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David Chapman

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Darla Coss, OTD, OTR/L, CHT

Associate Professor

David Chapman, PT, Ph.D.

Professor

John Fleming, EdD, OTR/L

Associate Professor

St. Catherine University

Abstract

Interprofessional care provided in a free community-based clinic that focuses on chronic health conditions and health promotion provides an innovative solution to improve societal health. Many existing clinics provide a range of professions but few include allied health services such as occupational and physical therapy. This paper provides a description of the development and implementation of an expanded faculty-guided student-led community based primary care clinic that includes occupational and physical therapists as part of an interprofessional collaborative practice model. A detailed description and explanation of the partners involved, the institutional missions that drive this work, the logistics completed that enabled the 'doors to open', faculty and student roles, and initial outcomes will be provided. A review of the service delivery model, lessons learned, and future directions for the clinic will also be offered.

Introduction

There are approximately 1400 free and charitable clinics providing care to medically underserved patients in the United States (National Association of Free and Charitable Clinics [NAFCC], 2020). In addition, there are 152 student-run free clinics (SRFC) providing low- to no-cost care and providing critical training for healthcare students (Society of Student Run Free Clinics [SSRFC], 2020). Both have existed in the United States since the 1960s as a safety net for uninsured or underinsured patients (Meah et al., 2009; NAFCC, 2020). Frequently, SRFCs are community-based with sponsorship, staffing, and supervision provided through medical schools, while free and charitable clinics are philanthropically funded and staffed with volunteers and professionals from the community. Services vary from clinic to clinic and often include primary medical and dental care, mental health, wellness, prescription consultation, and nutrition (NAFCC, 2020; SSRFC, 2020). While interprofessional models of care are increasing few clinics provide allied health services, such as occupational (OT) and physical therapy (PT) (Simpson & Long, 2007; Smith et al., 2014; Swartz, 2012). These professions, in addition to medical services, are integral to quality, low cost patient care, particularly in community-based clinics that provide primary care (Institute of Medicine [IOM], 2017; Bolt et al., 2019; Bornhöft et al., 2019)

Occupational therapists address prevention, health management, and wellness while focusing on promotion of healthy routines and habits, engagement in ‘occupations’ supportive of healthy lifestyles, and prevention of complications as a result of chronic disease progression or poor chronic disease management. ‘Occupations’ are activities that people want and need to do, including everyday activities like preparing a meal and

getting dressed, to more complex activities like managing their health and pursuing leisure and social activities. OT interventions remediate barriers to allow greater participation in work, social, educational, sleep, and activities and instrumental activities of daily living (ADLs/IADLs) (AOTA, 2020a).

Similarly, PTs evaluate and treat individuals across the lifespan who have a medical diagnosis or other health-related condition(s) that limit their ability to move and perform functional activities in their daily lives. PTs develop treatment plans designed to optimize the patient/client's ability to move, reduce their pain, restore function, enhance their health, wellness and fitness as well as prevent disability (American Physical Therapy Association, 2020).

As members of an interprofessional allied healthcare team, OTs and PTs work together in preventative and maintenance activities related to primary care, e.g. falls and injury prevention, exercise, ergonomics, and completion of ADLs and IADLs. Working in concert with the primary care team, OT and PT integrate the primary care goals with patient goals and create a treatment plan to optimize both (Bolt et al., 2019; Gray et al., 2018; Peranich et al., 2010). Other interprofessional team members may also include other allied health professionals such as dieticians, social workers, community health workers, and interpreters.

This paper provides a description of the development and implementation of an expanded faculty-guided student-led community based primary care clinic that includes occupational and physical therapists as part of an interprofessional collaborative practice model. The genesis for the development of this clinic came from the congruent missions and visions of an existing non-profit community health care organization [redacted]

[redacted] and an educational institution [redacted] that focuses on educating socially responsible allied healthcare professionals. The goals of this free clinic are to provide high quality clinical services to Spanish speaking patients without health insurance, and student learning opportunities through interprofessional practice. The similarities in institutional missions and the development of the clinic collaboration between [redacted] will be reviewed including faculty and student roles, and the service delivery. Finally, lessons learned and future directions for the clinic will be offered.

Shared Mission

The creation and development of the clinic stems from the shared history and healthcare missions of the Sisters of Saint Joseph of Carondelet (CSJ) through SMHC and St. Catherine University. SMHC was founded by the CSJs based on the belief that healthcare is a basic human right (SMHC, 2020). St. Catherine University was also founded by the CSJs with a commitment to create an inclusive environment of excellence emphasizing intellectual inquiry and social teaching within the Catholic tradition (St. Catherine University, 2021). The charism emphasized by the CSJs, to help the “dear neighbor without distinction”, continues in both the work of SMHC and St. Catherine University. SMHC current community-based structure and initiatives represent a continuation of this charism in providing quality health services to individuals without healthcare insurance.

The [redacted] “educates diverse learners and engages clinical and community partners to influence health, health systems, and health policy“ ([redacted]). Team-

oriented healthcare education, interprofessional education, and a commitment to promote health among underserved and immigrant communities is emphasized. To meet the needs of diverse people, [redacted] and [redacted] place a premium on working for justice in health and education. Each values the education and involvement of students as a way to serve those in need and enrich students' lives as they engage in professional activities and studies. Given this, community healthcare programs providing interprofessional patient-centered care that addresses social justice and healthcare disparities created an excellent foundation [redacted] OT and PT students to work with patients of [redacted].

Building successful collaborations requires a sense of mutual respect and trust, and a strong commitment to a shared mission (Parkinson, 2006). In addition, clear roles/responsibilities and excellent communication are key to both implementation of the expansion and sustainability (Seaton, et al., 2017) To enhance this collaborative relationship and guide the services provided, the mission of the clinic is "to advance social justice through transformative, holistic health care". The vision is to reduce health care disparities among the underserved through accessibility to high quality, patient-centered health services; develop compassionate and culturally fluent healthcare professionals in an interprofessional environment; engage in community partnerships which promote health and well-being; and advocate for wellness for all.

Roles of Interprofessional Team

Initial planning for the addition of OT and PT services at SMHC included communication between the Director of the University's Student Health and Wellness Center, the Executive Director of [redacted] and OT and PT faculty leadership as they

considered opening a satellite clinic on the [redacted] campus. Given the importance of organizational leaderships support when developing formal relationships with other organizations (Seaton et al., 2017), the Director of the Student Health and Wellness Center met with the University Administration to confirm administrative support for this community-based venture. With positive responses, the Director of the Student Health and Wellness Center formed the Clinic Expansion Committee (CEC). This is a small group of faculty and staff interested in the collaboration and includes the OT and PT faculty preceptors. A small group of committee members attended the annual conference hosted by NAFCC (NAFCC, 2021) to learn more about free and charitable clinics, and several committee members visited the University of California-San Diego SRFC (University of California School of Medicine, 2021) to observe a working interprofessional model in practice. Additionally, several committee members visited each of the existing SMHC sites to understand the current operational flow (SMHC, 2020).

Student Recruitment and Role

Students from [redacted] are well prepared to successfully provide interprofessional care with a social justice perspective and have been introduced to curriculum related to interprofessional care and social justice. Many students have also taken undergraduate coursework founded in interprofessional education principles, have participated in TeamSTEPPS (Agency for Healthcare Research and Quality, 2020) and/or attend the University due to a longstanding commitment to social justice [redacted] Similar to other University and College health care programs, students are often eager to participate in experiential learning during their

academic training (Schutte et al., 2015), thus student recruitment was not a barrier. Students attracted to this type of work often possess a genuine level of empathy, kindness, respect, and passion for the work (Shabbir & Santos, 2015; Weaver et al., 2019).

Faculty Role

Student guidance from faculty preceptors is necessary, particularly with students at various levels of preparation (Ng & Hu, 2017). Accreditation and state licensing standards require students to have faculty guidance in the initial chart review process to understand medications, diagnoses, tests and procedures, past medical histories; identify a plan for the initial patient contact, e.g. phrases to elicit the patient's history, motivational interviewing techniques, prioritizing multiple and complex issues, differential diagnoses; and in the provision of care, e.g. palpation/provocative/special tests, resources and guidance on the home programs, frequency and duration of services, and discharge planning (AOTA, 2020a; APTA, 2021) Additionally, faculty provide consultation and recommendations to students and provision of care that may be beyond a student's current knowledge and skill level (i.e. custom orthotics, complex patient care instruction related to cancer). Ultimately, students provide the majority of hands on patient care, with OT or PT faculty assisting as needed, similar to other SRFC models (SSRFC, 2020).

Approach to Implementation

Models for student participation

Processes to coordinate OT and PT student volunteers were put into place from the onset. OT students were initially recruited through the Master's Seminar and

Master's Project courses, occurring during their last year of the OT program. Three students were initially selected based on interest and skills, and were instrumental in completing literature reviews on topics related to caring for patients in this setting, including topics of chronic health conditions in the Spanish speaking populations. These students also conducted a needs assessment with [redacted], and provided education for the providers and staff at [redacted] This fostered a better understanding of OT and PT in primary care and the types of patients that could best be served. The initial three OT students also provided care during the first four months of clinic operations.

Sustainability played a factor in recognizing that the clinic would be better served by OT students as part of level I Fieldwork, a standard, credited course within the OT curriculum. Level I Fieldwork is one of two layers of Fieldwork required of all students matriculating in an entry-level occupational therapy program. AOTA defines Level I fieldwork as "an experience designed to introduce students to the concept of fieldwork education, amplify and build on didactic material in the program's coursework, and provide a beginning level of clinical skills while under close supervision of qualified personnel including program faculty" (AOTA, 2020b). Experiences can occur in all occupational therapy practice areas including community settings and emerging new occupational therapy practice. To date, there have been six groups of level I Fieldwork students engaged in clinic activities. Each group of three students commits to a 4-month period, allowing the clinic to be staffed with consistent OT students 12 months per year. Overlap between incoming and outgoing students is intentional and provides orientation and peer mentorship. In this model, OT students can be first- or second-year students.

Doctor of Physical Therapy (DPT) students, due to an existing DPT program model of serving community-based pro bono clinics, staff the clinic on a volunteer basis. Lead PT students were selected and responsible for recruiting consistent PT student volunteers to staff each clinic session. This model allows second year DPT students to develop their leadership and communication skills as well as ensure a consistent number of DPT students available for each clinic session. In both OT and PT models of care, students are encouraged to follow a patient from the initial visit through discharge of services, in an effort to provide consistent patient care and to allow the student to understand the spectrum of rehabilitation services.

Clinic Structure and Service delivery

Patients are provided with a prescription for services from a primary care provider at one of [redacted] 8 offsite locations. Initially, providers prescribed OT and PT services for patients with common musculoskeletal issues (carpal tunnel syndrome, knee and back pain, etc.). After several months of operation, through student led education sessions, faculty emails, and personal communications, providers began sending patients with orders for “OT/PT eval and treat” for many chronic health issues, e.g. obesity, chronic pain, diabetes, hypertension, and anxiety.

Scheduling is done through [redacted]. Students and faculty communicate with providers via email, phone, and written communication in the paper chart. Initially, patients provided their own transportation. More recently, many patients have begun to utilize a corporate ride service paid through grant funding. Rides to appointments are scheduled through [redacted] while rides home are scheduled by faculty in attendance on clinic days. Students typically escort patients as they leave the clinic to ensure the

patient has located their ride. Drop off and pick up locations, signage, and campus maps for patients are intentional to ensure patients feel well cared for in a new environment.

Paper charts are picked up from [redacted] office located adjacent to campus by a faculty member. Students and faculty arrive 30-60 minutes prior to the first patient appointment for review of clinic tenets, chart review and team formation. Students are encouraged to choose one or two scheduled patients based on interest, current course involvement, and continuity of care. Initial patient encounters are scheduled for 60 minutes with follow-up visits for 30 minutes. Students and faculty work together to review charts and focus on medications, past medical history, social history, and current diagnosis/order. Of note, with referring providers off site, patients may wait several days to several weeks to get an appointment at the clinic.

As patients arrive, students greet and take them to private treatment rooms. In most cases, two students (one PT and one OT student) and an interpreter participate in the initial evaluation. Students interview the patient, asking open ended questions to determine the patient needs, and begin the objective evaluation process. Once the students have collected this information, they consult with faculty. Faculty then guide students through their clinical reasoning process by addressing students' questions regarding diagnosis, special tests, and possible interventions. In addition to faculty resources, students rely on the online learning platform for the clinic, which houses patient education materials in English and Spanish. The medical director or another medical provider is available for consult during this time. Students then return to the

patient to complete their examination and evaluation, and begin to provide interventions. Faculty assist with interventions as needed.

Once the visit is complete, students complete their documentation in accordance with state practice guidelines, with oversight from faculty preceptors. Notes are printed, signed, and placed in the chart. Follow up communication, via phone or email, is completed with the patient care coordinator and/or referring provider. Clinic debriefing occurs after all patients are seen, and takes between 30-60 minutes. Food, provided by the [redacted] food shelf, is available for all patients to take home. Charts remain in a locked clinic room until a volunteer from [redacted] picks them up the following day.

Excellent patient care is emphasized and demonstrated through the tenets of the clinic (See Figure 1). The tenets were created by the CEC, with inspiration from the University of California-San Diego SRFC (University of California School of Medicine, 2021), as a guide for collaborative practice and patient centered care. All student and faculty review these tenets as an interprofessional group prior to and reflect on them after every clinic session. Prior to the end of a patient session, students will ask the patient to identify health issues of importance, and help the patient formulate questions to ask their primary care provider at the next visit. Encouraging patients to take greater control over actions and decisions that impact their health results in better overall health outcomes (McAllister et al., 2012). Emphasis is placed on the tenet, “Patient as Teacher”, encouraging students to actively listen, learn from the patient, and treat the patient as an equal in the interprofessional team.

Dedicated efforts to provide high quality care and produce allied health professionals who will excel in today's healthcare environment requires time for reflective practice (Mitchell et al., 2015). Thus, the interprofessional group is allowed time to complete chart reviews and huddle prior to patient care, and time to debrief and reflect on the overall outcomes of the clinic. Students are engaged in reflection on what went well, what could have been better, and how this will change their practice moving forward. At least two faculty, from different disciplines, facilitate the reflective components. Faculty are then able to support students with additional resources and evidence to move forward, and engage students in role playing difficult scenarios to ensure students are more confident in future patient encounters. Reflective practice is necessary to develop collaboration skills across professions and to improve individual clinical skill and reasoning (Richard et al., 2019)

Insert Figure 1 here

Outcomes

The clinic has been open since January of 2016, and has provided upwards of 130 visits. There have been 21 OT students and 12 PT students involved in providing care, along with three faulty preceptors. The simple intent of taking good care of patients has now evolved to providing intentional care led through the vision and mission statements. Clinic work has resulted in several scholarly publications and projects, along with increased student involvement and growth. Qualitative data related to student outcomes and the student experience is in progress. See Figure 2 for representative student comments after participation in clinic activities.

Insert Figure 2

Unsolicited feedback from SMHC providers and staff has been very positive. Verbal feedback from patients in clinic indicates effectiveness in pain reduction, improved ability to participate in life activities such as paid employment and child rearing, improved sleep, success in weight loss endeavors, and increased activity tolerance, to name a few. Additional patient care outcomes are being developed with our partner, [redacted] See Figure 3 for representative SMHC staff and patient comments.

Insert Figure 3

Future Direction and Key Recommendations

Organizations and resources that may be useful for those undertaking creation or expansion of free clinics, student run clinics, or a combination thereof can be found through the SSRFC, NAFCC, and the Association of Clinicians for the Underserved (ACU). Additionally, recommendations provided to health care educators by the IOM (2003) have been instrumental in validating our approach to this work. Specifically, the ability for faculty and students to collaborate on equal ground is necessary and intentional. Eliminating the hierarchical barriers that often exist in healthcare and education is paramount to the provision of patient centered care (Schottenfeld et al., 2016). Students, patients, faculty, interpreters, and supporting staff are equal members of the healthcare team. Patient centered care, provided through interprofessional teams is integral to quality care (IOM, 2003).

Future goals of the clinic include increasing services offered, student disciplines involved, and determining appropriate outcomes tools for both patient care and student

learning. Plans to implement outcomes and evaluation data are forthcoming. Student outcomes will be measured by implementation of the Interprofessional Collaborator Assessment Rubric (Curran et al., 2011). Patient related outcomes tools are under investigation with a leaning towards the PROMIS Scale v1.2-Global Health Spanish Language Version (Healthmeasures, 2017). Additionally, there is discussion on implementation of outcomes tools specific to pain and other physical issues, similar to tools used in traditional outpatient rehabilitative settings, e.g. SF-12 (Ware et al., 1998). Data collection with a focus on global health and symptom specific issues may help strengthen efforts for inclusion of allied health professions like OT and PT in primary care, and improve the likelihood of procuring additional resources to expand the current efforts at this clinic.

Key recommendations include the following:

1) Shared mission and institutional alignment: Building successful collaborations requires a sense of mutual respect and alignment at the level of the vision and mission of each organization (Parkinson et al., 2006; Seaton et al., 2018). As partnerships are developed, assure commonalities at the core and identify the unique contribution each partner brings to fill a gap.
2) Student commitment: Because students are often eager to participate in experiential learning (Schutte et al., 2015) and tend to possess a genuine level of empathy, kindness, respect, and passion for the work (Shabbir & Santos, 2015, Weaver et al., 2019), student screening and assurance of foundational education in interprofessional models and principles of social justice is necessary. Student participation in free clinic work requires

integration with allied health curriculum, although this can be accomplished through credited courses or expectations for service within the allied health program.

3) Faculty commitment: Developing and sustaining a partnership between a University or College and a community partner requires select faculty that are dedicated to community service and student learning. Several issues must be considered when engaging faculty to participate in this type of work (Canadian Federation of Medical Students, 2018; Clark et. al., 2019). Faculty workloads must be accounted for and considered relative to how faculty are evaluated by their program, school and university. For example, how will the time, energy and work that is devoted to a free clinic be calculated into the service portfolio of faculty? Will financial compensation be added to the faculty member's salary or will 'release time' from another activity be offered? In addition, the involved faculty must be prepared and comfortable interacting with and mentoring students from other professions ().

4) Faculty Fit: Involved faculty must be prepared and comfortable interacting and mentoring students from other professions (Shellenbarger & Meigan, 2016; Bvumbwe, 2016). Faculty must be patient centered and team centered rather than discipline driven (Schottenfield et al., 2016), allowing students to work under the supervision of professionals outside of their discipline while meeting state practice rules and regulations (McGonigel et al., 1994). Faculty must also value and create a safe, open learning environment that enables students to explore solutions to their patient care hypotheses in the context of

their individual professional learning. Finally, faculty who staff a free community-based clinic need to be flexible, adaptable, possess a high energy level, and be kind toward all team members and patients (Haslam, 2015).

5) Educating primary care providers: OTs and PTs can fill a gap in primary care needs, and should be utilized early and often in primary care (Peranich et al., 2010). As the need for additional primary care team members increases, it is imperative that interprofessional primary care opportunities are afforded in entry level education for OT and PT fields (Gray et al., 2018).
6) Facilitating transportation: Lack of transportation can be a significant barrier to patient healthcare needs, and correlates to lower physical and mental health (Kamimura, 2018). Consideration and assistance in getting patients to and from appointments is best practice (American Health Lawyers Association, 2016). Lyft Business has a variety of services related to healthcare, including integration into some electronic health management systems, and is one solution to transportation barriers (Lyft Business, 2021).
7) Navigating language barriers – use of interpreters: Providing services in a patient's primary language improves overall communication, allows the patient more control to ask questions, and improves satisfaction with care (Karliner, 2018). SMHC provides one trained interpreter for each scheduled clinic day, and St. Catherine University utilizes volunteer Spanish speaking students to address additional interpreting needs.
8) Establishing clinic tenets: Clinic tenets are foundational to providing patient care services. The tenets ground the team in the philosophy of the work and

guide decision making and planning processes (Schottenfeld et al., 2016). Students and faculty review the tenants before each clinic, and have an opportunity at the close of clinic to debrief on the application of the core tenets.

9) Reflective practice: Dedicate time to allow students and faculty preceptors to engage in reflective collaboration prior to and after each clinic. Clinical skill, reasoning, and interprofessional growth occur with reflective practice (Mitchell et al., 2015; Richard et al., 2019). Reflection is completed at the end of each clinic session, and in accordance with best practice, both OT and PT faculty challenge students to connect theory to practice while modeling effective communication and collaboration between disciplines (Richard et al., 2019).

Conclusion

The planning and implementation of a free community-based clinic that is a University-Clinic partnership can be a daunting process, however, the rewards far outweigh the challenges. The goal of improving societal health and well-being with willing partners is a starting point. Flexibility and patience, combined with the energy of an interprofessional collaborative team pave the way. The end results are improved community health and a well-prepared group of professionals, ready to address emerging practice areas to improve the health of all patients.

References

Agency for Healthcare Research and Quality. (2020). *Team STEPPS*. https://www.ahrq.gov/teamstepps/index.html

American Occupational Therapy Association. (2020a). Occupational Therapy Practice Framework: Domain and Process 4th ed. *American Journal of Occupational Therapy, 74*(Suppl. 2), 7412410010. https://doi.org/10.5014/ajot.2020.74S2001

American Occupational Therapy Association. (2020b). *Level I Fieldwork*. https://www.aota.org/Education-Careers/Fieldwork/LevelI.aspx

American Physical Therapy Association. (2020). *Becoming a PT*. https://www.apta.org/your-career/careers-in-physical-therapy/becoming-a-pt

Arrowsmith, J. (2018). Understanding the Charism of a religious organization. *Doctrine and Life*, 68(4), 47-59.

Association of Schools Advancing Health Professions. (2020). *What is allied health?* https://www.asahp.org/what-is/

Bornhöft, L., Larsson, M. E., Nordeman, L., Eggertsen, R., & Thorn, J. (2019). Health effects of direct triaging to physiotherapists in primary care for patients with musculoskeletal disorders: a pragmatic randomized controlled trial. *Therapeutic Advances in Musculoskeletal Disease*. https://doi.org/10.1177/1759720X19827504

Bvumbwe, T. (2016) Enhancing nursing education via academic clinical partnership: An integrative review. *International Journal of Nursing Science*. 315-322. http://www.elsevier.com/journals/international-journal-of-nursing-sciences/2352-0132 2016; 315-322.

Canadian Federation of Medical Students. (2018). *Developing and sustaining student-led clinics: A toolkit*. https://www.cfms.org/files/updates/SRC_ToolKit.pdf

Clark, S, Grieves H, Hock N, Suarez M, Young T. (2019). Faculty-Facilitated Clinics Within a Group Supervision Model. *OT Practice, 24*(6); 26-29.

Bolt, M., Ikking, T., Baaijen, R., & Saenger, S. (2019). Occupational therapy and primary care. *Primary Health Care Research & Development*, *20*, e27. https://doi.org/10.1017/S1463423618000452

Curran V, Hollett A, Casimiro LM, Mccarthy P, Banfield V, Hall P, Lackie K, Oandasan I, Simmons B, Wagner S. (2011) Development and validation of the interprofessional collaborator assessment rubric (ICAR). *Journal of Interprofessional Care, 25*(5):339-44.

Haslam, D. “More than kindness”. *Journal of Compassionate Health Care 2*, 6 (2015). https://doi.org/10.1186/s40639-015-0015-2

Healthmeasures. (2017). *PROMIS Scale v1.2-Global Health Spanish Language Version.* https://www.healthmeasures.net/search-view-measures

Institute of Medicine. (2017). *Vital directions for health and healthcare*. Washington, DC: National Academies Press.

Institute of Medicine. (2003). *Health professions education: A bridge to quality.* Washington, DC: National Academies Press. https://www.ncbi.nlm.nih.gov/books/NBK221525/

Karliner, L. (2018). *When patients and providers speak different languages*. Agency for Healthcare Research and Quality. https://psnet.ahrq.gov/web-mm/when-patients-and-providers-speak-different-languages

McAllister, M., Dunn, G., Payne, K., Davies, L., & Todd, C. (2012). Patient empowerment: The need to consider it as a measurable patient-reported outcome for chronic conditions. *BMC Health Services Research*, *12*(1). https://link.gale.com/apps/doc/A534166854/HRCA?u=clic_stkate&sid=HRCA&xid=d253ebab

McGonigel, M., Woodruff, G., & Roszmann-Millican, M. (1994). The transdisciplinary team: A model for family-centered early intervention. In L. Johnson et al. (Eds.), *Meeting early intervention challenges: Issues from birth to three*. (pp. 95-131). Maryland: Paul H. Brookes Publishing Company).

Meah, Y.S., Smith, E.L., & Thomas, D.C. (2009). Student-Run health clinic: Novel arena to educate medical students on Systems-Based practice. *Mount Sinai Journal of Medicine: A Journal of Translational and Personalized Medicine*, 76, 344–356

Mitchell, T., Richard, F., Battistoni, R., Rost-Banik, C., Netz, R., & Zakowske, C. (2015) Reflective practice that persists: Connections between reflections in service learning programs and in current life. *Michigan Journal of Community Service Learning,* Spring Issue, 49-63.

National Association of Free and Charitable Clinics. (2020). *About us.* https://www.nafcclinics.org/content/about-us

Ng, E., & Hu, T. (2017). A survey of Canadian interprofessional student-run free clinics. *Journal of Interprofessional Care, 31*(6), 781–784. https://doi.org/10.1080/13561820.2017.1346590

Richard, A., Gagnon, M., & Careau, E. (2019). Using reflective practice in interprofessional education and practice: a realist review of its characteristics and

effectiveness. *Journal of interprofessional care, 33*(5), 424–436. https://doi.org/10.1080/13561820.2018.1551867

Shellenbarger, T. & Robb, M. (2016) Effective Mentoring in the Clinical Setting. *American Journal of Nursing,* 116(4), 64-68 doi: 10.1097/01.NAJ.0000482149.37081.61

Simpson, S. A. & Long, J. A. (2007). Medical student-run health clinics: Important contributors to patient care and medical education. *J Gen Intern Med. 22*(3): 352–356 doi: 10.1007/s11606-006-0073-4

Sisters of [redacted]. (2020). *About us.* https://csjcarondelet.org/about-us/

Society of Student Run Free Clinics. (2020). *Home.* https://www.studentrunfreeclinics.org/

[redacted]. (2020). *Henrietta Schmoll School of Health.* https://www.stkate.edu/academics/hssh

St. Mary's Health Clinics. (2020). Get to know St. Mary's Health Clinics. https://www.stmaryshealthclinics.org/get-to-know

Swartz, M. (2012). The contributions of student-run free clinics. *Journal of Pediatric Health Care, 26*(6), 397.

Thompson, MS. (1999, May-June). Charism or deep story? Towards understanding better the 19th -century origins of American women's congregations. *Review for Religious*, 58, 230-250.

Ware, J., Kosinski, M. & Keller, S. (1998). *SF 12: How to score the SF-12 Physical and Mental Health Summary Scales, 2nd Ed.* Boston, MA: The Health Institute, New England Medical Center.

Weisenbeck, M. (2008, November-December). Understanding Charism. *Health Progress*, 16-17.