**Consumer Assessment of Healthcare Providers and Systems (CAHPS®)**
**2023 Research Meeting Summary**

# Patient Experience, Patient Safety, and Provider Well-Being: Associations and Paths for Quality Improvement

**January 2024**

# Table of Contents

**Introduction** ..... **1**

**Welcome and Overview** ..... **3**

**Session Summaries** ..... **3**

Keynote Address: How Improving Patient Experience Can Help Us Achieve the Quintuple Aim in Healthcare ..... 3

Session 1: Patient Experience and Workforce Well-Being ..... 4

Session 2: Patient Experience and Patient Safety ..... 6

**Concluding Remarks and Adjournment** ..... **10**

**Appendix A: Presentation Abstracts** ..... **12**

Part I: Patient Experience and Workforce Well-Being ..... 12

Part II: Patient Experience and Patient Safety ..... 13

# CAHPS 2023 Research Meeting Summary
# Patient Experience, Patient Safety, and Provider Well-Being: Associations and Paths for Quality Improvement
# October 19, 2023

## Introduction

This virtual research meeting explored how data from Consumer Assessment of Healthcare Providers and Systems (CAHPS®) surveys and other patient experience information can improve patient safety and the well-being of the healthcare workforce. The meeting featured a keynote presentation by Donald Berwick, M.D., President Emeritus and Senior Fellow at the Institute for Healthcare Improvement. More than 650 CAHPS survey users, researchers, healthcare organization leaders, patient advocates, policymakers, and Federal partners attended.

### Key Themes:

- Staff and provider well-being is positively associated with patient experience.
- Positive patient feedback that is shared with providers and staff helps to alleviate burnout.
- There is a positive relationship between provider and staff perceptions of patient safety culture and patient experience.
- Optimal communication with patients can improve patient safety and lower malpractice risks.
- Patient narratives reveal many opportunities to improve patient safety and reduce provider burnout.

### Key Issues:

**Workforce Well-Being:**

- A more patient-centered approach to healthcare allows patients to have more control over their care, as well as a voice in how healthcare processes and initiatives for improvement are designed. This approach not only facilitates a better healing experience for patients, but also contributes to a better workplace experience for healthcare staff.
- Diminished perceptions of well-being among the healthcare workforce can lead to lost productivity, which in turn adversely impacts organizations' financial status and overall patient outcomes.
- When staff view generally positive or empathic patient comments from patient experience surveys, staff burnout decreases. This positive reinforcement helps to boost staff confidence and bring about positive behavior change.
- Strong leadership in guiding quality improvement efforts, coupled with open communication and strong teamwork, helps to mitigate staff burnout and promote the concept that effective quality improvement initiatives are integrated into patient care.

## Key Issues (continued):

**Patient Safety:**

- In hospitals more positive provider and staff perceptions of patient safety culture are associated with patients thathave better experiences of overall care. Efforts to improve patient safety culture are likely to positively impact patient experience.
- Diagnostic safety can be improved through more effective communication. This entails focus on not only what leads to diagnostic problems, but also how to address these problems when they are uncovered.
- Poor care coordination disproportionately impacts those who are traditionally underserved. These inequities result in worse hospital experiences for Black and Hispanic populations. Black adults, compared to White adults, are more likely to report preventable adverse events. Determining communication breakdowns that affect underserved populations would help to alleviate the gaps in care coordination that result in racial disparities.
- Patients and family members often do not voice their concerns about safety issues because they fear that "speaking up" may adversely impact their care. Consequently, healthcare professionals need to be more proactive in eliciting and responding to patient and family feedback.
- Patients and family members can provide valuable input in the co-design of mobile applications to enable collection of timely patient feedback. Such tools serve to uncover safety issues, enhance service recovery efforts, and reveal opportunities for improvement.

## Meeting Structure:

The meeting included a welcome, keynote address, and eight sessions that highlighted research conducted by CAHPS grantees and other researchers. Presentations included the following topics:

- **Welcome and Overview**
- **Keynote:** How Improving Patient Experience Can Help Us Achieve the Quintuple Aim in Healthcare
- **Part I**: Patient Experience and Workforce Well-Being
    - **Session 1:** Patient Experience and Staff Well-Being in the National Health Service (NHS)
    - **Session 2:** Patient Narratives as a Catalyst for Reducing Staff Burnout in Ambulatory Care
    - **Session 3:** Associations of Provider and Nursing Staff Burnout with Involvement in Patient Experience Improvement Activities
- **Part II:** Patient Experience and Patient Safety
    - **Session 4:** Linking Provider and Staff Perceptions of Patient Safety Culture with Patient Experience in Hospitals
    - **Session 5:** Insights from Patient Narratives for Improving Diagnostic Safety
    - **Session 6:** Racial Disparities in Repeat Testing, Drug-Drug Interactions, and Preventable Emergency Department Visits in a National Study of Medicare Beneficiaries
    - **Session 7:** Patient-Provider Communication and Reducing Patient Harm and the Incidence of Malpractice
    - **Session 8:** From the Closest Observers of Care: Caregiver and Patient Hospital Safety Observations
- **Concluding Remarks and Adjournment**

## Welcome and Overview

Joann Sorra, Ph.D., Vice President, Westat
Caren Ginsberg, Ph.D., Director, CAHPS and Surveys on Patient Safety Culture (SOPS), AHRQ
Craig Umscheid, M.D., M.S., Director, Center for Quality Improvement and Patient Safety, AHRQ

The Agency for Healthcare Research and Quality (AHRQ) recognizes the significance of Institute for Healthcare Improvement (IHI) National Action Plan for Patient Safety, which establishes the interconnectedness between patient experience, patient safety, and provider well-being. Current research is exploring how these three concepts are linked and can be integrated into care processes to pave the path toward significant quality improvement. Assessing the relationship between patient experience, patient safety, and provider well-being may serve as a vital step for honing healthy organizational cultures, improving workplace safety, and boosting employee and patient engagement.

Patients themselves serve to inform these efforts through their feedback using tools such as the CAHPS surveys. These tools are rooted in the assumption that patients are the best source of information about their own health and can offer valuable insight about what comprises quality healthcare.

To achieve optimal patient experience and safe patient environments, healthcare systems must promote an organizational culture where a highly engaged workforce's well-being is valued. The process toward achieving this goal requires diligence in measuring not only patient perceptions of their experiences through CAHPS surveys, but also monitoring organizational culture that enhances employee well-being and perceptions about their workplaces.

For its part, AHRQ and the CAHPS program continue a sustained commitment to provide the most rigorous tools to not only accurately measure patient experience, but also reveal how patient experience impacts clinical components of care.

## Session Summaries

The following summaries highlight key points from the keynote address and each of the eight sessions, including: (1) where we are, (2) what we have discovered, and (3) priorities to target **(Exhibit 1).** Abstracts of all presentations in each session are available in Appendix A.

**Exhibit 1: Research Meeting Session Summary Structure**

### Keynote Address: How Improving Patient Experience Can Help Us Achieve the Quintuple Aim in Healthcare

Donald Berwick, M.D., M.P.P., President Emeritus and Senior Fellow, Institute for Healthcare Improvement

In the past, there has been disagreement about the role of patients in their care, with the issue of patient-centeredness not fully considered. This was particularly true during the COVID-19 pandemic, when visitor restrictions significantly hampered patient

experience. Although patient-centeredness is now considered an integral dimension of quality, more emphasis on this is needed. Reaffirmation of the definition of patient-centeredness is warranted to consider patient experiences of transparency, individualization, recognition, respect, dignity, and choice in all matters, without exception, as they relate to one's person, circumstances, and relationships in healthcare.

A redesign of the healthcare system is necessary to facilitate a more patient-centered approach. This redesign should frame care in a way where patients have a voice, safety is a priority, patients and family members are included in rounds, and clinicians communicate openly and work together as a team to anticipate patient needs.

In a truly patient-centered healthcare system, shared decision making technologies will be used universally; transparency in all aspects of care (including apologizing when things go wrong) will be commonplace; and patients and families will work with healthcare leaders to participate on institutional boards, as well as contribute to the design of more patient-centered processes and services. Ultimately, such patient-centered designs will benefit patients as well as clinicians.

## Session 1: Patient Experience and Workforce Well-Being

This session explored how aspects of well-being among healthcare professionals impact patient experience. Speakers examined workforce well-being in the United Kingdom and how burnout adversely impacts its healthcare system, interventions to stem burnout and increase morale, and associations between initiatives to improve patient experience and staff burnout.

### Patient Experience and Staff Well-Being in the National Health Service (NHS)

Christian van Stolk, Ph.D, Executive Vice President, RAND Europe

The health and well-being of health professionals working within the United Kingdom's (U.K.) National Health Service (NHS) are compromised because staff experience significant pressure due to work-related stress, bullying, and workplace violence. Most report suffering from a musculoskeletal condition. They are also stressed by the increased demand for services following the COVID-19 pandemic.

Productivity loss due to absenteeism, presenteeism (working while unwell), staff turnover, and increased reliance on contracted staff is rampant within the U.K. The financial losses from this diminished productivity equate to about 9 percent of the NHS's total budget. Furthermore, poor health and well-being among healthcare staff adversely impact patients through increased mortality risks, increased hospital-acquired infections, and worse patient experience.

To sustain the health of a nation, the well-being of the healthcare workforce should be a foremost priority. The cultivation of supportive work environments leads to increased staff engagement and job satisfaction that will, in turn, lead to better outcomes. These fundamental principles transcend beyond the U.K. and can apply to the U.S. healthcare system as well.

## Patient Narratives as a Catalyst for Reducing Staff Burnout in Ambulatory Care

Ingrid Nembhard, Ph.D, Fishman Family President's Distinguished Professor, Professor of Health Care Management, The Wharton School, University of Pennsylvania

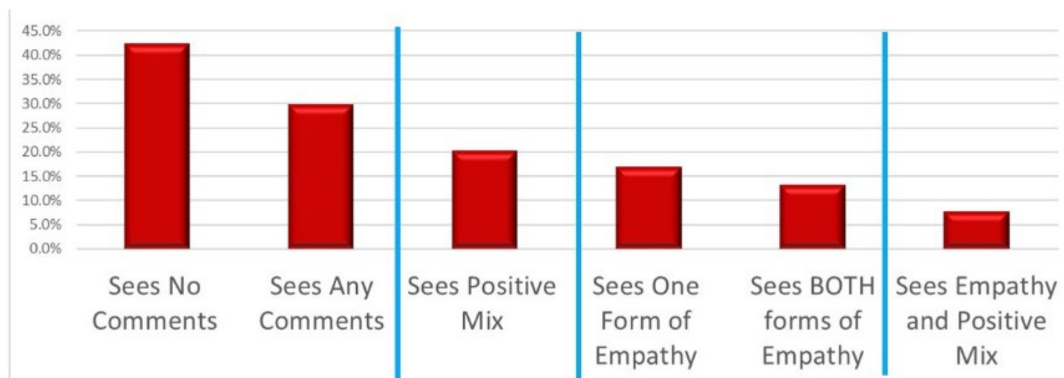
Research shows that almost 70 percent of patients who responded to patient experience surveys answered open-ended questions. These responses provide rich context to the quantitative data that are collected from the surveys. Insights from these narratives can help to identify additional domains of care that are important to patients, reveal equity issues, and motivate healthcare professionals to enact positive changes.

In a study of ambulatory care practices, patient comments were distributed to staff as feedback. There was variance in staff receipt of positive comments (e.g., compliments) as well as empathic patient comments that either recognized the challenges staff face or showed appreciation for the staff's efforts. Staff exposed to a higher proportion of positive patient comments experienced less burnout than those with lower proportions of positive comments. Burnout was even less when staff viewed both positive comments and empathic comments.  The study suggests that such narratives support workforce well-being, and improve patient experience in turn by boosting confidence and inspiring staff to adopt behaviors that are more patient-centered.

Although constructive patient feedback can be useful to inform improvements, healthcare organizations should also collect and share positive patient narratives with staff frequently as an intervention to promote workforce well-being. Furthermore, policymakers should incorporate narrative data into their incentive programs, as narrative use can bolster staff confidence and motivate their adoption of more patient-centered behaviors. Further research linking patient experience with workforce experience is warranted.

| Reinforcing Feedback and Reported Staff Burnout |
|---|
| Staff exposed to patient narratives that contain empathic statements (recognition of work challenges or appreciation of efforts) and positive comments (e.g., compliments) experience the lowest levels of burnout. Staff who see no patient comments have the highest levels of burnout (see **Exhibit 2**). |

**Exhibit 2. Percentage of Staff who Reported Burnout**




Source: Ingrid Nembhard, *Patient Narratives for Reducing Staff Burnout in Ambulatory Care,* October 19, 2023

### Associations of Provider and Nursing Staff Burnout with Involvement in Patient Experience Improvement Activities

Denise Quigley, Ph.D, Senior Health Policy Researcher, RAND

Burnout among providers negatively impacts patient care experiences and safety. This is especially true for pediatric nurses and primary care providers within Federally Qualified Health Centers (FQHCs), as these facilities typically experience high patient volumes and inadequate staffing.

In two studies involving providers at an FQHC and pediatric nurses at a large urban hospital, both in California, researchers examined whether rates of burnout were associated with patient experience measurement, quality improvement initiatives, and/or organizational culture. Clinic providers with more facilitative leadership that support QI efforts and discussions about needed changes reported not being burned out. More pressures related to patient care and lower job satisfaction for clinic providers were associated with burnout. Nurses who had more confidence in patient experience measurement, experienced a greater level of open communication and teamwork, and viewed quality improvement as integrated into everyday patient care reported less burnout. However, nurses who felt quality improvement initiatives added to their workload were more likely to report burnout.

Quality improvement is a team effort rather than an individual behavior. Healthcare organizations should employ strong leadership that supports quality improvement, teamwork, and open communication. Active engagement in quality improvement activities should be encouraged; however, increased workloads and time pressures associated with quality improvement activities should be monitored to prevent diminished staff morale.

## Session 2: Patient Experience and Patient Safety

This session explored the links between patient safety and patient experience. Speakers examined how patient safety culture and patient experience are associated; factors that exacerbate diagnostic mishaps; inequities in care that lead to racial differences in how patients report preventable adverse events; patient hesitation to voice safety concerns and the need to be more proactive in eliciting patient feedback; and co-designed tools that enable timely patient feedback related to safety issues.

### Linking Provider and Staff Perceptions of Patient Safety Culture with Patient Experience in Hospitals

Joann Sorra, Ph.D, Vice President, Westat

The premise that employees' perceptions of the culture in which they work are related to the way they, in turn, interact with their customers—thereby shaping customers' experiences—has been widely studied in different types of service organizations. Extending this research to healthcare organizations, researchers examined linkages

between provider and staff perceptions of patient safety culture and patient experiences with healthcare in hospitals.

A cross-sectional study used data from 178 hospitals, linking their patient safety culture data from the AHRQ Surveys on Patient Safety Culture® Hospital Survey 2.0 Version (HSOPS) and their patient experience scores from the CAHPS Hospital Survey (HCAHPS). Results from regression analyses indicated that hospitals with a more positive patient safety culture had patients with better experiences of care. Most of the HSOPS patient safety culture measures (78 percent) were positively associated with the HCAHPS patient experience measures. Positive provider and staff perceptions of their organization's non-punitive responses to errors and their overall patient safety ratings were associated with higher patient experience scores on all HCAHPS measures.

An important implication from this research is that initiatives to improve patient safety culture are likely to positively affect patients' experiences of care. Hospitals and health systems should align efforts to improve safety culture with their priorities to maximize patient experience. Although it is difficult and takes time to improve patient safety culture, it is critical to focus on culture because it serves as the foundation for the behaviors, structures, and processes that ultimately ensure patient safety and optimal patients' experiences of care.

## Insights from Patient Narratives for Understanding and Improving Diagnostic Safety

Mark Schlesinger, Ph.D, Professor of Health Policy, Yale School of Public Health

Diagnostic experiences are poorly captured through incident reporting in every clinical site where incident reporting has been studied. Approximately 9 million households per year are affected by patient-reported diagnostic mishaps, with 5 to 6 million experiencing persistent harms.

In a recent study, more than 1,500 patients were asked about their diagnostic experiences using both closed and open-ended questions. (Experiences related to COVID-19 were excluded.) Specifically, the survey asked whether in the past four years the patients had experienced a mistake or problem with the diagnosis of a medical condition. Mistakes were defined as complex errors involving diagnosis. Problems were defined as mishaps not related to diagnosis (e.g., short delays) or mistakes that were quickly rectified. Analyses showed that when experiences of problems, mistakes, and a combination of problems and mistakes are added together, the annual prevalence of diagnostic mishaps more than doubles figures reported IHI. Moreover, respondents reported that experiencing both problems and mistakes increased the likelihood of serious harms to health, lost trust, financial harm, and avoidance of medical care. These patient perceptions remained consistent over time. Finally, respondents reported that communication issues contribute somewhat to the origins of diagnostic mishaps, and that further breakdowns in communication made the situations vastly worse.

Effective communication is key to improving diagnostic safety. It is necessary to focus on not only what leads to diagnostic problems, but also what to do about the harm that occurs in the immediate aftermath. Future work  must address persistent harms, as well

as the cumulative burden of eroded distrust that could affect both providers and patients.

### Racial Disparities in Repeat Testing, Drug-Drug Interactions, and Preventable Emergency Department Visits in a National Study of Medicare Beneficiaries

Laura Pinheiro, Ph.D, Assistant Professor, Weill Cornell Medicine

Poorly coordinated care increases the risk for hospitalizations, emergency department visits, repeat tests, and prescription drug interactions. Black adults and Hispanic/Latino adults report more deficits in care coordination than Non-Hispanics and Whites. Black and Hispanic patients have also reported worse experiences with their hospital care than White patients.

A longitudinal cohort study was launched to determine if there are racial disparities in self-reported adverse events that could have been prevented with better communication by healthcare providers. The study followed more than 30,000 adults aged 45 and over for more than 15 years. Initially, baseline data were collected via computer-assisted telephone interviews, at-home physical exams, and assessments of participants' medication inventories. Between 2017 and 2018, a survey to assess participants' experiences with healthcare was administered to approximately 7,600 participants aged 65 and over. No racial differences in self-reported gaps in care coordination were found. However, compared to White adults, Black adults were 64 percent more likely to report an adverse event that they felt could have been prevented by better communication from their healthcare providers.

Future research should seek to understand better ways to communicate that will, in turn, prevent adverse events for patients. In particular, a deeper understanding of how communication gaps lead to preventable events among Black patients can inform how to tailor existing strategies to address communication challenges, decrease preventable adverse events, and reduce racial disparities.

### Patient-Provider Communication and Reducing Patient Harm and the Incidence of Malpractice

Thomas Gallagher, M.D., Professor and Associate Chair, Department of Medicine, and Professor, Department of Bioethics and Humanities, University of Washington

Progress on patient safety has been limited in part because of struggles with transparency. Responding to medical errors is the part of healthcare that should be the most patient-centered, but instead is the least. The current healthcare environment leaves all involved stressed—emotionally, physically, and financially. Furthermore, diminished patient trust changes the way patients and providers interact. Patients perceive that issues arise due to a combination of errors/adverse events and communication breakdowns, yet only 10 percent of patients raise concerns with their healthcare organizations because they fear retaliation that will adversely affect their care.

Traditionally patients have been expected to "speak up" when they have concerns. However, it is crucial that healthcare staff proactively solicit feedback so patients feel safe in doing so. When it comes to harm events, it is human nature to avoid difficult

discussions and fear punitive consequences. The Communication and Resolution Program (CRP) framework enables staff to facilitate a smooth process for open communication when these events occur. Benefits of CRP are enhanced trust among patients, reduced stress by clinicians, less likelihood of litigation, heightened learning, stronger institutional cultures, and increased public trust in the healthcare industry.

Organizations should support highly reliable CRP implementation, particularly to manage complex cases, adapt to different care environments, and support historically marginalized populations after breakdowns in care. Patients and families need to feel more comfortable sharing their concerns and receiving real-time responses. Ultimately, embracing effective transparency practices supports quality, safety, equity, and patient-centeredness of care.

**Exhibit 3: Elements of CRP Response**

| | Traditional Response | CRP Response |
|---|---|---|
| Incident reporting by clinicians | Delayed, often absent | Immediate |
| Communication with patient, family | Deny/defend | Transparent, ongoing |
| Event analysis | Physician, nurse are root causes | Focus on Just Culture, system, human factors |
| Quality improvement | Provider training | Drive value through system solutions, disseminating learning |
| Financial resolution | Only if family prevails on a malpractice claim | Proactively address patient/family needs |
| Care for care givers | None | Offered immediately |
| Patient, family involvement | Little to none | Extensive and ongoing |

Disclaimer: For informational purposes only and does not, itself, constitute medical advice. This does not replace careful medical judgments by qualified medical personnel. There may be information that does not apply to or may be inappropriate for the medical situation.

## From the Closest Observers of Care: Caregiver and Patient Hospital Safety Observations

Naomi Bardach, MD, Professor of Pediatrics and Policy, School of Medicine, University of California at San Francisco

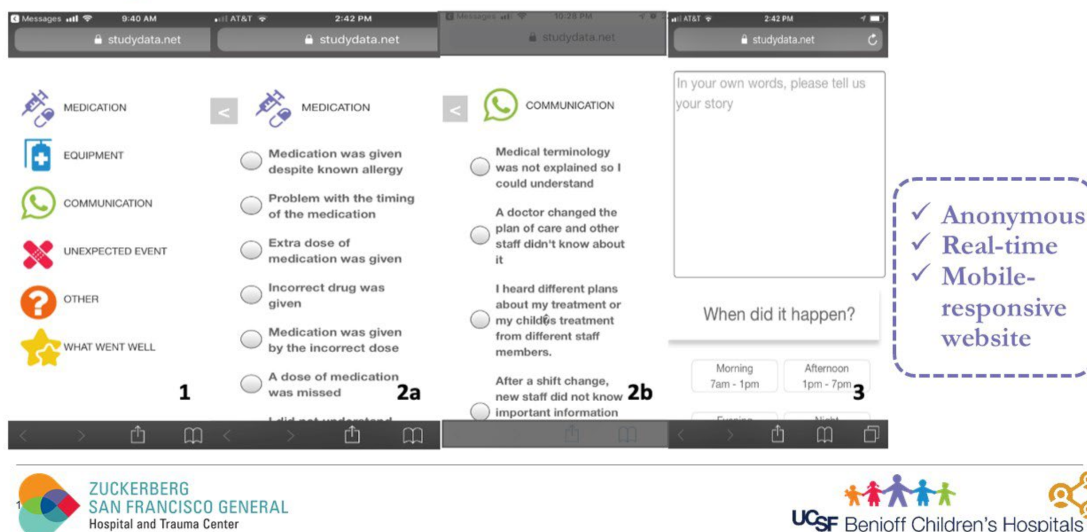
Patients and family members are the closest observers of care and can provide valuable feedback, whether through social media or patient experience surveys, for improving quality and safety. In fact, patients and families report more safety events than what is documented on internal incident reports.

In a recent study, researchers conducted an intervention to develop a Family Input for Quality and Safety (FIQS) tool that was co-designed by family advisory council members and hospital unit leaders. The FIQS tool uses a mobile phone interface that enables patients and family members to provide timely feedback about a variety of issues, including those pertaining to medication and communication. The tool was piloted among 235 patients and family members on a medical/surgical hospital unit. Narrative

comments related to medication and communication presented the most concerns about safety; however, some of the feedback (such as comments from patients about "what went well") was not related to safety. A current project using the FIQS tool in both English and Spanish is being implemented on nine units across three hospitals. The updated tool includes additional content that focuses on infection control and differential treatment based on racial or ethnic identity. This newest iteration of the research includes almost 1,000 participants.

Hospitals should consider collaborating with physician leaders, nurse leaders, and patient and family advisory council members to determine the best ways that family and patient reports can be incorporated into safety efforts. Use of a resource such as the FIQS tool can enhance service recovery, reveal systemic problems, and uncover themes that may warrant system attention.

**Exhibit 4: FIQS Tool**




## Concluding Remarks and Adjournment

Marc Elliott, Ph.D., Senior Principal Researcher, RAND

AHRQ is deeply committed to improving the experience of all patients through the collection of credible, reliable, and valid data that will provide greater understanding about patient experience and how it is associated with both workforce well-being and patient safety. Insights gleaned from this research meeting suggest that a greater emphasis on patient centeredness will yield many positive outcomes—not only for patients, but for staff as well. Current work by AHRQ's CAHPS Program is responding to the changing healthcare environment, such as with the integration of quantitative and narrative information that will further inform healthcare processes and help to create deeper and more empathic connections between healthcare staff and patients. Results of this research will help to alleviate burnout among staff and build a foundation of trust between healthcare staff and patients.

Patients are a vital source of information about patient safety, and it is imperative that they feel comfortable voicing their own concerns about safety. By adapting a patient-centered approach,

healthcare organizations can strengthen the bond between patients and healthcare providers—thereby promoting~~strengthening~~ healthy organizational cultures that clearly value and prioritize both patient safety culture and patient experience.

Ultimately, the concept of patient experience does not exist in its own silo. Rather, patient experience represents the thread that is woven throughout the entire care process. The strength of the thread—that is, the quality of the patient experience—is dependent on many factors, including staff well-being and organizational perceptions of patient safety culture.

AHRQ thanks the meeting planners, the presenters who shared their research, and all meeting attendees who will use the knowledge presented to make healthcare safer and better.

# Appendix A: Presentation Abstracts

## Part I: Patient Experience and Workforce Well-Being

### Patient Experience and Staff Well-Being in the National Health Service (NHS)

Christian van Stolk, Ph.D., Executive Vice President, RAND Europe

It is logical to assume that carers and medical professionals with better health and well-being will also be more productive and provide better care better. Using data from the National Health Service in England, collected through surveys and in administrative data sets, this presentation looks at the cost of poor employee health and well-being in the NHS, how poor health and well-being of NHS staff compare to other employers, and the impact of health and well-being on outcome measures. An inconvenient truth is that staff in the English health system has significant health and well-being challenges, which lead to very significant costs to the health services providers. Our models put this number at close to 10 per cent of the overall budgets of providers. This presentation asserts that putting the health and well-being of employees at the center of the provision of health services will not only save money for the system, but also lead to better outcomes for patients, service providers and ultimately society.

### Patient Narratives as a Catalyst for Reducing Staff Burnout in Ambulatory Care

Ingrid Nembhard, PhD, Fishman Family President's Distinguished Professor, Professor of Health Care Management, The Wharton School, University of Pennsylvania

Many in the healthcare workforce are burning out and becoming dissatisfied with their jobs, which was true even before COVID-19 exacerbated demands on workers. Our research assesses the role that feedback from patients about their care experiences in their own words (termed "patient narratives") plays in the well-being of healthcare personnel who care for them. Our hypothesis – building from organizational theory that links worker experience to customer experience and vice versa – was that frequent and useful feedback from patients in their own words is associated with reduced burnout and increased job satisfaction, which would suggest the importance of providing such feedback to personnel as an intervention. We tested our hypothesis using survey data from clinical and administrative staff affiliated with 22 ambulatory care practices associated with New York-Presbyterian. In this setting, we found support for our hypothesis and that providing healthcare professionals with patient narratives was associated with increased job satisfaction because this feedback provides positive reinforcement of professionals' efforts (an emotional resource), greater confidence in knowledge of patients and practice (a knowledge resource), and guidance for taking part in patient-inspired behavior change (meaningful action). This presentation concludes with the implications of these findings for health policy and practice.

### Associations of Provider and Nursing Staff Burnout with Involvement in Patient Experience Improvement Activities

Denise Quigley, PhD, Senior Health Policy Researcher, RAND

Burnout among providers negatively impacts patient care experiences and safety. Little-to-no evidence exists on how involvement in quality improvement (QI) activities influences burnout. We partnered with two institutions– a large, urban Federally Qualified Health Center and a medium-size, urban children's hospital—and conducted surveys pre-COVID-19 about perspectives including burnout. We conducted

exploratory analyses examining the association of burnout with primary care provider (PCP) and inpatient pediatric nurse perspectives on patient experience measurement (as measured by CAHPS), QI, and unit culture. We found that one-third of PCPs and of inpatient pediatric nurses reported burnout and their perspectives differed by level of burnout reported ($p$-values<0.05). For PCPs, we identified a relationship between *lower* levels of burnout and more information, sensemaking and facilitative leadership throughout the clinic, and more orientation and engagement with QI. Those PCPs reporting more patient care issues were more likely to experience burnout. For inpatient pediatric nurses who had more confidence in patient experience measurement, received frequent patient experience reports, felt included in QI, and experienced QI efforts as integrated into patient care reported not being burned out. More open communication among nurses and unit-level teamwork were also associated with not being burned out, whereas a larger QI workload was associated with burnout.

## Part II: Patient Experience and Patient Safety

### Linking Provider and Staff Perceptions of Patient Safety Culture with Patient Experience in Hospitals

Joann Sorra, Ph.D., Vice President, Westat

Our study examined the relationship between provider and staff perceptions of patient safety culture and patients' care experiences in hospitals. Our hypothesis was that hospitals with more positive patient safety cultures would have patients with better experiences of care. To test our hypothesis, we conducted hospital-level analyses with data from 178 hospitals, linking their AHRQ Surveys on Patient Safety Culture® Hospital (HSOPS) Survey data with their Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) patient experience data. We conducted a series of multiple regression models using each of the 12 HSOPS patient safety culture measures as the independent variables and each of the 11 HCAHPS patient experience measures as the dependent variables, controlling for hospital bed size, teaching status, and ownership. Overall, our hypothesis was supported. We found that better HSOPS patient safety culture scores were associated with better HCAHPS patient experience scores. The relationship of the HSOPS to HCAHPS composite measure average was $\beta = 0.27$ ($p < 0.05$). All 12 HSOPS measures were positively related to the HCAHPS *Communication About Medicines* composite, the HCAHPS composite measure average, and the HCAHPS *Hospital Rating*. Nine of 12 HSOPS measures were positively related to patients' *Willingness to Recommend* the hospital. Seventy-eight percent (78%) of the estimates were statistically significant at $p < 0.05$, with standardized regression coefficients ranging from $\beta = 0.13$ to 0.35. These findings support the fundamental premise that the organizational patient safety culture that providers and staff experience forms the foundation for the experience that patients have when they come to the hospital.

### Insights from Patient Narratives for Improving Diagnostic Safety

Mark Schlesinger, PhD, Professor of Health Policy, Yale School of Public Health

With increasing attention to safety in American healthcare, there is a clear need to learn more effectively from experiences of patients and families. This requires adapting methods developed for conventional patient experience surveys. We identify two key challenges to effective adaptation and propose solutions that can enhance our understanding of diagnostic safety, based on lessons from a nationally representative sample of more than 1,500 households. We make the case (a) that patient

safety surveys must inquire about all adverse events, not simply those perceived to involve errors, and (b) that such surveys can elicit feedback on events as far as five years in the past, without loss of fidelity or introduction of bias. Using this extended lookback window, we find that (a) over half of diagnostic problems are exacerbated by breakdowns in clinician-patent communication, (b) more than a quarter are identified by patients or families as affected by patients' personal attributes, and (c) more than 40 percent have harms exacerbated by clinician-patient interactions in the aftermath of the diagnostic mishap. These negative sequelae can affect subsequent encounters with healthcare and undermine future patient-provider relationships with providers who were not implicated in the initial diagnostic problem.

### Racial Disparities in Repeat Testing, Drug-Drug Interactions, and Preventable Emergency Department Visits in a National Study of Medicare Beneficiaries

Laura Pinheiro, PhD, Assistant Professor, Weill Cornell Medicine

Black Medicare beneficiaries are thought to experience worse care coordination than White beneficiaries. Using Consumer Assessment of Healthcare Providers and Systems (CAHPS) items from a cross-sectional survey that was administered to participants in the Reasons for Geographic and Racial Differences in Stroke (REGARDS) study in 2017-2018, we sought to determine if there are racial inequities in self-reported adverse events that could have been prevented with better communication across healthcare providers. Among 7,568 respondents included in this study, 34% identified as Black and 55% were female. Nearly 40% reported experiencing at least one gap in care coordination in the prior 12-months. Black participants were 64% more likely to report a preventable adverse event (i.e., repeat test, drug-drug interaction, or emergency department visit or hospitalization that respondents thought could have been prevented with better communication) compared to Non-Hispanic Whites. Specifically, Blacks were 77% more likely to have a repeat test, 76% more likely to experience a drug-drug interaction, and 45% more likely to report an emergency department visit or hospitalization. A deeper understanding of how gaps in communication among providers may lead to preventable events among Black patients may allow us to leverage insights to improve care and avert preventable outcomes, thus reducing inequities.

### Patient-Provider Communication and Reducing Patient Harm and the Incidence of Malpractice

Thomas Gallagher, MD, Professor and Associate Chair, Department of Medicine, and Professor, Department of Bioethics and Humanities, University of Washington

How healthcare organizations and providers respond when patients are harmed by their care is the ultimate test of their commitment to patient safety, quality, equity, and patient-centeredness. This is a challenge that far too many organizations fail to meet. Despite their global support of being transparent when care has gone wrong, turning this principle into highly reliable practice is challenging. Patients and families often notice problems in care but hesitate to speak up for fear it will adversely affect their ongoing care. Clinicians' reflexes to keep uncomfortable information about care breakdowns to themselves, coupled with fear that open communication about what happened with patients with the organization could lead to punitive consequences, further dampen transparency after harm. New initiatives known as Communication and Resolution Programs (CRPs) are quickly becoming the gold standard for identifying and responding to harm events with compassion, transparency, and accountability. Open communication as reflected in CRPs can help organizations improve patient and

family experience and promote both provider well-being and patient safety. Also examined are barriers to effective CRP implementation and strategies to overcome these challenges.

## From the Closest Observers of Care: Caregiver and Patient Hospital Safety Observations

Naomi Bardach, MD, Professor of Pediatrics and Policy, School of Medicine, University of California at San Francisco

Adverse patient safety event rates remain stubbornly high in hospitals. We describe an often untapped source of safety event reporting—patients and family members of hospitalized pediatric patients. We use a real-time mobile phone interface in the inpatient setting, which was developed in partnership with families and clinicians, to elicit safety observations daily. These observations are then shared with unit leadership to inform safety efforts. A learning collaborative of participating units with physician and nursing leadership and family advisors convenes monthly to share lessons learned and approaches to incorporating these observations into existing safety structures and efforts.

AHRQ Publication No. 24-0030
January 2024
www.ahrq.gov