Ramadan Dietary Order Quality Improvement Initiative

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Background

Islam is the world’s second-largest religious tradition, with approximately 3.45 million members in the United States. New York State has the third highest Muslim population in the country, with an estimated 20,000 to 25,000 Muslims residing in the Greater Rochester area.

During the month of Ramadan, Muslims perform daily fasting from sunrise to sunset. This poses a challenge for patients who are hospitalized during this time.

The University of Rochester Medical Center (URMC) meal ordering system currently does not accommodate access to adequate nutrition for Muslim patients who observe Ramadan. The goal of this project is to address this care gap.

What is Ramadan?

Islam is the religion practiced by Muslims. Ramadan is a holy month observed by Muslims annually. It is based on the lunar calendar, therefore dates vary from year to year. Ramadan marks the time when the first revelation of the Quran, the holy text of Islam, was revealed to the final prophet within Islam, Muhammad. Muslims use this time to focus on faith through self-reflection with daily fasting from dawn until sunset.

Fasting during Ramadan is also known as "صيام" (pronounced si-yam) which is encompassed within the 5 pillars that Muslims strive to achieve during their lives (Figure 1). The obligation of fasting is limited to those who are physically able, with exemptions including critical illness, age, and travel.

![Figure 1. The Five Pillars of Islam](image)

Objectives

- Implement a meal service workflow that provides hospitalized patients who observe Ramadan the option of fasting during daytime hours with flexible access to additional calorie-enriched meals and fluids overnight, during non-fasting hours.
- Execute this initiative across select URMC sites: Strong Memorial Hospital, Golisano Children’s Hospital, and Highland Hospital. Admitted patients aged 7 and older were eligible for participation.
- Foster a more inclusive healthcare system and increased trust with our patients through understanding their social and spiritual needs.

Methods

1. A multidisciplinary evaluation was performed of various clinical workflows and administrative resources within the nutrition and food services departments across URMC.
2. A Ramadan dietary order set was programmed into EPIC (Figure 2).
3. To enhance awareness, multiple educational materials, presentations, and email campaigns were created for healthcare workers, and ancillary staff prior to the QI initiative rollout (Figure 3).
4. From April 21st, 2022 to May 21st, 2022, patient menu assistants, bedside nurses, and physicians screened patients across participating sites to identify potential participants.
5. Providers were then directed to place the the Ramadan dietary order within the EMR, if deemed appropriate and medically safe to do so.
6. Participating patients were offered meals (with hot and cold food options) during non-fasting hours.
7. Participation rates and provider feedback was obtained retrospectively.

![Figure 2. Schematic depiction of the Ramadan meal service order set within EPIC.](image)

Results

During the study period, there were 3 requests for Ramadan meal accommodations. Participants consisted of 2 adults (one male and one female) as well as one pediatric male patient.

For the adult patients, meal accommodations were requested in the ED and Observation units. The dietary order set was not utilized on the general medicine floors. Participating patients did not have prolonged medical hospitalizations.

Limitations and Feedback

We designed our program to address common QI initiative barriers such as educational awareness and training. After conclusion of the initiative, we obtained feedback from providers via an anonymous survey to understand the low utilization rates. Seven providers reported they did not identify any patients who observed Ramadan.

One provider responded, “patients were surprised that it was offered and really appreciated the option to observe, one patient did and one patient chose not to given his illness.” Another provider responded, “Ordered, but on day 1 of admission (at admitted overnight), they couldn’t get any food because nutrition hadn’t been by to take orders yet”.

One limitation was that patients did not expect accommodations for Ramadan to be offered. A second main limitation was that hospitalized patients are more likely critically ill and are therefore limited in their ability to perform religious fasting.

Conclusion

With this new meal ordering system in place, URMC now has the ability to offer culturally sensitive dietary options to Muslim patients during Ramadan. This initiative demonstrates how multidisciplinary QI collaborations can create institutional change to advocate for patients and improve inpatient experiences within our hospital system.

Future directions for this project could include increased focus in lower acuity settings of the hospital such as ED observation, as well as additional guidance regarding IV fluids and IV medications in the Ramadan order set.

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