

The Patient-Centered Care Toolkit: a systematic literature review

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1 Background

With the growing emphasis on the quality and safety of care delivery, hospitals are ardently seeking to improve their practice. Greater focus now lies with patient satisfaction and consumer perspective of care, and medical centers must select and adjust improvement strategies accordingly. Some have even started adapting techniques from other service industries, such as the hotel sector, to procure higher levels of patient satisfaction (Desombre & Eccles, 1998).

Hospitals can see patient appraisals of their quality of care through surveys developed by the The Centers for Medicare and Medicaid Services (CMS) and the Agency for Healthcare Research and Quality (AHRQ). The results of these surveys are available publicly on websites such as www.hospitalcompare.hhs.gov and www.hcahpsonline.org. Though hospital staff and administration can see how they are performing in the eyes of the patient (as the HCAHPS survey is, in a sense, a report card for the inpatient medical center), it is difficult to bridge the gap between the current level of performance and desired level of performance. In other words, there is no consolidated list or database of research-proven interventions that a hospital can implement when it is reported to be underperforming in a certain area of care. Surveys may show that Hospital A does not perform highly in the areas of staff responsiveness or communication with nurses; however, no proven interventions are readily suggested to improve staff responsiveness or communication with nurses. For such information, the hospital would have to dedicate resources to search the literature itself. The Patient-Centered Care (PCC) Toolkit project aims to bridge the gap between awareness and improvement by providing a resource that inpatient medical centers can reference to improve their functioning in patient-centered care.

YOUR CARE FROM NURSES	THE HOSPITAL ENVIRONMENT	WHEN YOU LEFT THE HOSPITAL	OVERALL RATING OF HOSPITAL
1. During this hospital stay, how often did nurses treat you with courtesy and respect? <input type="checkbox"/> Never <input type="checkbox"/> Sometimes <input type="checkbox"/> Usually <input type="checkbox"/> Always	8. During this hospital stay, how often were your room and bathroom kept clean? <input type="checkbox"/> Never <input type="checkbox"/> Sometimes <input type="checkbox"/> Usually <input type="checkbox"/> Always	18. After you left the hospital, did you go directly to your own home, to someone else's home, or to another health facility? <input type="checkbox"/> Own home <input type="checkbox"/> Someone else's home <input type="checkbox"/> Another health facility → If Another, Go to Question 21	Please answer the following questions about your stay at the hospital named on the cover letter. Do not include any other hospital stays in your answers. 21. Using any number from 0 to 10, where 0 is the worst hospital possible and 10 is the best hospital possible, what number would you use to rate this hospital during your stay? <input type="checkbox"/> 0 Worst hospital possible <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6
YOUR CARE FROM DOCTORS	YOUR EXPERIENCES IN THIS HOSPITAL		
5. During this hospital stay, how often did doctors treat you with courtesy and respect? <input type="checkbox"/> Never <input type="checkbox"/> Sometimes <input type="checkbox"/> Usually <input type="checkbox"/> Always	10. During this hospital stay, did you need help from nurses or other hospital staff in getting to the bathroom or in using a bedpan? <input type="checkbox"/> Yes <input type="checkbox"/> No → If No, Go to Question 12		

Excerpts from the HCAHPS Survey, retrieved from www.hcahpsonline.org.

2 Methods

The review was conducted with articles found primarily through the PubMed database, though other databases such as CINAHL were used based on search domain (e.g. CINAHL was thought to be particularly useful for the domain of staff responsiveness). The domains of research were communication, discharge planning and processes, general patient satisfaction, the hospital environment, pain management, and staff responsiveness. Each domain was systematically reviewed by one member of the research team.

A screenshot of a spreadsheet showing search results for 'patient satisfaction'. The spreadsheet has columns for 'Title', 'URL', 'Description', 'Resource', 'Type', 'Identifier', 'Date', 'Epub', 'Created', and 'Updated'. It lists several articles related to patient satisfaction, including 'Creating and sustaining a collaborative model of care', 'An evidence-based strategy for transitioning patients from the hospital to the community', 'Hourly rounding implementation: a multisite description of structures, processes, and outcomes', 'Nursing care, inpatient satisfaction, and value-based purchasing: vital connections', 'Engaging staff with team-based performance sharing', and 'A medical resident post-discharge phone call study'.

A screenshot of the spreadsheet that search returns were exported to.

The review process consisted of a title review, abstract review, and full article review. At each stage, the first 20% of the reviews were checked for inter-rater agreement of at least 90% with the team leader, Hanan Aboumatar, before proceeding with the review. The Fuld Fellow was responsible for the domain of general patient satisfaction—search query:

("patient satisfaction"[tiab] OR "family satisfaction"[tiab] OR "patient-reported experience"[tiab] OR "patient experience"[tiab] OR "patient experiences"[tiab] OR "Patient satisfaction"[Majr] OR "patient engagement"[tiab] OR "patient activation"[tiab] OR "patient empowerment"[tiab]) AND ("Hospitals"[Mesh] OR "Inpatients"[Mesh] OR "hospital"[tw] OR "hospitals"[tw] OR "inpatient"[tw] OR "inpatients"[tw] OR "HCAHPS"[tw]) AND ("interventions"[tw] OR "intervention"[tw] OR "improvement"[tw] OR "tool"[tw] OR "tools"[tw] OR "project"[tw] OR "projects"[tw] OR "program"[tw] OR "programs"[tw]) AND ("1990/01/01"[PDAT] : "3000/12/31"[PDAT]) AND English[lang])

This domain was a catch-all search that the team hoped would return pertinent articles not initially captured by search queries of the other more specific domains; the search returned 2,888 articles. In the title stage, 794 articles were kept for review. In the abstract stage—256. It is expected that many of these remaining articles will be screened out upon closer review at the full article stage.

Exclusion criterion for all domains were: missing abstract (suggesting that articles were commentaries or editorials instead of experimental studies), emergency department studies, interventions focused on too narrow of a

population (e.g. pediatrics, gerontological/palliative care, very specific diseases, etc.), and publication before 1990.

At the full article review, information was abstracted into a separate spreadsheet. Desired information included: title, authors, journal details, patient population, intervention area, location, year of data collection/duration of intervention, experimental design, control, intervention description, disease, number of participants, study measures, measure at point 1/baseline, measure at point 2/intervention, and significance.

A screenshot of a data abstraction sheet for a full article review. The sheet has columns for 'Title', 'Journal Details', 'Author (Last, First Initial), year', 'Description (Paste Abstract here - or summarize article)', 'Patient population (e.g. surgical, medical, pediatric)', 'Intervention area (e.g. HCAHPS domain)', 'Location (e.g. MT state)', 'Year data collected (duration of intervention) (e.g. 1998-2000)', 'Experimental Design (e.g. RCT, Quasi Experimental)', 'Control', and 'Intervention (Paste intervention method sections)'. The first row contains data for an article titled 'The impact of...'. The second row contains data for an article titled 'An administrative decision to gradually replace standard controlled...'. The third row contains data for an article titled 'A medical resident post-discharge phone call study'.

A screenshot of the data abstraction sheet for the full article review.

5 Conclusions and Future Directions

Currently, the review is still in progress—some team members have finished reviewing their domain and are now helping to review others. All domains have passed the abstract stage.

Future directions for this project include compiling and perhaps further categorizing selected interventions and their data. Along those lines, the team has to decide how the PCC Toolkit will be presented, e.g. in a research article format to be published in a journal, as an online resource or database, or as a manuscript.

6 References

- Centers for Medicare & Medicaid Services. (2013). HCAHPS: Hospital Care Quality Information from the Consumer Perspective. Retrieved from <http://www.hcahpsonline.org>
- Desombre T., Eccles G. (1998). Improving service quality in NHS Trust hospitals: Lessons from the hotel sector. *International Journal of Health Care Quality Assurance*, 11 (1): 21-26.

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