LEGISLATIVE REPORT TO THE GENERAL ASSEMBLY
Adverse Event Reporting

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

QUALITY IN HEALTH CARE PROGRAM

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Department of Public Health

Legislative Report to the General Assembly
Adverse Event Reporting

Quality in Health Care Program

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EXECUTIVE SUMMARY

For 2012 the number of adverse events reports (n=244) was about the same as each of the seven prior years. The most common adverse events among reports were: (1) falls resulting in serious disability or death, (2) perforations during open, laparoscopic, and/or endoscopic procedures, (3) stage 3-4 pressure ulcers acquired after admission to a healthcare facility, (4) patient death or serious disability as a result of surgery, and (5) retention of foreign objects in patients after surgery. These five categories accounted for 85% of reports for events in 2012.

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 2013 Connecticut's list of reportable events was modified to reflect changes to the National Quality Forum list of Serious Reportable Events, including 4 new categories: (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.

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 event[1] 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.

Adverse events are reported to DPH by telephone and fax machine. Reporting forms and definitions are located at the DPH website under "Forms."[2] After the department has decided whether to launch in investigation, paper-based data are entered into an electronic database.

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

[1] As discussed in Connecticut's March 2004 Adverse Events report, adverse events are not the same as medical errors. While there is overlap between the categories, some adverse events do not result from medical errors, and some medical errors do not result in adverse events. Adverse Events Reports are available 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

adverse event definitions to supplement the NQF list, as allowed by the law. (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 (4H).[4] The NQF category "patient death associated with a fall" (5D) was expanded to include "serious injury associated with a fall." Reporting for this expanded category replaced the Connecticut-specific category (7B) that previously existed. The numbering for these and several other events changed with the *Serious Reportable Events in Healthcare-2011 Update* described below.

On January 1, 2010, an additional adverse event category (7G) entitled "Patient death or serious disability associated with surgery" specific to Connecticut was added to the list of reportable adverse events. This category includes significant hemorrhage and/or unanticipated death in an American Society of Anesthesiologists (ASA) 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 sometimes the numbering for the remaining 25 items. The most substantial change in definition made unstageable pressure ulcers

[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

reportable in addition to stages three and four. The updated NQF list includes 29 serious reportable events. The new items are: (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. Some of these new NQF items closely resemble items on the current Connecticut-specific list of adverse events. 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.

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 three PSOs, including Qualidigm, the Connecticut Healthcare Research & Education Foundation (CHREF) and the Ambulatory Surgical Center Patient Safety Organization (ASC PSO) (see the June 30, 2013 DPH report on Connecticut's Quality of Care Program[6]).

The content and data gathering for this annual adverse event report were discussed at meetings of the Best Practices and Adverse Events subcommittee of the Quality in Healthcare Advisory Committee over the past year. The department announced a change from summarizing and analyzing events by the year of occurrence to the year in which they were reported to DPH. This change facilitates communication with facilities, since events are assigned identifying numbers based on the year reported, not year of occurrence. Due to the change it is not necessary to revise figures for past years, as could happen, for example, if a retained surgical object was discovered and reported to DPH long after the surgery during which it was left in the patient. In 2012 there were two reports of events that occurred months earlier during 2011.

Adverse event data were obtained from the electronic database at DPH. 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. The Department thanks the Ambulatory Surgical Care Patient Safety Organization for assistance in gathering information from outpatient surgical centers.

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

ADVERSE EVENT DATA

As of August 13, 2013, the DPH electronic database contained 244 reports of adverse events reported in 2012. Demographic information 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 factors.[7] 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.[8]

Acute care or children's hospitals submitted 212 (87%) of the 244 adverse event reports; chronic disease hospitals, 14; hospitals for the mentally ill, 3; and outpatient surgical facilities (if not owned by a hospital), 15. Forty percent of reported adverse events occurred in males and 60% 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, according to the list of NQF events (1A-6D) and Connecticut-specific events (7A-G).

As shown in the chart below and Appendix C, the most commonly reported events were falls that resulted in serious disability or death. The NQF expanded the fall definition for category 5D in May 2007 so that events formerly reportable under the Connecticut specific category 7B became reportable as category 5D. Seventy-six falls comprised 28.5% of all 244 adverse events reported. The second most commonly reported events were perforations during open, laparoscopic, and/or endoscopic procedures, with 55 reports (21%).[9] The next most commonly reported, 51 events, were stage 3 or 4 pressure ulcers acquired after admission to a healthcare facility (19%). Next, with 5% each were death or serious injury following surgery (14 reports), and retention of foreign objects in patients after surgery or other procedures (12 reports).

Adverse event reporting and rate by facility and event type are shown in appendices D-G for, respectively, acute care hospitals (D), chronic care hospitals and hospices (E), hospitals for the

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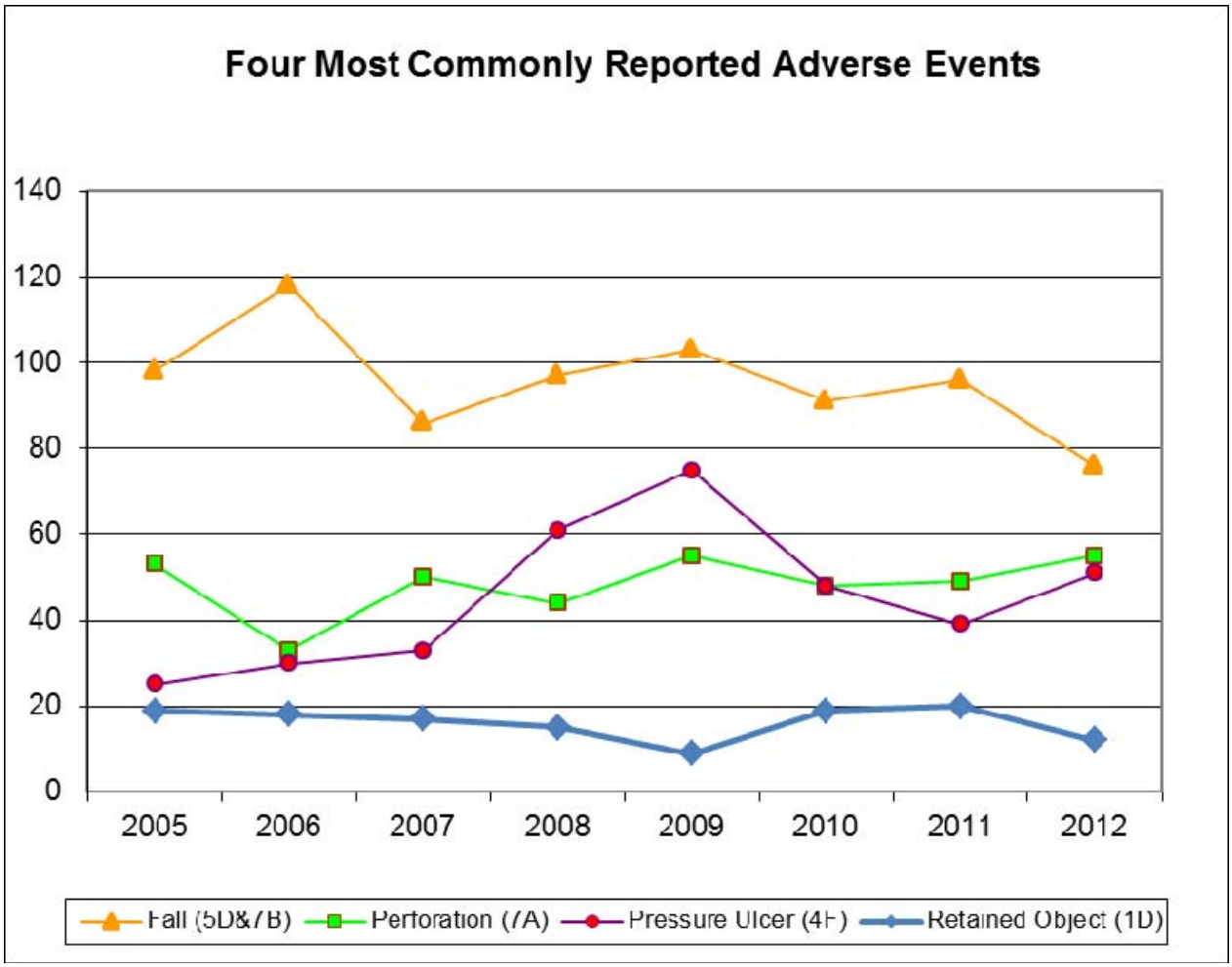
[7] Marieke Zegers et al, "Variation in the Rates of Adverse Events between Hospitals and Hospital Departments," *International Journal for Quality in Health Care* 2011:1-8, identified during a study of 21 Dutch hospitals and 300 hospital departments that increased risk of suffering a preventable adverse event was associated with surgical admission, more co-morbidity, higher age, longer length of hospital stay, elective admission, and complication of a surgical or medical procedure. The clustering of preventable adverse events in hospital departments was more than twice that found in hospitals, implying that "there is more room for improvement in patient safety at the hospital department level than at the hospital level."

[8] 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.

[9] 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).

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, surgical adverse events are not applicable in a facility that performs no surgery. 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 contribute to the denominator of the rate. There are several reasons for this presentation. First, it defines Connecticut acute care hospital rates in the same way as some other states, making state comparisons, including the chart in the 2011 report, possible. Second, our database does not permit us to clearly distinguish outpatient and inpatient settings for events reported by a hospital. Many of the choices for "Location of Event" (appendix A) could be either inpatient or outpatient. Third, the potential benefit of collecting outpatient visit information from hospitals does not seem to justify the extra burden to the hospitals. Fiscal year 2012 data were used in the rate denominator and payer mix because calendar year 2012 data were unavailable to DPH.



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, "it is limited by variability and incompleteness in reporting."[10] 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.
Based on these adverse event data alone we cannot derive certain conclusions. We cannot say whether a high reporting rate reflects highly complete reporting in a facility with 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 patients seen at each facility. Some ASCs provided case mix instead of the payer mix. This contextual information is required by PA 10-122. Since Medicare pays for most care in patients 65 years and older, 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 (Zegers et al, above) have found an association between older age and greater risk of experiencing an adverse event, perhaps because multiple chronic conditions and frailty are more common among the elderly, and because the intensity of interventions is greater among the elderly or those with multiple co-morbidities.[11] We tested this hypothesis for Connecticut. Using the Connecticut data for acute care hospitals but excluding the children's hospital, the Pearson correlation coefficient between percentage of Medicare payers in FY 2010 at a facility and reported rate of adverse events for 2004-2010 was only 0.26, and for percentage Medicare payers in 2010 and event rate in 2010 the correlation was opposite what we expected (r= -0.06). Due to the poor single year correlation in 2010, no calculation was made for 2011 or 2012. No attempt was made here to risk adjust the rates based upon the average age of the population served or other contextual factors.

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

CURRENT ACTIVITIES AND FUTURE PLANS

On November 8, 2012, DPH conducted a webinar for reporting facilities to introduce changes to the list of reportable adverse events and answer questions. Webinar materials were posted to the DPH website. At http://ct.gov/dph/site/default.asp see the Forms Tab, scroll down to "Licensing, Certification and Adverse Events." Adverse Event forms are used to report adverse events,

[10] 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.
[11] Aranaz-Andres J, et al., "What makes hospitalized patients more vulnerable and increases their risk of experiencing an adverse event?" *International Journal for Quality in Health Care* 2011; Sept 6, 1-8 [Epub ahead of print]

while Reportable Event forms are used by nursing homes for other events and are not part of the adverse event reporting system.

As described above, the Connecticut DPH modified Connecticut's list of reportable adverse events to incorporate the latest NQF list, and began using the modified list starting January 2013.

DPH regularly screens mortality data for cause of death codes that might be related to an adverse event. 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. In 2012 no additional fatal adverse events were identified through this supplemental screening process.

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 comes to attention; 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 (formerly the Healthcare Systems 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, review of clinical records, interviews with institutional staff and vested parties as appropriate. Beginning in the summer of 2004, resources for part-time DPH physician consultants were allocated for the specialties of medicine, surgery, pediatrics, anesthesia, obstetrics, gynecology, psychiatry, and orthopedics. As of spring 2010, these resources were no longer available. The Department continues to feel that such specialized medical consultation enhances the comprehensive nature of the investigations and is exploring alternative funding sources to

revitalize this part of our process. 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 three PSOs, including the Qualidigm Patient Safety Organization, the Connecticut Hospital Association Patient Safety Organization, and the Ambulatory Surgical Center Patient Safety Organization. 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. Reports can be found on the DPH website (http://www.ct.gov/dph/cwp/view.asp?a=3136&q=417318). The HAI Committee makes recommendations to the department on HAI public reporting, and has advised DPH to in general follow the CMS pay for reporting/annual payment update expectations.

Additional details about HAI prevention are in the Patient Safety Organization summaries in the June 30 report on the Quality in Health Care program at http://www.ct.gov/dph/cwp/view.asp?a=3132&q=388090&dphNav_GID=1601&dphPNavCtr=|#Gen.

Hospital Acquired Conditions (including infections)

The CMS Partnership for Patients (www.healthcare.gov) has set a goal of reducing preventable harm by 40% in US hospitals by the end of 2013. The Partnership will target all forms of harm to patients but will start by asking hospitals to focus on types of medical errors and complications where the potential for dramatic reductions in harm rates has been demonstrated by pioneering hospitals and systems across the country. Unintended consequences are also of concern. For example, a Partnership goal is to prevent falls *and* immobility. Immobility is an

unintended consequence of some efforts to prevent falls. CMS launched new Hospital Acquired Conditions data on Hospital Compare in October 2011.

APPENDICES

Appendix A:
Demographic Data from Adverse Event Reports

Appendix B:
Adverse Events Reports by Event Type and Year of Occurrence

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:
Facility Comments

Appendix A.
Demographic Data from Adverse Event Reports in the Electronic Database, Connecticut 2012

Measure	Frequency	Percent
Facility Type (n=244)		
Acute Care or Children's Hospital	212	86.9%
Chronic Disease Hospital	14	5.7%
Hospital for Mentally Ill Persons	3	1.2%
Outpatient Surgical Facility	15	6.1%
Patient Gender (n=244)		
Male	97	39.8%
Female	147	60.2%
Patient Age (n=244)		
0-14	9	3.7%
15-44	32	13.1%
45-64	70	28.7%
65 and older	133	54.5%
Location of Event (n=240)		
Adult Medical	52	21.7%
Adult Surgical	16	6.7%
Ambulatory Surgical	12	5.0%
Cardiac Care	4	1.7%
Cardiac Cath Lab	3	1.3%
Diagnostic Services	8	3.3%
Emergency Department	9	3.8%
Medical ICU	26	10.8%
Neonatal ICU	0	0.0%
Obstetrical/Gynecological	5	2.1%
Operating Room	42	17.5%
Other	15	6.3%
Outpatient Services	17	7.1%
Pediatrics	1	0.4%
Psychiatric	13	5.4%
Rehabilitative Services	2	0.8%
Surgical ICU	15	6.3%

Appendix B. Connecticut Adverse Events Reports in Electronic Database 2005-2012, by Event Code and Year NQF List (1A-6D) and Connecticut-Specific List (7A-7G)

Event Code	Description	Year of Adverse Event							
		2005	2006	2007	2008	2009	2010	2011	2012
1A	Surgery performed on the wrong body part	4	3	3	5	2	8	13	9
1B	Surgery performed on the wrong patient	0	1	1	0	0	0	0	0
1C	Wrong surgical procedure performed on a patient	2	0	4	1	0	5	4	2
1D	Retention of a foreign object in a patient after surgery or other procedure	19	18	17	15	9	19	20	12
1E	Intraoperative or immediate post-operative death in an ASA class I patient	0	0	2	0	0	0	0	0
2A	Patient death or serious disability associated with the use of contaminated drugs, devices, or biologics provided by the healthcare facility	1	0	0	1	0	0	1	0
2B	Patient death or serious disability associated with the use or function of a device in patient care in which the device is used or functions other than as intended	7	4	2	2	2	1	2	2
2C	Patient death or serious disability associated with intravascular air embolism that occurs while being cared for in a healthcare facility	3	0	0	1	2	0	0	1
3A	Infant discharged to the wrong person	0	0	0	0	0	0	0	0
3B	Patient death or serious disability associated with patient elopement (disappearance) for more than four hours	0	0	0	0	0	0	0	0
3C	Patient suicide, or attempted suicide resulting in serious disability, while being cared for in a healthcare facility	3	3	4	4	0	2	2	1
4A	Patient death or serious disability 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)	4	5	1	3	3	1	3	3

Appendix B (continued)

Event Code	Description	Year of Adverse Event							
		2005	2006	2007	2008	2009	2010	2011	2012
4B	Patient death or serious disability associated with a hemolytic reaction due to the administration of ABO-incompatible blood or blood products	0	0	0	1	0	0	0	0
4C	Maternal death or serious disability associated with labor or delivery in a low-risk pregnancy while being cared for in a healthcare facility	2	1	0	2	0	2	0	0
4D	Patient death or serious disability associated with hypoglycemia, the onset of which occurs while the patient is being cared for in a healthcare facility	1	1	2	0	0	0	1	0
4E	Death or serious disability (kernicterus) associated with failure to identify and treat hyperbilirubinemia in neonates	0	0	0	0	0	0	0	0
4F	Stage 3 or 4 pressure ulcers acquired after admission to a healthcare facility	23	30	33	61	75	48	39	51
4G	Patient death or serious disability due to spinal manipulative therapy	1	0	0	0	0	0	0	0
4H	Artificial insemination with the wrong donor sperm or wrong egg	NA	NA	0	0	1	0	0	0
5A	Patient death or serious disability associated with an electric shock while being cared for in a healthcare facility	0	0	0	0	0	0	0	0
5B	Any incident in which a line designated for oxygen or other gas to be delivered to a patient contains the wrong gas or is contaminated by toxic substances	0	0	1	0	0	0	0	0
5C	Patient death or serious disability associated with a burn incurred from any source while being cared for in a healthcare facility	0	3	1	0	1	0	2	1
5D & 7B	Patient death or serious injury associated with a fall while being cared for in a healthcare facility	98	118	86	97	103	91	96	76

Appendix B (continued)

Event Code	Description	Year of Adverse Event							
		2005	2006	2007	2008	2009	2010	2011	2012
5E	Patient death or serious disability associated with the use of restraints or bedrails	0	1	1	0	2	1	1	1
6A	Any instance of care ordered by or provided by someone impersonating a physician, nurse, pharmacist, or other licensed healthcare provider	0	1	0	0	0	0	0	0
6B	Abduction of a patient of any age	0	0	0	0	1	0	0	0
6C	Sexual assault on a patient within or on the grounds of a healthcare facility	5	12	7	5	2	3	4	7
6D	Death or significant 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 facility	2	0	1	2	1	2	4	2
7A	Perforations during open, laparoscopic and/or endoscopic procedures resulting in death or serious disability	53	33	50	44	55	48	49	55
7B	See event code 5D & 7B*								
7C	Obstetrical events resulting in death or serious disability to the neonate	6	4	5	1	2	5	2	4
7D	Significant medication reactions resulting in death or serious disability	3	1	3	4	1	3	2	0
7E	Laboratory or radiologic test results not reported to the treating practitioner or reported incorrectly which result in death or serious disability due to incorrect or missed diagnosis in the emergency department	0	1	0	0	0	2	0	0
7F	Nosocomial infections resulting in death or serious injury	2	3	3	6	2	3	5	3
7G	Patient death or serious disability as a result of surgery	NA	NA	NA	NA	1	16	21	14
Total		**239**	**243**	**227**	**255**	**265**	**260**	**271**	**244**

Notes: Adverse events occurring prior to 2005 or after 2012 are not included.

Category 4H was added to the reportable events list in 2007. Prior years are marked "NA," not applicable.

Category 7G was added to the reportable events list in 2010. Prior years are marked "NA," not applicable.

*Events formerly classified as 7B are reportable as 5D starting May 2007.

Events 2005-2011 are by date of event. Events in 2012 are by date event was reported.

Appendix C. Connecticut Adverse Events in 2012
Most Frequently Reported Events
NQF List (1A-6D) and Connecticut-Specific List (7A-7G)

Event	Description	Frequency	Percent of All Events
5D & 7B*	Patient death or serious injury associated with a fall while being cared for in a healthcare facility	76	28.5%
7A	Perforations during open, laparoscopic and/or endoscopic procedures resulting in death or serious disability	55	20.6%
4F	Stage 3 or 4 pressure ulcers acquired after admission to a healthcare facility	51	19.1%
7G	Death or serious injury associated with surgery	14	5.2%
1D	Retention of a foreign object in a patient after surgery or other procedure	12	4.5%
1A	Surgery performed on the wrong body part	9	3.4%
All other reported adverse events		27	10.1%
Total		**244**	**100.0%**

*Both fatal and non-fatal falls are reportable as 5D since 2007, but sometimes are reported as 7B.

Appendix D. Adverse Event Reports by Event Type
Acute Care Hospitals. Connecticut, 2012.

	Adverse Event Reports by Event Type																																		
Hospital	1A	1B	1C	1D	1E	2A	2B	2C	3A	3B	3C	4A	4B	4C	4D	4E	4F	4G	4H	5A	5B	5C	5D	5E	6A	6B	6C	6D	7A	7C	7D	7E	7F	7G
Backus																																		
Bridgeport																	2										1		5					
Bristol				1																			1											
CCMC												1					1												3					
Danbury				1													7						2						4	1				
Day Kimball																													1					
Dempsey				1													3						1											
Greenwich				1																			1											1
Griffin																							2						2					2
Hartford				1													7						8						2					
Hungerford																	6						1						1					
HOCC	1		1														2						1						7				1	1
Johnson																							3											
L & M																							1					1						
Manchester																							2						1					
Middlesex				1																			1					1						
Milford				1																			2											
MidState	1																						4						2					1
New Milford			1																											1				
Norwalk				1													2						2						2	1				1
Rockville																																		
St Francis																	1						1				1		4					1
St Mary's																							2						2					3
St Raphael	1											1					1						10						2					3
St Vincent's	1																4						6				3		3					
Sharon																																		
Stamford	1											1					2						3										1	
Waterbury				1				1															5	1					3					
Windham																																		
Yale-NH	2			3													8						3				2		4	1			1	1
All Acute Care	7	0	2	12	0	0	0	1	0	0	0	3	0	0	0	0	46	0	0	0	0	0	62	1	0	0	7	2	48	4	0	0	3	14

Notes: 8 events in 2011 reported in 2012 include Bridgeport 7A, Danbury 1D, Manchester 5D, St Raphael 5D, St Vincent 5D, Stamford 5D (2) & 7F
The 6D reported by Middlesex did not fit the NQF definition for that event category, but was nevertheless important to report to DPH

Appendix D (continued).
Adverse Event Reports and Rates
Acute Care Hospitals. Connecticut, 2012.

Hospital	Reports Total	Patient Days* FY 2012	Rate per 100,000 Pt Days*
William W. Backus Hospital	0	49,102	0.0
Bridgeport Hospital	8	101,436	7.9
Bristol Hospital	2	29,230	6.8
Connecticut Children's Medical Center	5	45,043	11.1
Danbury Hospital	15	91,875	16.3
Day Kimball Healthcare	1	18,509	5.4
John Dempsey Hospital	5	40,291	12.4
Greenwich Hospital	3	46,444	6.5
Griffin Hospital	6	28,713	20.9
Hartford Hospital	18	232,399	7.7
Charlotte Hungerford Hospital	8	25,210	31.7
Hospital of Central Connecticut	14	76,333	18.3
Johnson Memoral Hospital	3	16,228	18.5
Lawrence and Memorial Hospital	2	71,050	2.8
Manchester Memorial Hospital	3	45,098	6.7
Middlesex Hospital	3	57,063	5.3
Milford Hospital	3	14,426	20.8
MidState Medical Center	8	42,711	18.7
New Milford Hospital	2	8,566	23.3
Norwalk Hospital	9	67,464	13.3
Rockville General Hospital	0	13,128	0.0
Saint Francis Hospital	8	157,137	5.1
Saint Mary's Hospital	7	51,511	13.6
Hospital of Saint Raphael	18	104,600	17.2
Saint Vincent's Medical Center	17	122,834	13.8
Sharon Hospital	0	11,818	0.0
Stamford Hospital	8	70,198	11.4
Waterbury Hospital	11	57,490	19.1
Windham Community Memorial Hospital	0	18,674	0.0
Yale-New Haven Hospital	25	311,305	8.0
All Acute Care Hospitals	212	2,025,886	10.5

* 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, 2012.

	Adverse Event Reports by Event Type																																				
Facility	1A	1B	1C	1D	1E	2A	2B	2C	3A	3B	3C	4A	4B	4C	4D	4E	4F	4G	4H	5A	5B	5C	5D	5E	6A	6B	6C	6D	7A	7C	7D	7E	7F	7G
Ct Hospice																																					
Gaylord																	2						1														
Hsp Special Care																	3																				
Masonicare																							2														
Mount Sinai																																					
Veterans																							2														
Hebrew Home																							4														
Chronic Disease	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0			

Facility	Reports Total	Patient Days 2012	Rate per 100,000 Pt Days
The Connecticut Hospice	0	12,444	0.0
Gaylord Hospital	3	50,142	6.0
The Hospital for Special Care	3	72,123	4.2
Masonicare Health Center	2	2,247	89.0
Mount Sinai Rehabilitation Hospital	0	9,274	0.0
Levitow Veterans Health Center	2	39,785	5.0
Hebrew Home and Hospital	4	9,675	41.3
All Chronic Disease Hospitals	14	195,690	7.2

Appendix F. Adverse Event Reports by Event Type and Rates per 100,000 Inpatient Days
Hospitals for Mentally Ill Persons. Connecticut, 2012.

	Adverse Event Reports by Event Type																																		
Facility	1A	1B	1C	1D	1E	2A	2B	2C	3A	3B	3C	4A	4B	4C	4D	4E	4F	4G	4H	5A	5B	5C	5D	5E	6A	6B	6C	6D	7A	7C	7D	7E	7F	7G
Natchaug																																		
Silver Hill											1																							
Masonicare																							2											
Mental Health	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0

		Patient	Rate per
	Reports	Days	100,000
Facility	Total	2012	Pt Days
Natchaug Hospital*	0	17,448	0.0
Silver Hill Hospital*	1	14,190	7.0
Masonicare Behavioral Health	2	10,343	19.3
All Hospitals for Mentally Ill Persons	3	41,981	7.1
* Patient days for Natchaug and Silver Hill hospitals are 2011.			

Appendix G. Adverse Event Reports by Event Type for Ambulatory Surgical Centers, Pain Medicine Centers, Fertility Centers, and Childbirth Centers. Connecticut, 2012.

	Adverse Event Reports by Event Type																																		
Facility	1A	1B	1C	1D	1E	2A	2B	2C	3A	3B	3C	4A	4B	4C	4D	4E	4F	4G	4H	5A	5B	5C	5D	5E	6A	6B	6C	6D	7A	7C	7D	7E	7F	7G
Ct Childbirth & Women																																		
Aesthetic Surg Center																																		
Brucato Plastic Surgery																																		
Center for Adv Reprod																																		
Center for Ambul Surg																																		
Central Ct Endoscopy																																		
Coastal Digestive Care																																		
Ct Center for Plast Surg																																		
Ct Eye, South																																		
Connecticut Fertility																																		
Connecticut Foot																																		
Ct Surgery																																		
Ct Surgical Arts																																		
Constitution Surg, East																							2											
Ct GI Endoscopy																													1					
Ct Orthopaedic	1																																	
Danbury Surgical																													2					
Darien Medical Arts																																		
Diagnostic Endoscopy																													2					
Digestive Dis Endosc																																		
Dr. Felice Youth Images																																		
Eastern Ct Endoscopy																																		
Endoscopy Center of Ct																																		
Endoscopy, Fairfield																																		
Endoscopy, Northwest																																		
Evergreen Endoscopy																																		
Eye Surgery Center																																		
Fairfield Endoscopy																																		
Fairfield Surgery																																		
Gary J. Price, M.D.																																		
Glastonbury Endoscopy																																		
Glastonbury Surgery	1																																	
Hand Center of West Ct																																		
Hartford Surgical																																		
John J. Borkowski, M.D.																																		
Laser and Vision Surg																																		
Leif O. Nordberg, M.D.																																		
Litchfield Hills Surgery							2															1												
Middlesex Orthopedic																																		
Middlesex Endoscopy																													1					
Naugatuck Endoscopy																																		
New England Fertility																																		
New Vision Cataract																																		
North Haven Surgery																																		
Norwalk Surgery																																		
Orthopaedic Neurosurg																																		
Orthopedic Associates																																		
Plast Surg of South Ct																																		
Reproductive Medicine																																		
Robbins Eye																																		
St Francis GI Endosc																																		
Shoreline Colonoscopy																																		
Shoreline Surgery																													1					
Split Rock Surgical																																		
SSC II																																		
Summer St Ambulatory																																		
Surg Center Fairfield																																		
Surg Center-Ct Hand																																		
Waterbury Outpatient																																		
Wilton Surgery																																		
Yale Health Services																							1											
All Ambulatory Facilities	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	7	0	0	0	0	0

Notes: Three events in 2011 reported in 2012 are included: Danbury Surgical 7A, Litchfield Hills Surgery 2C (2)

Appendix G (continued). Adverse Event Reports and Rates, Outpatient Visits for Ambulatory Surgical Centers, Pain Medicine Centers, Fertility Centers, and Childbirth Centers, Connecticut, 2012.

Facility	Location	Reports Total	Patient Visits 2012	per 100,000 Pt visits Rate 2012
Connecticut Childbirth & Women's Center	Danbury	0	130	0.0
Aesthetic Surgery Center	New Haven	0	29	0.0
Center for Advanced Reproductive Services	Farmington	0	19,698	0.0
Center for Ambulatory Surgery	Westport	0	N/A	*
Central Connecticut Endoscopy Center	Plainville	0	5,813	0.0
Coastal Digestive Care Center	New London	0	5,674	0.0
Connecticut Center for Plastic Surgery[1]	Guilford	0	68	0.0
Connecticut Eye Surgery Center South	Milford	0	7,208	0.0
Connecticut Fertility	Bridgeport	0	234	0.0
Connecticut Foot Surgery Center	Milford	0	471	0.0
Connecticut Orthopaedic Specialist	Hamden	1	3,144	31.8
Connecticut Surgery Center LP	Hartford	0	3,471	0.0
Connecticut Surgical Arts[1]	Norwich	0	110	0.0
Constitution Eye Surgery Center East	Waterford	2	5,595	35.7
CT GI Endoscopy Center	Bloomfield	1	5,219	19.2
Danbury Surgical Center	Danbury	2	8,076	24.8
Darien Medical Arts (Aesthetic Surgery Center of CT)	Darien	0	N/A	
Diagnostic Endoscopy	Stamford	2	7,183	27.8
Digestive Disease Associates Endoscopy Suite	Branford	0	1,854	0.0
Dr. Felice's Youthful Images	Bloomfield	0	112	0.0
Eastern Connecticut Endoscopy Center[1]	Norwich	0	3,550	0.0
Endoscopy Center of Connecticut	Guilford/Hamden	0	7,615	0.0
Endoscopy Center of Fairfield, The	Fairfield	0	7,834	0.0
Endoscopy Center of Northwest Connecticut	Torrington	0	3,847	0.0
Evergreen Endoscopy Center	South Windsor	0	5,001	0.0
Eye Surgery Center, The	Bloomfield	0	10,954	0.0
Fairfield County Endoscopy Center	Trumbull	0	5,657	0.0
Fairfield Surgery Center	Fairfield	0	1,225	0.0
Gary J. Price, M.D., Center for Aesthetic Surgery	Guilford	0	187	0.0
Glastonbury Endoscopy Center, LLC	Glastonbury	0	4,430	0.0
Glastonbury Surgery Center	Glastonbury	1	3,011	33.2
Gregory Brucato, M.D./Brucato Plastic Surgery	Ridgefield	0	49	0.0
Hand Center of Western Connecticut, The	Danbury	0	1,002	0.0
Hartford Surgical Center	Hartford	0	1,373	0.0
John J. Borkowski, M.D.[1]	Middletown	0	32	0.0
Laser and Vision Surgery Center	Manchester	0	1,509	0.0
Leif O. Nordberg, M.D.	Stamford	0	49	0.0
Litchfield Hills Surgery Center	Torrington	3	2,129	140.9
Middlesex Center for Advanced Orthopedic Surgery	Middletown	0	3,525	0.0
Middlesex Endoscopy Center	Middletown	1	6,060	16.5
Naugatuck Valley Endoscopy Center[1]	Waterbury	0	2,879	0.0
New England Fertility Institute[1]	Stamford	0	827	0.0
New Vision Cataract Center	Norwalk	0	2,202	0.0
North Haven Surgery/Pain Medicine Center	North Haven	0	3,075	0.0
Norwalk Surgery Center	Norwalk	0	N/A	
Orthopaedic & Neurosurgery Center of Greenwich	Greenwich	0	1,598	0.0
Orthopedic Associates Surgery Center[2]	Rocky Hill	0	7,802	0.0
Plastic Surgery of Southern Connecticut	Westport	0	40	0.0
Reproductive Medicine Associates of Connecticut	Norwalk	0	779	0.0
Robbins Eye Center	Bridgeport	0	1,190	0.0
Saint Francis GI Endoscopy	Windsor	0	5,368	0.0
Shoreline Colonoscopy Suites	Old Saybrook	0	1,248	0.0
Shoreline Surgery Center	Guilford	1	6,221	16.1
Split Rock Surgical Associates	Wilton	0	143	0.0
SSC II	Guilford	0	3,694	0.0
Summer Street Ambulatory Surgery Center	Stamford	0	52	0.0
Surgery Center of Fairfield County	Bridgeport	0	4,110	0.0
Surgical Center of CT-CT Hand	Bridgeport	0	511	0.0
Waterbury Outpatient Surgical Center	Waterbury	0	2,092	0.0
Wilton Surgery Center	Wilton	0	5,254	0.0
Yale University Health Services ASC	New Haven	1	1,020	98.0
All Facilities		15		

Notes: N/A indicates that data had not been received from the facility at the time of this report.

* The Center for Ambulatory Surgery signed a consent order with DPH on August 15, 2013.

[1] CY 2011 data [2] FY 2012 data

Appendix H.
Primary Payer (%) of Inpatient Hospital Bills
Acute Care Hospitals. Connecticut, FY 2012.

Hospital	Self Pay	Medicare	Medicaid	Blue Cross and Commercial	No Charge	HMO	PPO	Other
William W. Backus Hospital	1.5	46.2	19.2	17.2	0.0	11.7	0.0	4.3
Bridgeport Hospital	1.2	38.6	31.5	15.3	0.0	10.8	1.6	1.0
Bristol Hospital	1.9	46.9	20.9	20.3	0.0	9.2	0.0	0.9
Connecticut Children's Medical Center	1.0	0.1	51.1	16.2	0.0	25.3	5.6	0.8
Danbury Hospital	1.0	40.9	17.2	37.2	0.0	3.0	0.0	0.8
Day Kimball Healthcare	1.8	42.6	26.5	20.2	0.0	6.8	0.0	2.1
John Dempsey Hospital	0.9	43.9	23.3	19.1	0.0	10.2	0.2	2.5
Greenwich Hospital	2.2	38.5	5.8	18.2	0.0	26.7	8.2	0.4
Griffin Hospital	2.6	47.8	18.1	13.9	0.0	16.6	0.0	1.0
Hartford Hospital	2.1	40.1	20.6	12.4	0.0	19.2	3.6	2.1
Charlotte Hungerford Hospital	2.5	55.0	16.9	15.8	0.0	8.2	0.6	0.9
Hospital of Central Connecticut	1.4	46.3	23.4	15.6	0.0	12.3	0.1	0.9
Johnson Memoral Hospital	3.5	48.7	19.0	15.9	0.0	6.8	5.4	0.8
Lawrence and Memorial Hospital	0.7	45.6	20.6	22.8	0.0	0.9	0.8	8.7
Manchester Memorial Hospital	2.6	40.2	21.5	7.9	0.0	18.8	8.1	0.9
Middlesex Hospital	0.1	50.5	16.7	18.9	0.0	9.5	2.9	1.4
Milford Hospital	2.5	56.6	9.0	15.7	0.0	13.1	2.2	0.9
MidState Medical Center	2.7	48.8	20.5	8.5	0.0	15.6	2.8	1.2
New Milford Hospital	2.6	48.6	11.7	15.5	0.0	15.1	3.1	3.3
Norwalk Hospital	4.4	40.7	17.5	23.7	0.0	12.8	0.4	0.5
Rockville General Hospital	3.0	65.9	9.6	6.5	0.0	9.9	3.8	1.4
Saint Francis Hospital	0.8	43.1	24.1	14.5	0.0	13.5	2.9	1.3
Saint Mary's Hospital	2.7	45.0	25.3	18.1	0.0	6.5	0.1	2.2
Hospital of Saint Raphael	0.5	54.6	17.0	16.4	0.0	10.4	0.0	1.2
Saint Vincent's Medical Center	6.4	45.1	19.8	14.4	0.0	10.6	3.0	0.9
Sharon Hospital	2.9	58.0	13.8	11.7	0.0	12.2	0.0	1.4
Stamford Hospital	2.1	35.7	23.1	21.7	0.0	16.9	0.0	0.5
Waterbury Hospital	1.7	46.3	26.0	13.9	0.0	9.2	2.1	0.8
Windham Community Memorial Hospital	3.2	50.7	19.0	20.9	0.0	3.2	0.0	3.1
Yale-New Haven Hospital	0.6	30.1	28.9	22.9	0.5	10.3	5.2	1.5
Total	1.8	41.7	22.2	18.1	0.1	12.0	2.4	1.6

Appendix H (continued).
Primary Payer (%) of Bills,
Hospices, Chronic Disease Hospitals, and Hospitals for Mentally Ill Persons.
Connecticut, 2012.

Facility	Self Pay	Medicare	Medicaid	Blue Cross and Commercial	Other
The Connecticut Hospice		100.0			
Gaylord Hospital	0.2	53.9	15.1	28.7	
The Hospital for Special Care		10.4	75.2	5.6	8.8
Masonicare Health Center, Chronic Disease Hospital		93.7		6.3	
Mount Sinai Rehabilitation Hospital	0.5	55.3	9.7	10.1	24.5
Levitow Veterans Health Center	1.8	13.8	78.0		6.4
Hebrew Home and Hospital		79.0	6.7		14.3
Natchaug Hospital	0.0	0.0	80.0	15.0	5.0
Silver Hill Hospital	4.0	5.0	0.0	91.0	0.0
Masonicare Behavioral Health		88.6		11.4	

The Hospital for Special Care and Natchaug Hospital data are fiscal year 2011. All others are calendar year.

VA Medicaid includes 68% with Medicare and Medicaid, 10% Medicaid only

Appendix H (continued). Case Mix or Primary Payer (%) of Bills
Ambulatory Surgical Centers, Pain Medicine Centers, Fertility Centers, and Outpatient Childbirth Centers.
Connecticut, 2012.

Facility	Case Mix	Self Pay	Medicare	Medicaid	Blue Cross and Commercial	HMO	PPO	Other
Connecticut Childbirth & Women's Center		7.0%		10.0%	83.0%			
Aesthetic Surgery Center		50.0%			50.0%			
Center for Advanced Reproductive Services					93.8%			6.2%
Center for Ambulatory Surgery	N/A*							
Central Connecticut Endoscopy Center			24.5%	0.3%				75.2%
Coastal Digestive Care Center		7.0%	19.0%	10.0%	58.0%	2.0%		4.0%
Connecticut Center for Plastic Surgery[1]		100.0%						
Connecticut Eye Surgery Center South		0.5%	59.4%	2.3%	36.6%	1.1%	0.1%	
Connecticut Fertility	Retrievals 230, Tesa 4							
Connecticut Foot	100% podiatry							
Ct Surgery		1.0%	20.0%	17.0%	24.0%	17.0%	1.0%	20.0%
Ct Surgical Arts[1]		30.0%	5.0%		65.0%			
Constitution Surg, East		0.3%	54.9%	3.5%	36.3%	0.1%		4.9%
Ct GI Endoscopy		0.3%	21.6%		78.1%			
Ct Orthopaedic		0.1%	11.2%		31.2%	24.4%	0.2%	32.9%
Danbury Surgical	42% GI, 27% ortho, 18% ophthal, 12% pain							
Darien Medical Arts	N/A							
Diagnostic Endoscopy	Colonoscopy, gastroscopy, sigmoidoscopy							
Digestive Dis Endosc			>50%		<50%			
Dr. Felice Youth Images		100.0%						
Eastern Connecticut Endoscopy Center[1]		17.0%	18.0%		81.0%			
Endoscopy Center of Ct[4]		5.0%	26.0%	5.0%	44.0%	20.0%		
Endoscopy, Fairfield			18.9%		74.4%			6.7%
Endoscopy, Northwest	100% gastroenterology							
Evergreen Endoscopy			18.7%	3.6%	77.7%			
Eye Surgery Center		0.2%	34.8%	1.7%	63.4%			
Fairfield Endoscopy			17.0%	2.0%		52.0%	25.0%	4.0%
Fairfield Surgery		0.3%	4.3%		68.4%			27.0%
Gary J. Price, M.D.		100.0%						
Glastonbury Endoscopy		0.1%	17.5%	1.1%	81.3%			
Glastonbury Surgery[3 4 5]			12.0%		45.0%	18.0%		25.0%
Gregory Brucato, M.D./Brucato Plastic Surgery	100% cosmetic							
Hand Center of West Ct			22.0%					78.0%
Hartford Surgical	ENT 366, Gyn 754, Gen 3, Opth 76, oral 5, cosmetic 32, pod 137							
John J. Borkowski, M.D.[1]		100.0%						
Laser and Vision Surg	1314 cataracts, 184 Yag laser							
Leif O. Nordberg, M.D.		100.0%						
Litchfield Hills Surgery		0.1%	27.7%	0.1%	44.9%			27.2%
Middlesex Orthopedic			20.5%	4.4%	58.6%			16.5%
Middlesex Endoscopy			23.6%	5.6%	70.9%			
Naugatuck Valley Endoscopy Center[1]			26.0%	2.0%	72.0%			
New England Fertility Institute[1]		60.0%			40.0%			
New Vision Cataract			47.0%	5.0%	47.0%			
North Haven Surgery		0.4%	21.3%	27.2%	4.1%			47.0%
Norwalk Surgery	N/A							
Orthopaedic Neurosurg		0.3%	28.3%	0.1%	71.3%			
Orthopedic Associates Surgery Center[2 4 5]		4.0%	16.0%			65.0%		16.0%
Plast Surg of South Ct		92.5%			7.5%			
Reproductive Medicine		20.0%			80.0%			
Robbins Eye			75.0%	15.0%				10.0%
St Francis GI Endosc			15.6%	1.2%				83.3%
Shoreline Colonoscopy	1025 colonoscopy, 223 EGD							
Shoreline Surgery[3 6]			21.4%		75.3%			3.4%
Split Rock Surgical		100.0%						
SSC II[3 6]			24.7%		61.7%			13.6%
Summer St Ambulatory		99.0%						1.0%
Surg Center Fairfield			16.0%	4.0%	66.0%			14.0%
Surgical Center of CT-CT Hand[4]		1.0%	21.9%	0.6%	25.2%	41.9%		9.4%
Waterbury Outpatient		1.5%	60.9%	12.6%	9.0%	14.2%		1.9%
Wilton Surgery		1.0%	59.0%		36.0%			4.0%
Yale Health Services						100.0%		

Notes: N/A indicates that the data had not been provided by the facility by the time this report was written.

[1] CY 2011 data [2] FY 2012 data [3] combines Medicare/Medicaid [4] combines HMO/PPO [5] combines self pay/commercial [6] combines self pay/other

* The Center for Ambulatory Surgery signed a consent order on August 15, 2013 which can be viewed at the DPH website at http://www.ct.gov/dph/lib/dph/facility_licensing_and_investigations/regulatoryactiondocuments/ctr_amb_surg_2nd_co_8_15_13_(2).pdf

Appendix I: Facility Comments

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:

St Francis GI Endoscopy
MidState Medical Center
CT GI Endoscopy
Day Kimball Healthcare
Norwalk Hospital
Litchfield Hills Surgery Center
Yale-New Haven Hospital, Bridgeport Hospital, and Greenwich Hospital
Saint Francis Hospital and Medical Center
Danbury Hospital and New Milford Hospital
Surgery Center of Fairfield County
Middlesex Hospital
St. Vincent's Health System
Griffin Hospital

Saint Francis GI Endoscopy

PATIENT SAFETY IMPROVEMENTS:

- Safe Procedural Checklist
- No hot beverages while patient is on the stretcher
- Hand Hygiene is observed by patients and also performed by patients at the facility prior to eating their snack post procedure

MidState Medical Center

MidState's mission is to improve the health and healing of the people and communities we serve and our core values of Integrity, Caring, Excellence and Safety provide a foundation to create an environment that thrives on a culture of safety and performance excellence.

Below are a few examples of MidState's results achieved through our journey to keep patient's safe while in our care.

Patient Safety Results

MidState has focused the last several years on reducing the number of preventable patient falls and the number of falls with injuries.

- In FY12, MidState continued to make considerable progress reducing patient falls and achieved another 10% reduction over the prior year on inpatient falls. Through our performance improvement activities, MidState reduced outpatient falls as well by 33% in FY12. As of June 30, 2013, MidState is on target for another 10% reduction in inpatient falls.

MidState's Journey to Creating a High Reliability Organization:

- Recognizing that the first step in reducing patient harm is the identification and reporting of actual and near miss events, MidState achieved a 16% increase in FY12 and promoted the reporting of near misses using a campaign slogan of "See Something, Say Something."
- As of June 30, 2013, MidState is on target for an additional 10% increase in the number of incidents reported. The goal for a highly reliable organization is that the numbers of near miss reports increase as the number of actual events decrease.
- In FY12, MidState joined other Connecticut hospitals on a journey of high reliability in partnership with the Connecticut Hospital Association and HPI (High Performance Improvement) consultants. In the fall of FY12, MidState underwent an extensive analysis to evaluate previous safety events to determine opportunities for improvement. Since, then a core team of MidState's Leadership meets weekly to discuss near misses and any potential safety events.
- MidState's Executive team implemented monthly safety rounds to identify any patient safety concerns expressed by the staff. Items identified are referred to the appropriate department or council for review and possible intervention.
- In April 2013, MidState established a Leadership Patient Safety Daily huddle, where leaders from all areas of the organization meet briefly to discuss any patient safety events that occurred within the last 24 hours, any near misses and any patient safety concerns for the upcoming 24 hours. This huddle has

enhanced communication among departments, quickly identifying and resolving potential areas of concern and has provided a heightened patient safety focus within the organization.

- The Leadership from MidState participated in High Reliability Training this winter along with key physician leaders. Before the end of this fiscal year, the plan is to train middle management and our community physician partners. Currently, plans are underway as a balanced scorecard initiative to train hospital employees and employed & contracted physicians with a goal of achieving 80% during FY14.

CTGI Endoscopy

I recently read the book "The Checklist Manifesto- How To Get Things Done Right" by Atul Gawande, a physician from Boston who participated in the research and development of the Safe Surgical Checklist with the WHO. If this were required reading in the medical community, we would see a significant decrease in reportable events! (and we would all work better as a team) The book is based on real life stories and examples that all can relate to.

Day Kimball Healthcare

Day Kimball Healthcare is committed to patient safety and employs a multitude of processes to prevent adverse events. We are also steadfast and transparent in addressing events when they do occur. We take every event seriously and work to identify practices and protocols necessary to prevent similar issues in the future. Most importantly, we work diligently to provide the highest level of patient safety possible.

- Day Kimball employees regularly participate in numerous quality improvement/ patient safety committees and collaborate with external organizations to ensure best practices are instituted to prevent adverse events.
- Our quality department proactively educates our staff on patient safety topics, consistently performs reviews of operations and policies, and institutes case reviews as needed.
- Day Kimball conducts a thorough review of each Joint Commission Sentinel Event Alert in order to identify additional strategies and other opportunities for quality improvement initiatives for injuries that seem to be trending across the country.
- Day Kimball Healthcare immediately addresses each adverse event, conducts root cause analysis and provide feedback to staff.

Day Kimball Healthcare continues to be proactive in integrating best practices learned through our own experiences and comprehensive analyses as well as through collaborations with Connecticut Hospital Association, VHA, The Joint Commission, and CMS Partnership for Patients.

Norwalk Hospital

Norwalk Hospital exists for the purpose providing uniquely excellent, innovative and compassionate health care to our patients, their families, and the community we serve.

We are committed to safety and follow the High Reliability core principles for the prevention of harm. As such, we have established a culture of transparency and an infrastructure that places safety first. A subcommittee of the Hospital's Board of Trustees focuses exclusively on quality improvement and patient safety.

We have also joined the Centers for Medicare & Medicaid (CMS), and the Connecticut Hospital Association's (CHA) "Partnership for Patient Safety" Program in the initiative to insure a safe patient experience across the continuum of care. Our initiatives for patient safety focus on areas such as surgical safety, medication safety, computerized order entry and electronic medical records, checklists for consistency and redundancy, communication, and the discharge process. Collectively, through statewide collaborations as well as the use internal and national benchmark data, we are preventing pressure ulcers, eliminating infections related to multiple drug resistant organisms, and significantly reducing patient falls with injury.

Norwalk Hospital supports the Quality in Health Care Program of the State Department of Public Health (DPH), as this transparency of adverse events reporting is one of the stepping stones in improving patient safety across the State, and look forward to opportunities in sharing risk reduction strategies that may develop subsequently to this report. We also agree with the Department's caution against using the report for comparative purposes due to the number of factors that influence the reports such as, wide variations in patient care mix, number of patients served, as well as how hospitals report adverse events.

In reinforcing and spreading Norwalk Hospital's mission of safety, we maintain a close partnership with our community, state, and national organizations to insure that we continue to provide exceptional care to our patients well into the future.

Litchfield Hills Surgery Center

To help ensure that no other patients have to encounter adverse effects of the Arthocare wands, Litchfield Hills Surgery Center reported the problem to the FDA.

Yale-New Haven Hospital, Bridgeport Hospital, and Greenwich Hospital

Yale-New Haven Health System, which consists of Yale-New Haven Hospital (York Street and Saint Raphael's campuses), Bridgeport Hospital and Greenwich Hospital fully supports the transparency this report represents. We continually strive to deliver the highest quality patient care; safety of our patients is our number one priority. To that end, we participate actively in the Connecticut Hospital Association's statewide initiative to eliminate harm based on the principles of "high reliability" and applaud the efforts of our hospital association to tackle some of the most difficult patient safety issues facing healthcare institutions. We believe that our culture

of safety, which encourages and standardizes the reporting, analysis, and implementation of requisite improvements in response to all unexpected or adverse outcomes has created a safer and more transparent healthcare environment. We actively share the information in this report throughout the System and utilize the data to guide performance improvement efforts. We are pleased with improvements that have been made with regard to harm reduction in Connecticut's healthcare institutions. The public can be confident that we will continually strive to improve, and in so doing, reduce the number of adverse events and increase patient safety.

Saint Francis Hospital and Medical Center

Saint Francis Hospital and Medical Center is committed to delivering the highest quality of care for our patients and strives to empower all members of the organization to speak up for patient safety. The safety of the patient is our number one priority. Saint Francis Hospital is actively engaged in the current statewide high reliability initiative in collaboration with The Connecticut Hospital Association (CHA) and HealthCare Performance Improvement (HPI) as a level 3 participant, which is the highest level of participation. Over the past year, we have embraced the standardized safety mechanisms and tools that are provided by this initiative to reach our goal of high reliability and safety throughout the organization. We are continually working to improve our processes to ensure that we provide our patients with the safest care possible.

In early 2013, we conducted an institution-wide hospital survey on Patient Safety Culture. The results showed more than a 100% increase in participation since our last survey, indicating an increased engagement and commitment to cultivating a culture of safety on the part of our staff. In addition, our analysis showed considerable improvement of our scores compared to historical performance across all our service lines. We significantly increased our scores on seven of the twelve dimensions included in the survey. Most significant was a nearly 25% increase in our score, as compared to 2009, in the dimension Teamwork Across Units. Saint Francis is proud of the work we have accomplished to date and as we continue to work towards our goal of high reliability and safety throughout our organization.

Danbury Hospital and New Milford Hospital

Danbury Hospital and New Milford Hospital, members of Western Connecticut Health Network (WCHN), have long been focused on providing high quality, safe care to the patients in our community. This is driven by a strong culture of accountability and best practice adoption. With our colleagues in the state, we are engaged in the adoption of High Reliability Organization (HRO) principles, in pursuit of the elimination of all-cause preventable harm. Both hospitals have actively participated in HRO training programs at the state and national level, and are incorporating HRO principles into the daily work of the organization.

All of our Board-driven quality and safety goals are tied to performance targets that represent top 10^{th} percentile national performance. Through participation in multiple voluntary national quality improvement data sharing programs in specialties such as surgery, cardiology, and nursing, to name a few, we ensure that our outcomes

are comparable to the best in the country. We use these national data to judge our performance, identify opportunities for increased attention, and measure our improvement. For example, through participation in the Nursing Database of National Quality Indictors (NDNQI), we have been able to validate fall and pressure ulcer rates that compare favorably to national performance. We have certified specialists in skin care, who oversee our program and train in-house teams to have enhanced expertise in this area. We also have a dedicated fall prevention specialist and team. Through our National Surgical Quality Improvement Program (NSQIP) database, we have been able to use patient outcome data, compared to national performance, to target those areas where we are not achieving "exemplary" surgical ratings, and then use the same database to verify that any changes in practice moved us in the right direction. Additionally, we are participating in a multi-year, national cohort program, focused on enhancing teamwork and patient safety in our operative and procedural areas.

Our internal reporting processes not only focus on capturing patient harm events, but on detecting precursor and near miss events, allowing us to make changes before something unintended occurs. Thankfully, the vast majority of our events do not involve harm. In the unfortunate case when a patient harm event occurs, we work with the patient and their family to quickly determine what happened and take appropriate actions to meet their needs. With the recognition that healthcare has become increasingly complex, and our patients often have multiple medical conditions, we know that we must focus more than ever on system-level as well as known patient-specific factors that contribute to the risk of undesired outcomes. Lean Six Sigma methodology is utilized organization-wide, with a number of certified employees in key areas. We take very seriously the trust our community places in us, and commit to continuously partnering with our patients and families in the pursuit of patient-centered quality and safety excellence.

Surgery Center of Fairfield County

In January 2012, we implemented the full use of the WHO Surgical Site Check list.

Middlesex Hospital

Our mission at Middlesex Hospital is to provide the safest, highest-quality health care and the best experience possible for our community. We continuously strive to improve our processes, understand the root causes of events, and assess the services we provide in order to achieve this goal. Knowing that culture is the key driving factor in determining how safe an organization is both for patients as well as employees, we are always focused on safety and quality as "the way we do things around here." The people of our community and our patients deserve no less than the best, safest, evidence-based health care possible.

Middlesex Hospital is taking many steps in the areas of safety and quality to fully achieve our goals. This includes many initiatives and collaborative projects with organizations such as CHA (Connecticut Hospital Association) and IHI (the Institute for Healthcare Improvement), both leaders in quality and safety. For

example, we are participating at the highest level in a statewide collaborative effort to eliminate preventable patient harm through the adoption of habits and tools associated with high reliability organizations. This includes tools to better find and fix problems that could result in avoidable harm, helping staff learn techniques to improve individual performance as well as to catch errors before they cause a problem, and improving teamwork and communication. Beyond this we have ongoing projects focusing on prevention of readmission, infections, falls, pressure ulcers, and best practices in perinatal care to name just a few.

We also are constantly working on changes so that people who receive care at Middlesex Hospital will have the best experience possible, so that our healthcare system will be the kind of place people would think of as the clear first choice to go for medical care. Our Patient and Family Advisory Council provides regular guidance and advice to help us learn what works well in this area and where we have opportunities to improve. Our staff members learn directly from our patients' experiences so we can improve—based on first-hand accounts from patients. Our aim is to create an experience of care that is truly centered on patients and their families.

Through leadership focused on safety and quality, increased transparency, strong teamwork, harnessing the power of science, technology, and information, and the intelligent use of data, we work every day toward providing the safest, highest-quality health care and best experience possible for all members of our community.

St. Vincent's Health Services

St. Vincent's is proud to have a tradition of patient safety through our work as a High Reliability Organization (HRO). In cooperation with the Connecticut Hospital Association, we are pleased to mentor others in their journey toward implementing High Reliability principles and practices.

St. Vincent's Medical Center and St. Vincent's Behavioral Health Services are diligent in reporting adverse events to the Department of Public Health, and continuously analyze such events and strive to make improvements. St. Vincent's has specifically worked toward preventing falls with injuries and pressure ulcers. Fall prevention requires a team approach-nurses, physicians, pharmacists, clinical support staff, and most important, patients and families are consulted in methods to reduce fall risk. We continue to engage staff with focused education regarding pressure ulcer staging, prevention and treatment.

St. Vincent's considers improved technology an enhancement for patient safety. To this end, there will be a system wide Electronic Health Record (EHR) conversion in April 2014. The new EHR will encompass several safety features including medication administration bar coding, electronic progress notes for all providers and enhanced ordering and notification features.

Griffin Hospital

Griffin Hospital is committed to continuously expanding our culture of patient safety and performance improvement.

Our performance improvement efforts are focused around the Institute of Medicine's six dimensions for provision of excellent care. Care must be safe, patient centered, effective, equitable, timely and efficient. To that end, we created four patient safety councils that oversee delivery of care to our patients. The Patient Safety Council focuses on safety indicators such as reduction of falls, pressure ulcers, and infections. The Evidence Based Care Council reviews all protocols and clinical pathways as well as compliance with core measures. The Patient Centered Care Council continuously strives to improve our patients' experience and our Planetree model of care and the Care Management Council works to improve through-put from presentation through discharge and across transitions of care.

Our Councils consist of representation from the front line staff up through and including the medical staff and Board of Directors; and report to the multidisciplinary Clinical Performance Improvement Committee, the Medical Executive Committee and the Quality Committee of the Board. We practice transparency and disclosure with apology for adverse events and encourage our staff to report all potential safety concerns as well as untoward outcomes of care. Since 2006, multiple quality and patient safety initiatives have been implemented including:

- An upgrade to our on-line safety and perception of care reporting system for employee accessibility to encourage increased staff reporting; as well as to improve tracking and trending of concerns
- Implementing Infection Control Liaisons to continuously promote our "Wash-In, Wash-Out" hand hygiene campaign and use of personal protective equipment
- Multidisciplinary team meetings for clinical debriefs and system reviews to identify root causes and correct issues that cause, or could potentially cause harm to our patients
- Patient /family meetings to address concerns and clarify care delivery issues.
- Implementation of leadership rounding for safety and departmental huddles to seek out and address safety concerns
- Mandatory staff education of new regulatory changes, including risk issues such as HIPAA and Informed Consent.
- Quality checks each shift on indicators that have the potential to cause patient harm
- Mandatory requirement for all employees, including the medical staff to receive annual influenza vaccine as a condition of employment.
- Participation in Connecticut Hospital Association Quality Improvement Collaboratives, including program on high reliability, reduction of avoidable readmissions, and prevention of central line infections.
- Implementation of TeamSTEPPS, a program created by the department of defense and the Agency for Healthcare Research and Quality to promote communication and teamwork within and across departments
- Participation in the Agency for Healthcare Research and Quality, Institute of Health, National Quality Forum and The Joint Commission's national Patient Safety initiatives.

Our focus has been on identifying issues with the potential to cause harm as well as system based errors through the application of multiple tools including our on-line safety reporting system, clinical debriefs, system reviews, and failure mode effect analysis. Through the review and investigation of these events opportunities for improvement in processes and protocols are identified. These findings and the corrective action plans are reviewed and approved by our staff, management, and the Board.