

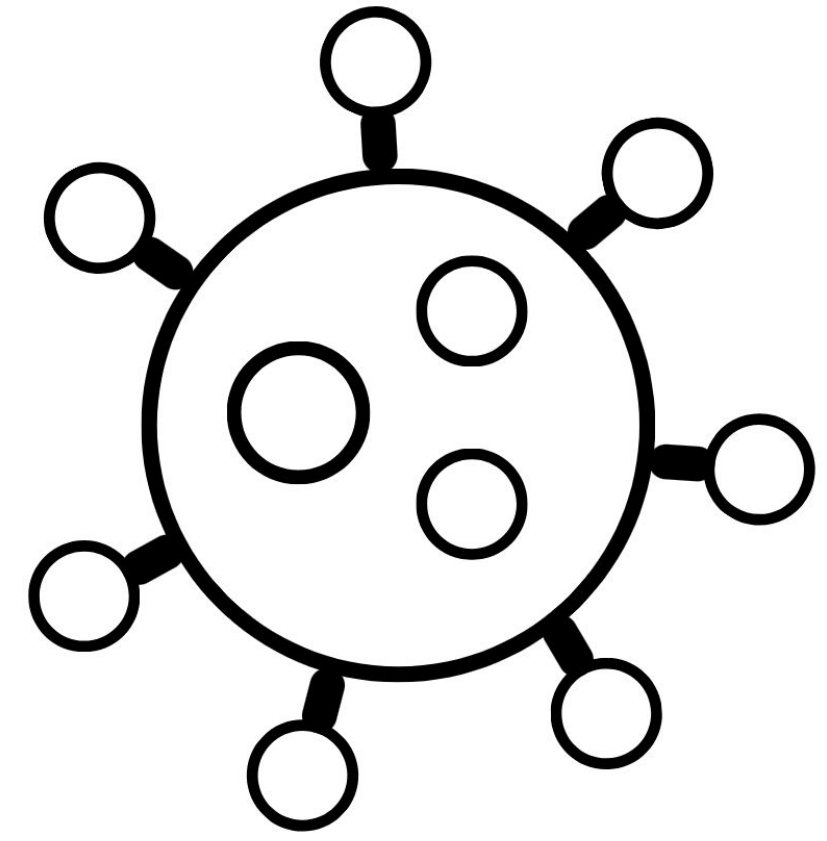


KEY MESSAGE

More than 75% of patient respondents reported they were satisfied with the new prenatal care model. Factors associated with a positive experience included ease, convenience, and improved access. Factors associated with a negative experience included access inequities, virtual visit quality, and safety without home devices.

Background

COVID-19 and Prenatal Care



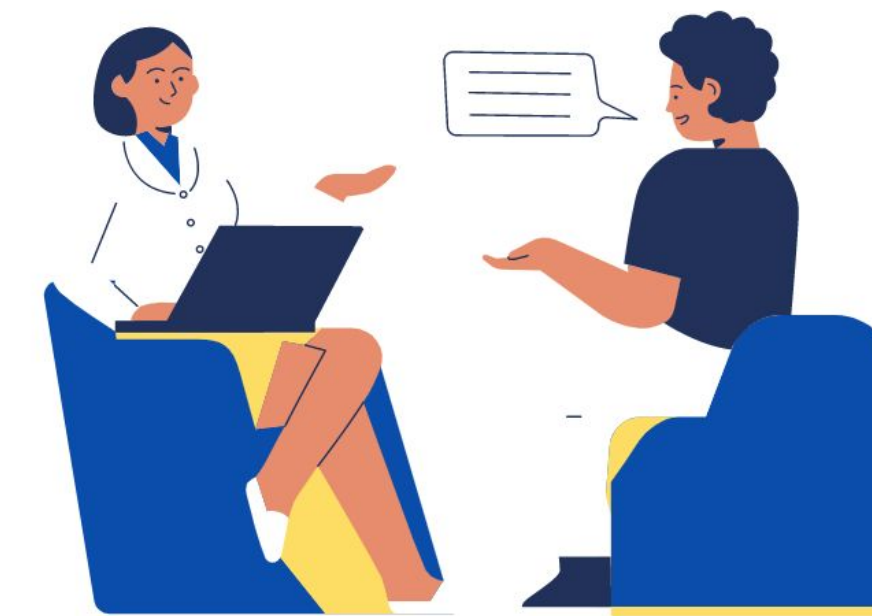
- The COVID-19 pandemic required immediate changes to prenatal care in March 2020
- Minimizing contact between providers and patients was necessary for the safety of everyone

How to Change Prenatal Care

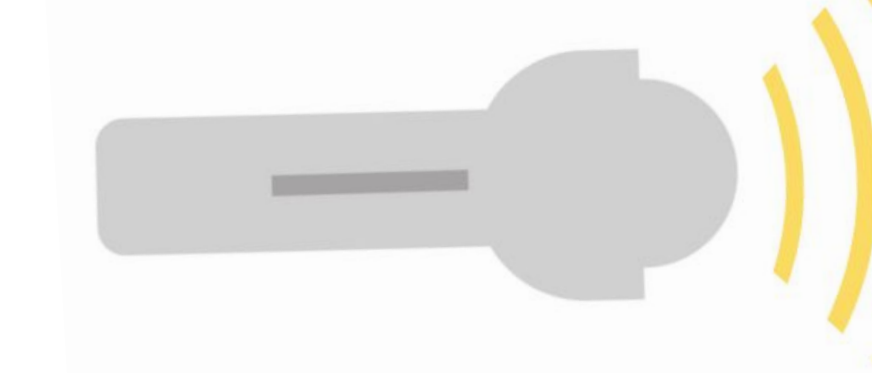
- Randomized controlled trials document that a reduced frequency of scheduled prenatal visits is safe and effective but lack real-world data¹
- 12-14 prenatal visits were in person before the pandemic
- UMMS implemented a 4-1-4 prenatal visit model strategy due to the pandemic
- There is a need to understand prenatal care and perspectives of patients on these changes in a real-world setting

4-1-4 Prenatal Visit Strategy

4 in-person appointments



1 fetal anatomy ultrasound



4 virtual appointments



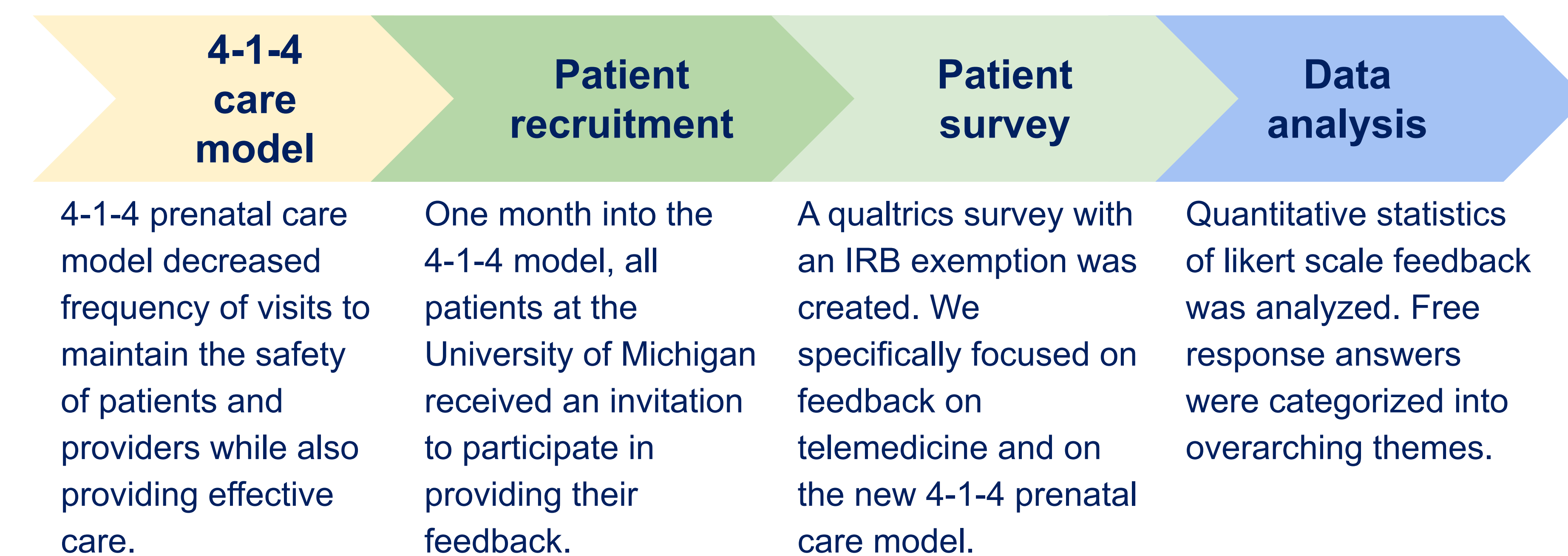
Objective:

- Collect and evaluate patient perspectives on their care after initial implementation of new 4-1-4 prenatal care model due to the COVID-19 pandemic.

Methods

Study Design

This was a retrospective evaluation of a suburban academic institution patient population (University of Michigan Medical System)². The process is summarized below:



Results

Of 1690 eligible patients, 253 (15.0%) responded to the survey. Patient demographics showed a mean age of 31.2 years (SD 6.7), predominantly white (180/253, 71.1%), privately insured (199/253, 78.7%), and multiparous (133/253, 52.6%). Written feedback themes are summarized in Table 1.

Table 1: Patient Perspectives on New Prenatal Care Model

Category	Positive Themes	Negative Themes
Access to Care	<p>New models decrease barriers to care like employment</p> <p><i>"I have a busy work schedule and childcare, so the flexibility is actually really nice for me."</i></p> <p>New models reduce travel time and inefficiencies</p> <p><i>"If you have a pregnancy with no issue the model offers care but less time with travel and waiting in the office."</i></p>	<p>Barriers may disproportionately affect vulnerable patients</p> <p><i>"Many people may not be able to afford monitoring devices to have at home"</i></p> <p><i>"I have access to home measurement devices but what about patients that don't? And how reliable are home devices?"</i></p>
Quality and Safety	<p>New schedules match care to patient's needs</p> <p><i>"Cuts down on transportation time and time off work; I am able to get all my questions answered by the doctor like I would in person"</i></p> <p>New models allowed for safety during the pandemic</p> <p><i>"I like not having to go to the office during COVID-19 and maintaining safety measures in my own home"</i></p>	<p>Routine measurements are crucial for perceived safety</p> <p><i>"It's my first pregnancy and I would feel more reassured if I was able to go to the office for appointments, get my BP and weight measured, make sure they can still hear a fetal heartbeat, etc"</i></p> <p>Concern for missing something</p> <p><i>"Things are going to get missed. It's hard to talk to the doctor on the phone, because they don't let you talk"</i></p>
Patient Satisfaction	<p>Virtual visits make space for counseling and communication</p> <p><i>"Virtual appointments are still nice check-ups with doctors and give you an opportunity to express any concerns."</i></p> <p>Virtual care is empowering for patients</p> <p><i>"I do find it empowering to seek out the information being sent to me via MyChart... I can consume information in regards to my pregnancy, labor and delivery at my own pace and also can refer back to it, versus relying solely on the in-person visits."</i></p>	<p>Defining expectations is crucial</p> <p><i>"Having a plan prior to the appointment of things to think about and possible questions to ask"</i></p> <p>Relationships are key for virtual visits</p> <p><i>"From my last virtual visit I don't feel like I got asked questions or had the doctors full attention."</i></p> <p>Lack of connection can be a driver of lower satisfaction</p> <p><i>"Less personal, quicker, seems more like a quick check in and not easy to learn what to do, what to expect etc."</i></p> <p>First-time moms are less comfortable with new models</p> <p><i>"For a first time mom, being pregnant and giving birth is anxiety inducing, add a pandemic and cut in in-person prenatal appts and it is overwhelming"</i></p>

Results Continued

Table 2: Patient Survey Responses on Care Experience

Theme	Question	Patients (n=253)
Access	Virtual Visits improve access to health services.	174 (68.8%)
	It is easy to do virtual visits.	235 (92.9%)
Quality and Safety	I was able to express myself effectively during virtual visits.	213 (84.2%)
	The quality of virtual visits is the same as in-person care.	94 (37.1%)
Patient Satisfaction	I think virtual visits are as safe as in person visits.	164 (64.8%)
	I felt well-prepared to do virtual visits.	231 (91.3%)
	I think virtual visits are a positive change for patients.	154 (60.9%)
	I am satisfied with doing virtual visits.	196 (77.5%)
	After COVID-19, I would like to continue virtual visits.	102 (40.3%)

- Majority of patient respondents reported that virtual visits were associated with high satisfaction, ease of use, safety, improvement in access, and a positive change for patients.
- A minority of patient respondents reported that virtual visits were the same as in person visits. Additionally, a minority reported they would want to continue virtual visits after the COVID-19 pandemic.

Discussion

- This study suggests that the 4-1-4 prenatal care model with reduced frequency of visits and telemedicine visits was associated with positive care experiences for many, but not all, patients.
- Ensuring continuity with providers, availability of home monitoring devices, and setting expectations for each visit are important considerations for further improvement. Changes have been made to improve these themes from this initial feedback.
- Limitations included that this was a single institution with a predominantly white and privately insured, and while this matches previous demographics at this institution, should be further evaluated in other populations to obtain a more representative perspective of different populations. Additionally, this was implemented extremely quickly in March of 2020 when much about COVID-19 was unknown.
- Further study is required to understand the long term outcomes and perspectives after months of this model.

Acknowledgements

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References

¹Butler Tobah, Y. S., LeBlanc, A., Branda, M. E., Inselman, J. W., Morris, M. A., Ridgeway, J. L., Finnie, D. M., Theiler, R., Torbenson, V. E., Brodrick, E. M., Meylor de Mooij, M., Gostout, B., & Famuyide, A. (2019). Randomized comparison of a reduced-visit prenatal care model enhanced with remote monitoring. *American journal of obstetrics and gynecology*, 221(6), 638.e1-638.e8. <https://doi.org/10.1016/j.ajog.2019.06.034>

²Peahl, A. F., Powell, A., Berlin, H., Smith, R. D., Krans, E., Waljee, J., Dalton, V. K., Heisler, M., & Moniz, M. H. (2020). Patient and provider perspectives of a new prenatal care model introduced in response to the coronavirus disease 2019 pandemic. *American journal of obstetrics and gynecology*, S0002-9378(20)31180-7. Advance online publication. <https://doi.org/10.1016/j.ajog.2020.10.008>