, as needed. Patients not improving are
92 referred to a higher intensity of care, though if that is not possible, the BHC may
93 continue to assist until improvements are noted. This consultant approach also
94 aims to improve the PCP's biopsychosocial management of health conditions in
95 general. (Reiter et al., 2018, p. 112)

96

97 While integrated primary care sites have demonstrated that having MHPs on site to be
98 necessary for improved patient mental health, simply having co-located MHPs has not
99 been found to be sufficient to fully integrate mental health care (Kathol, Butler,
100 McAlpine, & Kane, 2010). The current integrated care models have provided great
101 advances in mental health care and improved access, however, these models still do
102 not meet population needs. Importantly, these models maintain some of the primary
103 barriers to general mental health, including: the binary view of mental health, stigma,
104 and lack of prevention.

105

106 *Binary View of Mental Health*

107 Current integrated care models function on the idea that a *subset* of patients who
108 present to physical health care providers could also benefit from meeting with a MHP
109 (Briggs et al., 2016; Germán et al., 2017; Khatri et al., 2017; Reiter et al., 2018; Rowan
110 & Runyan, 2005; Zeiss & Karlin, 2008). In these models, a primary care provider (PCP)
111 decides who is going to be referred to the MHP (Briggs et al., 2016; Germán et al.,

112 2017; Khatri et al., 2017; Reiter et al., 2018; Rowan & Runyan, 2005; Zeiss & Karlin,
113 2008). Reliance on PCPs deciding who will be referred to the MHP presents several
114 problems. The first problem is that patients are not being screened for all mental health
115 conditions that may need treatment, and even among conditions that do commonly
116 receive screening, many cases are missed or not referred to mental health providers.
117 For example, many clinics use the first two questions of the Patient Health
118 Questionnaire (PHQ-2) to screen for depression and do not screen for suicidality if the
119 PHQ-2 screen is negative for depression, which has been found to miss many patients
120 who are experiencing suicidality (Dueweke, Marin, Sparkman, & Bridges, 2018). Failure
121 to screen for suicidality is thought to play a role in findings that greater than two-thirds of
122 people who suicide saw a primary care provider in the 90 days before their death
123 (Ahmedani et al., 2014; De Leo, Draper, Snowdon, & Kőlves, 2013). Similarly, among
124 people who were known to have experienced a trauma (i.e. presenting to a trauma
125 center with significant injuries from a physical trauma) physicians only discussed mental
126 health services in 19% of cases in the subsequent 6 months (Wong et al., 2009).
127 Among patients who presented for medical care following physical trauma and who had
128 PTSD or depressive symptoms detectable by screens, only 28% were referred to an
129 MHP in the 6 months after the traumatic event (Wong et al., 2009). In fact, PCPs have
130 been found to leave more than half of cases of PTSD undetected, missing valuable
131 opportunities to refer for psychotherapy, which is the first-line treatment (Greene, Neria,
132 & Gross, 2016; Williams, 2017).

133

134 The second problem of having a PCP decide who will and will not be referred to the
135 MHP is how this bifurcation reinforces the binary view of mental health: a person is
136 either mentally unhealthy and needs an MHP, or mentally healthy and does not need an
137 MHP. This dichotomous view is known to be inaccurate, with mental health symptoms
138 increasingly being referred to as multiple spectra (Lobo & Agius, 2012). Similar to
139 physical health, all people experience periods when they are in better mental health and
140 times when they are suffering, and experience symptoms ranging from mild to severe,
141 common to rare, and acute to chronic.

142

143 Models of behavioral health integration still largely focus on identifying people who are
144 already experiencing symptoms of mental illness (SAMHSA-HRSA Center for Integrated
145 Health Solutions, 2014) or who have certain medical conditions (Fisher & Dickinson,
146 2014; Poleshuck & Woods, 2014; Reiter et al., 2018). This approach can leave many
147 people with subclinical or prodromal symptoms without treatment. Additionally, the
148 binary approach reinforces the idea that only those individuals with severe enough
149 symptoms would need or benefit from mental health treatment.

150

151 This binary view has colored how people approach treatment for mental health.
152 Common screening instruments that are often used in integrated care, such as the
153 Patient Health Questionnaire for Depression (PHQ) and the 7-item questionnaire for
154 Generalized Anxiety Disorder (GAD-7), were designed to screen for people who are
155 currently experiencing significant symptoms that are likely diagnosable as Major

156 Depressive Disorder or Generalized Anxiety Disorder (Kroenke & Spitzer, 2002; Spitzer,
157 Kroenke, Williams, & Löwe, 2006). In fact, in same-day consultation models, since
158 patients are generally not expecting to meet with an MHP, and they rather are “worked-
159 in,” the appointment may not occur if the patient is unable to stay for the extra
160 appointment (Reiter et al., 2018) and thus may not see an MHP at all.

161

162 The World Health Organization defines health as “a state of complete physical, mental
163 and social well-being and not merely the absence of disease or infirmity” (World Health
164 Organization, 2005). Given this definition, it is impossible for any individual to be
165 mentally healthy for their entire lifespan. In fact, psychological suffering is considered a
166 universal experience for all people (Hayes, Strosahl, & Wilson, 2012). Thus, the
167 referral of only a subset of patients misses opportunities to address mental health in the
168 remaining population.

169

170 The binary view leads to the other two primary barriers to mental health: stigma and
171 lack of prevention.

172

173 *Stigma*

174 The oversimplification of complex characteristics into distinct groups – such as the
175 binary view of those who need mental health care and those who do not – is the
176 foundation upon which stigma developments (Link & Phelan, 2001). Once separation
177 into simplified, distinct groups has occurred, people begin to divide “us” from “them”,

178 and to associate “them” with undesirable characteristics and stereotypes. As a result,
179 there is an effort to distance oneself from the group associated with undesirable
180 characteristics, which, in turn, creates stigma (Link & Phelan, 2001).

181
182 The current models of integrated care use the separation into two distinct groups to
183 prioritize patients for referral to a limited number of MHPs. While prioritization is
184 important given the limited mental health resources currently available, it does reinforce
185 the simplification of characteristics into two distinct groups that can maintain the stigma
186 of the group that gets referred to the MHP.

187
188 There has been a call to decrease stigma as a means to increase care-seeking among
189 those with mental health symptoms (Corrigan, 2004). While proposed approaches to
190 decreasing stigma would involve reducing fundamental components of stigma, such as
191 decreasing dichotomous labeling that separates the stigmatized group from another
192 group (Link & Phelan, 2001), the flagging of a specific subset of patients who should
193 meet with the MHP actually serves to strengthen, rather than ameliorate, these factors
194 among both patients and providers.

195
196 Integrated care models try to decrease the stigma of seeing MHPs by changing the
197 location from mental health clinics, which are associated with stigma, to the primary
198 care office, where there is not the same stigma (Kenkel, Deleon, Mantell, & Steep,
199 2005). While this change in location allows some patients access to MHPs that they

200 would not have agreed to meet with before, reserving mental health clinics for those
201 who need specialty care reinforces stigma of going to mental health clinics by
202 continuing to allow people to separate patients into simplified groups (i.e. Those who
203 have to go to a mental health clinic and those who do not). In fact, as many people
204 belonging to stigmatized groups try to hide their stigmatized identity from others
205 (Goffman, 1963), the message conveyed by telling patients they can avoid going to
206 mental health clinics maintains the stigma of mental illness by reinforcing the idea of
207 “hiding” mental health care in primary care.

208

209 Intervention efforts that focus on identifying high risk individuals, especially among
210 groups that are already stigmatized in other ways, may bring ethical concerns
211 (American Psychological Association, 2014) that could be avoided if interventions were
212 universal instead. Since contact with people with mental illness has been proposed as a
213 promising avenue for decreasing stigma surrounding mental illness (Corrigan &
214 O'Shaughnessy, 2007), a more universal, rather than binary, approach is likely to both
215 improve mental health and decrease stigma.

216

217 *Prevention*

218 The binary view of mental illness has also interfered with prevention efforts as current
219 integrated care models focus on those who are already experiencing significant
220 symptoms.

221

222 There are four main approaches to prevention: universal or primary prevention – where
223 all people are targeted to reduce the incidence of disorder; - selective prevention –
224 where people who are deemed at risk are provided prevention interventions; indicated
225 interventions or secondary prevention– where people who already have subclinical
226 symptoms are targeted for intervention; and tertiary prevention – where people who
227 already have diagnosable syndromes are provided interventions to prevent future
228 episodes or problems (Katz & Ali, 2009; Leavell & Clark, 1965; Reisinger, Hunt, Burgo-
229 Black, & Agarwal, 2012).

230
231 Primary care medicine has enjoyed great successes with primary, selective, and
232 secondary prevention of a wide range of conditions. For example, the national effort to
233 vaccinate all children to prevent poliovirus resulted in the elimination of polio by 1979 in
234 the United States (Centers for Disease Control and Prevention (CDC), 2013). Similarly,
235 cervical cancer – which was previously the leading cause of cancer deaths among
236 women – has been dramatically reduced through screening all women for precancer
237 cells through Pap tests (CDC, 2014).

238
239 The focus on primary and secondary prevention contributed to the international 1978
240 Alma-Ata Declaration, which established the model for health policy (Magnussen, Ehiri,
241 & Jolly, 2004) and asserted that primary health care is essential for global public health
242 (World Health Organization, 2014). This declaration defined primary health care as
243 including promotion of health, prevention of illness, education about health problems,

244 and controlling, rehabilitating, and curing illness (World Health Organization, 1978). This
245 focus on primary and secondary prevention is in contrast to countries that follow tertiary
246 prevention models that only provide health care to those who have an illness. These
247 countries have been found to have poorer health outcomes compared to countries that
248 utilize primary care, which is universal and preventative (Magnussen et al., 2004). In
249 fact, the Alma-Ata Declaration specified that primary health care should be accessible to
250 all people (World Health Organization, 1978).

251
252 Despite the successes of the primary care model on prevention, mental health care has
253 maintained a partial and reactionary model. Mental health prevention efforts have
254 focused on secondary or tertiary prevention rather than primary prevention or mental
255 health promotion (Clark & Leavell, 1965). Since primary prevention includes both
256 protecting people from the onset of illness and promoting health (Clark & Leavell, 1965),
257 the current provision of mental health care does not meet criteria for primary health
258 care. Even wide selective interventions of individuals at highest risk for developing
259 specific mental health conditions are not thought to impact enough people to have a
260 significant effect on the prevalence of common disorders (Barrera, Torres, & Muñoz,
261 2007). To truly impact the prevalence of mental health problems, it is necessary to
262 address the incidence among all people, not only the duration or severity in select
263 groups or among those already experiencing symptoms (Barrera et al., 2007).

264 **The Next Step: Primary Mental Health Providers**

265 It is time for the next step in mental health care that can address a number of the

266 current problems by changing the way that we conceptualize mental illness and mental
267 health care. In contrast to the binary view, where some people are seen as needing an
268 MHP and others do not, this model would be similar to the primary care model of health
269 and would involve development of Primary Mental Health Providers (PMHPs). These
270 PMHPs would be to mental health care what primary care physicians (PCPs) are to
271 physical health care. In physical health care, it is the norm for all people to have a PCP
272 whom they see at least annually for a yearly “physical,” for screenings and prevention
273 when in good health, and whom they also see when they experience symptoms.
274 Similarly, it could become the norm for *all* people to have a PMHP whom they see at
275 least annually when in good mental health for screenings and prevention, and whom
276 they also see when they experience stressful life events or have a change in their
277 mental health. Like PCPs, PMHPs would be able to provide in-office treatment for
278 some disorders, while referring to specialists for others.

279
280 Thus, in the PMHP model, all patients would have two primary care clinicians instead of
281 just one: a PCP and a PMHP. With the growing amount of research, general
282 knowledge, and treatments available in health care, the role of primary care clinician
283 needs to expand beyond a single person. These two clinicians would be in the same
284 clinic with other members of a primary care team (e.g. pharmacists, case managers,
285 social work). By having two primary care clinicians, the health care system will be
286 moving toward true mental health parity: where half of primary care has a focus on
287 physical health and wellness and the other half of primary care has a focus on mental

288 health and wellness, with appropriate overlap. Mental health cannot achieve parity with
289 physical health if the vast majority of primary care is focused on physical health. The
290 PMHP model would allow a more equal and balanced approach to physical and mental
291 health.

292

293 Ideally, PMHPs would work in conjunction with PCPs at one all-inclusive primary health
294 care office. As most common medical problems have behavioral components (Hunter,
295 Goodie, Oordt, & Dobmeyer, 2009), collaboration on these issues is essential. This
296 collaboration would allow integrated care and a team approach on the vast range of
297 disorders that are common in both fields, such as diabetes, hypertension, autism, risky
298 sexual behaviors, disordered eating, and somaticized symptoms, as is currently done at
299 many integrated care sites.

300

301 In addition to parity, the PMHP model would replace the binary model by offering
302 universal care for mental health and help cultivate an understanding of mental health as
303 widely varied rather than dichotomous, which can aid in normalizing the experience of
304 mental health symptoms. Additionally, it would normalize seeing a mental health
305 provider, as all people would be expected to see a PMHP.

306

307 The PMHP model would help to address stigma of seeking treatment. Anti-stigma
308 campaigns for mental illness have been largely unsuccessful (Lovett, Tamkin, &
309 Fletcher, 2011). However, when conditions are seen as common, they are less likely to

310 be labeled as a stigmatized group (Lovett et al., 2011). Thus, a more universal
311 approach can reduce stigma and therefore have greater participation than approaches
312 that only select high risk individuals (Barrera et al., 2007), as is the focus of current
313 integrated care models (see Table 1).

314
315 The effects of moving from high risk screening to universal screening on stigma has
316 been demonstrated in HIV detection. Underdiagnosis occurs when only those at risk
317 are tested, as many people either do not know they are at risk or may not disclose risk
318 factors to health care providers (Branson et al., 2006). In contrast, when HIV screening
319 is offered universally, the stigma around getting tested declines, and a higher proportion
320 of people are tested (Branson et al., 2006). In fact, the CDC now recommends universal
321 testing for HIV because offering routine testing, rather than just testing people who were
322 thought to be at risk, reduces the stigma of getting tested (Branson et al., 2006).

323 Similarly, universal mental health screening can decrease the stigma of mental health
324 assessment.

325
326 Universal contact with mental health providers, and the consequent decrease in stigma,
327 would open the door to prevention efforts. Prevention has become increasingly
328 important in addressing the burden of mental health problems and climbing cost of
329 treatment (Petersen, Barry, Lund, & Bhana, 2014). Primary prevention of mental health
330 problems is now thought to be a reasonable goal (Barrera et al., 2007). In 2014, the
331 American Psychological Association published its Guidelines for Prevention in

332 Psychology, which specifically call on psychologists to develop, research, and
333 implement preventative interventions (Guideline 3) (American Psychological
334 Association, 2014).

335

336 Ideally, people would start having a PMHP during childhood, to begin prevention early
337 and stigma surrounding seeking mental health care would not form (Corrigan &
338 O'Shaughnessy, 2007), and children would see the integration of mind and body as
339 standard. Starting PMHP annual exams during childhood would mean illnesses with
340 early onset would be caught earlier and developmental challenges could be addressed
341 before they advanced further (Kaltiala-Heino & Rimpelä, 1999). While over 90% of
342 children see a primary care provider (Stancin & Perrin, 2014), which allows for
343 screening most children for both risk factors for negative health outcomes and illness,
344 mental health issues are often not addressed among pediatric primary care patients. In
345 fact, although anxiety is the most common mental health problem among pediatric
346 patients (Teubert & Pinquart, 2011), primary care often does not evaluate for risk factors
347 or engage in prevention efforts for anxiety disorders. Similarly, the U.S. Food and Drug
348 Administration has declared that childhood depression should not be permitted to
349 progress untreated, particularly due to the potential long-term educational and social
350 consequences (U.S. Food and Drug Administration, 2014), but often little time is
351 devoted to depressive symptoms or risks.

352

353 Montefiore Health Systems has demonstrated the effectiveness of a pediatric screening

354 schedule that leads to a subset of patients being referred to the MHPs (Briggs et al.,
355 2016). However, even in this successful model, only a small set of conditions are
356 screened, and only higher risk children are referred, maintaining the mental health
357 binary. In contrast, with PMHPs, additional screening measures at each age would be
358 added, plus preventative interventions and skills training would be implemented for all
359 patients, not just those at high risk.

360
361 Developmental and behavioral evaluation and early intervention by a PMHP would be
362 possible if children were consistently evaluated for developmental and
363 neurodevelopmental disorders, allowing for interventions early when they can have
364 strong effects (Stancin & Perrin, 2014). A number of preventative interventions, often
365 beginning in child and adolescent populations, have already been developed,
366 implemented, and found to be effective for depressive and anxiety disorders (Barrera et
367 al., 2007; Feldner, Zvolensky, & Schmidt, 2004; Teubert & Piquart, 2011).

368
369 As prevention efforts should focus on identifying and addressing risks, as well as
370 developing strengths, resilience, and coping mechanisms (American Psychological
371 Association, 2014), pediatric screening could include topics such as: bullying
372 (victimization and perpetration), social skills, social support, exposure to violence/abuse,
373 and exposure to substance abuse in the home in addition to screening for
374 developmental and mental health disorders. As children grow to adolescence, screening
375 and prevention could include areas such as peer relationships, listening skills, self-

376 esteem, body image, sexual health, sexual assault prevention, and substance use in
377 addition to screening for mood and anxiety disorders, which is often the current practice.
378 PMHPs would also be a great opportunity to keep adolescents and young adults
379 engaged in their health care during a time when they are often physically healthy and
380 therefore may not present to a PCP (Lau, Adams, Boscardin, & Irwin, 2014), but are
381 experiencing many transitions, stressors, and risk factors, offering opportunities for
382 intervention and early treatment.

383
384 Beyond pediatrics and adolescents, PMHPs would offer opportunities for interventions
385 for cognitive, social, emotional, and interpersonal concerns across the life span. Life
386 stressors, changes in relationship status, or entering new careers could trigger brief
387 interventions for improving listening skills, conflict resolution skills, decreasing
388 performance anxiety, or improving coping skills. By working with people as they
389 become parents, PMHPs could not only provide screening, prevention, and treatment of
390 conditions in new parents, but working with symptomatic parents may be a particularly
391 effective way of preventing similar symptoms in children (Bienvenu & Ginsburg, 2007).
392 Conditions that can be behaviorally passed down across generations (e.g. substance
393 abuse, physical and sexual abuse, some depressive and anxiety conditions) could be
394 identified and addressed so the cycle is broken. Thus, every appointment with a PMHP
395 would be an opportunity to promote health, as well as treat illness (Clark & Leavell,
396 1965).

397

398 In addition to the effects on stigma and prevention, PMHPs could also have a positive
399 impact on diagnosis and treatment. Universal screening at yearly mental health care
400 visits could cut down on underdiagnosis, as all people with a PMHP would be evaluated
401 annually. It could also cut down on overdiagnosis by following positive screens with
402 more thorough evaluations of symptoms and severity. All people could receive
403 appropriate evaluation for their developmental level, such as evaluation for learning or
404 developmental disabilities during childhood and dementia in older adults.

405

406 *Role of Psychologists*

407

408 While a number of different types of professionals may provide behavioral health care
409 within a primary care setting, psychologists would be particularly well-suited to fulfill the
410 role of PMHPs. Psychologists have the knowledge, skills, and expertise to provide
411 primary health care – providing prevention, accurate diagnosis, and first-line treatment.
412 Psychologists are trained as experts in development and mental health, as well as
413 assessment, treatment, and working with families (Stancin & Perrin, 2014). Health
414 psychologists would be particularly well-suited as they have training in both mental and
415 physical health conditions and are already members of many integrated care teams.
416 Additionally, psychologists are trained in many non-mental illness topics such as
417 lifespan development, interpersonal relationships, cognition, behavior, and social
418 interactions that make them well-rounded to address many topics. Psychiatrists and
419 psychiatric nurse practitioners would serve as a vital part of the team for the subset of
420 conditions that would benefit from medications, since it would be important for PMHPs

421 to focus on behaviors, social interactions, and address prevention, which cannot be
422 addressed through medication (U.S. Food and Drug Administration, 2014).

423
424 It has already been proposed that psychologists could be the leaders of primary care
425 teams (McDaniel & deGruy, 2014), rather than behavioral health consultants, where the
426 mental health professional is there to offer an opinion but is not an equal provider of
427 health care as primary care providers (Hunter et al., 2009; Reiter et al., 2018). In
428 contrast to the PCBH model, where the MHP's role is to take on certain tasks "so that
429 the PCP may reach as many patients as possible and work to the top of their license"
430 (Reiter et al., 2018), the PMHP model allows psychologists to reach as many patients
431 as possible and work to the top of *their* license as well. When psychologists work only
432 as PCP "extenders," to allow physicians to fulfill their role, it reinforces the idea that
433 psychologists are not equal providers, thus contributing to the devaluing of
434 psychologists and MHPs and reinforcing the idea that physical health providers are
435 more important than mental health providers.

436
437 Psychologists can also play an important role in the development and implementation of
438 the PMHP model in their role as researchers. Psychologists have already played a
439 strong role in demonstrating the effectiveness, financial viability, and value of
440 collaborative care models (e.g., Bryan et al., 2012; Chaffee, 2009). Thus, psychologists
441 would be uniquely qualified to not only serve as PMHPs, but also to conduct research to
442 evaluate, further develop, and revise the next steps in moving toward primary mental

443 health care.

444 **Potential Barriers**

445
446 There are a number of barriers that have prevented this type of model from being
447 implemented before. Many of these barriers have already started to diminish, and
448 further steps can be taken to continue to reduce these barriers.

449

450 *Financial*

451 Financial barriers are likely to be the primary obstacle in implementing the PMHP model
452 as finances have been a barrier to mental health care for decades but have been
453 gradually improving. The binary view of mental health - that some people need mental
454 health treatment while everyone else does not - was clear in health insurance coverage
455 in which mental health treatment often was not covered, or could only be purchased
456 separately for the proportion of the population who was thought to need it, such as in
457 some mental health carve-outs (Grazier & Eselius, 1999). When mental health services
458 were covered, they were often not covered to the same extent as physical health
459 services, leaving many people without mental health coverage or with inadequate
460 coverage (Beronio, Po, Skopec, & Glied, 2013).

461

462 The 2008 Paul Wellstone and Pete Domenici Mental Health Parity and Addiction Equity
463 Act (MHPAEA) made advances in mental health coverage by requiring insurance plans
464 that covered mental health to be comparable to medical and surgical coverage (Beronio
465 et al., 2013). The 2014 Affordable Care Act built on the MHPAEA by including mental

466 health as an “Essential Health Benefit” and expanded mental health parity to individual
467 and small group insurers (Beronio et al., 2013). The next step needed in this trajectory
468 would be for mental health parity to be expanded to all plans, including all Medicaid,
469 Medicare, and “grandfathered” plans that are not currently required to meet mental
470 health parity standards (National Alliance on Mental Illness, 2019). Modeling mental
471 health primary care after physical primary care may be successful because primary care
472 for physical medicine also faced resistance, with arguments that it was too idealistic or
473 too expensive (Magnussen et al., 2004), but, it has been found that when disease-
474 focused models are used, they are more expensive and have worse outcomes than
475 primary care models (Magnussen et al., 2004).

476

477 As reimbursement systems are beginning to change and new models are being
478 developed and tested (Kathol et al., 2010; Melek, 2012; Schwenk, 2016), it will be
479 important to move towards a model in which primary mental health care billing is also
480 treated the same as primary physical health care billing. Thus, it will be important for
481 financial models to not only measure the costs of implementing PMHP models, but also
482 the savings of the potential decreased prevalence, severity, and number of
483 exacerbations of mental illness, and the potential decreased societal costs of behaviors
484 from untreated conditions (e.g. violence, DUIs). For primary mental health care billing
485 to reach parity with primary physical health care billing, PMHPs would need to be able
486 to bill for preventive visits and for screening in the same way that PCPs can bill for
487 preventive visits (e.g. well-child, well-adult) and routine screenings (e.g. cancer

488 screenings, HbA1c, lead screening). In some states, developmental-behavioral
489 screening has become required and is a reimbursable service (Stancin & Perrin, 2014),
490 and thus some of the groundwork for this transition has already begun.

491
492 Additionally, PCPs can bill for the patient's concern or symptom (e.g. vaginal discharge)
493 even in the absence of diagnosable illness (e.g. bacterial vaginosis). Similarly, it would
494 be important for PMHPs to be able to label and bill for symptoms (e.g. sadness) even in
495 the absence of diagnosable syndromes (e.g. major depressive episode). The current
496 diagnostic and billing system reinforces the binary view of mental illness with strict
497 cutoffs for diagnosis, and has been criticized for contributing to overdiagnosis and
498 catering to the pharmaceutical industry (Cosgrove & Krinsky, 2012). Billing for
499 symptoms would be essential to reduce the potential for commercialization,
500 overmedication, and pathologizing the normal; concerns that have already surfaced with
501 the release of the DSM 5 (Bolton, 2013; Cassels, 2013). By allowing PMHPs to
502 address symptoms without having to meet criteria for a full diagnosis, patients can be
503 educated about normal range symptoms (e.g. normal sadness, worry), and coping skills
504 can be taught instead of using treatments with higher costs or risks, avoiding
505 pathologizing the normal. Additionally, patients with subclinical symptoms would be able
506 to receive care at earlier stages. By viewing symptoms as spectra, and having a billing
507 system that allows standards and cut-offs for defining diagnoses without risking non-
508 payment if a patient falls below a cut-off can avoid overdiagnosis and maximize early
509 intervention.

510

511 Mental health collaboration and prevention have already been found to decrease
512 medical costs, but also decrease physician pay with payment models where physicians
513 are paid more to care for sicker patients (S. Basu et al., 2017; Melek, 2012; Schwenk,
514 2016; Silberner, 2017). Therefore, a payment model is needed where integrated care
515 teams are funded for both prevention and care, rather than relying on payments for
516 individual providers in a fee-for-service model (S. Basu et al., 2017; Melek, 2012;
517 Schwenk, 2016; Silberner, 2017). Additionally, given that prevention models are less
518 expensive and have better outcomes than disease-based models (Magnussen et al.,
519 2004), PCPs and PMHPs can work together to lobby for increased value and funding for
520 primary care overall.

521

522 *Providers*

523 The second main barrier is a shortage of providers. Current PCBH models have used
524 screening and referrals partly because the limited number of mental health providers
525 are not able to see all of the patients in a primary care clinic. Part of the reason that
526 there are not enough providers is financial. Psychologists are one of the lowest paid
527 professions for number of years of training required (Bureau of Labor Statistics, 2018;
528 Carnevale, Rose, & Cheah, n.d.). This lower salary likely decreases the number of
529 people who choose a psychology career path. If reimbursement and payment models
530 were to change, and more value placed on mental health, then psychologists could see
531 higher salaries, drawing a larger mental health workforce. Additionally, mental health

532 stigma is likely to play a role in provider shortages as people may not be drawn to
533 stigmatized career fields. As mental health stigma decreases and people begin to place
534 more value on mental health care, the number of people who seek professions in
535 mental health care could increase. Thus, the first steps will be demonstrating the added
536 value and decreased costs of primary care mental health to continue to work toward
537 improved financial models and decreased stigma.

538

539 *Siloed Education*

540 Another barrier that has prevented this type of integration has been siloed education -
541 different health professions training separately, and not learning to work together and
542 collaborate. Co-located care sites have started to break down the barrier of having
543 mental health and physical health practicing in different physical locations, and
544 integrated care sites have allowed mental and physical health professionals to work
545 together on teams (Hunter, Reiter, & Dobmeyer, 2018), however education of different
546 health professions still often remains separate. It has been proposed that health
547 professionals include “interprofessional collaboration” as one of the groups of
548 competencies which health professionals would have to demonstrate for successful
549 completion of their education (Englander et al., 2013), and some health professional
550 programs are beginning to offer combined training. Even with these initiatives, in the
551 2017-2018 academic year, only 12% of medical schools had medical students learning
552 alongside psychology students (Association of American Medical Colleges, 2019).
553 Thus, increased interprofessional education is likely to reduce barriers to the PMHP

554 model.

555 **Future Directions**

556 As universal mental health is the key to decreasing the binary view of mental illness,
557 decreasing stigma of mental health care, and creating an avenue for prevention and
558 health promotion, next steps should involve implementation of components of the
559 PMHP model at select clinics. Small scale and incremental implementation would allow
560 for evaluation of small populations for change in stigma surrounding mental health care,
561 and evaluation of access to, and engagement with, mental health providers, and health
562 outcomes. Each component that gains support through incremental implementation can
563 then be used to help address barriers to more wide-spread implementation.

564

565 Since one of the main differences between current integrated care models and the
566 PMHP model is the addition of more comprehensive universal screening and
567 prevention, these components should be implemented and tested next. This
568 implementation would involve having an MHP see every patient who comes in for an
569 annual wellness exam for screening, brief interventions, and prevention. As
570 appointments in primary care clinics are often separated into wellness visits or problem-
571 based visits during scheduling, patients who schedule a wellness exam can be told
572 upon making the appointment that the clinic is now offering integrated care and annual
573 exams now involve meeting with two primary care clinicians who work as part of a team
574 and will focus on different aspects of their health. Since one of the barriers to
575 implementation is the number of available PMHPs compared to the overall population,

576 by starting with just well-visits several goals can be accomplished. First, the PMHPs
577 would have a more reasonable number of patients to see per day than if they tried to
578 see every patient. Second, it would allow the PMHP a wide range of patient
579 demographics (e.g. all ages) compared to when patients are referred only for specific
580 conditions. Third, patients are less likely to be acutely ill as they are for problem-based
581 visits, and thus may be more willing to participate in screening and prevention than
582 when they are focused on addressing a specific symptom for which they set up an
583 appointment. Newer billing codes such as 96110 (developmental screening) or 96127
584 (brief behavioral assessment) may soon be able to be used by psychologists for these
585 types of screenings (American Psychological Association Office of Health Care
586 Financing Staff, 2015). Once patients start experiencing the screening and preventative
587 PMHP appointments, additional research can be done on differences in diagnosis
588 detection and treatment, as well as patients' perceived usefulness, satisfaction, and
589 desire for other services, and on follow-up appointments scheduled with the PMHP
590 separate from the PCP. As research on existing integrated care models is ongoing,
591 each new component (e.g. screening, prevention strategies) can be added on as
592 research demonstrates efficacy and viability, and subsequent research can examine the
593 effects of multiple components on rates of diagnosis, early intervention, and referral for
594 resources.

595

596 In addition to future research on the implementation and effects of the PMHP model
597 itself, continued research into components of health care that will be utilized in the

598 PMHP model are also needed. For example, further studies are needed to evaluate the
599 effectiveness of specific universal screening methods, prevention techniques, and early
600 interventions for different conditions. Large samples will be needed to detect changes
601 in the overall incidence of various mental health conditions (Barrera et al., 2007), and
602 there are knowledge gaps in which types of prevention programs are most effective and
603 cost efficient (Kilian, Losert, Park, McDaid, & Knapp, 2010). As the American
604 Psychological Association works to develop clinical practice guidelines (American
605 Psychological Association, 2015), there are already efforts to create standardized
606 treatments for different conditions that could be implemented across practices.

607
608 The PMHP model represents a pathway to achieve APA's call for psychologists to
609 develop systemic interventions for prevention of physical and psychological distress
610 (American Psychological Association, 2014). While de-stigmatizing individual mental
611 health diagnoses may be a long-term and complex goal, de-stigmatizing mental health
612 care, decreasing the binary view of mental illness, and introduction of primary mental
613 health providers are all within reach.

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