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Occupational Therapy's Role in an Interprofessional Student-Run Free Clinic: Challenges and Opportunities Identified

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Abstract

Student-run free clinics (SRFCs) provide services to underserved populations while enhancing student education. Occupational therapy (OT) participation in integrated care SRFCs is an emerging area of practice and enhances the interprofessional model necessary for holistic patient care. The Student Health Outreach for Wellness (SHOW) organization, located in Phoenix, Arizona, is a SRFC comprised of three state universities that incorporates nine different health professional programs to deliver interprofessional care, including OT. The SHOW clinic provides direct care services where student volunteers practice clinical and interprofessional skills under the guidance of licensed health care providers. OT preceptors and students participate in team-based assessment and care delivery to practice their discipline-specific treatment knowledge of upper-extremity impairments, musculoskeletal pain, medication management, fall prevention, and behavioral health issues, among many others. OT integration into the clinic provides students and preceptors an opportunity to build a unique skill set in interprofessional care, educate other disciplines about OT, and become emerging leaders in the field. Challenges for OT involvement in this SRFC include recruitment and sustainability of volunteers and lack of knowledge and understanding about the role of OT on an interprofessional team. Further research is needed to identify additional benefits of OT services in SFRCs.

Keywords

occupational therapy, interprofessional education, interprofessional practice, student-run free clinic, primary care, integrated care

Credentials Display

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Student-run free clinics (SRFCs) are innovative community health care centers run by interprofessional teams of students to provide services ranging from primary care to therapy interventions in the community (Palombaro, Dole, & Lattanzi, 2011; Pammett, Landry, Weidmann, & Jorgenson, 2015; Society of Student Run Free Clinics, 2016). The Society of Student-Run Free Clinics (2016) has reported over 100 SRFCs in three countries worldwide, with the majority located in the United States and Canada. SRFCs primarily service uninsured and underserved populations.

The patients at these clinics are largely minorities of Hispanic and African American descent who have an annual income of less than \$10,000 and minimal education beyond high school (Dhans et al., 2015; Simpson & Long, 2007). Simpson and Long (2007) report that such individuals may be “marginally or completely homeless, and at high risk for inadequate management of serious medical problems including hypertension, diabetes, mental illness, substance abuse, and violence” (p. 352).

Other high-risk medical issues may include obesity, asthma, high cholesterol, and arthritis (Dhans et al., 2015).

The growing popularity of interprofessional SRFCs has resulted in emerging research demonstrating the value of a collaborative approach to patient care in this setting (Holmqvist, Courtney, Meili, & Dick, 2012; Liberman et al., 2011).

Interprofessional education allows the team to learn with, from, and about each other, whereas interprofessional collaborative practice is the implementation of comprehensive care provided to a patient by different professionals to achieve high

quality care (World Health Organization, 2010).

Interprofessional health care offers practitioners the ability to provide integrated care to patients, which includes primary and behavioral health services (American Psychological Association, 2016; Substance Abuse and Mental Health Services Administration, 2012). Reported student benefits with interprofessional, hands-on learning experience, such as one would gain at an interprofessional SRFC, include improved professional self-efficacy, increased perception of clinical reasoning skills, conflict resolution, improved communication skills, and improved attitudes and behaviors toward interprofessional interaction (Haggarty & Dalcin, 2014; Nørgaard et al., 2013; Sief et al., 2013). The type of student disciplines involved varies from one SRFC to another, but reportedly include art, counseling, dentistry, dental hygiene, dietetics, kinesiology, medical rehabilitation, medicine, nursing, nutrition, occupational therapy, pharmacy, physical therapy, physiotherapy, psychology, science, social work, speech-language pathology, and spiritual care (Haggarty & Dalcin, 2014). The largest percentage of student volunteers at 59 SRFC locations surveyed were found to be pursuing preclinical or clinical medical studies, with only 37% of student volunteers pursuing health-related graduate studies, such as occupational therapy (OT) (Simpson & Long, 2007).

The role of OT focuses on helping individuals across the lifespan participate in the things they want and need to do through use of therapeutic occupations or daily activities. The profession emerged from the Moral Treatment era

in the 19th century and has strong roots in the mental health field, whereby therapists were trained to provide purposeful activities to adults who had a mental illness. As the health care field changed and the population's needs evolved, the treatment focus for most occupational therapists also changed (Gutman, 2011). OT is not a common profession found in most SRFCs, and it is also considered to be an emerging profession in the primary care setting (Roberts, Farmer, Lamb, Muir, & Siebert, 2014; Smith, Thomas, et al., 2014). Occupational therapists are well prepared to contribute to interprofessional health care teams in integrated care SRFCs, as OT practitioners have a unique skill set geared toward understanding the significant impact that habits and routines have on those who have an acute illness, chronic condition(s), and/or disability (Dahl-Popolizio, Manson, Muir, & Rogers, 2016). In addition, occupational therapists can assume a wide variety of roles, such as direct care providers, case managers, consultants, educators, and advocates for patients and their families in the SRFC setting (Canadian Association of Occupational Therapists [CAOT], 2013; Roberts et al., 2014).

Traditionally, other specializations view OT as a profession with many specializations; however, in SRFCs, which offer integrated care services, occupational therapists act as generalists and must be well versed in the wide array of professional skills needed to provide evaluations and interventions for diverse populations (Donnelly, Brenchley, Crawford, & Letts, 2014). The involvement of OT in service-learning settings is a

future OT health care workforce, but also to add value to the care provided (Dahl-Popolizio et al., 2016). The uniquely holistic perspective of OT is an asset to interprofessional SRFC teams due to the diverse needs of underserved populations as well as the potential for interprofessional peer-to-peer education and collaboration with various health professional students. Client-centered OT interventions identified by Roberts et al. (2014) that can also address client needs in an integrated SRFC include but are not limited to:

- Self-management of chronic conditions and prevention of secondary complications . . . ,
- Health promotion and lifestyle modification to prevent chronic conditions . . . ,
- Self-management of psychiatric conditions and promotion of mental health,
- Management of musculoskeletal conditions including pain management,
- Safety and falls prevention within the home and community environments,
- Promoting and ensuring access to community resources for social participation . . . ,
- Driving and community mobility resources for older adults,
- Redesign of physical environments to support participation in valued activities, and
- Family and caregiver assistance and support (p. S26).

With OT as an emerging profession in primary care and the future of health care shifting to provide more integrated care services, it is

important that SRFCs mimic and pave the way for new health care standards (Muir, 2012; Roberts et al., 2014). In the last decade, there has been an increasing shift in patient care from a focus on treating acute conditions to improving overall quality of life. This shift requires complex treatment from multiple health professionals and effective communication and collaboration to leverage their strengths (Olson & Bialocerkowski, 2014). To address health care trending in this direction, interprofessional experiences are being increasingly embedded into university-based educational programs to encourage teamwork and to acknowledge the different team roles (Olson & Bialocerkowski, 2014; Smith, Yoon, et al., 2014). Students are the future of health care, so it is important that they become comfortable delivering care in the interprofessional model early in their training. The benefits for students of practicing in an interprofessional model include increased responsibility and autonomy, the opportunity for reflection, realistic insight regarding managing clinical workload, support of profession-specific facilitators, and an enhanced understanding of interprofessional collaboration (Reeves, Freeth, McCrorie, & Perry, 2002). OT educational training in subjects such as psychology, sociology, and behavioral health-related courses prepare occupational therapists to work with care needs frequently seen in SRFCs; thus, interprofessional educational experiences provide valuable practice for OT students. Incorporating OT in interprofessional SRFCs may also ensure that other health care students and professionals gain earlier exposure to OT in integrated care settings.

Facilitating the entire team's understanding of OT (and vice versa) and OT's understanding of other health professional roles is crucial for effective future integration of OT into any interprofessional health care team (Donnelly, Brenchley, Crawford, & Letts, 2013).

Intraprofessional collaboration among OT colleagues in integrated care can also be of benefit by allowing for resource sharing, consultation, and increased exposure of OT (Donnelly et al., 2013). OT students' participation along with an OT practitioner acting as a supervisor enhances hands-on learning and provides decision making support to the entire interprofessional team. Multiple OT practitioners or students on site to relay evaluation and treatment strategies that are best suited for patients may facilitate a more client-centered approach through more effective interventions that consider individuals' specific lifestyles. Thus, the incorporation of OT into integrated care SRFCs may significantly impact the quality of patient care.

Student Health Outreach for Wellness: An Interprofessional SRFC

The Student Health Outreach for Wellness (SHOW) clinic is a student-run, interprofessional free clinic and outreach organization in Phoenix, Arizona. A collaboration among Arizona State University, Northern Arizona University, and The University of Arizona, the SHOW clinic provides direct integrated care and outreach services to high-risk populations via licensed providers and students in an interprofessional care delivery model. Leaders from the three universities began to develop the SHOW clinic in May 2013, and the clinic officially opened in July 2015. The clinic

operates on Saturday mornings from Healthcare for the Homeless clinical space on the Human Services Campus, which provides services to approximately 6,500 people experiencing homelessness in the metro Phoenix area (Health Resources and Services Administration [HRSA], 2015). The demographics of this population (see Table 1) are consistent with those treated by most SRFC operations (Simpson & Long, 2007). To date, the SHOW clinic has

provided care for more than 1,500 individuals and offered over 300 students interprofessional learning opportunities. Following 18 months of operation, the SHOW clinic now encompasses students from nine health professional programs, including audiology, behavioral health, medicine, nursing, OT, physical therapy, physician assistant, social work, and speech-language pathology.

Table 1
The SHOW Clinic Population Demographics

Gender (percentage)		
Gender	Men	Women
Percentage of population	55.23%	44.77%
Age (percentage)		
Age (years)	Men	Women
18-24	12.77%	17.73%
25-29	6.53%	10.38%
30-34	7.86%	11.24%
35-39	7.96%	10.96%
40-44	10.65%	11.29%
45-49	12.59%	11.20%
50-54	16.03%	11.58%
55-59	13.63%	8.70%
60-64	8.14%	4.52%
65+	3.84%	2.39%
Patient Race and Ethnicity (number of patients)		
Race	Hispanic/Latino	Non-Hispanic/Latino
Hawaiian/Other Pacific Islander	2	17
Black/African American	54	1465
American Indian/Alaskan Native	6	200
White	709	2510
More than one race	83	46
Unreported	953	265
Total	1811	4503
Patient Insurance (percentage)		
Principal Third-Party	Percentage of patients	
Medical Insurance Source		
None/Uninsured	35.45%	
Medicaid	53.89%	
Medicare	8.28%	

Private Insurance 2.38%

Patient Characteristics - Special Populations

Special Populations	Number of patients
Agricultural Workers or Dependents	2
Homeless	6543
Veterans	214
Total	6759

Patient Characteristics - Frequency of Common Diagnoses

Diagnosis	Number of visits by diagnosis
Hypertension	2105
Substance Use Disorders (alcohol, tobacco, etc.)	1104
Diabetes Mellitus	1019
Behavioral Health Disorders (depression, anxiety, other mental disorders including PTSD)	944
Asthma	894
Overweight and Obesity	402
Reproductive Health (contraceptive management and sexually transmitted infections)	400
Chronic Obstructive Pulmonary Diseases	351
Heart Disease (selected)	313
Contact Dermatitis and other Eczema	131

Note: HRSA. (2015). Adapted from Maricopa County Department of Public Health's 2015 Health Resources and Services Administration Health Center Program Uniform Data Systems Report.

The SHOW clinic is a learning laboratory open to all students enrolled in the three primary partner universities. The SHOW clinic provides both direct interprofessional learning experiences and overall service delivery and leadership learning opportunities. Interprofessional learning and service delivery opportunities are available to the students through volunteering at the primary care clinic, community outreach one-day events, by joining a committee, or through ongoing program groups. Organizational efforts are coordinated by six student-led committees, guided by an advisory committee consisting of faculty from the three universities, community partners, and three executive student directors.

Students may be selected to take on executive leadership roles by applying to be a student director or committee chair. Student directors are chosen on a yearly basis near the end of the academic school year and have a 2-year term limit. The student directors participate in an interview prior to being chosen for the position. Any student involved with the SHOW clinic is eligible to apply for these positions; however, leadership is generally drawn from active committee members. The roles and responsibilities of the student directors are outlined in Table 2. The roles and responsibilities of respective committee chairs revolve around facilitating their committee's responsibilities (see Table 3).

Table 2

The SHOW Clinic Student Director Roles and Responsibilities

Student Director	Roles and Responsibilities
Director of Development	<ul style="list-style-type: none"> ● Directly supervise the Fund Development and Sustainability and Research and Quality Assurance Committees. ● Collaborate with relevant stakeholders to secure financial support for the SHOW's short- and long-term sustainability. ● Manage and communicate with alumni directory. ● Ensure processes are in place to facilitate continuous quality improvement and meaningful data collection. ● Understand the SHOW clinic's research goals and needs, assist in coordinating conference proposals as necessary.
Director of Operations	<ul style="list-style-type: none"> ● Directly supervise the Clinical Operations and the Volunteer and Human Resources Committees. ● Oversee strategic goals and improvement of the SHOW clinic through management of volunteers and clinical processes. ● Ensure that the SHOW clinic is meeting state licensure requirements by maintaining policies and procedures. ● Facilitate collaborative relationships with health professional liaisons and preceptors.
Director of Programs	<ul style="list-style-type: none"> ● Directly supervise the Communications and Technology and Programming and Special Events Committees. ● Facilitate Student Executive Committee meetings. ● Provide oversight of the SHOW clinic's weekly health education programs. ● Provide leadership in the planning and organization of media contacts and outreach initiatives or events. ● Provide leadership in the planning and organization for large events, such as the SHOW Annual Health Fair and Banquet.
All Directors	<ul style="list-style-type: none"> ● Report to the SHOW Advisory Committee and program director. ● Coordinate biweekly Student Executive Committee meetings and biweekly quality improvement meetings. ● Collaborate to complete tasks necessary for the day-to-day operation and long-term sustainability of the SHOW clinic. ● Facilitate and coordinate strategic planning for organization-wide events.

The three student directors oversee two committees each and manage clinical operations, programming and outreach, and research and development, respectively. Health professional students also have an opportunity to take on leadership positions in the SHOW clinic by representing their discipline as health profession

liaisons. The student-led committees include Clinical Operations, Communications and Technology, Fund Development and Sustainability, Programming and Special Events, Research and Quality Assurance, and Volunteer and Human Resources.

Table 3*The SHOW Clinic Core Committee Roles and Responsibilities*

Committee	Roles and Responsibilities
Clinical Operations	<ul style="list-style-type: none"> ● Operate in clinic as medications manager, shift manager, and clinic coordinator. ● Provide policies and procedures support, and work with research volunteers to manage quality improvement.
Communications and Technology	<ul style="list-style-type: none"> ● Coordinate external communications, marketing and outreach, the website, and events. ● Manage organization-wide technology needs.
Fund Development and Sustainability	<ul style="list-style-type: none"> ● Write grants, manage fundraisers and student-led crowdfunding, and engage with donors and the SHOW clinic alumni.
Programming and Special Events	<ul style="list-style-type: none"> ● Develop and implement educational health programs. ● Plan small- and large-scale events. ● Coordinate volunteers for health programs.
Research and Quality Assurance	<ul style="list-style-type: none"> ● Create and facilitate quality and research surveys/data collection. ● Coordinate conference and research outreach. ● Collaborate with clinical operations volunteers to manage quality improvement.
Volunteer and Human Resources	<ul style="list-style-type: none"> ● Manage volunteer applications and onboarding using human resources software. ● Assist with volunteer management in clinic.

Student committee members and volunteers participate in critical tasks to support the SHOW clinic's operations. In addition to the above committees, ad-hoc committees are collaborative committees led by the student directors, whose role best matches the purpose of the committee created in response to yearly events or for tasks that require the combined expertise of students on different committees. An example of an ad-hoc committee is the annual Health Fair Planning Committee, which is convened 3 months prior to the event and is comprised primarily of students in the Programming and Special Events, Communications and Technology, and Volunteer and Human Resources Committees, although any student in the SHOW clinic may take part in the committee, if they choose.

When joining the SHOW clinic, students

and licensed professionals are provided a tailored orientation depending on the type of volunteer position. For clinical volunteer positions, health care professionals and students must attend an orientation prior to volunteering at the clinic, which includes a primer on working with a vulnerable population, working on an interprofessional team, and required completion of mandatory clinic training modules. At the beginning of the volunteers' first shift of the semester at the clinic, they participate in a second, brief, clinic-specific orientation focusing on the clinical flow and teaching team structure. The interprofessional teaching team is composed of various health profession students and preceptors who supervise the students over three to four shifts during the semester. The licensed health care preceptors provide oversight for the direct care provided by the

interprofessional student teaching team to the patients served. Of note, the volunteers do not receive any formalized interprofessional training during their time at the SHOW clinic. Instead, the experience relies solely on the interprofessional practice interaction. Clinical processes are led by a student management team, which oversees operations of interprofessional teaching teams in the clinic. The goal of this model is to encourage both interprofessional leadership and clinical skill development for student leaders.

The clinic day begins with a pre-shift huddle, where the student volunteers and licensed preceptors gather to conduct introductions, discuss clinic updates, receive a brief in-service delivered by pre-determined health profession student(s), and review the goals of the interprofessional experience. After the pre-shift huddle, the team breaks out into their different roles, which include front desk staff and student navigators, student management team, and interprofessional teaching teams. At the end of the clinic day, the team gathers again to engage in a post-shift huddle to review specific cases, lessons learned, and reflect on interprofessional learning experiences.

The flow of a patient's experience at the clinic is documented in Figure 1. When a patient enters the clinic, he or she registers and completes intake materials with the assistance of an undergraduate student navigator who remains with the patient from the beginning to the end of the visit. An interprofessional teaching team is assigned to individual patients depending on the chief complaint. Before the initial exam, the

information, and the teaching team discusses the case presentation and then determines what student health disciplines are best suited to take the lead during the initial triage encounter. Once the interprofessional student team completes the patient's initial examination, they reconvene in a second interprofessional team huddle with their preceptors to develop a plan of care. After the team and preceptors develop a treatment plan and reevaluate which specialties are most relevant to the patient's needs, the pertinent health professional students and preceptor(s) provide direct care services. The providers then communicate the final plan of care, including follow-up instructions, and the patient is provided with necessary prescriptions and resources.

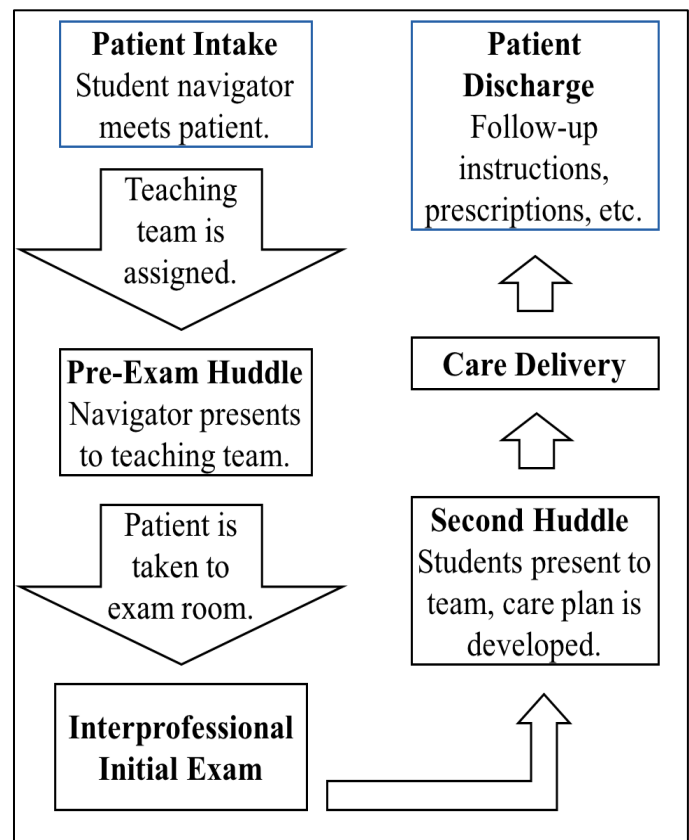


Figure 1. The SHOW Clinic Patient Flow Diagram.

OT's Role in the SHOW Clinic

Since the summer of 2014, the Northern Arizona University's OT program and faculty have provided a critical and vital role in the interprofessional, interinstitutional planning and opening of the SHOW clinic and community outreach efforts. The initial work began with faculty members joining the SHOW Advisory Committee, developing scope of practice guidelines for OT practitioners and students, working as liaisons between the organization and the university to coordinate efforts and meet established goals and deadlines, and to recruit OT preceptors and students.

In the fall of 2014, under the supervision of an OT preceptor, eleven OT students volunteered at the inaugural annual SHOW Health Fair, which provided health screenings, lifestyle management services, and connections to community health resources for over 280 individuals. Currently, the OT students work at the SHOW as OT Program Liaison and as members of the Quality Improvement Committee, the Clinic Teaching Team, and the Programming and Special Events Committee. In the fall of 2015, the SHOW clinic expanded the services provided by the interprofessional health care team integrated clinic to include OT. Figure 2 outlines the growth of the OT preceptors and student involvement in the clinic. Although the OT preceptors had at least 5 to over 20 years of clinical experience, this was the first time that the practitioners had worked in an integrated care SRFC. The OT student volunteers at the clinic had completed at least three semesters of their program, which included training with

foundational coursework, human movement, conditions, biomechanics, psychosocial and behavioral health function, and client communication and engagement. Because the concept of integrated care is new in the health care field and OT in the primary care setting is an innovate practice, in addition to learning how to work on an interprofessional team at an SRFC, the OT preceptors and students also had to (a) identify their role on the team and (b) determine what services would be provided to the patients at the clinic. Similar to what Donnelly et al. (2013) found, the common OT responsibilities identified on an interprofessional team were educating the team and patients about the role of OT, providing direct service, and contributing to the pre- and post-huddle shift meetings.

In the SHOW clinic, the OT students and preceptors participate with the interprofessional teaching team as needed. The teams include at least one OT preceptor and one OT student, in addition to other health care professionals and students that were assigned to the clinic for that day. A typical student triage team includes a medical or nursing student, an OT student, and one other health profession student. During the triage, the OT student assists in taking the patient's vitals, contributes to the collection of a medical and social history, and assesses for signs of behavioral health and cognitive issues. The student may also complete a physical examination, such as a range of motion assessment or a manual muscle test.

Consistent with what research suggests, common patient complaints treated by the OT team at the clinic include upper-extremity issues,

musculoskeletal pain, chronic disease management, stress, and depression (Dahl-Popolizio et al., 2016; Muir, 2012). Interventions to address these issues have focused on how the identified deficit(s) affect the individual's functionality and ability to complete occupations in his or her daily life. Examples of interventions include activity and/or environmental modifications, adaptive equipment, behavioral health management strategies, energy conservation, splinting, compensatory strategies, medication management compliance, and strategies to reduce falls. As the OT practitioners and students gain more experience volunteering at the SHOW clinic, the role of OT will continue to evolve.

Opportunities and Challenges for OT at SRFCs

The developing role of OT at the SHOW clinic has provided both opportunities and challenges for current practitioner and student volunteers. Over the first year of OT involvement at the clinic, the benefits reported by the OT preceptors and students include the ability to obtain hands-on experience working with an underserved and diverse population, the ability to provide health promotion and preventive services to the community, gaining experience to participate with interprofessional education and practice with a health care team, leadership skills acquisition, and advocating for the role of OT.

The practitioners are afforded the opportunity to use a generalist approach, which they may not use in their day-to-day work setting when treating their typical caseload. At the same time, they are often faced with the need to review or

on the diverse symptoms being presented. In addition to providing direct care to patients seen at the clinic, the OT practitioners and students are able to provide health promotion services to the community at large through the SHOW clinic's community outreach and programming events. While seasoned practitioners are gaining new skills, they report excitement about the ability to provide education and professional skills training to future occupational therapists.

Under the supervision of the OT preceptors, the OT students gain access to the opportunity to practice in an interprofessional, team-based approach to health care delivery in a real-world, safe environment early in their careers. This involvement has allowed the students to learn from, about, and with other health profession students, while simultaneously teaching students from other disciplines about the role of OT. Through both formal presentations and in the huddles, the students have had multiple opportunities to provide education to others about OT's scope of practice and how the profession may contribute to the patient's evaluation and plan of care. For example, when a student navigator presents a patient case to the interprofessional teaching team, it is up to the team to prioritize the patient issues and decide which profession is most appropriate to meet the needs identified. Since many other students and professionals do not fully understand the scope of OT, it is imperative the OT student evaluate the presenting patient concerns and delineate how OT can contribute to the assessment and treatment (if appropriate). In addition to teaching others about the OT profession, the OT preceptors and students

have had an invaluable experience learning about the scopes of practice of other health care professionals. By recognizing how other professional students and preceptors interact with patients, observing the questions asked to patients, and gaining an understanding of their professional reasoning process, the OT teams have gained useful insight into how other professions apply their clinical knowledge and skills.

For most of the OT students, the ability to apply classroom learning to the clinic setting early in their education has increased their comfort level when interacting with patients, and this is one of the main reasons why the students reported volunteering at the SHOW clinic. Because of the fast-paced nature of an integrated care clinic, the students have learned to build rapport and establish a therapeutic relationship with their patients in a short amount of time, thus allowing them to implement more meaningful and patient-centered interventions. The OT students are also required to think on the spot and to answer questions from their patient and other health professionals, in addition to probing and clarifying questions from their OT preceptor. To identify specific causes for problems and use professional reasoning skills, the OT students have had to identify quickly the need for additional assessments to better comprehend the patient's current level of function. Ultimately, the OT students gain experience acting as general providers through the identification and

implementation of assessment tools needed to help clarify patient needs quickly in an integrated care setting. The benefits reported from the OT volunteers at the SHOW clinic are consistent with other benefits found in the current literature (Donnelly et al., 2013; Donnelly et al., 2014; Holmqvist et al., 2012; Muir, 2012; Schutte et al., 2015).

OT involvement in the SHOW clinic is beneficial and innovative, and with innovation one typically encounters barriers and challenges. The OT preceptors and students have reported various challenges throughout their SHOW clinic experience. The recruitment of the preceptors and students is one of the biggest obstacles facing most SRFCs, and the experience for OT has been no different at the SHOW clinic (Holmqvist et al., 2012). Since the SHOW clinic is staffed with mostly weekend volunteer opportunities, recruiting new students and preceptors has been a slow process based on the limited opportunities that are available. Although there has been a steady growth in OT personnel over the last year (see Figure 2), most of the OT preceptors recruited were on the faculty at one of the three state universities, and the student volunteers were enrolled in the Northern Arizona University's OT Program. This recruitment pool has provided limited numbers of overall participants; therefore, marketing strategies to better reach out to community-based practitioners will be of benefit to the SHOW clinic.

SHOW Clinic Occupational Therapy Workforce Growth, Fall 2015 to Fall 2016

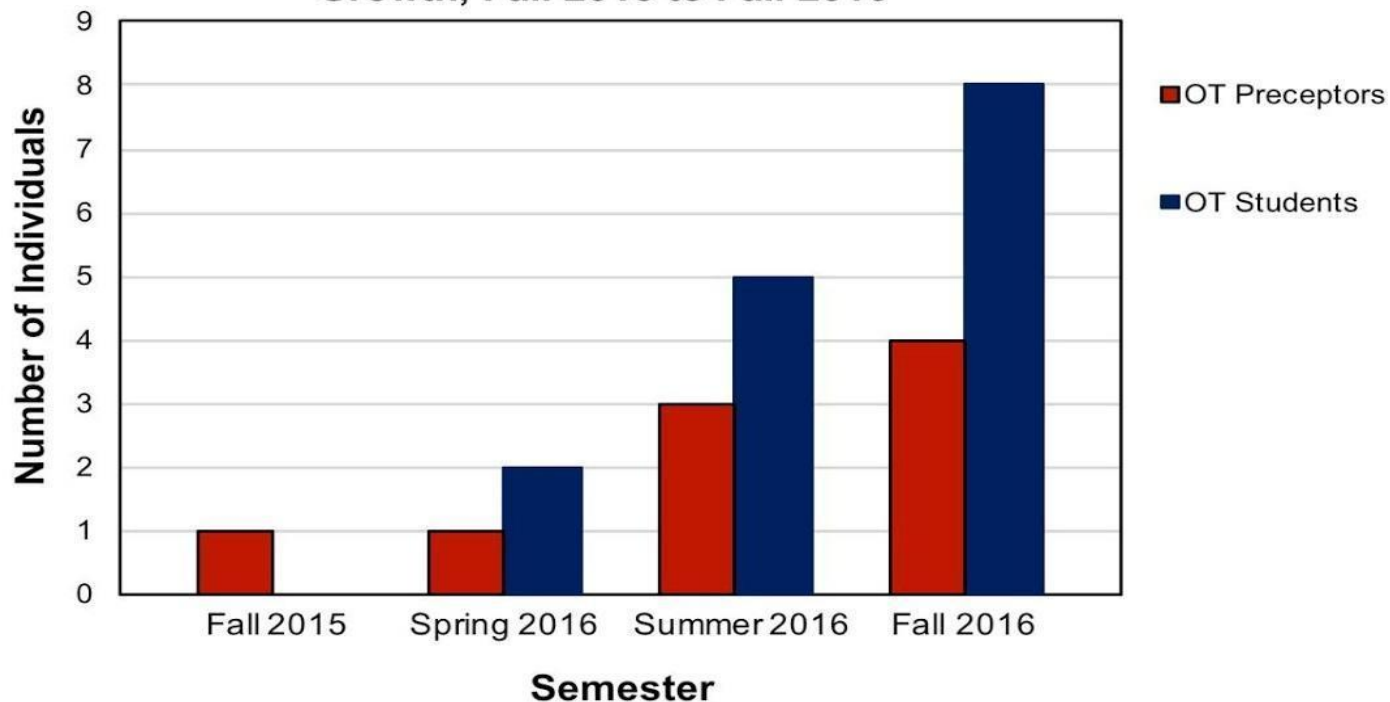


Figure 2. The SHOW Clinic OT Workforce Growth from the fall 2015 semester to the fall 2016 semester. Fall 2015: 1 preceptor, 0 students; Spring 2016: 1 preceptor, 2 students; Summer 2016: 3 preceptors, 5 students; Fall 2016: 4 preceptors, 8 students.

The need to increase sustainability to have volunteers commit to signing up for ongoing shifts for additional semesters is another barrier. The ability to volunteer is based on the individual's availability, commitments to school, work and social obligations, and the continuation of interest and desire to support the organization. As the students progress through the program, their commitment to schoolwork and fieldwork rotations increase, leaving them less time to engage with service learning. The OT preceptors have similar obligations and at times are not able to volunteer for more than one semester in a year. On average, the OT preceptors and students have volunteered for only one to two semesters at the clinic. In addition

student is required to commit to additional time to complete the orientation and onboarding training, which can be lengthy. If more preceptors and students volunteered for multiple semesters throughout the year, the resources dedicated to recruiting and orienting new OT participants would decrease.

Moving forward with the interprofessional team structure, it will be necessary to advocate for OT to work with patients in need of services. The OT preceptors are still developing their role, scope of practice, responsibilities, and best practices for supervising on an interprofessional team, and are also working to understand the care needs of patients and the treatment options available in the population the SHOW clinic serves. The OT

students have faced many of the same hurdles, although the students arguably gain invaluable critical skill training by working alongside the preceptors as they learn to address and overcome these challenges early in their careers. The OT team and other members of the interprofessional team will benefit from the dissemination of consistent and concrete knowledge about the role that OT can play at the SHOW's integrated care clinic. For example, if an OT team is not present during a weekend shift, other interprofessional team members may not learn or understand how an occupational therapist can contribute to the team and the patients served. To have an occupational therapist present at every clinic shift, it is imperative to recruit new preceptors and students continually, encourage ongoing participation throughout the year with current volunteers, and provide resources and handouts that provide a consistent message about the role of OT.

Discussion

The SHOW organization is an innovative venture that is less than 4 years old at the time of this publication. The organization is possible due to the support and dedication of the three state universities, volunteers, and community partners. The volunteers that have played various roles for the SHOW clinic to date have truly reached and helped thousands of individuals who were in need, while at the same time teaching the volunteers to work as an interprofessional team. The OT preceptors and students have volunteered and contributed through various roles with the SHOW organization, including as direct care providers, educators, program liaisons, consultants, and in

management positions. Many benefits and rewards were noted by the OT volunteers that contributed to personal and professional growth. Although challenges are inevitable, solutions that focus on developing best practices for supervising students on an interprofessional team and developing professional self-efficacy, patient-centered care, and sustainability provide opportunities to craft strategies to meet the demands of future practice.

The OT preceptors and students have now volunteered at the SHOW's clinic for a full year, which has allowed for a greater understanding of how an occupational therapist can incorporate his or her services at the clinic and be a contributing member of the interprofessional health care team. However, it is now time for the OT team to broaden their focus to expanding the services provided by the overall organization and to contributing to the growing body of research. At the time of this publication, the OT students are only able to participate in hands-on patient care at the SHOW clinic through limited volunteer opportunities, which are typically only available one day a week. One way to expand services will be to offer additional hours of operation throughout the week and to provide long-term and full-time fieldwork rotations at the clinic. Fieldwork students that complete a rotation in an interprofessional care setting will help to prepare future clinicians in an integrated care setting, develop skills on the ability to provide education about the role of OT in this setting, and learn about other health professions (Donnelly et al., 2013). Because of the nature and limited availability of literature on best practices about this emerging practice area, scholarship that

focuses on creating a model of care for the role of OT in an integrated care clinic is needed to provide replication and sustainability for other occupational therapists in similar settings. Collecting and disseminating data that document commonly seen diagnoses, the needs of patients, assessment tools, and intervention methods used in an integrated care clinic may be a starting point in developing a reproducible model of care. In addition, identifying frequently used roles and responsibilities of an occupational therapist in this setting will help to establish best practices. Furthermore, evaluating and examining the benefits of OT services provided in an interprofessional SRFC and the impact on patient care is sorely needed. As identified in Donnelly et al. (2014), selecting outcome measures and evaluating OT intervention methods based on those outcomes will begin to establish the benefits of OT in an integrated care clinic. The opportunities for OT are endless in the SHOW clinic and have the potential to document how OT can play a major role in the future of how health care services are delivered.

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References

- American Psychological Association. (2016). *Integrated health care*. Retrieved from <http://www.apa.org/health/integrated-health-care.aspx>
- Canadian Association of Occupational Therapists. (2013). *CAOT position statement: Occupational therapy in primary care*. Retrieved from http://www.caot.ca/pdfs/positionstate/PS_PrimaryCare.pdf
- Dahl-Popolizio, S., Manson, L., Muir, S., & Rogers, O. (2016). Enhancing the value of integrated primary care: The role of occupational therapy. *Families, Systems, & Health, 34*(3), 270-280. <http://dx.doi.org/10.1037/fsh0000208>
- Dhans, L., Anson, C., Callahan, K., Coats, E., Slaughter, L., Coker-Bolt, P., & Velozo, C. (2015). Student-run free therapy clinics: Integrating service learning and care for underinsured clients, *OT Practice, 20*(2), 16-18.
- Donnelly, C. A., Brenchley, C. L., Crawford, C. N., & Letts, L. J. (2013). The integration of occupational therapy into primary care: A multiple case study design. *BMC Family Practice, 14*(60). <http://dx.doi.org/10.1186/1471-2296-14-60>
- Donnelly, C. A., Brenchley, C. L., Crawford, C. N., & Letts, L. J. (2014). The emerging role of occupational therapy in primary care. *Canadian Journal of Occupational Therapy, 81*(1), 51-61. <http://dx.doi.org/10.1177/0008417414520683>
- Gutman, S. A. (2011). Special issue: Effectiveness of occupational therapy services in mental health practice. *The American Journal of Occupational Therapy, 65*(3), 235-237. <http://dx.doi.org/10.5014/ajot.2011.001339>
- Haggarty, D., & Dalcin, D. (2014). Student-run clinics in Canada: An innovative method of delivering interprofessional education. *Journal of Interprofessional Care, 28*(6), 570-572. <http://dx.doi.org/10.3109/13561820.2014.916658>
- Health Resources and Services Administration. (2015). *Maricopa County Department of Public Health Center 230 (Health Care for the Homeless) UDS Report – 2015*. [Data file]. Retrieved from <https://www.maricopa.gov/1696/Health-Care-for-the-Homeless>
- Holmqvist, M., Courtney, C., Meili, R., & Dick, A. (2012). Student-run clinics: Opportunities for interprofessional education and increasing social accountability. *Journal of Research in Interprofessional Practice and Education, 2*(3), 264-277. Retrieved from <http://www.jripe.org/index.php/journal/article/view/80>

- Lieberman, K. M., Meah, Y. S., Chow, A., Tornheim, J., Rolon, O., & Thomas, D. C. (2011). Quality of mental health care at a student-run clinic: Care for the uninsured exceeds that of publicly and privately insured populations. *Journal of Community Health, 36*(5), 733-740. <http://dx.doi.org/10.1007/s10900-011-9367-5>
- Muir, S. (2012). Occupational therapy in primary health care: We should be there. *The American Journal of Occupational Therapy, 66*(5), 506-510. <http://dx.doi.org/10.5014/ajot.2012.665001>
- NØrgaard, B., Draborg, E., Vestergaard, E., Odgaard, E., Jensen, D. C., & Sørensen, J. (2013). Interprofessional clinical training improves self-efficacy of health care students. *Medical Teacher, 35*(6), e1235-e1242. <http://dx.doi.org/10.3109/0142159X.2012.746452>
- Olson, R., & Bialocerkowski, A. (2014). Interprofessional education in allied health: A systematic review. *Medical Education, 48*(3), 236-246. <http://dx.doi.org/10.1111/medu.12290>
- Palombaro, K. M., Dole, R. L., & Lattanzi, J. B. (2011). A case report of a student-led pro bono clinic: A proposed model for meeting student and community needs in a sustainable manner. *Journal of the American Physical Therapy Association, 91*(11), 1627-1635. <http://dx.doi.org/10.2522/ptj.20100437>
- Pammett, R., Landry, E., Weidmann, A. E., & Jorgenson, D. (2015). Interprofessional student-run primary care health care clinics: Educational experiences for pharmacy students. *Canadian Pharmacists Journal, 148*(3), 125-128. <http://dx.doi.org/10.1177/1715163515578123>
- Reeves, S., Freeth, D., McCrorie, P., & Perry, D. (2002). 'It teaches you what to expect in future...': Interprofessional learning on a training ward for medical, nursing, occupational therapy and physiotherapy students. *Medical Education, 36*(4), 337-344. <http://dx.doi.org/10.1046/j.1365-2923.2002.01169.x>
- Roberts, P., Farmer, M. E., Lamb, A. J., Muir, S., & Siebert, C. (2014). The role of occupational therapy in primary care. *American Journal of Occupational Therapy, 68*(Suppl. 3), S25-S33. <http://dx.doi.org/10.5014/ajot.2014.686S06>
- Schutte, T., Tichelaar, J., Dekker, R. S., van Agtmael, M. A., de Vries, T. P. G. M., & Richir, M. (2015). Learning in student-run clinics: A systematic review. *Medical Education, 49*(3), 249-263. <http://dx.doi.org/10.1111/medu.12625>
- Sief, G., Coker-Bolt, P., Kraft, S., Gonsalves, W., Simpson, K., & Johnson, E. (2014). The development of clinical reasoning and interprofessional behaviors: Service-learning at a student run free clinic. *Journal of Interprofessional Care, 28*(6), 559-564. <http://dx.doi.org/10.3109/13561820.2014.921899>
- Simpson, S. A., & Long, J. A. (2007). Medical student-run health clinics: Important contributors to patient care and medical education. *Journal of General Internal Medicine, 22*(3), 352-356. <http://dx.doi.org/10.1007/s11606-006-0073-4>
- Smith, S. D., Yoon, R., Johnson, M. L., Natarajan, L., & Beck, E. (2014). The effect of involvement in a student-run free clinic project on attitudes toward the underserved and interest in primary care. *Journal of Health Care for the Poor and Underserved, 25*(2), 877-889. <http://doi.org/10.1353/hpu.2014.0083>
- Smith, S., Thomas, R., Cruz, M., Griggs, R., Moscato, B., & Ferrara, A. (2014). Presence and characteristics of student-run free clinics in medical schools. *The Journal of the American Medical Association, 312*(22), 2407-2410. <http://doi.org/10.1001/jama.2014.16066>
- Society of Student-Run Free Clinics. (2016). *What is a student-run free clinic?* Retrieved from www.studentrunfreeclinics.org
- Substance Abuse and Mental Health Services Administration. (2012). *Understanding health reform: Integrated care and why you should care*. Retrieved from <http://www.integration.samhsa.gov/integrated-care-models/2012-07-23UnderstandingHealthReform.pdf>
- World Health Organization. (2010). *Framework for action on interprofessional education & collaborative practice*. Retrieved from http://apps.who.int/iris/bitstream/10665/70185/1/WHO_HRH_HPN_10.3_eng.pdf?ua=1