Information from Medical Peer Review Committee Redacted

Investigation into the Death of Laura Levis

REPORT TO CAMBRIDGE HEALTH ALLIANCE, SPECIAL COMMITTEE OF THE BOARD OF TRUSTEES

Martha Coakley and Dean Richlin, Foley Hoag LLP

March 2019



EXECUTIVE SUMMARY

The Somerville Hospital Emergency Department ("SHED") sees over 16,000 patient visits a year. It is an urban facility and, like all providers within the Cambridge Health Alliance ("CHA"), it treats a disproportionate share of low-income patients, a significant percentage of whom also present with behavioral health needs.

In the early morning hours of September 16, 2016, the SHED was treating a number of patients, including at least three behavioral health patients, who were under patient watch by the two security officers on duty at the time. As a result, no security officer was at the security desk. At about 4:27 a.m., the SHED received a call from the Somerville Police Department ("SPD") dispatcher that a woman was having an asthma attack and had said she found the SHED closed. The SPD dispatcher was unable to provide the woman's location. By this time, the woman—Laura Levis—had already collapsed approximately two minutes earlier.

Ms. Levis was eventually found by a Somerville firefighter. She was prone on a stone bench directly outside the windows of the SHED waiting room and reception area, in view of the SHED's surveillance cameras, between the ambulance bay door, which was locked, and the SHED main entrance, which was unlocked. It had been over eight minutes since she collapsed, and she was in cardiac arrest. SHED personnel eventually brought her into the SHED, resuscitated her, and transferred her to the Cambridge Hospital intensive care unit ("ICU"), where she died six days later.

Almost immediately after Ms. Levis' arrival at the SHED and transfer to the Cambridge Hospital ICU, SHED staff and others began the process of analyzing what had happened, what lessons might be learned, and what changes might be appropriate to improve future care. CHA personnel also reported the incident to the Department of Public Health ("DPH").

The care Ms. Levis received at CHA and the events leading to her death became the subject of intense public attention—first, laudatory for the compassion displayed by the ICU staff and, later, damning for the SHED's failure to locate Ms. Levis and CHA's failure to disclose to her family all it knew. Anyone reviewing the facts leading to Ms. Levis' death is struck by the fact that at any number of steps along the way, this particular asthma attack might have ended in recovery. Her death is especially tragic because of the strong sense that it did not have to happen.

CHA's Board of Trustees is responsible for pursuing CHA's mission: to improve the health of its communities. With that in mind, the Board created a Special Committee to evaluate Ms. Levis' death and determine what the organization, at all levels, might learn. The Special Committee has engaged Foley Hoag to gather the relevant evidence and advise the Special Committee and the Board on its findings, conclusions and recommendations.

In conducting this review, Foley Hoag has focused on the following questions:

1. Did the SHED's effort to locate Ms. Levis on September 16 comply with CHA standards and best practices for emergency medical care?

- 2. Did the Quality and Risk Management Process adequately assess the factors that may have contributed to Ms. Levis' death, and did CHA remediate the issues that were identified?
- 3. Did CHA appropriately communicate and disclose information regarding Ms. Levis' admission to the SHED to Ms. Levis' family?
- 4. Did the Board of Trustees and Senior Management fulfill its oversight responsibilities in regards to the review of Ms. Levis' treatment and the subsequent publicity?

Based on our review of the evidence and other relevant materials, Foley Hoag has concluded that CHA did many things right. Perhaps most significantly, Ms. Levis received excellent and compassionate care from the moment she was found until her death. Also significantly, CHA began to assess the factors that contributed to Ms. Levis' inability to access the SHED almost immediately after she was resuscitated. But there are also areas for improvement. Foley Hoag makes the following conclusions and recommendations:

- 1. The SHED received incomplete information at a point in time when, because of prior events, it had no time to lose in locating Ms. Levis. Further, CHA did not have a formal policy or procedure in place for ground searches for patients self-presenting outside the hospital, and the roles to be played in conducting a search were unclear. Under the circumstances, SHED staff acted reasonably, particularly based on the limited information they had. We recommend that CHA confirm that SHED staff know how they should respond to information that a patient is trying to access the SHED, and assess whether a regular review would improve clarity and role responsibility.
- 2. The Quality and Risk Management process began almost immediately after Ms. Levis was transferred to the Cambridge Hospital ICU, but the process was uneven. It successfully identified structural deficiencies, but failed to review decision-making by SHED staff to determine whether there are ways to enhance efficiency and the chances for a successful outcome. We recommend that Risk Management, working with staff from the SHED, assess staff decision-making on the morning of September 16 to determine lessons learned and improve the chances for successful outcomes in the future. We also recommend CHA assess whether it should adopt procedures to assure quality control of the Root Cause Analysis ("RCA") process.
- 3. CHA should have informed Ms. Levis' family that Ms. Levis' case was under review and provided her family the opportunity to ask questions and learn about CHA's findings. Nevertheless, we found no evidence of an intentional effort to mislead or withhold information. CHA's policies did not anticipate a situation where the treating staff were different from the staff involved in the adverse event. Moreover, there was a lack of clarity as to who had responsibility to make disclosure to the family. We recommend that CHA consider an additional check in the RCA process to assure disclosure about pending investigations, such as adopting an automatic communication procedure for all RCAs for incidents when a patient has suffered harm.
- 4. The Board of Trustees and Senior Management failed to recognize that because Ms. Levis' inability to access the SHED was under review, the publicity stemming from the laudatory

media coverage created substantial strategic or enterprise risk to CHA. The Board and Senior Management failed to identify that risk affirmatively and take steps to mitigate it. We recommend that the Board of Trustees assess how it performs its oversight responsibilities, and review its communications with Board committees and management to ensure that information related to strategic or enterprise risk is transmitted in a clear, complete, and timely manner. The Board should also evaluate whether it has sufficient processes in place to identify, track, and mitigate non-financial, strategic or enterprise risk.

Finally, it has been clear since the start of our investigation that Ms. Levis' death and its aftermath, including the November 2018 publication in *The Boston Globe*, have had a profound effect on CHA. Our interviews revealed a lack of trust and cohesiveness among and between different segments of the organization. We recommend that the Board of Trustees and Senior Management consider what steps should be taken to promote greater trust and cohesion throughout CHA.

The report that follows details the evidence gathered, the facts found, and the basis for our conclusions and recommendations.

We note that peer review protected content is redacted from the publicly available version of this report. No other information that appears in the full version of the report to the Board has been removed from the publicly available version. Where text is redacted, a notation appears at the top of the page and a grey block replaces the peer review protected text. Medical peer review is the process by which health care professionals evaluate each other's performance to improve quality and safety of care. In order to ensure that medical professionals can candidly discuss safety issues, Massachusetts state law protects the confidentiality of the proceedings, reports, or records of medical peer review committees.

TABLE OF CONTENTS

I.	Scope and Purpose			1	
	A.	The Special Committee of the Board of Trustees			
	B.	Scope of the Report			
	C.	Methodology			
II.	Findings of Fact			4	
	A.	Camb	Cambridge Health Alliance		
		1.	CHA's Governance Structure	4	
		2.	CHA's Quality and Patient Safety Framework	5	
		3.	Somerville Hospital	8	
		4.	CHA's Performance	10	
	В.	Septe	September 16, 2016		
		1.	Somerville Hospital on September 16, 2016	10	
		2.	Ms. Levis' Attempted Entry Into the SHED	11	
		3.	Initial Publicity Surrounding Ms. Levis's Case	17	
	C.	CHA's Review of September 16, 2016		18	
		1.	Initial Notifications and SERS	18	
		2.	The RCA Process	19	
		3.	Presentation to the Patient Safety Committee	22	
		4.	Presentation to the Board Quality Committee	23	
		5.	Follow-Up Presentation to the Patient Safety Committee	24	
	D.	DPH/CMS Investigation		24	
		1.	DPH/CMS Survey and Settlement	24	
		2.	CHA's Internal Reports to the Board Regarding DPH's Investigation	25	
	E.	Further Publicity Surrounding Ms. Levis' Case		27	

		1.	Cambridge Day Article	27	
		2.	Mr. DeMarco's Boston Globe Article	27	
	F.	Chan	ges Implemented Prior to the Boston Globe Article	28	
		1.	Changes to Facilities	28	
		2.	Changes to Surveillance Policies and Procedures	.30	
		3.	Changes to PSO Policies and Procedures	.30	
		4.	Changes to ED Staff Policies and Procedures	.30	
	G.	Chan	ges Implemented After the Boston Globe Article	.31	
		1.	Changes to Facilities	31	
		2.	Changes to PSO Policies and Procedures	.31	
		3.	Re-Review of Ms. Levis' Case	31	
III.	Findir	Findings and Assessment			
	A.	Question 1: Did the SHED's effort to locate Ms. Levis on September 16 comply with CHA standards and best practices for emergency medical care?33			
		1.	CHA did not have a formal policy for searching for patients self-presenting outside the hospital	.33	
		2.	SHED Staff Acted Reasonably	34	
	B.	assess	tion 2: Did the Quality and Risk Management Framework adequately is the factors that may have contributed to Ms. Levis' death, and did CHA diate the issues that were identified?	.34	
		1.	CHA Did Not Evaluate Whether the Emergency Department Could Have Made Different Choices that Would Have Led to a Different Outcome	.34	
		2.	The Quality and Risk Management Framework Did Not Include Sufficient Controls to Oversee Implementation of Corrective Actions	.36	
	C.	Question 3: Did CHA appropriately communicate and disclose information regarding Ms. Levis' admission to the SHED to Ms. Levis' family?38			
		1.	CHA Did Not Have Adequate Measures in Place to Ensure that CHA Communicated Adverse Events to Families	.38	

		2.	No Evidence Suggests a Deliberate Attempt to Withhold Information or Mislead Mr. DeMarco	.41
	D.	Question 4: Did the Board of Trustees and Senior Management fulfill its oversight responsibilities in regards to the review of Ms. Levis' treatment and the subsequent publicity?		
		1.	The Board of Trustees and Senior Management Failed to Recognize that the Publication of Mr. DeMarco's Thank-You Letter Increased the Risk for CHA	42
		2.	The November 3, 2018 Boston Globe Article Divided CHA, Increasing Operational Risk	.43
IV.	Concl	usion		44

I. SCOPE AND PURPOSE

A. The Special Committee of the Board of Trustees

The Board of Trustees formed a Special Committee to investigate the circumstances surrounding Ms. Levis' death. The Special Committee's charter set out two goals:

- 1) To help CHA ensure that—consistent with its values—it provides safe, excellent, and compassionate care.
- 2) To fulfill the Board's oversight responsibilities by:
 - A. Ensuring that the Board has a full and comprehensive understanding of the events related to the death of Ms. Levis and CHA's internal and external response;
 - B. Identifying the root causes of any failures and system weaknesses found in the course of the review;
 - C. Providing the Board with assurance that CHA has implemented measures to address these root causes and prevent a similar event from occurring again; and,
 - D. Making further recommendations for improvement.

In late December 2018, the Special Committee engaged Foley Hoag partners Martha Coakley and Dean Richlin as outside counsel to advise and assist in achieving these goals. The Committee requested that Foley Hoag complete its work in time for the Board's March meeting.

B. Scope of the Report

The Special Committee's charter, as refined in subsequent meetings with Foley Hoag, defined the scope of this investigation. The charter contained a preliminary list of nearly thirty questions regarding Ms. Levis' death and CHA's subsequent review and response. These questions were condensed into four overarching areas of inquiry, which guided Foley Hoag in deciding which documents to collect and review and which individuals to interview:

- 1) Did the SHED's effort to locate Ms. Levis on September 16 comply with CHA standards and best practices for emergency medical care?
- 2) Did the Quality and Risk Management process adequately assess the factors that may have contributed to Ms. Levis' death, and did CHA remediate the issues that were identified?

¹ The Special Committee engaged Foley Hoag as outside counsel and not as outside investigators.

- 3) Did CHA appropriately communicate and disclose information regarding Ms. Levis' admission to the SHED to Ms. Levis' family?
- 4) Did the Board of Trustees and Senior Management fulfill its oversight responsibilities in regards to the review of Ms. Levis' treatment and the subsequent publicity?

C. Methodology

To answer these questions, Foley Hoag reviewed over 3,000 documents and communications relating to the events surrounding Ms. Levis' death, including:

- Documents relating to the morning Ms. Levis attempted to enter the SHED, including the personnel files of CHA employees who were present or involved in the immediate aftermath, internal incident reports and patient safety officer logs, police reports, and email communications between SHED staff and other CHA employees;
- Policies and protocols governing the duties of various SHED staff and other CHA employees, including policies and protocols for CHA public safety officers and policies and protocols for SHED clinical staff members, and related training materials, including materials relating to the Emergency Medical Treatment and Active Labor Act ("EMTALA") and adverse event reporting;
- Documents relating to CHA facilities, particularly signage, lighting, and wayfinding, including policies and protocols for facilities maintenance, budgets, and all planned and completed facilities changes from 2015 to date;
- Documents relating to Risk Management's review of Ms. Levis' case, including meeting minutes, meeting agendas, notes, and email communications between Risk Management and other CHA staff regarding Ms. Levis' case;
- Documents relating to CHA committees' review of Ms. Levis' case, including meeting minutes of CHA's Patient Safety Committee, Board Quality Committee, and Board Executive Committee, materials prepared for and presented to the committees, and email communications regarding the same;
- Documents relating to the potential medical malpractice and wrongful death claim by Ms. Levis' husband, Peter DeMarco, including communications between CHA and counsel for Mr. DeMarco and documents shared with Mr. DeMarco and his counsel;
- Documents relating to the DPH and Department of Health and Human Services Office of the Inspector General ("OIG") investigations into Ms. Levis' case, including surveys, findings, CHA's plans of correction, and communications between CHA staff and regulators regarding the investigations;
- Documents relating to the functioning of CHA's quality system, including Board Quality Committee meeting minutes from the date of Ms. Levis' event to the

present, materials prepared for and presented to the Board Quality Committee, and CHA's Patient Safety and Performance Improvement Plans for 2016, 2017, and 2018;

- Documents relating to CHA governance, including all Board of Trustees meeting minutes from 2016 to the present, all materials prepared for and presented to the Board of Trustees, training materials for Board members, and materials reflecting efforts by the Board of Trustees to develop and improve CHA's governance systems;
- Documents relating to the Board of Trustees' actions taken in response to the publication of Mr. DeMarco's November 2018 *Boston Globe* article, including meeting minutes, interview notes, and email communications between and among Mr. DeMarco, CHA employees, management, and the Board of Trustees.
- Somerville Hospital surveillance footage from the morning of Ms. Levis' attempted to entry the SHED, and audio recordings of calls between and among Ms. Levis and 911 operators, the SPD, and the SHED.

Foley Hoag conducted twenty-five interviews with CHA employees, management, members of the Board of Trustees, and others. Foley Hoag selected these individuals because they met one or more of the following criteria: they were present at the SHED during Ms. Levis' attempt to access the ED, and/or were significantly involved in her care; they were part of CHA's internal review of Ms. Levis' case; or they were responsible for CHA governance and oversight during the relevant time period. Foley Hoag also distributed a written survey to all Trustees to understand what they knew and when.

Interviews were conducted primarily by telephone, though certain interviews were conducted in person at Foley Hoag's Boston offices, Somerville Hospital, and Cambridge Hospital. Interviews typically lasted about 1-2 hours. Two Foley Hoag team members were present at every interview.

Foley Hoag team members also conducted a site visit at Somerville Hospital on February 22, 2019. The site visit included an external examination of Somerville Hospital's Highland Avenue entrance and the Tower Street entrance to the SHED, and an internal examination of the SHED and the Somerville Hospital's new Security Operations Center, an organization-wide hub for security and video surveillance monitoring.

II. FINDINGS OF FACT

A. Cambridge Health Alliance

Created by an act of the Legislature in 1996, CHA is a public instrumentality that manages several medical facilities in Boston's metro-north region, including hospitals in Somerville, Cambridge, and Everett. Currently CHA serves over 140,000 patients annually, over seventy percent (70%) of whom have public or subsidized insurance.

1. CHA's Governance Structure

a. Board of Trustees and Board Committees

A Board of Trustees, each of whom are appointed by the City Manager of Cambridge, governs CHA. Currently there are nineteen Trustees serving on the Board, including the Board Chair and Vice-Chair. The Chair, who develops the agenda for each meeting, leads the Board's monthly meetings. Because CHA is considered a "public body" under the Massachusetts Open Meeting Law, Board meetings are open to the public. If the Board wishes to discuss peer-review-protected information or other statutorily designated topics, it can convene into an executive session.

Interviewees told Foley Hoag that CHA's governance is largely driven by various Board sub-committees, not the Board of Trustees itself. These committees each focus on a particular subject. For example, the Board Quality Committee addresses quality of care and patient safety, the Board Finance Committee addresses CHA's finances, and the Board Executive Compensation Committee addresses executive compensation. Committee membership includes a mix of Trustees and other CHA executives and staff with relevant expertise. Like the Board, these committees meet monthly.

In addition to these subject-specific committees, there is also a Board Executive Committee, a smaller committee made up of the CEO and the chairs of all other committees. The Executive Committee's goal is to forge a stronger link between committees and the Board. It meets once a month in advance of the full Board meeting, and decides what issues need to be raised with the Board.

According to interviewees, there was and continues to be tension surrounding how much information is passed from the committees to the Board of Trustees.³ Some Trustees, particularly those who have recently been appointed to the Board, want to be more involved in CHA's governance. These Trustees feel that the Board does not receive enough information to play an active role in decision-making. Others argue that if the Board receives granular information about every subject, it risks duplicating the work of the committees.

² G.L. c. 30A, §§ 18, 20.

³ Part of this tension is because CHA only recently became solvent. Prior to 2016, the Board mostly focused on addressing CHA's financial stress, and has only recently been able to broaden its focus.

CHA has been working to address Board committees' role and their relationship to the Board since 2015. In 2015, CHA's former Board Chair restructured the Board Executive Committee so that its membership included committee chairs to foster a stronger link between committees and the Board. The Board also held two retreats in 2016 and 2017 specifically focused on governance. Despite these changes, some Trustees said Board meetings during the time period relevant to this report still felt like passive education sessions.

b. Board Quality Committee

The Board Quality Committee has primary oversight for patient safety. Like other CHA committees, the Board Quality Committee meets monthly. Its chair sets its agendas with input from CHA's Chief Quality Officer, who oversees patient safety. Its membership is a mix of Trustees and CHA executives and staff.

Although the subject of Board Quality Committee meetings varies, each meeting usually opens with a patient safety report. This report discusses recent safety events at CHA and provides an overview of the RCA into each. The RCA process, described in detail below, seeks to identify and address the root cause of a particular event.

There is significant overlap between the Board Quality Committee and the Board of Trustees—up to half of the Trustees serving during the time period relevant to this report also served on the Board Quality Committee at some point.

c. CHA Management

CHA management is led by a Chief Executive Officer ("CEO"), who oversees overall operations and acts as the primary link between management and the Board. The CEO has nine direct reports, each of whom oversee particular departments within CHA.⁴

According to interviewees, the relationship between the Board and Senior Management is amicable and inclusive. For example, senior managers typically attend and participate in Board meetings. Foley Hoag nevertheless detected some distrust between management and the Board.

2. CHA's Quality and Patient Safety Framework

CHA's Quality and Patient Safety framework is multi-layered. Safety events are first reported by staff using CHA's online reporting tool, then reviewed by CHA's Risk Management Department. Depending on an event's severity, it may be escalated and reported internally to various CHA committees. Serious incidents are reported to the appropriate public agency, as required by regulation.

⁴ These include: Legal and Compliance, Finance, Accountable Care, Information Technology, Quality and Patient Safety, Foundation and Community, Operations, Human Resources, and Clinical.

a. Peer Review and Just Culture

Medical peer review is the process by which health care professionals evaluate each other's performance. Its primary purpose is to improve quality and safety of care. In order to ensure that safety issues can be discussed candidly, the Massachusetts legislature passed two medical peer review laws designed to insulate peer review groups from the threat of malpractice litigation. To that end, chapter 111, section 204 of the Massachusetts General Laws provides that all peer review "proceedings, reports or records" are confidential and exempt from discovery in civil litigation and regulatory matters. Section 205 extends that protection to materials that are "necessary to comply with risk management and quality assurance programs." Together, these statutes protect CHA's Quality and Patient Safety framework.

CHA has also adopted the concept of a "just culture" as part of its review of safety events. At the core of this concept is the notion that although individuals might bear some responsibility for a particular safety event, CHA should focus on reforming systems, policies, and procedures rather than assigning individual blame or punishing any one employee. This emphasis on systems, not people, is meant to encourage candor from those involved.

b. Safety Event Reporting

CHA policy defines an "adverse event" as "[a]n unexpected, unintended occurrence that results in injury or has the potential to cause harm to any patient, staff member, or visitor." CHA requires that all clinical and non-clinical staff who witness or are involved in an adverse event, including a potential event or near miss,⁶ report the event using CHA's online Safety Event Reporting System, called SERS.

All SERS reports are collected in a central database, which is reviewed daily by CHA's Risk Management Department. Risk Management evaluates each SERS report for severity, and determines whether the event in question triggers CHA's reporting obligations to public agencies like DPH, the Department of Mental Health ("DMH"), or the Massachusetts Board of Registration in Medicine.

While a review of all of CHA's reporting obligations is beyond the scope of this report, it is important to note that if an event is reportable, a detailed regulatory framework governs each step of CHA's response. For example, certain events called Serious Reportable Events ("SREs")⁷ must be reported to DPH as well as to the patient's family. CHA must also conduct a preventability

⁵ G.L. c. 111, § 204(a).

⁶ CHA policy defines a "near miss" as "occurrences or incidents that could have happened if not first discovered and controlled (i.e., prevented or mitigated)" and "[a]n intercepted error, a situation that could have resulted in an accident, injury or illness but did not either by chance or timely intervention."

⁷ Massachusetts regulations define a Serious Reportable Event as an event that results in an adverse patient outcome, is clearly identifiable and measurable, has been identified to be in a class of events that are usually or reasonably preventable, and of a nature such that the risk of occurrence is significantly influenced by the policies and procedures of the hospital. *See* 105 CMR 130.332; 105 CMR 140.308.

analysis, and if the event is found to be preventable, CHA is prohibited from charging or seeking reimbursement for related services.⁸

For non-reportable events, CHA's response is far less regimented. Instead, Risk Management exercises its discretion and conducts a case-by-case analysis of how a particular event should be handled.

c. Root Cause Analysis

If an event involves either serious injury or is part of a larger pattern or problem, Risk Management conducts a Root Cause Analysis, or RCA. The RCA process is led by a Risk Manager, who gathers information about the event, talks to those involved, and convenes an RCA meeting to identify root causes and propose corrective actions. Depending on the complexity of the event, the Risk Manager or RCA members may decide to convene a follow-up meeting for further discussion and analysis.

Generally, Risk Management attempts to have those directly involved in an adverse event attend the initial RCA. Failing that, their supervisors will attend as "content manager experts" who can speak to how the particular department functions. Each RCA begins with a written description of the event, followed by an in-depth review of the potential causes. Once an RCA is complete, the Risk Manager who ran the process presents the RCA's conclusions to the Patient Safety Committee.

At the time that CHA investigated the events surrounding Ms. Levis' death, the RCA process did not include an examination of whether an appropriate apology and disclosure had been made.

d. Patient Safety Committee

The Patient Safety Committee is a medical peer review committee composed of CHA senior leaders, managers, directors, and chief physicians. It reviews all RCAs to assess their findings and any recommended corrective actions. Like other CHA committees, it meets monthly, meaning it reviews multiple RCAs at a time. Typically, the Patient Safety Committee spends the majority of each meeting reviewing RCAs, allowing each RCA to be assessed in depth.

e. Board Quality Committee

If an RCA involves a reportable event, the Director of Risk Management will also present a summary of the RCA to the Board Quality Committee following the initial report to Patient Safety. Non-reportable events may also be presented if they involve serious harm.

Interviewees told Foley Hoag that Board Quality Committee members are engaged during these presentations and ask a number of questions. Unlike the Patient Safety Committee, however, reviewing RCAs is not the Board Quality Committee's only responsibility, but one of several.

⁸ DPH Circular Letter DQHC-12-9-570.

Generally, twenty-five minutes of each meeting Board Quality Committee meeting is devoted to RCAs, and the summaries and discussions are condensed for time.

3. Somerville Hospital

Somerville Hospital is located in a residential neighborhood in Somerville. It provides outpatient services and runs a 24-hour emergency department. It stopped providing in-patient services in 2009. As a result, in 2016, only a portion of the physical facility was in use and occupied by hospital clinicians and staff, particularly at night.

a. Somerville Hospital Facilities Layout in September 2016

The hospital had two main entrances: one on Highland Avenue between Crocker Street and Tower Street, and another on Tower Street between Highland Avenue and Crown Street. The Highland Avenue entrance was open during the day and provided direct access to primary care facilities. The Tower Street entrance provided direct access to the SHED. Attached as Exhibit A is a schematic of the SHED that shows the Tower Street entrance layout.

In September 2016, someone approaching Somerville Hospital along Highland Avenue from Crocker Street would have encountered large signs indicating that the SHED entrance was located on Tower Street. The SHED entrance and parking lot were located near the top of a steep hill that Tower Street climbs as it approaches Crown Street. The entryway to the parking lot was located about 375 feet from the Tower Street and Highland Avenue intersection. Another sign at the entryway directed patients and visitors to the SHED.

The SHED had two entrances. The first was the main entrance, which was open to the public every day of the week, 24 hours a day, and was located on the left side of the parking lot. The other entrance was located in the ambulance bay and was accessible only to first responders and hospital staff. International hospital facilities guidelines direct hospitals to limit access to ambulance bays to protect pedestrians and provide ambulances with unfettered access.

The SHED's ambulance bay was an open-air garage-like structure located on the right side of the SHED parking lot. Inside the ambulance bay was a large sliding glass door that led to the ED. That door required a key code to enter from outside. Large white lettering on the glass to the right of the door directed the public to the SHED main entrance:

AMBULANCE ENTRANCE ONLY

Patients and Visitors Please Use Main Entrance

Along the sidewalk between the two entrances were four stone benches abutting the SHED building. The benches were only about a foot away from the SHED's "storefront" windows.

Both the SHED main entrance and the ambulance bay entrance led to the SHED reception and waiting area, which was located in a long hallway that ran parallel to Tower Street. On the external side of the hallway were the SHED's "storefront" windows, which faced the parking lot.

On the internal side were several doors leading to different areas in the ED. On the far left was a security office. Near the reception and waiting area were three more sets of doors—one for a triage room in the ED, another for an office and patient intake area, and a third set of double doors that led directly into the ED. The double doors aligned with the sliding glass door in the ambulance bay, allowing for direct access to the ED for patients arriving by ambulance.

Inside the security office were monitors with feeds from the hospital's surveillance cameras. There was also a monitor in the nurses' area in the ED. The surveillance system included cameras that monitored the Highland Avenue and Tower Street parking lots and the ambulance bay. Internal surveillance cameras monitored the SHED entrances and the reception and waiting area.

b. Somerville Hospital Overnight Staffing

As noted above, Somerville Hospital did not have inpatient care, so overnight staff was limited to the ED and a sleep clinic. The overnight shift lasted from 11:00 p.m. to at 7:00 a.m. During that time, most of the hospital building was unused and empty.

A typical overnight shift was staffed by an ED physician, three nurses, a patient access representative or nursing assistant ("PAR"), and a receptionist responsible for patient intake. The nurses and PAR generally worked in the ED itself, while the receptionist generally worked in the office and patient intake area. There was also a greeter desk outside the ED in the reception and waiting area, but this desk was typically unmanned at night.

Onsite security at SHED generally consisted of two patient safety officers ("PSOs"). Written policy directed one PSO to remain in the security office to greet patients and monitor surveillance feeds. The other PSO, "when not on assignment," was directed to, among other things, conduct interior and exterior patrols, including "a patrol of the Emergency Department once an hour when there are no active Patient Safety Watches."

Patient Safety Watches were initiated by a physician (or by a nurse pending approval by a physician) for patients determined to be at risk of harming themselves or others or escaping the hospital. CHA's watch policy imposes different requirements depending on the type of patient behavior involved. For lower-risk patients—namely, patients who do not pose any risk to others—the policy directs that the patient may be watched by either a PSO or a "trained non-licensed observer." The ratio for these watches is four patients to one observer. For patients determined to be an "imminent risk to others due to delirium, agitation, aggression, homicidal or assaultive behaviors," the policy directs that the watch be performed by a PSO at a ratio of two patients per officer.

Any observer on watch is required to maintain a "line of sight observation" on patients, but may leave to address emergencies. In such cases, either another qualified observer or the ED charge nurse must be notified. Typically, only one PSO is needed for a patient safety watch. That

⁹ The CHA security staff includes 35 to 45 PSOs. It also includes nine sergeants (also known as supervisors) who report to two lieutenants. The two lieutenants report to Deputy Chief of Public Safety.

PSO will ask the second PSO to provide additional assistance only when one or more patients become too disruptive for a single PSO to monitor them effectively.

Security during the overnight shift also included a sergeant assigned to a vehicle patrol that monitored all CHA facilities and was available to provide assistance to onsite PSOs upon their request. ¹⁰

4. CHA's Performance

In about 2005, CHA began a process improvement plan for its ED facilities. ¹¹ The plan focused on patient flow, and its implementation significantly reduced patient wait times and increased Press Ganey patient satisfaction scores. Between 2005 and 2012, patient satisfaction scores for the Cambridge ED rose from about the 15th percentile to about the 78th percentile, according to a 2014 research article by CHA's Chief Medical Officer. ¹²

B. September 16, 2016

1. Somerville Hospital on September 16, 2016

Ms. Levis came to the SHED early in the morning on September 16, 2016. One ED physician and three nurses were on staff for the overnight shift. Nurse-1 had worked the SHED overnight shift for about forty years, and the other two were travel nurses, hired to work in a specific location for a limited amount of time. A PAR and a receptionist were also present. There were two PSOs on duty that morning and a sergeant assigned to the vehicle patrol, though the sergeant was never called in to provide assistance and played no role in Ms. Levis' case.

That morning, the SHED was treating at least three behavioral health patients who required a continuous patient safety watch. Because one of these behavioral health patients was particularly agitated, the watch required two people, and both PSO-1 and PSO-2 remained in the ED for the entire night shift. According to interviewees, it was rare for both SHED PSOs to be engaged on patient safety watch at the same time.

¹⁰ There is no set patrolling schedule. Rather, sergeants have discretion about which facilities to monitor and when. The furthest CHA facility from Somerville Hospital is the Revere Care Center. It would take the patrolling sergeant about 20 minutes to drive from that facility to Somerville Hospital in response to a call for assistance during an overnight shift.

¹¹ Reporting about the results from the plan focused mainly on the Cambridge ED, but a March 21, 2017 Cambridge Day article reported that the "changes have been rolled out at all three Alliance hospitals, in Cambridge, Somerville, and Everett." *See* Sue Reinhart, *Cambridge Hospital turned around its ER, quietly overhauling it into the state's fastest*, Cambridge Day (March 21, 2017), http://www.cambridgeday.com/2017/03/21/cambridge-hospital-turned-around-its-er-quietly-overhauling-it-into-the-states-fastest.

¹² Sayah et al., *Minimizing ED Wait Times and Improving Patient Flow and Experience of* Care, 2014 Emergency Med. Int'l, at 5-6 (Apr. 14, 2014), https://www.hindawi.com/journals/emi/2014/981472.

During this time, no one was stationed in the security office to watch the surveillance feeds. Although there was a monitor in the nurses' work area, the nurses typically only check the monitor periodically.

2. Ms. Levis' Attempted Entry Into the SHED

On September 16, 2016, Ms. Levis was thirty-four years old and living in Somerville. She was married to Peter DeMarco, whom she met in 2004 when both were working at *The Boston Globe*. At the time, Ms. Levis and Mr. DeMarco were separated and living apart.

Ms. Levis had asthma, which she controlled primarily by using inhalers. According to Mr. DeMarco, Ms. Levis occasionally suffered asthma attacks that required emergency medical treatment. In these instances, Mr. DeMarco and Ms. Levis would typically drive to Mount Auburn Hospital.

Early in the morning of September 16, 2016, Ms. Levis began experiencing symptoms of an asthma attack. We do not know what actions Ms. Levis took before she arrived at the Somerville Hospital campus. Mr. DeMarco wrote that Ms. Levis was living at an apartment located a few blocks away from Somerville Hospital. Ms. Levis walked by herself to Somerville Hospital. She did not call 911 before she arrived.

Ms. Levis first appeared on Somerville Hospital's surveillance system as she walked past the closed Highland Avenue entrance toward Tower Street. After turning onto Tower Street, Ms. Levis made her way up the steep hill to the SHED parking lot. She appeared on the hospital's surveillance cameras overlooking Tower Street at about 4:21 a.m. ¹³ After entering the lot, Ms. Levis hesitated for a moment before approaching the ambulance bay.

At about 4:21:59 a.m., Ms. Levis walked into the ambulance bay and up to the glass door. She pressed her hands against the glass and peered inside but was unable to enter. After about three seconds, Ms. Levis turned and left the ambulance bay.

Ms. Levis walked out of the ambulance bay and sat down on a bench near the main entrance. At about 4:23 a.m., she dialed 911, and a regional 911 operator answered. The audio recording of this call reveals that Ms. Levis was in significant distress: 14

¹³ The times in this report are approximate. They have been reconstructed using security footage and audio recordings that lack a time stamp. A police report states that Ms. Levis appeared on the hospital's surveillance system on Tower Street at "approximately 4:21AM," which we have been unable to verify. All times of day have been calculated relative to that estimated 4:21 a.m. time. These times differ slightly from those in Mr. DeMarco's November 2018 *Boston Globe* article. While the times of day in this report are an approximation, the times between events are not. They accurately reflect the lapse times recorded by the media players on the surveillance footage and audio recordings.

Attached as Exhibit B is a map of the SHED that shows the paths of the individuals involved in Ms. Levis' case, including the approximate times of their actions.

¹⁴ For this first call between Ms. Levis and the Regional Operator, we have relied on the 911 audio embedded in the online version of Mr. DeMarco's November 2018 *Boston Globe* article.

Regional Operator: This line is recorded. Where is your emergency?

Ms. Levis: I'm at Somerville Hospital.

Regional Operator: I'm sorry. Where are you?

Ms. Levis: Somerville Hospital.

Regional Operator: Okay, what's the emergency?

Ms. Levis: I'm having an asthma attack. I'm dying.

Regional Operator: Whereabouts are you at the hospital?

Ms. Levis: Emergency room.

Regional Operator: Okay.

Ms. Levis: I can't get in.

Regional Operator: Let me get you into Somerville. You're outside?

Ms. Levis: Mm-hm.

Regional Operator: Are you in the parking lot?

Ms. Levis: Yeah.

Regional Operator: Are you in a vehicle?

Ms. Levis: No. I'm just outside it.

Regional Operator: At the door?

Ms. Levis: Asthma. Asthma.

Regional Operator: Are you at the door?

Ms. Levis: Yeah.

Regional Operator: Yes?

Ms. Levis: Yes, I'm just at the door. I feel like I'm dying.

This call lasted about forty seconds; then, the regional operator connected Ms. Levis' call, with Ms. Levis still on the line, to the dispatcher at the Somerville Police Department ("SPD"). The regional operator remained on the line. Ms. Levis' distress was noticeably increasing:

SPD Dispatcher: 911, this line is recorded, where's your emergency?

Ms. Levis: (stammering and wheezing audibly) I'm outside.

SPD Dispatcher: Hello?

Regional Operator: Somerville, this is She's outside of the Somerville

Hospital.

SPD Dispatcher: Okay.

Regional Operator: She's having an asthma attack.

SPD Dispatcher: Okay.

Regional Operator: She can't get into the hospital there.

SPD Dispatcher: Uhh, so they're open 24/7, the emergency side anyway.

Umm, let me see.

Regional Operator: Ma'am, where are you located there?

SPD Dispatcher: You're at 230 Highland Ave, right?

Ms. Levis: (Inaudible mumbling)

SPD Dispatcher: Okay. I'm going to connect you to Cataldo. Don't hang up,

okay? Hello?

The SPD Dispatcher transferred the call to Cataldo Ambulance Service:

SPD Dispatcher: This is Somerville trying to transfer a call. (To Ms. Levis)

Caller, are you still there?

Cataldo Operator: Hello, caller? (To SPD Dispatcher) Did you get an address?

SPD Dispatcher: She's saying that she's actually calling from the Somerville

Hospital but that it's closed . . . (inaudible) . . . It was weird. She didn't say much other than, could tell that she was crying, but she said she's having an asthma attack or an

anxiety attack. I have a callback number but.

Cataldo Operator: All right, why don't you give me that? I'll try it.

The SPD dispatcher gave Ms. Levis' number, and the Cataldo operator said she would call it. The conversations between the Regional Operator and the SPD Dispatcher and between the SPD Dispatcher and Cataldo lasted just under two minutes. At about 4:25:30 a.m., presumably during this call, Ms. Levis had collapsed on the bench and dropped her phone. After the call, SPD called the Somerville Fire Department ("SFD"), which dispatched a fire engine to Somerville Hospital.

About two minutes after Ms. Levis had collapsed, the SPD Dispatcher called Somerville Hospital and was transferred to the SHED. Nurse-1 answered:

Nurse-1: Emergency.

SPD Dispatcher: Hi, it's Somerville Police.

Nurse-1: Hi.

SPD Dispatcher: Hi, are your doors locked by any chance?

Nurse-1: No? Why?

SPD Dispatcher: [Because] there's a female having an asthma attack. She's

saying she's out on the like . . . (inaudible) . . . she's pinging off Tower Street and she's saying the Emergency Room is

closed so I don't know where she is.

Nurse-1: I'll go look.

SPD Dispatcher: All right thanks sorry.

Nurse-1 hung up the phone and said to those in hearing range that the police had called to say there was a patient outside the ED who could not get in. Nurse-1 did not ask anyone to assist her in searching for Ms. Levis, nor did anyone offer to help. At about 4:28:10 a.m., Nurse-1 exited the ED through the waiting area and went to the ambulance bay entrance, opened the sliding door, and stepped outside to look around for about ten seconds before re-entering the hospital. In an interview with Foley Hoag, Nurse-1 explained that she checked this door first because it was the only locked door on Tower Street. Nurse-1 also explained that she had assumed Ms. Levis was walking based on the SPD Dispatcher's use of "pinging," which Nurse-1 associated with movement. She was looking for someone on foot, not someone who had collapsed.

When Nurse-1 exited the ED, a discharged patient followed closely behind her, turned to her right, and walked down the waiting room hallway towards the main entrance. After exiting the hospital, this patient passed within about two feet of Ms. Levis before retrieving a bike from the nearby bike-rack and biking away down Tower Street.

When Nurse-1 re-entered the hospital, she encountered PSO-1, who had followed her into the hallway. Surveillance footage shows that the two spoke for about twenty seconds. Although neither Nurse-1 nor PSO-1 could recall exactly what was said, both agreed that Nurse-1 did not ask PSO-1 for assistance and PSO-1 did not offer to help.

As PSO-1 returned to the ED, Nurse-1 walked down the hallway to the SHED main entrance. At about 4:29:13 a.m., she poked her head out of the main entrance doors and looked around for about five seconds, but did not step outside. Nurse-1 then returned to the SHED and called the SPD dispatcher:

SPD Dispatcher: Somerville Police this line is recorded.

Nurse-1: Hi, it's Somerville Hospital do you have a phone number?

(The SPD Dispatcher gave Ms. Levis' number)

SPD Dispatcher: You know what I think she did, I think she's at the thing at

the bottom.

Nurse-1: Well that's what I'm wondering . . . (inaudible) . . . because

it's all locked and no one is down there.

SPD Dispatcher: Yeah, that's the only thing I can think of.

Nurse-1: So if [I] can call her I'll tell her where to go.

SPD Dispatcher: Ok, yeah, we have an officer coming out too.

Nurse-1: Oh you do?

SPD Dispatcher: Yeah, just in case.

Nurse-1: Okay.

SPD Dispatcher: Only because she said she was having an asthma attack but

I figured I give you guys a call, just in case you seen her.

Nurse-1: I looked outside up here but I didn't see anything.

SPD Dispatcher: Yeah.

Nurse-1: I'll try this number.

SPD Dispatcher: She's pinging off, looks like 68 Tower Street so I don't know

where that is.

Nurse-1: Okay, all right, thanks.

At about 4:31:15 a.m., Nurse-1 called Ms. Levis' number, but there was no answer. By that time, Ms. Levis had been collapsed for about five minutes and forty-five seconds. ¹⁵

When the SFD arrived at the hospital, they first went to the Highland Avenue entrance. The fire engine pulled into the Highland Avenue parking lot, and a firefighter got out and searched the area. He then continued on foot to the Tower Street entrance.

¹⁵ There is no evidence to indicate that SHED staff, at any point, stopped trying to locate Ms. Levis. Nurse-1 indicated she was still trying to discover Ms. Levis' location when an officer knocked on the SHED windows to inform them Ms. Levis was outside the SHED.

The fire engine followed and parked on Tower Street outside the ED parking lot at about 4:32:50 a.m. As the firefighter entered the lot, he spotted Ms. Levis and ran over to her. He reached Ms. Levis at about 4:33:19 a.m.—about seven minutes and forty-nine seconds after she had collapsed. Another firefighter came from the fire engine to assist, and they began to perform CPR.

A Police SUV pulled into the lot moments later, and an officer ran into the SHED to request help from ED staff.¹⁶ The officer ran to the triage area and knocked on the windows until he got SHED staff's attention. He told them that Ms. Levis was right outside the building. Nurse-1 and two other staff members went out to assist. At 4:37:53 a.m., Ms. Levis was placed on a stretcher and brought into the ED.

By the time she was found, Ms. Levis was not breathing and her heart had stopped, leading to cardiac arrest. She was treated by ED Physician-1, who engaged in several procedures to resuscitate her. Ms. Levis' heartbeat and circulation were restored, but she did not regain consciousness.

According to the Chief Medical Officer and Chief of Emergency Medicine, ED Physician-1 did not learn about the circumstances surrounding Ms. Levis' attempted entry into the SHED until after she resuscitated Ms. Levis. Even then, ED Physician-1 was not fully aware of every detail. CHA physicians who Foley Hoag interviewed, however, told us that additional knowledge of certain facts—such as the precise time it took first responders to find Ms. Levis—would not have affected ED Physician-1's decision-making regarding Ms. Levis' treatment.

When the overnight shift ended at 7:00 a.m., ED Physician-1 spoke to the physician who was replacing her, ED Physician-2, concerning what she knew about Ms. Levis, as is the standard practice for any patient whose hospital stay continues between shifts.

Once Ms. Levis was stable, SHED staff prepared to transfer her to the Cambridge Hospital ICU. SHED staff called Mr. DeMarco, and he arrived at the SHED shortly before Ms. Levis was transferred. According to Mr. DeMarco, SHED staff told him that Ms. Levis called 911 but was unable to give her exact location, collapsed somewhere outside the SHED, and was eventually located by emergency responders in the "last place" they looked.

Foley Hoag could only confirm the identity of one person, ED Physician-2, who spoke to Mr. DeMarco before the transfer. Though ED Physician-2 does not remember precisely what she said, she knows she did not discuss the SHED's search for Ms. Levis or the precise location where she was found, because ED Physician-2 did not know these facts at the time.

At Cambridge Hospital, Ms. Levis was initially admitted under the care of ICU Physician-1. She was then transferred to the care of ICU Physician-2. ICU Physician-2 treated Ms. Levis until her death on September 22, 2016.

ICU Physician-2 told Foley Hoag that, based on the fact that Ms. Levis had been down for several minutes due to cardiac arrest, the assumption was that she had suffered severe anoxic brain

¹⁶ According to the police report from that night, the SHED was not aware that Ms. Levis had been found and that emergency treatment had begun until the SPD officer entered the SHED to notify them about the incident.

injury. As is typical for patients in this condition, the ICU placed Ms. Levis on a "chill protocol," which cooled her temperature. The protocol lasts for twenty-four hours and is followed by a seventy-two-hour waiting period before prognostication. According to ICU Physician-2, Ms. Levis' family was told before the chill protocol began that her condition was severe and recovery was unlikely but that ICU Physician-2 would wait to prognosticate until after the chill protocol and waiting period.

ICU Physician-2 knew little about Ms. Levis' attempted entry into the SHED. He knew that Ms. Levis was found outside the SHED in cardiac arrest, but ICU Physician-2 did not recall how he learned this information or whether it was communicated to Ms. Levis' family. He explained that he would have felt uncomfortable discussing this information because his team did not have firsthand knowledge of the facts.

Finally, ICU Physician-2 told us that it is not conventional practice for ICU physicians to delve into these types of facts if they do not serve a specific treatment-related purpose. And in Ms. Levis' case, knowing more facts would not have influenced ICU Physician-2's treatment decisions. Specifically, ICU Physician-2 said that knowing how long Ms. Levis had been unconscious would not have altered his plan of care or what was told to the family about Ms. Levis' chances for recovery.

3. Initial Publicity Surrounding Ms. Levis's Case

On September 26, 2016, Mr. DeMarco emailed an intimate and moving letter to the staff at the Cambridge Hospital ICU expressing his gratitude for their treatment of Ms. Levis. The letter was widely circulated among CHA's Trustees, management, and staff. Mr. DeMarco also posted the letter on his Facebook page, where it began to generate increasing public attention. On October 6, 2016, *The New York Times* published the letter, titled "A Letter to the Doctors and Nurses Who Cared for My Wife."

A day after the letter was published, NBC expressed interest in filming a story about Ms. Levis and her care at the ICU. CHA's Quality and Patient Safety, Risk Management, and Public Relations and Marketing departments assessed whether to participate in the story. Some in Quality and Risk Management, including Quality leadership, told Foley Hoag they were hesitant about the story, both because it could be perceived as celebrating a patient death and because Ms. Levis' case was under internal review by CHA. In the end, Quality and Marketing leadership decided to allow NBC to proceed with filming, partially because they believed that Mr. DeMarco knew the details about Ms. Levis' attempted entry into the SHED and wrote the letter anyway. CHA obtained a signed release form from Mr. DeMarco and, on October 10, 2016, NBC Nightly News aired "A Widower's Powerful Love Letter for Those Who Cared for His Wife."

Mr. DeMarco's letter prompted the Board of Trustees to invite Cambridge ICU staff members, including ICU Physician-2, to attend the October 18, 2016 Board meeting so that the Board could thank them for the care they provided. Days before, the Board Chair at the time told the CEO that she was concerned Ms. Levis' difficulty accessing the SHED might come up at the meeting, since CHA's internal review of Ms. Levis' case was recently discussed at a Board Quality Committee meeting. The Board Chair asked the CEO if he would be prepared to address the incident if it was raised, and the CEO replied that he would be. Neither the Board Chair nor the

CEO suggested affirmatively bringing the connection between CHA's ongoing investigation and Mr. DeMarco's letter to the attention of the full Board. They concluded that the Board meeting should be focused on the ICU staff's compassionate care, not on the review of Ms. Levis' attempt to access the SHED. The minutes from the October 18, 2016 meeting reflect no discussion of Ms. Levis' case being under review, and Board members we interviewed said they remembered no such discussion having occurred.

Meanwhile, Mr. DeMarco and other members of Ms. Levis' family had begun investigating Ms. Levis' attempted entry into the SHED. After receiving police reports about the event from other members of Ms. Levis' family, Mr. DeMarco retained legal counsel who, on November 1, 2016, notified CHA of their intent to investigate potential medical malpractice and wrongful death claims. CHA ceased direct communications with Mr. DeMarco and communicated through his attorneys instead. This information was not communicated to the Board of Trustees until after Mr. DeMarco's article was published in *The Boston Globe* in November 2018.

C. CHA's Review of September 16, 2016

1. Initial Notifications and SERS

Around the time that Ms. Levis was transferred to the CHA Cambridge ICU, SHED's Nurse Manager contacted CHA's Director of Risk Management to notify her that a serious safety event had occurred. The Director of Risk Management immediately passed the information along to CHA's Chief Quality Officer.

Both SHED's Nurse Manager and Nurse-1 filed SERS reports using CHA's online system—the Nurse Manager the morning of September 16, and Nurse-1 during her shift the following day. Both SERS reports were substantially similar, noting that Ms. Levis had called 911 and said she could not get into the SHED because the doors were locked, and was eventually found in cardiac arrest by EMTs and SFD.

The Nurse Manager's SERS report noted that she had spoken with CHA's Deputy Chief of Public Safety and had asked him to review and preserve the surveillance footage, which he did that same morning. He also emailed PSO-1 and PSO-2, also on the morning of September 16, to ask why the incident was not recorded in Public Safety's operations log. PSO-1 responded, explaining:

[PSO-2] and I were dealing with an agitated male patient in RM#4 for the majority of our 23:00-7:00 shift on 9/15/16. This male continuously shouted, flailed his arms, activated the nurse call button, left his bed and attempted to walk towards nursing area, etc. Nursing staff decided against restraining this subject. There were also two other patient watches occurring simultaneously.

While dealing with the agitated male in RM#4, [Nurse-1] walked by [PSO-2] and me stating, in what I would describe as a mumble, something about "Somerville Police," "locked doors" and "a patient outside."

She continued to walk past us, out of the [ED] and then out of the ambulance bay doors. I followed and from the vending machine area, observed her remain in the doorway and look around the exterior. I did not observe any emergency vehicles at this time. She then returned and said "I can't see anyone." At this time, I returned back into the [ED] and continued to assist [PSO-2] with the patient watches and with deescalating and redirecting the agitated male patient in RM#4.

Approximately five minutes later, emergency vehicle lights could be seen from inside the emergency room in the parking lot of the SH. While still in the process of deescalating RM#4 a loud knock was heard coming from the EW main door area.

A few minutes later, [PSO-2] and I assisted with moving RM#1A and 18, the other patient watches, into RM#2. A female patient was then stretchered into RM#1 with several emergency responders.

2. The RCA Process

a. Assignment to the Ambulatory Risk Manager

Risk Management divided safety events into two categories: inpatient and ambulatory. Events involving one of CHA's EDs, like Ms. Levis' case, fell under inpatient. However, due to an unrelated matter, the Inpatient Risk Manager was unable to oversee Ms. Levis' case. Instead, the Ambulatory Risk Manager took Ms. Levis' case and immediately began looking into the event, starting with a preliminary meeting with the SHED's Nurse Manager the morning of September 16. The Ambulatory Risk Manager also opened a potential claim with CRICO, CHA's medical malpractice insurer, on September 20, as was standard procedure for adverse events.

b. Initial Regulatory Assessment

Risk Management determined very early in the RCA process that Ms. Levis' case did not meet the regulatory definition of a Serious Reportable Event ("SRE"). Massachusetts regulations define SREs as certain categories of events that are reasonably preventable, and of a nature such that the risk of occurrence is significantly influenced by the policies and procedures of the hospital. Regulatory guidance sets out precisely which categories of events qualify as SREs. Ms. Levis' case did not fall within any of the categories outlined in regulatory guidance, so it did not meet the definition of an SRE.

The Director of Risk Management believed it was nevertheless important that CHA notify DPH of the event. CHA typically reports unusual adverse events even if they do not meet the definition of an SRE. Although the decision to report Ms. Levis' case was made in September, the notification itself did not occur until late October due to miscommunications and an unexpected leave of absence within Risk Management.

On October 31, 2016, the Director of Risk Management filed an incident report with DPH about Ms. Levis' case, describing the event and listing corrective measures that CHA had taken. ¹⁷ The report incorrectly stated that Nurse-1 and PSO-1 conducted a search of the grounds. The Director of Risk Management had not been involved in the RCA process. There is no evidence that this was a deliberate attempt to mislead DPH, but rather an honest mistake.

The Report correctly stated: "Review of the grounds area was conducted and although the lighting and signage/instruction on the ambulance bay area was appropriate, enhancements have been made; adjustments to the lighting and additional signage has been conducted. Additionally, an evaluation of all CHA main and ED entrance areas are being reviewed to ensure entrance visibility."

c. The RCA Meetings

Ms. Levis' case resulted in two RCA meetings: one on September 21, 2016 and a follow-up meeting on October 4, 2016.

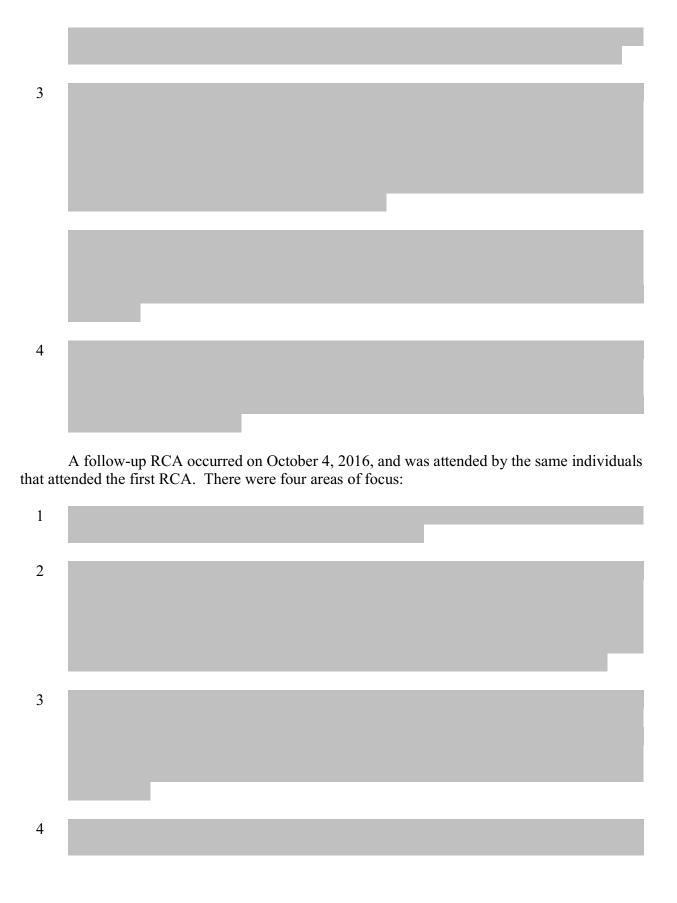
The initial RCA meeting into Ms. Levis' case was attended by the Deputy Chief of Public Safety, the SHED Nurse Manager, the Vice President of Support Services, the Director of Emergency Management, and a few additional CHA staff. The Ambulatory Risk Manager facilitated the discussion.

The team ultimately discussed four areas of focus:

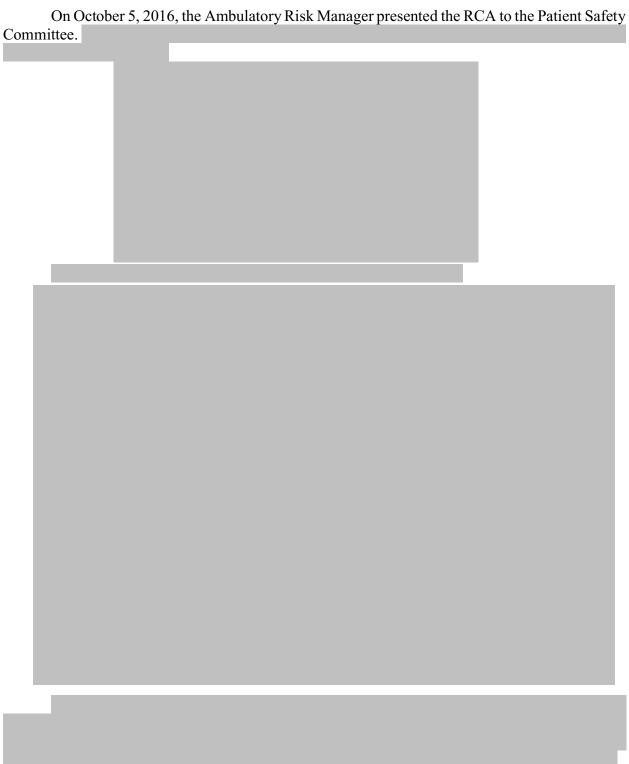
1
2

34 year old woman in respiratory distress was unable to gain entrance to the CHA Somerville Hospital ED at approximately 04:30AM and called 911 for help. The Somerville Police alerted the ED of call and both RN and Public Safety Officer went outside to find the person. [D]ue to the darkness of the early morning hour, the individual was not visible to staff and calls were made to the police as well as her cell phone number which went unanswered. Once EMS and police arrived an immediate search of the street, sidewalk area and hospital grounds was initiated. The woman was located down in the area near the ambulance bay entrance in full cardiac arrest. CPR was initiated, a heart rate was obtained and she was transferred to the ICU area for care including post arrest cooling for 24 hours, then rewarming. The patient was determined to have suffered an anoxic brain injury and was found to have no brain stem function. Patient was a known registered organ donor, and with family consent organ donation procurement was initiated.

¹⁷ Incident Report to DPH. The report described the event as follows:



3. Presentation to the Patient Safety Committee



4. Presentation to the Board Quality Committee

On October 13, 2016, the Inpatient Risk Manager, substituting for the Director of Risk Management who was unavailable for unrelated reasons, presented the RCA to the Board Quality Committee. The Inpatient Risk Manager had never presented to the Board Quality Committee or been to a Board Quality Committee meeting before.

she believes she had participated in Ms. Levis' initial RCA meeting as a note-taker and was therefore familiar with the event.



5. Follow-Up Presentation to the Patient Safety Committee

CHA had made two changes to SHED: (1) dimmed the lighting surrounding the ambulance bay to make it less appealing to patients and (2) installed a red, illuminated EMERGENCY sign in the SHED windows facing the parking lot to the right of the SHED main entrance.

D. DPH/CMS Investigation

1. DPH/CMS Survey and Settlement

Since July 2016, CHA had been the subject of an ongoing DPH survey regarding its EDs. The primary focus of this survey was CHA's compliance with a state-mandated emergency services program for psychiatric patients. While onsite for its re-survey of CHA's EDs in November 2016, DPH expanded the investigation to include Ms. Levis' case.

Following its re-survey and investigation, DPH issued two separate sets of findings: (1) a January 4, 2017 statement of deficiencies regarding CHA's compliance with Medicare Conditions of Participation, and (2) through the Centers for Medicare & Medicaid Services ("CMS"), a

February 14, 2017 statement of deficiencies regarding CHA's compliance with EMTALA. Each statement incorporated findings related to Ms. Levis.

DPH's first statement of deficiencies, regarding CHA's compliance with Medicare Conditions of Participation, found that although the SHED was accessible to Ms. Levis, she had nevertheless received "poor quality pre-hospital care." The final report stated that CHA "failed to ensure a safe environment" because the corrective actions identified by the RCA were "not communicated to all stakeholders in the Emergency Department Service." DPH came to this conclusion based on its interviews with Nurse-1, Nurse-2, PSO-1, the Deputy Chief of Public Safety, the SHED Nurse Manager, an unnamed receptionist present on 9/16, and CHA's interim Chief Nursing Officer. Most of them were unaware of any remedial actions being taken in response to Ms. Levis' RCA, leading to DPH's conclusion that the RCA's corrective actions were not properly communicated.

The second statement of deficiencies, issued by CMS but based on DPH's survey data, focused on CHA's compliance with EMTALA. EMTALA is a federal law that requires that anyone coming to an emergency department must be stabilized and treated, regardless of their insurance status or ability to pay. CMS concluded that CHA had not met its obligations under EMTALA because it "failed to provide [Ms. Levis] with an appropriate medical screening exam when [she] presented to [Somerville Hospital's] grounds seeking attention for difficulty breathing." 21

While CHA and DPH ultimately reached an agreement regarding the first statement of deficiencies (discussed in more detail below), CMS referred CHA's alleged EMTALA violation to OIG. On June 20, 2017, OIG sent a letter to CHA's CEO, stating that it believed CHA had violated EMTALA as a "result of its failure to sufficiently search for [Ms. Levis] while she was experiencing an emergency condition." It offered CHA the chance to settle the matter before OIG took administrative action.

CHA's General Counsel and others in management strongly disagreed with OIG's position and did not believe that the search for Ms. Levis violated EMTALA. Nevertheless, CHA eventually entered into a settlement with OIG for \$90,000 on December 12, 2017. The maximum penalty for an EMTALA violation is \$104,826 per incident—a settlement of \$90,000 is high for a single settlement with OIG, reflecting OIG's view that this was a serious violation.

2. CHA's Internal Reports to the Board Regarding DPH's Investigation

Most Trustees surveyed by Foley Hoag stated that they had been completely unaware of the connection between DPH's investigation and Mr. DeMarco's thank-you letter. Although both the Board Quality Committee and the Board of Trustees received regular updates about DPH's

25

¹⁸ State Survey Findings 01-03-17.pdf.

¹⁹ MQIB12 Deficiency Stmt Jan 4 2017 - form 2567.

²⁰ 42 U.S. Code § 1395dd.

²¹ EMTALA Notice D6O551 02-14-17.pdf.

investigation, these reports did not make the connection explicit. A brief timeline of these reports is provided below.

On December 8, 2016, shortly after DPH had finished its re-survey of CHA, CHA's Chief Quality Officer presented to the Board Quality Committee about the ongoing investigation. According to the Board Quality Committee meeting minutes, the bulk of the Chief Quality Officer's presentation appears to have been about DPH's investigation into CHA's treatment of psychiatric patients. Regarding the investigation into Ms. Levis' case, the minutes simply state that the investigation "was in response to a complaint that DPH received in relation to patient access, particularly focused on access to the SHED." Ms. Levis was not named, nor was the connection to the Mr. DeMarco's thank-you letter mentioned.

The Board of Trustees received a similar update as part of their December 20, 2016 premeeting information packet. The CEO Report contained in that packet summarized the ongoing DPH investigations using words almost identical to those in the Board Quality Committee minutes. Regarding the investigation into Ms. Levis' case, the report simply stated that it "was in response to a complaint that DPH received in relation to patient access, particularly focused on access to the SHED."

On January 12, 2017, after DPH had provided their first statement of deficiencies, the Chief Quality Officer updated the Board Quality Committee on DPH's findings. In relevant part, the meeting minutes state:

CHA has received initial findings from DPH ... The survey found that the patient did have access to the Emergency Department at Somerville; however, DPH found that CHA did not provide adequate pre-hospital care to the patient. DPH provided no specific findings, just an overall conclusion. CHA has requested clarification from DPH on this latter preliminary finding.

The CEO Report accompanying the January 17, 2017 Board of Trustees pre-meeting information packet again contained an identical summary.

On March 3, 2017, after CMS provided the second statement of deficiencies regarding EMTALA, the Chief Quality Officer updated the Board Quality Committee on the investigation. According to the meeting minutes, this summary did not mention Ms. Levis' case, only the psychiatric patients in the ED. The CEO Report accompanying the March 21, 2017 Board of Trustees meeting packet also summarized CMS's EMTALA findings, again without mentioning Ms. Levis' case.

After March 21, 2017, there were no further reports to the Board about the DPH/CMS investigation, and no report to the Board of Trustees about the resulting settlement with OIG.

E. Further Publicity Surrounding Ms. Levis' Case

1. Cambridge Day Article

On January 2, 2018, *Cambridge Day* published an article by Sue Reinert titled "Death outside an ER, nursery staff shortage stand out for Health Alliance safety record." The article, which was based on DPH's two statements of deficiency, painted CHA in a very negative light. Ms. Levis' case was prominently featured and described in great detail. Reinert wrote:

[P]olice notified the hospital that the woman was outside, short of breath and looking for the entrance in the early hours of Sept. 16, 2016, but no one went out to search for her in the dark, according to a report by the state Department of Public Health. An ambulance crew sent by police found her lying on the ground outside the hospital in "full cardiac arrest," and she later died.²²

CHA had been aware of the article in advance, as Reinert had emailed the Director of Communications on December 4, 2017 asking for an interview. The Director of Communications coordinated with the Board Quality Committee Chair and the CEO to provide a statement in response.

After the article was published, the CEO circulated it to the Board of Trustees. According to the survey conducted by Foley Hoag however, many Trustees failed to connect the story to the woman who was the subject of Mr. DeMarco's laudatory thank-you note that had gone viral fifteen months earlier.

2. Mr. DeMarco's Boston Globe Article

On October 15, 2018, Mr. DeMarco emailed CHA's Director of Communications about his own upcoming article. This was the first time Mr. DeMarco had reached out to CHA directly since November 1, 2016, when his lawyers notified CHA of his intent to sue.

In his email, Mr. DeMarco referenced *The New York Times* thank-you letter and explained that he had decided to write a second story about Ms. Levis' treatment at SHED, and had several questions for CHA. In consultation with outside malpractice counsel, CHA management—including the General Counsel, Chief Quality Officer, Director of Risk Management, and Inpatient Risk Manager—decided that it could not answer Mr. DeMarco's questions given the pending legal action. When CHA's Director of Communications explained this to Mr. DeMarco, he expressed disappointment and stated that he no longer intended to sue. CHA did not respond.

At the same time, CHA's external legal counsel and Mr. DeMarco's legal counsel were exchanging letters about Mr. DeMarco's potential lawsuit. In consultation with internal CHA management, specifically the individuals mentioned above, CHA's external counsel decided to extend a settlement offer of \$100,000 on October 24, 2018. Mr. DeMarco rejected the offer.

²² Sue Reinert, *Death outside an ER, nursery staff shortage stand out for Health Alliance safety record*, Cambridge Day (January 2, 2018).

On October 27, 2018, the CEO alerted the Board of Trustees to Mr. DeMarco's upcoming article. He explained the connection to the viral *New York Times* thank-you letter, and told the Trustees that Mr. DeMarco's latest piece "raises questions about the events surrounding Laura's arrival at [SHED]." Finally, he told the Trustees about Mr. DeMarco's notice of intent to sue, and explained that it meant CHA was unable to provide comment on the story.

On November 3, 2018, *The Boston Globe* published Mr. DeMarco's article, "Losing Laura." The article, which provided a minute-by-minute description of Ms. Levis' approach to SHED, insinuated that CHA had deliberately withheld information from Mr. DeMarco about the circumstances of Ms. Levis' collapse—most importantly, how close she was found to SHED's main entrance. The article also criticized Nurse-1's actions, stating that Ms. Levis had been "left to die." Like Mr. DeMarco's 2016 thank-you letter, "Losing Laura" quickly gained wide-spread attention. It was *The Boston Globe's* most widely-read article of 2018.

CHA's CEO called Mr. DeMarco multiple times in the days following, but could not get through because Mr. DeMarco's voicemail was full. Eventually, CHA's Director of Communications reached Mr. DeMarco over email and arranged a face-to-face meeting at *The Boston Globe's* offices. On November 13, 2018, Mr. DeMarco met with CHA's CEO, Director of Communications, Chief Medical Officer, and Chief Nursing Officer, and received a formal apology. A follow-up meeting with all the same participants occurred on December 3, 2018, during which the leadership team answered Mr. DeMarco's questions regarding Ms. Levis' case. Mr. DeMarco published an article about this meeting on December 29, 2018, describing it as an "extraordinary turnaround."

CHA also began conducting an internal review of the RCA about Ms. Levis' case shortly after *The Boston Globe* published "Losing Laura" to determine why more information was not communicated to Mr. DeMarco and her parents.

Finally, on November 26, 2018, the Board of Trustees decided (1) to convene a Special Committee to investigate Ms. Levis' case, and (2) to hire outside counsel to conduct a review.

F. Changes Implemented Prior to the Boston Globe Article

1. Changes to Facilities

CHA implemented three main facilities changes as a direct result of Ms. Levis' case. First, between October 20, 2016 and November 11, 2016, CHA replaced a bright incandescent double flood light in the ambulance bay with a dimmer LED flood light equipped with a motion sensor. The motion sensor was set to trigger when a vehicle drives into the ambulance bay.

Second, CHA replaced four other "recessed" lights in the ambulance bay with LED bulbs and connected those to the motion sensor as well. The new lighting does not shine out past the ambulance bay entryway.

Before After





Third, on November 10, 2016, CHA installed a red, illuminated EMERGENCY sign in the SHED windows facing the parking lot to the right of the SHED main entrance.

Several other facilities changes were carried out through 2017 as part of an ongoing program to renovate the SHED that had been approved before Ms. Levis' case. The renovations included updates to the reception and waiting area, replacing the windows facing the SHED parking lot, painting, and upgrading bathrooms.

As part of these planned renovations, CHA opened a second public entrance to the SHED on September 11, 2017, located immediately to the left of the ambulance bay. CHA installed a large, non-illuminated EMERGENCY sign above this second entrance and a smaller, illuminated EMERGENCY sign in the reception and waiting area window near the second entrance. The entrance is depicted in the photo below.



Figure 1 Second Public Entrance

2. Changes to Surveillance Policies and Procedures

CHA did not change any surveillance policies and procedures as a direct result of Ms. Levis' case.

Independent of Ms. Levis, CHA constructed a 24-hour Security Operations Center at Somerville Hospital. Although the Operations Center only became fully operational on January 1, 2019, it had been planned and was in construction throughout 2017 and 2018. The Operations Center has access to surveillance footage from each of CHA's campuses, and is monitored 24/7 by a private security company. The Operations Center has two-way radios that allow them to communicate directly with PSOs.

3. Changes to PSO Policies and Procedures

Although no formal written policies were changed, CHA did alter PSO procedure to require that sergeants on vehicle patrol check-in with the SHED charge nurse at the beginning of every shift. On December 16, 2017, the Deputy Chief of Public Safety informed all sergeants of this change via email, describing it as part of CHA's "continuous effort to improve the relationship with [the ED], specifically on the Somerville campus ... It is our hope that by promoting consistent encounters that channels of communication and collaboration will be established and fostered."

CHA also provided additional EMTALA training after DPH/CMS issued their statements of deficiency. First, on March 1, 2017, CHA's Chief Medical Officer led an EMTALA training for sergeants to remind them of their EMTALA obligations. The same day, Public Safety published a training bulletin for PSOs regarding their role in responding to medical emergencies "outside of a hospital." The bulletin states:

Patients may self-present to a hospital facility suffering from injury or illness before entering the building. If an Officer discovers such an emergency, or is made aware of such an emergency, a request for Emergency Medical Services via the 911 system should be made. Responding Officers, if properly trained, may render preliminary care and work to ensure scene safety while medical personnel respond to the area.

4. Changes to ED Staff Policies and Procedures

On October 20, 2016, the Ambulatory Risk Manager and the Deputy Chief of Public Safety met with SHED staff to discuss role delineation and collaboration between Public Safety and staff. At the meeting, SHED staff were reminded that Public Safety Officers should be the ones to conduct perimeter searches, and were encouraged to collaborate with Public Safety Officers to handle these tasks. This was not a change, but a reinforcement of existing procedure.

Following the DPH/CMS statements of deficiencies, ED staff was also assigned an expanded EMTALA training module to complete online. The module was assigned April 25, 2017, and due June 5, 2017.

G. Changes Implemented After the Boston Globe Article

1. Changes to Facilities

Following the publication of "Losing Laura," CHA formally changed Somerville Hospital's address to the address of the SHED. Previously, Somerville Hospital's address had been 230 Highland Avenue, an address down the hill and around the corner from SHED. Somerville Hospital's address is now 33 Tower Street, the SHED's address, so that anyone attempting to find Somerville Hospital would be directed to the SHED's main entrance. The City of Somerville approved the address change on November 29, 2018.

On December 3, 2018, CHA also installed new door chimes on the SHED main entrance and ambulance bay doors. The chimes alert SHED staff when someone enters the SHED. They are set to sound from 9:00 p.m. to 5:30 a.m. for both doors.

2. Changes to PSO Policies and Procedures

On November 29, 2018, CHA instituted a new procedure for PSOs at Somerville Hospital, requiring that they notify their sergeant if both PSOs are called into the SHED and no one is present at the front desk. Their sergeant will then notify either Cambridge PSO or the Security Operations Center, who will monitor the cameras for the SHED.

3. Re-Review of Ms. Levis' Case

3.	Ke-Keview of Ms. Levi	s Cuse		
On November 11 determine why Ms. Levi	, 2018, CHA conducted is' family did not receive		the initial RC	A process to
·	·			
-				



the disclosure and apology issues, she suggested CHA require that all RCAs and subsequent committee presentations include a review of communication with the patient and their family.

Through interviews, Foley Hoag learned that all RCAs and subsequent presentations to the Patient Safety Committee and the Board Quality Committee now include a review of disclosure and apology.

III. FINDINGS AND ASSESSMENT

Our review sought to answer four overarching questions about the facts and circumstances surrounding Ms. Levis' death and CHA's subsequent response. Based on our interviews and review of relevant documents, we have reached the following conclusions:

- Question 1: Did the SHED's effort to locate Ms. Levis on September 16 comply with CHA standards and best practices for emergency medical care?
 - Answer: The SHED received incomplete information at a point in time when, because of prior events, it had no time to lose in locating Ms. Levis. Further, CHA did not have a formal policy or procedure in place for ground searches for patients self-presenting outside the hospital, and the roles to be played in conducting a search were unclear. Under the circumstances, SHED staff acted reasonably, particularly based on the limited information they had.
- Question 2: Did the Quality and Risk Management Process adequately assess the factors that may have contributed to Ms. Levis' death, and did CHA remediate the issues that were identified?
 - O Answer: The Quality and Risk Management process began almost immediately after Ms. Levis was transferred to the Cambridge Hospital ICU, but the process was uneven. It successfully identified structural deficiencies, but failed to review decision-making by SHED staff to determine whether there are ways to enhance efficiency and the chances for a successful outcome.
- Question 3: Did CHA appropriately communicate and disclose information regarding Ms. Levis' admission to the SHED to Ms. Levis' family?

- O Answer: CHA should have informed Ms. Levis' family that Ms. Levis' case was under review and provided her family the opportunity to ask questions and learn about CHA's findings. Nevertheless, we found no evidence of an intentional effort to mislead or withhold information. CHA's policies did not anticipate a situation where the treating staff were different from the staff involved in the adverse event. Moreover, there was a lack of clarity as to who had responsibility to make disclosure to the family.
- Question 4: Did the Board of Trustees and Senior Management fulfill its oversight responsibilities in regards to the review of Ms. Levis' treatment and the subsequent publicity?
 - O Answer: The Board of Trustees and Senior Management failed to recognize that because Ms. Levis' inability to access the SHED was under review, the publicity stemming from the laudatory media coverage created substantial strategic or enterprise risk to CHA. The Board and Senior Management failed to identify that risk affirmatively and take steps to mitigate it.

Our review of each of these four questions includes recommendations on steps CHA can take to address our observations and improve performance going forward.

- A. Question 1: Did the SHED's effort to locate Ms. Levis on September 16 comply with CHA standards and best practices for emergency medical care?
 - 1. CHA did not have a formal policy for searching for patients selfpresenting outside the hospital

We asked clinical staff from the SHED and public safety personnel about CHA's policies for conducting ground searches in the event an individual is unable to access the hospital. All witnesses agreed that CHA did not have a formal policy, but that the PSOs would be responsible for conducting a search. In the SHED, PSOs typically take direction from the nurses. A nurse is not prohibited from exiting the hospital to conduct a search, but the needs of other patients already admitted to the ED would typically weigh against a nurse leaving the ED to assist in a search. The Chief of Emergency Medicine stated that best practice would be for the nurse to remain in the ED, and engage public safety or emergency medical services to search for the patient.

In March 2017, the CHA Department of Public Safety issued a one and a half page bulletin. The bulletin directs PSOs to request EMS services if they discover or are made aware of a patient suffering from injury or illness outside the hospital. The Officer may render preliminary care if properly trained. The bulletin does not provide additional instruction on how to locate a patient.

Recommendation: CHA should confirm with various components of the ED staff—physicians, nurses, and security—how members of the ED should respond to information that a patient is trying to access the ED. CHA should assess whether roles are clear and whether a regular review, or other procedure, protocol, or training would improve clarity of role responsibility within the ED. CHA should then reassess whether, in light of this report, and after assessing the understanding of staff, whether the March 2017 bulletin is clear or needs revision.

2. SHED Staff Acted Reasonably

Before we began our inquiry, Nurse-1 and PSO-1 had already been interviewed multiple times about the events of September 16, 2016. We reviewed these interview notes, and also interviewed them to learn what information they knew on the morning of September 16, what steps they took in an effort to locate Ms. Levis, and their thought process in taking these steps. We also reviewed surveillance footage and audio tapes of communication between the SPD and Nurse-1 on the morning of September 16. We asked CHA's Chief Medical Officer, Chief of Emergency Medicine, CHA's Chief of Public Safety about best practices in emergencies. Based on our review, we have concluded that both Nurse-1 and PSO-1 acted reasonably given existing policies, their training, and the information they knew at the time.²³

Nurse-1 only received limited information from the SPD about Ms. Levis, her condition, and her location. The SPD dispatcher relayed three pieces of information to Nurse-1: 1) a woman was having an asthma attack, 2) the woman said the ED was locked, and 3) the woman's cellphone was pinging off Tower Street. The Dispatcher did not inform Nurse-1 about the urgency Ms. Levis relayed in her call or that Ms. Levis was no longer responsive on the phone. Nurse-1 was also not aware that Ms. Levis had reached the SPD by calling 911, instead of the non-emergency phone number.

Nurse-1 immediately went to the Ambulance Bay door because she knew it was the only locked door on Tower Street. Nurse-1 thought Ms. Levis was likely directly outside the door. When she did not see Ms. Levis outside the door, Nurse-1 thought the patient was mobile and walking to a different part of the building. Nurse-1 had brief conversation with PSO-1, in which Nurse-1 did not ask for help in the search and PSO-1 did not offer assistance. After looking out the main entrance, Nurse-1 decided to call Ms. Levis' cell phone because she thought it would be the fastest way to reach her. We think each of these steps were reasonable given the limited information she had at the time. We further find significant that emergency services dispatched by the SPD also believed that Ms. Levis might be on Highland Avenue and started their search there.

Recommendation: CHA should evaluate whether it can work with the Executive Office of Public Safety and the State Legislature to streamline the Commonwealth's 911 system to mitigate the loss of information between a caller and emergency responders.

- B. Question 2: Did the Quality and Risk Management Framework adequately assess the factors that may have contributed to Ms. Levis' death, and did CHA remediate the issues that were identified?
 - 1. CHA Did Not Evaluate Whether the Emergency Department Could Have Made Different Choices that Would Have Led to a Different Outcome

We interviewed four CHA staff members who were involved in the RCA. We also reviewed the reports from the RCA to the Patient Safety Committee and the Board Quality

²³ This conclusion is separate and apart from CHA's obligations under EMTALA.

Committee, meeting minutes from the RCA, and notes and other documents that supported the RCA.

The Ambulatory Risk Manager began organizing an RCA to review Ms. Levis' inability to access the ED two hours after Ms. Levis had been transferred to the ICU. There is no evidence to indicate CHA was at all reluctant to conduct a self-evaluation of what, if any, mistakes were made. Within two days of the event, the Deputy Chief Public Safety saved and reviewed the security footage and contacted PSO-1, the Ambulatory Risk Manager walked the path Ms. Levis took in the early morning to understand what she would have seen, and both the Nurse Manager and Nurse-1 filed SERS reports. We commend CHA for promptly taking action to assess what had occurred.

Although we have concluded that Nurse-1 and PSO-1 acted reasonably under the circumstances, CHA may be able to train staff to take different actions in the future to improve the effective use of diminishing time. The RCA should have evaluated these alternatives to learn from Ms. Levis' case and establish best practices for the future. The RCA should have asked questions such as:

- Are there questions clinical staff should ask when they receive information about a patient having difficulty accessing the ED?
- When should staff make use of the surveillance feed?
- When, if ever, should safety staff engage in a ground search absent direction from the clinical staff?
- When should security staff call for backup?
- What steps should staff take if they are unable to reach an incoming patient by phone?

The purpose of

peer review and just culture is to foster an environment where CHA personnel can openly review and challenge how CHA cared for a patient to learn from past experience. In this case, that review was incomplete.

Recommendation: Risk Management, working with staff from the ED, should assess key decision points on the morning of September 16 to determine lessons learned. Among other topics, this review should address 1) what information ED staff should seek from a caller, 2) whether, when, what, and how to communicate information to other ED staff members, and 3) whether there is a preferred order of actions to be taken when initiating and conducting a search. Risk

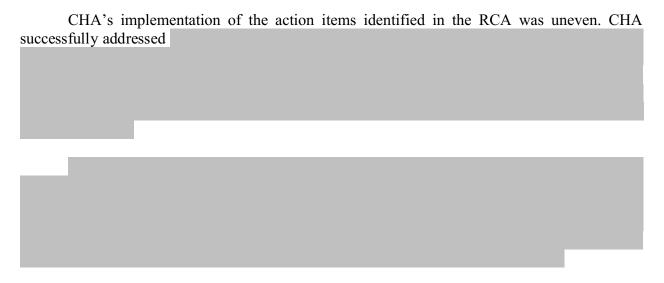
Management should also assess whether there are strategies or controls it can implement to foster a just culture in which challenge is encouraged. The Board Quality Committee should consider ways in which it can give its complete support to these efforts.²⁴

2. The Quality and Risk Management Framework Did Not Include Sufficient Controls to Oversee Implementation of Corrective Actions

Risk Management presents all RCAs first to the Patient Safety Committee and then the Board Quality Committee. The purpose of these presentations is to allow a multi-disciplinary collection of CHA's clinical and non-clinical leadership to assess and oversee patient safety issues and any corresponding corrective action.

The Ambulatory Risk Manager presented the RCA to the Patient Safety Committee on October 5, 2016.
When the Inpatient Risk Manager presented the RCA to the Board Quality Committee the following week,
Presentations to the Board Quality Committee are typically narrower than what is presented to the Patient Safety Committee. The Board Quality Committee has oversight over a broader number of topics, so the Risk Management staff focuses the Board Quality Committee on key issues in the RCA.
In this case,

²⁴ According to the Governance Institute, the Board Quality Committee should send "clear signals" that "the organization is committed to openness, candor, and transparency" for quality and safety issues. Its three recommendations are adopting a just culture philosophy, adopting a "patients-as-only-customer' mantra," and developing a "strong" disclosure and apology policy. Governance Inst., *Maximizing the Effectiveness of the Board's Quality Committee: Leading Practices and Lessons Learned*, at 1 (2015).



The Ambulatory Risk Manager and the Deputy Chief of Public Safety hosted a meeting with SHED staff to discuss culture and role delineation with the ED. Neither, however, undertook additional follow up after this meeting. Witnesses told us that some members of the ED staff were unable to attend the meeting, and no make-up session was held. Nor did CHA conduct any subsequent training or review to assess whether the changes identified in the RCA had been successfully implemented.

the Chief of Emergency Medicine and the physicians in the SHED were not included in the meeting.

Since the

publication of *The Boston Globe* article, CHA began requiring PSOs to notify their supervisor if both officers are occupied at the SHED. The Security Operations Center will also watch the security monitors.

Continued oversight of the RCA process is necessary to ensure action items are completed. Many issues that could lead to adverse events,

do not lend themselves to one-time fixes. Instead, these issues require continued training and focus over a length of time for the change to take hold. We conclude that the Quality and Risk Management framework does not include adequate procedures and controls to oversee the RCA process and implementation of corrective action items.

Recommendation: CHA should assess whether the Patient Safety Committee and the Board Quality Committee have sufficient detail on RCA cases in order to provide productive feedback and oversight. CHA should consider whether the relevant committees should take additional steps to assure that Risk Management presents all necessary aspects of an RCA to the Patient Safety

Committee and the Board Quality Committee, in other words, whether CHA should adopt some process to assure quality control of the RCA process. ²⁵ ²⁶

C. Question 3: Did CHA appropriately communicate and disclose information regarding Ms. Levis' admission to the SHED to Ms. Levis' family?

1. CHA Did Not Have Adequate Measures in Place to Ensure that CHA Communicated Adverse Events to Families

Our interviews indicated a widespread commitment at CHA to transparency and disclosure. Several witnesses said that CHA prided itself on being a leader in patient communication, disclosure of adverse events, and apology. As of September 2016, CHA's policy on "Disclosure of Unanticipated Outcomes of Patient Care" required "all physicians, nurses, and other healthcare providers involved with patient care to maintain an open and honest communication with their patients, family members or designated representatives concerning errors, adverse events, or unanticipated outcomes of patient care." The policy provided that "[r]esponsibility for disclosing the event or unanticipated outcome typically rests with the clinician who has overall responsibility for the patient's care" and that disclosure "should be made with guidance from Risk Management and Patient Safety Department."

We have divided our review of CHA's disclosure to Ms. Levis' family into three periods: a. the initial communication on the morning of September 16, b. subsequent communication while CHA conducted its internal review, and c. communication after CHA received notice of potential litigation.

a. Communication on the Morning of September 16

In his November 2018 *Boston Globe* article, Mr. DeMarco wrote that, upon arriving at the SHED, he was provided initial information about Ms. Levis. According to the article, Mr. DeMarco was told that Ms. Levis was found collapsed on a street leading to Somerville Hospital or possibly in a parking lot on the outskirts of the property. When interviewed by Foley Hoag, Mr. DeMarco said that he was told she may have been found on a sidewalk. None of the witnesses from CHA were able to confirm exactly what the CHA staff communicated to Mr. DeMarco that morning. We assumed for purposes of our review that Mr. DeMarco's recollection of the conversation was accurate.

https://www.cms.gov/medicare/provider-enrollment-and-certification/qapi/downloads/guidanceforrca.pdf.

²⁵ The National Patient Safety Foundation's RCA² program includes an annual RCA process review by senior leadership and the Board that tracks the percentage of RCA-recommended actions that are completed. Nat'l Patient Safety Found., *RCA² Improving Root Cause Analyses and Actions to Prevent Harm*, at 20 (2016). RCA² means Root Cause Analysis *and Action*, which emphasizes the principle that "prevention requires actions to be taken." *Id.* at vii. The RCA² program encompasses not only best practices for RCAs but also "tools to evaluate" RCA reviews "so that significant flaws can be identified and remediated to achieve the ultimate objective of improving patient safety." *Id.*

²⁶ CMS guidance on measuring the success of RCAs suggests, among other things, selecting someone after an RCA committee has disbanded to monitor whether corrective actions have been implemented, whether staff is complying with recommended changes, and whether the changes have made a difference. CMS, *Guidance for Performing Root Cause Analysis (RCA) with Performance Improvement Projects (PIPs)*, at 9, *available at*

At the time Mr. DeMarco arrived at the hospital, no member of the CHA staff had a complete picture of what had occurred. Although SHED staff knew Ms. Levis had called the SPD asking if the doors were locked, no one in the SHED learned until after Ms. Levis was found that she had collapsed prior to SHED staff checking the ambulance bay door.

We also believe that the potential miscommunication about the exact location where Ms. Levis collapsed was reasonable given the rapid pace at which the morning's events occurred. The Chief of Emergency Medicine explained that in emergency medicine, providers focus on information that could affect patient care. The clinical staff would not have prioritized information on exactly where outside the hospital Ms. Levis had collapsed because such information would not have changed her treatment. We believe this is likely the reason CHA personnel speaking with Mr. DeMarco that morning may not have communicated the exact location where she collapsed.

We conclude that the initial communication with Mr. DeMarco on the morning of September 16 met CHA's standards for transparency and disclosure.

b. Communication while CHA Initiated its Internal Review

CHA began its review of Ms. Levis' inability to access the SHED while Ms. Levis remained in intensive care. Nobody communicated to Mr. DeMarco that CHA had initiated a review of the events that preceded Ms. Levis' admission into the SHED. Several witnesses noted that CHA failed to recognize that, through the RCA process, CHA had learned more information about the incident than had previously been shared with Mr. DeMarco. Many witnesses said they assumed that Mr. DeMarco had already been notified, even after *The New York Times* published his thank-you letter.

We identified two reasons that facilitated the incorrect assumption that someone had already disclosed to Mr. DeMarco what had occurred. First, Risk Management did not and does not have a policy of automatically communicating to patients that their care is being reviewed when the case does not meet the regulatory definition of an SRE. In contrast, Risk Management has mandatory communications and disclosures in place for patients who are subject to an SRE. In this case, where what occurred fell outside the definition of an SRE, Risk Management did not apply similar procedures.

Second, there was a lack of clarity regarding who was responsible for ensuring that communication occurred. At all levels of the organization, there was an assumption that others were responsible for handling or overseeing communication with Mr. DeMarco. For example, Ms. Levis had already been transferred to the ICU when the RCA took place. ICU Physician-2 knew that Ms. Levis had been found outside the SHED, but, at the time, he did not know any of the information related to the RCA. ICU Physician-2 stated that disclosure should have come from the physician in the ED because they would have been better situated to answer questions that Mr. DeMarco may have raised, but the patient was no longer in the ED when CHA learned additional information about the case. At the same time, Risk Management did not have a process in place to inform either the ED or the ICU that disclosure needed to take place.

In 2016, RCAs at CHA did not review the disclosure and apology to the family, and Risk Management did not routinely include information about apology and disclosure in communication to the Patient Safety Committee or the Board Quality Committee. In response to the publication of the *Boston Globe* article on November 3, 2018, Risk Management conducted a second RCA focused on identifying mistakes in CHA's communication and disclosure to Mr. DeMarco. As a result of this review, disclosure and apology is now a part of all RCAs. Risk Management now presents a review of disclosure and apology to the Board Quality Committee and the Patient Safety Committee as part of all RCA reviews. We commend CHA for making this change.

We conclude that CHA should have communicated to Mr. DeMarco that CHA was conducting an RCA into Ms. Levis' inability to access the SHED. Timely disclosure of the existence of a review and its ultimate recommendations would have provided Mr. DeMarco the opportunity to ask additional questions. It likely would have also lessened or avoided the breach of trust that Mr. DeMarco experienced when he learned what had happened not from CHA but from other sources.

Recommendation: We recommend that CHA consider an additional check in the RCA process to increase disclosure about pending investigations, such as adopting an automatic communication procedure, similar to that required for SREs, for all RCAs for incidents when a patient has been harmed. We also recommend that Risk Management confirm that roles and functions are clear as to who is responsible for communicating adverse events with a family, especially when a patient is no longer under the care of the department where the adverse event occurred. CHA should engage in a periodic review to confirm clarity of relevant policies and procedures.

c. Communication Subsequent to Notification of Potential Wrongful Death Claims

On November 1, 2016, CHA received a letter from Mr. DeMarco's counsel regarding a potential wrongful death claim related to Ms. Levis. Several people, including the Risk Management staff, Senior Management, and members of the Board of Trustees said they knew of the potential litigation. Many Trustees were, however, unaware that CHA had received notice of a potential claim.

Massachusetts law makes statements of apology by a health care provider inadmissible in a medical malpractice claim.²⁷ Nevertheless, CHA's outside-malpractice counsel recommended stopping any further communication with Mr. DeMarco. Some witnesses said that the potential wrongful death claim furthered their assumptions that CHA had disclosed what occurred at the SHED to Mr. DeMarco because he otherwise would not have known. Others said they thought Mr. DeMarco had considered Ms. Levis' care in the ICU separate and apart from what took place in the ED. The disparity between the positive feelings in the thank-you note and the threat of potential

²⁷ G.L. c. 233, § 79L.

litigation should have signaled a need for further evaluation. We conclude that CHA should have taken this opportunity to confirm whether disclosure and apology had occurred.

Recommendation: We recommend that CHA consider adopting a procedure to review whether an apology is appropriate when CHA receives notice of potential litigation. If Senior Management determines that an apology is appropriate, it should confer with counsel on the scope and language of the apology and the means of communicating it.

2. No Evidence Suggests a Deliberate Attempt to Withhold Information or Mislead Mr. DeMarco

Foley Hoag asked all witnesses about the communication and disclosure to Mr. DeMarco about the events outside of the SHED. Nobody described a deliberate decision to withhold information from Mr. DeMarco. Several witnesses—including Board members, management, and members of the risk management organization—indicated that they incorrectly assumed that Mr. DeMarco had already been informed of the facts relating to Ms. Levis' admission into the SHED. Significantly, no one checked that assumption by asking for confirmation of disclosure.

In the November 3, 2018 *Boston Globe* article, Mr. DeMarco suggested that the SHED waited to contact him until after the night shift staff had left as a means of withholding information. There is no evidence to support this suggestion. We asked several clinical staff members about the process to contact families of patients who arrive in the ED in critical condition. Uniformly, the witnesses stated that the primary priority is stabilizing the patient. In order to focus resources on providing care, family members are only contacted once the patient is stabilized. We conclude that there is no evidence that anyone at CHA willfully withheld information from Mr. DeMarco or other members of Ms. Levis' family.

D. Question 4: Did the Board of Trustees and Senior Management fulfill its oversight responsibilities in regards to the review of Ms. Levis' treatment and the subsequent publicity?

We detected a lack of trust and cohesiveness throughout the segments of the organization that were the subject of our review. We observed distrust between staff and management, staff and the Board of Trustees, and management and the Board of Trustees. From the start, the review of Ms. Levis' case revealed and, in some cases exacerbated, division in the organization. For example, the RCA process was not fully candid, information was diluted as it moved up the Quality and Risk Framework, there was reluctance by the Board of Trustees and the Board Quality Committee to ask difficult questions, and there was a reluctance to share information with the Board in a way that was clear and concise. Despite these fissures, we commend CHA for engaging in self-examination immediately after Ms. Levis was admitted to the ED on September 16, 2016 and then again after *The Boston Globe* published Mr. DeMarco's article on November 3, 2018.

1. The Board of Trustees and Senior Management Failed to Recognize that the Publication of Mr. DeMarco's Thank-You Letter Increased the Risk for CHA

We asked many of the witnesses we interviewed whether the CHA reassessed Ms. Levis' case after *The New York Times* published Mr. DeMarco's letter. Nobody, at any level of the organization, indicated that CHA reassessed its response to Ms. Levis' death and the communication with Mr. DeMarco.

The New York Times published Mr. DeMarco's thank-you letter on October 6, 2016. As described above, the results of the RCA were presented to the Board Quality Committee on October 13, 2016. We spoke to multiple individuals that were present for this meeting. The witnesses all agreed that someone in the meeting raised the connection between the RCA and Mr. DeMarco's thank-you letter. Multiple members of the Board of Trustees, the Board Quality Committee, Senior Management, and the Risk Management staff told us that they knew at that time that Ms. Levis was both the patient featured in *The New York Times* and that her case was subject to an RCA review.

All of the witnesses agreed that there was no discussion at the Board Quality Committee meeting about what Mr. DeMarco knew. Each of these witnesses assumed that Mr. DeMarco knew the details of the events, but, as noted above, no one asked for confirmation. One member of the Board Quality Committee described the Levis RCA as less complicated than most. The Board Quality Committee's role is not only to receive information about quality events, but to actively monitor the performance and effectiveness of the quality function. This necessarily means asking question to assure that responsible parties discharged their duties, including disclosure and apology. In this case, the Board Quality Committee did not meet this responsibility.

Similarly, prior to the Board of Trustees meeting the following week, the Chair of the Board and the CEO strategized how to respond if another member of Board connected Mr. DeMarco's thank-you letter to the RCA. But neither suggested affirmatively raising the issue. Another member of the Board of Trustees and Board Quality Committee stated that they assumed it was unnecessary to raise the connection because the Chair was aware of it. We also suspect Board members had a natural reluctance to dampen the celebration of the ICU staff, although no witness said this was a consideration.

The positive publicity around the ICU care materially changed the facts of Ms. Levis' case in a manner that demanded a different institutional response. Ms. Levis' case became a review of the most publicized patient case in CHA's recent history, requiring heightened attention from the Board. Board Quality Committee members and Senior Management, several of whom knew the connection between the RCA and Mr. DeMarco's thank-you letter, should have recognized that the opportunity for the negative aspects of this story to both offend Mr. DeMarco and damage the institution had increased dramatically. Our review of email correspondence indicates that members of the Risk Management Department raised concerns about negative backlash to Senior Management. Nobody, however, acted on this concern.

We also asked several witnesses, including clinical staff, management, and members of the Board of Trustees, about the DPH surveys and EMTALA settlement that resulted, in part, from

Ms. Levis' inability to access the SHED. Several of these witnesses were adamant that, despite the settlement, CHA did not violate its obligations under EMTALA. CHA became overly focused on whether the institution in fact violated EMTALA. In so doing, CHA failed to recognize that this case presented unique risks different from other regulatory investigations because of the related publicity. In any event, the disagreement with the regulators' conclusions neither explains nor justifies failure to provide the Board of Trustees with information that would allow the Board of Trustees to consider all implications of those conclusions.

By failing to reassess Ms. Levis' case, CHA lost the opportunity to control how Mr. DeMarco learned the additional details regarding Ms. Levis' inability to access the ED. The risk to the institution materialized into harm when the Boston Globe published the November 3, 2018 article. The reputational harm to CHA extended beyond bad publicity. It decreased morale, promoted divisiveness, and led to a questioning of effectiveness within the organization. All of this might have been avoided if CHA had given timely notice to Mr. DeMarco that Ms. Levis' case was under review.

Recommendation: The Board of Trustees should assess how it performs its oversight responsibilities, and review its communications with Board committees and management to ensure that information related to strategic or enterprise risk is transmitted in a clear, complete and timely manner.²⁸

2. The November 3, 2018 Boston Globe Article Divided CHA, Increasing Operational Risk

From the start of our investigation, it has been clear that Mr. DeMarco's November 3, 2018 *Boston Globe* article and its aftermath have unsettled all levels of CHA's organization. Our interviews repeatedly demonstrated a lack of trust and cohesiveness among different segments of the organization. The organization did not seem unified in seeing the value of finding the facts and determining whether there were additional lessons to learn.

Instead, witnesses frequently expressed concern that their comments would be relayed to the Board of Trustees. Many witnesses expressed concerns about the extent to which comments would be associated with them. Finger pointing between the Trustees, Senior Management, and various departments within CHA was common throughout the interviews. The lack of cohesion within the organization has the potential for serious consequences. The lack of trust between the Trustees, Senior Management, and the ED staff can affect performance.

We conclude that this case created a risk to the organization that neither the Board of Trustees nor Senior Management anticipated or properly identified until after *the Boston Globe* published Mr. DeMarco's article on November 3, 2018.

²⁸ The American Society for Healthcare Risk Management has developed a framework for implementing enterprise risk management, which among other things, emphasizes an organization-wide, proactive approach to risk management.

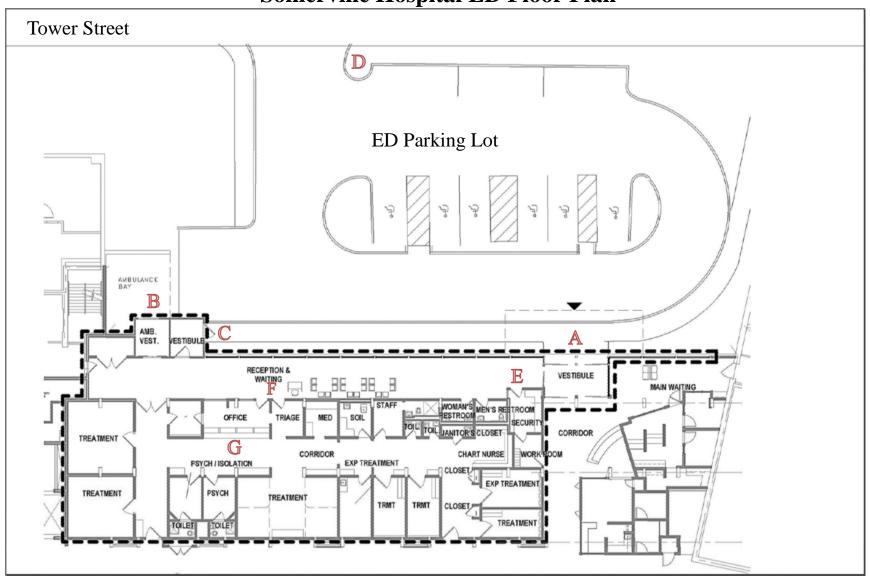
Recommendation: The Board of Trustees should evaluate whether it has sufficient processes in place to identify, track, and mitigate non-financial, enterprise risks. Also, the search for a new CEO provides the Board of Trustees with an opportunity to consider what the organization needs in the CEO role to promote greater trust and cohesiveness in the organization. The Board should consider developing a plan that permits it to hear from all stakeholders on how CHA might improve trust and cohesiveness.

IV. CONCLUSION

CHA did many things right in treating Ms. Levis and in its response to her death. The medical care and compassion she received once admitted to the SHED and in the Cambridge Hospital ICU was exceptional. CHA also quickly initiated a process to review the circumstances leading to Ms. Levis' inability to access the SHED and adopted a number of changes. The events on the morning of September 16, 2016, Ms. Levis' death, and the publicity that followed, however, tested CHA staff, Senior Management, and the Board of Trustees. The recommendations we have made in this report are intended to assist CHA in enhancing its effectiveness, so that CHA is better able to meet the demands of the communities it serves.

EXHIBIT A

- EXHIBIT A -Somerville Hospital ED Floor Plan



A: ED main entrance

B: ED ambulance bay entrance

C: New ED entrance (added Sep. 2017)

D: Sign for ED

E: Security office

F: Doors to ED office and triage areas

G: ED, nurse work area

EXHIBIT B

- EXHIBIT B - Paths of Ms. Levis, Nurse-1, and PSO-1

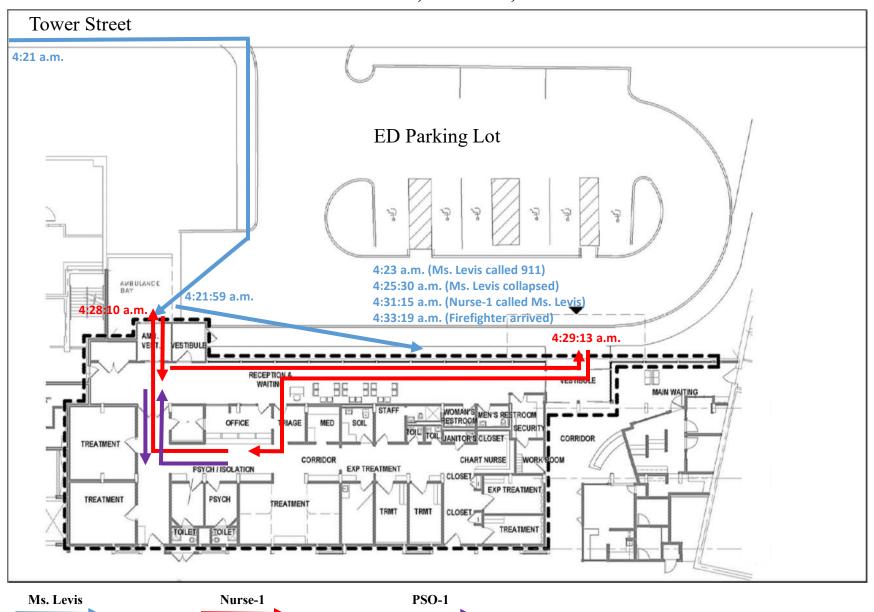


EXHIBIT C



Board of Trustees Questionnaire

Summarized Answers

Privileged & Confidential

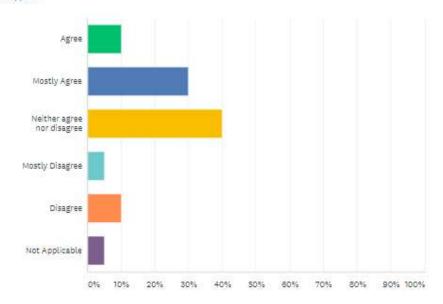


Safety & Compliance Board Education

Q5

The Board education programs regularly address the patient safety and compliance responsibilities of Trustees.





ANSWER CHOICES	▼ RESPONSES	•
▼ Agree	10.00%	2
▼ Mostly Agree	30.00%	6
▼ Neither agree nor disagree	40.00%	8
▼ Mostly Disagree	5.00%	1
▼ Disagree	10.00%	2
▼ Not Applicable	5.00%	1
TOTAL		20

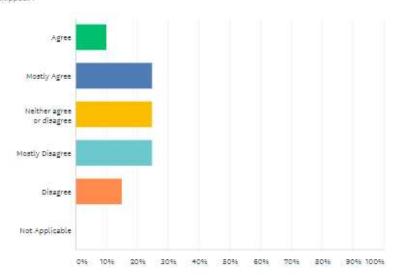


Safety & Compliance Reports to Board

Q7

The reports to the Board by management and by the Quality Committee on issues of patient safety and compliance are sufficient in frequency and content for Trustees to understand and perform their patient safety responsibilities.

Answered: 20 Skipped: 1



ANSWER CHOICES *	RESPONSES	*
▼ Agree	10.00%	2
▼ Mostly Agree	25.00%	5
▼ Neitheragree or disagree	25.00%	8
▼ Mostly Disagree	25.00%	Б
▼ Disagree	15,00%	.3
▼ Not Applicable	0.00%	0
TOTAL		20



Safety & Compliance comments

On education: "We have struggled with finding good time for trustee education outside of meetings. And within our meetings there is not adequate time for significant trustee education. More focus on PEOC than safety."

On presentations to the Board: "Quality committee work is highlighted in Board minutes but board members are looking for more explicit discussion."

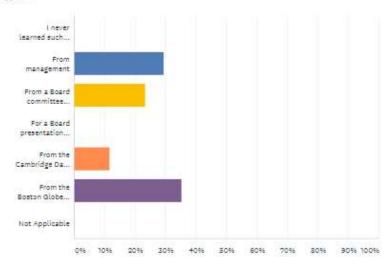


Levis Event General Knowledge

Q8

How did you first learn or come to appreciate that a person was found in September 2016 by Somerville Police and EMTs in cardiac arrest outside the lobby of the Emergency Department ("ED") of Somerville Hospital? (choose one)

Answered: 17 Skipped: 4



ANSWER CHOICES	*	RESPONSES	
▼ I never learned such information		0.00%	0
▼ From management		29.41%	ā
▼ From a Board committee presentation		23.53%	4
 For a Board presentation or discussion about a DPH investigation 		0.00%	0
From the Cambridge Day article of January 2, 2018		11.76%	2
▼ From the Boston Globe Magazine article of November 3, 2018		35.29%	8
▼ Not Applicable		0.00%	0
TOTAL			17

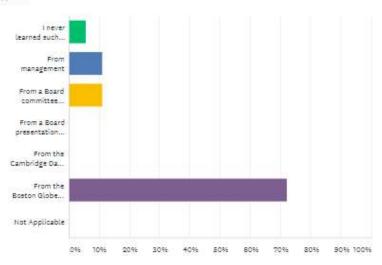


Levis Event General Knowledge

Q9

How did you first learn or come to appreciate that a person was visible in September 2016, on the surveillance cameras of Somerville Hospital when she attempted to gain access to the ED and later became unconscious? (choose one)

Answered: 18 Skipped: 3



ANSWER CHOICES	RESPONSES	*
I never learned such information	5.56%	4
▼ From management	11,11%	2
From a Board committee presentation.	11,1196	2
 From a Board presentation or discussion about a DPH investigation 	0.00%	0
▼ From the Cambridge Day article of January 2, 2018	0.00%	0
▼ From the Boston Globe Magazine article of November 3, 2018	72.22%	13
▼ Not Applicable	0.00%	٥
TOTAL		18

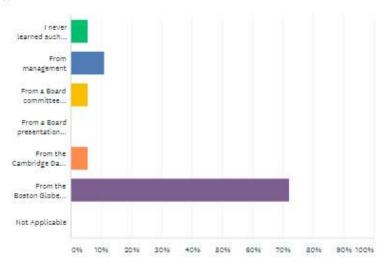


Levis Event Staff Response

Q11

How did you first learn or come to appreciate that the Somerville Police Department notified a nurse in the Somerville ED in September 2016 that a person was experiencing an asthma attack and was attempting to gain access to the ED? (choose one)

Answered: 18 Skipped: 3



ANSWER CHOICES	*	RESPONSES	
 I never learned such information 		5.58%	্ৰ
From management		11,11%	2
From a Board committee presentation		5.56%	1
 From a Board presentation or discussion about a DPH investigation 		0.00%	0
From the Cambridge Day article of January 2, 2018		5,58%	1
 From the Boston Globe Magazine article of November 3, 2018 		72.22%	13
Not Applicable		0.00%	0
TOTAL			18

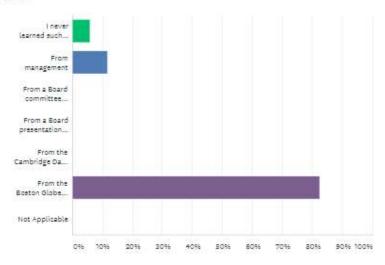


Levis Event Staff Response contd.

Q12

How did you first learn or come to appreciate that no employee of Somerville Hospital undertook a physical search of the grounds of the hospital after receiving notice in September 2016 that a person was attempting to gain access to the ED? (choose one)

Answered: 17 Skipped: 4



ANSWER CHOICES	RESPONSES	
▼ I never learned such information	5.88%	31
▼ From management	11.76%	2
▼ From a Board committee presentation	0,00%	0
 From a Board presentation or discussion about a DPH investigation 	0.00%	0
 From the Cambridge Day article of January 2, 2018 	0.00%	0
▼ From the Boston Globe Magazine article of November 3, 2018	82,35%	34
 ▼ Not Applicable 	0.00%	۵
TOTAL		17

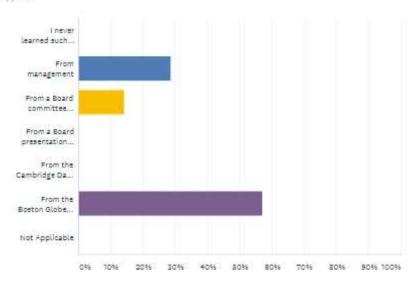


Levis Event Identity of Levis

Q13

How did you first learn or come to appreciate that the person described above in questions 8 through 12 was Peter DeMarco's wife, Laura Levis?





ANSWER CHOICES	RESPONSES	*
▼ I never learned such information	0.00%	0
▼ From management	28.57%	4
From a Board committee presentation	14.29%	2
 From a Board presentation or discussion about a DPH investigation 	0.00%	0
▼ From the Cambridge Day article of January 2, 2018	0.00%	0
 From the Boston Globe Magazine article of November 3, 2018 	57.14%	8
▼ Not Applicable	0.00%	0
TOTAL		14



Levis Event comments

On Levis's identity: "A few weeks after L.L. died and CHA was lauded by Peter for great care in the Cambridge ICU, there was mention of a woman who underwent cardiac arrest outside Somerville Hospital. This was in an RCA report. No one offered that this individual was the same person who died in the ICU. I and another Board colleague looked at one another as if to say this has to be the same person, and I asked the then Chief Risk Officer if the RCA report was referring to the woman who'd died in the ICU. With a very troubled look, she nodded yes. No more was said or offered. I left that meeting that day quite troubled and confused."

"At the Oct qual committee meeting, with [redacted] or myself asked directly "ARE YOU TELLING US THIS IS THE WOMAN FROM THE NYTIMES ARTICLE? The question was answered in the affirmative and that moment was the first time the two events got tied together. It bothers me still that we had to find out by asking a direct question ... As I recall things were pretty much dropped after that."

"I first made the connection at the Oct 2016 Quality Committee meeting ... I had to ask if the person who died in the ICU at Cambridge Hospital was the same person noted in the brief RCA description provide to the quality Committee."

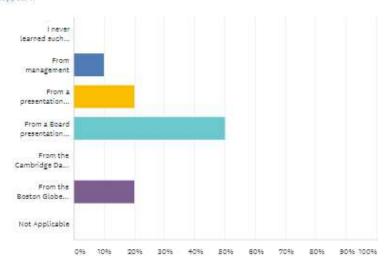


Root Cause Analysis

Q14

How did you first learn or come to appreciate that the Risk Management staff of Somerville Hospital convened a Root Cause Analysis Review Meeting in September 2016 to assess why a person was found in cardiac arrest outside the lobby of the ED of Somerville Hospital? (choose one)

Answered: 10 Skipped: 11



ANSWER CHOICES	~	RESPONSES	
 I never learned such information 		0.00%	D
▼ From management		10.00%	1
▼ From a presentation by the Quality Committee		20.00%	2
 From a Board presentation or discussion about a DPH investigation 		50.00%	б
▼ From the Cambridge Day article of January 2, 2018		0,00%	0
▼ From the Boston Globe Magazine article of November 3, 2018		20.00%	2
▼ Not Applicable		0.00%	0
TOTAL			10

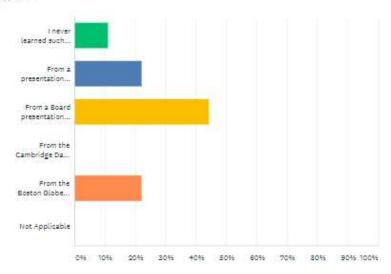


Root Cause Analysis contd.

Q15

How did you first learn or come to appreciate that the Root Cause Analysis had identified in October 2016 the following root causes for the event described in the previous question: signage/lighting; culture (teamwork and role delineation), and acuity of ED (3 patients on safety watch)? (choose one)





ANSWER CHOICES	RESPONSES	
 I never learned such information 	11,1196	1
From a presentation by the Quality Committee	22.22%	2
 From a Board presentation or discussion about a DPH investigation 	44.44%	- 4
From the Cambridge Day article of January 2, 2018	0.00%	0
From the Boston Globe Magazine article of November 3, 2018	22.22%	2
Not Applicable	0.00%	0
TOTAL		9



Root Cause Analysis comments

"The report to Board Quality Committee focused on the signage and lighting as contributing to the situation. We never heard about the acuity of ED pts."

"I learned about the signage/lighting issue from the BQC RCA. I learned about the acuity of ED in December. I had not heard about culture before this survey."

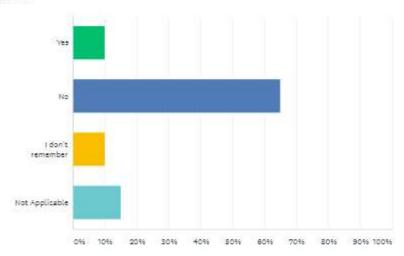


NYT Thank-You

Q17

Did you know at the time you learned of the DeMarco Thank-You Letter in late September or early October 2016 before being transferred to Cambridge Hospital that his wife was found in cardiac arrest outside the lobby of the ED of Somerville Hospital?





ANSWER CHOICES	▼ RESPONSES	
▼ Yes	10.00%	2
▼ No	65.00%	13
▼ (don't remember	10.00%	2
▼ Not Applicable	15.00%	.3
TOTAL		20

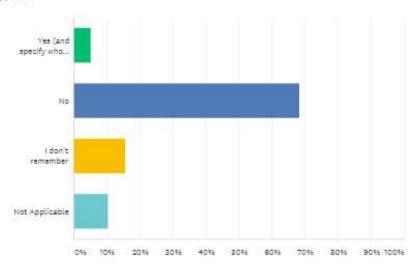


NYT Thank-You

Q19

Did you or anyone to your knowledge, at the time of the circulation of the DeMarco Thank-You Letter ask CHA management whether Peter DeMarco had known or been informed how his wife came to be treated at Cambridge Hospital?

Answered: 19 Skipped: 2



ANSWER CHOICES	* RESPONSES	*
 Yes (and specify who asked in comment section) 	5.26%	1
▼ No	68.42%	13
▼ I don't remember	15.79%	3
▼ Not Applicable	10.53%	2
TOTAL		19

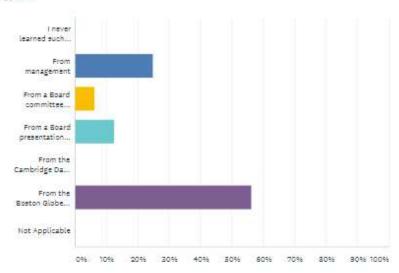


NYT Thank-You contd.

Q20

How did you first learn or come to appreciate that the patient described in Peter DeMarco's Thank-You Letter was the person found in cardiac arrest outside the SH ED?

Answered: 16 Skipped: 5



ANSWER CHOICES	*	RESPONSES	*
▼ I never learned such information		0,00%	0
▼ From management		25.00%	.9
From a Board committee presentation		6.25%	1
 From a Board presentation or discussion about a DPH investigation 		12.50%	2
 From the Cambridge Day article of January 2, 2018 		0.00%	0
 From the Boston Globe Magazine article of November 3, 2018 		58.25%	9
▼ Not Applicable		0.00%	0
TOTAL			16

NYT Thank-You comments

On the link to Levis event: "The information was provided in response to a question posed to risk management staff during a board quality committee meeting."

"I believe it was a couple days before the [Globe] article that we were told."

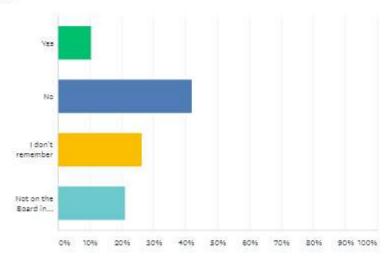


DPH/OIG Investigation

Q21

Did you understand that when the CEO presented to the Board at its December 20, 2016 meeting about an ongoing survey by the Department of Public Health, one of the patients he was describing was the patient described in the DeMarco Thank-You Letter?

Answered: 19 Skipped: 2



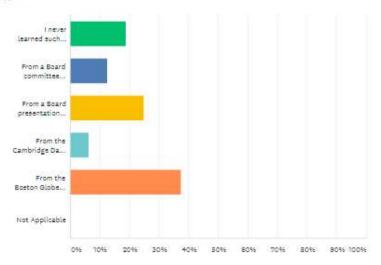
ANSWER CHOICES	▼ RESPONSES	·
▼ Yes	10.53%	2
▼ No	42.11%	8
→ (don't remember	26.32%	5
▼ Not on the Board in December 2016	21.05%	.9
TOTAL		19



Q23

How did you learn or come to appreciate that the DPH had found that CHA had violated EMTALA (Emergency Medical Treatment and Labor Act) by failing to conduct an outside search to locate a person after learning that she was on hospital grounds, could not access the ED, and was having difficulty breathing? (choose one)

Answered: 16 Skipped: 5



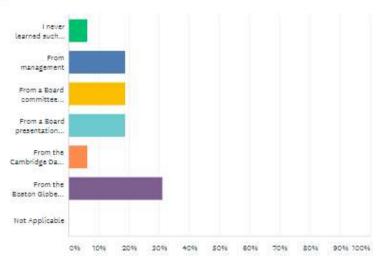
ANSWER CHOICES	RESPONSES	
▼ I never learned such information	18.75%	3
From a Board committee presentation	12.50%	2
 From a Board presentation or discussion about a OPH investigation 	25.00%	4
From the Cambridge Day article of January 2, 2018	6.25%	35
▼ From the Boston Globe Magazine article of November 3, 2018	37.50%	6
▼ Not Applicable	0.00%	0
TOTAL		16



Q26

How did you learn or come to appreciate that CHA entered into a settlement with the OIG (Office of the Inspector General) for violations of EMTALA arising from the experience of the patient described in the DeMarco Thank-You Letter? (choose one)

Answered: 16 Skipped: 5



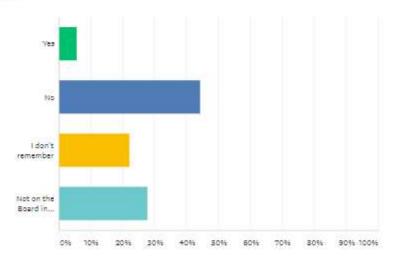
ANSWER CHOICES	RESPONSES	
I never learned such information	6.25%	্য
▼ From management	18.75%	3
From a Board committee presentation	18.75%	3
 From a Board presentation or discussion about a DPH investigation 	18.75%	3
 From the Cambridge Day article of January 2, 2018 	6.25%	1
▼ From the Boston Globe Magazine article of November 3, 2018	31.25%	5
▼ Not Applicable	0.00%	0
TOTAL		16



Q27

Did you understand that the Cambridge Day article dated January 2, 2018, and circulated by the CEO on January 3, 2018, described various safety violations of CHA, including the findings by DPH and CHA's settlement with the OIG arising from the experience of the patient described in the DeMarco Thank-You Letter?

Answered: 18 Skipped: 3



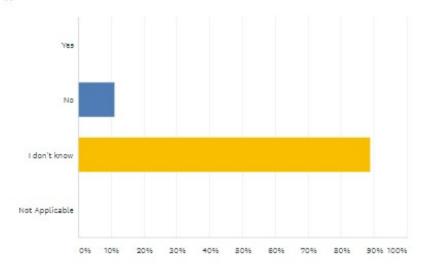
ANSWER CHOICES	* RESPONSES	7
▼ Yes	5.56%	1
▼ No	44.44%	8
▼ 1 don't remember	22.22%	4
Not on the Board in January 2018	27.78%	8
TOTAL		18



Q28

To your knowledge, did CHA, before November 1, 2016, inform Peter DeMarco that the staff of SH ED could not locate his wife before she went into cardiac arrest outside the SH ED?

Answered: 18 Skipped: 3



ANSWER CHOICES ▼	RESPONSES	*
▼ Yes	0.00%	0
▼ No	11.11%	2
▼ I don't know	88.89%	16
▼ Not Applicable	0.00%	0
TOTAL		18

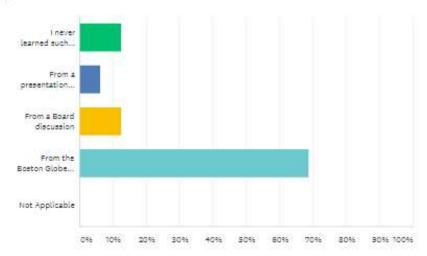


Potential Legal Claims

Q30

How did you learn or come to appreciate that CHA had not, before November 3, 2018, apologized to the family of Laura Levis for mistakes made by CHA that contributed to Laura Levis's death? (choose one)





RESPONSES	,
12.50%	2
6.25%	4
12.50%	2
68.75%	, 13,
0.00%	0
	16
	12.50% 6.25% 12.50% 68.75%

EXHIBIT D

- EXHIBIT D – Board of Trustees Questions

Members of the Board of Trustless provided the Special Committee with a detailed list of questions for the Special Committee to address in its fact-finding review. We have attempted to answer these questions in our report. Below is a listed of references to sections of the report where we have addressed each of these questions. We note where we were either unable to answer a given question or where a specific question was outside the scope of our review.

Notification, Root Cause Analysis, Process Improvement and Preparedness

1) Upon being alerted to the event, what steps did CHA take to review the event and the root causes for what occurred? Where did this review process follow, or not follow, CHA policy and/ or best practice? If CHA did not follow its policy and/ or best practice, what are the underlying causes that explain why this did not happen?

Reference: Section II.C.

2) What improvements have been made to ensure that all event reviews conform to CHA policy and practice and that CHA policy and practice follows best practices? What further improvements need to be made?

Reference: Section III.B.

3) What CHA policy exists relating to the sharing of instances of patient death or serious harm in connection with treatment received at CHA with either the Board or a Board sub-committee?

Reference: Section II.A.2, Section II.C, Section III.B.

4) What internal notification policy is in place with provider team(s) who are involved in an incident of patient death or serious harm? What about notification to other providers who are involved in the care of a patient, but who are not necessarily involved in a particular event itself? What about notification to other staff, such as care managers, etc.?

Reference: Section II.B.2, Section III.C.1

5) What improvements did CHA implement in response to the event and did they address the underlying causes of the event? What changes have been made with respect to signage, security, lighting, protocols for searching hospital grounds, staff training/education, etc.?

Reference: Section II.F, Section II.G

6) What are CHA's policies, procedures, and capabilities for implementing and analyzing underlying issues associated with patient death or serious harm?

Reference: Section II.A.2, Section II.C, Section III.B.

7) Is there a single position/person/team for carrying out the analysis? How is this work checked to be sure it is complete?

- EXHIBIT D – Board of Trustees Questions

Reference: Section II.A.2, Section II.C, Section III.B.

8) Has CHA had its incident analysis procedures evaluated by a qualified outside party?

Reference: Section II.G.3

9) What will CHA do to address and improve communication protocols with 911 system and local police? How can CHA work with 911 system and local police to improve communication systems?

Reference: Section III.A.2

10) Are police reports collected as part of incident analysis protocol? Are there police reports on other adverse incidents that CHA has not seen, sought out? How does CHA know if there is a police report or not?

CHA obtained a copy of the police report in Ms. Levis' case on July 24, 2017 once it became aware that a police report existed in the matter. A full review of other adverse events and related police reports would take significantly longer than the amount of time the Special Committee set to complete our report.

11) Over the last five years, what are the other instances of patient death or serious harm in connection with treatment received at CHA? Are there other past adverse incidents that have not been handled as they should have?

In our interviews, nobody raised any other adverse events that had been mishandled. A full review of other patient deaths or adverse events would take significantly longer than the amount of time the Special Committee set to complete our report.

12) How does CHA use results of incident analysis to drive improvements including standardization, establishment of checklists, confirmation that new protocols are adhered to?

Reference: Section II.A.2, Section II.C, Section III.B.

13) Are CHA's emergency departments optimally staffed and resourced to be able to provide excellent care at all times?

Reference: Section III.B

14) Is the organization equipped to respond to extraordinary circumstances as they unfold and what systems need to be put into place?

Reference: Section III

- EXHIBIT D – Board of Trustees Questions

Disclosure and Apology, External Communication

1) What are the best practices for disclosure and apology and does CHA policy and practice align with these?

Reference: Section III.C

2) What were the root causes of the communications gaps with the family and internally within CHA? How have these been addressed and what further steps need to be taken?

Reference: Section II.B, Section II.C, Section, II.D, Section II.E, Section, III.C.

3) Why didn't CHA apologize to Laura Levis's family in 2016? What decisions led to an apology to the family in following the article in the Boston Globe by Peter DeMarco, and did this reflect a change in CHA policy or was CHA policy not followed in 2016? Who was involved in these decisions and when were they made?

Reference: Section II.B, Section II.C, Section, II.D, Section II.E, Section, III.C.

4) How and when were Board members notified of the outreach by Mr. DeMarco to CHA in October 2018, in which he requested to meet with CHA representatives and editors of the Boston Globe?

Reference: Section II.E.2

5) How were decisions made about external communications with the press and stakeholders, and how did they fit with CHA policies and/or best practices.

Reference: Section II.E, Section III.D

Board Notification, Governance, and Oversight

1) What is the chronology of notification to the Board and/or Board sub-committee regarding events related to Laura Levis's death?

Reference: Section II.B.3, Section II.C.4, Section II.D.2, Section II.E

2) What information about the events, subsequent governmental reviews and actions, and legal action was communicated to the Board or Board committees, including, but not limited to any Department of Public Health surveys and findings; notice of potential EMTALA violation and offer to settle from CMS Office of Inspector General (OIG), and notice to preserve evidence from the family's legal counsel.

Reference: Section II.D, Section III.C.1

3) Was the potential EMTALA violation settlement described in any budget documents the Board or Board subcommittee reviewed or approved?

- EXHIBIT D -

Board of Trustees Questions

Examination of CHA's budget was beyond the scope of this report. We recommend that the Board Finance Committee consider pursuing this issue.

4) How was the information communicated to the Board, and was this the appropriate amount of

information? More generally,

a) What information should the Board receive?

b) What process improvements can be made to ensure that the Board is timely and

appropriately informed?

c) What questions should the Board be asking and what inquiries should it be making?

d) What is the Board's role relative to executive leadership? What are the respective

responsibilities of the Board and executive leadership?

Reference: Section II.A.1, Section II.B.3, Section II.D.2, Section II.E, Section III.D

5) Generally, how are judgments and settlement payments captured in CHA budget review and

approval process? Who approves payment of any judgement or settlement payment?

Examination of CHA's budget was beyond the scope of this report. We recommend that

the Board Finance Committee consider pursuing this issue.

6) Over the last five years, what other instances of state or federal regulatory findings and

corrective/disciplinary actions and settlements have occurred?

The report discusses a DPH survey that was ongoing at the time of the inquiry into Ms. Levis' death. A full review of all regulatory findings, corrective actions, and settlements over the last five years would take significantly longer than the amount of time the Special

Committee set to complete our report.

7) At the time the Board celebrated Ms. Levis' care at the Cambridge Hospital, was executive

leadership aware of what occurred as part of her care at the Somerville Hospital emergency

department?

Reference: Section II.B.3

8) Does the Board have trust in executive leadership? If trust has been materially damaged, can it

be rebuilt and how? How does the Board build trust among the whole organization?

Reference: Section III.D

4

- EXHIBIT D — Board of Trustees Questions

Promoting Accountability and a Just Culture

1) How can the Board better support a just culture that promotes openness, transparency, learning, accountability, and continuous improvement in quality and patient safety?

Reference: Section III.D