Social Determinants of Health:
Nursing, Health Professions and Interprofessional
Education at a Crossroads

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Introduction

Worldwide, reports, scientific discovery, and external drivers are changing contemporary thinking about the impact of social determinants on the health (SDoH) and wellbeing of people and populations (Braveman & Gottlieb, 2014; National Academies of Sciences Engineering and Medicine, 2016, 2019a; World Health Organization, 2008, 2020). When estimating the relative impacts of clinical care and social factors on health and health outcomes, the greatest proportion of health outcomes are attributed to social factors (Hood, Gennuso, Swain & Catlin, 2016; Magnan, 2017). Social factors advantage some populations while disadvantaging others and include economic stability, education, social and community context, neighborhood, and the built environment (Green & Zook, 2019; U.S. Department of Health and Human Services, 2019). For disadvantaged populations, health is adversely impacted by social factors that include lack of access to stable housing, healthy food choices, safe neighborhoods, and reliable transportation (Hood, Gennuso, Swain, & Catlin, 2016; Magnan, 2017). Social determinants of health (SDoH) reside upstream from individual health care system clinical encounters that typically occur downstream in hospitals, ambulatory, and primary care clinics. The root causes of social determinants that confer health risks onto populations involve power dynamics, social inequalities, historic structures, economic factors, unfavorable policies, and intergenerational influences that extend beyond a single individual or family.

Today, nursing and other health professions’ education and training are primarily focused on addressing the downstream clinical care needs of individuals and families in clinical settings (National Academies of Sciences Engineering and Medicine, 2019a). Yet, a central premise is that to achieve the goal of health equity, action is required on the upstream SDoH in order to close the health gap between differentially advantaged and disadvantaged populations (U.S. Department of Health and Human Services, 2019).

This paper begins with describing the business case and moral obligation for the SDoH and health equity as a call to action for nursing and health professions education. Because solutions reside in cross-professions and multi-sector collaboration, we describe the current state of interprofessional education, activating and educating nurses as interprofessional team members, and lessons learned in a national nurse-led interprofessional initiative, including designing new academic-community partnerships around people and populations. Five features for new learning models are explored: dual identity formation, intersectionality, cultural humility, relational ethics and transformative learning. By integrating emerging concepts, five activities for aligning social care with health care for the SDoH and health equity are explored for education, using Pittman’s four core functions for nursing, connected to interprofessional learning (National Academies of Sciences Engineering and Medicine, 2019; Pittman, 2019 a, b).

Today, payment models and incentives to address the SDoH and health equity are changing; the response from multiple sectors is rapid, moving beyond traditional health care models. By shifting the focus to health, interventions are increasingly accepted as tied to local environments, neighborhoods and communities (Ash et al., 2017; Joint Center for Political and Economic Studies Health Policy Institute & Cook County IL Place Matters Team, 2012). Decision-making and leadership efforts are already underway to clarify the SDoH and define the roles of the health care sector while acknowledging its limits in a larger effort to improve health and control costs (Alderwick & Gottlieb, 2019). The view of the interprofessional health team is expanding beyond individual clinical encounters and breaching the walls of health care systems out into communities where people live (National Academies of Sciences Engineering and Medicine, 2019a; Pittman, 2019a). Multi-sector models involving innovative interprofessional collaboration between community agencies such as police, emergency, legal system, housing, and public works and the health care system are showing promise and demonstrating positive health outcomes for vulnerable populations (Hardin, Trumbo, & Wiest, 2019).

The shift from the predominant focus on clinical care to close the gap of health equity, presents a new and
fast approaching horizon for nursing and health professions’ education. As new players enter health care to respond to the evolving value-based payment models and the input of new and different resources to incentivize a focus on the SDoH and health equity, nurses and other health professionals who will maintain relevant in the future will be those who demonstrate value in those upstream locations where health is created. For universities and colleges that have built nursing and health professions education programs over the past two decades on the “shortage narrative” (Fraher & Brandt, 2019), faculty will need to become aware of the current rapidly changing health care environment in order to respond and strengthen the alignment with the health sector (National Academies of Sciences Engineering and Medicine, 2019b). It will no longer be sufficient to educate and train nurses and other health professionals to exclusively support clinical care and delivery of services to individuals and their families. The opportunity for the profession of nursing is to expand the range and impact of education and practice to remain competitive and relevant among the health professions and be at the table with multiple sectors engage in an evolving health care delivery system.

**The Business Case Joins Moral Obligation**

In the U.S., new policies and conversations are driving the urgency to substantively address the SDoH and health equity. Driven by financial incentives and payment models, new players, decision-makers and leaders increasingly reside outside of the traditional health professions sectors. Rather than the health professions alone, health care industry leaders and representatives and private sector organizations are repositioning themselves to apply health system interventions to non-medical factors (Green & Zook, 2019; Magnam, 2017). For example, a private interest group known as the Health Care Transformation Task Force is comprised of a coalition of payers, purchasers, providers, and patients committed to embracing value-based payment models—and offers a framework to describe the distinction among the SDoH, population health, social risk factors, and social needs in a manner that promotes more precise usage of each term by all stakeholders to enable consistent measurement and tracking for incentivization (Alderwick & Gottlieb, 2019). Clear and consistent definition of key terminology is an intentional step that private industry leaders, new to the SDoH and health equity space, are taking to determine what role health professionals and payers can and should play in addressing the underlying factors that influence population health (Green & Zook, 2019). Many in the education sector are currently unaware of these significant shifts in thinking about health and health care (National Academies of Sciences Engineering and Medicine, 2019b).

For over a century, to provide access to care for “sick”, “poor”, and “indigent” people, health professionals and a part of the health sector have focused on clinical care for vulnerable populations experiencing health inequities (Hendrick, 1914; Pittman, 2019a, 2019b; Wald, 1934). These interprofessional, public health care models have resided outside the mainstream health care system, advanced by passionate health professional champions and leaders who advocate for social justice, moral obligation and social mission of organizations (Mullan, et al., 2010; Pittman, 2019a, 2019b; Wald, 1934). Government agencies have traditionally been responsible for shaping the policies and practices governing social determinants such as health, housing, transportation, education, nutrition, employment and the environment. The governmental investments and policies span decades and have had large-scale, population-level impacts on the health of the U.S. all without applying a consistent and coherent population-health framework to guide a fair and equitable approach to shaping the health of populations.

Now agile, private, for-profit entities with substantial big data capabilities are engaging in matters traditionally relegated to large governmental agency bureaucracy. By using standardized measures and approaches that work in the private sector, for-profit health systems are developing models and business lines to address health, prevention and wellness, housing, and transportation in an effort to lower costs of health care for all populations in their own neighborhoods and communities (Joint Center for Political and
Economic Studies Health Policy Institute & Cook County IL Place Matters Team, 2012). Additionally, private entities that have traditionally occupied the fee-for-service- and insurance-only space have for the first time are venturing into the SDoH and population health domain. For example, the American Hospital Association (AHA) and other health care entities in the private sector have discovered that addressing social determinants and health equity is good for business (American Hospital Association, 2020; Chin, 2016; KPMG Government Institute, 2018). The American Hospital Association (AHA), whose mission is to advance the health of individuals and communities is developing tools to address social determinants and population health. AHA’s social determinants strategies include tactical approaches to reduce overall costs and increase revenues. AHA has developed new business lines to include remote patient monitoring, diabetes prevention programs, employment support services, supportive housing services, meal delivery services, and non-emergency transportation to health services. AHA is also developing data platforms to track progress on social determinants as population health metrics (American Hospital Association, 2020).

Recognizing the challenges of documented value and return on investment, the business case positions efforts to address the SDoH and health equity as an opportunity to achieve real and sustained economic growth (Turner, 2018). Therefore, the impetus to embrace the SDoH and health equity in nursing and other health professions education and practice can be framed as both an imperative for social justice and strategy for economic growth. The social justice/moral imperative with the business case position argues in education that teaching students to effectively address the SDoH and health equity inside and outside of the health care delivery system, enables practicing nurses and students to take a wider view—zooming out—and therefore seeing issues, contributing factors and potentially enabling factors more clearly. One is able to see the interconnectedness of an individual and their community—to look beyond an individual’s choices and behaviors and observe the impact of policies and structures that have been entrenched/embedded in communities and have shaped the health and health outcomes of the advantaged and disadvantaged. The moral argument goes further—that in the end, everyone will have an opportunity to achieve optimal health outcomes. Social justice argues that decades of public and private policies codified as part of federal, state, and local laws and practices have shaped the social, educational and economic opportunities of entire populations—systematically advantaging some populations while disadvantaging others. The inequalities in health and health care observed today are generations in the making and require some form of redress (Artiga & Hinton, 2018; Daniel, Borstein, & Kane, 2018; Joint Center for Political and Economic Studies Health Policy Institute & Cook County IL Place Matters Team, 2012).

At the very least, the system-level solutions that are necessary to address the SDoH and require multi-sector partnerships will necessitate that nurses and other health professions, move beyond their siloed cultures to work interprofessionally. In health professions education today, the business case arguments are often invisible. SDoH and health equity are taught as the moral obligation of a health professional and as “the right thing to do” but remain marginal to core missions. Nursing with 3.8 million registered nurses nationwide is the largest singular health profession in the U.S., comprising the largest segment of the health care workforce (American Association of Colleges of Nursing (AACN), 2019; U.S. Department of Health and Human Services, Health Resources and Services Administration, & National Center for Health Workforce Analysis, 2019a, 2019b). Professional nursing with its outsized footprint in the national economy cannot afford to be divested or sidelined in decisions on how to achieve national population health outcomes. Nurses, by sheer numbers alone, collectively could impact policies that influence the SDoH and health equity.

The Current State of Interprofessional Education

To work upstream as well as downstream in interprofessional, multi-sector teams, new models of education are needed. Since the early 1960s, interprofessional education has been an evolving field of
study and practice that has lived on the margins and is experiencing resurgence and renewed interest since 2000 (Cerra & Brandt, 2011; Institute of Medicine Committee on the Health Professions Education Summit, Greiner, & Knebel, 2003). Over fifty years ago, early pioneers envisioned an interdisciplinary education academic model that would prepare pre-professional students from different programs for future practice “by the same teachers in the same classrooms, and on the same patients” (Mccreary, 1964, p. 1220). In 1972, the Institute of Medicine (IOM) expanded the concept of interdisciplinary education to recognize “the synergistic interrelationship of all who can contribute to the patient’s well-being” (Institute of Medicine, 1972, p.12). The 1972 IOM report underscored the need to educate students in teams while concurrently redesigning the health care system to “redploy the functions of the professions in new ways to be more efficient, effective, comprehensive, and personalized” (Institute of Medicine, 1972, p. 4). The new professional functions included expanding “the roles of some professions and perhaps eliminating others, but more closely meshing the functions of each than ever before” (Institute of Medicine, 1972, p. 4).

Today, national and international efforts are advancing the field of interprofessional education and collaborative practice. National core competencies for interprofessional collaborative practice have been developed to guide pre-professional curriculum design (Canadian Interprofessional Health Collaborative, 2010; Interprofessional Education Collaborative, 2011). In 2011, the Interprofessional Education Collaborative (IPEC) of national health professions education associations, including the American Association of Colleges of Nursing, released core competencies for interprofessional collaborative practice in four domains: ethics/values for interprofessional practice; roles/ responsibilities; interprofessional communication; and teams and teamwork (Interprofessional Education Collaborative, 2011). In 2016, IPEC updated the competencies to strengthen the role of population health to promote health and health equity across the life span (Interprofessional Education Collaborative, 2016). Today, the potential for impact on the SDoH is growing as IPEC has expanded to 21 health professions education associations, now including the National League for Nursing.

Activating and Educating Nurses as Interprofessional Team Members

A number of nursing leaders have proposed new roles and responsibilities for nursing in the redesign of health care (Buerhaus, DesRoches, Dittus, & Donelan, 2015; Bodenheimer & Mason, 2017; Pittman & Forrest,2015; Spetz, Fraher, Li, & Bates, 2015). Additionally, a “confluence of opportunities” are converging to address longstanding health challenges; these include moving to a culture of health, bipartisan interest in new payment models, potential financial viability of community-based models, and the growing portion of the physician workforce that now works in health care organizations (Pittman, 2019b, p. 49-50; Robert Wood Johnson Foundation, 2018). A stepping stone toward developing a culture of health is an understanding of the role of culture in health. The American Association of Colleges of Nursing (AACN) (2008) developed curriculum guidelines and toolkits for baccalaureate and graduate nursing students and incorporated cultural competence into their Essentials series (American Association of Colleges of Nursing (AACN), 2006, 2008, 2011). In 2019, the AACN released draft domains and descriptors for the Essentials that includes population health and interprofessional partnerships (AACN, November 2019). The National League for Nursing (2019) recently published a call to action to intentionally integrate the SDoH into nursing curriculum and to emphasize nursing’s moral responsibility to health equity and social justice (National League for Nursing, 2019). Recognizing the importance of a culturally competent workforce to address the SDoH, the American Academy of Nursing recommended specific guidelines for implementing culturally competent nursing care that include knowledge of culture, life-long learning, critical reflection, and effective communication (Douglas et al., 2014). Despite calls by leading nursing organizations to incorporate cultural competence in nursing education, current curricular approaches are not sufficient to move the needle on health equity. The question is: Why?
Citing this environment and current nursing care and interventions in diverse settings (e.g., hospitals and health systems, aging in place, maternal child home visits, urgent care clinic), nursing is well-positioned to enhance contributions in the 21st century (Pittman, 2019a). Pittman calls on nursing to rise to the challenge by re-embracing the Wald Model. (Pittman, 2019a, 2019b; Wald, 1934). Public health nurses are well aware of the contributions of Lillian Wald who first envisioned a new role for nurses in the care of the sick poor, primarily immigrants, in their homes in the 1890s and later African-Americans in the South. Stимulated by the progressive era and new science informing infectious disease prevention and treatment, Wald recognized that “sickness should be considered within the social and economic context” of homes and neighborhoods (Buhler-Wilkerson, 1993, p. 1778). Wald and her nursing colleagues worked tirelessly in the early 20th century to make the public health nursing curative and prevention model a reality nationally.

During her career, Wald worked with individual patient and families by operating in communities as well as engaging national insurance companies, and advocating in policy environments. Public health nursing champions accomplished their vision by partnering with other professionals, particularly social workers, and community organization such as “women’s clubs, church groups, mission societies, hospitals, charity organizations, tuberculosis association, health departments, settlement houses, and visiting nurse associations (Buhler-Wilkerson, 1993, p. 1779). Eventually, Wald’s home-based model for the sick poor led to the establishment of the Henry Street Settlement that still functions today and created a cadre of thousands of public health nurses throughout the U.S. Buhler-Wilkerson describes a number of lessons learned that are relevant today such as the need to develop a mix of public-private programs that respect local customs and needs, document cost-effective benefits valued by society, place practice within reimbursement systems providing payment appropriate to service costs, among others (Buhler-Wilkerson, 1993, p. 1778).

To realize the redesign of health care taking into account the SDoH and health equity, Pittman proposes not only re-embracing the Wald Model (Pittman, 2019b) but also recommends articulating, refining and updating four core functions of nursing that builds upon its roots (Pittman, 2019a):

1. Extending compassion and establishing the trust with patients, their families, and communities.
2. Assessing patients, families, and communities’ unmet needs in the context of their lives and goals.
3. Building partnerships within and outside of the health sector to find solutions.
4. Identifying and advocating for collective, upstream solutions.

The first two core functions (trust and evaluation) identified by Pittman are strongly rooted in the nursing profession and curricula of which the tenets of person-centered care are foundational. Nursing is a trusted profession, rated highest in honesty and ethics by respondents to the national Gallup poll in 2020 (Reinhart, 2020). However, Pittman recognizes that while public health nurses conduct comprehensive assessments, as in Wald’s time, nurses often are not encouraged or even allowed to conduct such assessments. Therefore, an important shift is to include not only individuals to incorporate their families in their own communities but also becoming the “source of control and full partners in care” (Disch, 2017). Within undergraduate education today, nursing students learn how to complete comprehensive patient and community assessments, but perhaps not directly linking the two to impact social determinants, the upstream factors. The new opportunities for nursing to return to its social mission lies in capitalizing on the relationship and assessment skills fostered with individuals, families, and communities and to apply them to new multi-sectoral partnerships to generate and implement upstream solutions to social determinants and advance
health equity.

In the early 20th century, Lillian Wald thought health professions education was too narrowly focused and increasingly isolated; she eventually broke ranks with nursing education because of what she considered over-specialization (Buhler-Wilkerson, 1993, p. 1781). Today, with the call for re-embracing social mission and reconnecting to communities the questions for nursing education are: What are the new educational models to deploy, educate, and retrain the current and future workforce needed to move to community-based, population health models? How does re-embracing the social mission impact the knowledge needed for clinical nursing practice and change within health systems in addition to what goes on outside of them? What will the nursing workforce do that articulates with the multi-sector efforts?

Lessons Learned in a National Nurse-led Interprofessional, Community-based Initiative

In 2016, the Robert Wood Johnson Foundation, Josiah Macy Jr. Foundation, Gordon and Betty Moore Foundation, and John A. Hartford Foundation funded the National Center for Interprofessional Practice and Education (National Center) to implement the Accelerating Interprofessional Community-Based Education and Practice Initiative (National Center for Interprofessional Practice and Education, 2020). The four foundations envisioned a program that would support advanced practice nurse faculty members to lead academic-community interprofessional teams with the goal to impact population health in a variety of community-based settings. The types of diverse settings serving vulnerable, high-risk populations include: low income housing facilities, a residential addiction treatment center, a skilled nursing facility, a Federally Qualified Health Center, a primary care teaching clinic, a public school, rural and urban primary care clinics, centers for aging adult services, and behavioral health service agencies (Harder+Company Community Research, 2019). This initiative provided $50K grants that required a local match, technical assistance, expert consultation and resources to sixteen schools of nursing to accelerate their interprofessional education and collaborative practice efforts (National Center for Interprofessional Practice and Education, 2020). The challenge to the nurse leaders was to not only develop a Wald-like practice model program serving individuals, families, and the community but also to create a sustained interprofessional education program that supports students from multiple health professions to learn team-based practice skills such as the IPEC competencies in community settings.

For two years, a community research organization conducted an external evaluation of the initiative and documented the process of implementation across the sites to enable program replication in other settings. A number of health/patient, learning and organizational outcomes in individual sites were documented that included health (decreased emergency department visits, increased access to care, decreased hospitalizations and decreased diabetic markers (HgbA1c levels); organizational (increase in staff satisfaction, expansion of services such as two new primary care teaching clinics with development of additional sites and services, expansion of the number of professions involved, progression of interprofessional teamness among staff and students working in teams); and student learning and workforce development (meeting IPEC competencies and staff training) (Guck et al., 2019; Harder+Company Community Research, 2019). The evaluation revealed: 1. Working in a community-based setting gave students hands-on experience with the ways in which the SDOH impact the lives of patients. 2. Programs allowed student interprofessional care teams to showcase how their expertise could aid specific vulnerable patient populations. 3. Working on interprofessional teams helped students learn more about effective team-based care and collaboration (Harder+Company Community Research, 2019).

Design practice and education around people and populations first, not professionals
Creating multisector, academic-community partnerships to address the SDoH and health equity moves beyond one of the key messages in the 2011 Institute of Medicine *Future of Nursing* report: “Nurses should be full partners, with physicians and other health professionals, in redesigning health care in the United States” (IOM, 2011, p. 4). A significant lesson learned in the Accelerating Initiative is that advanced practice nurses not only can be full partners with physicians and other health professionals but also effectively lead interprofessional practice and education teams that demonstrate health, organizational and learning outcome improvements in communities. These teams exhibit boundary-spanning capabilities and the ability to create “direction, alignment, and commitment across boundaries in service of a higher vision or goal” (Ernst & Chrobot-Mason, 2011, p. 55). The Accelerating Initiative teams that designed their programs focused on the specific circumstances of community members first then followed by what the students needed to learn were the most successful in demonstrating positive impact. Using this change and redesign strategy, nurse leaders and their teams were able to articulate to multiple audiences an effective compelling vision for individuals, families and communities and describe how the program simultaneously benefits students (Harder+Company Community Research, 2019). This design principle moves intended student learning outcomes from educating for practice in the future to demonstrating collaborative behaviors, performance and critical reflection in practice to the benefit of populations in their own neighborhoods and living settings. As a result, students learn valuable lessons about the SDoH and master skills by “zooming out” to understand the social and economic circumstances. This new understanding about culture and upstream social factors can help students translate their practice skills to multiple settings such as acute care and ambulatory clinics in the future.

In 2016, the National Academy of Science, Engineering and Medicine Global Forum on Innovation in Health Professions Education identified three domains of activities for health professions to understand and address the SDoH: education (experiential, collaborative learning, integrated curriculum, continuing professional development), community (reciprocal commitment, community practices and community engagement, and organization (supportive organizational environment and vision for and commitment to SDoH) (Figure 1). Lifelong learning is situated in the center of the framework, emphasizing its importance in the educational pathway of health professionals toward understanding and addressing the SDoH (National Academies of Sciences Engineering and Medicine, 2016).
Based upon the Accelerating Initiative evaluator findings, the NASEM framework can be refined to position lifelong learning to be focused on specific individuals, families and communities first (Harder+Company Community Research, 2019; National Academies of Sciences Engineering and Medicine, 2016). This reorientation positions the relationship between the education and community sectors and the organizations within each to form multi-sector teams to guide program design and evaluation for impact on specific communities (Figure 2). This refinement emphasizes that the organizations within both the education and community sectors need to have supportive environments and imperatives for the SDoH and health equity. For education to effectively address the SDoH and health equity, a compelling vision for the partnership is essential through reciprocal commitment and active and sustained engagement. Together, the education (academic)-community partnership team designs the practice and learning environment using an integrated curriculum to meet specific population needs in community settings. As described in the NASEM Framework, this curriculum uses three forms of learning: collaborative, experiential and continuing professional development in which all stakeholders learn together, actively addressing the SDoH and health equity. This new academic-community partnership for the SDoH and health equity is portrayed in Figure 2.
Supportive organizational environments are necessary for advancing interprofessional education and collaborative practice initiatives. For successful IPE programs that challenge the status quo, senior leaders set the vision at the top and provide access to resources such as time, space and finances while recognizing and rewarding IPE efforts (Reeves et al., 2016). In the successful Accelerating Initiative academic-community partnerships, the support of nursing school deans, associate deans, and department chairs were important critical success factors for the nurse team leaders creating academic-community partnerships. Underscoring the importance of the social mission, leaders protected time for the faculty to build the important, necessary relationships with community members to design appropriate curriculum and learning formats.

To support the new academic-community partnerships, leaders in nursing and other health professions schools can take advantage of readily available tools to advance the social mission of their schools. For example, the Social Mission Metrics Initiative at George Washington University created a self-assessment instrument to measure the status of a school’s social mission, its current strengths and areas for improvement in comparison to similar schools (Mullan, 2017; Mullan Institute, 2018). Furthermore, to recognize and reward faculty and community members, the Community-Campus Partnership for Health (CCPH), an organization dedicated to health equity and social justice, has created a resource for quality community-engaged scholarship with criteria for faculty promotion and tenure. The CCPH approach engages community members with university faculty to review promotion materials and educates community partners why faculty rewards matter to them (Community-Campus Partnerships for Health, 2017a).

Five Features of Teaching Methods for SDoH to Move the Needle on Health Equity

The root cause of social risk factors of health involves power, social inequalities, structure, economics,
historical insults and intergenerational influences. Traditional educational approaches have not moved the needle on health equity. Today’s primary nursing and health professions education models are based upon individual clinician competency to serve individual patients who are sick and must go to health systems for clinical care, or the 20% of health. Pacquiao notes that in health care organizations under these circumstances, it is difficult to recognize the SDoH and solutions for health equity outside of the context of the life conditions that stifle the control of destiny and ultimately health outcomes (Pacquiao, 2016). Current education approaches to teach the SDoH for health equity have been called a “road to nowhere” because they involve primarily learning facts rather than challenging underlying understanding and assumptions about the structural conditions that need to be changed (Sharma, Pinto, & Kumagai, 2018). Furthermore, training models on cultural competence or adding a single learning objective to an existing course may result in unintended consequences leading to paternalistic and patronizing care (Muaygil, 2018). Therefore, by not confronting the true underlying issues of health inequity, current educational approaches, no matter how well meaning, that are used in health professions education may contribute to what Hafferty calls “the hidden curriculum” (Hafferty, 1998; Hafferty & Franks, 1994). The hidden curriculum may “constrain or even incapacitate” the ability to achieve health equity goals these teaching approaches espouse, and in fact perpetuate the status quo (Sharma, Pinto, & Kumagai, 2018, p. 25).

In addition to creating new academic-practice partnerships in community-based settings, teaching methods in classrooms, simulations and experiential learning need to challenge nurses and other health professions students and clinicians to examine and take action on the underlying assumptions and the conventional thinking about health and social factors. We propose five features of teaching methods for the SDoH to move the needle on health equity: 1. Dual identity formation; 2. Intersectionality as an analytic tool; 3. Cultural humility; 4. Relational ethics; 5. Transformative learning.

1. **Dual Identity Formation**
With the resurgence of and growing interest in interprofessional practice and education, significant scholarship and research are advancing the field to inform how nurses with other professionals can function in and lead interprofessional efforts. Nursing and other health professions education programs are successful in equipping graduates with clinical knowledge and skills and professionalism. To do so, the emphasis has been on profession-specific specialization and identity formation of students with a single profession such as nursing. Uni-professionalism, or single profession identity, has been found to be a “major barrier” to interprofessional collaborative practice for patient-centered care (Khalili, Orchard, Spence Laschinger, & Farah, 2013, p. 448). To address misconceptions about one’s own professional role in context with other professions and to avoid conflict in working across professions, Khalili and colleagues propose a dual identity framework starting in the first year of nursing and other health professions education programs. Students need to not only be educated to be a nurse but also at the same time learn to become a member of an interprofessional team. Using the dual identity framework, faculty can design IPE curricula to support students from multiple professional programs to actively and consistently learn together about their own profession’s scopes of practice as well as what other professions contribute to interprofessional person-centered collaborative practice. An exemplar of the concept of dual identity formation is the work of Creighton University College of Nursing’s academic-community partnership with other academic programs and Catholic Health Initiatives (CHI) and Community Link illustrated in Appendix A.

2. **Intersectionality as an Analytic and Action Tool**
Lasting solutions for health equity must be addressed at the systems and policy levels. The U.S. Department of Health and Human Services lists five key areas of the SDoH (economic stability, education, social and community context, health and health care and neighborhood and built environment), each
with its own subset of underlying factors demonstrates the complexity and interconnectedness of the issues (Figure 3. (U.S. Department of Health and Human Services, 2019). The overlay of multiple factors with deep, historic roots will not be solved by a single solution such as improving access to care or transportation. Rather the causes will be multi-faceted, local, by zip code; systematic, and likely rooted in long-standing policies and regulations that facilitate or create barriers to health.

Figure 3. Five Key Areas of Social Determinants of Health

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<tr>
<th>Social Determinant of Health</th>
<th>Examples of Underlying Factors</th>
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<td>Economic stability</td>
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<td>Food insecurity</td>
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<td>Housing instability</td>
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<td>Poverty</td>
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<td>Education</td>
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<td>Language and literacy</td>
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<td>Access to primary care</td>
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<td>Health literacy</td>
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<td>Neighborhood and built environment</td>
<td>Access to foods that support healthy eating patterns</td>
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<td>Crime and violence</td>
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Yet, the academic programs that educate health professionals rarely consider or discuss politics or power, the source of inequities, as topics of discussion, critical reflection, or action as identified in national and international reports (National Academies of Sciences Engineering and Medicine, 2016; World Health Organization, 2020). The root causes of inequities sit as a “silent background” with little awareness or understanding of their influence on health care, research or classroom practices that perpetuate inequities. By contrast, social activists working in the community are well-aware of the power differentials and impact of policy and more likely than not to use social theory or research in their daily work (Collins & Bilge, 2016, p. 32). Thus, it is important the concepts of politics and power remain in the forefront to move beyond the traditional view.

Over the past two decades, intersectionality is increasingly gaining acceptance as an analytic tool to examine power relations and the impact of politics. Educators can use the five HHS key areas as a framework to promote critical reflection and action about social ideas and theory surrounding power, social inequality, relational thinking beyond either/or judgment, social context, complexity, and often social justice. Within a social situation such as the new academic-community partnership, intersectionality can involve inquiry (analysis) about the five key areas of the SDoH and praxis (practice, reality, action), bringing together two or more entities or sectors to produce an impact that is a greater one.

Intersectionality is “a way of understanding and analyzing complexity in the world, in people, and in human experiences. The events and conditions of social and political life
and the self can seldom be understood as shaped by one factor. They are shaped by many factors in diverse and mutually influencing ways. When it comes to social inequality, people’s lives and the organization of power in a given society are better understood as being shaped not by a single axis of social division, be it race or gender or class, but by many axes that work together and influence each other. Intersectionality as an analytic tool gives people better access to the complexity of the world and of themselves…” (Collins & Bilge, 2016, p. 32).

3. Cultural Humility

Over the past thirty years, there have been numerous national calls for multi-cultural training to address growing health disparities and the mismatch of health professionals’ “lack of knowledge regarding patients’ health beliefs and life experiences and providers’ unintentional and intentional processes of racism, classism, homophobia, and sexism” (Tervalon & Murray-García, 1998, p. 117). Over time, the concept of cultural training for multiculturalism has gained favor. Blanchet Garneau and Pepin (2015) describe this form of training in the health sciences from a perspective where “culture is objective, is stable over time, and clearly defines the differences between people” (Blanchet Garneau & Pepin, 2015). In contrast, they regard culture as ever changing within historical, social, political, and economic context and believe that “mere awareness of cultural differences is insufficient to bring about transformation in human relationships and will not eliminate ethnic, racial, and cultural discrimination, or potential inequalities” (Blanchet Garneau & Pepin, 2015, p. 11).

To address these issues, Tervalon and Murray-Garcia (1998) propose the use of the term “cultural humility” as a commitment to active, lifelong engagement with patients and communities (Tervalon & Murray-García, 1998). Cultural humility is defined by a process where “individuals continually engage in self-reflection and self-critique to develop and maintain a mutually respectful and dynamic partnerships with communities on behalf of individual patients and communities in the context of community-based clinical and advocacy training models” (Tervalon & Murray-García, 1998, p. 118). To practice cultural humility, clinicians relinquish their role as experts in a multicultural world where power imbalances exists. Rather, cultural humility is a process of always questioning, openness, self-awareness, being egoless, and incorporating self-reflection and critique by willingly interacting with diverse individuals. The results of achieving cultural humility are mutual empowerment, respect, partnerships, optimal care, and lifelong learning” (Foronda, Baptiste, Reinholdt, & Ousman, 2016, p. 213).

For nursing education, Blanchet Garneau and Pepin recommend critical reflection teaching methods for cultural humility that “allow the professional to question current practices and to propose changes for the improvement of efficiency and quality of care, and, on a larger scale, equality and social justice” (Blanchet Garneau & Pepin, 2015, p. 13). This contrasts with merely “focusing on skills and information about various cultures toward a movement of cultural humility, implying one must strive for learning at the highest level of learning; that of transformation” (Foronda, Baptiste, Reinholdt, & Ousman, 2016, p. 214).

4. Relational Ethics

In a recent analysis of six models of cultural competence, Botelho and Lima (in press) argue that existing approaches may assist with cultural respect but tend to oversimplify patients’ cultural experience and overlook the complexities associated with power dynamics (Botelho & Lima, 2020 In Press). They propose the practices of not only cultural humility but also relational ethics to facilitate cross-cultural work. Health professions practice is grounded in ethics, particularly in the patient – health professional relationship, or individual to individual. However, traditional approaches to bioethics, particularly those focused on moral
reasoning, have been critiqued as insufficient for exploring moral experiences and interactions in healthcare environments (Bergum & Dossetor, 2005).

What is emerging is a concept of relational ethics that introduces the need for “genuine” trust, fairness and justice and “give and take” in human connections (IPEC, 2011, 2016; Frost, et. al., 2019; Kunyk & Austin, 2011). To mainstream proposed education and practice solutions to the upstream social risk factors in individuals, families, communities and populations resulting in health inequities, the human connections in a context of challenging traditional approaches to clinical care are becoming increasingly complex. These relationships include policymakers and their constituents, academic institutions and health systems, between professions on national, state and local levels, and most importantly with populations and communities.

For educators, reflecting on the ethical impact of educational strategies to teach the SDoH to students will become increasingly important. For example, incorporating SDoH screening tools in student activities in clinical and community settings may be introducing unintentional ethical dilemmas. Garg and colleagues caution that many validated social risk screening tools for unmet needs such as food, housing were developed for research and not clinical or educational purposes. They note that the solutions for adverse conditions identified in screening require resources well beyond the scope of clinical care. “Screening for any condition in isolation without the capacity to ensure the referral and linkage to appropriate treatment is ineffective and arguably, unethical” (Garg, Boynton-Jarrett, & Dworkin, 2016, p. 813).

5. **Transformative Learning**

The ultimate goal of teaching methods for the SDoH that incorporates the features of dual identity, intersectionality, cultural humility, and relational ethics is to educate students and clinicians to develop an awareness of the silent background and ethical dilemmas the SDoH and health inequity present. This form of learning is called transformative and uses methods to expand consciousness of basic world view, beliefs, biases, and assumptions (Mezirow, 1991, 2000). In the case of the SDoH and health equity, when students learn in diverse clinical and community care settings, nursing educators can use critical reflection to facilitate internal awareness of beliefs (BlanchetGarneau, 2016). By “zooming out” to see the connections of a complex world, students and clinicians can gain enhanced awareness about the economic, social, historical and generational factors to make concrete changes in nursing practice as members of teams inside and outside of health systems. Transformative, lifelong learning, for the SDoH to change basic world views, is a fourth educational strategy with collaborative learning, experiential learning, and continuing professional development.

**Five Activities Aligning Education to Health Care for the SDoH**

The power for practical solutions for education, workforce development, and academic-community-partnerships for the SDoH and health equity going forward will be integrative thinking that draws upon and pulls together many recommendations, research, and report findings to strengthen the connection between education and the health system. For example, the recent NASEM report (2019) identifies five complementary activities in health care to adopt to integrate social care: awareness, adjustment, assistance, alignment, and advocacy (Figure 4) (National Academies of Sciences Engineering and Medicine, 2019a, p. 3). As nursing considers Pittman’s emerging four core functions to re-embrace the Wald model with other professions and sectors in the community, how will nursing and interprofessional educational interventions be designed and implemented?
These five complementary activities define specific areas of concentration pertinent to provision of care and can be used to create activities for SDoH and health equity lifelong learning along the educational continuum. The original language used to define the health care activities that strengthen social care has been edited to remove the health care system as the actor in order to broaden applicability of the concepts to learners. In addition, use of the word “patients” has been replaced with “people” to broaden the concepts to care within the community and a wellness focus.

- **Awareness**: Activities that identify the social risks and assets of defined people and populations.
- **Adjustment**: Activities that focus on altering clinical care to accommodate identified social barriers
- **Assistance**: Activities that reduce social risk by providing assistance in connecting people with relevant social care resources.
- **Alignment**: Activities to understand existing social care assets in the community, organize them to facilitate synergies, and invest in and deploy them to positively affect health outcomes.
- **Advocacy**: Activities, in partnership, to promote policies that facilitate the creation and redeployment of assets or resources to address health and social needs.

The bottom line is that we need new thinking and new models of care and appropriate educational interventions that focus on the SDoH and health equity. Table 1 outlines the connections between Pittman’s four core functions of nursing, the five activities to integrate social care, and the described emerging concepts to guide nursing and interprofessional education toward achievement of health equity.

Implementing this model within nursing education, with a focus on intersectionality, provides an opportunity to incorporate enriched models of nursing and interprofessional education to support evolving models of care delivery. “Taking into account the social, political, historical, and structural contexts allows nurses and students to go beyond individual and group cultural differences and to acknowledge the
dynamism of culture and its multiple variations across age, gender, sexual orientation, or social status” (Blanchet Garneau, 2016, p. 127). Social status is reflective of additional characteristics contributing to culture including geographic differences, employment, housing, neighborhood, environmental conditions, education, literacy, poverty, and food insecurity. Using the five features of teaching the SDoH (i.e., dual identify, cultural humility, intersectionality, relational ethics, and transformative learning) by applying the model to learning activities (i.e., awareness, adjustment, assistance, alignment and advocacy) provides an authentic, contextualized experience that allows for reflection, transformative learning and growth.

Nursing and health professions schools can impact communities and neighborhoods by moving practice and education where individuals, families, and communities ultimately experience the social and economic factors that affect their health and longevity. The shift will keep people well in their own living environments. Addressing health in communities and neighborhoods provides new opportunities for creating space for new models of learning for nursing, health professions and interprofessional education. While most schools offer community-based experiences for their students, the multi-sectoral partnerships and leadership competencies required to address upstream policy concerns are often missing (National Academies of Sciences, Engineering and Medicine, 2015). The question for educators is how to utilize these factors to design curriculum, educational interventions, and partnerships to not only create a future health workforce, but impact the current workforce that are together are capable of effectively impacting population health.

Awareness: Activities that identify the social risks and assets of defined people and populations.

Much of what has been taught as cultural competence focuses on the individual and not on communities or populations. While cultural awareness is important, it is not sufficient to achieve health equity. Awareness is only one piece of the puzzle. In a study of health professionals surveyed about cross-cultural education provided by their organizations, “a dearth of respondents referred to broader, systemic components of cross-culture care such as a recognition of racism (explicit and implicit), power imbalances, entrenched majority culture biases and the need for self-reflexivity (awareness of one’s own prejudices) (Shepherd, et al., 2019, p. 9).

Implications for Nursing Education:
Achieving competence in awareness requires educational interventions at the intrapersonal, interpersonal, and community levels. At the intrapersonal level, the concept of implicit bias should be addressed. Gonzalez and colleagues found that institutional culture as well as faculty abilities to facilitate discussion about implicit bias were key factors in curricular success (Gonzalez et al., 2018). Strategies for individuals to adopt in reflecting on and working through their biases include emotional regulation, partnership building, and perspective taking (Narayan, 2019).

At the interpersonal level, cultural awareness is important. A cultural assessment is more than categorizing patients according to the sum of a variety of demographic categories. Rather, it is about providing care for a patient within their historical, social, political, and economic context. Montori cautions providers that care guidelines are intended to manage a disease, not a person (Montori, 2017). Likewise, the personal and social context of a client’s life, in addition to the community in which he/she lives, are important aspects of treating “this person” not a person with “this condition.” While cross-cultural learning is an important part of nursing education, it is not sufficient to address the complexities associated with the SDoH. In a recent analysis of six models of cultural competence, Botelho and Lima argue that existing approaches may assist with cultural respect but tend to oversimplify patients’ cultural experience and overlook the complexities associated with power dynamics. They propose the practices of cultural humility and relational ethics to facilitate cross-cultural work (Botelho & Lima, 2020). Hence, there is a need to
return to nursing’s social mission and create new partnerships that embrace these complexities.

At the community level, an awareness opportunity exists with the federal requirement for not-for-profit hospitals to perform community assessments every three years as part of the community benefits provision of the Affordable Care Act (IRS (Internal Revenue Service), 2019). Hospitals are required to collect data on demographics and health needs to insure they provide a benefit back to the community in exchange for tax-exempt status. Partnering with hospitals or health systems may facilitate opportunities for a team of learners to participate in data collection, analysis, and planning. Teaching data collection and interpretation within a classroom setting allows for increasing knowledge and skill. Providing experiences within the community provides an authentic application of that learning and contextualizes it in a pragmatic and meaningful way for learners and can strategically benefit the community at the same time. An nurse-led exemplar from Washburn University’s Campus 2 Community Interprofessional is included in the appendix. Furthermore, the Community Campus Partnership for Health offers tools and training to explore the roots of structural inequalities and provides tools for researchers and educators (Community-Campus Partnerships for Health, 2017b).

**Downstream Activities Focused on Individuals**

Strategies that focus on the individual require critical reflection to support transformational learning (Blanchet Garneau, 2016). The downstream activities from the Social Care model are Adjustment and Assistance.

**Adjustment:** Activities that focus on altering clinical care to accommodate identified social barriers

While nurses and health professionals are educated to provide person-centered care that is responsive to patient preferences, needs, and values, they may not be aware of specific assessments to determine needs concerning the SDoH. Often, an assessment of needs and preferences are based on demographic characteristics and cultural background. An appropriate learning activity might be to screen for the SDoH. Several screening tools are available to facilitate a holistic assessment as well as to identify barriers that may interfere with health activities (O’Gurek & Henke, 2018). As noted, many validated social risk screening tools for unmet needs such as food, housing were developed for research purposes. (Garg, Boynton-Jarrett, & Dworkin, 2016). It is important, however, that a system of care (such as case management) exists to provide referrals for assistance that may surface. An exemplar from a nurse-led initiative at the University of Colorado is included in the appendix. If an authentic, ethical, experience is not available, simulation with a standardized patient may be a viable alternative. Such an activity can surface patient needs as well as discern roles and responsibilities among a group of interprofessional learners.

**Assistance:** Activities that reduce social risk by providing assistance in connecting people with relevant social care resources

Community health and public health nursing rotations often provide student experience with assistance. Those that take place in partnership with community organizations can be highly effective. In addition, exposure to top tier evidence-based programs such as the Nurse-Family Partnership, a nurse home visitation for low-income, first-time mothers, provides support for the broad and sustained benefits of community-based, multi-sectoral interventions for health (Kitzman et al., 2019). However, a note of caution and ethical consideration is necessary regarding the practice of independent student activities for which there is limited, if any follow-up on referrals.
Implications for Nursing Education:

Providing learners with an opportunity to work with people in their homes allows for an authentic experience concerning how people meet health needs within the framework of social determinants. It is important to prepare learner teams for the home visit environment through simulation and interactive learning activities concerning safety. The key to the examples provided was the wrap-around services available through the clinic. If learners encountered a problem, they could call a provider at the clinic and arrange for further care as needed. Further, students were able to document within the EHR to provide continuity of care.

Upstream Activities focused on Communities

While traditional educational models have focused on individual activities, for nurses and health professions colleagues to work toward health equity, alignment and advocacy work toward upstream causes of health disparities are necessary. Asking new questions to learn varying viewpoints provides opportunity to engage new players from different sectors and disciplines into conversations about addressing social and health inequities at the system and policy levels. This is particularly important to understand subcultures in groups and their sense-making and perspectives. What is the history behind viewpoints and how did we get to this point in upstream social factors determining health and inequality? Intersectionality can inform not only how one sector sees itself but also how one sector views another. These constructive conversations can also lead to a deeper understanding about the larger systems professional relationships to each other and the impact of hierarchy and views of professional prestige shaped by policy payment models, and regulations (Pittman, 2019a).

Alignment: Activities to understand existing social care assets in the community, organize them to facilitate synergies, and invest in and deploy them to positively affect health outcomes

To address upstream causes of inequities, schools of nursing are uniquely positioned to partner with communities and other academic programs to explore possibilities for collaboration to promote health. Students are already engaged in learning activities concerning community health. What are the possibilities of expanding those activities to situate them in an authentic, multisectoral partnership with the school? In seeking partnerships to promote health equity, all nursing schools reside in a geopolitical space and have the opportunity to authentically partner with community organizations to make transformative change. A key to sustainability is that these partnerships have the commitment of senior leadership and are not the responsibility of one or two faculty members.

The establishment of academic-practice partnerships with health systems are lauded as a mechanism to advance the profession of nursing by creating “systems for nurses to achieve educational and career advancement, prepare nurses of the future to practice and lead, provide mechanisms for lifelong Learning. (Beal et al., 2012, p. 327). With the future of nursing focused on health equity, these partnerships must expand to include community organizations situated linked to SDoH. To do so, the National Quality Forum Action Guide provides a glide path to facilitate forging community partnerships (National Quality Forum, 2016). They identify 10 key elements:

1. Collaborative self-assessment
2. Leadership Across the Region and Within Organizations
3. Audience-specific strategic communication
4. A community health needs assessment and asset mapping process
5. An organizational planning and priority-setting process
6. An agreed-upon, prioritized set of health improvement activities
7. Selection and use of measures and performance targets
8. Joint reporting on progress toward achieving intended results
9. Indications of scalability
10. A plan for sustainability

**Advocacy:** Activities, in partnership, to promote policies that facilitate the creation and redeployment of assets or resources to address health and social needs.

Once alignment is created, advocacy work can be a focus of the partnership. This activity allows for students to have theoretical as well as experiential learning that can directly impact residents of the community. A nurse-led example of advocacy occurs between the University of Utah and a housing authority (see appendix). Rozendo and colleagues (2017) conducted a critical review to assess the extent to which social and health inequalities have been addressed in nursing curriculum. Of the 15 articles from schools within the United States, most reported on course work for service learning or study abroad opportunities (Rozendo, Santos-Salas & Cameron, 2017). Morris and colleagues (2019) describe a 3-credit course in Advocacy for Public Health that is offered to a variety of students and includes both didactic and experiential learning opportunities within their communities (Morris et al., 2019). Developing learning activities to strengthen nurses’ ability to speak up and speak out (Barton, 2018) to effectively advocate for upstream policy changes for health equity may change the dynamics of health reporting (Mason et al., 2018) and help propel nurses as a credible resource to represent healthcare to the public.

**Implications for Nursing Education:**

Schools of nursing have success at establishing effective academic-practice partnerships within healthcare systems. To substantively move forward toward health equity, partnerships must occur outside of the healthcare sector through engagement and partnership with community agencies within social, education, and economic sectors. Not only does this work provide sustainable clinical placements, it also enhances achievement of health outcomes. The 10-step process provides a guide to facilitate work with multiple sectors within a community and create the alignment necessary to work toward health equity. At the community level, students can be engaged in addressing upstream causes of health inequities through policy, advocacy, and alignment activities that promote health. Creating learning activities where students explore the roots of existing policy through a social justice lens or identify multiple facets of the social context that shape policy can foster understanding of the realities of intersectionality.

**Conclusion**

The challenges of achieving health equity through addressing the SDoH require new models of care and new models of health professions education. Nurses have the capacity to advance this agenda through their collective impact in working with other health professionals. Traditional thinking and checklist models of education will not be effective in addressing upstream causes of health inequity. Application of the five features for new learning models for preparing and retraining the health professions workforce to rise to the current calls for addressing the SDoH and health equity provide an opportunity to address the upstream factors. An opportunity exists to reimagine curriculum to support health equity through recognition of: 1. dual identity formation; 2. intersectionality an analytic tool; 3. cultural humility; 4. relational ethics; and 5. transformative learning. These features will facilitate learning opportunities for our
students and improve health outcomes for people and populations.

Table 1. Crosswalk of Pittman's Core Functions, Social Care Activities, and Education for SDoH

<table>
<thead>
<tr>
<th>Emerging nursing core functions (Pittman)</th>
<th>Health care activities that Strengthen Social Care</th>
<th>Reframing emerging concepts to guide the design of nursing and interprofessional education for SDoH</th>
</tr>
</thead>
</table>
| 1. Extending compassion and establishing the trust with patients, their families, and communities. | Awareness Activities that identify the social risks and assets of defined people and populations. | Awareness competency to build trust:  
• SDoH is the major factor impacting health; clinical care represents 20%.  
• Person- and family-centered engagement for health;  
• Cultural humility  
• Relational ethics |
| 2. Assessing patients, families, and communities’ unmet needs in the context of their lives and goals. | Adjustment Activities that focus on altering clinical care to accommodate identified social barriers | Adjustment competency for comprehensive evaluation:  
• Design practice and education around people and populations first, not professionals or students |
|  | Assistance Activities that reduce social risk by providing assistance in connecting people with relevant social care resources. | Assistance competency for comprehensive evaluation  
• Multi-sector teams partner with and in communities to identify social factors that inhibit and benefit health.  
• Identify resources and engage professionals such as social workers |
| 3. Building partnerships within and outside of the health sector to find solutions | Alignment Activities to understand existing social care assets in the community, organize them to facilitate synergies, and invest in and deploy them to positively affect health outcomes. | Alignment competency for partnerships:  
• Boundary-spanning leadership with Intersectionality  
• Transformative learning  
• Dual identity formation |
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<tr>
<th>4. Identifying and advocating for collective, upstream solutions</th>
<th>Advocacy</th>
<th>Advocacy competency for upstream solutions to address power differentials</th>
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<tbody>
<tr>
<td>Advocacy Activities, in partnership, to promote policies that facilitate the creation and redeployment of assets or resources to address health and social needs.</td>
<td>Intersectionality as an analytic and action tool</td>
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Appendix. Case Studies from the Nurse-Led Accelerating Initiative

**Creighton University College of Nursing, Omaha, Nebraska**

**Dual Identity Formation**

“Matching High Utilization with Personal Care Teams” is an academic-community partnership that participates in the national nurse-led Accelerating Initiative. The **Creighton University** College of Nursing, Department of Family Medicine, and Center for Interprofessional Practice, Education and Research (CIPER) partner with the Catholic Health Initiatives (CHI). CHI’s partner, Community Link, connects eligible patients with resources to address the SDoH to improve health outcomes. The Creighton-CHI partnership provides interprofessional training in a primary care teaching clinic to enable students and health professionals the opportunity to learn to break down professional silos while mastering teamwork skills. By serving patients who are high-utilizers of health system care, nursing and other health professions students actively learn their own professional identity and clinical skills while becoming aware of the scopes of practice and the roles and responsibilities of other professions. For example, the clinicians have incorporated short, frequent training sessions in the course of the day for representatives of each clinic profession to inform faculty, staff, and students about their professions’ required education, scopes of practice, licensure as well as roles and responsibilities in health care delivery and specifically the clinic.

During evaluator interviews with the Creighton-CHI partners, interprofessional team members explained that it is not about bringing everyone together but about bringing the right combination of players together for specific patient goals and aims of the clinic. Team members develop a common language to describe patient problems and tackle upstream social determinants of health. The change in culture at this clinic site has produced an openness in bringing up problems interprofessionally and working them out together. Leaders are allowed to emerge depending on their expertise in relation to the patient’s needs rather than their individual professional or educational role, and all views are respected.

Evaluators found that the Creighton and CHI Health Collaborative initiative provides ample evidence to suggest that an adaptive approach which pulls from diverse professional skillsets creates the space for innovation in patient care. One partner stated, “I think <this model> is really about fluidity of team and about fluidity of experience and so people move in and out of leadership roles, in and out of teams as their experience and expertise dictates so that, for one [patient] they might not need a diabetes educator, but for the next person they might need diabetes [education] and physical and occupational therapy to really help [address] their concerns and to figure out how we get them healthy.” (Harder + Company Community Research, 2019, p. 22)
Washburn University School of Nursing, Topeka, Kansas
Building Student Awareness of the SDoH and Advocacy in the Community

Washburn University is one of the last municipal universities left in the United States. As the primary funder and supporter of the university, the Topeka community plays an integral part in determining the university mission and how it interacts with the community. Within a mandate of access, Washburn University maintains ongoing relationships and participation with community organizations, committees and planning boards. In 2016, Washburn University formed a unique partnership with Topeka Housing Authority (THA) and the Pine Ridge community. This public housing community serves approximately 500 people with the following demographics: 50% are 17 years old or younger; female heads of household comprise 76% of the units; and of the 197 households, 90% are living at or below 100% of the federal poverty level.

Through the Accelerating Initiative-funded Classroom to Community (C2C) interprofessional program, in 2016-17 graduate nursing students completed a community assessment engaging Pine Ridge residents through focus groups and door-to-door surveys to identify the resident’s concern about access to health care. Students learned that the East Topeka community has limited public transit and few medical services. Since Washburn University is not within an academic health center, the school of nursing formed a unique academic-community partnership with the School of Business, Department of Communications, and the office of sponsored projects and THA. Teams of nursing, business and communications students and faculty worked with Pine Ridge residents and THA to design the building of the Pine Ridge Family Health Clinic (PRFHC), a primary care clinic, as well as developed a sustainable business and marketing plan.

As a result, THA remodeled one of the housing units for the PRFHC that opened in the Pine Ridge Manor community in November 2017. Third-party billing has been implemented and payment for services are designed to address the economic status of this diverse, medically underserved population. The convenient location and willingness to provide treatment regardless of the ability to pay have resulted in measurable evidence of improved access to care. In less than two years, the clinic has logged over 1000 patient visits; patient reported emergency room visits have been reduced; and patients are highly satisfied with the availability of care and education provided.

The increasing educational opportunities for students to engage with community members to contribute to the vitality of PRFHC continue and are expanding. Faculty from the Department of Social Work have now joined the C2C team to further build awareness by offering a poverty simulation with the Pine Ridge residents. The Pine Ridge Poverty Simulation activity moves students through a series of social service “programs” to obtain services. The residents of Pine Ridge Manor residents teach the students in guided small group conversation. In addition, the PRFCH has opened a program to address childhood obesity;
students completed another health needs assessment and business plan to present for future development of a satellite primary care clinic in another housing community serving elderly and disabled residents; a new community grant now enables the clinic to hire a transportation specialist who transports patients to and from the clinic, to the hospitals for diagnostic testing, and to specialty referral appointments; and tele-health equipment has been added to collaborated with a mental health advanced practice registered nurse to develop plans of care for patients with complex behavioral care needs seen at the clinic.

University of Colorado College of Nursing, Denver, Colorado
Adjustment Activities to Alter Clinical Care to Accommodate Social Barriers

The University of Colorado College of Nursing program, Aligning Resources to Provide for Aging Adults in the Community identified a gap in the care for geriatric clinic population centered on health literacy and patient safety in an urban underserved population served by Sheridan Health Services, a nurse-managed, federally-qualified health center and faculty practice of the University of Colorado College of Nursing. Interprofessional teams of students from pharmacy and undergraduate and graduate nursing provide home visits to older adults and complete a series of assessments concerning falls, medications, depression, and sleep. The interprofessional student teams are able to address areas of concern for older adults: cognition, medication adherence, and safety.

Care for older adults in the community was enhanced through increased numbers of encounters with patients to resolve previously unidentified and/or unmet health needs. The older adults also gained strategies and support needed to promote and manage their health. Students added value through identification of near misses, successfully scheduling follow-up appointments with referrals to primary care, behavioral health, psychiatric and dental services all as a direct result of a home visit which added continuity and extended the reach of the primary care provider in meeting the needs of older adults in the community.

The University of Utah College of Nursing
Salt Lake City, Utah
Advocating Using a Student Hotspotting Model

The University of Utah College of Nursing’s nurse-led Accelerating Initiative formed a partnership with the Housing First Program through the Housing Authority of the County of Salt Lake (now Housing Connect): and employs student hotspotting interventions to work with high-need community members. The Housing First Program for chronically homeless single adults offers wraparound services in the areas of social services, substance abuse, education, and employment. Since the inception of the program, new partnerships with the Camden Coalition for Health and the University of Utah Health Systems have been added allowing access to health systems data and the ability to build a community-based complex care curriculum. The partnerships show a common recognition of the importance of the SDoH and the interconnectedness of their work advocating for health care services and alignment with the community and health system. The program trains student interprofessional teams in patient-centered approaches to
investigate and address the root causes of high healthcare utilization. The teams use health system data to identify and work with residents who have complex health and social needs and who are high users of healthcare services. These individuals are often not well served by traditional models of primary care and rely heavily on emergency services.

Today, interprofessional student teams across 16 educational programs including undergraduate and graduate nursing work with health care and social service case managers to identify health status and risks, improve care coordination and inform delivery of health care and social services. After participating in the program, community members have reported feeling that they have an advocate in the health care system and that they better understand how to navigate their own care. Over the course of two years, there has been an increase in the diversity of patients and populations served by the program, and a broadening of the program partnerships.

What began as a partnership between one community agency and a single academic program has grown into a full community-academic-health system partnership with the potential to affect outcomes in all three domains. Data is being collected to better understand the impact of the program on student learning, on the individuals served, and on the larger health system. Early results suggest students’ development of IPEC competencies, especially in the domains of Team Work, Roles, and Responsibilities, Interprofessional Biases, and Community Centeredness. Participating patients have reported improved self-efficacy of health care navigation and demonstrated increased use of primary care and decreased use of emergency services.
References


Disch, J. (November 8, 2017). Perspective on Person-centered Care: Nursing education. Retrieved from https://www.adea.org/ADEA/Blogs/ADEA_CCI_Liaison_Ledger/Perspective_on_Person-centered_Care__Nursing_Education.html


Fraher, E., & Brandt, B. (2019). Toward a system where workforce planning and interprofessional practice and education are designed around patients and populations not professions. Journal of Interprofessional Care, 00(00), 1–9.


Health Professions Accreditors Collaborative, & National Center for Interprofessional Practice and Education. (2019). *Guidance on Developing Quality Interprofessional Education for the Health Professions*. Chicago, IL.


IRS (Internal Revenue Service). (2019). Requirements for 501(c)(3) Hospitals Under the Affordable Care Act - Section 501(r).

Joint Center for Political and Economic Studies Health Policy Institute, & Cook County IL Place Matters Team. (2012). *Place Matters for Health in Cook County: Ensuring Opportunities for Good Health for All - A Report on Health Inequities in Cook County, Illinois*. Washington, D.C.


