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Is Stability Sufficient? Challenging the Status Quo via Needs Assessment in a 22-Year-Old Student-Run Free Clinic

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Abstract

Background: An increase in the utilization of student-run free clinics (SRFCs) as an adjunct to early healthcare student training begs the question of whether SRFCs are meeting expectations of stakeholders, particularly students, faculty, and staff. The objective of our study was to perform a needs assessment of clinic stakeholders to assess whether their expectations regarding clinic purpose and performance were being met.
Methods: Clinical leadership at an interdisciplinary SRFC affiliated with an academic medical center in Omaha, Nebraska sent a needs assessment survey to all students, faculty, and staff at the affiliated academic medical center. The responses were coded and analyzed via descriptive statistics.
Results: The survey demonstrated that the clinics met key stakeholder priorities in patient care and education and identified some anticipated areas for improvement. It also illuminated several previously unknown and unmet stakeholder expectations, including needs for higher visibility, desire for expanded volunteer roles, discovery of an untapped pool of potential volunteers, and desire for significant improvements to the interdisciplinary process.
Conclusions: The needs assessment survey identified specific areas of unmet needs that have implications for the ability of the SRFC to operate and serve patients with quality and efficiency.

Background

Over the last several decades, there has been an increase in the utilization of student-run free clinics (SRFCs) to foster an interprofessional, experiential learning environment for healthcare students early in their training.[1,2] In theory, these clinics provide students an early opportunity to practice basic diagnostic and physical examination skills while learning to work in a team setting to deliver high-quality care.[3] Students gain valuable exposure to difficulties and nuances of caring for underserved patients, in addition to a more holistic understanding of community resources that can support the care of these patients.[3] SRFCs also provide students with an opportunity to learn principles of clinic and systems management through the management of clinic flow, clinic design and modification, financial management, outreach, quality control, and student education.[1] These experiences train students to lead teams and manage and implement a healthcare delivery system, skills often underdeveloped within a traditional clinical curriculum.[1]

Despite widespread utilization of SRFCs to support and extend medical curricula, there is a lack of research about whether clinics are meeting student and faculty expectations, objectives, and organizational missions. One survey of medical school students and faculty found that students and faculty desired a SRFC and felt it would benefit their education[4] but provided little guidance on what their explicit expectations were from such a clinic. Another study specifically evaluated student perceptions of interpersonal collaborations within a SRFC.[5] This study found that students who participated at the SRFC reported more experiences in working within an interprofessional team and greater comfort with caring for patients in a team setting. The medical stu-

dents in this study reported increased comfort with patient education, while pharmacy students stated further problem-solving skills should be taught within their discipline. However, needs assessments of this type are uncommon, with little evidence verifying SRFCs are meeting student and faculty expectations.

The University of Nebraska Medical Center (UNMC) is home to its SRFC, which has been in practice since 1997. The Student Health Alliance Reaching Indigent Needy Groups (SHARING) clinics are interprofessional, student-run free medical clinics for low-income, uninsured adults in Omaha, Nebraska and have the dual missions of empowering patients by providing quality, low-cost healthcare and human services, and instilling service values and compassion in health professions students. Several interdisciplinary clinics are hosted under the SHARING umbrella, including SHARING (general medical care), RESPECT (sexual health), GOODLIFE (diabetic care), VISION (vision clinic), and a SHARING dental clinic through the College of Dentistry. Clinics are governed by faculty and student committees and operate through volunteerism and donations. The clinics provide acute and chronic medical care, preventive services, physical therapy, dietetics and social work consultation, and psychiatric services. Also, SHARING hosts several community health outreach programs. With recent changes to the medical student curriculum, changes to clinic location, and coverage expansion with the Patient Protection and Affordable Care Act, as well as Nebraska Medicaid expansion, the SHARING clinics are embarking on a journey of change and uncertainty. This presents an opportunity for the clinics to assess if clinic activities align with expectations of participating students and faculty, as we serve patients entirely through the generosity of volunteers.

To this end, we sought to gather information via a needs assessment on what various UNMC stakeholders (e.g., students, faculty, and leadership) felt was the ultimate role of our SRFC. By understanding common barriers and facilitators of successful and meaningful involvement with the SRFC, we can increase the quantity and quality of experiences current and future clinicians have with the SRFC and better meet the needs of the multiple disciplines participating in the clinic.

Methods

An electronic survey, consisting of both multiple choice and free-response questions, was distributed via SurveyMonkey (SurveyMonkey Inc., San Mateo, California) by email to all faculty, students, and staff associated with UNMC to evaluate if the SHARING clinics were meeting the expectations of students and faculty with regard to education and patient care (Online Appendix 1). The survey was open for six weeks, and three requests to complete the survey were sent at two-week intervals. Free-response results were compiled, reviewed, and subsequently coded and binned by two researchers to identify major themes arising in each question. Identified themes were then discussed and endorsed by all researchers, with descriptive statistics performed on the frequency of thematic responses using Microsoft Excel version 16.43. For multiple choice questions, descriptive statistics were performed and are reported herein (Online Appendix 2). This study was approved by the UNMC Institutional Review Board committee.

Results

A total of 610 individuals responded to the survey, a response rate of approximately 11%. The survey collected organizational role, college affiliation, and volunteer status. Data were subsequently broken down into staff, student, faculty, and university leadership counts (Table 1).

Only 43.1% of respondents had volunteered with a SHARING initiative (Online Appendix 2). The top reasons reported for volunteering were helping the underserved (72.6%), practicing clinical skills (56.7%), and a desire to volunteer in general (56.7%). The most cited reason among the 56.9% of respondents who had not volunteered was not knowing about the clinics (59.1%). Similar responses were found for those providing additional thoughts on SHARING in a concluding free-response question; of the 109 respondents, 8.3% answering this optional question did not know about the clinics, while 11% said stakeholders (patients, faculty, and/or students) needed more information about the clinics.

When compared to other factors, the majority of barriers to volunteering at SHARING were re-

Table 1. Demographics of survey respondents

Characteristic	N=610* (%)
Role	
Faculty	342 (56.1)
Student	262 (43.0)
Staff	33 (5.4)
Leadership	14 (2.3)
Other	2 (0.4)
College	
Medicine	295 (48.4)
Nursing	69 (11.3)
Pharmacy	51 (8.4)
Other	50 (8.2)
Public health	46 (7.5)
Dentistry	35 (5.7)
Graduate studies	32 (5.2)
Group (N=677)	
Medicine faculty	204 (30.1)
Medical students	85 (12.6)
Pharmacy students	43 (6.4)
Public health students	37 (5.5)
Nursing students	36 (5.3)
Nursing faculty	33 (4.9)
Dentistry faculty	32 (4.7)
Physician assistant students	25 (3.7)
Graduate studies students	25 (3.7)

Table 2. Responses to "What do sharing programs and/or services do well that should be continued?"

Task	N=558* (%)
Patient care	170 (30.5)
Student experience	142 (25.4)
Interprofessionalism	102 (18.3)
Clinic process/services	44 (7.9)
Don't know	34 (6.1)
Community engagement	28 (5.0)
Everything	20 (3.6)
Education	7 (2.5)
Student leadership	2 (0.7)

**Tables 1-5: Number of responses may not summate to total N given that respondents were able to select as many options as applicable or none.*

Table 3. Responses to "What gaps exist in SHARING programs and/or services that should be addressed?"

Task	N=254* (%)
Efficiency/organization	54 (21.3)
Low patient volume	32 (12.6)
Additional services needed	31 (12.2)
Patient interaction	30 (11.8)
Interprofessionalism	28 (11.0)
Don't know	19 (7.5)
Nothing	18 (7.1)
Clinic location	14 (5.5)
Other	11 (4.3)
Education provision	10 (3.9)
Clinic mission lacking	7 (2.8)

Table 4. Responses to "What should be the primary focus of care provided by SHARING clinics?"

Primary focus	N=146* (%)
Accessibility	32 (21.9)
Affordability	21 (14.4)
Safety-net	16 (11.0)
Preventative medicine	15 (10.3)
Quality	14 (9.6)
Primary care	12 (8.2)
Bridge to UNMC services	9 (6.2)
Acute care	8 (5.5)
Chronic care	6 (4.1)
Health education	5 (3.4)
Social services	4 (2.7)
Comprehensive services	2 (1.4)
Cultural competency	1 (0.7)
High patient volume	1 (0.7)

UNMC: University of Nebraska Medical Center.

Table 5. Responses to "Who are the SHARING clinics for?"

Primary beneficiary	N=471* (%)
Patients	250 (53.1)
Students	91 (19.3)
Don't know	49 (10.4)
Community	43 (9.1)
Healthcare system	23 (4.9)
Other	15 (3.2)

lated to SHARING organizational factors (41.2%) rather than personal factors or deficits of clinical knowledge or skills. Specific barriers included no suitable role at the clinics (27.9%) and not knowing how to get involved (11.8%), or not yet having tried to get involved (10.3%). Most who saw no suitable role worked in administrative positions. The second most-cited reason for not volunteering was personal reasons (38.2%). Most who cited this reason were either too busy (17.4%) or not in Omaha (13.2%); while UNMC is located in Omaha, there are satellite campuses across Nebraska that provide didactic and clinical education for health professional students.

Successes of SHARING Programs/Services

When considering all responses (Table 2), the top positive aspects of SHARING clinics were patient care (30.5%), student experience (25.4%), and interprofessional (18.3%). Within patient care, participants focused on access to comprehensive, continuous, quality care provision (19.4%), including vital services (7.2%) at low or no cost to patients (3.9%). Within student experience, respondents mentioned early exposure to aspects of patient care (20.1%), especially direct patient care (9.3%). Positive ratings of interprofessionalism were mostly due to the facilitation and teaching of interdisciplinary teamwork (12.2%).

Gaps in SHARING Programs/Services

Stakeholders' priorities for improvement (Table 3) were generally addressing clinics' efficiency and organization. Specific efficiency concerns were detailed most by student respondents and included slow patient care workflow (7.9%), and allowing too many students per clinic patient (3.5%). Although collected in a separate question, concerns over low patient volumes (12.6%) and long patient interaction times or confusing patient interaction processes (11.8%) could reasonably be grouped into this category (Table 3). Faculty respondents were most concerned about the expansion of services (12.2%), in particular, more comprehensive social work resources for patients.

Focus and Beneficiaries of SHARING Clinics

Overwhelmingly, stakeholders answered that SHARING's primary role is to serve patients, specifically anyone generally in need of SHARING's medical services, without any specific eligibility requirements (70%). In free-responses detailing the primary goal of care (Online Appendix 2), access and affordability of care were listed as priority parts of service provision (22% and 14%, respectively). These results corroborated previous questions about what services SHARING should provide (Table 4) and who SHARING should serve (Table 5). Stakeholders believed SHARING should provide primarily preventive outreach (27.0%) and chronic disease management (21.6%). When asked about their profession's ideal role in SHARING, all colleges' respondents believed their primary role was providing patient care (25.0%) and educating students (14.0%). This is aligned with how the clinics are currently organized and managed. However, of clinical disciplines, only the College of Medicine (COM) mentioned clinical or administrative leadership as their discipline's primary role; COM was often seen as overbearing in this regard. When considering all disciplines, the College of Public Health (COPH) participants also mentioned an interest in administrative leadership but did not see a clear role for themselves at present (16% and 24%, respectively).

Discussion

We initiated this project to assess if our organization's mission and performance aligned with the priorities of stakeholders in the UNMC community. Though we expected to be meeting stakeholder expectations as a mature SRFC, this was not necessarily the case. Overall, our findings confirmed previously known features of the clinics that were both well-aligned and poorly aligned with stakeholder priorities. Findings also suggested there were issues significant to clinic operations that were not yet known, such as low visibility to potential volunteers and community, and a more diverse volunteer base than the clinics were prepared to accommodate. While we had a mostly accurate prior understanding of SHARING's organizational strengths and weaknesses, we did not predict several findings. Of note, only 43.1% of respondents have volunteered with SHARING, which could be appropriately explained by the diversity of affiliations within the respondent population. Because SHARING is a

health professional clinic and many of the respondents are not in positions that have a volunteering role defined in the clinic, there was lower than expected volunteer rate. Importantly, of those having not volunteered at the free clinics, 59.1% did not know the clinics existed. As a clinic with a 22-year history that has been very involved locally and even nationally, this result was unexpected. While interprofessionalism was mentioned, the primary emphasis of SHARING was patient care. Notably, we found patients were listed as being the primary beneficiary of the clinics, while concerns about efficiency and low patient volume were additional issues. These findings have serious implications relating to our volunteer base, growth potential, and ability to reach patients.

Given the lack of research into SRFC alignment of operations with stakeholder expectations, our needs assessment findings advance knowledge of how well SRFCs are performing in this dimension. As expected, our strengths are early student exposure to clinical care and providing access to care for underserved populations. Thus, we are meeting two major stakeholder and mission goals: to educate students and care for the community. However, the organization will need to adapt to maintain these goals, as much of SHARING's patient base will gain insurance coverage under the October 2020 Nebraska Medicaid expansion, forcing the clinics to reconsider target patient populations. Lack of focus on a particular patient group or service suggests that stakeholders support widening the current patient base. Furthermore, a follow-up survey is underway to assess patient perspectives on aspects of service provision at SHARING clinics. We hope to incorporate patient voices in future investigation of this topic for a more complete picture of SRFC performance.

A consistently identified area for improvement was streamlining patient care workflows. Providing care in a clinic built for traditional care models, a constant student leadership turnover, inconsistent preceptor recruitment, and a steady stream of new student volunteers result in workflow inefficiencies. The clinic environment has a known impact on teamwork and communication in patient care,[6] but as a SRFC dependent on existing university space and resources, our location is difficult to optimize. However, there are many organizational and administrative tools available to assess clinical workflow processes and make improvements in efficiency and quality to meet patient care and educational goals.

An unexpected finding is a discrepancy in interpretation of interdisciplinary teamwork between our organization and stakeholders. First, results show an untapped pool of administrative volunteers. SHARING brands itself on being interdisciplinary, but it does not have defined opportunities for non-clinical volunteers, with such responsibilities falling to the student and faculty committees, both comprised of primarily clinical members. To our knowledge there is no specific data on how administrative volunteers are used in SRFCs, but we propose that developing non-clinical volunteering roles may relieve pressure on student and faculty leadership in planning-oriented roles and on clinic workflow by establishing consistent administrative structure. In addition, public health respondents see a significant role for themselves in clinic administration and evaluation. This suggests a potential partnership with COPH faculty, students, and staff on process improvement, social service provision, and community engagement, which would allow SHARING to focus on clinical priorities. Finally, another interdisciplinary concern is the perception that COM dominates student and faculty leadership roles, patient care, and educational discussions. A lack of inclusivity in collaboration and openness in communication can reduce team function and pose risk to patients.[7] As described in Murphy et al., prior leadership experiences are associated with reported leadership self-efficacy, yet different academic programs (medicine, dentistry, pharmacy, etc.) did not show differences across self-perceived of ability to lead.[8] In our survey results, we found medical faculty and students stated leading the team was their role, whereas no other discipline reported this as their role. As such, we speculate that due to the traditional hierarchical approach of team-based medicine, health professions students believe that medical faculty and students have a prima facie role in leading. Discerning the nuance of this structural bias and desire for leadership roles within medicine and other disciplines were distinctly outside of the scope of this study. In any

case, this perception is detrimental; investing in and ensuring quality of structured interprofessional interactions such as rounds/patient care, checklists, and team meetings may improve interprofessional interaction.[9,10] Most importantly, as evidenced by patient care being listed as the primary role of SHARING—as well as patients being the primary beneficiary—successful interprofessional interactions can have large effects on clinical outcomes.[11-13]

Another unexpected needs assessment finding as an established clinic is low organizational visibility among potential student and faculty volunteers. We were unaware that lack of visibility regarding our clinics and mission was a significant barrier to volunteerism. Low visibility may also have impacted the efficacy of our survey as a data collection tool; it is difficult to solicit opinions on an unknown organization. While our assessment did not seek patient feedback, we suspect clinic visibility might also be low among both potential patients and the potential physician referral base, contributing to low patient volumes. We are currently conducting a study on patients seen in the emergency department who are uninsured and do not have an identified primary care physician to better evaluate patient awareness of our clinic.

Our clinic's mix of expected and unexpected findings regarding stakeholder expectations challenge the common SRFC assumption that stakeholder needs are met by simply involving students in clinical and operational responsibilities early on. While we were already aware of some organizational strengths and weaknesses, we also discovered major areas where stakeholder expectations are unmet. These include previously unknown opportunities for interdisciplinary involvement and organizational growth that, if addressed, may improve indolent organizational issues such as low patient volumes and limited institutional memory.

Our work suggests that assuming that an operational SRFC is an optimal SRFC can seriously limit volunteer recruiting and ultimately, an organization's service to students, faculty, and as a consequence, patients. We suspect these limitations may be evident especially among clinics that have existed for many years and have achieved stability. While mature clinics likely have developed the ability over time to improve upon their initial offerings to stakeholders, they may not capitalize upon available resources and capabilities to do so without facing a large amount of bureaucratic impediments, as changes to an established clinic might result in specific process complaints or concerns threatening clinic viability. Systematic exploration of this additional potential in mature organizations may enable effective change and subsequent benefits from improvements in processes, activities, and resource use. A needs assessment is a feasible and effective way of gathering information on needs and opportunities for a free clinic with the goal of making improvements[13]. It is the authors' hope that by bringing this to the attention of SRFCs, especially those with history in their communities, clinics will consider conducting such needs assessments to examine opportunities to go above and beyond what the status quo can offer to all involved at successfully established SRFCs.

This work is not without limitations. While we believe this survey and its results provide a meaningful framework and potential approach for other SRFCs to conduct a stakeholder's survey, the generalizability of the findings are low. Demographics of the institution and surrounding community can vastly affect SRFC mission and function, with each having unique characteristics. Importantly, our choice to utilize free-response questions allowed respondents to more uniquely express their opinions and capture greater breadth of data.

Conclusions

As with much organizational management research in medicine, the question of whether SRFCs are meeting stakeholder expectations is prime for exploration; little is known about SRFC efforts in this area. Our experience suggests SRFCs can benefit from implementing stakeholder feedback mechanisms to assess clinic needs and opportunities. In our case, casting a wide net for feedback via a needs assessment illuminated several unknown stakeholder priorities such as improving interprofessionalism and visibility. These are likely issues in common with many SRFCs and may be keys to sustainability

and achieving service growth. Future areas for study include collecting more data on whether and how SRFCs as a group are meeting stakeholder expectations, and how this is related to SRFC survival and growth. Other areas for exploration include how organizational structure and/or alignment with various other healthcare models (academic medical center, community hospital, etc.) affect stakeholder expectations, as well as examination of which structures are most effective in satisfying stakeholder expectations.

Disclosures

The authors have no conflicts of interest to disclose.

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