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Quality improvement and models of behavioral healthcare integration: Position paper #2 from the International Society of Psychiatric-Mental Health Nurses

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ABSTRACT

This is the second article in a series written to present and address the position of the International Society of Psychiatric-Mental Health Nurses (ISPN) related to the notion of behavioral healthcare integration and the role of nurses in the 21st century. The first article addressed assumptions, definitions and roles related to the integration of behavioral healthcare. The purpose of this article is to focus on Integrated Care within the context of recent initiatives that endeavor to improve quality, safety and reduce costs in the US healthcare system also known as the "Triple Aim" (or more recently, the Quadruple Aim). This paper specifically focuses on the role of nurses and nursing practice by: (a) connecting the concept of integrated behavioral healthcare to quality improvement (QI) and the Quadruple Aim, and (b) highlighting examples of models of integration currently in use. Discussion of models of integration compares ways various models reinforce and actualize integration of behavioral health within primary care, in various special populations across the continuum of care, and in both inpatient and community settings. This paper also stresses innovative training programs offering nurses the skills for learning behavioral health integration through online modules and participation in Interprofessional Education (IPE) activities often through simulation approaches. This 2nd manuscript is consistent with the ISPN 2016 Position Paper and reinforces the necessity for all nurses to be educated on both the Quadruple Aim and behavioral health integration to improve patient care and subsequent care outcomes.

Introduction

The majority of healthcare providers agree that the mind and body should be treated as a single entity (Pincus et al., 2007). Integrating behavioral health and substance abuse services into primary healthcare delivery systems requires providers to be able to work to the highest level of their practice and implement team-based whole healthcare (e.g. assessment, screening, treatment, referral) to promote safe, cost effective, quality care (Hoge, Morris, Laraia, Pomerantz, & Farley, 2014). Nurses are poised to lead the interprofessional teams and are the cornerstone of care across the healthcare delivery systems in the United States (Soltis-Jarrett, Shea, Ragaisis, Shell, & Newton, 2017).

This is the second article in a series written to present and address the position of the International Society of Psychiatric-Mental Health Nurses (ISPN) related to the notion of behavioral health integration and the role of nurses in the 21st century. The purpose of this article is to focus on Integrated Care within the context of recent initiatives that endeavor to improve quality, safety and reduce costs in the US healthcare system also known as the "Triple Aim" (or more recently, the Quadruple Aim). The Triple Aim was launched a decade ago to provide a foundation for the development of evidenced based models of healthcare that would offer patient-centered, cost-effective and collaborative care for persons, families and communities (Berwick, Nolan, & Whittington, 2008; Lewis, 2014). In recent years, a fourth aim was added to focus on provider satisfaction as part of the healthcare process, elevating the importance of clinician well-being to that of the original

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three goals of the Triple Aim (Bodenheimer & Sinsky, 2014). This paper will specifically focus on the role of nurses and nursing practice by: (a) connecting the concept of integrated behavioral healthcare to quality improvement (QI) and the Quadruple Aim, and (b) highlighting examples of models of integration currently in use.

Quality, safety and cost: the Quadruple Aim & integrated behavioral healthcare

Reports of inadequate care throughout the U.S. healthcare system and a lack of transparency related to the quality of care in healthcare institutions has led to increasing public concern (Weingart et al., 2010). Difficulty in scheduling appointments and the presence of long waiting times, especially when the patient perceives a need for urgent medical attention, are just two examples of sources of frustration and concern (Ahmed & Fincham, 2011). The Institute of Medicine (IOM) *Crossing the Quality Chasm* (2001) presented six healthcare goals that would provide a foundation to improve the quality of care including that healthcare is safe, effective, patient-centered, timely, efficient, and equitable (Bloom, 2002; Kohn, Corrigan, & Donaldson, 1999). The report also included 10 principles to guide the development of high-quality healthcare system, including that care should be patient-centered and *collaborative* between providers. The IOM's call for collaborative care has been supported by the National Committee for Quality Assurance (2013), with a report that emphasized the added importance of integrated care for mental health concerns of patients who are dually eligible for Medicare and Medicaid benefits (National Committee for Quality Assurance, 2013).

Building upon the IOM's report, multiple initiatives were developed to achieve healthcare system-wide goals and the Quadruple Aim (Berwick et al., 2008; Bodenheimer & Sinsky, 2014). The goals of the original Triple Aim identified the need to improve the individual experience of care and the health of populations while managing the cost (Berwick et al., 2008) The first of these initiatives – the National Quality Strategy (NQS) – developed a framework which outlines six priorities for achieving the goals of the Triple Aim: a) improve quality of care b) reduce healthcare costs and c) improve the health of the US population. Table 1 lists the priorities identified by the NQS (Agency for Healthcare and Research Quality, 2017).

Together, the Triple Aim and the priorities set out by the National Quality Strategy provide direction leading to nationwide improvement of healthcare delivery and care outcomes. Still, achievement of the Triple Aim requires an effective healthcare system composed of engaged and productive healthcare providers. The critical role of the workforce in healthcare transformation, and the risk and consequences of burnout and dissatisfaction among healthcare providers is not addressed in the Triple Aim. The suggested addition of the "Quadruple Aim" deals with this absence by adding a fourth aim of improving the experience of providing care. This addition highlights the importance of both workforce and patient engagement in the goal of improving patient care, population health while reducing healthcare cost (Bodenheimer & Sinsky, 2014; Sikka, Morath, & Leape, 2015).

Putting theory into practice: the Quadruple Aim applied

Co-occurring behavioral health and substance use disorders are common in primary care settings, especially among persons with chronic medical illnesses (Katon & Unützer, 2013). These complex problems highlight the need for coordinated care and suggest that the integration of behavioral health services into primary care (such as with the patient-centered medical home model) will improve the odds of achieving the Triple Aim (Katon & Unützer, 2013). Behavioral health integration utilizing a patient-centered approach has been shown to promote evidenced-based practices and significantly improve treatment outcomes in a variety of settings and populations, including the underserved (Buxton, Chandler-Altendorf, & Puente, 2012), clients in a Veterans Administration medical home (Pomerantz et al., 2010), and individuals with comorbid mental and substance use disorders (Grella & Stein, 2006). Huang and colleagues, in a meta-analysis of eight randomized controlled trials encompassing 2238 primary care patients with co-morbid depression and diabetes mellitus, concluded that collaborative care significantly improved depression treatment response rate and adherence to antidepressant and oral hypoglycemic medication (Huang, Wei, Wu, Chen, & Guo, 2013).

In addition to improving the individual experience of care, the Triple Aim calls for the reduction of healthcare costs. According to the 2008 Milliman Medical Index (2008), healthcare for patients with chronic medical disease and co-occurring depression costs an average of $505 per patient per month more as compared to those without depression. Costs for patients with co-occurring anxiety were even higher, averaging $651 more per patient per month. Approximately 80% of the increase in expenditure was due to medical rather than behavioral healthcare cost (Melek & Norris, 2008).

It is important to review studies that assess the fiscal impact of models that focus on integration and collaboration. A recent report to the Centers for Medicare & Medicaid Services compared the collaborative care model to traditional care models, finding the collaborative care model associated with cost savings in low-income, high-risk populations with medical comorbidity (Center for Health Care Strategies and Mathematical Policy Research, 2013). Simon et al. (2007) also examined the economic and health benefits of a depression treatment program for outpatients with co-morbid depression and diabetes mellitus in primary care clinics using a collaborative care model as compared to patients receiving usual or traditional care. Researchers found patients assigned to the intervention group experienced 61 additional days without depressive symptoms and costs averaging $314 less than patients in the usual care group. A recent meta-analysis of collaborative chronic care models also demonstrated significant positive effects across multiple disorders with regard to mental and physical quality of life, clinical symptoms and social role function with no net increase in total healthcare costs (Woltmann et al., 2012).

The landmark University of Washington IMPACT Study examined 1801 depressed older adults enrolled in a 12-month collaborative care intervention treatment model in 18 primary care clinics located in five states from 1998 to 2002. Study participants received a collaborative stepped care approach between a primary care provider (PCP) and depression care manager with a psychiatrist available for complex patients. Results revealed lower medical costs, with participants reporting a decrease in depression symptoms, improved functioning, better quality of life and less pain (Hunkeler et al., 2006; Unützer et al., 2008). These studies suggest moving from a traditional medical model to a collaborative model of behavioral and medical healthcare may lead to

Table 1
Six National Quality Strategy priorities for achieving the goals of the Triple Aim (Agency for Healthcare and Research Quality, 2017).

Patient safety	Making care safer by reducing harm caused in the delivery of care.
Patient and family engagement	Ensuring that each person and family are engaged as partners in their care.
Coordination of care	Promoting effective communication and coordination of care.
Dissemination of best practices	Promoting the most effective prevention and treatment practices for the leading causes of mortality.
Population health	Working with communities to promote wide use of best practices to enable healthy living.
Efficient use of healthcare resources	Making quality care more affordable for individuals, families, employers, and governments by developing and spreading new healthcare delivery models.

significant cost savings.

The widespread problems of burnout and dissatisfaction among physicians and other healthcare providers has been well documented (Bodenheimer & Sinsky, 2014). Burnout among U.S. physicians has been reported at 50% or greater, coinciding with low levels of satisfaction with work-life balance (Shanafelt et al., 2015). Though much of the literature centers on physicians, awareness of the stress and risk of burnout in other members of the healthcare team is emerging (Havens, Gittell, & Vasey, 2018; Morrow, Call, Marcus, & Locke, 2018). In 2014, Drs. Bodenheimer and Sinsky proposed a direct correlation in the level of job satisfaction and resiliency of the care team members with the achievement of patient outcomes, and in response, added a fourth goal to the Triple Aim: improving the work life of healthcare providers, clinicians and staff. Various initiatives have been developed in recognition of the need to provide support to healthcare professionals to achieve the goals of the original Triple Aim. The University of Utah Health, an academic healthcare system, developed a Resiliency Center to support faculty and staff through wellness programs, communications skills training, peer support and an on-site Employee Assistance Program (Morrow et al., 2018). The Anne Arundel Medical Center in Annapolis, Maryland developed an employee WellBeing Program comprised of the following elements: purpose, social, financial, physical, community wellbeing (Jacobs, McGovern, Heinmiller, & Drenkard, 2018). Both programs report improvement in wellbeing and engagement of care team members.

The importance of job satisfaction on patient-centered outcomes was evidenced in 2017 when national nursing leaders from the American Academy of Nursing Expert Panel on Building Health System Excellence gathered to discuss the role of nurse leaders in developing work environments to support the Quadruple Aim (Batcheller, Zimmermann, Pappas, & Adams, 2017). From this meeting entitled "Nursing Leadership and the Quadruple Aim: Framing Contribution and Influencing the Future" four main themes emerged. First is the need for nurse leaders to become involved in organizational strategic plans in creating interprofessional models of care that optimize the use of resources, scope of practice, and determinants of health. Second is the need for nurse leaders to establish evidence-based standards of practice and compare outcomes to national benchmarks. Next, nurse leaders will need to establish a culture of cooperation and collegiality across professions and with staff, patients and families. Finally, the group discussed the transition of newly licensed registered nurses into practice, its impact on the work environment, and the paucity of nurse residency programs that undergo accreditation. A panel of national experts is collaborating on a policy paper regarding nurse residency programs for review by the Board of the American Academy of Nursing (Batcheller et al., 2017).

As suggested in the report of the meeting of the American Academy of Nursing Expert Panel, nurse leaders are also in a position to create integrated models of care and establish standards of practice in the healthcare organization (Batcheller et al., 2017). Establishing standards of practice based on evidence and evaluated through a Quality Improvement framework are important aspects of creating effective and efficient healthcare systems. In this way, nursing leaders play a pivotal role in the achievement of each component of the Quadruple Aim.

Integrated behavioral healthcare and quality improvement

Various models of integrating behavioral and physical healthcare have demonstrated improved outcomes as compared to traditional care (Druss et al., 2010; Katon et al., 2010; Wells et al., 2000). One way to develop and maintain an effective and efficient integrated behavioral healthcare system is through a Quality Improvement (QI) framework. QI refers to the development and implementation of standardized quality and performance measures to determine quality of care (O'Donohue & Maragakis, 2016). The QI system provides a mechanism to assess healthcare system changes and innovations such as the implementation of an integrated healthcare process for effectiveness in meeting the goals of the Triple Aim by monitoring outcomes, patient satisfaction and cost among other variables and ensures that healthcare dollars are being most efficiently spent (Chassin & O'Kane, 2010; Maragakis & O'Donohue, 2016).

However, in early studies, few quality measures existed to evaluate the care provided within models of integrated behavioral and physical healthcare (Hermann, 2005; Kilbourne, Keyser, & Pincus, 2010). Rather, measures tended to concentrate on single conditions or focus on limited aspects of care without addressing linkages (or collaboration) among the traditional silos of healthcare delivery: behavioral health, substance use, and physical healthcare (Goldman, Spaeth-Rublee, & Pincus, 2015). Chwastiak et al. (2017) demonstrated the feasibility of implementing a collaborative care program for poorly-controlled type 2 diabetes and complex behavioral health disorders in an urban primary care clinic using both clinical and process measures. Clinical measures demonstrated that integration of behavioral healthcare into chronic care management of patients with diabetes improved outcomes among the high-risk population. The study results showed a mean decrease in HbA1c of 0.9 (10.6 to 9.4) among those referred to the collaborative care team, compared to a mean decrease of 0.2 (9.4 to 9.2) among those not referred, with a significant difference between groups in their reduction in HbA1c ($p = .008$). Process measures also demonstrated increased patient engagement among those referred to the collaborative care team as compared to those not referred as measured by telephone contacts and clinic visits (14.5 clinic visits vs. 8.3 $p < .0001$). Additionally, differences were found between the two groups with regards to total number of HbA1c measurements taken and the likelihood to be screened for depression using the PHQ-9 ($p < .001$) (Chwastiak et al., 2017).

Evidence-based quality improvement (EBQI) is an approach specifically aimed to redesign clinical practice through the translation of care delivery research into routine practice settings (Rubenstein & Pugh, 2006). In 2010, Rubenstein and colleagues evaluated a program called TIDES (Translating Initiatives in Depression into Effective Solutions) as part of an EBQI project for implementing research-based depression collaborative care in Veterans Health Administration (VA) primary care practices. To guide the QI effort, workgroups and a panel of mental health and primary care leaders (Depression Intervention Design Panel) were established. The workgroups modified, and refined tools identified in prior depression research to fit the VA practices using multiple Plan-Do-Study-Act (PDSA) cycles (Deming, 1986), creating the TIDES protocols, policies, and tools. Each PDSA cycle involve planning (Plan), carrying out (Do), evaluating results (Study), and putting in place (Act) improvements. Based upon assessment for depression by a depression care manager (DCM), participants were referred to a mental health specialist (MHS), primary care-based cognitive-behavioral therapy, or follow-up in primary care with the DCM. Results indicated that the participants with DCM assistance ($n = 128$) had a significant drop in mean Patient Health Questionnaire −9 (PHQ-9) scores from 15.1 to 4.7 ($p < .001$) suggesting reduction of depression symptoms. Patients referred to MHS providers ($n = 50$) also reported a drop in mean PHQ-9 scores from 16.4 to 9.0 ($p < .001$). Finally, patients in the TIDES program also demonstrated high levels of adherence to antidepressant and improved depression symptoms. The researchers reported that the TIDES programs were expanding nationally (Rubenstein et al., 2010).

Creating and sustaining integrated behavioral healthcare environments that achieve the Quadruple Aim will require nurse leaders to be involved in policymaking and organizational strategic planning. In additional, nurse educators will be needed to prepare nurses across all specialties and at every level, to function in an integrated behavioral healthcare setting. The following section presents some interventions to facilitate nursing's involvement in achieving the Quadruple Aim.

Integrated behavioral healthcare and nursing education: a role for generalists and specialists

At the turn of the millennium, increased attention was paid to developing and sustaining a well-trained and competent workforce for the treatment of individuals with psychiatric illnesses in the community (Lichtveld et al., 2001). This included both nurse generalists and specialists who practice in a variety of healthcare settings, suggesting all nurses need behavioral health skills and those who are specialists need to learn to work to the top of their scope of practice.

The Annapolis Coalition on the Behavioral Health Workforce developed an action plan intended to support and strengthen the healthcare workforce (Hoge et al., 2009). Almost a decade later, members of ISPN have taken the position that it is essential that all nurses are educated and trained in behavioral health integration starting in their undergraduate and graduate nursing programs and continuing with lifelong learning in behavioral health and substance use disorder assessment and treatment. Nursing education must focus on the nurse's development and acquisition of skills to recognize, assess, intervene and appropriately refer those with behavioral health and substance use problems. This strategy facilitates the movement of “integration” into action, such as that envisioned by Stuart (2005) who had asserted that “it is essential that more nurses form the ‘cornerstone of integrated care’”. Stuart emphasized that more than 3.1 million registered nurses in the US provide care in every community in a wide variety of settings, and that nurses are often the first provider in healthcare services. More recently, the SAMHSA-HRSA Center for Integrated Health Solutions (CIHS), in promoting the integration of primary and behavioral health services to better address individuals with dual diagnosis, has supported integrated care as an essential part of all nursing program curricula (www.integration.samhsa.gov).

Educating the workforce has long been a focus of the Annapolis Coalition (Hoge et al., 2009). Academic nursing programs are ideally suited to train the current workforce to increase their skills of assessment and management of behavioral health and substance use disorders. Examples include training nurses to: (a) implement motivational interviewing, (b) screen for psychiatric and substance use problems and (c) incorporating SBIRT: Screening Brief Intervention, and Referral to Treatment as part of the workflow in any healthcare setting (www.integration.samhsa.gov/about-us/esolutions-newsletter/e-solutions-may-2014).

Innovative training programs can also offer nurses the skills for learning behavioral health integration through online modules and participation in Interprofessional Education (IPE) activities often through simulation approaches (Hoge et al., 2005). IPE has the potential to play a key role in improving healthcare delivery by providing all healthcare professionals with the skills necessary for interprofessional collaborative practice (Reeves et al., 2008; World Health Organization [WHO], 2010). Educating nurses with other healthcare professionals will facilitate the integration of behavioral and primary healthcare and enhance communication across those disciplines. By fostering these changes in nursing education programs, all nurses on the “front line” of care would be better prepared to recognize, assess, briefly treat, and appropriately refer those with behavioral health and substance use problems in every healthcare setting (Hoge et al., 2005).

Heath, Wise Romero, and Reynolds (2013) reported the primary care nurse practitioner (NP) and Psychiatric-Mental Health Nurse Practitioner (PMHNP) are responsible for the care of up to 68% of patients with co-morbid primary care and behavioral health problems and have developed core competencies for both primary care and behavioral healthcare that should be incorporated into nurse practitioner (NP) graduate programs. Fortunately, primary care providers such as Family Nurse Practitioners have been returning to school in greater numbers to obtain PMHNP certification. ' (AACN, 2018). Facilitating clinical experiences in behavioral health integration needs to be included with the didactic courses for both primary care NPs and PMHNPs. This can be designed and implemented at clinical sites where behavioral health integration occurs such as; free medical clinics, outpatient offices and community health centers. Many programs follow this pattern in both clinical and didactic educational experiences.

Best practices: models of integration

The concept of the Patient-Centered Medical Home (PCMH) endeavors to shift the focus of episodic acute care of individuals to the management of the health of defined populations, especially those individuals living with multiple, complex and chronic health conditions. Many individuals living with chronic physical illnesses and conditions present with co-morbid behavioral health and substance use problems, requiring collaborative and comprehensive care by a team of healthcare professionals. Models that position behavioral health in a primary care setting and employ dually prepared providers such as Family/Psychiatric-Mental Health Nurse Practitioners and/or physicians double boarded in Family Medicine/Psychiatry have the potential to generate efficiencies in the healthcare system while improving access to prevention and treatment services (Schoenwald, Hoagwood, Atkins, Evans, & Ringeisen, 2010). However, with the declining numbers of psychiatrists and lack of the necessary mass of PMHNPs to address needs of those nurses serve, other creative and innovative models need to be explored, especially for those in rural healthcare settings. One such model, the TANDEM3-PC, was developed and is continuing to be facilitated in rural North Carolina (Soltis-Jarrett, 2018). This unique and innovative framework of practice, education and training has been able to demonstrate how a PMHNP can work "in tandem" with Primary Care Nurse Practitioners and other members of the interprofessional healthcare team. Early data analysis has shown significant patient-centered outcomes as well as effectively assessed and managed individuals with complex, comorbid medical and psychiatric diagnoses. Laying the foundation for integrated behavioral health includes understanding several frameworks that have been developed to meet patient needs. These include: (a) the Four Quadrant Model, (b) the Vertical vs. Horizontal Model, and (c) Levels of Integrated Care. Each of these frameworks will be briefly presented with examples of application to practice.

The Four-Quadrant Model

The Four-Quadrant Model (Mauer, 2009) is a Behavioral Health/Primary Care Integration model that assumes competency-based mental health and substance abuse (MH/SA) service integration within a primary care setting as well as the notion of integrating primary care into a specialty psychiatric setting. This model describes the unique needs of subsets of the population that Behavioral Health/Primary Care integration must address. Each quadrant (see Table 2) considers the level of behavioral and physical health risk and complexity along with the needs of the population in order to suggest the major system elements

Table 2
Definitions of the four quadrants of the Four-Quadrant model (Mauer, 2009).

Quadrant 1	Low to moderate behavioral health and low to moderate physical health complexity/risk
Quadrant 2	Moderate to high behavioral health and low to moderate physical health complexity/risk
Quadrant 3	Low to moderate behavioral health and moderate to high physical health complexity/risk
Quadrant 4	Moderate to high behavioral health and moderate to high physical health complexity/risk

Table 3
Five Levels of Integrated Healthcare are differentiated by the amount of recommended collaboration (Heath et al., 2013).

Level 1	*Minimal Collaboration:* Mental health and other healthcare providers work in separate facilities, operate separate systems, and rarely communicate about cases.
Level 2	*Basic Collaboration at a Distance:* Mental health and other healthcare providers operate separate systems at separate sites, but engage in periodic communication about shared patients, mostly through telephone and letters. Providers view one another as resources.
Level 3	*Basic Collaboration Onsite:* Mental health and other healthcare providers operate separate systems, but share facilities. Proximity supports at least occasional face-to- face meetings. Communication improves and is more regular.
Level 4	*Close Collaboration in a Partly Integrated System:* Mental health and other healthcare providers share the same sites and operate some systems in common, such as scheduling and charting. There are regular face-to-face interactions among primary care and behavioral health providers, coordinated treatment plans for difficult patients, and a basic understanding of one another's roles and cultures.
Level 5	*Close Collaboration in a Fully Integrated System:* Mental health and other healthcare providers share the same sites, vision, and systems. All providers are on the same team and have developed an in-depth understanding of one another's roles and areas of expertise.

to be utilized (e.g. care management can be assumed by either primary care or behavioral health providers, depending on the identified needs). Overall, this model describes levels of integration in terms of primary care complexity and risk and mental health and substance use disorder complexity and risk.

Issues relating to the sustainability of the components of Four Quadrant model include consumer preferences, a trained workforce, organizational support in providing services, and fiscal resources. These interrelated issues need to be discussed with consensus reached for both primary care and behavioral health providers before establishing an integrated care approach. Positive resolution of these issues will enhance the outcome of sustainability (Kathol, Butler, McAlpine, & Kane, 2010; National Council for Community Behavioral Healthcare, 2009).

Horizontal integration versus vertical integration care models

Horizontal integration of healthcare may be described a circular model in which equal distribution of responsibility and power is shared within and between multiple groups of healthcare professionals that provide similar levels of care. The horizontal provision of care model typifies interdisciplinary practices currently taught to students in healthcare professions. Examples of horizontal integration also include the formation of multi-hospital systems, mergers, and strategic alliances with neighboring hospitals to form local networks in which patients are cared for by multiple providers (Msuya, 2004).

Vertical integration, in contrast, moves patients sequentially between different levels and types of specialty services from community-based to acute care, and primary to specialty care. This is the traditional model of care, whereby a physician leads the planning of care. Vertical delivery of healthcare services provides selective or distinct interventions for specific health conditions such as depression, anxiety disorders, and substance use disorders treatment. Examples of the vertical model also include the leadership of primary care providers (PCPs), strategic alliances with providers in physician-hospital organizations (PHOs), management services organizations (MSOs), and the development of health maintenance organizations (HMOs) (Msuya, 2004).

According to the World Health Organization, vertical programs have the following components: intervention, monitoring and evaluation, with the intervention delivery component interfacing with horizontal delivery. Vertical integration often provides quick results such as a specific immunization day versus routine immunization days in a horizontal model clinic. Vertical programs can enhance-vertical-horizontal collaboration by making optimal use of the workforce available and promoting that workforce to grow in quantity and quality (www.who.int/bulletin/volumes/83/4/editorial0505/en).

Levels of integrated care

Multiple levels of integrated behavioral healthcare currently exist and include three approaches: coordinated, co-located and integrated. The *coordinated care* approach is a framework that guides the implementation of behavioral and primary healthcare and providers who maintain separate offices and systems. Communication between providers is varied, based upon provider need and patient concerns. The behavioral health and physical health needs of the patient are treated separately, with discrete treatment plans developed by each provider. Information and records may be shared among providers on an as needed basis (Heath et al., 2013). The *co-location* approach is utilized when both behavioral and primary care providers are located in the same facility but may not share the same office space. The patient's health needs are treated separately. Collaboration is based on a referral process. The systems of the providers may or may not be shared. The co-location framework allows for communication among providers through in-person, telephonic, or electronic means (Heath et al., 2013; Wulsin, Sollner, & Pincus, 2006). In a *behavioral health and primary care integrated care* approach, an on-site team approach manages all patient concerns. Shared facility and office space among providers allow for a high level of collaboration and communication of relevant patient information.

The SAMHSA-HRSA Center for Integrated Health Solutions (Heath et al., 2013) provides a framework to describe the amount of collaboration among the specific Levels of Integrated Healthcare (see Table 3).

In summary, integrated behavioral healthcare teams and services have multiple approaches and do not have to be present or delivered in the same physical location to meet the definition of integrated care. However, advantages to shared locations include an increased likelihood that patients referred for services will follow through on treatment. Also, opportunities increase for medical and behavioral health providers to build their relationships and skills through informal interactions (Heath et al., 2013). Although advantages exist in bringing behavioral health services on site in primary care settings, some level of integration can still occur between clinicians and organizations that are physically separate but use shared care plans and workflows. Physically separated care providers are an acceptable variation as long as the care team fulfills the required functions of integrated behavioral healthcare from separate locations.

The SAMHSA-HRSA Center for Integrated Health Solutions (CIHS) promotes the development of integrated primary and behavioral health services to better address the needs of individuals with mental health and substance use conditions, whether seen in behavioral health or primary care provider settings. Sustainable models of integrated care must address the development of an adequate workforce to meet the complex needs of these clients. Both primary care and behavioral health providers need to develop specific skills in order to function effectively in integrated care settings. Psychiatric-Mental Health RNs and Advanced Practice RNs (APRN) are uniquely qualified to lead teams of integrated care providers. A list of core competencies developed by SAMHSA provide organizations and individual professionals with a “gold standard” for the skill set needed to deliver integrated care. They represent the long-term goals of workforce development for professionals with careers in integrated care. These core competencies include interpersonal communication, collaboration and teamwork, screening and assessment, care planning and coordination, intervention cultural competence, systems-oriented practice, practice-based learning and quality improvement, and informatics (Hoge et al., 2014; https://www.

integration.samhsa.gov/workforce/integration_competencies_final.pdf).

Conclusion

Nursing leaders have been instrumental in developing each component of the Quadruple Aim and continue to have a role in national policymaking with the goal of improving the health of the population (Batcheller et al., 2017). It is the position of the International Society of Psychiatric Nurses (ISPN) that all nurses be educated on the Quadruple Aim, behavioral health integration, and the importance of both on improving patient care and care outcomes. ISPN supports the American Academy of Nursing Expert Panel on Building Health System Excellence's call for the increased involvement of nurse leaders in the effort to achieve the Quadruple Aim. Furthermore, ISPN believes and supports that all nurses, both generalists and specialists, need to be educated and trained in behavioral health integration approaches to care. In this way, we can optimize the professional work environment and improve patient care, thus realizing the Quadruple Aim.

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Declaration of Competing Interest

None.

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