


BMJ Open Quality HCAHPS: having constant communication augments hospital and patient satisfaction

Raghu Tiperneni ,¹ Shailee Patel,¹ Farah Heis,¹ Samara Ghali,² Doantrang Du,¹ Wael Ghali,¹ Lauren Russo,¹ Kenneth Granet¹

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ABSTRACT

Background and aim The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) has become a standardised instrument to measure hospitalised patients' perception of care. Our hospital's HCAHPS scores for the 'communication with doctors' domain in medical service were suboptimal when compared with peer groups in December 2020. Our goal was to improve performance in the 'communication with doctors' domain to at least 50% from baseline over a 6-month period.

Intervention Orientation of house staff, nurses and attendings on the Acknowledge, Introduce, Duration, Explain, Thank you (AIDET) approach. Implementation of the afternoon rounds (with documentation) along with the morning rounds to summarise the plan and discuss updates throughout the day to enhance doctor–patient communication.

Data analysis HCAHPS domain scores for 'communication with doctors' with each subcategory were tracked monthly as well as the number of PM notes written as a measure of afternoon rounds.

Results 'Communication with doctor' domain improved from 8% percentile rank in December to as high as 78%. 'Doctors treat you with courtesy/respect' improved from 24% percentile rank in December to as high as 90%. 'Doctors listen carefully to you' improved from 13% percentile rank in December to as high as 88%. 'Doctors explain in a way you understand' improved from 2% percentile rank in December to as high as 72%.

Conclusions Our results suggest that HCAHPS scores in the 'communication with doctors' domain can be improved when employing the AIDET approach with each patient encounter and the addition of afternoon rounds. Sustainability is vital to the success of these interventions, as we observed in our results that there is a direct proportional correlation with the number of afternoon rounds performed with higher scores.

BACKGROUND

Patient-centred medicine is becoming the main focus of many healthcare systems, and the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey is a tool used to track patient satisfaction. The HCAHPS survey is the first national, standardised, publicly reported survey of patient's perspectives of hospital care. It is a survey

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Patient-centred medicine is becoming the main focus of many healthcare systems, and the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) survey is a tool used to track patient satisfaction. Our hospital's HCAHPS scores for the 'communication with doctors' domain in medical service were suboptimal when compared with peer groups in December 2020. So embarked our project with a goal to improve the HCAHPS scores.

WHAT THIS STUDY ADDS

⇒ To our knowledge, the addition of daily afternoon rounds in addition to scripted encounters has not yet been simultaneously applied and studied, making this a unique endeavour. 'Communication with doctors' domain scores improved significantly, reflecting the importance of these interventions in improving physician–patient communication and relationship. Ninety per cent of the residents felt that this approach provided an opportunity for professional growth/learning experience.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ We are currently using the Acknowledge, Introduce, Duration, Explanation approach with each patient encounter and additional afternoon rounds (especially for patients with multiple comorbid conditions, language barriers and limited health literacy) as part of the standard of care.

instrument and data collection methodology for measuring patients' perceptions of their hospital experience. While many hospitals have collected information on patient satisfaction for their own internal use, until HCAHPS there was no national standard for collecting and publicly reporting information about patient experience of care that allowed valid comparisons to be made across hospitals locally, regionally and nationally. The survey itself encompasses several domains which are further partitioned into 29 questions addressing interpersonal, medical and environmental elements of patient care.^{1 2} The analysis of this data helps hospital



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¹Internal medicine, Monmouth Medical Center, Long Branch, New Jersey, USA

²Department of Psychology, Rutgers health, New Brunswick, New Jersey, USA

Correspondence to

Dr Raghu Tiperneni;
dr.raghutiperneni@gmail.com

**Table 1** AIDET approach

| | | |
|---|-------------|--|
| A | Acknowledge | Greet the patient by name, make eye contact, smile and acknowledge family or friends in the room. |
| I | Introduce | Introduce yourself with your name, skillset, professional certification and experience. |
| D | Duration | Give an accurate time expectation for tests, physician arrival and identify the next steps. When this is not possible, give a time in which you will update the patient on progress. |
| E | Explanation | Explain step-by-step what to expect next, answer questions and let the patient know how to contact you, such as a nurse call button. |
| T | Thank you | Thank the patient and/or family. You might express gratitude to them for choosing your hospital or for their communication and cooperation. Thank family members for being there to support the patient. |

administrators implement policies to improve the health-care processes, as well as patient satisfaction. Furthermore, patients' survey responses have a direct impact on financial reimbursement for hospitals. In other words, value-based purchasing is primarily determined by HCAHPS scores.

Despite our highly qualified and passionate medical staff, Monmouth Medical Center's performance was suboptimal when compared with peer groups in the domain of 'communication with doctors'. Within this domain, patients are asked how often they feel their physician treated them with courtesy and respect, how often their physician listened to them carefully, and how often their physician explained things in a way they could understand. The answer choices are 'never', 'sometimes', 'usually' or 'always' based on their perception of care. Good physician-patient communication has the potential to affect their perception of care. Multiple studies

have examined numerous factors impacting HCAHPS scores with different interventions having various degrees of success. A study published in 2018 by Ospina *et al* found that of 67% of situations during which clinicians elicited patient concerns, patients spoke for a median of 11 s before being interrupted.³ It is also worth noting that only 12% of adults are proficient in health literacy, and this reduced comprehension hinders patients' ability to understand complex sentence structure, follow oral instructions and communicate with healthcare providers.⁴ A review of MMC's HCAHPS in this domain for the month of December 2020 on the medical service showed that we scored of 8% percentile rank among Peer Groups. We had consistently suboptimal results even prior to December. As a result, we initiated a quality improvement (QI) project to improve the score in this domain.

AIM

Our global aim is to improve performance in the 'communication with doctors' domain of the HCAHPS survey to at least 50% from baseline over a 6-month period.

METHODOLOGY Framework

This is a QI project conducted at a single institution, Monmouth Medical Center, a University affiliated community hospital with 513 hospital beds and a diverse patient population. Study was done for a duration of 6 months starting January 2021 to June 2021. The study population included all adult patients (>18 years in age) that were admitted to the inpatient non- Intensive Care Unit medical services from 4 January 2021 to 30 June 2021. There were approximately 400 patients admitted each month that were included in our analysis. Adult patients on non-medical services were excluded. There was no executive sponsorship to the project. No patients were involved in the study design.

Interventions

The proposed intervention was twofold and framed to improve the quality and quantity of communication among physicians and patients.

- First, we educated the house staff, nursing staff and attendings on medical services on the Acknowledge, Introduce, Duration, Explanation (AIDET) approach

Box 1 Morning and afternoon rounds framework:

Morning rounds:

- ⇒ Talk to registered nurse for the patient, if possible, go into the room together.
- ⇒ Employ Acknowledge, Introduce, Duration, Explanation, Thank you (AIDET) framework.
- ⇒ Approach patient the head of the bed and maintain good eye contact.
- ⇒ Listen, do not interrupt.
- ⇒ Explain the plan of care, for the day.
- ⇒ Employ teach-back technique: Can we go over this again?
- ⇒ Identify primary care, preferred family contact especially during the first encounter.
- ⇒ Finish patient encounters with 'Is there anything else that I may help you with?'

Afternoon rounds:

- ⇒ Talk to registered nurse for the patient (if possible), go into the room together between 15:00 and 16:30 hours.
- ⇒ Employ AIDET framework.
- ⇒ Provide follow-up information, test results, subspecialist(s) recommendations and medication changes.
- ⇒ Employ teach-back technique: Can we go over this again?
- ⇒ Review clinical response if applicable. for example, how is your pain?
- ⇒ Finish patient encounters with 'Is there anything else that I may help you with?'
- ⇒ Document interaction during afternoon rounds on electronic medical record.

I went to patient room today noon for follow-up.
 Patient was lying comfortably on bed, not in any acute distress. No acute complaints

Changed

No new imaging done today. Updated the treatment plan to the patient along with consultant recommendations.
 Treatment plan remain the same for the day [updated RN,]

Figure 1 PM note precompleted template from EMR - Electronic Medical Record.

(table 1). An in-person conference using a 26-power point slide teaching AIDET approach was conducted with all the involved house staff. All were encouraged to adhere to the suggested framework for morning and afternoon rounds with each patient encounter (box 1). The competency assessment was conducted during daily clinical work rounds by the faculty attendings, face to face and with direct observation at the bedside with feedback provided after exiting patient's room. The afternoon rounds are a second encounter for the day, observed by either the attending or by the nurse leader assigned to the floor, all with the intention of 'hardwiring' AIDET methodology in every encounter.

- ▶ As a second intervention, the concept of afternoon rounds was introduced, whereby one house staff member of the team (or the whole team) returns to the bedside in the afternoon to discuss with their

patients the plan of care. The purpose of the afternoon rounds was to concisely summarise all consultants' information from the day, discuss pertinent imaging and investigations that occurred throughout the day, ensure their understanding of the care they are being provided and answer any questions that the patients might have. This intervention was documented by the rounding physician as 'PM Rounds' in the patient's electronic medical records (EMR) figure 1. There were no other physician activities affected by additional afternoon rounds, since the rounds were meant to be focused and brief. In fact, the time spent for the afternoon rounds in updating the plan of care helped the morning rounds to be more efficient since the results of tests and recommendations of consultants were shared and discussed with the patient already.

The screenshot shows a web-based 'Reporting Portal' interface. At the top, there is a search bar and navigation tabs for 'All Reports (2888)' and 'My Favorites (1)'. The main content area displays a report card for 'MMC PM Note Report Audit' under the 'MMC' category. The report card includes a 'Favorite' star icon and three action buttons: 'Run', 'Run in Background', and 'View Documents'. The report details are as follows:

| Report Name | Categories | Favorite |
|--------------------------|------------|----------|
| MMC PM Note Report Audit | MMC | ★ |

Description: No description available.
Suggested Report User: No suggested user.
Reporting Application: DA2
Suggested Report Frequency: No suggested frequency.
Alternate name: No alternative name.
Support Reference Number: 0e9fbcc2-44b1-4bbd-a780-081f55df478a
Path: Published / MMC

Figure 2 It audit tool on EMR to check for number of PM notes each month. EMR, electronic medical record.

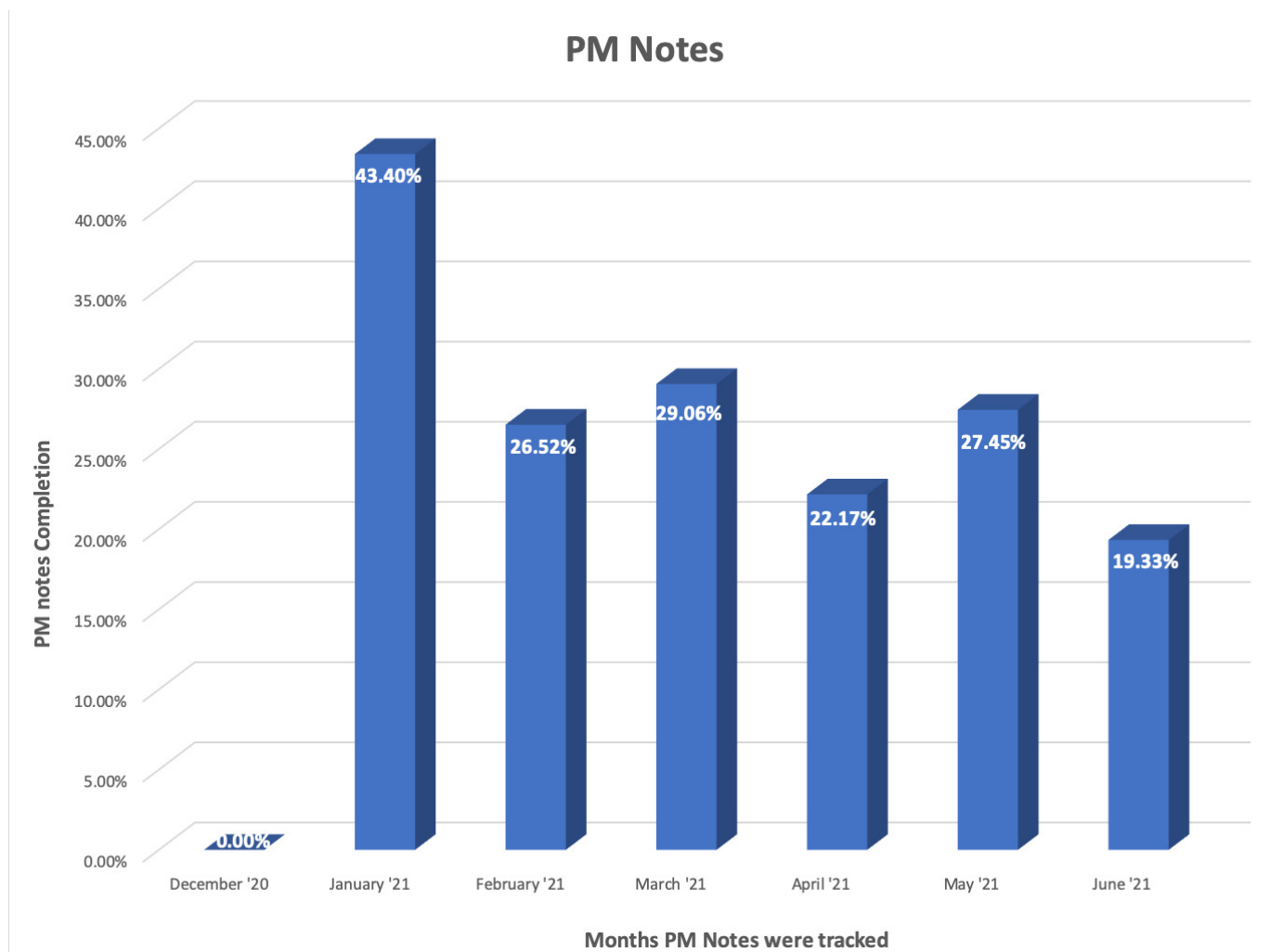


Figure 3 Number of PM notes each month.

Data collection

The HCAHPS domain scores for ‘communication with doctors’ with each subcategory were tracked monthly, along with the number of PM notes written. The number of PM notes was captured using an audit tool created by our IT department in our EMR-cerner (figure 2).

RESULTS

To our knowledge, the addition of daily afternoon rounds in addition to scripted encounters has not yet been simultaneously applied and studied, making this a unique endeavour. Based on the data of the 6 months of the study, we have seen significant results with our approach.

1. The percentage of PM rounds in the month of January 171/394 (43.40%) patients admitted to the inpatient medicine service, received PM rounds and documentation, while the same for February was 110/414 (26.52%), March was 145/499 (29.06%), April was 94/424 (22.17%), May 115/419 (27.45%), June was 69/357 (19.33%) (figure 3). The drift in PM notes from the month of January to February, followed by a plateau can be explained by an unforeseen decrease in man power at our hospital during those months.

2. The HCAHPS survey results (December 2020—baseline with no intervention vs January 2021 to June 2021 with interventions—AIDET approach and afternoon rounds as explained above) as in figure 4:

- ‘Communication with doctor’ domain improved from 8% percentile rank in December to as high as 78%.
- ‘Doctors treat you with courtesy/respect’ improved from 24% percentile rank in December to as high as 90%.
- ‘Doctors listen carefully to you’ improved from 13% percentile rank in December to as high as 88%.
- ‘Doctors explain in a way you understand’ improved from 2% percentile rank in December to as high as 72%.

3. Ninety per cent of the residents felt that this approach provided an opportunity for professional growth/learning experience and would like to implement it as the standard of care (figure 5).

We also noted as the project ended, in the month of July, 2021 the HCAHPS scores went significantly down when the PM notes were 0% supporting the value of PM rounds and the ADIET approach.

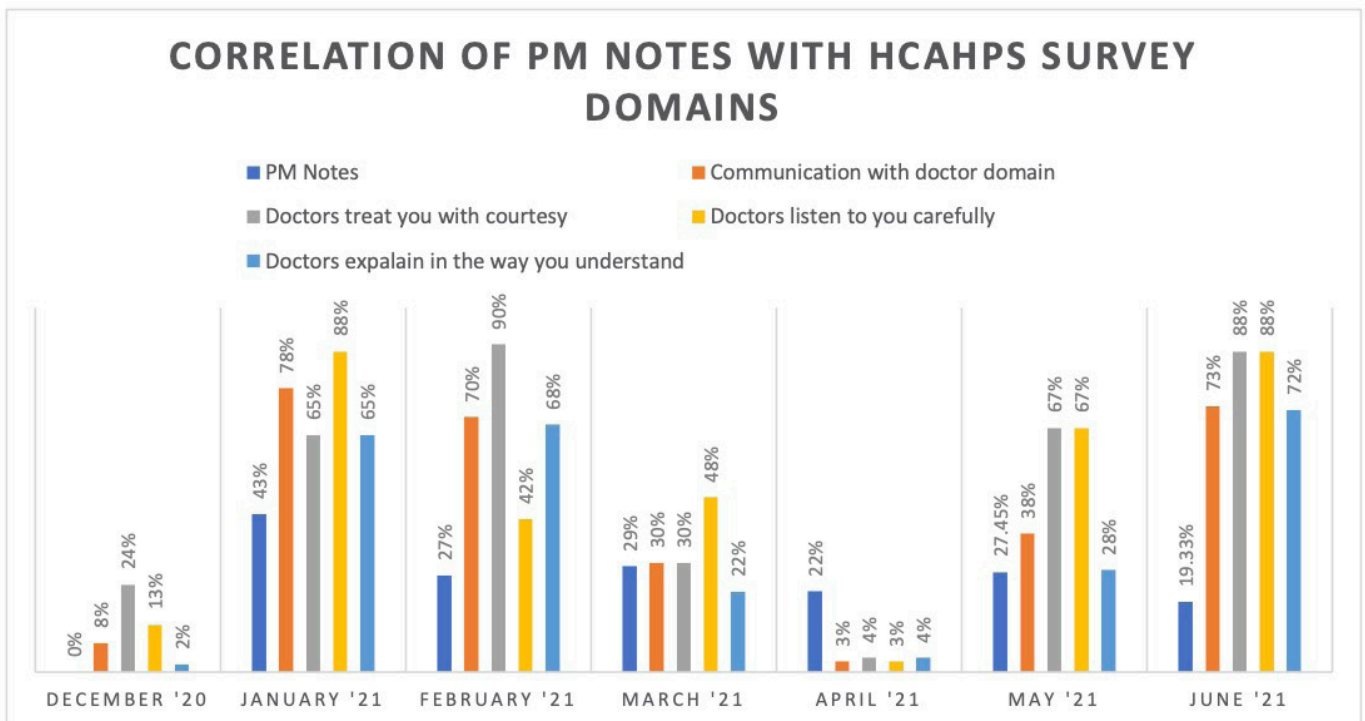


Figure 4 HCAHPS scores and PM notes in each month correlation. HCAHPS, Hospital Consumer Assessment of Healthcare Providers and System.

DISCUSSION

The satisfaction of hospitalised patients is not only dependent on their clinical outcome, but also on their perception of care. Patients’ perception of the care they received is measured using an HCAHPS survey sent to each discharged patient to be completed within 6 weeks. Poor performance on this survey can have a financial impact on hospitals, since value-based purchasing is partly determined by HCAHPS scores. It is important to examine factors and implement processes that can help patients have a better experience while being hospitalised. Review of our past performance on the HCAHPS survey showed

that we traditionally do poorly in the ‘communication with doctors’ domain, scoring as low as 8% percentile rank in December 2020. For this reason, we embarked on this QI project with the aim of improving our performance to at least 50% from baseline over 6 months by standardising communication technique using the AIDET approach and the addition of afternoon rounds (with documentation) as explained above.

To our knowledge, the addition of daily afternoon rounds in addition to scripted encounters has not yet been simultaneously applied and studied, making this a unique endeavour. Based on the data of the 6 months

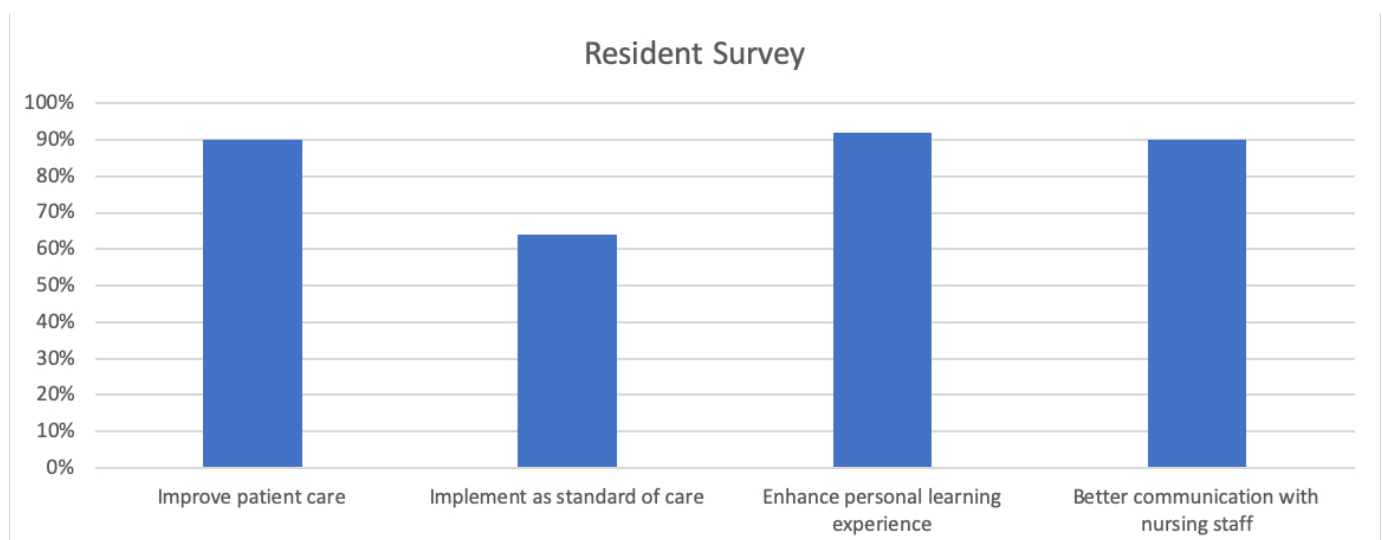


Figure 5 Resident survey on the experience.

of the study, we have seen significant results with our approach as explained in the results section in detail. The above-noted drop in PM notes in the month of April can be explained by the fatigue from physicians end especially given the COVID-19 pandemic time. We had a meeting at the end of April with all the house staff involved in the project to reinforce our AIDET approach and the importance of afternoon rounds. We presented the HCAHPS results thus far to encourage and motivate the staff. Followed by that we noticed an improvement in adherence.

By June, many house staff and attendings have learnt to incorporate the AIDET approach in their encounters. Despite the decrease in PM notes documentation, patients were more satisfied because of the improvement in verbal communication between physicians and patients. We consider the documented PM notes as a surrogate marker.

In the month of July, we have a new intern class joining the programme who will need the education regarding the AIDET approach and the importance of additional afternoon rounds, which impacted our HCAHPS score significantly supporting the value of PM rounds and the AIDET approach.

As stated earlier, multiple studies have examined numerous factors impacting HCAHPS scores with different interventions having various degrees of success. A systematic review to check for interventions to improve hospital patient satisfaction with healthcare providers and systems showed a few studies that had some improvement in HCAHPS score through various interventions, however, more rigorous research is needed to identify effective and generalisable interventions to improve patient satisfaction.⁵ It is also worth noting that only 12% of adults are proficient in health literacy, and this reduced comprehension hinders patients' ability to understand complex sentence structure, follow oral instructions and communicate with healthcare providers.⁴ Hitawala *et al* published a QI study that aimed to assess and improve patient and nurse satisfaction with physicians via improvement in physician–patient and physician–nurse communication to a level greater than 90%. Visual handouts were employed to help patients identify different providers, members of the team and plans of care. Postintervention, the HCAHPS displayed an improvement in physician communication, reaching the expected goal of 84.4%.⁶ Similarly, Seiler *et al* designed a comprehensive physician-training module focused on improving specific 'etiquette-based' physician communication skills and physician coaching with structured feedback in an attempt to improve HCAHPS score reflecting physician domain performance, however, did not find significant improvement in physician communication domain of the HCAHPS scores.⁷

In our QI project, it appears that the combination of employing the AIDET approach with each physician–patient interaction plus the afternoon rounds has a positive impact on patients' perception of care. There appears to be a direct proportional correlation between

the percentage of afternoon rounds being performed (as reflected in the number of PM notes documented) and patient satisfaction, as seen on HCAHPS scores (figure 2).

CHALLENGES

1. The time and effort of additional afternoon rounds pose an extra burden on physician's workload. To ease this burden, we have streamlined the process of afternoon rounds by encouraging the team to identify and prioritise patients with complex issues, dividing the workload among team members and using a pre-completed template to make charting a quicker process.
2. Another challenge was the inability to do afternoon rounds on weekends due to reduced staff, cross coverage among physicians and shortened official work hours that left little time to pursue additional rounding later in the day. It is noted that in the month of April all the domains percentile ranks significantly trended down which can be partly attributed to the decrease in PM notes/rounds notes due to another surge in the COVID-19 pandemic.
3. Given that HCAHPS is a standardised survey with no available data regarding patient's age, sex, ethnicity, comorbidities, educational attainment and clinical course we could not further analyse our data.

Acknowledging these concerns early and devising strategies to overcome them, we hope to continue proposed interventions that have been showing positive results.

CONCLUSION

Our results suggest that HCAHPS scores in the 'communication with doctors' domain can be improved when employing the AIDET approach with each patient encounter and the addition of afternoon rounds. This QI project has thus far successfully encompassed a multi-disciplinary effort in targeting the improvement of patient satisfaction scores in the domains related to communication. Sustainability is vital to the success of these interventions. It is difficult to determine whether it is the AIDET approach or the addition of afternoon rounds, or the combination of both that is contributing to the current success. The ultimate goal would be to create ideal medical practices that would improve patient outcomes and enhance their hospital stay experience. If sustained success can be achieved, these strategies should be adopted to become standards of care. Although our current project focused on improving the patient's healthcare experience, we plan to examine if there is any potential correlation in clinical outcomes such as length of hospital stay and readmission rate in future project using this approach.

Contributors RT: initiated the project with a significant contribution to data analysis and manuscript writing. SP: worked on the orientation of staff/residents with the AIDET approach, introduction part in manuscript writing. FH: worked on abstract and manuscript proofread. SG: worked on the resident survey and helped with introduction part of the manuscript writing. DD: principal investigator and Guarantor, coordinated with the team in the plan and worked through it. Final

proofread of the manuscript and edited the work. WG: worked on orienting staff/residents with the AIDET approach. Final proofread of manuscript and editing. LR: helped with the nursing staff orientation and coordinated the plan with the nursing team at the hospital. KG: final proofread of manuscript and editing.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval This QI project was approved by our institutional review board.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement All data relevant to the study are included in the article or uploaded as online supplemental information. N/A.

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ORCID iD

Raghu Tiperneni <http://orcid.org/0000-0002-9500-0593>

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