

Participatory Design Invites Physician Engagement in Performance Dashboard and Feedback System

Performance feedback is important for quality improvement (QI). But a review of performance feedback found it to be only modestly effective in improving desired behavior. In addition, performance is variable, making it difficult to determine which interventions are successful.

A study from the March 2022 issue of *The Joint Commission Journal on Quality and Patient Safety (JQPS)* suggests dashboard and feedback systems developed using participatory design can effectively engage physicians. The study also shows that physicians placed a high value on collaboration, internal motivation, and tools and metrics focused on clinical and patient needs.



What is performance feedback?

Also known as audit and feedback, performance feedback is widely used in the context of QI to measure clinical performance and feed data back to practicing clinicians. It's designed to help clinicians understand and improve the care they deliver, help leadership reduce unwarranted variations in practice, and help groups improve performance.

Two components of performance feedback:

- 1 Performance report:** translates data into metrics for visual presentation, usually as a data dashboard showing comparisons
- 2 Feedback delivery system:** presents the data report with specified frequency and performance interventions

What is participatory design?

It is methodology that engages and incorporates end-user feedback throughout the design process to ensure the product supports end-user goals, fits organizational context and invites positive attitudes for change.

Participatory design leads to higher usability, satisfaction, effectiveness and sustainability.

THE STUDY

Step 1:

Created dashboard prototype using metrics previously/ currently used at institution

Step 2:

Recruited 20 hospitalist physicians to participate

Step 3:

Held six hour-long design sessions and conducted two surveys

Design sessions addressed key components of the feedback system:

- dashboard design
- performance metric selection
- methods of delivering feedback data delivery
- potential interventions to improve performance on metrics (incentives, coaching)

Surveys examined attitudes toward session topics and invited feedback. Data was used to guide further discussions, inform development of data dashboard, and improve participatory design process for future initiatives.

Step 4:

Used the Capability Opportunity Motivation and Behavior (COM-B) model to identify barriers to dashboard engagement and created relevant interventions to address the barriers, and focus on user engagement, adaption of the dashboard and user review

What is the COM-B model?

Based on behavioral change theory, the COM-B model cites capability (C), opportunity (O) and motivation (M) as three key factors capable of changing behavior (B).

Step 5:

Allocated resources to design, build and implement the dashboard prototype

Step 6:

Implemented pilot

THE TAKE-AWAYS

The participatory design process highlighted the importance of context and local culture when developing a feedback system.

The study indicates physicians prefer...

collaboration
over
competition



internal motivation
over external
incentives



dashboard used
to aid **clinical practice**
over
punitive uses



clinical and patient-centered metrics
over
financial or
throughput
metrics



The study offers a template for the development and implementation of a performance dashboard and feedback system that leverages participatory design methodology to engage physician end-users in systematically addressing their concerns, preferences and priorities.

To learn more about this study, visit:

[https://www.jointcommissionjournal.com/article/S1553-7250\(21\)00266-X/fulltext](https://www.jointcommissionjournal.com/article/S1553-7250(21)00266-X/fulltext)