



LEGISLATIVE REPORT TO THE GENERAL ASSEMBLY Adverse Event Reporting

General Statutes of Connecticut
Section 19a-127l-n

QUALITY IN HEALTH CARE PROGRAM

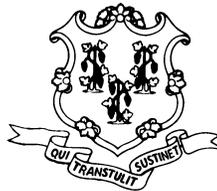
OCTOBER 2017

Raul Pino, MD, MPH, Commissioner

Wendy H. Furniss, RNC, MS, Chief (retired), Healthcare Safety & Quality Branch

Lloyd Mueller, PhD, Supervising Epidemiologist

Jon C. Olson, DPM, DrPH, Epidemiologist



State of Connecticut
Department of Public Health
410 Capitol Avenue
P.O. Box 340308
Hartford, Connecticut 06134-0308

**State of Connecticut
Department of Public Health**

**Legislative Report to the General Assembly
Adverse Event Reporting
For the Period of January 1, 2016 – December 31, 2016**

Quality in Health Care Program

Table of Contents

| | |
|---|-----------|
| EXECUTIVE SUMMARY | 3 |
| BACKGROUND | 3 |
| CGS §19a-127I | |
| ADVERSE EVENT DATA | 6 |
| CURRENT ACTIVITIES AND FUTURE PLANS..... | 9 |
| Investigation of Adverse Events | |
| Patient Safety Organizations | |
| Healthcare Associated Infections | |
| Healthcare Acquired Conditions | |
| Selected Patient Safety Literature Summaries and Abstracts | |
| Concluding Statement | |
| APPENDICES..... | 15 |
| A) DEMOGRAPHIC DATA FROM REPORTS IN THE ADVERSE EVENTS DATABASE | 16 |
| B) COUNTS AND CROSSWALK OF ADVERSE EVENT CODES 2012-2017 | 17 |
| C) ADVERSE EVENT REPORTS BY FREQUENCY | 19 |
| D) ADVERSE EVENT REPORTS AND RATES BY TYPE, ACUTE CARE HOSPITALS..... | 20 |
| E) ADVERSE EVENT REPORTS AND RATES BY TYPE, CHRONIC DISEASE HOSPITALS AND HOSPICES | 22 |
| F) ADVERSE EVENT REPORTS AND RATES BY TYPE, HOSPITALS FOR MENTALLY ILL PERSONS..... | 23 |
| G) ADVERSE EVENT REPORTS AND RATES BY TYPE, AMBULATORY SURGICAL CENTERS, PAIN MEDICINE CENTERS, FERTILITY CENTERS, AND OUTPATIENT CHILDBIRTH CENTERS.. | 24 |
| H) PRIMARY PAYER SOURCE BY MEDICAL FACILITY | 26 |
| I) COMMENTS SUBMITTED BY FACILITIES | 29 |

EXECUTIVE SUMMARY

The number of adverse events reports (n=431) in 2016 was 5% lower than the preceding year. The most common adverse events reported were: (1) stage 3-4 or unstageable pressure ulcers acquired after admission to a healthcare facility, (2) falls resulting in serious disability or death, (3) perforations during open, laparoscopic, and/or endoscopic procedures, and (4) sexual abuse or assault on a patient or staff member.

After examining an adverse event report, which includes a Corrective Action Plan, the Department of Public Health (DPH) determines whether to initiate an investigation. In addition to adverse event monitoring by DPH, Patient Safety Organizations disseminate information to improve patient care.

In January 2017, based on the recommendations of a work group of the Quality in Health Care Advisory Committee, the two Connecticut-specific categories (CT 1 & CT 2) became no longer reportable. The work group concluded that the overwhelming majority of perforations during open, laparoscopic, and endoscopic procedures (CT 1) are not preventable, and that events reported as serious injury or death during surgery (CT 2) are better captured under other more specific surgical categories already used by Connecticut in the National Quality Forum list of reportable events. Also in January 2017, the guidance for reporting sexual abuse or assault (NQF 7C) was revised to clarify what is a substantiated allegation. In May 2017, DPH implemented web-based adverse event reporting. For the first six months of 2017, adverse events report volume was comparable to the first six months of 2016, except for NQF 7C reports which were much lower during January to June 2017 compared to the same period the previous year.

BACKGROUND

Connecticut General Statutes §19a-127l required the Department of Public Health (DPH) to establish a Quality in Health Care program for health care facilities. The program is operated through general DPH resources. An Advisory Committee, chaired by the DPH Commissioner or designee, advises the program. Mandatory adverse event¹ reporting began October 1, 2002. After evaluating the program for more than a year, the Advisory Committee recommended adoption of the National Quality Forum (NQF) list of Serious Reportable Events, plus five or six Connecticut-specific events.

Prior to May 2017, adverse events were reported to DPH by telephone and fax machine. Beginning May 2017, reporting is through a web-based portal. Reporting forms and definitions are located at the DPH website under “[Forms](#)”.²

¹ As discussed in Connecticut’s March 2004 Adverse Events report, adverse events are not the same as medical errors. Some adverse events do not result from medical errors, and some medical errors do not result in adverse events. Annual Reports are at www.ct.gov/dph under Statistics & Research, then choose “Health Care Quality.”

² http://www.ct.gov/dph/cwp/view.asp?a=3115&q=390100&dphNav_GID=1601

The Adverse Event reporting requirements were amended when CGS 19a-127n became effective July 1, 2004. The statute replaced the previous adverse event classification system with a list of reportable events identified by the NQF. Additionally, DPH added six Connecticut-specific adverse event definitions to supplement the NQF list. (The list appears in Appendix B.) Items on the list are of concern to both the public and healthcare professionals, are clearly identifiable and measurable, and are often preventable.³ DPH completed development of the mandated regulations for reporting of adverse events, and these became effective November 1, 2007.

In May 2007, hospitals and ambulatory surgical centers were provided with the updated NQF List of Serious Reportable Events and the revised list compiled by the Commissioner of Public Health. A new category was included in the NQF list related to fertility clinics.⁴ The NQF category “patient death associated with a fall” was expanded to include “serious injury associated with a fall.” Reporting for this expanded category replaced the Connecticut-specific category that previously existed.

In January 2010, “Patient death or serious disability associated with surgery” was added to the list of reportable adverse events. This category includes significant hemorrhage and/or unanticipated death in a low risk (American Society of Anesthesiologists Class 2) patient.

Public Act 10-122 required that for all annual reports submitted after July 1, 2011:

the commissioner shall include hospital and outpatient surgical facility adverse event information for each facility identified (1) by the National Quality Forum's List of Serious Reportable Events category, and (2) in accordance with any list compiled by the commissioner and adopted as regulations pursuant to subsection (c) of this section. Such reports shall be prepared in a format that uses relevant contextual information. For purposes of this subsection "contextual information" includes, but is not limited to, (A) the relationship between the number of adverse events and a hospital's total number of patient days or an outpatient surgical facility's total number of surgical encounters expressed as a fraction in which the numerator is the aggregate number of adverse events reported by each hospital or outpatient surgical facility by category as specified in this subsection and the denominator is the total of the hospital's patient days or the outpatient surgical facility's total number of surgical encounters, and (B) information concerning the patient population served by the hospital or outpatient surgical facility, including such hospital's or outpatient surgical facility's payor or case mix. In addition, a hospital or outpatient surgical facility may provide informational comments relating to any adverse event reported to the commissioner pursuant to this section.

The NQF document *Serious Reportable Events in Healthcare-2011 Update*⁵ added four items, retired three items, and revised definitions, specifications, and numbering for the remaining items. The most substantial change in definition made unstageable pressure ulcers reportable in

³ More fully explained in Kenneth W. Kizer, “Clearing the Confusion about Connecticut’s New Adverse Event Reporting Law,” which appears as appendix B of Connecticut’s October 2004 Adverse Events report.

⁴ Prior to *Serious Reportable Events in Healthcare-2011 Update*, category 4H was “Artificial insemination with the wrong donor sperm or wrong egg.” In 2013 the Connecticut category label changed to NQF 4G.

⁵ http://www.qualityforum.org/Topics/SREs/Serious_Reportable_Events.aspx

addition to stages three and four. The new items were: (1) Death or serious injury of a neonate associated with labor or delivery in a low-risk pregnancy; (2) patient death or serious injury resulting from the irretrievable loss of an irreplaceable biological specimen; (3) patient death or serious injury from failure to follow up or communicate laboratory, pathology, or radiology test results; (4) death or serious injury of a patient associated with the introduction of a metallic object into the MRI area. A summary of NQF changes appeared in Appendix J of the October 2012 DPH report, and the revised Connecticut adverse event list in Appendix K there. DPH promulgated guidance related to these changes during 2012 and implemented the revised list in January 2013.

In October 2016, recommendations were made to the DPH Commissioner by a DPH/hospital work group of the Quality in Health Care Advisory Committee concerning four adverse event categories that were identified as weak due to lack of clarity or lack of current effectiveness. Regarding pressure ulcers (NQF 4F), the work group concluded that the spike in reporting in 2013 was due to the definitional change to include unstageable pressure ulcers, not to any decline in patient safety or quality, and that additional reporting years are required to verify the efficacy of the expanded category. Regarding sexual abuse or assault (NQF 7C) the work group recommended changes to the existing guidance to clarify what constitutes reportable “substantiated allegations.” Additional criteria for a reportable event: any staff-witnessed sexual assault; sufficient clinical evidence to support allegations; credible admission by the perpetrator. Additional guidance: consider the impact of the alleged perpetrator’s mental state on the credibility of their admission.

Regarding perforations during open, laparoscopic, or endoscopic procedures (CT 1) the work group determined that the overwhelming majority of reported events are not preventable and recommended that the category be retired. Regarding patient death or serious injury as a result of surgery (CT 2), the work group concluded that the category does not provide a useful means of identifying preventable events, while five other categories which track specific surgical issues are better designed to capture meaningful data.⁶ The work group recommended that category CT 2 be retired. These recommendations were accepted. Starting January 2017, the two Connecticut-specific categories are no longer reportable to DPH, and clarifying guidance was introduced to reduce the number of unsubstantiated sexual abuse reports going forward.⁷

CGS Section 19a-127o identifies the primary activity of a Patient Safety Organization (PSO), which is to improve patient safety and the quality of care delivered to patients through the collection, aggregation, analysis, or processing of medical or health-related information submitted to the PSO by the health care provider. This “patient work product” may include reports, records, analyses, policies, procedures or root cause analyses prepared exclusively for the purpose of disclosure to the PSO. The patient safety work product is confidential and not subject to use or access except to the PSO and the health care provider. PSOs disseminate appropriate information or recommendations on best clinical practices or potential system changes to improve patient care to the health care providers, DPH, the Quality of Care Advisory Committee and the public. DPH has designated four PSOs: Qualidigm, the Connecticut

⁶ Categories 1A-1E relate to surgical or invasive procedure events.

⁷ For the complete guidance, see [AE Reporting Guidance 2017](#). Or, on the DPH website choose Forms, then scroll down to Hospital Adverse Event Reporting Categories (effective 1/1/17).

Healthcare Research & Education Foundation (CHREF), the Ambulatory Surgical Center Patient Safety Organization (ASC PSO), and QA to QI LLC (see the DPH reports on Connecticut's Quality of Care Program⁸).

DPH presented webinars in December 2016 and April 2017 to introduce the revised adverse event category list and implementation guidelines, and web-based reporting, to facilities that participate in adverse event reporting. The revised adverse event categories and guidance as of January 2017, slides from the April 2017 training, and an adverse event web-based user manual are available at http://www.ct.gov/dph/cwp/view.asp?a=3115&q=390100&dphNav_GID=1601. Following user acceptance testing, web-based adverse event reporting went live in May 2017.

The web-based adverse event reporting application is hosted at the Connecticut Bureau of Enterprise Systems and Technology (BEST) behind firewalls. The application uses drop-down lists to minimize data entry errors or ambiguities. Users first register and log in using username and password. Facility users will be able to see the events at their own facility only. Tracking of submitted adverse event reports and corrective action plans, and follow-up with the DPH Facility Licensing and Investigation (FLIS) section, if additional details are requested, are also through the application.

New fields in the web-based application collect data on the preferred language spoken by the patient who experienced the adverse event, English proficiency, race, ethnicity, and whether an interpreter was provided during the medical visit.

Adverse event data for this DPH report were obtained from the electronic database at DPH and the web-based application. Inpatient days and primary payer information for acute care hospitals was obtained from hospital discharge data routinely gathered by the Office of Healthcare Access (OHCA) at DPH. Similar information for outpatient childbirth centers, hospice, chronic disease hospitals, and hospitals for the mentally ill, and outpatient surgical centers was obtained by DPH from those facilities.⁹

ADVERSE EVENT DATA

As of July 10, 2017, the DPH electronic database contained 431 reports of adverse events reported in 2016 and 181 events reported during the first six months of 2017. Demographic information for 2016 is shown in Appendix A. This reported information is influenced by several factors: varying rates of adverse events across facilities, patient case mix, quality of care, number of patients served, knowledge or interpretation of event definitions and reporting requirements, changes made to event definitions, additions to or deletions from the list of reportable events, willingness to report events, as well as the effectiveness of the institutional system to convey information from event participants to the designated reporter, and other

⁸ Quality of Health Care reports are at www.ct.gov/dph under Statistics & Research, then choose "Health Care Quality."

⁹ The Department thanks the Ambulatory Surgical Care Patient Safety Organization for assistance in gathering information from outpatient surgical centers.

factors.¹⁰ Consequently, clear conclusions about the causes of observed event fluctuations and differences across facilities cannot be derived simply from the number of reports or fluctuations in the number of reports.¹¹

Acute care hospitals including children's hospitals submitted 387 (90%) of the 431 adverse event reports in 2016; chronic disease hospitals, 27; hospitals for the mentally ill, 5; and outpatient surgical facilities (if not owned by a hospital), 12. Fifty-one percent of reported adverse events occurred in males and 49% in females. The majority of reports concerned patients over the age of 65 years. The most common location of occurrence was reported to be the adult medical ward (Appendix A).

Appendix B presents the number of adverse events reported by year for January 2012 through June 2017, according to the list of NQF events (1A-7D) and Connecticut-specific events (CT1 & CT2) that was adopted in 2013 and revised in 2017. Thus for example, the definition of falls in 2012 was the same as in 2013-17 except they were NQF category 4E in 2012. They are shown as NQF category 4F, which is the category used in 2013-17.

As shown in the chart below and Appendix C, the most commonly reported events in 2016 were pressure ulcers. 186 pressure ulcers comprised 43% of all 431 adverse events reported. The second most commonly reported events were falls resulting in death or serious injury, with 74 reports (17%). Perforations during open, laparoscopic, and/or endoscopic procedures, followed with 58 reports (14%).¹² The next most commonly reported, 24 events, was sexual abuse or assault (6%).

Between 2012 and 2013 the category of reportable pressure ulcers expanded to include unstageable ulcers in addition to stage 3 and 4, if acquired in the healthcare facility. As a result of this expansion, total annual counts in 2013-2017 should not be compared directly with counts in prior years. Following the peak in ulcers reported in 2013, there was a large decline through 2016. See the October 2014 and 2015 reports for additional analysis of pressure ulcers.

The number of reports of sexual abuse or assault in 2016 (24) were more than twice as high as in any previous year. The largest number of reports came from Saint Vincent's Medical Center (10) and Yale New Haven Hospital (7), but all other facilities also reported more events (7) than during most previous years. Both St. Vincent's and Yale have child psychiatric campuses and most of their 7C reports were alleged sexual touching and acts. Among the 24 events; 7 were staff to patient, 2 were patient to staff, 10 were patient to patient, and 5 were unknown perpetrator to patient. 14 events were reported in the psychiatric ward; 9 victims were male and 15 female. Victim ages ranged from 10-15 years (5), 16-18 years (5), and 19-59 years (14).

¹⁰ Zegers et al, "Variation in the Rates of Adverse Events between Hospitals and Hospital Departments," *International Journal for Quality in Health Care* 2011:1-8; Attenello et al, "Incidence of 'Never Events' Among Weekend Admissions Versus Weekday Admissions to US Hospitals: National Analysis," *BMJ* 2015;350:h1460.

¹¹ For additional discussion of the limitations of passive incident reporting, see the Patient Safety section of the September 2011 issue of the Agency for Healthcare Research and Quality (AHRQ), Morbidity and Mortality Rounds at <http://webmm.ahrq.gov/>; Kaveh G. Shojania, "The Elephant of Patient Safety: What You See Depends Upon How You Look," *Joint Commission Journal on Quality and Patient Safety*, 36(9); September 2010, 399.

¹² For more details about these adverse events, see the "Six Month Summary of Adverse Event Reports" (Appendix A of the June 30, 2005 DPH report on the Quality in Health Care Program).

Two acts between patients were admitted to be consensual and one patient admitted fabricating an allegation which the facility reported to DPH. Among the facility responses, 5 persons were either fired, or had criminal proceedings initiated. For 2017, there were 2 reports received between January and June. It is reasonable to assume, but not provable, that the reporting guidance implemented in 2017 reduced the number of unsubstantiated allegations reported.

Twenty reports of retained objects after surgery from 2016 included guide wire piece (4), foreign object (3), catheter tip (3), gauze (2), and single items (8).

Twenty-four reports of wrong site/patient/procedure events (1A-1C) were received during 2016. Three surgeries included wrong vertebral level; three, the wrong tooth extracted. Two reports involved wrong catheter location and 2 others, wrong side nerve block. Among remaining reports, 3 mentioned wrong side and 2 mentioned the wrong size implant.

Of the four burn reports (5C), one involved a flame in the operating room, two were hot liquid spills by patients and one a spill by an aide on patients: coffee, tea, and soup.

Adverse event counts, patient days, and rate by facility and event type in 2016 are shown in appendices D-G. These represent, respectively, acute care hospitals (D), chronic care hospitals and hospices (E), hospitals for the mentally ill (F), and ambulatory surgical centers, pain medicine centers, fertility centers, and outpatient childbirth centers (G). Not all adverse event categories are relevant to all facilities. For example, events associated with birth are not applicable in a facility that does not handle deliveries. Also, patient populations differ considerably between types of facilities.

For acute care hospitals, the calculated rates are based on adverse events that occurred in the emergency department, inpatient, or an outpatient setting (in the numerator), but only inpatient days are used for the denominator of the rate. We found that outpatient day figures could not be reliably obtained from the database. Many of the choices for "Location of Event" (appendix A) could be either inpatient or outpatient.

Significant variation in facility reporting patterns are a common characteristic of passive surveillance systems (where the responsibility for reporting falls upon the health care provider) and this is not unique to Connecticut's adverse events reporting system. A passive surveillance system "has the advantage of being simple and not burdensome" to administer, however "it is limited by variability and incompleteness in reporting."¹³ Typically, data validation is a function of an active surveillance strategy that can be used to increase the completeness of reporting, as is being done in the separate Connecticut Healthcare Associated Infections program. However, data validation is often labor intensive and expensive, requiring dedicated resources. Nevertheless, without such validation we cannot determine how complete facility reporting is.

Based on these adverse event data alone certain conclusions are not possible. No conclusion can be reached as to whether a high reporting rate reflects highly complete reporting in a facility with

¹³ Steven M. Teutsch, "Considerations in Planning a Surveillance System," in Steven M. Teutsch and R. Elliott Churchill, eds., *Principles and Practice of Public Health Surveillance*, 2nd ed. (New York: Oxford University Press, 2000), 22.

good quality of care, or perhaps modestly complete reporting in a facility with poor care, or neither better nor worse quality care, as noted earlier.

Appendix H, based on billing data, shows the primary payer for all patients seen at each facility. There is a positive correlation between the proportion of patients covered by Medicare and the average age of patients seen at a facility. Some studies have found an association between older age and greater risk of experiencing an adverse event. We tested this hypothesis for Connecticut (see the 2011 report). Due to the poor single year correlation in 2010, no calculation was made for later years. No attempt was made here to risk adjust the rates based upon the average age of the population served or other contextual factors. Minimal correlation of age with total adverse events is partly due to adverse events being a heterogeneous category, with different causes and occurring in various locations (see the 2015 report).

Appendix I contains facility comments about safety efforts, as allowed for by PA 10-122.

CURRENT ACTIVITIES AND FUTURE PLANS

DPH regularly screens death records for cause of death codes that might be related to an adverse event. (For a description of the system, see the 2011 Adverse Event report, Appendix Q.) Selected records are reviewed further. The department gathers additional information to determine if reportable fatal adverse events occurred, and whether such events were reported to DPH.

Investigation of Adverse Events

The first responsibility for investigation of an adverse event lies with the facility in which the event occurred. Under Connecticut's Adverse Event reporting law, facilities are required to submit a Corrective Action Plan to DPH for each reported Adverse Event.

An external investigation at a healthcare facility due to an adverse event may begin in several ways: (1) as a result of a complaint to DPH made by any person; (2) following a sentinel event report by the facility to the Joint Commission, a complaint to the Joint Commission by any person (see www.jointcommission.org), or an unannounced, onsite visit to a facility by the Joint Commission during which an adverse event becomes known; or (3) as a consequence of an adverse event report sent by the healthcare facility to DPH. The last of these routes is discussed here.

After examining an adverse event report, which includes a Corrective Action Plan, the DPH Healthcare Quality and Safety Branch determines whether to initiate an investigation. Screening to rule out medical error is based on clinical judgment and/or objective medical criteria. The screening team consists of healthcare clinicians at DPH.

DPH conducts investigations regarding adverse event reports that may indicate a systems issue or issues related to inadequate standards of care. These investigations determine regulatory

compliance versus noncompliance and provide additional information that may allow one to distinguish between events that have been due to a medical error or system failure and those that have not. Investigations involving adverse events follow the same process as issues received through the public complaint process. Information is gathered through onsite inspection and observation, review of clinical records, interviews with institutional staff and vested parties as appropriate. The results of completed investigations are public, and may be obtained upon request, under the Freedom of Information (FOI) Act.

Patient Safety Organizations

Connecticut General Statutes section 19a-127o allowed DPH to designate “Patient Safety Organizations” (PSOs) and 19a-127p required hospitals to contract with a PSO. The primary activity of a PSO is to improve patient safety and the quality of care delivered to patients through the collection, aggregation, analysis or processing of medical or health care related information submitted to the PSO by the health care provider. This “patient safety work product” may include reports, records, analyses, policies, procedures, or root cause analyses prepared exclusively for the purpose of disclosure to the PSO. The patient safety work product is confidential and not subject to use or access except to the PSO and the health care provider. The PSO will disseminate appropriate information or recommendations on best medical practices or potential system changes to improve patient care to the health care providers, DPH, the Quality of Health Care Advisory Committee, and the public. DPH has designated four PSOs, including the Qualidigm Patient Safety Organization, the Connecticut Hospital Association Patient Safety Organization, the Ambulatory Surgical Center Patient Safety Organization, and QA to QI LLC. PSO activities during the previous year appear in the annual June 30 report concerning the Quality in Health Care program, found on the DPH website.

Healthcare Associated Infections

The Healthcare Associated Infections (HAI) Committee, established by legislation, is separate from the Quality in Health Care Advisory Committee. Infections are reported through the CDC’s National Healthcare Safety Network (NHSN). Reports from the HAI Committee can be found on the DPH website (<http://www.ct.gov/dph/cwp/view.asp?a=3136&q=417318>).

Healthcare Acquired Conditions (including infections)

CMS Hospital Compare includes data about knee and hip replacement complications and healthcare associated infections: CLABSI, CAUTI, SSI, MRSA, and C Diff.¹⁴ Nursing Home Compare includes data about pressure ulcers, falls, UTI, and use of restraints.¹⁵

The Medicare Patient Safety Monitoring System (MPSMS) identifies adverse events from a national sample of patients who were hospitalized for acute myocardial infarction (AMI),

¹⁴ <https://www.medicare.gov/hospitalcompare/search.html>

¹⁵ <https://www.medicare.gov/nursinghomecompare/search.html>

congestive heart failure (HF), pneumonia, or any of several surgical procedures. The MPSMS uses 21 measures of adverse events. The measures differ from the NQF list used in the Connecticut adverse event reporting system that is the subject of this annual report.

*Selected Patient Safety Literature Summaries and Abstracts*¹⁶

Improving Health Care Quality and Patient Safety Through Peer-to-Peer Assessment: Demonstration Project in Two Academic Medical Centers.

Mort E, Bruckel J, Donelan K, Paine L, Rosen M, Thompson D, Weaver S, Yagoda D, Pronovost P. *Am J Med Qual.* 2016 Oct 23. pii: 1062860616673709. [Epub ahead of print]

ABSTRACT Despite decades of investment in patient safety, unintentional patient harm remains a major challenge in the health care industry. Peer-to-peer assessment in the nuclear industry has been shown to reduce harm. The study team's goal was to pilot and assess the feasibility of this approach in health care. The team developed tools and piloted a peer-to-peer assessment at 2 academic hospitals: Massachusetts General Hospital and Johns Hopkins Hospital. The assessment evaluated both the institutions' organizational approach to quality and safety as well as their approach to reducing 2 specific areas of patient harm. Site visits were completed and consisted of semistructured interviews with institutional leaders and clinical staff as well as direct patient observations using audit tools. Reports with recommendations were well received and each institution has developed improvement plans. The study team believes that peer-to-peer assessment in health care has promise and warrants consideration for wider adoption.

Displaying radiation exposure and cost information at order entry for outpatient diagnostic imaging: a strategy to inform clinician ordering.

Kruger JF, Chen AH, Rybkin A, Leeds K, Guzman D, Vittinghoff E, Goldman LE. *BMJ Qual Saf.* 2016 Dec;25(12):977-985. doi: 10.1136/bmjqs-2015-004242. Epub 2016 Jan 6.

CONCLUSION Displaying radiation exposure and cost information at order entry may improve clinician awareness about diagnostic imaging safety risks and costs. More clinicians reported the radiation information influenced their clinical practice.

Responsible e-Prescribing Needs e-Discontinuation

Shira Fischer, Adam Rose. *JAMA.* 2017;317(5):469-470. doi:10.1001/jama.2016.19908

SUMMARY e-Discontinuation would give physicians (and other prescribers) a way to send a message to the pharmacy to electronically stop a prescription from being filled or refilled. Health

¹⁶Selected by DPH. Many resources are featured on the AHRQ Patient Safety Network, <http://psnet.ahrq.gov>.

systems like the Veterans Health Administration and Kaiser Permanente, where prescriber and pharmacy are in the same organization, already have this feature. When prescribers outside such systems want to cancel a prescription, they must call the pharmacy. But because clinicians lack a financial incentive to make that call, patients for whom the medication was prescribed may be left with refillable prescriptions they should no longer fill. Continued use of e-prescribing without e-discontinuation is concerning when coupled with a trend among pharmacies to directly remind patients to refill their prescriptions. Electronic health records allow prescribers to stop a prescription, but what many physicians may not realize is that in most cases that directive is not sent to any pharmacy

Impact of the Opioid Safety Initiative on opioid-related prescribing in veterans.

Lin LA, Bohnert AS, Kerns RD, Clay MA, Ganoczy D, Ilgen MA. *Pain*. 2017 Jan 4. doi: 10.1097/j.pain.0000000000000837. [Epub ahead of print]

ABSTRACT The Veterans Health Administration (VHA) designed the Opioid Safety Initiative (OSI) to help decrease opioid prescribing practices associated with adverse outcomes. Key components included disseminating a dashboard tool that aggregates electronic medical record data to audit real-time opioid-related prescribing and identifying a clinical leader at each facility to implement the tool and promote safer prescribing. Implementation of a national health care system-wide initiative was associated with reductions in outpatient prescribing of risky opioid regimens. These findings provide evidence for the potential utility of large-scale interventions to promote safer opioid prescribing.

Root-cause analysis: swatting at mosquitoes versus draining the swamp.

Trbovich P, Shojania KG. *BMJ Qual Saf*. 2017 Feb 21; [Epub ahead of print] <http://dx.doi.org/10.1136/bmjqs-2016-006229>

SUMMARY Many healthcare systems recommend root-cause analysis (RCA) as a key method for investigating critical incidents and developing recommendations for preventing future events. In practice, however, RCAs vary widely in terms of their conduct and the utility of the recommendations they produce. RCAs often fail to explore deep system problems that contributed to safety events due to the limited methods used, constrained time and meagre financial/human resources to conduct RCAs. Furthermore, healthcare organisations often lack the mandate and authority required to develop and implement sophisticated and effective corrective actions. Consequently, corrective actions primarily aim at changing human behaviour rather than system-based changes. In this issue of *BMJ Quality and Safety*, Kellogg *et al* confirm these concerns about RCAs. Reviewing 302 RCAs conducted over an 8-year period at a US academic medical centre, the authors report the most common solution types as training, process change and policy reinforcement. Serious events (eg, retained surgical sponges) recurred repeatedly despite conducting RCAs.

Patient and Family Engagement in Primary Care

https://www.ahrq.gov/professionals/quality-patient-safety/patient-family-engagement/pfeprimarycare/interventions.html?utm_source=ahrq&utm_medium=twitterchat&utm_term=&utm_content=21&utm_campaign=ahrq_psaw_2017

SUMMARY Teach-back is a technique for health care providers to ensure that they have explained medical information clearly so that patients and their families understand what is communicated to them. Be Prepared to Be Engaged toolkit will help patients and their families prepare for and become more fully engaged in their medical appointments—to be ready for the appointment, to speak up, to ask questions, to take notes. Medication management is a strategy for engaging with patients and caregivers to create a complete and accurate medication list using the brown bag method. A warm handoff is a transfer of care from one clinician to another, where the handoff occurs in front of the patient and family. This transparent handoff of care allows patients and families to hear what is said between clinicians and engages patients and families in communication, giving them the opportunity to clarify or correct information they provided or ask questions about their care.

The Economics of Patient Safety

Luke Slawomirski, Ane Auraen and Niek Klazinga. OECD 2017.

https://www.bundesgesundheitsministerium.de/fileadmin/Dateien/3_Downloads/P/Patientensicherheit/The_Economics_of_patient_safety_Web.pdf

SUMMARY Overall, the available evidence suggests that 15% of hospital expenditure and activity in OECD countries can be attributed to treating safety failures. Most of the burden is associated with a few common adverse events: healthcare-associated infections (HAI), venous thromboembolism (VTE), pressure ulcers, medication error and wrong or delayed diagnosis. Many adverse events can be systematically prevented through better policy and practice, with the cost of prevention typically much lower than the cost of harm. HAI or VTE prevention programs, for example, cost a fraction of the financial burden these events impart.

Deep Needle Procedures: Improving Safety With Ultrasound Visualization

Christopher R. Peabody, and Diku Mandavia. J Patient Saf 2014;13: 103–108.

SUMMARY There is now mounting evidence that clinician-performed point-of-care ultrasound improves patient safety, enhances health care quality, and reduces health care cost for deep needle procedures. Furthermore, the miniaturization, ease of use, and the evolving affordability of ultrasound have now made this technology widely available. The adoption of point-of-care ultrasonography has reached a tipping point and should be seriously considered the safety standard for all hospital based deep needle procedures.

The Potential Return on Public Investment in Detecting Adverse Drug Effects

Huybrechts, Krista F; Desai, Rishi J.; Park, Moa; Gagne, Joshua J; Najafzadeh, Mehdi; Avorn, Jerry. *Medical Care*. 55(6):545-551, June 2017.

SUMMARY We assessed 3 examples in which early signals of safety hazards were not adequately recognized, resulting in continued exposure of a large number of patients to these drugs when safer and effective alternative treatments were available. The drug examples studied were rofecoxib, cerivastatin, and troglitazone. Using an individual patient simulation model and the health care system perspective, we estimated the potential costs that could have been averted by early systematic detection of safety hazards through the implementation of active surveillance programs.

Effectiveness of Pharmacist Intervention to Reduce Medication Errors and Health-Care Resources Utilization After Transitions of Care: A Meta-analysis of Randomized Controlled Trials.

De Oliveira GS Jr, Castro-Alves LJ, Kendall MC, McCarthy R. *J Patient Saf*. 2017 Jun 30. doi: 10.1097/PTS.0000000000000283. [Epub ahead of print]

RESULTS Thirteen randomized trials examining 3503 patients were included in the final analysis. The aggregate effect of the 10 studies evaluating the effect of pharmacists intervention on the incidence of medication errors during transitions of care favored pharmacist over control with an odds ratio (95% confidence interval [CI]) of 0.44 (0.31-0.63). The overall effect of 4 studies evaluating the effect of a pharmacist intervention on the incidence of emergency room visits compared with control favored the pharmacist intervention, odds ratio (95% CI) of 0.42 (0.22-0.78), number needed to treat (95% CI) of 6.2 (3.4-31.4).

CONCLUSION Pharmacist transition of care intervention is an effective strategy to reduce medication errors after hospital discharge. In addition, a pharmacist intervention also reduces subsequent emergency room visits. Hospitals should consider implementing this intervention to improve patient safety and quality during transitions of care.

The **AHRQ Annual Perspective 2016** articles were devoted to *Measuring and Responding to Deaths from Medical Errors, Patient Safety and Opioid Medications, and Rethinking Root Cause Analysis*. https://psnet.ahrq.gov/perspectives?annual_perspective=true

Concluding Statement

After many years' experience with adverse events reporting in acute care settings, it is evident to DPH that this system provides value and enhances other existing patient safety systems and interventions. Regular review of the events and revisions where appropriate, have kept the reporting system current and focused on important safety issues. The new, more robust, electronic reporting system will allow data analysis.

APPENDICES

Appendix A:
Demographic Data from Adverse Event Reports

Appendix B:
Counts and Crosswalk of Adverse Events Codes 2012-2017

Appendix C:
Adverse Event Reports by Frequency of Occurrence

Appendix D:
Acute Care Hospital
Adverse Event Reports and Rates by Facility and Event Type

Appendix E:
Chronic Disease Hospital and Hospice
Adverse Event Reports and Rates by Facility and Event Type

Appendix F:
Hospital for the Mentally Ill
Adverse Event Reports and Rates by Facility and Event Type

Appendix G:
Ambulatory Surgical Center, Pain Medicine Center,
Fertility Center, and Outpatient Childbirth Center
Adverse Event Reports and Rates by Facility and Event Type

Appendix H:
Primary Payer Source, by Facility

Appendix I:
Comments Submitted by Facilities

| Appendix A. | | |
|---|-----------|---------|
| Demographic Data from Adverse Event Reports in the Electronic Database, Connecticut 2016 | | |
| Measure | Frequency | Percent |
| Facility Type (n=431) | | |
| Acute Care or Children's Hospital | 387 | 89.8% |
| Chronic Disease Hospital | 27 | 6.3% |
| Hospital for Mentally Ill Persons | 5 | 1.2% |
| Outpatient Surgical Facility | 12 | 2.8% |
| Patient Gender (n=431) | | |
| Male | 219 | 50.8% |
| Female | 212 | 49.2% |
| Patient Age (n=431) | | |
| 0-14 | 9 | 2.1% |
| 15-44 | 62 | 14.4% |
| 45-64 | 119 | 27.6% |
| 65 and older | 241 | 55.9% |
| Location of Event (n=431) | | |
| Adult Medical | 102 | 23.7% |
| Adult Surgical | 46 | 10.7% |
| Ambulatory Surgical | 9 | 2.1% |
| Cardiac Care and Telemetry | 21 | 4.9% |
| Cardiac Cath Lab | 2 | 0.5% |
| Diagnostic Services | 4 | 0.9% |
| Emergency Department | 15 | 3.5% |
| Medical ICU | 49 | 11.4% |
| Neonatal ICU | 0 | 0.0% |
| Obstetrical/Gynecological | 7 | 1.6% |
| Operating Room | 55 | 12.8% |
| Other | 28 | 6.5% |
| Outpatient Services | 24 | 5.6% |
| Pediatrics | 4 | 0.9% |
| Psychiatric | 26 | 6.0% |
| Rehabilitative Services | 16 | 3.7% |
| Surgical ICU | 23 | 5.3% |

Appendix B. Counts of Adverse Event Codes 2012-2017 (half year)

| Event Code | Description | Reports 2012 | Reports 2013 | Reports 2014 | Reports 2015 | Reports 2016 | JanJun 2017 |
|------------|---|--------------|--------------|--------------|--------------|--------------|-------------|
| NQF 1A | Surgery performed on the wrong site | 9 | 13 | 15 | 13 | 18 | 2 |
| NQF 1B | Surgery performed on the wrong patient | 0 | 1 | 0 | 1 | 1 | 0 |
| NQF 1C | Wrong surgical procedure performed on a patient | 2 | 1 | 4 | 1 | 6 | 2 |
| NQF 1D | Retention of a foreign object in a patient after surgery or other procedure | 12 | 25 | 24 | 19 | 20 | 8 |
| NQF 1E | Intraoperative or immediate postoperative/postprocedure death in an ASA class I patient | 0 | 0 | 1 | 1 | 1 | 0 |
| NQF 2A | Patient death or serious injury associated with the use of contaminated drugs, devices, or biologics provided by the healthcare setting | 0 | 0 | 3 | 0 | 1 | 0 |
| NQF 2B | Patient death or serious injury associated with the use or function of a device in patient care in which the device is used or functions other than as intended | 2 | 3 | 2 | 5 | 1 | 0 |
| NQF 2C | Patient death or serious injury associated with intravascular air embolism that occurs while being cared for in a healthcare setting | 1 | 0 | 0 | 1 | 0 | 1 |
| NQF 3A | Discharge or release of a patient/resident of any age, who is unable to make decisions, to other than an authorized person | 0 | 0 | 0 | 1 | 2 | 0 |
| NQF 3B | Patient death or serious injury associated with patient elopement (disappearance) | 0 | 1 | 0 | 0 | 0 | 0 |
| NQF 3C | Patient suicide, attempted suicide, or self-harm that results in serious injury, while being cared for in a healthcare setting | 1 | 5 | 0 | 3 | 5 | 1 |
| NQF 4A | Patient death or serious injury associated with a medication error (e.g., errors involving the wrong drug, wrong dose, wrong patient, wrong time, wrong rate, wrong preparation or wrong route of administration) | 3 | 6 | 1 | 7 | 7 | 2 |
| NQF 4B | Patient death or serious injury associated with unsafe administration of blood products | 0 | 0 | 0 | 0 | 0 | 0 |
| NQF 4C | Maternal death or serious injury associated with labor or delivery in a low-risk pregnancy while being cared for in a healthcare setting | 0 | 2 | 0 | 1 | 3 | 0 |
| NQF 4D | Death or serious injury of a neonate associated with labor or delivery in a low-risk pregnancy | 4 | 1 | 4 | 5 | 2 | 0 |
| NQF 4E | Patient death or serious injury associated with a fall while being cared for in a healthcare setting | 76 | 90 | 78 | 90 | 74 | 53 |
| NQF 4F* | Any Stage 3, Stage 4, or unstageable pressure ulcer acquired after admission/ presentation to a healthcare setting | 51 | 277 | 245 | 230 | 186 | 105 |
| NQF 4G | Artificial insemination with the wrong donor sperm or wrong egg | 0 | 0 | 0 | 0 | 0 | 0 |

Appendix B (cont.). Counts of Adverse Event Codes 2012-2017 (half year)

| Event Code | Description | Reports 2012 | Reports 2013 | Reports 2014 | Reports 2015 | Reports 2016 | JanJun 2017 |
|------------|---|--------------|--------------|--------------|--------------|--------------|-------------|
| NQF 4H | Death or serious injury resulting from irretrievable loss of an irreplaceable biological specimen | NA | 3 | 0 | 0 | 0 | 0 |
| NQF 4I | Patient death or serious injury resulting from failure to follow up or communicate laboratory, pathology, or radiology test results | 0 | 2 | 0 | 3 | 2 | 0 |
| NQF 5A | Patient or staff death or serious injury associated with an electric shock in the course of a patient care process in a healthcare setting | 0 | 0 | 0 | 0 | 0 | 0 |
| NQF 5B | Any incident in which systems designated for oxygen or other gas to be delivered to a patient contains no gas, the wrong gas, or are contaminated by toxic substances | 0 | 1 | 0 | 0 | 0 | 0 |
| NQF 5C | Patient death or serious injury associated with a burn incurred from any source in the course of a patient care process in a healthcare setting | 1 | 0 | 1 | 0 | 4 | 4 |
| NQF 5D | Patient death or serious injury associated with the use of physical restraints or bedrails while being cared for in a healthcare setting | 1 | 1 | 0 | 2 | 0 | 1 |
| NQF 6A | Death or serious injury of a patient or staff associated with the introduction of a metallic object into the MRI area. | NA | 0 | 0 | 0 | 0 | 0 |
| NQF 7A | Any instance of care ordered by or provided by someone impersonating a physician, nurse, pharmacist, or other licensed healthcare provider | 0 | 2 | 1 | 0 | 0 | 0 |
| NQF 7B | Abduction of a patient/resident of any age | 0 | 1 | 0 | 0 | 0 | 0 |
| NQF 7C | Sexual abuse/assault on a patient or staff member within or on the grounds of a healthcare setting | 7 | 4 | 9 | 10 | 24 | 2 |
| NQF 7D | Death or serious injury of a patient or staff member resulting from a physical assault (i.e.battery) that occurs within or on the grounds of a healthcare setting | 2 | 3 | 1 | 0 | 2 | 0 |
| CT 1 | Perforations during open, laparoscopic and/or endoscopic procedures resulting in death or serious injury. | 55 | 79 | 71 | 49 | 58 | NA |
| CT 2 | Patient death or serious injury as a result of surgery | 14 | 13 | 12 | 14 | 14 | NA |
| | | | | | | | |
| | Total Reports | 241 | 534 | 472 | 456 | 431 | 181 |
| | Total excluding CT1-CT2 | 172 | 442 | 389 | 393 | 359 | 181 |

*Unstageable pressure ulcers became reportable in 2013.

NA is marked in cells where the event category did not exist prior to 2013 or after 2016.

CT1 and CT2 are no longer reportable beginning January 2017.

The definition of NQF 7C was clarified to include only substantiated allegations beginning January 2017.

| Appendix C. Connecticut Adverse Events in 2016 | | | |
|---|--|------------|-----------------------|
| Most Frequently Reported Events | | | |
| NQF List (1A-7D) and Connecticut-Specific List (CT1 & CT2) | | | |
| | | | |
| Event | Description | Frequency | Percent of All Events |
| 4F | Unstageable, stage 3 or 4 pressure ulcers acquired after admission to a healthcare facility | 186 | 43.2% |
| 4E | Patient death or serious injury associated with a fall while being cared for in a healthcare facility | 74 | 17.2% |
| CT1 | Perforations during open, laparoscopic and/or endoscopic procedures resulting in death or serious disability | 58 | 13.5% |
| 7C | Sexual abuse or assault on a patient or staff member | 24 | 5.6% |
| 1D | Retention of a foreign object in a patient after surgery or other procedure | 20 | 4.6% |
| 1A | Surgery performed on the wrong body part | 18 | 4.2% |
| CT2 | Death or serious injury associated with surgery | 14 | 3.2% |
| All other reported adverse events | | 37 | 8.6% |
| Total | | 431 | 100.0% |

**Appendix D. Adverse Event Reports by Event Type
Acute Care Hospitals. Connecticut, 2016.**

| Hospital | Adverse Event Reports by Event Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----------------------|-------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|----|--|
| | 1A | 1B | 1C | 1D | 1E | 2A | 2B | 2C | 3A | 3B | 3C | 4A | 4B | 4C | 4D | 4E | 4F | 4G | 4H | 4I | 5A | 5B | 5C | 5D | 6A | 7A | 7B | 7C | 7D | CT1 | CT2 | | |
| Backus | | | | 1 | | | | | | | 2 | | | | 2 | 5 | | | | 1 | | | | | | | | | 1 | 2 | | | |
| Bridgeport | | | 1 | 2 | 1 | | | 1 | | | 2 | | | 2 | 1 | 5 | 19 | | | | | | | | | | | 1 | | 4 | | | |
| Bristol | 1 | | | | | | | | | | | | | | | | 7 | | | | | | | | | | | | | 7 | 1 | | |
| CCMC | | | | | | | | | | | | 1 | | | | | 1 | | | | | | | | | | | 1 | | | | | |
| Danbury ¹ | | | | | | | | | | | | | | | | 3 | 10 | | | | | | | | | | | | | 1 | 1 | | |
| Day Kimball | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | | |
| Dempsey | 1 | | | 4 | 1 | | | | | | 1 | | | | | | 2 | | | | | | | | | | | | | | 1 | | |
| Greenwich | | | | | | | | | | | | 1 | | | | | 1 | | | | 1 | | | | | | | | 1 | 1 | | | |
| Griffin | | | | | | | | | | | | | | 1 | | 3 | 5 | | | | | | | | | | | | | 1 | 1 | | |
| Hartford | 2 | 1 | | 1 | | | | | | | | | | | | 1 | 19 | | | | | | | | | | | | 1 | | | | |
| Hungerford | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| HOCC | 1 | | | | | | | | | | | 1 | | | | | 2 | 4 | | | | | | | | | | | | | | | |
| Johnson | | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | |
| L & M | | | | | | | | | | | 1 | | | | | | 3 | 1 | | | | | | | | | | | | | 4 | 4 | |
| Manchester | | | | 1 | | | | | | | 1 | | | | 1 | | 2 | | | | | | | | | | | | | | 2 | | |
| Middlesex | | | | 2 | | | | | | | | | | | | | 3 | 2 | | | | | | | | | | | | | | 2 | |
| MidState | | | | 1 | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | 1 | |
| Milford | | | | 1 | | | | | | | | | | | | | | 3 | | | | | | | | | | | | | | 1 | |
| Norwalk | | | | 1 | | | | | | | | 2 | | | | | 4 | 6 | | | | | | | | | | | | | | 2 | |
| Rockville | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | | |
| St Francis | 3 | | | | | | 1 | | | | | | | | | | 5 | 12 | | | | | 3 | | | | | | 2 | | 3 | | |
| St Mary's | | | 1 | 1 | | | | | | | | | | | | | | 4 | | | | | | | | | | | | | 3 | 1 | |
| St Vincent's | | | | | | | | | | | | | | | | | 4 | 11 | | | | | | | | | | | 10 | | 4 | 1 | |
| Sharon | | | | 1 | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | |
| Stamford | 1 | | | | | | | | | | | | | | | | 3 | 11 | | | | | 1 | | | | | | | | 1 | 1 | |
| Waterbury | | | | | | | | | | | | | | | | | 3 | 6 | | | | | | | | | | | | | | 4 | |
| Windham | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | |
| Yale-NH | 9 | 3 | 3 | | | | | 1 | | | 1 | | | | | | 11 | 37 | | | | | | | | | | | | | | 7 | |
| All Acute Care | 18 | 1 | 5 | 19 | 1 | 1 | 1 | 0 | 2 | 0 | 5 | 6 | 0 | 3 | 2 | 61 | 170 | 0 | 0 | 2 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 22 | 2 | 50 | 12 | |

¹ Beginning October 2014 New Milford events are reported under Danbury license.

Notes: Event categories changed between 2012 and 2013, e.g old 5D is new 4E (falls); old 7A is new CT1 (perforations during surgery).

Appendix D (continued).
Adverse Event Reports and Rates
Acute Care Hospitals. Connecticut, 2016.

| Hospital | CY 2016 Reports Total | Patient Days* CY 2016 | Rate per 100,000 Pt Days* |
|--|-----------------------------|-----------------------------|---------------------------------|
| William W. Backus Hospital | 14 | 45999 | 30.4 |
| Bridgeport Hospital | 37 | 105975 | 34.9 |
| Bristol Hospital | 16 | 25421 | 62.9 |
| Connecticut Children's Medical Center | 3 | 45618 | 6.6 |
| Danbury and New Milford Hospitals ¹ | 15 | 95754 | 15.7 |
| Day Kimball Healthcare | 2 | 16113 | 12.4 |
| John Dempsey Hospital | 10 | 38389 | 26.0 |
| Greenwich Hospital | 5 | 54191 | 9.2 |
| Griffin Hospital | 11 | 30907 | 35.6 |
| Hartford Hospital | 25 | 233786 | 10.7 |
| Charlotte Hungerford Hospital | 1 | 23315 | 4.3 |
| Hospital of Central Connecticut | 8 | 64924 | 12.3 |
| Johnson Memorial Hospital | 2 | 15276 | 13.1 |
| Lawrence and Memorial Hospital | 13 | 61241 | 21.2 |
| Manchester Memorial Hospital | 7 | 40342 | 17.4 |
| Middlesex Hospital | 9 | 53390 | 16.9 |
| Milford Hospital | 5 | 11054 | 45.2 |
| MidState Medical Center | 4 | 33870 | 11.8 |
| Norwalk Hospital | 15 | 53383 | 28.1 |
| Rockville General Hospital | 1 | 9008 | 11.1 |
| Saint Francis Hospital | 29 | 143525 | 20.2 |
| Saint Mary's Hospital | 10 | 46619 | 21.5 |
| Saint Vincent's Medical Center | 30 | 97399 | 30.8 |
| Sharon Hospital | 3 | 5959 | 50.3 |
| Stamford Hospital | 18 | 70549 | 25.5 |
| Waterbury Hospital | 13 | 50642 | 25.7 |
| Windham Community Memorial Hospital | 1 | 8626 | 11.6 |
| Yale-New Haven Hospital | 80 | 425116 | 18.8 |
| All Acute Care Hospitals | 387 | 1906391 | 20.3 |
| ¹ New Milford Hospital is under the Danbury license beginning 10/1/2014 | | | |
| * Inpatient patient days are used as rate denominators. | | | |

**Appendix E. Adverse Event Reports by Event Type and Rates per 100,000 Inpatient Days,
Chronic Disease Hospitals and Hospice. Connecticut, 2016.**

| Facility | Adverse Event Reports by Event Type | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------------|-------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|-----|---|
| | 1A | 1B | 1C | 1D | 1E | 2A | 2B | 2C | 3A | 3B | 3C | 4A | 4B | 4C | 4D | 4E | 4F | 4G | 4H | 4I | 5A | 5B | 5C | 5D | 6A | 7A | 7B | 7C | 7D | CT1 | CT2 | |
| Ct Hospice | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gaylord | | | | | | | | | | | | | | | | 2 | 2 | | | | | | | | | | | | | | | |
| Hsp Special Care | | | | | | | | | | | | | | | | 3 | 11 | | | | | | | | | | | | | | | |
| Masonicare | | | | | | | | | | | | 1 | | | | 1 | 1 | | | | | | | | | | | | | | | |
| Mount Sinai | | | | | | | | | | | | | | | | 1 | 1 | | | | | | | | | | | | | | | |
| Veterans | | | | | | | | | | | | | | | | 1 | 1 | | | | | | | | | | | | | | | |
| Hebrew Home | | | | | | | | | | | | | | | | 2 | | | | | | | | | | | | | | | | |
| Chronic Disease | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 10 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Note: Event definitions and categories changed between 2012 and 2013; old 5D is new 4E (falls); old 7A is new CT1 (perforations during surgery).

| Facility | Reports Total | Patient* | Rate per |
|---------------------------------------|------------------|--------------|--------------------|
| | | Days 2016 | 100,000 Pt Days |
| The Connecticut Hospice | 0 | 14,049 | 0.0 |
| Gaylord Hospital | 4 | 39,027 | 10.2 |
| The Hospital for Special Care | 14 | 74,072 | 18.9 |
| Masonicare Health Center | 3 | 3,676 | 81.6 |
| Mount Sinai Rehabilitation Hospital** | 2 | 10,011 | 20.0 |
| Levitow Veterans Health Center | 2 | 41,610 | 4.8 |
| Hebrew Home and Hospital | 2 | 8,440 | 23.7 |
| All Chronic Disease Hospitals | 27 | | |

* Inpatient days are used for rate calculation.
Gaylord also reported 69738 outpatient and HSC 42234 outpatient visits
**denominator data are FY 2016

Appendix G (continued). Adverse Event Reports and Rates, Outpatient Visits for Ambulatory Surgical Centers, Pain Medicine Centers, Fertility Centers, and Childbirth Centers, Connecticut, 2016.

| Facility | Location | Reports Total | Patient Visits 2016 | per 100,000 |
|---|-----------------|------------------|---------------------------|---------------------------|
| | | | | Pt visits Rate 2016 |
| Connecticut Childbirth & Women's Center | Danbury | 0 | 146 | 0.0 |
| Aesthetic Surgery Center | New Haven | 0 | 347 | 0.0 |
| Center for Advanced Reproductive Services | Farmington | 0 | 1971 | 0.0 |
| Central Connecticut Endoscopy Center | Plainville | 1 | 6514 | 15.4 |
| Coastal Digestive Care Center | New London | 1 | 7033 | 14.2 |
| Connecticut Center for Plastic Surgery (now Guilford Surgery) | Guilford | 0 | 453 | 0.0 |
| Connecticut Eye Surgery Center South | Milford | 1 | 7105 | 14.1 |
| Connecticut Fertility ¹ | Bridgeport | 0 | 253 | 0.0 |
| Connecticut Foot Surgery Center | Milford | 0 | 354 | 0.0 |
| Connecticut GI Endoscopy | Bloomfield | 0 | 5839 | 0.0 |
| Connecticut Orthopaedic | Hamden | 0 | 4256 | 0.0 |
| Connecticut Surgery | Hartford | 1 | 3467 | 28.8 |
| Constitution Eye Surgery Center East | Waterford | 0 | 5877 | 0.0 |
| Danbury Surgical Center | Danbury | 0 | 7096 | 0.0 |
| Diagnostic Endoscopy | Stamford | 2 | 6151 | 32.5 |
| Digestive Disease Associates Endoscopy Suite | Branford | 0 | 2174 | 0.0 |
| Dr. Felice's Youthful Images | Bloomfield | 0 | 148 | 0.0 |
| Eastern Connecticut Endoscopy Center | Norwich | 0 | 5844 | 0.0 |
| Endoscopy Center of Connecticut | Guilford/Hamden | 1 | 9521 | 10.5 |
| Endoscopy Center of Fairfield, The | Fairfield | 0 | 9065 | 0.0 |
| Endoscopy Center of Northwest Connecticut | Torrington | 0 | 3551 | 0.0 |
| Evergreen Endoscopy Center | South Windsor | 1 | 5084 | 19.7 |
| Eye Surgery Center, The | Bloomfield | 0 | 1853 | 0.0 |
| Fairfield County Endoscopy Center | Trumbull | 1 | 5827 | 17.2 |
| Fairfield Surgery Center | Fairfield | 0 | 1603 | 0.0 |
| Gary J. Price, M.D., Center for Aesthetic Surgery | Guilford | 0 | 159 | 0.0 |
| Glastonbury Endoscopy Center, LLC | Glastonbury | 0 | 5810 | 0.0 |
| Glastonbury Surgery Center | Glastonbury | 0 | 5040 | 0.0 |
| Gregory Brucato, M.D./Brucato Plastic Surgery | Ridgefield | 0 | 47 | 0.0 |
| Hartford Surgical Center ³ | Hartford | | | |
| John J. Borkowski, M.D. ¹ | Middletown | 0 | 33 | 0.0 |
| Laser and Vision Surgery Center | Manchester | 0 | 1966 | 0.0 |
| Leif O. Nordberg, M.D. Now CVW Body Design | Stamford | 0 | 218 | 0.0 |
| Litchfield Hills Surgery Center | Torrington | 0 | 1311 | 0.0 |
| Middlesex Center for Advanced Orthopedic Surgery | Middletown | 2 | 3490 | 57.3 |
| Middlesex Endoscopy Center | Middletown | 0 | 6571 | 0.0 |
| Naugatuck Valley Endoscopy Center | Waterbury | 0 | 3837 | 0.0 |
| New England Fertility Institute ² | Stamford | 0 | 250 | 0.0 |
| New Vision Cataract Center | Norwalk | 0 | 2415 | 0.0 |
| North Haven Surgery/Pain Medicine Center | North Haven | 0 | 4062 | 0.0 |
| Norwalk Surgery Center | Norwalk | 0 | 3465 | 0.0 |
| Orthopaedic & Neurosurgery Center of Greenwich | Greenwich | 0 | 1759 | 0.0 |
| Orthopedic Associates Surgery Center | Rocky Hill | 0 | 7775 | 0.0 |
| Plastic Surgery of Southern Connecticut | Westport | 0 | 22 | 0.0 |
| Reproductive Medicine Associates of Connecticut | Norwalk | 0 | 1049 | 0.0 |
| River Valley Ambul Surg/Connecticut Surgical Arts | Norwich | 0 | 4711 | 0.0 |
| Saint Francis GI Endoscopy | Windsor | 0 | 6193 | 0.0 |
| Shoreline Colonoscopy Suites | Old Saybrook | 0 | 550 | 0.0 |
| Shoreline Surgery Center | Guilford | 0 | 6534 | 0.0 |
| Southington Surgery Center | Southington | 0 | 4133 | 0.0 |
| Split Rock Surgical Associates | Wilton | 0 | 127 | 0.0 |
| SSC II | Guilford | 0 | 3176 | 0.0 |
| Summer Street Ambulatory Surgery Center | Stamford | 0 | 239 | 0.0 |
| Surgery Center of Fairfield County | Bridgeport | 0 | 6057 | 0.0 |
| Surgical Center of CT-CT Hand | Bridgeport | 1 | 2825 | 35.4 |
| Waterbury Outpatient Surgical Center | Waterbury | 0 | 3652 | 0.0 |
| Western CT Ortho Surgical Ctr (formerly Hand Ctr) | Danbury | 0 | 2384 | 0.0 |
| Wilton Surgery Center | Wilton | 0 | 7473 | 0.0 |
| Yale University Health Services ASC | New Haven | 0 | 1386 | 0.0 |
| All Facilities | | 12 | | |

¹ 2015 patient visits data. ² 2014 patient visits data.

³ Hartford Surgical, 100 Retreat Avenue closed in 2015. Hartford Surgical, 31 Seymour Street opened in 2017.

Appendix H.
Primary Payer (%) of Inpatient Hospital Bills
Acute Care Hospitals. Connecticut, CY 2016.

| Hospital | Self Pay | Medicare | Medicaid | Blue Cross and Commercial | Other |
|--|-------------|--------------|--------------|---------------------------|--------------|
| William W. Backus Hospital | 1.2 | 41.5 | 25.9 | 15.9 | 15.5 |
| Bridgeport Hospital | 4.4 | 31.2 | 35.6 | 23.0 | 5.8 |
| Bristol Hospital | 1.7 | 39.0 | 28.9 | 19.4 | 11.1 |
| Connecticut Children's Medical Center | 0.7 | 0.1 | 55.5 | 27.0 | 16.8 |
| Danbury and New Milford Hospitals | 1.4 | 41.5 | 18.5 | 36.9 | 1.9 |
| Day Kimball Healthcare | 0.6 | 38.9 | 31.2 | 16.3 | 14.0 |
| John Dempsey Hospital | 0.6 | 38.3 | 28.7 | 16.9 | 15.5 |
| Greenwich Hospital | 3.6 | 30.4 | 7.3 | 43.0 | 15.7 |
| Griffin Hospital | 1.0 | 38.0 | 25.1 | 19.7 | 16.3 |
| Hartford Hospital | 1.5 | 34.7 | 26.6 | 15.3 | 21.9 |
| Charlotte Hungerford Hospital | 1.0 | 50.2 | 25.5 | 12.7 | 10.7 |
| Hospital of Central Connecticut | 1.2 | 36.6 | 30.6 | 8.1 | 23.4 |
| Johnson Memorial Hospital | 1.5 | 37.6 | 31.2 | 5.4 | 24.3 |
| Lawrence and Memorial Hospital | 0.6 | 42.5 | 24.1 | 25.1 | 7.7 |
| Manchester Memorial Hospital | 1.3 | 30.5 | 28.6 | 8.4 | 30.2 |
| Middlesex Hospital | 0.5 | 44.3 | 18.8 | 18.8 | 17.7 |
| Milford Hospital | 1.6 | 54.2 | 10.8 | 14.8 | 18.6 |
| MidState Medical Center | 1.4 | 40.0 | 28.6 | 11.8 | 18.2 |
| Norwalk Hospital | 3.4 | 40.5 | 20.7 | 23.1 | 12.4 |
| Rockville General Hospital | 1.2 | 56.0 | 17.9 | 6.9 | 18.1 |
| Saint Francis Hospital | 1.5 | 37.5 | 27.2 | 7.0 | 26.9 |
| Saint Mary's Hospital | 1.6 | 38.8 | 34.1 | 15.1 | 10.4 |
| Saint Vincent's Medical Center | 4.1 | 36.4 | 28.7 | 15.5 | 15.2 |
| Sharon Hospital | 0.0 | 47.9 | 14.6 | 12.4 | 25.2 |
| Stamford Hospital | 0.7 | 32.4 | 26.9 | 18.7 | 21.4 |
| Waterbury Hospital | 1.6 | 38.5 | 33.9 | 12.0 | 14.1 |
| Windham Community Memorial Hospital | 2.3 | 55.2 | 24.4 | 12.3 | 5.9 |
| Yale-New Haven Hospital | 2.9 | 29.2 | 30.1 | 27.3 | 10.4 |
| Total | 2.0% | 35.4% | 27.2% | 20.1% | 15.2% |
| Data Source: DPH Community, Family Health, and Prevention Section. | | | | | |

**Appendix H (continued).
Primary Payer (%) of Bills,
Hospices, Chronic Disease Hospitals, and Hospitals for Mentally Ill Persons.
Connecticut, 2016.**

| Facility | Self Pay | Medicare | Medicaid | Blue Cross and Commercial | Other |
|--|----------|----------|----------|------------------------------|-------|
| The Connecticut Hospice | | 100.0 | | | |
| Gaylord Hospital | | 49.9 | 8.6 | 38.0 | 2.2 |
| The Hospital for Special Care | | 9.3 | 82.0 | 8.3 | 0.4 |
| Masonicare Health Center, Chronic Disease Hospital | | 90.0 | | 10.0 | |
| Mount Sinai Rehabilitation Hospital | | 43.0 | 20.0 | 10.0 | 27.0 |
| Levitow Veterans Health Center | | | 73.7 | | 26.3 |
| Hebrew Home and Hospital | | 86.1 | 5.1 | | 8.7 |
| Natchaug Hospital* | 0.9 | 20.9 | 43.0 | | 35.2 |
| Silver Hill Hospital | 6.0 | 9.0 | | | 85.0 |
| Masonicare Behavioral Health | | 86.0 | | 14.0 | |

| Appendix H (continued). Case Mix or Primary Payer (%) of Bills | | | | | | |
|---|---|----------|----------|----------|---------------------------|-------|
| Ambulatory Surgical Centers, Pain Medicine Centers, Fertility Centers, and Outpatient Childbirth Centers. | | | | | | |
| Connecticut, 2016. | | | | | | |
| Facility | Case Mix | Self Pay | Medicare | Medicaid | Blue Cross and Commercial | Other |
| Connecticut Childbirth & Women's Center | | 7.0 | | | 22.0 | 71.0 |
| Aesthetic Surgery Center | | 60.0 | | | 40.0 | |
| Center for Advanced Reproductive Services | | 20.0 | | | 34.0 | 46.0 |
| Central Connecticut Endoscopy Center | | 1.0 | 31.0 | 7.0 | 51.0 | 11.0 |
| Coastal Digestive Care Center | | 7.0 | 23.0 | 11.0 | 55.0 | 5.0 |
| Guilford Surgery Ctr formally CT Ctr for Plastic Surg | | 8.0 | 4.0 | 0.0 | 81.0 | 7.0 |
| Connecticut Eye Surgery Center South | | 0.5 | 71.0 | 0.5 | 25.0 | 3.0 |
| Connecticut Fertility ¹ | | 70.0 | | | 30.0 | |
| Connecticut Foot Surgery Center | | 2.0 | 25.0 | 3.0 | 70.0 | |
| Connecticut GI Endoscopy | | 0.2 | 21.0 | 1.0 | 78.0 | |
| Connecticut Orthopaedic | | 0.0 | 21.0 | 1.0 | 30.0 | 47.0 |
| Connecticut Surgery | Pain 50%, ortho 41%, ophth 3%, Uro 2%, GYN 2%, Pod 2%, ENT 1%, Neuro 1% | | | | | |
| Constitution Surg, East ¹ | | 8.0 | 53.0 | 4.0 | 36.0 | 7.0 |
| Danbury Surgical | GI 43%, ophth 28%, ortho 24%, pain 4%, other .5% | | | | | |
| Diagnostic Endoscopy ¹ | EGD-2295, Colonoscopy-5239, Sig-67 | | | | | |
| Digestive Dis Endosc | | 5.0 | 33.0 | 10.0 | 50.0 | 2.0 |
| Dr. Felice Youth Images (Now Bloomfield ASC) | | 1.0 | | | 96.0 | 3.0 |
| Eastern Connecticut Endoscopy Center | | 0.1 | 20.0 | 12.0 | 67.0 | |
| Endoscopy Center of Ct | | 5.0 | 30.0 | 10.0 | 55.0 | 0.0 |
| Endoscopy, Fairfield | | 1.0 | 20.0 | 0.0 | 70.0 | 8.0 |
| Endoscopy, Northwest | | 0.2 | 24.0 | 11.0 | 64.0 | |
| Evergreen Endoscopy | | 1.0 | 22.0 | 6.0 | 60.0 | 11.0 |
| Eye Surgery Center | | 1.0 | 70.0 | 3.0 | 26.0 | |
| Fairfield Endoscopy (NEMG Gastro) | | 1.0 | 29.0 | 6.0 | 22.0 | 41.0 |
| Fairfield Surgery | | 1.0 | 16.0 | | 61.0 | 22.0 |
| Gary J. Price, M.D. | | 100.0 | | | | |
| Glastonbury Endoscopy | | 0.1 | 17.0 | 4.0 | 79.0 | |
| Glastonbury Surgery | | 0.1 | 18.0 | 7.0 | 51.0 | 13.0 |
| Gregory Brucato, M.D./Brucato Plastic Surgery | | 100.0 | | | | |
| Hartford Surgical ³ | | | | | | |
| John J. Borkowski, M.D. | | 100.0 | | | | |
| Laser and Vision Surg | | 0.0 | 58.0 | 4.0 | 29.0 | 8.0 |
| Leif O. Nordberg, M.D. Now CVW Body Design | | | | | 15.0 | 85.0 |
| Litchfield Hills Surgery | | 1.0 | 3.0 | 0.0 | 64.0 | 18.0 |
| Middlesex Orthopedic | | 0.2 | 18.0 | 2.0 | 23.0 | 57.0 |
| Middlesex Endoscopy | | 0.0 | 20.3 | 8.0 | 70.4 | 1.2 |
| Naugatuck Valley Endoscopy Center (Now Waterbury ASC) | | 1.0 | 26.0 | 14.0 | 38.0 | 20.0 |
| New England Fertility Institute ² | | 80.0 | | | 20.0 | |
| New Vision Cataract | | 0.3 | 47.0 | 7.0 | 46.0 | |
| North Haven Surgery | | 1.0 | 22.0 | 23.0 | | 54.0 |
| Norwalk Surgery | | 1.0 | 65.0 | 28.0 | 3.0 | 2.0 |
| Stamford ASC-Ortho Neuro became HOPD | | 5.0 | 20.0 | 0.0 | 69.0 | 6.0 |
| Orthopedic Associates Surgery Center | | 0.6 | 41.0 | 4.0 | 38.0 | 16.0 |
| Plastic Surg of South Ct | | 27.0 | 9.0 | 4.0 | 59.0 | |
| Reproductive Medicine | | 25.0 | | | 75.0 | |
| River Valley | | 0.1 | 15.0 | 3.0 | 78.0 | 2.0 |
| Saint Francis GI Endosc | | 0.1 | 16.0 | 1.6 | 82.0 | |
| Shoreline Colonoscopy | | 0.0 | 20.0 | 4.0 | 75.0 | 1.0 |
| Shoreline Surgery | | 0.5 | 21.3 | 2.1 | 75.0 | 1.0 |
| Southington Surgery Center | | 0.1 | 21.0 | 2.0 | 65.0 | 11.0 |
| Split Rock Surgical | | 100.0 | | | | |
| SSC II | | 2.2 | 44.5 | 1.9 | 46.4 | 4.9 |
| Summer St Ambulatory | | 16.0 | 1.0 | | 79.0 | 4.0 |
| Surgical Center Fairfield | | 1.0 | 17.0 | 3.0 | 76.0 | 3.0 |
| Surgical Center of CT | | 4.0 | 25.0 | 9.0 | 54.0 | 5.0 |
| Waterbury Outpatient | | 6.0 | 56.0 | 10.0 | 26.0 | 1.0 |
| Western CT Ortho Surgical Ctr | | 1.0 | 25.0 | 0.1 | 61.0 | 12.0 |
| Wilton Surgery | | 1.0 | 47.0 | 7.0 | 44.0 | 1.0 |
| Yale Health Services | | | | | | 100.0 |

¹ 2015 data. ² 2014 data. ³ Hartford Surgical, 100 Retreat Avenue closed in 2015. Hartford Surgical, 31 Seymour Street opened in 2017.

Appendix I: Comments Submitted by Facilities

In accordance with legislation, facilities that are required to report adverse events to the Connecticut DPH may submit comments to DPH for inclusion in the annual report to the legislature. Submitting comments is OPTIONAL, not required. DPH encourages comments describing how a facility used data to measure or track adverse events or quality of care and measurably improve care or decrease adverse events. Do not list awards.

Facilities providing comments:

Middlesex Endoscopy
Middlesex Hospital
Charlotte Hungerford Hospital
Western Connecticut Health Network (Danbury, New Milford, Norfolk)
Griffin Hospital
Saint Francis Healthcare
St. Vincent's Medical Center

Middlesex Endoscopy

Ongoing patient satisfaction survey reporting measures.
Ongoing reportable patient safety measures.
Facility Safety updates including annual risk assessments according to newly adopted Patient Safety Standards.
Ongoing staff competencies and education.

Comments Submitted by Facilities, continued

Middlesex Hospital

The employees, medical staff, and leadership of Middlesex Hospital are committed to providing the people we serve with the safest, highest-quality health care and the best possible experience. To this end we apply vigorous methods and models that are known to improve care processes that enhance targeted, desired outcomes. Those methods include Continuous Quality Improvement, Benchmarking, High Reliability, Evidence Based Guidelines, and Reference Databases.

We have adopted a philosophy and culture in which we have committed to the elimination of preventable harm. Our entire team of caregivers and providers have all been educated regarding how to find threats to safety, reports them, and collaborate to eliminate them. Our primary goal is to first do no harm. Unfortunately, it is a reality that things may not always go as expected. Thus, an organization also needs to have the skills to effectively learn from these types of situations, and to make changes to continuously improve over time. We are committed to studying the causes of safety events. By finding causes, we are able to create actions and systems that seek to prevent similar occurrences. In addition, we have recognized that achieving this goal will require that we involve patients and their families in both planning our strategies for improvement, and in understanding our results. To achieve this, we have developed a comprehensive patient and family advisory committee, and many of our improvement teams have patient/family members serving as the voice of the patients in our service area.

In the last four years, we have seen a 70% decrease in the most serious of safety events, and we have sustained that reduction for now over a year. We do not rest on this, however. Our goal, going forward, is zero preventable harm and we will continue to strive for that.

One specific example of the work we have done to improve outcomes is related to surgical site infections in people who have had a total joint replacement. Several years ago, we recognized opportunities to improve the care of our patients. Through the use of practice guidelines and systematic process improvement, with the combined efforts of people from many disciplines, we have further improved all processes of perioperative care. For example, we instituted the use of total room disinfection using ultraviolet light to clean every OR room on a daily basis. As a result of multiple efforts, we have observed significant reduction in our rate of surgical site infections in people having a total knee or total hip replacement, to a level that is below what might usually be expected. We continue to search out the best practices so we can further decrease the likelihood of undesired outcomes for surgical patients. This is beyond people having joint replacements; many of the improvements are also being applied to other categories of surgery that are high risk for infection.

Finally, to anyone who has been affected by an adverse event while a patient at Middlesex Hospital, to their family members and loved ones, we sincerely apologize for any impact of such an event, and assure you that we have learned as much as we can from any event, so we can do our best to be sure it does not happen again.

Comments Submitted by Facilities, continued

Charlotte Hungerford Hospital

Charlotte Hungerford Hospital (CHH) and its 1,200 caregivers take great pride and work very hard to provide our patients with the very best possible medical care and services. We know, however, that there is always room for improvement. Adverse events are rare at CHH, but even one is too many, and we understand that it may be concerning.

We want to assure our patients and community that we take any adverse event very seriously, and if they do occur we take all necessary steps to identify root causes and take immediate corrective actions to ensure we maintain a safe and high-quality healthcare environment.

CHH has many ongoing efforts to improve patient care, and is currently taking the following quality and safety steps:

- CHH has created an ***Adverse Event Team*** which reviews each adverse event or near event, performs root cause analysis, and works with medical and clinical staff members on ways to prevent future events.
- CHH is currently instituting a hospital wide ***High Reliability Initiative*** with the CT Hospital Association and Press Ganey Analytics to educate all employees on safety habits and how to further incorporate them into the daily practice of caring for patients.
- CHH continues to work update and improve its ***Hand Hygiene and Fall Prevention Performance Improvement Initiatives*** with the Joint Commissions Center for Transforming Healthcare Group.
- CHH adopted a ***Patient Safety Core Organizational Value*** as part of its broader set of vision and values that is now measured and incorporated in all employee performance evaluations.
- CHH created and hosts a monthly ***Transitions of Care Community Partnership Committee*** of staff and members of local skilled nursing facilities and homecare agencies to examine ways to improve patient care and decrease readmissions.
- CHH is currently conducting ***Patient Rounding*** by physicians, caregivers and administrators to receive real time feedback on the care provided to hospital patients.
- CHH has successfully launched a ***Safety Coach Program*** to help reinforce, across all staff members, the basic tenants of high reliability and safety.

CHH is committed to investigating and implementing new best practices, and we will continue to identify ways to improve our current processes to ensure and protect the safety and welfare of our patients and community.

Comments Submitted by Facilities, continued

Western Connecticut Health Network

The mission of Western Connecticut Health Network (WCHN) is to improve the health of every person we serve through the efficient delivery of excellent, innovative and compassionate care. Our Network of Danbury/New Milford and Norwalk Hospitals strives to deliver the highest quality of care and service by surpassing established national standards through a continuous focus on improvement, innovation and education.

We approach our work with the highest standards of openness, honesty and ethical behavior. Our goal is to achieve optimal safety outcomes by maintaining the Network's serious safety event incidence at the top quartile of state performance. Our work also includes a focus on employee safety through efforts to reduce injury rate by 5% during this fiscal year. In addition to optimal safety outcomes for both patients and our staff, the Network strives to achieve optimal quality outcomes by reducing the incidence of hospital associated conditions. WCHN is actively engaged in local and statewide initiatives to deliver excellent care to every person served. WCHN is a member of the Connecticut Hospital Association's Patient Safety Organization and actively participates in the statewide high reliability collaborative to reduce patient harm across the state. As a result of this active engagement, WCHN is proud of the reduction in preventable serious safety events and actively reviews every occurrence for lessons learned to hardwire interventions to permanently reduce harm to zero. WCHN is committed to providing excellent, innovative and compassionate care with a focus on the patient and our community. We are proud of our efforts to outperform established national standards to meet the needs of our community. We believe in our community and take very seriously the trust it places in our healthcare Network.

Griffin Hospital

Griffin Hospital continues its commitment to providing safe, patient-centered, high quality care to all of the patients we serve. In 2014, Griffin implemented High Reliability through-out the organization, using the Connecticut Hospital Association's "Safety Starts with Me" program. The program focuses on a standardized set of safety habits and behaviors; using error prevention tools, that when used as part of daily workflow reduces avoidable medical error. By the end of calendar year 2015, Griffin had successfully reduced our preventable serious safety event rate for a rolling 12 months by 80% and has remained at or better than the 80% reduction target for calendar year 2016.

Comments Submitted by Facilities, continued

Saint Francis Hospital and Medical Center

Saint Francis Hospital and Medical Center is dedicated to delivering the highest quality of care for our community. We began our “high reliability journey” just a few years ago with system-wide training on eliminating errors and continuing quality improvement. This training continues today, empowering each and every member of our team to speak up for patient safety. In 2015, Saint Francis Hospital was chosen by the Agency for Healthcare Research and Quality (AHRQ), to participate in a multi-level national study which provided training and education for one safety concern, skin injuries related to pressure. Through the knowledge learned as part of this study, our patients have experienced over a 50% reduction in hospital acquired pressure injuries from 2015 to 2016. We continue to examine all aspects of care that we provide to our patients to prevent harm and enhance the patient experience. We are dedicated to creating consistent and reliable processes to make the system of care delivery as safe as possible. The Saint Francis team is proud of our demonstrated commitment to become a highly reliable institution. We strive to eliminate preventable harm by understanding that through education and empowerment of our staff and advocacy for our patients, we can and have accomplished safe behavior practices that confer the safest and highest quality care for the community we serve.

St. Vincent’s Medical Center

St. Vincent’s Medical Center remains committed to and actively engaged in a high reliability sustainability effort and maintaining a culture of safety. Continued diligence on this effort allows our staff to focus on our mission of creating a safe, holistic, and compassionate environment in which we can deliver person-centered care. To that end, we implemented new strategies, including “Rounding with Influence;” improved the process of timely review of reported events and collaboration in safety huddles; and continued our commitment to training all providers and reinforcing their accountability to high reliability principles. We believe that reporting of actual and potential events to the Department of Public Health is a reflection of our continued commitment to safety.

Fall prevention continues to remain a high priority. An interdisciplinary Fall Prevention Team meets monthly. Fall data is presented there and is also included in each unit’s scorecard for review with staff. Patients’ fall risk continues to be discussed as part of bedside shift reports and unit-based safety huddles. Fall-related signage was updated. Several inpatient units implemented “Move to Improve” in 2016 to increase staff awareness of the complications of immobility, including deconditioning and relationship to patient falls. Education and training related to methods and equipment necessary to mobilize patients was provided. All nurses and CNA’s were re-educated on fall assessment and interventions, with improvements made to assessment of behavioral health patients to decrease falls in that population.

We remain vigilant in our efforts to reduce the incidence of pressure ulcers. We have a dedicated full-time Certified Wound Nurse who consults in patient care and provides continuous education for our staff and patients on pressure ulcer prevention. St. Vincent’s is a member of the Ascension Pressure Ulcer Initiative,

Comments Submitted by Facilities, continued

sharing best practices for pressure ulcer prevention with other health systems. As such, we continue to evaluate new products and tactics for the reduction of adverse events related to skin care in the inpatient setting.

Ongoing efforts to educate staff on skin surveillance, documentation and reporting, as well as interventions per our pressure prevention protocol, have been successful. Nurses selected from inpatient units attended a two-day conference on wound care, which will assist them in achieving wound care associate certification, enhance unit-based expertise and ensure prevention protocols and interventions are in place. During orientation, all newly hired nurses round with the wound nurse for three hours, identifying at-risk patients with implementation of pressure prevention. The wound care physician has met with hospitalists and residents to conduct wound care and protocol implementation reviews. Each unit has a skin clinician as a staff resource. Three times a week the wound care physician rounds with the Certified Wound Nurse on more complex cases. St. Vincent's offers our staff an annual, all-day wound care symposium with CEU credits. A policy enhancement requiring two-nurse skin surveillance on admission and two-nurse staging verification has been presented and is being reviewed. This enhancement is expected to improve early identification, accuracy and timely intervention.

We remain vigilant in reducing the incidence of pressure ulcers. We have a dedicated certified wound and ostomy nurse who consults in patient care, and provides continuous education for our staff and patients on pressure ulcer prevention. St. Vincent's is a member of the Ascension Health Pressure Ulcer Initiative, sharing best practices for pressure ulcer prevention with other health systems. As such, we continue to evaluate new products and tactics for the reduction of adverse events related to skin care in the inpatient setting. Ongoing efforts to educate staff on skin surveillance, documentation, and reporting as well as interventions per our pressure prevention protocol have been successful. While this has initially resulted in an increase in reporting of incidents, our team believes it is a more accurate representation of a concern that all health care facilities are confronted with.

At St. Vincent's, patient and associate safety is our highest concern. We have policies regarding employee conduct and holding employees accountable for their actions. Employees who do not adhere to these policies are subject to progressive discipline, up to and including termination.

Fall prevention continues to remain a high priority. A new subgroup was created to review any patient fall and evaluate for common causes and areas of improvement. Monthly fall data is reviewed and feedback is provided to all nursing units. Fall risk is communicated at the RN bedside shift report. Fall prevention "Champions" have been established for each nursing unit to help promote fall education and fall prevention strategies.

To enhance surgical safety, St. Vincent's continues to concentrate its efforts on training and education around quality and safety and best practices. Surgical leadership and staff participate in interdisciplinary workgroups for surgical safety, review the specifics of any events, and continuously evaluate for improvement opportunities. St. Vincent's is a teaching hospital, and the chief clinical partner for the Frank H. Netter, MD School of Medicine at Quinnipiac University. As such, residents and students are included in event and process review, promoting a culture of safety throughout their education. St. Vincent's also participates in the Connecticut Quality Collaborative, a statewide initiative for surgical quality and safety, along with surgical workgroups at Ascension Health.

Finally, as part of our culture of safety, we empower all our staff to "speak up for safety" if they see something that has the potential to be unsafe in any situation.