



BETSY LEHMAN CENTER

for Patient Safety and Medical Error Reduction

Betsy Lehman Center Advisory Roundtables: Conversations about Patient Safety in Massachusetts

November 2014

SUMMARY

Earlier this year, the Betsy Lehman Center for Patient Safety and Medical Error Reduction (BLC) convened more than 100 patient safety experts and stakeholders—including consumers—through eight Advisory Roundtables. Our purpose was to solicit diverse views about the current state of patient safety in Massachusetts including gaps, opportunities, and priorities. The information from these sessions will inform the strategic direction and functional roles of the newly reestablished BLC, an independent state agency charged by the Legislature with advancing patient safety in the Commonwealth.

A number of cross-cutting themes emerged during the course of the roundtable discussions. While many of the top issues were common to all of the roundtables, the perspective on the topic or the intensity of the concern often varied depending on the setting of care or the role of the participant, whether patient, doctor, nurse, practice manager, hospital executive, insurer, or employer.

Participants' primary concerns about patient risks can be distilled down to the following themes: (a) communication; (b) electronic health records; (c) medication management and reconciliation; (d) transitions of care; and (e) an assortment of specific clinical issues. In addition to these major concerns, a general sense of anxiety was pervasive. It was exemplified by the doctor who cited concern about "what we don't even know to think about" and others who wondered whether anyone has an eye on the big picture. The rapid pace of change, including introduction of new medical devices and technology, increasingly complex health care systems, and time and reimbursement pressures all seem to contribute to the overall level of concern.

The list of challenges and barriers to improving patient safety is long, but toward the top are: (a) overcoming time and reimbursement pressures; (b) tensions about reporting (both within organizations and to regulators) and public disclosure; (c) maintaining strong clinician-patient relationships; (d) the need to embed patient safety in the health care infrastructure; and (e) creating a just culture in health care organizations.

Participants' views diverged over the efficacy of existing efforts to improve patient safety. While there was a general sense that a patient safety culture is emerging, participants also expressed a clear view that there is much room for improvement. Opportunities include: (a) greater attention to what can be learned from near misses; (b) data aggregation and analysis for purposes of shared learning; (c) increased leadership by health care executives and trustees to prioritize patient safety and foster a safety culture in their organizations (d) patient engagement and empowerment; and (e) attention to cultural diversity in health care settings.

The roundtable discussions were intense, frank, and refreshingly open; there was little defensiveness or posturing. The resounding takeaway was that participants have a high level of

concern about patient safety, a strong desire for shared learning beyond their own practices and institutions, and forward movement. Participants were interested in having BLC focus on celebrating good work and positive action. There was also a call to have BLC serve as a convener, a bully pulpit, and a disseminator of meaningful information that can leverage learning opportunities to drive improvements in patient safety.

BACKGROUND

The Betsy Lehman Center for Patient Safety and Medical Error Reduction (BLC) has a broad mandate to improve patient safety in Massachusetts. It is named after Betsy Lehman, a prominent *Boston Globe* healthcare reporter and mother of two young children, who died in 1994 as the result of a preventable medical error. Her untimely and shocking death became a catalyst for improvements in patient safety both here and nationally.

Originally established through legislation in 2004, BLC operated within the Massachusetts Department of Public Health until 2010. It was recently reestablished as an independent agency affiliated with and supported by the Center for Health Information and Analysis (CHIA). It has its own board comprised of the Attorney General, the Secretary of Health and Human Services, the Undersecretary of Consumer Affairs, and the Executive Director of CHIA.

Under its enabling statute, BLC is charged with leading a program of research, analysis, and dissemination and coordinating the patient safety activities of state health agencies and health care providers. Given the breadth of this mission, our initial challenge has been to determine how an independent, non-regulatory state agency can best act to advance patient safety in the Commonwealth. We have framed this inquiry as follows:

- *What should be BLC's functional role and areas of focus given the gaps and opportunities in the current landscape?*
- *How can BLC contribute to ongoing work by others in the patient safety space and avoid duplication of effort?*

During 2014, BLC initiated a strategic planning process to identify areas of need that it is uniquely positioned to address. This process has been informed by a program of research designed to assess the existing patient safety landscape in Massachusetts in order to develop an action plan and priorities, both short and long term.

As a first step, BLC organized a series of eight, two-hour Advisory Roundtables which convened a wide range of experts and stakeholders for structured conversations about patient safety in the state.¹ Participants included individuals who represent the hospital, outpatient, long term care, patient, health plan, and payer perspectives from across the Commonwealth, including Boston, MetroWest, the South Shore and Cape Cod, Central and Western Massachusetts. BLC was assisted by a planning committee whose members co-facilitated many of the roundtable sessions.²

¹ See Appendix 1 for list of Advisory Roundtable participants

² See Appendix 2 for planning committee members

The goal of the roundtable discussions was to gather impressions and overarching themes in order to create an inventory of issues and questions that could inform additional research activities as well as subsequent deliberations about BLC's strategic direction. The roundtables were not expected to produce consensus or conclusions. Instead, the intent was to gather input from key stakeholders and identify common themes and concerns.

WHAT WE HEARD

The roundtable discussions were framed around several questions:

1. What patient safety concerns keep you up at night?
2. What do you consider the most pressing challenges and barriers to change?
3. What progress have you seen in recent years?
4. Where do you see opportunities for forward movement?

A number of cross-cutting themes emerged over the course of the roundtable discussions. While many of the major issues were common to all of the roundtables, the perspective on the topic or the intensity of the concern often varied depending on the setting of care or the role of the participant, whether patient, doctor, nurse, practice manager, hospital executive, insurer, or employer.³ Several of the most pressing risks to patient safety were expressed across the spectrum: as personal concerns, challenges and barriers, areas of progress, and present opportunities.

Although it would be impossible to capture every idea discussed over the course of all eight sessions, the following narrative categorizes and synthesizes many of the key themes. It represents the views and opinions of individual participants but should not be read to reflect consensus within or across the roundtables. Nor should any of the statements be taken as findings of fact or conclusions by BLC.

1. Concerns that keep people up at night

Communication and transitions of care: Accurate and timely communication among clinicians and staff and with patients and payers is an essential element of delivering safe care. Straining participants' ability to communicate effectively are: the sheer volume of information, the increasing complexity of care, multiple shift transitions each day within inpatient and long term care settings, and transitions between settings of care.

³ See Appendix 3 for summaries of key themes from each of the eight Advisory Roundtable sessions

Questions abound about the most effective ways to communicate clinical and other information to patients in ways they can understand, particularly given the frequent use of clinical language. Multiple languages and cultural differences create particular challenges. Participants also said that issues related to end-of-life care, patient preferences, shared decision-making, and informed consent need attention.

Handoffs within institutions and transitions between settings of care are considered to be difficult and often dangerous due to a failure to communicate important information. There is a perceived need for patient care plans at the community level that are available to the entire care team as well as patients and family members. Discharge planning needs to be streamlined with attention to what the patient and subsequent providers really need to know.

Providers often lack feedback loops on the success of their patients' care transitions. For instance, post-acute care facilities do not see readmission data on patients who they discharge but who are subsequently readmitted to hospitals.

Electronic health records (EHRs): Roundtable participants described a love-hate relationship with EHRs. They expressed great frustration that the EHRs are not user-friendly and that EHR vendors are not accountable for fixing unanticipated design problems that put patient safety at risk. A common perception was that EHRs do not reflect actual workflows because they are designed by people who do not have clinical experience. "Click fatigue" was cited as a real problem that contributes to errors. These are just some of the concerns raised by participants:

- EHRs are difficult and time-consuming to use. They make a vast amount of information available but are responsible for both insufficient information and superfluous information. There needs to be a way to prioritize the information and highlight the most critical information about a given medical event; even a summary section would help.
- Information in EHRs and health information exchanges needs to be updated frequently so it is current and reliably accurate.
- The systems often lack a mechanism for highlighting who is responsible for next critical steps when messages are copied and forwarded to multiple clinicians.
- Time is wasted looking for buried information among the "note bloat" created by cut and paste work product.
- It is time consuming for PCPs to have to input everything that comes to them from the specialists. Specialists should have greater access to EHRs.

- Lack of interoperability of EHRs across different provider groups and systems is a significant shortcoming.
- Software should be scaled for different types of practice settings rather than trying to force “one size to fit all.”
- Protected information (for example, about behavioral health or HIV status) is unavailable although important to delivering safe health care.
- Opportunities for clinicians and others to offer feedback to vendors of EHR systems are too limited. There is no existing mechanism to aggregate and share information or to resolve EHR design issues that are undoubtedly leading to patient safety risks across many care settings and systems. EHR vendors are not accountable for EHR design issues that result in patient harm.
- EHRs are particularly difficult to use in an emergency department.
- Training in the use of EHRs is inadequate.
- It is unrealistic to hope or expect that EHRs will perform an adequate communication function among providers or with patients.

EHR issues related to medication management and reconciliation are discussed below.

Medication management and reconciliation: Participants highlighted numerous issues associated with medication errors, for example:

- Better systems are needed for noting and tracking potential adverse drug interactions.
- Medication reconciliation needs to be accurate before patients leave the hospital. But it is difficult to accomplish given the many other required discharge tasks. It was noted that medication reconciliation errors on discharge may affect more than half of all patients.
- Most EHR systems list a patient’s medications in alphabetical order, making it hard to find the relevant information and discern which medications are most important.
- New pharmaceuticals and new dosing protocols increase the opportunity for errors.
- Geriatric medicine needs to be better and more-widely understood, particularly around appropriate dosing and potential adverse drug interactions specific to older patients.
- Medication reconciliation is particularly challenging in the emergency room due to time pressures, especially with older patients.

- Despite the potential of EHRs to facilitate medication reconciliation, the current platforms can produce unintended consequences. For example, the automatic expiration of an antibiotic order after a set period of time--to prevent excess use--can lead to premature discontinuance of needed antibiotics unless clinician review is built into the process.
- Patients and their caregivers may not understand important aspects of their medication regimens, so they are sometimes unreliable reporters.
- Inappropriate or expired medications are in many patient homes.
- Patients may not take their medications as prescribed.
- Prescription drug abuse happens; some patients move from doctor to doctor to ensure a steady supply of new prescriptions for medications.

There were a number of suggestions for improved medication reconciliation and management:

- EHR medication lists could be sorted or highlighted by disease category or priority so that providers can find the essential information quickly.
- Patients should have electronic cards with all medications listed and constantly updated (a common practice in France).
- Pilot projects that involved sending pharmacists or other staff to patient homes to oversee medication use have been successful but are hard to scale and sustain.

Specific clinical issues:

Novel safety risks: Responsibilities are often unclear when it comes to identifying, evaluating, and addressing new safety risks that emerge as systems change and new systems are introduced. Some examples mentioned were: workflow changes related to EHR implementations; introduction of new medical devices into a clinical setting; and limitations on residents' working hours.

Behavioral health issues: There were many concerns expressed about people with mental health disorders getting lost in the system (for example, from incarceration to an emergency room) and challenges to integrating psychiatric treatment and behavioral health with primary care. In addition, mental health patients sometimes trigger safety risks for others in the facility, notably the emergency department. Much of this concern stems from the practice of holding mental health patients in the emergency room without admitting them (known as "boarding"), which results in unsafe stretching of resources that puts all patients at risk.

Setting-specific clinical issues: Participants discussed a wide range of safety concerns associated with specific care settings: hospitals; outpatient practice; long-term care facilities; and during transitions of care between settings. Participants noted setting-specific patient safety risks such as antibiotic resistance, patient falls, delays in diagnoses, and other issues related to “closing the loops” on patient referrals, laboratory results and other necessary follow-up. Particularly error-prone situations and procedures were raised, including mislabeling of multiple skin biopsies taken during a single visit.

2. Challenges and Barriers to Change

Time and reimbursement: Many participants felt that time equals money and there is not enough of either. This makes it hard to slow down enough to build relationships and keep patients safe. This came up repeatedly and was cited as a key safety issue for outpatient practices. Many roundtable groups expressed a belief that primary care doctors are the most beleaguered due to the pressures of inadequate time and reimbursement.

- Closing open loops, particularly following up and documenting test results and specialist appointments, can be overwhelming.
- There was a general sense that things simply do not get done because of time constraints, including tracking down referrals and other needed information.
- Outpatient settings typically are not staffed by quality and safety managers or risk managers that are commonly found in hospital settings.
- For the most part, current reimbursement practices do not incentivize hospitals and other facilities to develop systems for reducing the risk of patient harm.
- Traditional fee-for-service providers are not compensated for time spent ensuring patient care transitions are smooth and safe.

Reporting to government regulators: Participants expressed frustration and disappointment in the current approach to collecting and reporting information about medical harm. Many participants indicated that very little learning is coming out of the state’s two adverse event reporting systems, and that the systems do not provide a complete and accurate picture of patient safety in Massachusetts. Primary concerns included:

- Complexity and duplication—specifically, reporting some categories of adverse events both to the Department of Public Health (DPH) and the Board of Registration in Medicine (BORIM).

- Providers devote greater focus to compliance with reporting requirements than they do to assessing and addressing the safety issues reflected in the reports they submit.
- Analytic feedback from DPH and BORIM about reported adverse events is very limited; better feedback loops could promote learning if they are timely and accurate and focus on data that is meaningful and actionable.
 - The BORIM periodic newsletter highlighting effective interventions was cited as a positive exception to the general lack of feedback.
- Increased reporting requirements - without improved assessment and feedback - would be counterproductive.

Internal reporting: Many participants described frustration with the lack of time and resources available to support internal reporting and discussion of safety incidents or concerns by staff in hospitals and other clinical settings. There is also a desire to leverage the existing data to get better results.

- Reports need to be triaged so that the most serious issues are not lost.
- Small numbers of serious adverse events in any one institution make it difficult to ascertain trends. It would be more meaningful if more data could be aggregated across institutions.
- Focusing on “outliers” – single, unusual cases of extreme harm - can distract from the management of more prevalent risks that need attention.
- Patient safety discussions are generally reactive, often prompted by a mandatory reportable adverse event that triggered an investigation. A more proactive approach would encourage such discussions based upon staff concerns about near misses and potential safety risks.

Transparency: The degree to which institutions are comfortable with the transparency of their patient safety data varies depending on the institution and the context and whether the information will be used for external or internal purposes.

- External transparency refers to the disclosure of patient safety data from a hospital, unit, or individual clinician to public audiences. Concern about external transparency seemed to be grounded on distrust of the reporting systems created by regulatory or advocacy groups. Providers, in particular, feared that:
 - Peer organizations will not use the same standards when reporting and the institutions that report most accurately will look the worst;
 - Averages do not provide meaningful information about safety across an institution—data at the departmental or unit level would be needed; and

- Consumers will misinterpret the data.
- Internal transparency refers to reporting of errors, near misses, and other safety concerns by staff within their institutions.
 - Internal transparency was generally seen as a positive goal.
 - Levels of internal transparency seem to vary widely. Some participants reported institutional cultures that promote candor about adverse events and near misses, while others indicate that lawyers, risk managers, or fear of ‘looking bad’ discourages people from being open about adverse events.
- Some participants voiced concern that increased public disclosure (external transparency) would have a chilling effect on health care professionals’ willingness to report errors and near misses within their institutions (internal transparency), and ultimately hamper the opportunities for learning that can reduce the risk of error.

Payer and purchaser roles:

A number of new federal and state policy initiatives around health care reform shift some responsibility for patient safety and quality to health insurance providers and employers. There are a number of challenges to boosting their role and influence on reducing patient safety risks, including:

- While health plans receive data on adverse events affecting their members, the information is limited and is not shared across insurers;
- Payments to providers can be withheld for services provided as a result of a medical error. But payers told us this seldom happens in practice.
- Insurers can terminate their contracts with problematic physicians, but the process is onerous and costly, and the outcome does little to protect consumers who are covered by other plans.
- Large employers expressed concern that they don’t have enough information to help their employees make better choices about quality and safety of care.

Just culture: Some participants referred to the challenge of building and maintaining a just culture that promotes internal transparency and focuses on system safety improvement and accountability rather than individual blame, while also holding individuals responsible for their own actions when appropriate.

Ambulatory settings: There was recognition that although much of the patient safety efforts have centered on hospitals, serious medical errors have become increasingly common in outpatient settings. Outpatient physician practices, dialysis centers, and other ambulatory settings have lagged behind hospitals in adopting quality improvement and safety measures, often as a result of a comparative lack of resources and infrastructure.

Long term care settings: Long term care settings face many unique challenges, and have not received as much attention from policymakers, regulators and the public when it comes to patient safety. Leadership and staff awareness of safety risks and systems improvements to address them remain low. In addition, participants noted the severe financial constraints under which many long term care facilities operate that make new investments in safety systems unlikely. The operations of roughly half of the state’s long term care facilities are not computerized at all, and lack staff who can operate the spreadsheet software DPH asks them to use to report adverse events. Even defining what constitutes an “error” in the case of the long term care population is not straightforward. Participants noted the example of patient falls that result in injuries. Many such falls could likely only be prevented through extreme restrictions on residents’ mobility and autonomy that would raise other concerns.

Home care: General concerns surfaced about safety risks associated with care delivered in homes - from long term care provided by home health aides to elders or people with disabilities to home infusions following a patient’s discharge from a hospital. The basic takeaway was that it is currently hard to monitor, quantify, and work collectively on solutions to resolve the safety risks that occur in these and other home care situations.

Embedding patient safety in the health care infrastructure: These challenges include unaligned financial incentives, the absence of safety responsibilities in job descriptions and HR review policies, and inadequate internal communications capacity for information sharing. Many also expressed the view that workforce issues, such as inadequate staffing, insufficient skillsets, and high staff turnover, lead to “workarounds” that can compromise patient safety.

Relationships: There was concern that the traditional doctor-patient relationship has been eroded by a lack time for doctors to get to know their patients, lack of continuity because patients are seeing multiple providers, and staff turnover that reduces consistency within each practice.

Cultural competency: Some participants drew a connection between a broad lack of cultural competence among care providers and the increased risk of medical harm. Hospitals and health care providers treat patients of different national origins, religions, and ages. Patients speak a variety of languages and many have limited English proficiency. In addition, clinicians with different training, specialties and backgrounds don’t always communicate well with each other. Participants recognized the value of developing better educational tools for understanding cultural differences.

3. Progress

We heard various expressions of pride about progress that has been made to improve patient safety—tempered by concerns that errors remain very common. As one participant noted, “‘*patient safety culture*’ is a new concept but at least now it exists.”

Provider awareness: Participants thought that health care professionals now acknowledge the too-frequent incidence of medical errors, in contrast to 20 years ago when no one would admit to their existence. There was a desire to distinguish between bad outcomes and errors, and also some concern about unrealistic patient expectations. Although a few private practice physicians indicated that they had not witnessed many serious errors that resulted in death and questioned the statistics, most participants seemed to agree that medical errors and near misses are underreported and things go wrong regularly.

The reduction of central line infections during hospitalizations was cited as an example of improved safety. Timeouts and checklists were cited as having positively improved the culture in operating rooms. At the same time, hierarchical structures and reluctance to speak up still prevail in many settings.

Best practices: Many proven strategies now exist for addressing a wide range of patient safety risks. While dissemination and operationalization of these strategies, even within the same organization, can be a challenge, it can and has been done. A number of participants complained that it is difficult to find information about best practices that might be replicated to address specific patient safety issues in their organizations.

Patient engagement: Initiatives to engage patients both in their own care and in an advisory capacity to providers was mentioned as an area of change and development. The role of Patient Family Advisory Committees is evolving and there is increased recognition, at least within some institutions, of the value of patient engagement on fundamental patient safety issues.

EHR: As noted earlier, there were cautionary tales about the ways in which technology creates new sources of errors that need to be studied and understood. Nevertheless, the advent of new technology and EHRs was cited as progress toward improved patient safety. Most concur that EHRs and other new technologies have at least some benefits and future potential despite the great deal of frustration and concern about current inadequacies.

4. Areas of opportunity

Culture and leadership: Participants described a patient safety culture that is emerging but remains a work in progress. Many participants noted the great variation among institutions and even among subunits within institutions with respect to their focus on safety and the strength of their safety culture. These variations relate to how willing institutions are to promote patient participation in safety efforts, transparency with patients and families after errors or adverse events, and the extent to which errors and adverse events are catalysts for change. The need for culture change and a way to assess the culture and measure the change were mentioned at several roundtables.

The important role that governance and leadership play in advancing a culture of safety was expressed. Several participants indicated that hospital CEOs and boards need to assure that patient safety is a top priority and that adequate resources are available to support safety efforts. The correlation between a CEO and governing boards that champion patient safety and an effective patient safety program was highlighted.

Near misses: Participants expressed a strong view that near misses offer a big opportunity for quality improvement if they are reported (at least internally), seriously reviewed, and analyzed. Currently it is an area of missed opportunity for learning. What kept the near-misses from becoming errors? What would assure that they do not become errors in the future? The perception is that near misses are rarely acknowledged, much less reviewed and used to improve patient safety.

Shared learning: There is power in aggregating data as well as sharing experiences, interpretations, and results of safety and quality improvement efforts across institutions. If more data were aggregated, it would be easier to spot trends more quickly. If data analysis was more robust and widely distributed, it would facilitate further development, dissemination, and implementation of best practices. There seemed to be high energy for creating a forum that could focus on advancing opportunities for shared learning.

Improving teamwork and eliminating silos: Participants recognized the value of finding creative ways to break down silos and create shared workloads among team members (nurses and clinical assistants) so that, with the benefit of computer based practice supports, health care professionals can work “at the top of their licenses,” delegating other tasks to non-physicians.

Patient engagement: Consumers can be a tremendous source of energy and information on the subject of patient safety if they are educated, empowered and engaged, many of our

participants said. Some noted that while there is much talk of “patient engagement,” the concept is not well defined or understood. Patients need to have a feeling of safety as well as actually being safe. Hospitals have created Patient Family Advisory Councils, but many of these PFACs have served in marginal roles. There is concern among members of some PFACs that they be given a stronger role as patient safety advocates rather than being used for marketing and public relations purposes. There is an opportunity for many hospitals to take the lead from other hospitals that engage their PFACs on patient care issues and include members on their patient safety committees.

FUTURE DIRECTIONS FOR THE BETSY LEHMAN CENTER

What keeps health care providers and leaders up at night? One physician put it this way: “I haven’t seen a patient who has had a flawless trip through the system.” Another believes that patients assume their providers “know everything...but we don’t.”

Clearly, participants said, more needs to be done. The delivery of health care has become more complex, as have the challenges associated with meeting the needs of patients diagnosed with multiple and chronic illnesses. Providers must be conscious of cost without losing sight of quality and safety. Opportunities to lose valuable information about a patient have increased: electronic health record systems have not realized their potential for preventing errors and have introduced some new risks, medication management and reconciliation is fraught with difficulty, care transitions are often poorly communicated and disjointed, and patients may not be encouraged to take charge of their own care.

In this climate, roundtable contributors expressed a desire for BLC to play an active role in bettering the patient safety record in Massachusetts. As an independent agency, the Center is positioned to act as a convener and a disseminator of information. Suggested roles for BLC included:

- Facilitating collaborations among health care providers to help them tackle common problems and share best practices across their organizations;
- Creating a platform for more robust analysis of adverse event data reported to the state, enhanced feedback to reporting institutions, and sharing of aggregated data and analysis across institutions for the purpose of shared learning;
- Increasing public awareness and consumer engagement around patient safety;
- Advancing safety as a top priority for health care CEOs and boards of directors;
- Ensuring that health care organizations and policymakers recognize that investments in patient safety are aligned with cost containment; and

- Encouraging a more significant role for Patient and Family Advisory Councils in patient safety activities at their institutions.

Some participants noted that, as a non-regulatory state agency, BLC also has an opportunity to set a positive tone that inspires, encourages and celebrates individual and institutional efforts to effect meaningful change in patient safety policy and practices.

BLC is grateful to all who have contributed to this important dialogue to date. In the coming months, we will remain engaged in an active conversation with providers, consumers, advocates, payers, state agencies, and other interested parties to ensure BLC is on a path to support meaningful improvements to the patient safety landscape in our Commonwealth.

Appendix 1

BETSY LEHMAN CENTER ADVISORY ROUNDTABLE PARTICIPANTS

We would like to recognize the following participants who so generously devoted their time and energies to our Advisory Roundtables. Inclusion on this list does not imply their endorsement of the contents of this report.

Jann Ahern, Executive Director, Home Care Division, South Shore Hospital
Howard Alfred, MD, UMass Memorial Medical Center
Lisa Allen, Vice President Quality and Safety, Steward Healthcare
Bruce Auerbach, MD, Chief Executive Officer, Sturdy Memorial Hospital
Peter Barker, MD
Evan Benjamin, MD, Senior Vice President, Healthcare Quality, Baystate Health
Randi Berkowitz, MD, Medical Director, Commonwealth Care Alliance
Kate Bicego, Consumer Assistance Program Manager, Brigham and Women's South End Community Health Center
Alice Bonner, MD, Associate Professor, School of Nursing, Northeastern University
Karen Boudreau, MD, Chief Medical Officer, Boston Medical Center HealthNet Plan
Nancy Bucken, Executive Director, Harbor Health Service (Hyannis & Plymouth)
Jeffrey Burl, MD, Chair of Geriatrics, Reliant Medical Group
Jim Butterick, MD, Chief Medical Officer, Falmouth Hospital
Stephanie Calcasola, MSN, Director of Quality, Baystate Medical Center
Gina Campbell, Chief Operating Officer, Baystate Franklin Medical Center
Francis Campion, MD, Vice President for Clinical Affairs, Alere Analytics
Beth Capstick, Consultant, Massachusetts Coalition for the Prevention of Medical Errors
Joan Chapdelaine, Harbor Health Services
Lisa Cimino, PFAC Member, Massachusetts General Hospital Family Advisory Council (MGHFAC)
Jan Cook, MD, Chief Medical Officer, Minuteman Health
Dianne Cutillo, Senior Director of Public Affairs, Cooley Dickinson Hospital
Georgia Dash, Director of Infection Prevention, Cape Cod Healthcare
Steve Davis, MD, Worcester Medical Center
John Devlin, Professor, Critical Care Pharmacy Fellowship Program, Northeastern University, Department of Pharmacy Practice
Paul Dinatale, Assistant Director, Health Care Quality, The Commonwealth of Massachusetts, Department of Public Health
Anton Dodek, MD, Associate Chief Medical Officer and Vice President of Medical Quality and Strategy, Blue Cross Blue Shield of Massachusetts
Terry Donovan, RN, Welch Healthcare and Retirement Group
Ronald Dunlap, MD, President, Massachusetts Medical Society
Jack Evjy, MD, Senior Medical Advisor, Massachusetts Medical Society

James Feldman, MD, Chair of Committee on Quality Medical Practice, Massachusetts Medical Society

Judy Flynn, Vice President Patient Care Quality, Compliance Officer, Partners HealthCare at Home

Pat Folcarelli, RN, PhD, Director of Patient Safety, Beth Israel Deaconess Medical Center

Damian Folch, MD, Damian Folch Family Practice and Lifestyle Medicine

Nancy Gaden, RN, Senior Vice President, Boston Medical Center

Larry Garber, MD, Medical Director for Informatics, Reliant Medical Group

Tracy Gay, JD, Assistant Vice President of Patient Safety Operations, CRICO

Arlene Germain, President and Co-Founder, MA Advocates for Nursing Home Reform

Maria Gray, Vice President Quality & Safety, Steward Healthcare

Paula Griswold, Executive Director, Massachusetts Coalition for the Prevention of Medical Errors

Sue Gullo, Institute for Healthcare Improvement

Ann Hartstein, Secretary, Executive Office of Elder Affairs

Alex Heard, MD, Chief Medical Officer, Falmouth Hospital

Helen Hendricks, Director of Quality Management and Improvement, Neighborhood Health Plan

Laurie Herndon, APRN, Director of Clinical Quality, Massachusetts Senior Care Association

Cynthia Holzer, MD, Medical Director, UnitedHealthcare Community Plan

Cyrus Hopkins, MD, Medical Director, Patient Safety; Chair, Quality and Patient Safety Committee (QPSC), Massachusetts General Hospital

Margaret Hudlin, MD, Vice President/Medical Officer, UMass Memorial Medical Center

Karen Johnson, Baystate Health

Allen B.Kachalia, MD, Assistant Professor of Medicine, Brigham and Women's Hospital and Harvard Medical School

Marshall Katzen, MD, UMass Memorial Medical Center

Elaine Kirshenbaum, Vice President for Policy, Planning and Member Services, Massachusetts Medical Society

Robert Klugman, MD, Chief Medical Officer, Kindred Healthcare

Lynn Kohrs, Manager, Health Benefits and Programs, GE Aviation

Louis Kuchnir, MD, UMass Memorial Medical Center

Eric Linzer, Senior Vice President of Public Affairs & Operations, Massachusetts Association of Health Plans (MAHP)

Diane M.Loud, Senior Organizational Effectiveness Specialist/Co-Chair of Patient Family Advisory Council, Boston Medical Center

Beverly Loudin, MD, Medical Director, Vice President of Patient Safety & Risk Management, Atrius Health Foundation

David Lucier, MD, Medical Resident, Beth Israel Deaconess Medical Center

Michelle Malkoski, Director of Nursing, Knollwood Nursing Center

Robert McCarron, MD, Executive Director, UMass Memorial Medical Center

Mary McKenna, MA State Long-Term Care Ombudsman, Massachusetts Executive Office of Elder Affairs

Karen Devereaux Melillo, PhD, ANP-C, FAANP, FGSA

Professor Interim Dean, School of Nursing – College of Health Sciences;
Director, Center for Gerontology Research and Partnerships; Regional Consortium for
Community-Engaged Gerontology Researchers, University of Massachusetts Lowell

Judith Melin, M.A., MD, Executive Director & Associate Chief Medical Officer, Workforce
Health, Lahey Health

Stephanie Messina, Benefits Director, Demoulas Market Basket

Paul Miller, Survey Branch Chief, Centers for Medicare & Medicaid Services

Elizabeth A. Mort, MD, Vice President Quality & Safety, Massachusetts General Hospital,
Edward P. Lawrence Center for Quality and Safety

Marie Mullen, MD, Executive Director, UMass Memorial Medical Center

Kim Munto, Director of Risk Management, Milford Regional Medical Center

Mary Neagle, Project Manager, Massachusetts General Hospital

Constance Nichols, MD, Executive Director, UMass Memorial Medical Center

Pat Noga, PhD, Vice President, Clinical Affairs, Massachusetts Hospital Association

Dominic Nompoggi, MD, UMass Memorial Medical Center

Mary O'Quinn, Director of Quality and Compliance, Spaulding North Shore

Linda Percy, PFAC Member, New England Baptist

Debra S. Poskanzer, MD, CHIE, Vice President, Medical Management and Quality, Tufts
Health Plan

Tami Rich, PFAC Member, Boston Children's Hospital

Suzanne Robbins, Director of Clinical Operations, Community Health Center of Cape Cod

Joel Rubinstein, MD, Medical Director, Network Medical Management & Behavioral
Health, Harvard Pilgrim Health Care

Matt Salmon, Chief Executive Officer, Salmon Health and Retirement

Doug Salvador, MD, Vice President, Medical Affairs Department of Healthcare Quality,
Baystate Medical Center

Kenneth E. Sands, MD, Senior Vice President of Health Care Quality and Chief Quality
Officer, Beth Israel Deaconess Medical Center

Robert A. Sands, MD, Instructor, Harvard Medical School, Brigham & Women's
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Luke Sato, MD, Chief Medical Officer, CRICO

Patricia Scagnoli, Director, Quality & Compliance, Brockton Neighborhood Health Center

Oren Schaefer, MD, UMass Memorial Medical Center

Gordon Schiff, MD, Director of Patient Safety Research, Partners HealthCare

Penelope Shaw, PhD, Consumer, Kindred Nursing and Rehabilitation

Elissa Sherman, MD, President, LeadingAge Massachusetts

Theresa Sievers, Vice President Quality & Patient Safety, Lawrence General Hospital

Colette Silverman, Chief Administrative Officer, Visiting Nurses Association of Cape Cod

Marjorie Solomon, PFAC member, Beth Israel Deaconess Medical Center

Pat Stahl, Program Manager, Department of Volunteer Services, Dana-Farber Cancer
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Veera Sudireddy, MD, Executive Director, UMass Memorial Medical Center

Christina Taft, UMass Memorial Medical Center

Sara Taylor, PFAC Member and Co-Chair, Dana-Farber/Children's Hospital Cancer Center,
Pediatric Patient and Family Advisory Council

Robert Terrill, MD

Dianne Thomas, Patient Relations Director, Baystate Medical Center

Deb Wachenheim, Health Quality Manager, Health Care For All

Brianne White, RN, UMass Memorial Medical Center

Erika Wilkinson, Senior Policy Advisor, Government & Regulatory Affairs, Blue Cross Blue
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Jane Williams, MD, Medical Director, Blue Cross Blue Shield of Massachusetts

Ashley Yeats, MD, Chief Medical Officer, Beth Israel Deaconess Milton

David Young, MD, Vice President, SeniorLink

Mark Yurkofsky, MD, Spaulding Nursing and Therapy Center West Roxbury

Appendix 2

PLANNING COMMITTEE

The Betsy Lehman Center is grateful for the assistance of an expert planning committee in convening and facilitating the Advisory Roundtables. Committee members include:

Evan Benjamin, MD, Senior Vice President Healthcare Quality, Baystate Health

Alice Bonner, PhD, RN, Associate Professor, Northeastern University School of Nursing

Michael Caljouw, Vice President of Government and Regulatory Affairs, Blue Cross Blue Shield of Massachusetts

James Feldman, MD, MPH, Vice Chair, Research, Department of Emergency Medicine, Boston Medical Center

Paula Griswold, Executive Director, MA Coalition for the Prevention of Medical Errors

Elaine Kirshenbaum, Vice President Policy, Planning, and Member Services, MA Medical Society

Robert Klugman, MD, VP Medical Affairs, Eastern Region, Kindred Health Care

Nicholas Leydon, Director of PROMISES Project, MA Department of Public Health

Rick Lord, President and CEO, Associated Industries of MA

Lora Pellegrini, President and CEO of MA Association of Health Plans

Kenneth Sands, MD, Senior Vice President of Healthcare Quality, Beth Israel Deaconess Medical Center

Colette Silverman, Director of Quality, Cape Cod Healthcare and Chief Nursing Officer, VNA of Cape Cod, Inc.

Deborah Wachenheim, Health Quality Manager, Health Care For All

The Betsy Lehman Center also acknowledges the many contributions of Peg Metzger, JD in producing this report.

Appendix 3

KEY TAKEAWAYS FROM ADVISORY ROUNDTABLE SESSIONS

The Betsy Lehman Center convened eight Advisory Roundtable sessions in the spring and summer of 2014:

1. **Hospital Setting/Greater Boston:** April 30, 2014, Betsy Lehman Center
2. **Hospital Setting/Western Massachusetts:** June 5, 2014, Baystate Health, Springfield
3. **Outpatient Medical Practice/Greater Boston:** May 7, 2014, Massachusetts Medical Society, Waltham
4. **Outpatient Medical Practice/Worcester:** July 17, 2014, One Biotech Park, Worcester
5. **Patient Family Advisory Council Perspective:** May 29, 2014, Betsy Lehman Center
6. **Community Health Centers and Hospitals/Cape Cod and South Shore:** June 12, 2014, Cape Cod Healthcare, Mashpee
7. **Health Plan and Payers:** June 18, 2014, Betsy Lehman Center
8. **Long Term Care:** July 10, 2014, Betsy Lehman Center

Here is what bubbled to the top from each of our discussions:

Patient Safety in the Hospital Setting
<p>Greater Boston</p> <p>The creation of a “patient safety culture” is a necessary first step for medical providers but is often the hardest one to take, we were told. The CEO of every hospital in the state needs to make the safe care of patients a top priority. In addition, time and resources should be invested in training and improvement tools to help nurses, physicians and other care givers avoid as many errors as possible, and learn from those they are unable to avert.</p> <p>By law, Massachusetts hospitals must tell the state when any one of 29 adverse events occur during patient care. Roundtable participants told us that the mandatory reporting system generates data, but analysis and dissemination of the information does not offer sufficient opportunities to learn from mistakes. To that end, the group expressed collective interest in having the Betsy Lehman Center facilitate the development of an additional voluntary reporting tool that also captures so-called “near misses.” That way, patterns can emerge more quickly, as could protocol changes to prevent those same events from recurring.</p> <p>Other forward-looking proposals to emerge from this session include:</p> <ul style="list-style-type: none">• Developing a method to measure the role played by teamwork – a key component to a robust safety culture;• Sharing information about interventions that may help hospitals improve their scores on the federal Agency for Healthcare Research and Quality safety measures; and• Better education around language and cultural differences that are often seen as barriers to effective communication among members of the medical team and between caregivers and their patients. <p>This group offered a series of concrete suggestions to improve patient safety, primarily around culture-creation and data collection and usage. They also strongly expressed a preference for using data to enhance shared learning rather than to shame or punish individuals or hospitals when mistakes are made.</p>

Western Massachusetts

Health care providers in western Massachusetts share many of the same worries, problems, and challenges as their counterparts in the metropolitan Boston area when it comes to ensuring patient safety.

Participants articulated a number of safety concerns, including: treating increasing numbers of patients with mental illnesses, especially in the emergency room; insufficient time for training and professional development in safety given other day-to-day pressures; communication problems, including during shift changes and transitions from a facility back home; and helping patients take a more active role in their care.

Providers echoed the need for better use of data on reportable adverse events as well as mechanisms for learning as much as possible from the “near misses.” That said, participants told us they were somewhat frustrated with current reporting systems, citing too much redundancy and inefficiency. They also expressed concerns about the potential for overlapping responsibilities of private and public patient safety organizations.

Patient safety leadership really must begin at the top and cannot exclude patients, they said. A virtuous circle results when there is dedication from top to bottom, good feedback loops, and an environment that encourages people to speak up about their concerns and ideas.

Patient Safety in the Outpatient Setting

Greater Boston

The strongest recurring theme in this discussion was the need for reliable, consistent communication to keep patients safe in the primary care setting. Obstacles to smooth communication are too numerous to list but include: information overload, electronic systems that don't highlight key aspects of a patient's conditions, time and financial pressures, cultural/linguistic differences, and insufficient systems for patient engagement.

In addition to communication issues, physicians told us that patient safety is compromised by a lack of clarity about responsibility and appropriate systems for care transitions, medication reconciliation, and insufficient funding for safety initiatives at the primary care level. Electronic medical record systems pose unique challenges in the primary care setting as does a culture that leaves physicians and other providers reluctant to speak openly about the patient safety concerns that keep them up at night.

Moving forward, physicians described three motivating principles behind patient safety:

1. *Focus* – on everything to keep patients safe;
2. *Fear and anxiety* -- about hurting people; and
3. *Openness in communication* -- with patients and their families to fix problems and traumas caused during medical care.

Physicians expressed both a deep commitment to their profession and a desire to have more help in safeguarding their patients. The current reporting and other safety-minded systems are inadequate to the task; a system that is predicated on learning from mistakes rather than blaming or shaming is needed.

Worcester

Clinicians in the Worcester area shared their worries about breakdowns in the coordination of care between primary care doctors and other medical specialists, medication errors, time pressures and the inadequacies of electronic medical records. Most agreed that: the culture in medicine should encourage self-reporting of errors; adherence to standards of care sometimes limits new techniques; and, often, good ideas are generated but follow-up is inadequate. Many also believe that the state's medical error reporting system doesn't help doctors and practices focus on the biggest problems.

To build an effective patient safety culture, the group also talked about the importance of encouraging individuals within the health care setting to step up and report their concerns. That can best be done by empowering individuals, building accountability, and shaping health care practices so they are focused on the patient.

Thinking broadly, these providers called for:

- Putting greater value on good communication and coordination;
- Involving patients in their care; and
- Offering resources to providers in outpatient settings to improve the culture around patient safety.

A guiding principle in improving patient safety, they said, should be to develop systems and processes that make it hard for good people to make mistakes.

Patient Family Advisory Council Perspective

The consumer voice in health care isn't always loud and clear. Patient and Family Advisory Councils (PFAC) were mandated by a 2008 Massachusetts law designed to improve the experience of hospital patients, but the empowerment of council members and the consumers they represent vary widely.

PFACs work with hospitals on many facets of the patient experience, but said they need help to be more effective stewards of a safe stay in the hospital for all patients. Some ways the BLC could support the work of PFACs statewide emerged.

- Because they often have to battle to be heard, PFAC members lose valuable time that could be devoted to substantive patient safety activity. BLC could help members with information gaps so they are truly informed on important safety issues and also help them achieve a place as partners with hospital administration in improving safety.
- BLC could identify and publicize successful PFAC activities. These might include more patient-driven projects in hospitals and integration of PFAC work with Quality Assurance and Performance Improvement (QAPI) projects in nursing homes.
- Hospital discharge procedures are generally designed to meet the hospitals' checklists and requirements. PFAC members underscored the need for streamlining discharge planning to better serve the patient and keep him or her safe during the transition back home and to follow-up health care.

There is a lot of energy and many ideas emanating from PFACs across the state. Many private practice and hospital physicians who participated in roundtable discussions also underscored the need for patient involvement in safety improvements. During this session, PFAC members repeated a motto, "nothing about us without us," and asked for help in living up to their charge.

Community Health Centers and Hospitals/Cape Cod and South Shore

Health care leaders in this part of the state were frank about the challenges they face and obstacles to reducing the number of patients who experience a medical error. They echoed comments made by providers in other roundtable discussions about adverse event reporting data that could be better utilized to foster learning and the need to spend more time scrutinizing "near misses" to inform improvements. One participant characterized the inconsistency in reporting medical missteps this way: "Things are better than they used to be but there are pockets where no one even wants to talk."

The prevention of patient falls and infections during hospitalization are two areas of patient safety they believe would particularly benefit from improved sharing of data and best practices. Concerns were also expressed about whether the growth in patient-centered homes and accountable care organizations will help or hinder communication as patients transition from their hospital stay back to their homes.

Participants identified numerous areas where more work needs to be done, including:

- Patient education and empowerment, including health literacy and cultural competency;
- Opportunities for errors during transitions of care, including when patients leave the hospital or nursing home, move between specialists and primary care or change pharmacies, for example;
- Compilation and sharing of best practices that promote safety; and
- Coordinate activities with other data-collection entities.

We heard an overarching concern about how best to reach health care providers who are not currently investing time and resources in patient protection. Institutions that lack the leadership or culture to prioritize patient safety are unlikely to utilize more robust data and best practices information.

Patient Safety in Long Term Care Settings

The health care needs of older adults pose special challenges to our health care system, especially when it comes to patient safety. Many physicians, nurses and others who care for seniors have little training in geriatrics. In addition, commonly cited patient safety problems such as inadequate communication, medication reconciliation, and care coordination, can be magnified when the patient population is older.

Many long-term care facilities have poor electronic health record systems or have difficulty interfacing with the EHR systems of another provider, we were told. Also, defining adverse events in an LTC setting can be nuanced. For example, while reducing falls is a noble goal, does this effort result in other harms from the use of restraints or an excessive number of alarms? Staffing issues are particularly pronounced in long term care facilities where leadership turnover is high and the skill sets of workers often don't match the advanced needs of the patients. Nurses, who provide much of the care in these settings, seldom get the recognition they deserve.

The gaps in communication and care for this population are many, but priority areas include:

- Compiling best practices in long-term care settings, rather than focusing on errors;
- Building communication bridges among hospitals, long-term care facilities and home caregivers so that care and discharge plans are clear and shared;
- Paying particular attention to medication records so that changes are updated and available to all of a patient's caregivers;
- Educating patients and families about what to expect in long-term care settings;
- Advocating for more front-line caregivers to receive training in gerontology; and
- Taking extra care of the need to include families, particularly when a patient has experienced cognitive decline.

This group underscored the need for deeper and broader conversations about patient safety in the long-term care setting. In fact, follow-up emails to the BLC from session participants often began with a phrase such as, "This issue was not even mentioned in the discussion." The list of "what keeps you up at night" scenarios for this group was long and showed deep concerns about providing better, safer care to aging members of our community.

Patient Safety from the Payer and Purchaser Perspective

Health insurance providers and businesses that pay a portion of their employees' health insurance have financial incentives to curtail costly medical errors. Yet, for a variety of reasons, both groups expressed concerns that they are not in a position to affect meaningful change in the incidence of patient harm.

Employers said they have little information about which providers, hospitals, or other care settings have the best safety track records, making it difficult for them to use their purchasing power to influence care quality. Safety data that is collected by health insurers is not passed along to employers.

Health insurers note that they have some levers available to them that could motivate providers to improve patient safety. However, they considered most of their options either too blunt or too time-consuming. For example, insurers told us they can remove providers from their network if they have documented concerns about the safe delivery of care. But it is seldom done because it is administratively costly and onerous.

Potential changes to the patient safety environment endorsed by the group included:

- A stronger effort on the part of state regulators to use their authority to identify providers and institutions with poor safety records;
- Improve the quality and consistency of root cause analysis reports when a serious adverse event has occurred so more can be learned from them;
- Institute patient safety programs in all health care settings; and
- Develop meaningful quality and safety measures that can be tracked and analyzed.

This group also suggested that meaningful improvement in patient safety can be made if more providers willingly apologize for errors and offer patients compensation when an error has been made in their care.