

Final Report Individual Project Proposal Reducing the Mortality Rates of African American Women in Childbirth

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1 AREAS OF FOCUS

Unit(s) of Focus: Unit 1 and 3 External Mentors: Tia Pope, Elizabeth Shivers; GT Topic's Primary Area of Focus Domains: Patient Centered Care

2 BACKGROUND AND SIGNIFICANCE

According to Centers for Disease Control and Prevention research, African American women are three to four times more likely to have pregnancy-related deaths compared to white women, CDC, 2019. These findings suggest that the disparity observed in pregnancy-related death for minority women is a complex national problem that needs to be addressed seriously. In past decades, the overall rate of pregnancy-related deaths has kept climbing over in the US, thus making maternal mortality rate in the United States the worst in any industrialized country. Thus, having a way to be able to reduce this maternal mortality with the help of current technology would be a very Significant task that could prevent deaths and reduce the health disparity.

3 PROBLEM

Based on these backgrounds, Our project focuses on problem of how to increase trust of pregnant women from minority group to healthcare system. This comes from the issues of how does parents actually chose on maternity wards. This is due to the fact that some maternity wards might be providing a more emphatetic care to parents coming from minority group. One of the issues I found was a lot of new parents coming from minority groups felt that the hospital didn't respect their wish or doesn't explain cleraly to them about their pregnancy and postpartum situation, Sims, 2020. By having higher trust I hope to increase the compli-ance of the medical procedure. Increase in compliance should be helpful towards having a better health outcome for pregnant African American women.

4 SOLUTION

The project plans to increase trust by having African American women to be able to communicate with people they trust in their own community and communicate with people with medical knowledge in the community to help foster verifiable and trustworthy information. The information deemed important for this projects are the information related to daily task/struggles pregnant women needs to face, the facility/maternity wards needed by the pregnant women, and emotional support from community that understand the feeling of pregnant women coming from the same minority groups.

1. The communication features will be just in time and only shows the latest status (like Slack in early days that deletes messages after a while). The idea is so that each member of the group doesn't have to scroll just like in chat app, but can see what other people are saying in real time.
2. The rating features that I'm planning to do is rating for maternity ward. This is used so that people from a specific minority groups can rate hospital/maternity ward that might be more empathetic to the community. It's close to Yelp, but since the member of each communication channel are from the same minority groups, hopefully this information can be trusted more.
3. The note features is a note to help goes to the daily tasks or to save important messages from the just in time message from others that my app user think is important.

5 COMPLEXITY OR EFFORT

Programming languages/frameworks: HAPI R4 Server, Pusher, JavaScript, Python

Visualization software and/or libraries: CSS & Bootstrap

Hosting or delivery method: Heroku App

5.1 Project Timeline

For timeline to go with each task with as start date and an end date I'm using a Gantt Chart and it can be shown in Fig. 1

CS 6440 Gantt-Chart

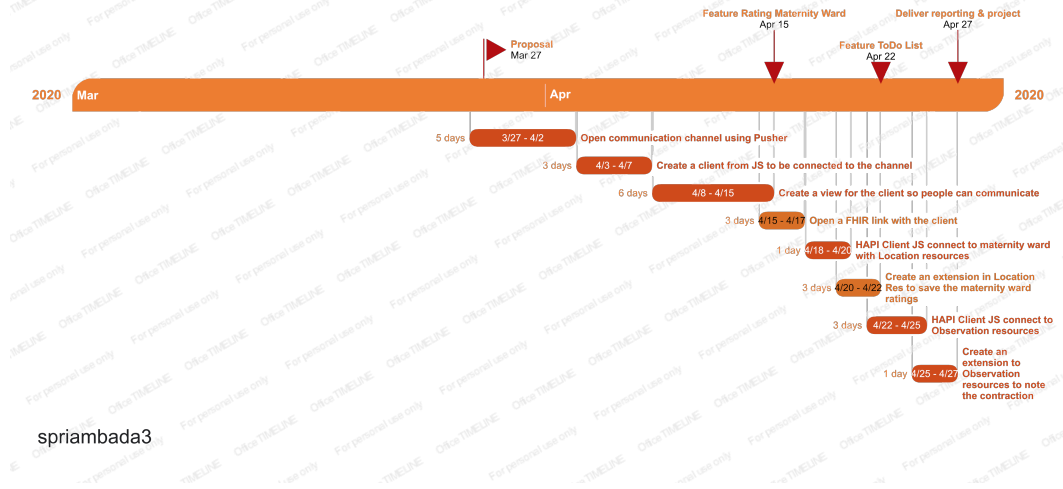


Figure 1—CS6440 Project To-Do-List

6 REFERENCES

- [1] CDC (2019). "Racial and Ethnic Disparities Continue in Pregnancy-Related Deaths". In: URL: <https://www.cdc.gov/media/releases/2019/p0905-racial-ethnic-disparities-pregnancy-deaths.html>.
- [2] Sims, Megan (2020). "Birth without bias: This health app helps Black women get safe maternity care". In: URL: <https://www.yahoo.com/lifestyle/birth-black-women-pregnancy-app-212556959.html>.