

# Integrated Care: A Disruptive Innovation for Extending Psychiatric Expertise to Primary Care Practices

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Behavioral health disorders (mental health problems and substance use disorders) are highly prevalent, negatively impact chronic medical illness, and raise the overall cost of health care from increased emergency department utilization, hospital readmission rates, and occupational disability.<sup>1-3</sup> Psychiatrists make up a scarce and expensive resource needed to address the demand for treatment of patients with behavioral health disorders. Patients in rural areas are even more in need as problems with access and capacity persist, particularly as psychiatrists are located primarily in major cities and urban areas.<sup>4</sup> Primary care practices are the only resource in these rural towns and feel inadequately equipped to manage these conditions, not just because of knowledge gaps but also because of the nature of business practices. Integrated care has been shown as a new business practice that can improve care, stabilize cost, and foster positive patient and provider experiences.<sup>5,6</sup> However, implementing this model is challenging and difficult to disrupt the current business practice.<sup>7</sup> It is important to understand integrated care through the framework of disruptive innovation theory to provide insight into how practices can be disrupted to extend affordable and accessible psychiatric expertise to primary care.

Clayton Christensen defines disruptive innovation as “the process of coupling cost-reducing technologies with innovative business models to deliver increasingly affordable and accessible products and services.”<sup>8</sup> Overall, a business model has 4 components, though its strength lies in its value proposition, which is defined as a service or product that helps customers do something they want to do effectively, conveniently, and affordably.<sup>9</sup> The other 3 components are (1) the *resources* needed to deliver the value

proposition; (2) the *processes*, which stipulate the way of working together to address a recurrent task in a consistent way; and (3) the *profit formula*, which keeps the business in practice. Three types of business models are possible in health care and can be combined with technologies to either sustain or disrupt the psychiatric practice.<sup>9</sup> These business models have been called solution shops, value adding process model, and facilitated user network, with the latter being the most disruptive. It is important to understand these business models and how they can be tailored to extend psychiatric expertise to deliver the value proposition of improved well-being for behavioral health patients in primary care.

Like most specialists in health care and consultants in other industries, psychiatrists are solution shop experts. By solution shop, it means that they use expert knowledge and the intuition gained from years of training and treating many patients to address complex unstructured problems that patients present with.<sup>8</sup> In the psychiatric practice, *resources* (staff, technologies) are put together, and a *process of care* is devised to deliver the *value proposition* (diagnosis, treatment recommendation) for patients, with the intention of obtaining a *profit margin*, which keeps the practice in business to continue to provide care. The financial compensation for these services follows a fee-for-service model, either time- or complexity- based reimbursement. In keeping with other specialties in health care, innovative efforts are appropriately focused on improving diagnosis (*Diagnostic and Statistical Manual of Mental Disorders*, biomarkers) and treatments (medication, pharmacogenomic testing, and psychotherapy) but may end up increasing the cost without necessarily improving access and affordability.

In rural areas, access to these solution shop experts is limited and attempts to use

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cost-lowering technologies such as telepsychiatry only end up sustaining the same practices without necessarily reducing the cost or reaching more people, because patients can be seen only one at a time, and this magnifies the cry for more psychiatrist to be trained or relocated to rural areas.<sup>10</sup> However, the bigger problem with treating behavioral health disorders is that most of them are chronic in nature and a solution shop model, though required for diagnosis and treatment recommendation, does not necessarily enable patients to maintain wellness. Patients are tasked with implementing the recommendations from solution shops but making the required behavior change is difficult. This predicament also applies to other chronic medical illnesses that are dependent on health behavior change such as diet, exercise, medication compliance, smoking cessation, appropriate alcohol intake, and avoidance of recreational drug use. It is clear that a different model to address the value proposition of maintaining wellness is required and to extend psychiatric expertise across a larger population. Herein lie the benefits of integrated care.

Integrated care uses a value adding process model to enable psychiatric expertise to be converted into simpler and affordable ones and help patients implement recommendations from solution shops to achieve wellness goals. A value adding process business model derives its strength from optimizing process efficiency.<sup>9</sup> The focus is to repackaging the resources used to streamline the processes of care to deliver the value proposition of wellness while operating on different profit margin rules. The core processes in integrated care have been defined as team driven, population focused, measurement guided, and evidence based.<sup>11</sup> The resources used include the addition of a care manager (CM) with behavioral health expertise who works with the primary care provider (PCP) and patient and is supervised by a consulting psychiatrist in a team-based approach that can be collocated in primary care or virtual.<sup>12</sup> The care process is initiated when a PCP sees a patient with behavioral health needs and liaises with a CM who adds the patient to the caseload of patients they track within a population registry. The registry contains important patient data that provide the basis of systematic case review each week with the care team.<sup>13</sup> These data

typically include symptom measures (eg, Patient Health Questionnaire-9), process measures (eg, access), experience measures (patient and provider), and utilization measures (eg, emergency department visits). The CM interacts with patients on a regular basis and uses evidenced-based approaches suited to primary care such as motivational interviewing, problem-solving therapy, and behavior activation to move patients toward wellness.<sup>14</sup>

The consulting psychiatrist working in this model wears many hats including clinical leader, caseload consultant, curbside consultant, direct consultant, clinical educator, and coach.<sup>15</sup> The psychiatrist consults indirectly through the care team on a defined caseload of primary care patients to shape their behavioral health. It is estimated that the amount of time required by the psychiatrist to make substantial impact on a population of patients is 2 to 3 hours every week.<sup>15</sup> They also consult directly by seeing selected patients who are not improving, hence maintaining a solution shop market too. Ensuring fidelity to the value adding processes in integrated care is critical for the success of this model of care and delivering the improved clinical outcomes that have been demonstrated in randomized controlled trials.<sup>16</sup> Reimbursement for these nontraditional services (CM role, indirect consults by psychiatrist) requires value-based payment schemes such as bundled payments for a predetermined group of services that are typically not billable under traditional insurance schemes.<sup>17</sup> Since 2017, Medicare has implemented payment codes to pay for this model though it remains stringent and private insurance schemes are lagging.<sup>18</sup>

Despite overwhelming evidence of improved clinical outcomes<sup>16</sup> and cost-effectiveness<sup>19-21</sup> of integrated care, translating the new practice into the real world is challenging as shown in the Depression Improvement Across Minnesota Offering a New Direction (DIAMOND) study. Solberg et al<sup>22</sup> evaluated the DIAMOND study and found no considerable improvement in clinical outcomes but admitted to having no specific way to measure and ensure fidelity to the model, which is critical for effectiveness. Kathol et al<sup>23</sup> argue that models of integrated care that embed behavioral health professionals with expertise in evidence-based therapies ensure improved clinical outcomes. A blend of models<sup>24</sup> may be

needed in practice to ensure the success of integrated care in primary care. Nevertheless, the evaluation of the DIAMOND study demonstrates difficulty in translating evidence into practice despite the support of insurance companies to use bundled payments. Miller et al<sup>25</sup> believe that capitated payment models that reimburse for a predetermined per person rate to primary care practices regardless of whether the care is for behavioral health or medical conditions will better support the sustainability of integrated care. Health policy initiatives on payment reform to support integrated care certainly lack the pace of practice innovation.<sup>26</sup>

The true disruptive power of integrated care can be realized only when it transitions from a value adding process to a facilitated user network business model that thrives from efficient management of a technological platform. For example, a centralized virtual telehub using telepsychiatry and Web-based registry platforms can further extend psychiatric expertise across a wider population by building the capacity of PCPs to treat behavioral health condition.<sup>27</sup> In these learning networks, aggregated sparse and distributed anonymized data from process and outcome measures allow for the identification of trends in delivery system gaps and the insights gained can be used to foster business-to-business practices and/or business-to-customer offerings.<sup>13</sup> Some business-to-business practices aimed at building the capacity of PCPs to treat behavioral health conditions include the use of psychiatrist specialist hub and multiple primary care spokes for didactics, consultative, and case-based learning to foster continuous professional development.<sup>28,29</sup> In addition, the insights gained from the large amount of data stored within these platforms can create new clinical support tools for point-of-care decision making for PCPs.<sup>27,30</sup> On the business-to-consumer side of the platform, direct evaluation of a patient at an originating site by a psychiatrist at a distant site via telepsychiatry can be done for difficult-to-reach areas. Digital and mobile technologies/apps to support patient self-management, under the guidance of a CM, can also be incorporated within these platforms.<sup>27</sup>

A number of studies, as summarized in a metanalysis,<sup>31</sup> suggest that telepsychiatry is equivalent to face-to-face assessments in diagnostic

accuracy and patient satisfaction. However, when telepsychiatry is embedded within an integrated care model it has been shown to be better than usual care. Fortney et al<sup>32</sup> conducted a randomized controlled trial to study whether telepsychiatry-enhanced integrated care was better than usual primary care in depression treatment in Veterans Affairs' community-based outpatient clinics and demonstrated positive results. Evidence-based psychotherapy delivered virtually was also found to have contributed to another telepsychiatry-based integrated care leading to positive results in patients with posttraumatic stress disorder.<sup>33</sup> In another study, Fortney et al<sup>12</sup> demonstrated that telepsychiatry-based integrated care was better than practice-based integrated care for depression treatment with improved cost-effectiveness.<sup>34</sup> By coupling these technological advances with appropriately matched business models such as integrated care, disruptive innovation has the potential to bring affordability and accessibility to a wider population.

Extending psychiatric expertise to primary care does not mean replacement of traditional specialty behavioral health services. What it does is help distribute resources by using a stepped care model to ensure that only patients with complex behavioral health problems are referred to specialty behavioral health services such as long-term psychotherapy, pharmacotherapy, partial hospitalization programs, traditional case management services, and community treatment teams. In conclusion, though the implementation of integrated care is difficult and varied models may be needed to ensure sustainability of the model, the theory of disruptive innovation suggests that integrated care, enabled by technological platform, has the potential to increase access and capacity to rural primary care sites for treatment of behavioral health conditions. In this way, integrated care can disrupt current practice to reach a market that has been ignored and allow patients to get the job they want done, more effectively, conveniently, and affordably.

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