

## Kansas Needs Psychiatric Subspecialists

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### *Shortage of Psychiatrists in Kansas and Efforts to Address Shortage*

In the era of physician shortage, it comes as little surprise that the need for psychiatrists is similarly high. The surge in mental health needs in the wake of the COVID-19 pandemic has been described as the “second wave” of the pandemic.<sup>1</sup> The reserve of psychiatrists is low and aging, with six of ten psychiatrists above the age of 55, and there is reasonable concern that retiring psychiatrists may outpace residency graduates.<sup>2</sup> In the state of Kansas, the ratio of psychiatrists to Kansas residents is 17/10,000 compared to the national average of 19.9/10,000.<sup>3</sup>

In 1992, the State of Kansas recognized the impending physician shortage and how it disproportionately impacts rural areas and instituted the Kansas Medical Student Loan (KMSL) program.<sup>4</sup> In 2017, psychiatry was added to the KMSL program and received funding in 2018 for six positions at any given time.<sup>5</sup> Since its inception, ten medical students have signed with the KMSL-Psychiatry program for future psychiatric practice in Kansas.<sup>6</sup> The Kansas Bridging Plan (KBP) is a similar program that was instituted in 1991, though only residents are eligible. Psychiatry was added to KBP in 2018 and eight psychiatry residents have participated in KBP.<sup>7</sup>

There is good news on the horizon for psychiatry, as applications to psychiatry residency programs and competitiveness of applicants have been increasing.<sup>8</sup> However, a similar increase has not carried over to psychiatry fellowship programs, all of which have experienced a decline in fellows.<sup>9</sup> The American Board of Medical Specialties maintains a record of all board-certified physicians in the U.S.; data for psychiatry and psychiatry sub-specialties in Kansas can be seen in Table 1. Though there have been efforts to address the shortage of physicians, including psychiatrists, in Kansas, the supply of subspecialist psychiatrists is also at a dire level and will require similar efforts to address.

### *Kansas Suffers from a Lack of Subspecialty Psychiatrists and Fellowship Training Programs*

**Addiction Psychiatry.** Over 20 million people in the U.S. met criteria for substance use disorders and were in need of treatment in the past year, with 20% of the population using an illicit drug.<sup>10</sup> Substance use disorders occur more frequently in patients with mental illness, with 9 million and 3 million use disorders in acute and chronic mental illness, respectively. Substance use has increased in the COVID-19 era due to a variety of factors.<sup>11</sup> Not only has substance use been increasing steadily, worsened by the COVID-19 pandemic, but mortality due to substance

use also has increased in the past decade.<sup>12</sup> A nationwide shortage of addiction specialty physicians has been identified, with the shortage especially impacting rural counties.<sup>13</sup> Kansas has nine board-certified addiction psychiatrists, which all practice within the Kansas City metropolitan area, and there is an addictions fellowship training program at University of Kansas Medical Center (KUMC) in Kansas City.<sup>14,15</sup>

**Table 1. Board-certified general and subspecialty psychiatrists and available training programs in Kansas.**

Psychiatrists in Kansas			
Specialty	# of Psychiatrists	Graduating Psychiatrists per Year	Training Programs in Kansas
General Psychiatry	339	12	2: KU* (Kansas City and Wichita)
Addiction Psychiatry	9	2	KU-Kansas City
Child/Adolescent Psychiatry	55	3 - 4	KU-Kansas City (KU-Wichita in planning)
Consult/Liaison Psychiatry	1	0	None
Forensic Psychiatry	4	0	None
Geriatric Psychiatry	13	0	None

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**Geriatric Psychiatry.** The U.S. geriatric population will nearly double to 72 million people by 2030, exacerbating a geriatric mental health crisis that affects approximately one-fifth of the geriatric population.<sup>16</sup> The ratio of geriatric psychiatrists to geriatric patients with mental and/or substance use disorders is less than 1/6,000, which has been declared a crisis.<sup>17</sup> The geriatric population (age 65+) represents 15% of the population in Kansas, with growth of this demographic predicted to increase at four times the rate of younger demographics over the next two decades.<sup>18</sup> Existing psychiatric illness, as well as developing mood, substance, and cognitive disorders during later years of life, add to the burden, which contributes to less favorable outcomes and costs.<sup>17</sup> Sixty percent of geriatric psychiatry fellowships are unfilled, which is the lowest of all psychiatric subspecialties.<sup>19</sup> There are 13 board-certified geriatric psychiatrists in Kansas practicing in the Kansas City and Wichita metropolitan areas, Topeka, and Great Bend; there are no fellowship training programs in the state.<sup>14</sup>

**Child/Adolescent Psychiatry (CAP).** In October 2021, a national state of emergency in children’s mental health was declared due to rising rates of mental health concerns and suicide over the past decade, which were exacerbated (increased 25 - 50%) by the many stressors of the COVID-19 pandemic.<sup>20</sup> Nearly 10% of children require psychiatric care and only 45% of those receive necessary treatment.<sup>21</sup> Rising suicide rates, which occur at a higher rate in rural areas, especially are concerning for Kansas.<sup>22</sup> In the 2020 National Residency Match Program, the fill rate for CAP programs was the highest among psychiatric subspecialties at 83%.<sup>23</sup> Current estimates indicated the U.S. has approximately half of necessary child psychiatrists to meet patient needs.<sup>24</sup> The American Academy of Child and Adolescent Psychiatry rated Kansas as having a severe shortage with only 9 CAP/100,000 patients.<sup>25</sup> Fifty-five CAP are board-certified in the state, practicing in the Kansas City and Wichita metropolitan areas, Topeka, Lawrence,

and Manhattan; there is a fellowship training program at KUMC in Kansas City and a program at KUMC in Wichita in the planning stages.<sup>14,15</sup>

**Consult/Liaison Psychiatry (CLP).** One-quarter to one-third of hospital inpatients have comorbid psychiatric illness, which adds to overall comorbidity and negatively impacts their stay and treatment. This can be improved by involvement of consult-liaison psychiatry (CLP), previously called psychosomatic medicine,<sup>26</sup> to reduce length of stay and cost.<sup>27,28</sup> Though many barriers to CLP involvement have been examined,<sup>27</sup> access in Kansas is likely to be a limiting factor. During the COVID-19 pandemic, CLP has been assisting in treating neuropsychiatric symptoms of COVID as well as an increase of hospital psychiatric symptoms and admissions.<sup>29</sup> Similarly during the pandemic, CLP has served as palliative care team members and directors,<sup>30</sup> which raises the possibility of CLP's continued involvement in oncology and palliative care. Fill rate for CLP programs in 2020 was 68%.<sup>23</sup> There is one board-certified consult/liaison psychiatrist in Kansas, who practices in Wichita, with no local fellowship training programs.<sup>14,15</sup> Though not CLP, dual-boarded Internal Medicine/Psychiatry physicians are well-suited to practice CLP and two complete training at the University of Kansas Medical School yearly.

**Forensic Psychiatry.** Mental illness affects over 50% of those in jails and prisons.<sup>31</sup> These patients at the intersection of psychiatry and the law are treated and evaluated by forensic psychiatrists. In Kansas, there are two hospitals operated by the state for mental illness, in Osawatimie and Larned. Only Larned has a formal forensic unit, the State Security Program.<sup>32</sup> Fifty-eight percent of forensic psychiatry fellowships are filled, though this process is complicated by an unregulated application system, unlike the match for medical residencies and other psychiatric fellowships aside from geriatrics.<sup>33</sup> There are four forensic psychiatrists boarded in the state practicing in Kansas City and Wichita metropolitan areas and Lawrence, with no local fellowship training programs.<sup>14,15</sup>

The need for psychiatric care has continued to rise over the past decade, with a "second wave" due to the COVID-19 pandemic. This escalation of need is superimposed on an existing shortage of general and subspecialty psychiatrists without a corresponding increase of these physicians to provide that care, cutting off patients in need from physicians with appropriate expertise and training. Kansas experiences a shortage in each of the subspecialties in psychiatry, with local fellowship training programs existing only for CAP and addiction psychiatry. Additional fellowships that would be beneficial to Kansans, but have not been formally approved by the Accreditation Council for Graduate Medical Education (ACGME), are emergency psychiatry and reproductive psychiatry.<sup>34-37</sup>

**Emergency Psychiatry.** Over 143 million emergency department (ED) visits occurred across the U.S. in 2018 and, in Kansas, roughly 18% (187,000) of ED visits were for mental health and substance use disorders.<sup>38</sup> Emergency department visits for psychiatric reasons (including suicide attempts, overdose, intimate partner violence, child abuse and neglect) increased during the COVID-19 pandemic.<sup>39</sup> Dedicated psychiatric emergency services with emergency psychiatrists (i.e., the Alameda Model) lead to improved outcomes, decreasing psychiatric patient boarding time, admissions, and cost, as well as increasing safety

outcomes.<sup>40,41</sup> There are only four emergency psychiatry fellowships in the U.S., none of which are in Kansas.

**Reproductive Psychiatry.** Women of child-bearing age experience a similar burden of psychiatric illness and have increased risk of psychiatric illness at transitions in the reproductive cycle.<sup>42</sup> Approximately 13% of pregnancies involve exposure to antidepressants, not counting the many other categories of psychotropic medications. The American College of Obstetricians and Gynecologists and the U.S. Preventive Services Task Force recommended specialized screening and treatment during the peripartum period.<sup>37</sup> In light of this, fellowship programs are attempting to address this practice gap, as just over half of psychiatry residencies include reproductive psychiatry topics in their program.<sup>43,44</sup> With over a third of residencies having no reproductive psychiatry training and nearly three quarters of programs devoting less than five hours of instruction on the topic, there appears to be few opportunities to bring this knowledge to the state without a fellowship program.<sup>43</sup> Since 2002, 15 fellowships have been established in the U.S. to address this need, none of which are in Kansas.<sup>45</sup>

#### What are Subspecialists and How to Address this Shortage to Benefit Kansans

Concentration into specialties and further into subspecialties has been required as depth and extent of medical knowledge increases. There are nearly 12,000 ACGME-approved fellowship positions offered across the nation each year, indicating that nearly one-third of residents pursue further training in a fellowship. As illustrated above, however, the number of psychiatrists pursuing subspecialty training is lower than what is found in many other specialties.<sup>23,46</sup>

Why is it important to have subspecialty psychiatrists in the state? Subspecialists bring the highest standards of care necessary for complex cases and better expertise to treat patients. In addition, the presence of fellowship-trained physicians enriches the educational environment of residents and medical students through didactic or clinical educational efforts. For example, CAP is trained to distinguish developmentally normal fantasy from possible psychosis; geriatric and CLP work effectively with patients who have co-occurring medical conditions. Each one of the psychiatric subspecialties leverages their knowledge of their subject area to deliver the highest-efficacy and evidence-based treatment for the benefit of patients.

The elusive question remains: how to entice more psychiatry residents to pursue subspecialty training after residency? Escalating costs of debt carried through medical school and residency (\$207,000 average) create a barrier to extending training, especially when need for psychiatrists is high.<sup>2,47</sup> A survey found residents weighed the following factors from most to least important when considering pursuing a fellowship: lifestyle, finances, academic opportunities, prestige, and research.<sup>48</sup> Child/adolescent psychiatry is the fellowship chosen most frequently, whereas geriatrics is least frequent. A survey of fellowship program directors revealed the burden and cost of relocating for the short period of time for fellowship training, as well as the cumbersome

application process due to programs not universally using the National Residency Match process, are significant barriers.<sup>49</sup>

Review of the literature on this topic showed there are many ideas potentially to increase the number of psychiatry residents that enter into fellowships. Psychiatry residency is a four-year training program. It has been suggested by some that ACGME milestones for general psychiatry can be met by the end of the third year of residency training.<sup>9</sup> Some CAP programs offer “fast track” positions in this model of leaving residency after three years to begin fellowship, which may contribute to CAP’s popularity. CAP is the only two-year fellowship in psychiatry, while all other fellowships are one year. Financial incentives (i.e., loan forgiveness) tied to fellowship training may increase the likelihood of entering fellowship training.<sup>50</sup> To increase clinical expertise in subspecialty shortage areas without fellowship training, subspecialty fourth year tracks in general psychiatry residency programs could be created to increase expertise in a chosen subspecialty of interest.<sup>51,52</sup> This might be appealing for those residents who do not want to leave the geographic area they are in to attend a fellowship. Though there are many stakeholders that have interest in addressing the psychiatry subspecialty shortage on a national level, some changes can be made independently on a local level.

The State of Kansas has utilized the KMSL program to address critical shortages for decades and this provides a successful and preexisting model to address the shortage of general and subspecialist psychiatrists through loan repayment.<sup>4</sup> Additionally, the KBP also incentivizes the practice of general and child psychiatry, specifically in rural counties. However, both the KMSL and KBP programs only incentivize general psychiatry and CAP, which may be a barrier to growing subspecialty knowledge across the state. Psychiatry positions for KMSL and KBP are not being filled at similar rates compared to primary care. This raises two questions: 1) would these funds be better suited to increase general psychiatry residency positions in Kansas, and 2) is participation in these programs reduced by the inability to subspecialize? The critical shortage of subspecialty psychiatrists in Kansas should be of similar importance as the original target of these incentive finance programs, which both of these changes would address. Most critically, Kansas has no current way of supplementing these numbers through current incentive programs. To provide Kansas with subspecialty expertise in psychiatry, we must reexamine and address the current incentive programs to include verbiage to recruit and retain psychiatrists who pursue subspecialty training.

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