

## Capstone for Impact Submission | GY2021

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**Project Title:** Stay Home, Stay Connected: Michigan Medicine Virtual Prenatal Support Group

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**Advisor Names(s):** Dr. Alex Peahl

**If this project can be continued by another UMMS student, please include your contact information or any other details you would like to share here:**

Project to continue under the mentorship of Dr. Samantha Kempner ([skmpner@med.umich.edu](mailto:skmpner@med.umich.edu)) and Dr. Alex Peahl ([alexfric@med.umich.edu](mailto:alexfric@med.umich.edu)), with a student leadership team of M3 students Sangini Tolia, Alana Slavin, and Allison Milen. Ongoing student recruitment will continue under this new leadership team.

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### **Summary (~250-500 words):**

In response to the COVID-19 pandemic, healthcare systems limited non-essential in-person medical services to reallocate resources and reduce infectious spread. Obstetric providers across the country quickly adopted a new prenatal care model including reduced prenatal visit schedules and telemedicine. Simultaneously, many of the ancillary prenatal classes available for patient education on subjects such as breastfeeding, childbirth, and infant care were canceled, in many cases without virtual alternatives. In addition to changes in prenatal care, many pregnant patients faced significant life stressors such as changes in employment, social isolation, financial concerns, and uncertainty about the impact of the pandemic on pregnancy and childbirth. Preliminary surveys of pregnant patients in Michigan Medicine during this time revealed high rates of positive depression and anxiety screens (>40%).

Recognizing that pregnant patients were facing unprecedented stress, the Department of Obstetrics and Gynecology (OB/Gyn) at Michigan Medicine sought to create an additional support system and anticipatory guidance opportunity through a virtual community of pregnant individuals. We created Stay Home, Stay Connected (SHSC), a virtual support group for pregnant and postpartum patients. Participants engaged in weekly small and large group sessions with interdisciplinary prenatal care and mental health providers and students (medical, midwifery, and social work) to discuss various prenatal care topics.

Our initial QI surveys among participants ( $n=61$ ) reported high participant satisfaction overall; over 90% of participants “agreed” or “strongly agreed” that SHSC addressed their patient education needs and helped them feel supported through a community of pregnant individuals. Of the 24 interprofessional students involved in the program, there were significant improvements ( $p < 0.05$ ) in self-reported educational competencies, including: form clinical questions/retrieve evidence, collaborate with interprofessional teams, and recognize urgent/emergent patient care needs. SHSC, which is embedded in the larger prenatal care redesign to connect the medical and non-medical needs in pregnancy while strengthening interprofessional collaborations (OB/GYN, midwifery, social work, psychiatry), is currently being redesigned to become permanently integrated into the prenatal workflow at Michigan Medicine.

## Methodology:

### *Program Structure*

In collaboration with the Department of OB/Gyn, five medical students supported the creation of “Stay Home, Stay Connected” (SHSC). This is a virtual support group program for pregnant and postpartum patients designed to provide supplementary anticipatory guidance and psychosocial support. Participants ( $n=180$ ) were divided into groups of 10-12 patients facilitated by 1-2 interprofessional students (medicine, social work, or midwifery) and one prenatal care provider (OB/Gyn, midwifery, family medicine) who followed the small group through pregnancy. Participants engaged in monthly small groups via Zoom to discuss various prenatal topics (e.g. breastfeeding). In weeks that small groups did not meet, participants attended large group sessions which featured 3 alternating themes (coping skills, wellness, self-care strategies) and were led by social workers, psychiatrists, or community guests. Finally, participants had a private Facebook group facilitated by students to form a virtual community for continued social support.

### *QI Methods*

We administered a participant entry survey to obtain baseline depression and anxiety rates and understand patients’ reasons for joining SHSC. A satisfaction survey was administered one month after program launch. To assess the impact of this program on interprofessional education, we surveyed student participants regarding (1) Prevalence of interprofessional partnership (2) Satisfaction with interprofessional collaboration (5-point Likert Scale, 1= extremely dissatisfied, 5= extremely satisfied); and (3) Self-perceived interprofessional competency (as outlined by AMA) before and after (5-point Likert Scale 1= not confident 5= very confident). Responses were tabulated using descriptive statistics.

## Results:

### *Initial Participant Survey Results*

Our initial QI survey revealed that 75% (122/162) of participants were white, 93% (151/163) were privately insured, and 53% (87/163) were first-time mothers. It also identified a significant need for additional psychosocial support among our participants; about 36% ( $n=61$ ) reported GAD-7 score  $>4$  and 5% ( $n=8$ ) scored positive on PHQ-2. When asked if participants “Felt nervous or stressed”, 77% (125/163) indicated at least “somewhat”. Three key themes of psychosocial needs emerged from iterative thematic coding of their qualitative responses for joining SHSC ( $n=142$ ): (1) **Community:** participants desired a community of pregnant individuals during social distancing to share pregnancy experiences and receive social support, (2) **Mental health support:** participants wanted mental health support to help cope with their stress in the setting of social isolation, and (3) **Anticipatory guidance:** participants sought additional education in the setting of cancelled prenatal classes, particularly for first-time mothers.

### *Monthly Participant Satisfaction Survey Results*

Follow-up surveys after two small group sessions ( $n=61$ ) reported high participant satisfaction overall; over 90% of patients “agreed” or “strongly agreed” that SHSC addressed their anticipatory guidance needs and helped them feel supported through a group of pregnant individuals (57/61 and 60/61, respectively). Thematic analysis of qualitative responses about the small groups ( $n=59$ ) reveals that small group sessions effectively created a community where participants felt comfortable sharing pregnancy experiences.

Additionally, they strongly valued direct interactions with prenatal care providers in small groups for further patient education. Based on survey feedback for more structured small groups and greater participant engagement, we implemented a more guided discussion format by distributing pre-determined discussion prompts and patient resources prior to sessions. Responses for large groups were also positive with 98% (67/68) indicating that large groups are “very helpful”, “somewhat helpful” or “slightly helpful”. Qualitative responses ( $n=19$ ) indicate that these sessions provided valuable mental health support by offering a variety of stress coping strategies from behavioral health experts.

### *Student Facilitator QI Survey Results*

Of the 24 student participants, 20 (83.3%) responded [medical: 9/20, 45%; nurse-midwifery: 4/20, 20%; social work: 7/20, 35%]. Most respondents (12/20, 60%) reported interprofessional partnership with a student from a different program, and 35% (7/20) reported partnership with an interprofessional provider. Students reported high satisfaction with interprofessional partnership (4.0, SD 0.9). There were significant improvements in self-reported competencies, including collaboration with interprofessional healthcare providers (before: 4.0, after: 4.5,  $p<0.05$ ). Three key themes of program impact emerged: (1) Students appreciated creating meaningful relationships with patients; (2) Students gained important clinical perspectives and leadership skills through interdisciplinary partnership; and (3) Students were empowered by supporting patients during a vulnerable time.

### **Conclusion (~250-500 words):**

#### *SHSC in the Prenatal Care & Health Systems*

SHSC began as a substitute for cancelled prenatal services in a pandemic, but it will remain a permanent addition to prenatal care which adds a new holistic dimension to our prenatal care system by providing supplementary education and psychosocial support throughout pregnancy. Additionally, the virtual format of SHSC will lower the barriers for accessing prenatal support groups, including lack of transportation, childcare, or group session costs. We prepared reduced-cost internet options for patients with financial difficulty in accessing internet, as well as a formalized referral process to social work for anyone with material needs. Finally, SHSC effectively translated pre-existing prenatal support group services into a virtual platform by incorporating widely available technology (Zoom, Facebook) into greater prenatal care.

#### *Future Directions of SHSC*

Initial data from our novel online pregnancy support group in a population with high positive depression and anxiety screening rates are promising. We are in the process of coordinating a post-participation QI survey for postpartum participants who have completed the 10-month program. Future research directions include surveying the participating prenatal care providers, as well as doing an in-depth focus interview for previous participants for a more detailed feedback. We are currently working with the Department of OB/Gyn to revamp the program to better fit the permanent prenatal workflow. We are working on transitioning from a 5-student leadership team to a more sustainable leadership structure that is integrated with the administrative support from the Department of OB/Gyn.

#### *SHSC and Medical Education*

From a medical education perspective, SHSC provides a unique avenue for interprofessional collaboration among healthcare providers, a core competency identified by AMA. Physicians, midwives, social workers, psychiatrists, and students of medicine, social work, and midwifery collaborate weekly to facilitate discussion groups. Finally, SHSC offers unparalleled longitudinal patient care experiences for learners by engaging with their small groups throughout the pregnancy and postpartum course. It allowed students to contribute to the

healthcare system during COVID-19, while providing them with patient experiences, interdisciplinary education, and clinical competencies. As telemedicine continues beyond the pandemic, virtual service learning is a promising tool to improve IPE competencies and provide unique approaches to interdisciplinary teamwork.

### **Reflection/Impact Statement:**

As aspiring OB/GYNs, SHSC was pivotal in fostering a new vision of comprehensive, interprofessional, and patient-centered pregnancy care. While our survey data indicates that pregnant patients are already benefitting in multiple ways from our programming, we as students also gained important skills and experiences, and hope to continue that legacy through our interprofessional structure. We started envisioning what it would be like to train alongside our social work colleagues to learn the subtle yet crucial art of communication surrounding mental health in pregnancy. We imagine a rich learning environment with midwifery colleagues to witness the holistic dimensions of pregnancy. Most profoundly, SHSC has taught us the power of a team. Our team of five brilliant medical student co-leaders forged precious connections by pursuing a common vision and leaning on one another for support, while an excellent team of prenatal care providers guided us on program development and execution. Their sacrifice and advocacy demonstrates their deep commitment to our patients' well-being, and sets an example for our not-so-distant future as providers. The rapid implementation of Stay Home, Stay Connected represents beautiful synchrony of healthcare providers striving toward high quality care in the midst of an unprecedented challenge to the healthcare systems, and the momentum we have already witnessed towards permanently integrating the program into prenatal care demonstrates an impact even greater than we could have imagined.