Project to Collect Medical Near-Miss/ Adverse Event Information 2007 Annual Report

August 13, 2008

Division of Adverse Event Prevention
Japan Council for Quality Health Care

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Foreword

Eitaka Tsuboi
President
Japan Council for Quality Health Care

The Japan Council for Quality Health Care (JCQHC) has been conducting various activities, such as the Project to Collect Medical Near-Miss/Adverse Event Information and the evaluation of medical services provided at hospitals, in order to maintain public confidence in healthcare services and improve the quality of the services. In response to rising awareness and expectations of the general public as well as medical institutions concerning promotion of medical safety and medical adverse event prevention, the JCQHC has been actively engaged in the said activities. JCQHC's recent developments include a new no-fault compensation system for obstetric accidents to be launched in January 2009 and a project to collect and analyze near-miss incidents occurring at pharmacies to be launched within this fiscal year.

The JCQHC Division of Adverse Event Prevention has been undertaking the Project to Collect Medical Near-Miss/Adverse Event Information to prevent medical adverse events and to promote medical safety since 2004. As a neutral third-party organization, the JCQHC has been publishing collected medical near-miss/adverse event information and the analyses of data in the form of periodic reports, annual reports and monthly fax newsletters for medical professionals, administrative organizations and the general public. The reports can also be browsed on JCQHC's website. The JCQHC would like to thank all cooperating medical institutions and relevant parties for reporting near-miss incidents and adverse events for the project.

The 2007 annual report was prepared based on past reports. The annual report includes near-miss incidents and adverse events reported in the past year, analyses of individual themes, medical adverse event information to be shared, and a summary of workshops and materials used therein that will be useful for medical safety promotion. The JCQHC hopes the annual report will be beneficial to healthcare providers and help the general public understand our current efforts to promote medical safety in Japan. As with the 2005 and 2006 annual reports, the 2007 annual report will be translated into English and posted on JCQHC's website for wider audiences.

The JCQHC has received numerous responses including inquiries about and publicity concerning a number of medical adverse events and their details appearing in past reports, which indicates elevated social awareness of the promotion of medical safety and the prevention of medial adverse events. Your suggestions for JCQHC's activities to enhance the content of future reports will be greatly appreciated.

JCQHC is determined to maintain public confidence in healthcare services and improve the quality of medical treatment and its safety through various projects, including the evaluation of medical services provided at hospitals. JCQHC appreciates your understanding and cooperation.

Issuing the 2007 Annual Report

Kikuo Nomoto
Director
Japan Council for Quality Health Care

The Division of Adverse Event Prevention started the Project to Collect Medical Near-Miss/Adverse Event Information in October 2004 to prevent occurrence and recurrence of near-miss incidents and adverse events. The objective of collecting and analyzing medical near-miss/adverse event information is to create a safety-oriented culture in the rapidly advancing medical community. It is important to collect a wide range of relevant information and use it to promote medical safety. In terms of creating a safety-oriented culture, it is not necessarily correct to view an increase in the number of reports on near-miss incidents and adverse events as an actual increase in near-miss incidents and adverse events, or to think that there is a decline in safety at medical institutions. The Japan Council for Quality Health Care (JCQHC) has received positive responses to the project, including an opinion that participation in the project indicates proactive efforts to promote medical safety. The Division of Adverse Event Prevention has been handling received information with utmost care to create an environment for easy reporting of near-miss incidents and adverse events by medical institutions, as reports from participating institutions are the basis of this project. The JCQHC deeply appreciates the cooperation of the medical institutions that have been reporting near-miss incidents and adverse events and participating in the on-site visits. Participating institutions are encouraged to report near-miss incidents and adverse events in accordance with the project outline in order to provide readers of the annual report with appropriate information on near-miss incidents and adverse events occurring in Japan.

The 2007 Annual Report is based on previous reports. The current report basically consists of the contents of previous reports and includes tabulation based on previously published reporting dates. However, the tabulation of medical adverse events according to the date on which an event occurred or the occurrence of an event was reported and additional data concerning registered medical institutions that voluntarily participate in the project is also included. The 2007 annual report also includes the analysis of seven individual themes, medical adverse event information to be shared, medical safety information, and the cases used for the analyses of medical adverse events in past workshops and sample analyses. The JCQHC hopes that managers, people in charge of medical safety or safe use of drugs and medical devices and other healthcare providers at medical institutions will share the information provided in the annual report for promotion of medical safety at individual hospitals.

JCQHC will increase its efforts to enhance the content of project reports for the prevention of medical adverse events and the promotion of medical safety in Japan. Your understanding and cooperation is appreciated.

I Outline of Project to Collect Medical Near-Miss/Adverse Event Information

1 Background of Medical Near-Miss/Adverse Event Information Collection

Background of Near-Miss Information Collection

The Ministry of Health, Labour and Welfare (MHLW) started "Network for Medical Safety Measures (Project to Collect Medical Near-Miss Information)" in October 2001 to analyze collected near-miss information and provide medical safety information and proposed preventive measures to parties concerned. In the initial project scheme, Organization for Pharmaceutical Safety and Research [OPSR; present Pharmaceuticals and Medical Devices Agency (PMDA)] collected medical near-miss information from participating medical institutions and reported to the MHLW of which study group was responsible for data tabulation and analysis. Medical near-miss information was collected in 10 reports in the previous scheme, and the MHLW published tabulated data to provide information to parties concerned based on the collected near-miss information(Note 1).

JCQHC took over Project to Collect Medical Near-Miss Information from Organization for Pharmaceutical Safety and Research [OPSR; present Pharmaceuticals and Medical Devices Agency (PMDA)] in 2004 and has conducted the 11th and subsequent reports since. Tabulated data and analyses are posted on JCQHC website(Note 2).

Background on the Collecting of Medical Adverse Event Information

A Report on the "Comprehensive Promotion Measures for Medical Treatment Safety"(Note 3) was compiled and published in April 2002 by the Investigation Committee for Medical Treatment Safety Measures, a body established by the Ministry of Health, Labour and Welfare. Commenting on the governmental network service for medical treatment safety (a project to collect medical near-miss information) which began in October 2001, the report stated, "In analyzing such cases, there is a need to study the building of a system to collect even more accurate analytical and study results, as well as the results of analyzing and studying the improvement measures, from an even greater number of institutions." The report also touched on medical adverse event cases and, while introducing opinions that called for utilizing the collecting and analysis of such case examples and establishing a system for enforcing surveys and reports, it pointed out the need to conduct further studies that include legal issues associated with the reporting of medical malpractice.

The MHLW subsequently issued a ministerial ordinance to partially revise the enforcement regulations for Health Service Law (Note 4) on September 21, 2004 to require advanced treatment facilities to report medical adverse events. The JCQHC was registered at the MHLW on October 1, 2004 and became a Minister's recognized organization to analyze medical adverse event data in accordance with the said ordinance.

(Note 1) See "Medical Safety Measures" on the MHLW website (http://www.mhlw.go.jp/topics/bukyoku/isei/i-anzen/index.html).

(Note 2) See "Project to Collect, Analyze, and Provide Medical Near-Miss/Adverse Event Information" on the JCQHC website (http://jcqhc.or.jp/html/accident.htm#med-safe).

(Note 3) Issues such as "safety measures at medical institutions," "Improvement of Safety for Drugs and Medical Devices" "education and training to enhance medical safety," and "establishing an environment to promote medical safety" were included in the proposals for "Comprehensive Measures to Promote Medical Safety."
See "Reports" in "Medical Safety Measures" page on the MHLW website (http://www.mhlw.go.jp/topics/bukyoku/isei/i-anzen/houkoku/index.html).

(Note 4) MHLW Ordinance No. 133

Background of JCQHC Project

The Center for Medical Adverse Event Prevention (currently the Division of Adverse Event Prevention)[(Note 1)] was established within the JCQHC on July 1, 2004, and the statutory collection of near-miss/adverse event information started on October 7, 2004. The Department comprehensively analyzes medical near-miss/adverse event information and, based on the policies of Management Committee[(Note 2)] of the Center, prepares reports through summaries of Comprehensive Evaluation Panel[(Note 3)] composed of specialists. The JCQHC has been providing reports prepared by the Center for Medical Adverse Event Prevention to participating medical institutions, relevant organizations, and administrative organizations as well as posting them on its website[(Note 4)] for public review.

(Note 1) Center for Medical Adverse Event Prevention was renamed the Department of Medical Adverse Event Prevention on April 1, 2008 due to the organizational reform.

(Note 2) Consisting of experts in general medicine or medical safety measures and general advisors, Management Committee develops operational policies of Center for Medical Adverse Event Prevention and evaluates its activities.

(Note 3) Consisting of experts from each field, Comprehensive Evaluation Panel reviews and evaluates reports comprehensively as well as provides technological advice for analytical methods.

(Note 4) See “Project to Collect, Analyze, and Provide Medical Near-Miss/Adverse Event Information” on the JCQHC website (http://jcqhc.or.jp/html/accident.htm#med-safe).

2 Outline of Project to Collect Medical Near-Miss/Adverse Event Information and Organizational Structure

The project consists of Project to Collect, Analyze, and Provide Medical Adverse Event Information and Project to Collect, Analyze, and Provide Medical Near-Miss Information. The outline of each project is described below.

[1] Outline of Project to Collect, Analyze, and Provide Medical Adverse Event Information

(1) Objective

To collect, analyze, and provide medical adverse event information reported by medical institutions subject to reporting requirement, and for voluntarily participating medical institutions to widely share information useful to develop medical safety measures with medical institutions in general and to provide information to the general public in order to further promote medical safety measures.

(2) Collection of medical adverse event information

1. Medical institutions

Information is collected at the following medical institutions subject to reporting requirement, as well as voluntarily participating medical institutions.

i) Medical institutions subject to reporting requirement(Note 1)

A. National Centers and National Sanatoriums for Hansen's disease
B. Hospitals run by the National Hospital Organization
C. Hospitals affiliated with universities governed by the School Education Law (not including their branch hospitals)
D. Advanced treatment facilities

ii) Voluntarily participating medical institutions

Medical institutions other than those subject to reporting requirement may participate in the project by providing their organizational information required by the JCQHC to register.

(Note1) The MHLW issued a ministerial ordinance to partially revise the enforcement regulations for Health Service Law (MHLW Ordinance No. 133, 2004) on September 21, 2004 to require National Centers, National Sanatoriums for Hansen's disease, hospitals run by National Hospital Organization, hospitals affiliated with universities (not including their branch hospitals) governed by the School Education Law No. 22, 1947 (not including their branch hospitals), and advanced treatment facilities to report medical adverse events.

2. Medical adverse event information to be reported

The following medical adverse event information is subject to reporting.

A. Apparent error in treatment or management that resulted in patient's death or mental or physical disability or required unexpected treatment, treatment to an unexpected extent, or other medical procedure

B. Unapparent error in treatment or management that resulted in patient's death or mental or physical disability or required unexpected treatment, treatment to an unexpected extent, or other medical procedure (including events possibly associated with treatment or management provided; limited to unexpected events)

C. Other than those described in A and B, information conducive to prevention of medical adverse events and their recurrence at medical institutions

3. Reporting method and due date

Medical adverse events should be reported on the exclusive reporting web page via Internet (SSL communication). As a general rule, a medical adverse event must be reported within 2 weeks of occurrence or within 2 weeks after identifying the occurrence.

4. Report form

Code choice reporting and descriptive reporting are available. In code choice reporting, applicable codes are checked or selected from pull-down lists. In descriptive reporting, descriptions are provided in the relevant fields.

In this report, an answer with no chosen code is referred as "no choice" and a field with no description entry as "no description."

(3) Analysis and publication of medical adverse event information

1. Tabulation

Performed by the JCQHC Division of Adverse Event Prevention

2. Publication of tabulation/analysis

Information is provided to relevant parties and the public in this report and through the JCQHC website(Note1).

(Note 1) See "Project to Collect, Analyze, and Provide Medical Near-Miss/Adverse Event Information" on the JCQHC website (http://jcqhc.or.jp/html/accident.htm#med-safe).

(4) Education and training in the collection of information on medical adverse events

"The Third Workshop on Analysis and Reporting of Medical Adverse Event Information" and "The Fourth Workshop on Analysis and Reporting of Medical Adverse Event Information" were held to help the registered medical institutions gain deeper understanding of the current medical adverse event information reporting system, techniques for analyzing the causes and underlying factors, and development of preventive measures.

1. Outline of the workshops

i) Date

a) The third workshop: February 3 (Sat.) and February 4 (Sun.), 2007 (2 days)
b) The fourth workshop: August 10 (Fri.) and August 11 (Sat.), 2007 (1.5 days)

ii) Participants

a) Heads of the medical safety management divisions at the registered medical institutions
b) People responsible for the management of medical safety and those with similar responsibilities at the registered medical institutions

iii) Details

a) Lectures: Medical adverse event information reporting system of JCQHC
Techniques for medical adverse event analysis (RCA)
b) Exercise: Practical learning through simulated case analyses and reporting

2. Attendance

i) The third workshop: 100 attendees

ii) The fourth workshop: 69 attendees

[2] Outline of Project to Collect, Analyze, and Provide Medical Near-Miss Information

(1) Objective

To collect, analyze, and provide medical near-miss information reported by voluntarily participating medical institutions to widely share information useful to develop medical safety measures with medical institutions in general and to provide information to the general public in order to further promote medical safety measures

(2) Collection of medical near-miss information

1. Medical institutions

Information is collected at voluntarily participating medical institutions.

2. Medical near-miss information to be reported

i) Medical near-miss information subject to reporting

A. Potentially erroneous medical procedures identified before actually performed for patients
B. Erroneous medical procedures performed but did not affect patients' conditions
C. Erroneous medical procedures performed, and patients required minor procedure/treatment as the result

ii) Medical institutions where "general coded information" and/or "descriptive information" are collected

Medical near-miss information consists of "general coded information" and "descriptive information" that are collected separately at different medical institutions. The difference in the nature of information and medical institutions where such information is collected is described below.

A. General coded information
Information on any and all medical near-miss incidents (e.g. situation and details) occurred during a given collection period will be collected in the form of code table-based report.
General coded information will be collected only at designated medical institutions(Note 1).

B. Descriptive information
Regarding near-miss incidents of which information should be provided to others in general in light of promoting medical safety measures, causes and proposed corrective measures will be reported in the form of a "descriptive information" report.
"Descriptive information" described in a) and b) below will be collected from all registered medical institutions.

(Note 1) Designated medical institutions are medical institutions participating in Project to Collect Medical Near-Miss Information and agreed to cooperate to provide "general coded information." As of December 31, 2007, 240 institutions have been designated by avoiding biases in institution size and location.

a) Medical near-miss cases covered by themes specified for individual collection periods(Note 1) (Fig. I-2-1)

b) Medical near-miss cases to be collected regularly regardless of periodic themes described in a)

- Cases in which patients would have died or had serious conditions if actions in question had been done or occurrence of events in question had been unnoticed
- Cases involving names or dosage forms of newly introduced drugs; cases involving drugs, medical devices/equipment such as errors in medical device operation(Note 2)
- Other cases that persons responsible for safety management at medical institutions examined thoroughly and determined that reporting of such cases would be conducive to improvement of medical safety

Fig. I-2-1 Themes for Descriptive Information Specified for Individual Collection Periods

Collection period	Month of occurrence	Theme
23rd	2007 January to March	○ Cases related to insertion, placement and management of drainage tube (not including accidental removal and self-removal) ○ Cases related to the management of drugs brought by patients at the time of hospitalization ○ Cases related to infusion pump and syringe pump (reasons for early discovery, ideas and approaches for prevention should be described along with the pump model) ○ Cases involving pediatric patients
24th	April to June	○ Cases related to insertion, placement and management of drainage tube (not including accidental removal and self-removal) ○ Cases related to the management of drugs brought by patients at the time of hospitalization ○ Cases related to infusion pump and syringe pump (reasons for early discovery, ideas and approaches for prevention should be described along with the pump model) ○ Cases involving pediatric patients
25th	July to September	○ Cases related to the management of drugs brought by patients at the time of hospitalization ○ Cases related to infusion pump and syringe pump (reasons for early discovery, ideas and approaches for prevention should be described along with the pump model) ○ Cases involving pediatric patients ○ Cases of accidents occurring during rehabilitation training (involving a physical therapist, an occupational therapist or a speech therapist)
26th	October to December	○ Cases involving pediatric patients ○ Cases of accidents occurring during rehabilitation training (involving a physical therapist, an occupational therapist or a speech therapist) ○ Cases involving contraindicated medications (incompatibilities, contraindicated combinations, contraindications based on the disease, allergies) ○ Cases involving blood transfusion

3. Reporting method

(1) Web reporting and (2) reporting in a designated format (CSV format) are available. The reporting method will be selected by individual registered medical institutions at the time of registration.

(Note 1) Certain themes are specified for medical near-miss cases to be collected in individual collection period in order to analyze medical adverse events covered by specific themes.

(Note 2) Information such as drug (product) names and units is also collected in events associated with drugs, medical devices or other items.

4. Report form

Code choice reporting and descriptive reporting are available. In code choice reporting, applicable codes are checked or selected from pull-down lists. In descriptive reporting, descriptions are provided in relevant fields.

(3) Analysis and provision of medical near-miss information

1. Tabulation

Performed by the JCQHC Division of Adverse Event Prevention

2. Publication of tabulation/analysis

Provided to relevant parties and general public in reports and on the JCQHC website(Note 1) (Note 2).

(4) Education and training in the collection of medical near-miss incidents

The "Workshop on Collection, Analysis and Reporting of Medical Near-Miss Incidents" was held on Wednesday, December 12, 2007. The workshop provided leaders of medical safety management at the designated medical institutions with information on the current status of the Project to Collect Medical Adverse Event Information, the significance of understanding the analyzing of medical near-miss incidents and adverse events, and the learning of the analytical method (RCA).

1. Outline of the workshop

i) Attendees

A. Heads of Medical Safety Management division at the designated medical institutions
B. Medical safety managers and those involved in medical safety management at the designated medical institutions

ii) Details

A. Lectures: The Project to Collect Medical Near-Miss/Adverse Event Information
The method to analyze medical near-miss/adverse event cases (root cause analysis: RCA)

2. Attendance

108 attendees

(Note 1) See "Project to Collect Medical Near-Miss Information" on the JCQHC website (http://jcqhc.or.jp/html/accident.htm#med-safe).
(Note 2) See Medical Near-Miss (Important Cases) Information Database Development and Publication website (http://www2.hiyari-hatto.jp/hiyarihatto.index.jsp).

[3] Organizational Structure for Project to Collect Medical Near-Miss/Adverse Event Information

The following committees and divisions have been established in Center for Medical Adverse Event Prevention to maintain neutrality and fairness of a third-party organization to collect medical adverse event information and to promote smooth organizational operation.

(1) Management Committee

Consisting of 19 experts in general medicine or medical safety measures and general advisors (as of December 31, 2007), Management Committee develops operational policies of Center for Medical Adverse Event Prevention and evaluates its activities. Management Committee is established as a subcommittee specified in the JCQHC act of endowment.

(2) Expert divisions

A. Comprehensive Evaluation Panel

Consisting of 16 experts from various fields (as of December 31, 2007), Comprehensive Evaluation Panel reviews and evaluates reports (proposals) prepared by "Expert Analysis Groups" described below as well as provides technological advice for analytical methods.

B. Expert Analysis Groups

Consisting of medical experts involved in medical safety and safety management experts, Expert Analysis Groups review and analyze reported cases, develop corrective measures, and prepare reports (proposals) as well as medical safety information (proposal). Expert Analysis Groups also collect necessary information for analysis and development of corrective measures and conduct on-site visit. Currently about 20 members are participating in the activities of Expert Analysis Groups.

(3) Medical Adverse Event Prevention Division

Medical Adverse Event Prevention Division is in charge of Project to Collect Medical Near-Miss/Adverse Event Information.

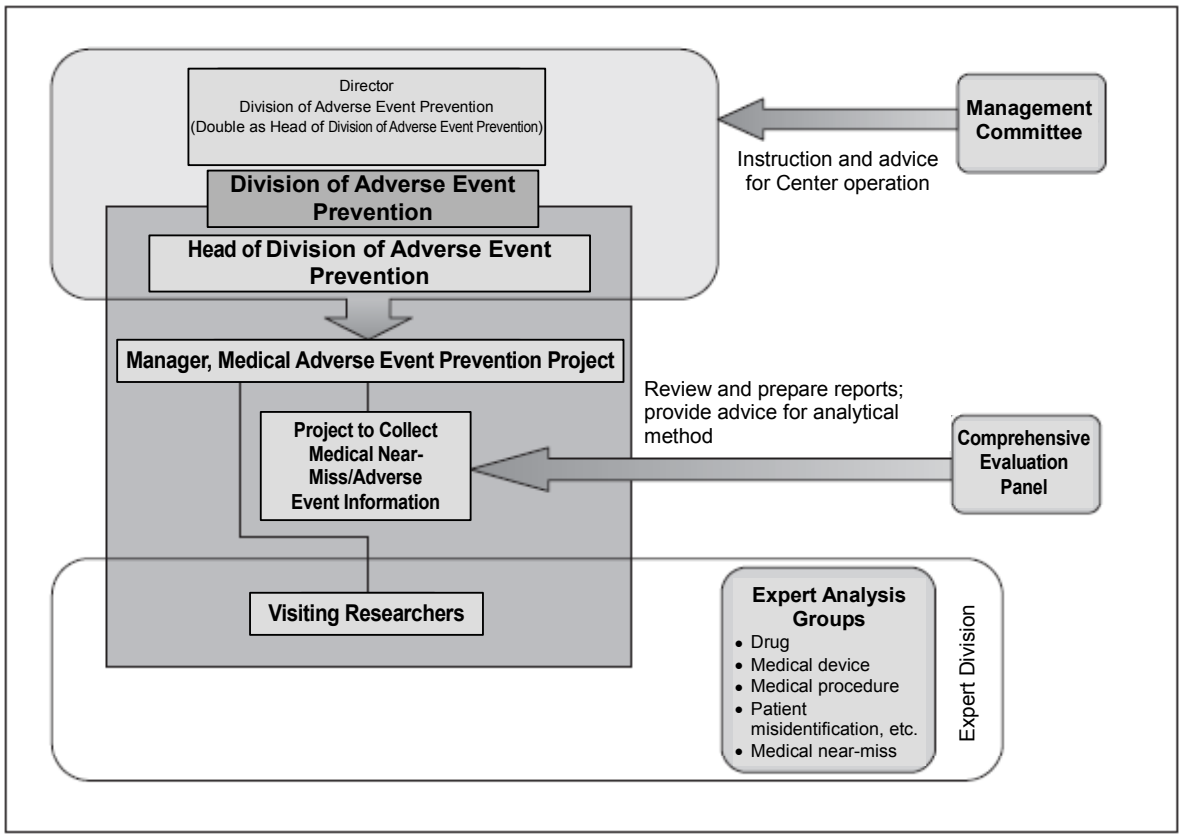
Consisting of staff with medical qualifications and visiting researchers, Division of Adverse Event Prevention receives medical near-miss/adverse event reports and other useful information for medical safety as well as prepares and publishes project reports. The Department also visits medical institutions with members of Expert Analysis Groups to collect further information as necessary.

[4] Organization for Data Analysis and Information Provision

Initial reports are processed by staff, visiting researchers, and members of Expert Analysis Groups bound by the confidentiality clause of Division of Adverse Event Prevention. Information contained in initial reports is anonymized by Department staff before being processed for analysis.

Expert Analysis Groups collect follow-up information, review published studies, and monitor activities of medical institutions making advanced efforts to prevent medical adverse events as necessary. Expert Analysis Groups prepare reports (proposals) containing results of comprehensive analysis of obtained information and submit them to Comprehensive Evaluation Panel. Comprehensive Evaluation Panel reviews submitted reports (proposals) from an expert point of view, prepares final reports, and publishes them as JCQHC reports and medical safety information.

Fig. I-3-2



II Current Reporting Status

1. Report on Collection, Analysis, and Provision of Medical Adverse Event Information

This annual report contains three types of tabulated information.

A. Details of information provided by medical institutions subject to reporting requirement (by month of report)
   Same tabulation as that published quarterly
B. Details of information provided by medical institutions subject to reporting requirement (by month of occurrence)
C. Details of information provided by voluntarily participating medical institutions (by month of report)
   Tabulation of information provided by all medical institutions participated in the project (medical institutions subject to reporting requirement and voluntarily participating medical institutions)

[1] Registered Medical Institutions

Medical adverse event information is provided by medical institutions subject to reporting requirement and voluntarily participating medical institutions whose participations are voluntary.

(1) Number of medical institutions subject to reporting requirement and registered medical institutions

The number of medical institutions participating in Project to Collect, Analyze, and Provide Medical Adverse Event Information as of December 31, 2007 is shown in Fig. II-1-1.

Fig. II-1-1 Number of Medical Institutions Subject to Reporting Requirement and voluntarily participating medical institutions

Mother body		Medical institutions subject to reporting requirement	Voluntarily participating medical institutions (Note)
Government	National University Corporation, etc	46	1
	National Hospital Organization	146	-
	Ministry of Health, Labour and Welfare (National Centers)	8	-
	Ministry of Health, Labour and Welfare (Sanatoriums for Hansen's Disease)	13	-
	Japan Labour Health and Welfare Organization	-	1
Municipality	Prefecture	2	7
	City/village	-	27
	Japan Association of Municipal and Prefectural Colleges and Universities	8	1
	Local independent administrative institutions	1	0
Mother body of public medical institution other than municipality	Japan Red Cross	-	49
	Saiseikai Imperial Gift Foundation	-	4
	National Welfare Federation of Agricultural Cooperatives	-	5
	National Health Insurance Association Federation		1
	All Japan Federation of Social Insurance Associations	-	36
	Employees' Pension Welfare Corporation	-	1
	Mutual Aid Associations and their associations	-	7
Corporation	School juridical organization	49	8
	Healthcare corporation	-	99
	Charitable organization	-	15
	Company	-	7
	Other corporation	-	5
Individual practitioner		-	11
Total		273	285

(Note) Voluntarily participating medical institutions are those participating in the project other than medical institutions subject to reporting requirement.

(2) Changes in number of registration of voluntarily participating medical institutions

Changes in the number of voluntarily participating medical institutions between January 1 and December 31, 2007 are shown below.

Fig. II-1-2 Number of Registrations of voluntarily participating medical institutions

	2007											
	January	February	March	April	May	June	July	August	September	October	November	December
Number of registered medical institutions	2	0	4	0	1	3	2	0	0	0	3	2
Number of rejected registrations	31	0	0	0	0	0	1	0	0	0	0	0
Accumulated total	271	271	275	275	276	279	280	280	280	280	283	285

[2] Changes in Number of Reports

(1) Number of monthly reports

The number of monthly reports made by medical institutions subject to reporting requirement and voluntarily participating medical institutions between January 1 and December 31, 2007 is shown below.

Fig. II-1-3 Number of Monthly Reports Made by Medical Institutions Subject to Reporting Requirement and voluntarily participating medical institutions

	2007												Total
	January	February	March	April	May	June	July	August	September	October	November	December	
Number of reports made by medical institutions subject to reporting requirement	80	117	74	85	128	96	95	108	100	138	124	121	1,266
Number of reports made by voluntarily participating medical institutions	8	11	19	35	29	7	15	17	9	6	12	11	179
Number of medical institutions subject to reporting requirement	273	273	273	273	273	274	274	274	273	273	273	273	-
Number of voluntarily participating medical institutions	271	271	275	275	276	279	280	280	280	280	283	285	-

(2) Medical adverse event reporting status

A. Reporting status of medical institutions subject to reporting requirement

Among medical institutions subject to reporting requirement as of December 31, 2007, the number of reporting medical institutions subject to reporting requirement and the number of reports made between January 1 and December 31, 2007 are shown in Fig. II-1-4 and those by bed size category in Fig. II-1-5. The tabulated number of reports made by medical institutions during the same period is shown Fig. II-1-6. Since there have been several changes in medical institutions sinceafter the start of the project including newly qualified reporting requirement or abolishment of medical institutions, medical institutions subject to reporting requirement have inconsistent numbers with other figures. As of December 31, 2007, the number of medical institutions subject to reporting requirement is 273 institutions, and the total number of beds is 144,736.

Fig. II-1-4 Number of Reporting Medical Institutions Subject to Reporting Requirement and Reports Made

Mother body		Number of registrations (As of December 31, 2007)	Number of reporting medical institutions	Number of reports
			January to December, 2007	January to December, 2007
Government	National University Corporation	46	39	281
	National Hospital Organization	146	109	592
	National Centers	8	7	56
	Sanatoriums for Hansen's Disease	13	5	15
Municipality	Prefecture	11	7	31
	City/village			
	Japan Association of Municipal and Prefectural Colleges and Universities			
	Local independent administrative institutions			
Corporation	School juridical organization	49	26	291
(Re-posted)	Advanced treatment hospital	82	70	585
Total		273	193	1,266

(Note) Total number of beds at medical institutions subject to reporting requirement as of December 31, 2007 is 144,736.

Fig. II-1-5 Number of Reporting Medical Institutions Subject to Reporting Requirement and Reports Made by Bed Size

Bedsize category	Number of medical institutions	Number of reporting medical institutions	Reports made	Potential of residual disability (Note 1)						
		January to December 2007	January to December 2007	January to December 2007						
				Death	High	Low	None (Note 2)	No disability (Note 2)	Unknown (Note 3)	Total
0 - 19 beds	0	0	0	0	0	0	0	0	0	0
20 - 49 beds	13	1	15	0	0	6	2	6	1	15
50 - 99 beds	6	0	0	0	0	0	0	0	0	0
100 - 149 beds	4	2	3	0	0	0	1	2	0	3
150 - 199 beds	8	6	22	0	3	12	4	1	2	22
200 - 249 beds	12	7	14	0	1	8	3	1	1	14
250 - 299 beds	18	14	53	6	2	27	9	2	7	53
300 - 349 beds	25	17	103	10	6	40	16	13	18	103
350 - 399 beds	18	14	69	9	5	30	6	4	15	69
400 - 449 beds	25	18	109	7	15	54	20	4	9	109
450 - 499 beds	14	9	38	9	4	7	11	7	0	38
500 - 549 beds	13	10	66	7	4	36	13	2	4	66
550 - 599 beds	12	9	69	12	4	34	8	4	7	68
600 - 649 beds	26	18	131	23	22	58	16	3	9	131
650 - 699 beds	8	6	49	4	4	20	10	9	2	49
700 - 749 beds	12	11	66	9	7	26	8	0	16	66
750 - 799 beds	3	3	6	1	4	1	0	0	0	6
800 - 849 beds	12	9	67	5	9	25	16	2	10	67
850 - 899 beds	5	5	36	2	6	18	4	4	2	36
900 - 999 beds	9	8	38	10	3	11	7	3	4	38
1000 beds or more	30	26	312	28	64	146	33	19	22	312
Total	273	193	1,266	142	163	559	187	86	129	1,266

(Note 1) There is not always a causal relationship between the occurrence of medical adverse event as well as presence or absence of after-the-fact negligence and "potential of residual disability."

(Note 2) "None" and "No disability" were additional categories included as of July.

(Note 3) "Unknown" includes cases in which the outcome of a patient was not confirmed by the due date (within 2 weeks) and warning cases that did not have any impact on patients.

Fig. II-1-6 Number of Medical Institutions Subject to Reporting Requirement by Number of Reports

Number of reports	Number of reporting medical institutions
	January to December, 2007
0	80
1	29
2	39
3	15
4	24
5	12
6	8
7	13
8	5
9	6
10	11
11 to 20	24
21 to 30	5
31 to 40	0
41 to 50	1
51 to 100	1
101 to 150	0
151 to 200	0
200 or more	0
Total	273

B. Reporting status of voluntarily participating medical institutions

The tabulated number of reporting medical institutions and reports by mother body between January 1 and December 31, 2007 in the voluntarily participating medical institutions as of December 31, 2007 are shown in Fig. II-1-7.

Fig. II-1-7 Number of Reporting voluntarily participating medical institutions and Number of Reports

Mother body	Number of registrations (As of December 31, 2007)	Number of reporting medical institutions	Number of reports
		January to December 2007	January to December 2007
Government	2	0	0
Municipality	35	10	37
Public medical institution	103	13	33
Corporation	134	26	109
Individual practitioner	11	0	0
Total	285	49	179

[3] Details of Reports Made by Medical Institutions Subject to Reporting Requirement (by Month of Report)

The quarterly tabulation of reports made by medical institutions subject to reporting requirement between January 1 and December 31, 2007 is shown below.

Fig. II-1-8 Month of Occurrence

Month of occurrence		Number of events
2006	November and before	92
	December	63
2007	January	87
	February	80
	March	81
	April	102
	May	109
	June	110
	July	114
	August	101
	September	95
	October	94
	November	99
	December	39
Total		1,266

Fig. II-1-9 Day of Occurrence and Weekday/Holiday Category

Day of occurrence	Weekday					Holiday					Aggregate total
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
Mon.	36	51	36	61	184	1	2	3	9	15	199
Tue.	54	50	57	59	220	1	1	1	0	3	223
Wed.	37	55	53	64	209	1	0	1	0	2	211
Thu.	51	51	60	81	243	0	2	1	0	3	246
Fri.	42	44	39	53	178	3	3	0	3	9	187
Sat.	7	11	4	3	25	20	18	17	27	82	107
Sun.	0	0	1	0	1	18	21	30	23	92	93
Total	227	262	250	321	1,060	44	47	53	62	206	1,266

Fig. II-1-10 Time of Occurrence

Time of occurrence	Number of events				
	January to March	April to June	July to September	October to December	Total
0:00 – before 2:00	10	11	11	20	52
2:00 – before 4:00	9	11	9	14	43
4:00 – before 6:00	11	15	20	12	58
6:00 – before 8:00	17	20	10	22	69
8:00 – before 10:00	15	26	27	44	112
10:00 – before 12:00	38	49	44	69	200
12:00 – before 14:00	35	32	42	36	145
14:00 – before 16:00	37	44	32	63	176
16:00 – before 18:00	33	30	31	38	132
18:00 – before 20:00	25	28	29	16	98
20:00 – before 22:00	20	18	17	15	70
22:00 – before 24:00	12	13	15	17	57
Time unknown	9	12	16	17	54
Total	271	309	303	383	1,266

Fig. II-1-11 Patient Age

Number of patients	Patient age	Number of events					Inpatient				
		January to March	April to June	July to September	October to December	Aggregate total	January to March	April to June	July to September	October to December	Aggregate total
1 patient	0 to 9	20	26	13	20	79	18	22	11	19	70
	10s	6	9	8	9	32	6	8	7	8	29
	20s	12	9	10	10	41	11	8	6	9	34
	30s	21	17	15	16	69	21	16	10	14	61
	40s	13	18	26	31	88	12	16	24	30	82
	50s	32	35	34	48	149	28	32	33	44	137
	60s	52	47	61	77	237	52	41	56	70	219
	70s	63	90	83	84	320	58	83	79	78	298
	80s	45	47	44	76	212	42	44	44	72	202
	90 or above	5	11	8	11	35	5	11	7	9	32
	Total	269	309	302	382	1,262	253	281	277	353	1,164
2 or more (Note)	Total	2	0	1	1	4	2	0	1	0	3
Aggregate total		271	309	303	383	1,266	255	281	278	353	1,167

(Note) Category "2 or more" was added for the check box of "Number of patients" since July 2006.

Fig. II-1-12 Sex of Patients

Number of patients	Sex	Number of events				
		January to March	April to June	July to September	October to December	Total
1 patient	Male	133	166	166	182	647
	Female	136	143	136	200	615
	Total	269	309	302	382	1,262
2 or more	Total	2	0	1	1	4
Aggregate total		271	309	303	383	1,266

Fig. II-1-13 Inpatient/Outpatient Status and Duration of Hospital Stay

Inpatient/outpatient status		Number of events				
		January to March	April to June	July to September	October to December	Total
Inpatient	Duration: 0 to 31 days	171	178	183	247	779
	Duration: 32 days or longer	80	94	93	106	373
	No choice	4	9	2	0	15
	Total	255	281	278	353	1,167
Outpatient	Initial visit	0	1	5	2	8
	Follow-up visit	16	27	20	28	91
	Total	16	28	25	30	99
Aggregate total		271	309	303	383	1,266

Fig. II-1-14 Person Who Identified Event

Person who identified event	Number of events				
	January to March	April to June	July to September	October to December	Total
Medical staff	225	252	253	330	1,060
Patient himself/herself	14	7	11	14	46
Patient's family/caregiver	12	19	11	9	51
Other patient	6	11	9	10	36
Others	14	20	19	20	73
Total	271	309	303	383	1,266

Fig. II-1-15 Job Title of Person Involved

Job title of person involved (Note)	Number of events				
	January to March	April to June	July to September	October to December	Total
Doctor	193	199	229	278	899
Dentist	2	4	4	12	22
Nurse	160	205	234	259	858
Assistant nurse	7	5	3	5	20
Pharmacist	0	4	2	3	9
Clinical engineer	0	2	1	2	5
Midwife	0	5	3	0	8
Nursing assistant	2	2	1	0	5
Radiological technologist	1	2	3	4	10
Clinical technologist	0	0	1	0	1
Physical therapist (PT)	0	0	2	7	9
Occupational therapist (OT)	0	1	0	0	1
Medical technologist	0	0	0	0	0
Dental hygienist	0	1	0	2	3
Others	22	26	9	14	71
Total	387	456	492	586	1,921

(Note) Person involved is a person determined by the medical institution to have been involved in the event occurred; more than 1 person may have been involved.

Fig. II-1-16 Years of Experience of Person Involved by Job Title (Doctor, Dentist, Nurse, Pharmacist)

Years of experience × Job title of person involved(Note)	Doctor					Dentist				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
0 year	6	3	4	4	17	1	0	0	0	1
1 year	1	0	10	6	17	0	0	0	2	2
2 years	7	1	7	13	28	0	1	0	1	2
3 years	6	7	9	14	36	0	0	0	1	1
4 years	5	11	12	13	41	0	0	0	0	0
5 years	10	5	16	16	47	1	0	1	0	2
6 years	14	14	13	13	54	0	0	0	1	1
7 years	10	14	14	12	50	0	0	0	0	0
8 years	14	6	13	9	42	0	0	0	0	0
9 years	11	11	10	14	46	0	1	0	0	1
10 years	12	18	16	18	64	0	0	0	0	0
11 to 20 years	73	87	73	105	338	0	0	2	0	2
21 to 30 years	19	19	27	38	103	0	2	0	4	6
30 years or longer	5	3	5	3	16	0	0	1	3	4
Total	193	199	229	278	899	2	4	4	12	22

(Note) Person involved is a person determined by the medical institution to have been involved in the event occurred; more than 1 person may have been involved.

Nurse					Pharmacist				
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
16	12	16	25	69	0	0	0	1	1
18	20	22	23	83	0	1	0	1	2
17	23	23	24	87	0	1	0	0	1
9	14	17	20	60	0	0	1	0	1
14	11	18	8	51	0	0	0	0	0
9	7	13	10	39	0	0	1	0	1
4	7	12	19	42	0	1	0	0	1
6	6	9	13	34	0	0	0	0	0
5	9	7	2	23	0	0	0	0	0
6	6	6	8	26	0	0	0	0	0
8	11	8	4	31	0	0	0	0	0
30	43	39	45	157	0	1	0	0	1
15	27	35	50	127	0	0	0	1	1
3	9	9	8	29	0	0	0	0	0
160	205	234	259	858	0	4	2	3	9

Fig. II-1-17 Number of Years Person Involved (Doctor, Dentist, Nurse, Pharmacist) Has Been Working at Current Department

Number of years at current department × Job title of person involved(Note)	Doctor					Dentist				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
0 year	33	29	69	69	200	1	0	0	3	4
1 year	25	29	36	43	133	0	0	0	0	0
2 years	17	14	17	36	84	0	1	0	2	3
3 years	11	17	21	20	69	0	0	0	0	0
4 years	10	19	22	21	72	1	0	0	0	1
5 years	13	10	12	8	43	0	0	1	0	1
6 years	15	15	9	14	53	0	0	1	0	1
7 years	10	10	10	10	40	0	0	0	0	0
8 years	9	8	3	8	28	0	0	0	0	0
9 years	7	5	4	7	23	0	1	0	0	1
10 years	6	11	5	7	29	0	0	0	0	0
11 to 20 years	28	31	16	32	107	0	1	1	2	4
21 to 30 years	9	1	5	2	17	0	1	1	2	4
30 years or longer	0	0	0	1	1	0	0	0	3	3
Total	193	199	229	278	899	2	4	4	12	22

(Note) Person involved is a person determined by the medical institution to have been involved in the event occurred; more than 1 person may have been involved.

Nurse					Pharmacist				
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
50	52	52	67	221	0	1	1	0	2
34	50	55	57	196	0	2	0	1	3
24	34	40	43	141	0	0	0	1	1
14	28	34	46	122	0	0	1	0	1
13	12	20	10	55	0	1	0	0	1
11	6	16	12	45	0	0	0	0	0
1	6	3	10	20	0	0	0	0	0
2	4	4	4	14	0	0	0	0	0
4	2	3	1	10	0	0	0	0	0
2	3	2	2	9	0	0	0	0	0
1	1	1	1	4	0	0	0	0	0
4	6	4	6	20	0	0	0	0	0
0	1	0	0	1	0	0	0	1	1
0	0	0	0	0	0	0	0	0	0
160	205	234	259	858	0	4	2	3	9

Fig. II-1-18 Working Hours (in week previous to event) (Note 1) of Person Involved (Doctors) (Note 2)

Working hours	January to March	April to June	July to September	October to December	January to December
<0 to 8 hours	1	5	3	3	12
<8 to 16 hours	1	2	0	1	4
<16 to 24 hours	1	1	0	0	2
<24 to 32 hours	3	4	0	0	7
<32 to 40 hours	47	39	3	9	98
<40 to 48 hours	55	56	65	50	226
<48 to 56 hours	27	25	33	31	116
<56 to 64 hours	20	33	46	24	123
<64 to 72 hours	15	14	17	26	72
<72 to 80 hours	3	6	6	8	23
<80 to 88 hours	11	5	10	8	34
<88 to 96 hours	4	1	6	1	12
96 hours or more	3	4	3	9	19
Unknown	2	4	37	108	151
Total	193	199	229	278	899
Average working hours (not including unknown/no choice)	49.7	48.1	54.4	55.3	51.7

(Note 1) The working hours may include not only in-hospital but also out-of-hospital working hours.

(Note 2) The person involved is a person who is determined to be related to the relevant event by medical institutions and may include part-time staff. The person involved also may give multiple answers.

Fig. II-1-19 Working Hours (in week previous to event) (Note 1) of Person Involved (Nurses) (Note 2)

Working hours	January to March	April to June	July to September	October to December	January to December
<0 to 8 hours	4	2	0	1	7
<8 to 16 hours	4	2	6	0	12
<16 to 24 hours	4	9	5	2	20
<24 to 32 hours	13	14	8	25	60
<32 to 40 hours	51	42	71	64	228
<40 to 48 hours	70	117	111	100	398
<48 to 56 hours	11	12	19	17	59
<56 to 64 hours	2	7	1	2	12
<64 to 72 hours	0	0	0	0	0
<72 to 80 hours	0	0	0	0	0
<80 to 88 hours	1	0	0	0	1
<88 to 96 hours	0	0	0	0	0
96 hours or more	0	0	0	0	0
Unknown	0	0	13	48	61
Total	160	205	234	259	858
Average working hours (not including unknown/no choice)	36.1	37.5	37.1	36.7	36.9

(Note 1) The working hours may include not only in-hospital but also out-of-hospital working hours.

(Note 2) The person involved is a person who is determined to be related to the relevant event by medical institutions and may include part-time staff. The person involved also may give multiple answers.

Fig. II-1-20 Number of Night Shifts (in week previous to event) of Person Involved (Doctors)

Number of night shifts	January to March	April to June	July to September	October to December	January to December
Zero	64	76	97	109	346
1 time	65	62	80	88	295
2 times	11	12	21	25	69
3 times	6	3	5	4	18
4 times	1	0	0	1	2
5 times	1	0	0	1	2
6 times	0	0	0	0	0
7 times	0	1	0	0	1
Unknown	45	45	26	50	166
Total	193	199	229	278	899
Average number of night shifts (not including unknown/no choice)	0.77	0.66	0.68	0.70	0.70

Fig. II-1-21 Number of Night Shifts (in week previous to event) of Person Involved (Nurses)

Number of night shifts	January to March	April to June	July to September	October to December	January to December
Zero	27	42	39	41	149
1 time	37	48	72	87	244
2 times	74	79	84	100	337
3 times	16	25	25	20	86
4 times	2	3	4	4	13
5 times	0	1	2	0	3
6 times	0	0	0	0	0
7 times	0	0	0	0	0
Unknown	4	7	8	7	26
Total	160	205	234	259	858
Average number of night shifts (not including unknown/no choice)	1.54	1.51	1.51	1.44	1.49

Fig. II-1-22 Summary of Event

Summary of event	January to March		April to June		July to September		October to December		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Ordering	0	0.0	1	0.3	0	0.0	3	0.8	4	0.3
Drug	15	5.5	19	6.1	19	6.3	24	6.3	77	6.1
Blood transfusion	2	0.7	1	0.3	0	0.0	0	0.0	3	0.2
Treatment/procedure	83	30.6	105	34.0	80	26.4	111	29.0	379	29.9
Medical equipment, etc.	23	8.5	22	7.1	47	15.5	35	9.1	127	10.0
Medical device	6	2.2	7	2.3	21	6.9	11	2.9	45	3.6
Drainage tube or other tube	17	6.3	14	4.5	25	8.3	21	5.5	77	6.1
Dental equipment	0	0.0	1	0.3	1	0.3	3	0.8	5	0.4
Examination/test	12	4.4	15	4.9	10	3.3	9	2.4	46	3.6
Nursing care	88	32.5	107	34.6	101	33.3	145	37.9	441	34.8
Others	48	17.7	39	12.6	46	15.2	56	14.6	189	14.9
Total	271	100.0	309	100.0	303	100.0	383	100.0	1,266	100.0

Fig. II-1-23 Potential of Residual Disability

Potential of Residual Disability (Note 1)	January to March		April to June		July to September		October to December		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Death	32	11.8	27	8.7	31	10.2	52	13.6	142	11.2
High	44	16.2	36	11.7	39	12.9	44	11.5	163	12.9
Low	153	56.5	194	62.8	98	32.3	114	29.8	559	44.2
None(Note 1)	-	-	-	-	79	26.1	108	28.2	187	14.8
No disability(Note 2)	-	-	-	-	35	11.6	51	13.3	86	6.8
Unknown(Note 3)	42	15.5	52	16.8	21	6.9	14	3.7	129	10.2
Total	271	100.0	309	100.0	303	100.0	383	100.0	1,266	100.0

(Note 1) "Potential of residual disability" is not necessarily associated with occurrence of event or negligence.

(Note 2) "None" and "No disability" were additional categories included as of July.

(Note 3) "Unknown" includes indefinite outcome at the time of reporting (within 2 weeks) and events of warning that did not affect patients' conditions in any way.

Fig. II-1-24 Intensity of Treatment(Note 1)

Intensity of treatment	July to September		October to December		Total	
	Number	%	Number	%	Number	%
Intensive treatment(Note 2)	150	49.5	196	51.2	346	50.4
Minor treatment	118	38.9	153	39.9	271	39.5
No treatment	35	11.6	34	8.9	69	10.1
Total	303	100.0	383	100.0	686	100.0

(Note 1) "Intensity of treatment" data has been collected since July.

(Note 2) See Reference 1 of HPB Notification No. 0921001 (September 21, 2004).

Fig. II-1-25 Place of Occurrence

Place of Occurrence	January to March		April to June		July to September		October to December		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Outpatient examination room	5	1.8	10	3.2	10	3.3	10	2.6	35	2.8
Outpatient treatment room	2	0.7	3	1.0	2	0.7	4	1.0	11	0.9
Outpatient lobby	2	0.7	3	1.0	1	0.3	0	0.0	6	0.5
Emergency room	1	0.4	2	0.6	3	1.0	1	0.3	7	0.6
Critical care center	0	0.0	2	0.6	5	1.7	0	0.0	7	0.6
Patient room	132	48.7	150	48.5	136	44.9	168	43.9	586	46.3
Ward treatment room	2	0.7	6	1.9	7	2.3	6	1.6	21	1.7
Operation room	46	17.0	35	11.3	38	12.5	53	13.8	172	13.6
ICU	8	3.0	4	1.3	11	3.6	8	2.1	31	2.4
CCU	0	0.0	2	0.6	1	0.3	0	0.0	3	0.2
NICU	0	0.0	1	0.3	0	0.0	2	0.5	3	0.2
Examination room	10	3.7	4	1.3	4	1.3	5	1.3	23	1.8
Catheterization laboratory	4	1.5	9	2.9	11	3.6	13	3.4	37	2.9
Radiotherapy room	2	0.7	5	1.6	4	1.3	4	1.0	15	1.2
Radiography room	2	0.7	3	1.0	8	2.6	5	1.3	18	1.4
Radioactive scanning room	0	0.0	1	0.3	0	0.0	0	0.0	1	0.1
Dialysis room	0	0.0	0	0.0	0	0.0	2	0.5	2	0.2
Delivery room	0	0.0	1	0.3	2	0.7	2	0.5	5	0.4
Rehabilitation room	0	0.0	0	0.0	1	0.3	2	0.5	3	0.2
Restroom	9	3.3	10	3.2	13	4.3	7	1.8	39	3.1
Hallway	8	3.0	8	2.6	10	3.3	17	4.4	43	3.4
Bathroom	4	1.5	8	2.6	5	1.7	6	1.6	23	1.8
Stairway	0	0.0	1	0.3	0	0.0	1	0.3	2	0.2
Unknown	6	2.2	2	0.6	4	1.3	9	2.4	21	1.7
Others	28	10.3	39	12.6	27	8.9	58	15.1	152	12.0
Total	271	100.0	309	100.0	303	100.0	383	100.0	1,266	100.0

Fig. II-1-26 Clinical Department

Clinical Department (Note)	January to March		April to June		July to September		October to December		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Internal medicine	26	8.3	22	5.9	28	7.3	33	6.9	109	7.1
Anesthesiology	10	3.2	7	1.9	7	1.8	13	2.7	37	2.4
Cardiovascular medicine	21	6.7	23	6.2	24	6.3	35	7.4	103	6.7
Neurology	11	3.5	12	3.2	12	3.1	8	1.7	43	2.8
Respiratory tract medicine	12	3.8	19	5.1	19	4.9	28	5.9	78	5.1
Gastrointestinal medicine	16	5.1	29	7.8	23	6.0	39	8.2	107	6.9
Hematology	5	1.6	7	1.9	5	1.3	6	1.3	23	1.5
Circulatory surgery	6	1.9	2	0.5	1	0.3	2	0.4	11	0.7
Allergy	0	0.0	0	0.0	1	0.3	1	0.2	2	0.1
Rheumatism	0	0.0	4	1.1	0	0.0	1	0.2	5	0.3
Pediatrics	11	3.5	22	5.9	17	4.4	19	4.0	69	4.5
General surgery	17	5.4	24	6.5	35	9.1	44	9.3	120	7.8
Orthopedics	27	8.7	35	9.4	44	11.5	51	10.7	157	10.2
Plastic surgery	0	0.0	5	1.3	2	0.5	3	0.6	10	0.6
Cosmetic surgery	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Neurosurgery	15	4.8	15	4.0	26	6.8	26	5.5	82	5.3
Respiratory surgery	7	2.2	12	3.2	5	1.3	8	1.7	32	2.1
Cardiovascular surgery	15	4.8	8	2.2	11	2.9	15	3.2	49	3.2
Pediatric surgery	6	1.9	10	2.7	1	0.3	2	0.4	19	1.2
Pain clinic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dermatology	2	0.6	11	3.0	11	2.9	4	0.8	28	1.8
Urology	11	3.5	8	2.2	23	6.0	12	2.5	54	3.5
Venereology	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Proctology	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Gynecology/Obstetrics	7	2.2	4	1.1	6	1.6	7	1.5	24	1.6
Obstetrics	4	1.3	1	0.3	2	0.5	1	0.2	8	0.5
Gynecology	6	1.9	6	1.6	0	0.0	4	0.8	16	1.0
Ophthalmology	0	0.0	7	1.9	2	0.5	5	1.1	14	0.9
Otolaryngology	4	1.3	9	2.4	7	1.8	10	2.1	30	1.9
Psychosomatic medicine	0	0.0	1	0.3	1	0.3	0	0.0	2	0.1
Psychiatry	20	6.4	18	4.8	18	4.7	24	5.1	80	5.2
Rehabilitation	1	0.3	1	0.3	7	1.8	6	1.3	15	1.0
Radiology	8	2.6	9	2.4	10	2.6	10	2.1	37	2.4
Dentistry	3	1.0	5	1.3	0	0.0	7	1.5	15	1.0
Orthodontics	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pediatric dentistry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dental/oral surgery	1	0.3	4	1.1	3	0.8	12	2.5	20	1.3
Unknown	3	1.0	0	0.0	0	0.0	0	0.0	3	0.2
Others	37	11.9	32	8.6	33	8.6	39	8.2	141	9.1
Total	312	100.0	372	100.0	384	100.0	475	100.0	1,543	100.0

(Note) "Clinical department" may be more than one.

Fig. II-1-27 Cause of Event

Cause of Event (Note)	January to March		April to June		July to September		October to December		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Neglect to check	69	13.5	73	12.9	85	16.3	108	15.3	335	14.5
Neglect to observe	67	13.1	73	12.9	67	12.8	109	15.5	316	13.7
Misjudgment	65	12.7	81	14.3	57	10.9	110	15.6	313	13.6
Lack of knowledge	15	2.9	16	2.8	35	6.7	21	3.0	87	3.8
Deficiency of technique/skill	20	3.9	25	4.4	33	6.3	26	3.7	104	4.5
Delayed reporting	8	1.6	10	1.8	5	1.0	6	0.9	29	1.3
Under unusual physical condition	11	2.1	9	1.6	14	2.7	19	2.7	53	2.3
Under unusual psychological condition	4	0.8	7	1.2	7	1.3	11	1.6	29	1.3
System failure	13	2.5	15	2.7	12	2.3	16	2.3	56	2.4
Inadequate coordination	27	5.3	36	6.4	33	6.3	26	3.7	122	5.3
Inadequate documentation	5	1.0	6	1.1	1	0.2	5	0.7	17	0.7
Similarity in patient's appearance or name	1	0.2	1	0.2	0	0.0	0	0.0	2	0.1
Busy working condition	14	2.7	16	2.8	11	2.1	15	2.1	56	2.4
Problem in environment	16	3.1	14	2.5	7	1.3	23	3.3	60	2.6
Problem in the drug	6	1.2	2	0.4	4	0.8	4	0.6	16	0.7
Problem in medical device	8	1.6	14	2.5	8	1.5	10	1.4	40	1.7
Problem in other items	5	1.0	5	0.9	3	0.6	8	1.1	21	0.9
Problem in facility	16	3.1	11	1.9	7	1.3	12	1.7	46	2.0
Problem in education/training	20	3.9	26	4.6	10	1.9	24	3.4	80	3.5
Lack of explanation	45	8.8	33	5.8	21	4.0	26	3.7	125	5.4
Others	77	15.0	93	16.4	102	19.5	126	17.9	398	17.3
Total	512	100.0	566	100.0	522	100.0	705	100.0	2,305	100.0

(Note) "Cause of event" may be more than one.

Fig. II-1-28 Cases Encouraged to be Reported (Note)

Cases encouraged to be reported	July to September		October to December		Total	
	Number	%	Number	%	Number	%
Accident due to use of contaminated drug /material/biologic product	1	0.3	0	0.0	1	0.1
Death or disability due to nosocomial infection	1	0.3	0	0.0	1	0.1
Suicide or suicide attempt during hospitalization	7	2.3	9	2.3	16	2.3
Escape of inpatient	1	0.3	0	0.0	1	0.1
Burn during hospitalization	2	0.7	4	1.0	6	0.9
Electric shock during hospitalization	0	0.0	0	0.0	0	0.0
Death or disability of patient due to facility fire	0	0.0	0	0.0	0	0.0
Handing over of infant to wrong parent	0	0.0	1	0.3	1	0.1
Others	291	96.0	369	96.3	660	96.2
Total	303	100.0	383	100.0	686	100.0

(Note) Data on "cases encouraged to be reported" has been collected since July.

Fig. II-1-29 Establishment of Accident Investigation Board (Note 1)

Establishment of accident investigation board(Note 2)	July to September		October to December		Total	
	Number	%	Number	%	Number	%
Existing internal investigation board	54	17.3	69	17.1	123	17.2
Existing external investigation board	4	1.3	5	1.2	9	1.3
Internal investigation board to be established	1	0.3	3	0.7	4	0.6
External investigation board to be established	1	0.3	0	0.0	1	0.1
Existing medical safety committee is in charge of investigation	211	67.6	273	67.7	484	67.7
Currently under consideration and undecided	9	2.9	5	1.2	14	2.0
Others	32	10.3	42	10.4	74	10.3
No choice(Note 3)	0	0.0	6	1.5	6	0.8
Total	312	100.0	403	100.0	715	100.0

(Note 1) Data on "establishment of accident investigation board" has been collected since July.

(Note 2) Multiple choices acceptable

(Note 3) "No choice" means none of the checkboxes for "establishment of accident investigation board" was selected.

Fig. II-1-30 Summary of Event and Potential of Residual Disability

Summary of Event × Potential of Residual Disability	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Ordering	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3
Drug	0	1	0	2	3	1	1	2	2	6	10	11	2	3	26
Blood transfusion	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
Treatment/procedure	10	9	9	17	45	18	19	16	15	68	48	54	25	24	151
Medical equipment, etc.	4	3	6	3	16	4	1	3	5	13	13	13	15	9	50
Medical device	0	0	2	1	3	2	1	0	2	5	3	5	9	4	21
Drainage tube or other tube	4	3	4	2	13	2	0	3	3	8	10	8	5	5	28
Dental equipment	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Examination/test	0	0	1	1	2	3	4	0	0	7	7	10	3	3	23
Nursing care	6	6	6	18	36	12	10	14	12	48	57	78	35	56	226
Others	12	8	9	11	40	6	1	4	10	21	16	26	18	17	77
Total	32	27	31	52	142	44	36	39	44	163	153	194	98	114	559

(Note) "None" and "No disability" were additional categories included as of July.

None[(Note)]					No disability[(Note)]					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
-	-	0	1	1	-	-	0	0	0	0	0	0	0	0	4
-	-	9	7	16	-	-	6	8	14	4	6	0	2	12	77
-	-	0	0	0	-	-	0	0	0	0	0	0	0	0	3
-	-	18	33	51	-	-	9	19	28	7	23	3	3	36	379
-	-	11	13	24	-	-	6	3	9	2	5	6	2	15	127
-	-	1	2	3	-	-	6	1	7	1	1	3	1	6	45
-	-	10	9	19	-	-	0	1	1	1	3	3	1	8	77
-	-	0	2	2	-	-	0	1	1	0	1	0	0	1	5
-	-	3	2	5	-	-	2	3	5	2	1	1	0	4	46
-	-	30	44	74	-	-	8	12	20	13	13	8	3	37	441
-	-	8	8	16	-	-	4	6	10	14	4	3	4	25	189
-	-	79	108	187	-	-	35	51	86	42	52	21	14	129	1,266

Fig. II-1-31 Situation and Potential of Residual Disability

Situation (Note 1) × Potential of Residual Disability	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Related to drug															
Drug preparation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other drug preparations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcutaneous/intramuscular injection	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4
Intravenous injection	0	0	0	0	0	0	1	0	1	2	4	2	0	3	9
Arterial injection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peripheral intravenous drop	0	0	0	0	0	1	0	0	1	2	0	2	2	0	4
Central venous injection	0	0	0	0	0	0	0	0	0	0	2	1	0	1	4
Oral administration	0	0	0	1	1	0	0	0	0	0	2	1	0	1	4
Nose drop/eye drop/ear drop	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Other drug prescription/administration	0	0	0	1	1	0	0	0	0	0	0	1	0	0	1
Oral drug dispensing/management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Injection dispensing/management	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1
Dispensing/management, others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Related to blood transfusion															
Pre-transfusion testing	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Blood transfusion	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Blood transfusion, others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Related to treatment/procedure															
Craniotomy	1	0	0	1	2	1	0	2	0	3	2	1	2	0	5
Thoracotomy	1	1	0	0	2	2	1	0	1	4	1	0	1	1	3
Cardiotomy	0	1	0	0	1	1	0	0	1	2	1	1	0	0	2
Laparotomy	0	1	1	1	3	2	1	0	0	3	5	3	3	1	12
Extremities	0	0	0	0	0	1	0	0	0	1	0	0	1	1	2
Endoscopic surgery	0	0	0	1	1	1	4	2	1	8	3	2	2	6	13
Other surgery	0	1	0	3	4	2	1	3	3	9	5	7	6	2	20
Preparation for surgery	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1
Preoperative procedure	0	0	0	0	0	0	0	1	0	1	0	1	1	1	3
Postoperative procedure	1	0	1	1	3	2	1	0	0	3	2	1	0	0	3
Surgery, others	0	1	2	1	4	2	1	2	1	6	5	3	0	0	8
General anesthesia (inhalation anesthesia and intravenous anesthesia)	0	0	0	0	0	1	0	0	1	2	0	0	0	1	1
Local anesthesia	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Inhalation anesthesia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intravenous anesthesia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vertebral/epidural anesthesia	0	0	0	0	0	0	0	0	1	1	0	0	1	1	2
Anesthesia, others	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
Caesarean section	1	0	0	0	1	0	0	0	1	1	0	0	0	1	1
Delivery and artificial abortion, others	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1
Blood purification (including hemodialysis)	1	0	0	0	1	0	0	0	0	0	1	0	1	0	2
IVR (ex. angiocatheter)	0	0	1	1	2	1	2	3	1	7	3	4	0	4	11
Radiotherapy	0	0	0	0	0	0	0	0	1	1	2	1	1	0	4
Rehabilitation	0	0	0	1	1	1	0	0	0	1	0	0	0	0	0
Invasive dental treatment	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Endoscopic treatment	0	0	0	1	1	0	1	0	2	3	1	0	0	0	1

None[(Note 2)]					No disability[(Note 2)]					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
															84
0	0	1	3	4	0	0	0	1	1	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	6
0	0	4	4	8	0	0	1	2	3	3	1	0	1	5	27
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	1	4	0	0	1	0	1	0	3	0	1	4	15
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	0	2	2	0	0	3	2	5	1	4	0	0	5	17
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3
0	0	1	0	1	0	0	0	2	2	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
															2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
															353
0	0	1	2	3	0	0	0	0	0	0	0	0	0	0	13
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	10
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	6
0	0	1	2	3	0	0	2	0	2	2	2	0	0	4	27
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	4
0	0	3	1	4	0	0	0	1	1	0	1	0	0	1	28
0	0	1	3	4	0	0	0	1	1	0	5	0	1	6	44
0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3
0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	6
0	0	1	2	3	0	0	1	0	1	0	1	0	0	1	14
0	0	1	1	2	0	0	2	0	2	0	2	0	0	2	24
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	4
0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	1	1	1	1	0	0	2	6
0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	22
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
0	0	0	1	1	0	0	0	0	0	0	0	1	0	1	4
0	0	0	0	0	0	0	0	1	1	0	1	0	0	1	3
0	0	0	3	3	0	0	0	1	1	1	1	2	0	4	13

Situation (Note 1) × Potential of Residual Disability	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Treatment, others	0	0	3	2	5	0	1	2	0	3	2	6	4	1	13
Central venous line	2	2	0	1	5	0	0	0	1	1	2	5	0	1	8
Peripheral venous line	0	0	0	0	0	0	0	0	0	0	1	3	0	0	4
Catheter for blood purification	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feeding tube (NG, ED)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Urethral catheter	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Drainage procedure	0	0	0	0	0	0	0	0	0	0	2	1	1	0	4
Wound care	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tube placement, others	1	0	0	0	1	0	0	0	0	0	0	1	1	1	3
Tracheal intubation	0	0	0	0	0	0	0	0	0	0	1	2	0	0	3
Tracheotomy	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
Cardiac compression	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oxygen therapy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emergency procedure, others	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1
Related to use/management of medical device															
Ventilator	0	0	2	0	2	1	0	0	1	2	2	3	2	0	7
Oxygen therapy equipment	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0
Oxygenator	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
Defibrillator	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pace maker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Infusion/transfusion pump	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
Blood purification device	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ECG, blood pressure monitor	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0
Pulse oxymeter	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Use/management of medical device, others	0	0	0	0	0	0	0	0	0	0	1	3	4	4	12
Use/management of other dental devices and materials	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Related to use/management of drainage tube or other tube															
Central venous line	0	0	0	0	0	1	0	0	1	2	2	1	0	0	3
Peripheral venous line	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1
Tracheal tube	1	2	1	3	7	0	0	1	2	3	1	0	0	1	2
Tracheal cannula	0	1	1	0	2	0	0	0	0	0	1	1	0	1	3
Feeding tube (NG, ED)	2	0	0	0	2	0	0	0	1	1	0	0	2	0	2
Urethral catheter	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Chest drainage tube	0	0	0	0	0	0	0	0	0	0	3	3	2	1	9
Abdominal drainage tube	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Ventricular/cisternal drainage tube	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcutaneous continuous suction drainage tube	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Epidural catheter	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Catheter/line for blood purification	0	0	0	0	0	0	1	0	0	1	0	0	0	1	1
Use/management of drainage tube or other tube, others	1	0	1	1	3	0	0	1	0	1	1	2	2	1	6
Related to examination															
Blood drawing	0	0	1	0	1	0	1	0	0	1	0	1	1	0	2
Sample collection, others	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
Other physiological tests	0	0	0	0	0	0	0	0	0	0	2	1	0	1	4
General imaging	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
MRI	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Angiocatheter-aided imaging	0	0	0	0	0	2	2	0	0	4	1	1	1	1	4

None[Note 2]					No disability[Note 2]					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
0	0	1	3	4	0	0	2	4	6	0	2	0	1	3	34
0	0	2	4	6	0	0	2	6	8	0	2	0	0	2	30
0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	7
0	0	0	1	1	0	0	0	0	0	0	1	0	0	1	2
0	0	3	2	5	0	0	0	2	2	0	1	1	0	2	13
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
															54
0	0	0	0	0	0	0	2	1	3	0	2	0	1	3	17
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	1	2	3	0	0	4	0	4	0	1	3	0	4	23
0	0	0	1	1	0	0	0	2	2	0	0	0	0	0	4
															82
0	0	3	0	3	0	0	0	0	0	1	1	0	0	2	10
0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3
0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	14
0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	7
0	0	1	1	2	0	0	0	0	0	0	0	0	1	1	8
0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	3
0	0	1	0	1	0	0	0	0	0	0	1	1	0	2	12
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	2	5	7	0	0	0	0	0	1	0	0	0	1	18
															52
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	3
0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2
0	0	0	0	0	0	0	0	1	1	0	1	0	0	1	10

Situation (Note 1) × Potential of Residual Disability	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Lower gastrointestinal imaging	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Imaging, others	1	0	0	0	1	0	0	0	0	0	1	2	0	0	3
Upper gastrointestinal	0	0	0	0	0	0	2	0	0	2	0	3	0	0	3
Lower gastrointestinal	0	0	0	1	1	0	0	0	0	0	2	0	0	1	3
Bronchoscopy	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3
Endoscopic examination, others	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Pathological examination	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Examination, others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Related to nursing care															
Endotracheal/oral suctioning	0	2	0	0	2	1	0	0	0	1	1	0	0	1	2
Changing position	0	0	0	0	0	0	0	1	0	1	1	5	2	0	8
Bed bath	0	0	0	1	1	1	0	0	1	2	0	1	1	0	2
Help with changing clothes	1	0	0	0	1	0	0	0	0	0	0	1	0	1	2
Help with eating	1	0	0	0	1	3	1	1	1	6	1	1	0	0	2
Help with bathing	0	0	0	1	1	0	0	0	1	1	1	4	1	1	7
Help with elimination	0	0	0	0	0	2	2	0	0	4	2	5	2	8	17
Help with moving	0	0	0	0	0	0	0	0	1	1	0	3	2	0	5
Transportation	0	0	0	1	1	0	0	0	0	0	0	1	0	0	1
Tending patient's belongings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Meal serving	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Patient observation	3	2	1	3	9	4	0	3	3	10	5	7	5	4	21
Nursing care, others	1	0	2	1	4	1	0	4	1	6	8	8	11	12	39
Oral intake	1	0	0	2	3	0	0	0	0	0	0	1	0	0	1
Other feeding or nutrition support	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1
While taking a walk	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
While moving from one place to another	1	1	0	4	6	2	3	1	1	7	23	20	10	17	70
While going out/sleeping out	0	1	0	2	3	0	0	0	0	0	0	0	0	0	0
While eating	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2
While bathing	0	1	1	2	4	0	0	0	0	0	0	2	0	2	4
While excreting	0	0	0	1	1	0	1	2	1	4	5	10	1	0	16
While sleeping	0	1	1	1	3	1	1	1	5	8	3	2	2	3	10
Recuperation, others	1	0	0	2	3	0	2	3	1	6	7	8	3	13	31
Others	**8**	**2**	**7**	**8**	**25**	**3**	**1**	**2**	**4**	**10**	**9**	**12**	**14**	**6**	**41**
No choice (Note 3)	**2**	**6**	**1**	**2**	**11**	**2**	**3**	**1**	**0**	**6**	**10**	**16**	**0**	**2**	**28**
Total	**32**	**27**	**31**	**52**	**142**	**44**	**36**	**39**	**44**	**163**	**153**	**194**	**98**	**114**	**559**

(Note 1) Part of the figures for "situation" data may be different from those included in the report due to the partial change of the tabulation method after the system improvement in July.

(Note 2) "None" and "No disability" were additional categories included as of July.

(Note 3) "No choice" means no "situation" or "potential of residual disability" was selected.

None[Note 2]					No disability[Note 2]					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
0	0	1	0	1	0	0	1	0	1	1	0	0	0	1	7
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	6
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
															485
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	6
0	0	0	1	1	0	0	0	0	0	2	0	0	1	3	13
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	6
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	4
0	0	0	1	1	0	0	0	1	1	1	0	0	0	1	12
0	0	1	0	1	0	0	1	1	2	1	0	1	0	2	14
0	0	1	1	2	0	0	0	0	0	0	0	1	0	1	24
0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	8
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	7	2	9	0	0	1	2	3	3	0	0	0	3	55
0	0	3	6	9	0	0	0	1	1	1	3	0	1	5	64
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
0	0	12	16	28	0	0	3	5	8	3	5	2	0	10	129
0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	5
0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	6
0	0	1	1	2	0	0	0	0	0	0	1	0	0	1	11
0	0	3	1	4	0	0	1	1	2	1	0	0	0	1	28
0	0	2	2	4	0	0	1	1	2	0	3	0	0	3	30
0	0	2	6	8	0	0	0	1	1	1	1	4	1	7	56
0	**0**	**2**	**5**	**7**	**0**	**0**	**2**	**2**	**4**	**13**	**2**	**1**	**2**	**18**	**105**
0	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**1**	**2**	**49**
0	**0**	**79**	**108**	**187**	**0**	**0**	**35**	**51**	**86**	**42**	**52**	**21**	**14**	**129**	**1,266**

Fig. II-1-32 Details of Event and Potential of Residual Disability

Details of Event (Note 1) × Potential of Residual Disability	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Related to drug															
Dose error	0	0	0	0	0	0	0	1	0	1	0	1	0	1	2
Overdose	0	0	0	0	0	0	1	0	0	1	2	1	1	3	7
Dosing speed too fast	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
Patient misidentification	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drug mix-up	0	0	0	0	0	0	0	0	0	0	5	4	0	0	9
Wrong dosing method	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drug prescription/administration, others	0	0	0	2	2	1	0	0	1	2	1	4	1	1	7
Dispensing error (wrong dose/number)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dispensing/drug management, others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drug/blood product management, others	0	0	0	0	0	0	0	0	1	1	0	1	0	0	1
Related to blood transfusion															
Cross-match error	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Error in documentation/recording of results	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfusion testing, others	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Irradiation of blood products, blood transfusion, others	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Related to treatment/procedure															
Patient misidentification	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Wrong site treatment/procedure	0	0	0	0	0	1	0	0	1	2	4	2	3	2	11
Wrong examination/treatment/ procedure, others	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Wrong method (technique)	0	0	0	0	0	2	1	2	0	5	5	4	3	1	13
Neglected/forgotten (treatment/procedure)	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1
Unnecessary treatment/procedure	0	0	0	0	0	1	0	0	0	1	2	0	2	0	4
Wrong patient position	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wrong examination/treatment, others	1	0	0	2	3	1	1	1	1	4	2	0	3	3	8
Aspiration	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Retained foreign object	0	0	0	0	0	0	0	0	0	0	5	4	2	3	14
Treatment/procedure, others	7	7	9	12	35	12	11	13	14	50	25	30	12	13	80
Use/management of medical device															
Assembly	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Forgot to set up/turn on power	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
Malfunction	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Lack of knowledge	0	0	1	0	1	0	0	0	0	0	0	0	0	1	1
Forgot to set alarm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Range of alarm setup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Neglect in inspection/management before or during device operation	0	0	0	0	0	1	0	0	0	1	1	0	0	1	2
Error in sterilization/cleaning technique	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Breakage	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3
Use/management of medical device, others	0	1	3	0	4	1	1	0	2	4	1	4	4	2	11

None[(Note 2)]					No disability[(Note 2)]					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
															84
0	0	1	2	3	0	0	1	0	1	0	1	0	0	1	8
0	0	2	3	5	0	0	1	2	3	0	2	0	0	2	18
0	0	2	0	2	0	0	0	0	0	0	1	0	0	1	6
0	0	0	1	1	0	0	1	3	4	1	3	0	0	4	9
0	0	3	1	4	0	0	1	0	1	2	0	0	1	3	17
0	0	0	0	0	0	0	1	1	2	0	0	0	1	1	3
0	0	1	2	3	0	0	1	1	2	1	1	0	0	2	18
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	2
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
															2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
															353
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	1	4	5	0	0	0	1	1	0	2	0	0	2	21
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
0	0	3	1	4	0	0	1	4	5	0	5	0	0	5	32
0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	6
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	3	3	0	0	0	1	1	1	1	0	0	2	21
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	4	5	9	0	0	1	2	3	2	3	0	1	6	32
0	0	10	18	28	0	0	7	13	20	2	10	4	2	18	231
															54
0	0	0	0	0	0	0	0	1	1	0	1	0	0	1	3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	0	1	1	2	0	0	0	1	1	7
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	0	1	1	2	0	0	0	0	0	6
0	0	0	2	2	0	0	5	0	5	0	1	4	0	5	31

Details of Event (Note 1) × Potential of Residual Disability	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Related to use/management of drainage tube or other tube															
Infusion leakage	0	0	0	0	0	0	0	1	0	1	1	0	2	0	3
Self-removal	1	0	1	1	3	0	0	0	1	1	1	0	0	0	1
Spontaneous dislodgment	0	2	0	1	3	1	0	0	0	1	0	1	0	0	1
Disconnection	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Blockage	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2
Breakage/severance	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1
Wrong connection	0	0	1	0	1	0	0	0	0	0	1	2	0	0	3
Air bubble in tube	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
Use/management of drainage tube or other tube, others	3	1	1	2	7	0	1	1	2	4	5	6	5	3	19
Related to examination															
Patient misidentification (examination)	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Wrong examination/evaluation technique	1	0	0	0	1	0	0	0	0	0	0	1	1	0	2
Error in sample collection	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Sample misidentification (examination)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lost sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sample contamination	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Management of analytical device/ equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Preparation of examination device/ equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Result reporting	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Examination, others	0	0	1	1	2	2	5	0	0	7	7	10	1	5	23
Related to nursing care															
Fall	1	1	0	8	10	4	5	4	6	19	34	50	21	40	145
Fall from bed	1	1	0	1	3	1	1	2	3	7	8	9	2	7	26
Collision	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Restraint	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
Severe decubitus (involving muscle layer, Stage III/IV)	0	0	0	0	0	0	0	2	0	2	6	3	4	2	15
Aspiration (nursing care)	1	0	2	2	5	5	0	1	2	8	0	1	0	0	1
Accidental ingestion (nursing care)	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Nursing care/recuperation, others	4	6	4	9	23	5	4	6	4	19	9	16	12	11	48
Transportation, others	0	0	0	1	1	0	0	1	0	1	0	2	0	2	4
Going out/staying out without notice	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Self medication, others	1	0	0	0	1	0	0	0	1	1	1	0	1	0	2
Meal/nutrition, others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	**8**	**2**	**7**	**8**	**25**	**3**	**1**	**2**	**4**	**10**	**9**	**12**	**14**	**6**	**41**
No choice (Note 3)	**2**	**6**	**1**	**2**	**11**	**2**	**3**	**1**	**0**	**6**	**10**	**16**	**0**	**2**	**28**
Total	**32**	**27**	**31**	**52**	**142**	**44**	**36**	**39**	**44**	**163**	**153**	**194**	**98**	**114**	**559**

(Note 1) Part of the figures for "details of event" data may be different from those included in the report due to the partial change of the tabulation method after the system improvement in July.

(Note 2) "None" and "No disability" were additional categories included as of July.

(Note 3) "No choice" means no "details of event" or "potential of residual disability" was selected.

None (Note 2)					No disability (Note 2)					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
															82
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	5
0	0	2	1	3	0	0	0	0	0	0	0	1	0	1	9
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	1	3	4	0	0	0	0	0	1	0	0	0	1	7
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	5	3	8	0	0	0	0	0	2	3	2	2	9	47
															52
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	4
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	3
0	0	3	1	4	0	0	2	3	5	0	0	1	0	1	42
															485
0	0	19	24	43	0	0	4	5	9	7	5	6	1	19	245
0	0	1	3	4	0	0	0	3	3	0	4	1	1	6	49
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	1	1	1	1	0	0	2	20
0	0	0	2	2	0	0	0	1	1	2	1	0	0	3	20
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
0	0	10	14	24	0	0	3	2	5	3	2	1	1	7	126
0	0	3	0	3	0	0	0	1	1	0	0	0	0	0	10
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	5
0	0	2	0	2	0	0	1	0	1	0	0	0	0	0	3
0	**0**	**2**	**5**	**7**	**0**	**0**	**2**	**2**	**4**	**13**	**2**	**1**	**2**	**18**	**105**
0	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**1**	**2**	**49**
0	**0**	**79**	**108**	**187**	**0**	**0**	**35**	**51**	**86**	**42**	**52**	**21**	**14**	**129**	**1,266**

Fig. II-1-33 Place of Occurrence and Summary of Event

Place of Occurrence × Summary of Event	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Outpatient examination room	0	0	0	0	0	0	3	1	0	4	3	6	3	2	14
Outpatient treatment room	0	0	0	0	0	0	0	0	1	1	1	1	2	1	5
Outpatient lobby	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
Emergency room	0	0	0	0	0	0	1	1	0	2	1	1	0	1	3
Critical care center	0	0	0	0	0	0	0	1	0	1	0	2	1	0	3
Patient room	21	14	14	28	77	17	13	23	22	75	72	100	45	53	270
Ward treatment room	0	0	1	0	1	0	0	0	0	0	2	6	2	0	10
Operation room	3	5	2	6	16	13	5	5	10	33	26	14	14	12	66
ICU	0	0	3	0	3	3	0	0	2	5	4	2	2	2	10
CCU	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
NICU	0	1	0	0	1	0	0	0	0	0	0	0	0	2	2
Examination room	0	0	0	1	1	3	1	0	0	4	7	3	0	1	11
Catheterization laboratory	0	1	3	2	6	0	2	2	1	5	4	4	5	4	17
Radiotherapy room	0	0	0	0	0	0	2	0	1	3	2	2	3	2	9
Radiography room	1	0	0	0	1	0	0	1	0	1	1	3	1	0	5
Radioactive scanning room	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Dialysis room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delivery room	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2
Rehabilitation room	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Restroom	1	0	1	0	2	3	1	1	2	7	4	8	1	2	15
Hallway	1	0	0	1	2	0	1	0	1	2	4	6	5	6	21
Bathroom	1	1	1	3	6	0	0	0	0	0	2	6	1	2	11
Stairway	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	1	0	1	0	2	1	2	0	0	3	2	0	1	3	6
Others	3	5	5	11	24	4	4	4	4	16	18	25	9	19	71
Total	32	27	31	52	142	44	36	39	44	163	153	194	98	114	559

(Note) "None" and "No disability" were additional categories included as of July.

None[(Note)]					No disability[(Note)]					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
-	-	2	2	4	-	-	3	6	9	2	1	1	0	4	35
-	-	0	1	1	-	-	0	1	1	1	2	0	0	3	11
-	-	0	0	0	-	-	0	0	0	2	1	0	0	3	6
-	-	0	0	0	-	-	2	0	2	0	0	0	0	0	7
-	-	3	0	3	-	-	0	0	0	0	0	0	0	0	7
-	-	35	37	72	-	-	14	21	35	22	23	5	7	57	586
-	-	3	6	9	-	-	0	0	0	0	0	1	0	1	21
-	-	9	15	24	-	-	7	8	15	4	11	1	2	18	172
-	-	4	3	7	-	-	1	0	1	1	2	1	1	5	31
-	-	0	0	0	-	-	0	0	0	0	0	0	0	0	3
-	-	0	0	0	-	-	0	0	0	0	0	0	0	0	3
-	-	2	2	4	-	-	1	1	2	0	0	1	0	1	23
-	-	1	4	5	-	-	0	2	2	0	2	0	0	2	37
-	-	0	1	1	-	-	0	0	0	0	1	1	0	2	15
-	-	3	3	6	-	-	1	2	3	0	0	2	0	2	18
-	-	0	0	0	-	-	0	0	0	0	0	0	0	0	1
-	-	0	1	1	-	-	0	1	1	0	0	0	0	0	2
-	-	0	1	1	-	-	1	0	1	0	0	0	0	0	5
-	-	0	0	0	-	-	0	1	1	0	0	1	0	1	3
-	-	7	1	8	-	-	1	1	2	1	1	2	1	5	39
-	-	1	9	10	-	-	1	0	1	3	1	3	0	7	43
-	-	1	1	2	-	-	1	0	1	1	1	1	0	3	23
-	-	0	0	0	-	-	0	1	1	0	1	0	0	1	2
-	-	2	6	8	-	-	0	0	0	2	0	0	0	2	21
-	-	6	15	21	-	-	2	6	8	3	5	1	3	12	152
-	-	79	108	187	-	-	35	51	86	42	52	21	14	129	1,266

Fig. II-1-34 Place of Occurrence and Inpatient/Outpatient Status

Place of Occurrence × Inpatient/Outpatient Status	Inpatient					Outpatient					Aggregate total
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
Outpatient examination room	1	1	0	0	2	4	9	10	10	33	35
Outpatient treatment room	0	0	0	1	1	2	3	2	3	10	11
Outpatient lobby	0	0	1	0	1	2	3	0	0	5	6
Emergency room	0	0	0	0	0	1	2	3	1	7	7
Critical care center	0	2	4	0	6	0	0	1	0	1	7
Patient room	132	150	136	168	586	0	0	0	0	0	586
Ward treatment room	2	6	6	6	20	0	0	1	0	1	21
Operation room	46	34	37	52	169	0	1	1	1	3	172
ICU	8	4	11	8	31	0	0	0	0	0	31
CCU	0	2	1	0	3	0	0	0	0	0	3
NICU	0	1	0	2	3	0	0	0	0	0	3
Examination room	7	3	3	4	17	3	1	1	1	6	23
Catheterization laboratory	4	9	11	13	37	0	0	0	0	0	37
Radiotherapy room	2	4	4	4	14	0	1	0	0	1	15
Radiography room	2	3	6	4	15	0	0	2	1	3	18
Radioactive scanning room	0	0	0	0	0	0	1	0	0	1	1
Dialysis room	0	0	0	2	2	0	0	0	0	0	2
Delivery room	0	1	2	2	5	0	0	0	0	0	5
Rehabilitation room	0	0	1	2	3	0	0	0	0	0	3
Restroom	9	9	12	7	37	0	1	1	0	2	39
Hallway	8	8	10	16	42	0	0	0	1	1	43
Bathroom	4	8	5	6	23	0	0	0	0	0	23
Stairway	0	1	0	1	2	0	0	0	0	0	2
Unknown	5	2	4	9	20	1	0	0	0	1	21
Others	25	33	24	46	128	3	6	3	12	24	152
Total	255	281	278	353	1,167	16	28	25	30	99	1,266

Fig. II-1-35 Cause of Event and Summary of Event

Cause of event(Note) × Summary of event	Ordering					Drug					Blood transfusion					Treatment /procedure					Medical equipment, etc.				
																					Medical device				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Neglect to check	0	1	0	3	4	12	15	15	14	56	2	1	0	0	3	24	28	23	36	111	4	1	15	6	26
Neglect to observe	0	0	0	0	0	1	4	1	2	8	0	0	0	0	0	18	12	12	21	63	2	1	4	7	14
Misjudgment	0	0	0	1	1	1	3	2	5	11	0	0	0	0	0	17	27	12	31	87	0	1	4	1	6
Lack of knowledge	0	1	0	0	1	3	3	5	4	15	0	0	0	0	0	3	4	10	6	23	1	0	8	3	12
Deficiency of technique/skill	0	0	0	0	0	0	2	0	1	3	0	0	0	0	0	14	12	17	14	57	1	1	2	0	4
Delayed reporting	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4	2	1	2	9	0	0	0	0	0
Under unusual physical condition	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	4	6	14	0	0	0	0	0
Under unusual psychological condition	0	1	0	0	1	0	3	1	1	5	0	0	0	0	0	2	1	1	3	7	0	0	1	1	2
System failure	0	1	0	2	3	4	1	4	3	12	0	1	0	0	1	4	5	3	2	14	0	2	2	2	6
Inadequate coordination	0	1	0	1	2	2	7	4	1	14	0	0	0	0	0	9	8	8	10	35	2	0	1	0	3
Inadequate documentation	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	1	0	1	2	0	0	0	1	1
Similarity in patient's appearance or name	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Busy working condition	0	0	0	0	0	3	3	1	0	7	0	1	0	0	1	4	4	4	2	14	2	0	0	1	3
Problem in environment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	4	0	0	0	0	0
Problem in the drug	0	0	0	0	0	4	1	1	3	9	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0
Problem in medical device	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	3	6	2	2	13	4	4	6	3	17
Problem in other items	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	0	1	5	1	0	0	1	2
Problem in facility	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	4	0	0	4	0	0	0	2	2
Problem in education/training	0	1	0	1	2	3	4	0	3	10	0	0	0	0	0	3	5	2	5	15	1	1	2	2	6
Lack of explanation	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	15	14	3	4	36	0	0	0	0	0
Others	0	0	0	0	0	1	1	3	6	11	1	0	0	0	1	26	38	33	38	135	1	2	2	1	6
Total	0	6	0	8	14	34	50	38	47	169	4	3	0	0	7	152	178	136	184	650	19	13	47	31	110

(Note) "Cause of event" may have been more than one.

Medical equipment, etc.										Examination					Nursing care					Others					Aggregate total
Drainage tube or other tube					Dental equipment																				
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
8	2	9	9	28	0	0	0	1	1	3	4	5	2	14	12	16	13	24	65	4	5	5	13	27	335
2	3	5	5	15	0	0	0	0	0	3	1	1	1	6	30	44	33	62	169	11	8	11	11	41	316
7	5	12	6	30	0	0	0	1	1	2	5	0	1	8	31	34	20	54	139	7	6	7	10	30	313
2	1	6	2	11	0	0	0	0	0	0	1	0	0	1	5	3	5	3	16	1	3	1	3	8	87
1	1	1	0	3	0	1	1	0	2	2	1	1	1	5	1	3	10	8	22	1	4	1	2	8	104
2	2	2	1	7	0	0	0	0	0	0	0	0	0	0	2	3	2	2	9	0	2	0	1	3	29
1	0	1	3	5	0	0	0	0	0	1	1	0	1	3	6	5	5	5	21	1	1	4	4	10	53
0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	3	5	10	1	1	0	1	3	29
1	1	1	2	5	0	0	0	0	0	1	0	1	0	2	2	3	0	2	7	1	1	1	3	6	56
4	0	5	3	12	0	0	0	0	0	1	1	0	0	2	6	10	11	7	34	3	9	4	4	20	122
0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	3	0	1	5	3	1	0	2	6	17
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2
0	0	0	2	2	0	0	0	0	0	0	2	0	1	3	3	3	6	8	20	2	3	0	1	6	56
1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	8	10	7	16	41	4	3	0	6	13	60
0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	2	0	3	1	0	0	0	1	16
0	1	0	2	3	0	0	0	2	2	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	40
0	0	1	0	1	0	0	0	0	0	0	0	0	1	1	2	1	2	3	8	1	1	0	2	4	21
2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	6	6	6	8	26	8	1	1	0	10	46
1	0	1	2	4	0	0	0	0	0	0	0	0	0	0	10	9	4	8	31	2	6	1	3	12	80
1	0	0	1	2	0	0	0	0	0	3	3	1	0	7	16	11	14	16	57	10	5	3	4	22	125
4	6	4	5	19	0	0	0	0	0	3	4	4	4	15	21	29	32	47	129	20	13	24	25	82	398
37	22	48	44	151	0	1	2	4	7	20	23	13	13	69	164	196	175	279	814	82	74	63	95	314	2,305

Fig. II-1-36 Place of Occurrence and Summary of Event

Place of Occurrence × Summary of Event	Ordering					Drug					Blood transfusion					Treatment /procedure					Medical equipment, etc.				
																					Medical device				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Outpatient examination room	0	0	0	0	0	1	3	3	2	9	0	0	0	0	0	2	3	3	6	14	0	0	0	0	0
Outpatient treatment room	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	2	1	1	5	0	0	0	0	0
Outpatient lobby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emergency room	0	0	0	0	0	1	0	1	0	2	0	1	0	0	1	0	1	1	1	3	0	0	0	0	0
Critical care center	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0
Patient room	0	1	0	3	4	10	11	11	10	42	1	0	0	0	1	21	33	18	26	98	4	4	5	7	20
Ward treatment room	0	0	0	0	0	1	1	1	0	3	0	0	0	0	0	1	3	3	4	11	0	0	1	0	1
Operation room	0	0	0	0	0	0	0	0	3	3	0	0	0	0	0	37	33	27	39	136	0	0	7	1	8
ICU	0	0	0	0	0	0	1	1	0	2	1	0	0	0	1	2	1	1	2	6	1	0	3	0	4
CCU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0
NICU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Examination room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	1	2	7	0	0	0	0	0
Catheterization laboratory	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	7	9	8	27	0	0	0	2	2
Radiotherapy room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	0	1	7	0	1	4	0	5
Radiography room	0	0	0	0	0	0	1	1	1	3	0	0	0	0	0	1	2	4	2	9	0	0	0	0	0
Radioactive scanning room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dialysis room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
Delivery room	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	2	4	0	0	0	0	0
Rehabilitation room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Restroom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hallway	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
Bathroom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stairway	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0
Others	0	0	0	0	0	2	2	0	6	10	0	0	0	0	0	9	11	9	15	44	1	2	1	0	4
Total	0	1	0	3	4	15	19	19	24	77	2	1	0	0	3	83	105	80	111	379	6	7	21	11	45

Medical equipment, etc.										Examination					Nursing care					Others					Aggregate total
Drainage tube or other tube					Dental equipment																				
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
0	0	1	0	1	0	0	0	1	1	2	2	2	1	7	0	1	0	0	1	0	1	1	0	2	35
0	0	1	0	1	0	1	0	0	1	0	0	0	1	1	0	0	0	1	1	1	0	0	0	1	11
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2	1	1	0	4	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	7
0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	0	0	0	0	0	7
11	9	17	9	46	0	0	0	1	1	1	2	1	0	4	58	69	61	91	279	26	21	23	21	91	586
0	1	0	1	2	0	0	0	0	0	0	1	1	0	2	0	0	1	0	1	0	0	0	1	1	21
4	0	0	2	6	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	5	2	4	7	18	172
1	0	2	5	8	0	0	0	0	0	0	0	0	0	0	2	0	2	0	4	1	2	2	1	6	31
0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3
0	0	2	0	2	0	0	0	0	0	5	2	1	2	10	1	0	0	0	1	1	1	0	1	3	23
0	0	0	0	0	0	0	0	0	0	1	2	1	2	6	0	0	0	0	0	0	0	1	1	2	37
0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	15
0	0	0	0	0	0	0	0	0	0	1	0	3	1	5	0	0	0	0	0	0	0	0	1	1	18
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	1	2	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	9	11	6	32	3	1	2	1	7	39
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	7	10	13	36	2	1	0	2	5	43
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	8	5	6	22	1	0	0	0	1	23
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	2
1	0	0	1	2	0	0	0	0	0	1	0	0	0	1	2	1	4	7	14	1	0	0	1	2	21
0	3	0	2	5	0	0	0	0	0	1	5	1	1	8	10	7	6	19	42	5	9	10	15	39	152
17	14	25	21	77	0	1	1	3	5	12	15	10	9	46	88	107	101	145	441	48	39	46	56	189	1,266

[4] Details of Reports from Medical Institutions Subject to Reporting Requirement (by Month of Occurrence)

The quarterly tabulation of reports on medical adverse events **occurred in 2007** made by medical institutions subject to reporting requirement between January 1 2007 and March 31 2008 is shown **by month of occurrence** below.

Fig. II-1-37 Month of Occurrence

Month of occurrence		Number of events
2007	January	87
	February	80
	March	81
	April	102
	May	109
	June	111
	July	117
	August	106
	September	99
	October	102
	November	111
	December	86
Total		1,191

Fig. II-1-38 Day of Occurrence and Weekday/Holiday Category

Day of occurrence	Weekday					Holiday					Aggregate total
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
Mon.	23	53	41	53	170	0	4	6	8	18	188
Tue.	44	48	57	45	194	2	0	1	0	3	197
Wed.	37	56	55	45	193	1	0	1	0	2	195
Thu.	46	68	59	65	238	1	2	0	0	3	241
Fri.	38	44	45	36	163	1	2	0	3	6	169
Sat.	10	4	4	2	20	23	20	19	22	84	104
Sun.	0	0	1	0	1	22	21	33	20	96	97
Total	198	273	262	246	979	50	49	60	53	212	1,191

Fig. II-1-39 Time of Occurrence

Time of occurrence	Number of events				
	January to March	April to June	July to September	October to December	Aggregate total
0:00 – before 2:00	9	12	16	11	48
2:00 – before 4:00	11	13	11	7	42
4:00 – before 6:00	11	16	17	8	52
6:00 – before 8:00	15	20	14	22	71
8:00 – before 10:00	18	29	30	35	112
10:00 – before 12:00	39	52	51	53	195
12:00 – before 14:00	22	39	41	31	133
14:00 – before 16:00	36	33	40	52	161
16:00 – before 18:00	28	38	30	26	122
18:00 – before 20:00	25	31	20	11	87
20:00 – before 22:00	15	18	18	14	65
22:00 – before 24:00	15	9	20	13	57
Time unknown	4	12	14	16	46
Total	248	322	322	299	1,191

Fig. II-1-40 Patient Age

Number of patients	Patient age	Number of events					Inpatient				
		January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
1 patient	0 to 9	23	17	12	17	69	20	16	10	16	62
	10s	6	9	9	6	30	5	9	7	5	26
	20s	6	13	9	8	36	5	11	6	7	29
	30s	15	22	14	10	61	15	20	10	8	53
	40s	13	23	25	25	86	11	21	24	23	79
	50s	31	30	49	32	142	28	28	47	29	132
	60s	38	59	61	59	217	37	52	55	54	198
	70s	63	89	77	76	305	58	85	73	73	289
	80s	46	47	57	55	205	44	44	56	52	196
	90 or above	5	12	9	10	36	5	12	8	8	33
	Total	246	321	322	298	1,187	228	298	296	275	1,097
2 patients or more	Total	2	1	0	1	4	2	1	0	0	3
Aggregate total		248	322	322	299	1,191	230	299	296	275	1,100

Fig. II-1-41 Sex of Patients

Number of patients	Sex	Number of events				
		January to March	April to June	July to September	October to December	Total
1 patient	Male	130	181	163	140	614
	Female	116	140	159	158	573
	No choice	0	0	0	0	0
	Total	246	321	322	298	1,187
2 patients or more	Total	2	1	0	1	4
Aggregate total		248	322	322	299	1,191

Fig. II-1-42 Inpatient/Outpatient Status and Duration of Hospital Stay

Inpatient/outpatient status		Number of events				
		January to March	April to June	July to September	October to December	Total
Inpatient	Duration: 0 to 31 days	142	189	200	185	716
	Duration: 32 days or longer	85	103	94	90	372
	No choice	3	7	2	0	12
	Total	230	299	296	275	1,100
Outpatient	Initial visit	0	2	4	3	9
	Follow-up visit	18	21	22	21	82
	Total	18	23	26	24	91
Aggregate total		248	322	322	299	1,191

Fig. II-1-43 Person Who Identified Event

Person who identified event	Number of events				
	January to March	April to June	July to September	October to December	Total
Medical staff	200	273	271	254	998
Patient himself/herself	12	7	11	11	41
Patient's family/caregiver	11	16	8	9	44
Other patient	11	9	10	8	38
Others	14	17	22	17	70
No choice	0	0	0	0	0
Total	248	322	322	299	1,191

Fig. II-1-44 Job Title of Person Involved

Job title of person involved (Note)	Number of events				
	January to March	April to June	July to September	October to December	Total
Doctor	149	222	228	213	812
Dentist	7	2	8	10	27
Nurse	180	214	234	207	835
Assistant nurse	9	4	3	6	22
Pharmacist	1	4	2	2	9
Clinical engineer	2	1	2	0	5
Midwife	0	7	1	1	9
Nursing assistant	1	2	1	0	4
Radiological technologist	2	1	3	4	10
Clinical technologist	0	0	0	0	0
Physical therapist (PT)	0	2	5	3	10
Occupational therapist (OT)	1	0	0	0	1
Medical technologist	0	0	0	0	0
Dental hygienist	1	0	0	2	3
Others	18	19	13	12	62
Total	371	478	500	460	1,809

(Note) Person involved is a person determined by the medical institution to have been involved in the event occurred; more than 1 person may have been involved.

Fig. II-1-45 Years of Experience of Person Involved by Job Title (Doctor, Dentist, Nurse, Pharmacist)

Years of experience × Job title of person involved(Note)	Doctor					Dentist				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
0 year	7	3	3	4	17	1	0	0	0	1
1 year	3	3	6	6	18	0	0	3	0	3
2 years	3	8	7	7	25	1	0	0	1	2
3 years	4	10	10	14	38	0	0	1	0	1
4 years	6	10	10	10	36	0	0	0	0	0
5 years	7	6	17	11	41	2	0	0	1	3
6 years	10	13	10	9	42	0	0	0	1	1
7 years	7	15	12	13	47	0	0	0	0	0
8 years	9	8	12	9	38	0	0	0	1	1
9 years	9	10	13	11	43	0	1	1	0	2
10 years	14	15	19	4	52	0	0	1	0	1
11 to 20 years	50	88	78	87	303	1	0	0	0	1
21 to 30 years	14	30	26	27	97	1	1	1	3	6
30 years or longer	6	3	5	1	15	1	0	1	3	5
Total	149	222	228	213	812	7	2	8	10	27

(Note) Person involved is a person determined by the medical institution to have been involved in the event occurred; more than 1 person may have been involved.

Nurse					Pharmacist					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
12	16	15	19	62	0	0	0	0	0	80
28	14	18	22	82	1	1	0	1	3	106
22	25	18	21	86	0	1	0	0	1	114
7	17	19	14	57	0	0	1	0	1	97
17	13	12	9	51	0	0	0	0	0	87
10	7	12	6	35	0	0	1	0	1	80
4	11	11	15	41	0	1	0	0	1	85
6	9	8	8	31	0	0	0	0	0	78
5	8	7	2	22	0	0	0	0	0	61
8	5	10	5	28	0	0	0	0	0	73
6	12	6	4	28	0	0	0	0	0	81
31	39	44	35	149	0	1	0	1	2	455
19	30	43	42	134	0	0	0	0	0	237
5	8	11	5	29	0	0	0	0	0	49
180	214	234	207	835	1	4	2	2	9	1,683

Fig. II-1-46 Number of Years Person Involved (Doctor, Dentist, Nurse, Pharmacist) Has Been Working at Current Department

Number of years at current department × Job title of person involved(Note)	Doctor					Dentist				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
0 year	30	47	62	53	192	1	0	3	0	4
1 year	20	41	33	34	128	0	0	1	0	1
2 years	13	22	15	32	82	1	0	0	2	3
3 years	9	14	21	22	66	0	0	0	0	0
4 years	9	24	18	14	65	1	0	0	0	1
5 years	8	11	13	5	37	1	0	0	1	2
6 years	11	11	10	8	40	0	0	0	0	0
7 years	6	9	12	12	39	0	0	0	0	0
8 years	5	7	6	6	24	0	0	1	1	2
9 years	5	2	5	5	17	0	1	2	0	3
10 years	11	3	8	0	22	0	0	0	0	0
11 to 20 years	20	27	22	20	89	2	0	0	1	3
21 to 30 years	2	4	3	1	10	1	1	0	2	4
30 years or longer	0	0	0	1	1	0	0	1	3	4
Total	149	222	228	213	812	7	2	8	10	27

(Note) Person involved is a person determined by the medical institution to have been involved in the event occurred; more than 1 person may have been involved.

Nurse					Pharmacist					
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	Aggregate total
52	60	49	60	221	0	1	1	2	4	421
48	49	53	46	196	1	2	0	0	3	328
30	37	37	36	140	0	0	0	0	0	225
17	26	45	31	119	0	0	1	0	1	186
16	14	15	11	56	0	1	0	0	1	123
4	11	15	8	38	0	0	0	0	0	77
2	7	3	7	19	0	0	0	0	0	59
2	3	4	2	11	0	0	0	0	0	50
3	1	3	1	8	0	0	0	0	0	34
3	0	3	1	7	0	0	0	0	0	27
1	1	2	1	5	0	0	0	0	0	27
2	4	5	3	14	0	0	0	0	0	106
0	1	0	0	1	0	0	0	0	0	15
0	0	0	0	0	0	0	0	0	0	5
180	214	234	207	835	1	4	2	2	9	1,683

Fig. II-1-47 Working Hours (in week previous to event) (Note 1) of Person Involved (Doctors) (Note 2)

Working hours	January to March	April to June	July to September	October to December	January to December
<0 to 8 hours	3	2	2	3	10
<8 to 16 hours	2	0	0	1	3
<16 to 24 hours	1	1	0	0	2
<24 to 32 hours	2	4	1	0	7
<32 to 40 hours	26	4	8	4	42
<40 to 48 hours	31	69	58	41	199
<48 to 56 hours	28	29	34	24	115
<56 to 64 hours	19	48	26	12	105
<64 to 72 hours	13	18	16	25	72
<72 to 80 hours	5	8	5	5	23
<80 to 88 hours	5	7	8	9	29
<88 to 96 hours	5	1	3	2	11
96 hours or more	4	3	3	11	21
Unknown	5	28	64	76	173
Total	149	222	228	213	812
Average working hours (not including "unknown")	51.7	52.3	52.7	57.6	53.4

(Note 1) The working hours may include not only in-hospital but also out-of-hospital working hours.

(Note 2) The person involved is a person who is determined to be related to the relevant event by medical institutions and may include part-time staff. The person involved also may give multiple answers.

Fig. II-1-48 Working Hours (in week previous to event) (Note 1) of Person Involved (Nurses) (Note 2)

Working hours	January to March	April to June	July to September	October to December	January to December
<0 to 8 hours	2	1	0	1	4
<8 to 16 hours	5	2	5	0	12
<16 to 24 hours	2	8	5	3	18
<24 to 32 hours	15	13	11	20	59
<32 to 40 hours	42	39	71	56	208
<40 to 48 hours	98	116	98	87	399
<48 to 56 hours	13	15	21	10	59
<56 to 64 hours	2	6	1	2	11
<64 to 72 hours	0	0	0	0	0
<72 to 80 hours	0	0	0	0	0
<80 to 88 hours	1	0	0	0	1
<88 to 96 hours	0	0	0	0	0
96 hours or more	0	0	0	0	0
Unknown	0	14	22	28	64
Total	180	214	234	207	835
Average working hours (not including "unknown")	37.2	37.9	36.7	36.3	37.1

(Note 1) The working hours may include not only in-hospital but also out-of-hospital working hours.

(Note 2) The person involved is a person who is determined to be related to the relevant event by medical institutions and may include part-time staff. The person involved also may give multiple answers.

Fig. II-1-49 Number of Night Shifts (in week previous to event) of Person Involved (Doctors)

Number of night shifts	January to March	April to June	July to September	October to December	January to December
Zero	51	98	100	88	337
1 time	53	71	68	68	260
2 times	11	19	19	22	71
3 times	6	4	3	3	16
4 times	0	0	0	2	2
5 times	1	0	0	1	2
6 times	0	0	0	0	0
7 times	1	0	0	0	1
Unknown	26	30	38	29	123
Total	149	222	228	213	812
Average working hours (not including “unknown”)	0.85	0.63	0.61	0.73	0.69

Fig. II-1-50 Number of Night Shifts (in week previous to event) of Person Involved (Nurses)

Number of night shifts	January to March	April to June	July to September	October to December	January to December
Zero	19	42	41	29	131
1 time	45	52	75	76	248
2 times	81	89	81	78	329
3 times	29	21	23	16	89
4 times	1	4	5	2	12
5 times	0	1	2	0	3
6 times	0	0	0	0	0
7 times	0	0	0	0	0
Unknown	5	5	7	6	23
Total	180	214	234	207	835
Average working hours (not including “unknown”)	1.70	1.50	1.48	1.43	1.52

Fig. II-1-51 Summary of Event

Summary of event	January to March		April to June		July to September		October to December		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Ordering	0	0.0	2	0.6	0	0.0	2	0.7	4	0.3
Drug	19	7.7	19	5.9	27	8.4	19	6.4	84	7.1
Blood transfusion	0	0.0	1	0.3	0	0.0	0	0.0	1	0.1
Treatment/procedure	76	30.6	99	30.7	95	29.5	71	23.7	341	28.6
Medical equipment, etc.	18	7.3	34	10.6	34	10.6	28	9.4	114	9.6
Medical device	8	3.2	7	2.2	16	5.0	8	2.7	39	3.3
Drainage tube or other tube	9	3.6	27	8.4	16	5.0	19	6.4	71	6.0
Dental equipment	1	0.4	0	0.0	2	0.6	1	0.3	4	0.3
Examination/test	4	1.6	11	3.4	8	2.5	12	4.0	35	2.9
Nursing care	98	39.5	112	34.8	115	35.7	119	39.8	444	37.3
Others	33	13.3	44	13.7	43	13.4	48	16.1	168	14.1
Total	248	100.0	322	100.0	322	100.0	299	100.0	1,191	100.0

Fig. II-1-52 Potential of Residual Disability

Potential of residual disability(Note 1)	January to March		April to June		July to September		October to December		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Death	26	10.5	44	13.7	33	10.2	35	11.7	138	11.6
High	39	15.7	24	7.5	42	13.0	36	12.0	141	11.8
Low	145	58.5	160	49.7	102	31.7	101	33.8	508	42.7
None(Note 2)	1	0.4	35	10.9	89	27.6	84	28.1	209	17.5
No disability(Note 2)	0	0.0	17	5.3	38	11.8	35	11.7	90	7.6
Unknown(Note 3)	37	14.9	42	13.0	18	5.6	8	2.7	105	8.8
Total	248	100.0	322	100.0	322	100.0	299	100.0	1,191	100.0

(Note 1) "Potential of residual disability" is not necessarily associated with occurrence of event or negligence.

(Note 2) "None" and "No disability" were additional categories included as of July.

(Note 3) "Unknown" includes indefinite outcome at the time of reporting (within 2 weeks) and events of warning that did not affect patients' conditions in any way.

Fig. II-1-53 Intensity of Treatment(Note 1)

Intensity of treatment	July to September		October to December		Total	
	Number	%	Number	%	Number	%
Intensive treatment(Note 2)	166	51.6	146	48.8	312	50.2
Minor treatment	126	39.1	123	41.1	249	40.1
No treatment	30	9.3	30	10.0	60	9.7
Total	322	100.0	299	100.0	621	100.0

(Note 1) "Intensity of treatment" data has been collected since July.

(Note 2) See Reference 1 of HPB Notification No. 0921001 (as of September 21, 2004).

Fig. II-1-54 Place of Occurrence

Place of Occurrence	January to March		April to June		July to September		October to December		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Outpatient examination room	9	3.6	5	1.6	12	3.7	9	3.0	35	2.9
Outpatient treatment room	4	1.6	2	0.6	2	0.6	3	1.0	11	0.9
Outpatient lobby	0	0.0	3	0.9	1	0.3	0	0.0	4	0.3
Emergency room	2	0.8	2	0.6	2	0.6	1	0.3	7	0.6
Critical care center	0	0.0	3	0.9	4	1.2	0	0.0	7	0.6
Patient room	127	51.2	149	46.3	141	43.8	142	47.5	559	46.9
Ward treatment room	3	1.2	7	2.2	6	1.9	6	2.0	22	1.8
Operation room	29	11.7	41	12.7	41	12.7	29	9.7	140	11.8
ICU	8	3.2	6	1.9	10	3.1	6	2.0	30	2.5
CCU	2	0.8	0	0.0	1	0.3	0	0.0	3	0.3
NICU	0	0.0	1	0.3	1	0.3	3	1.0	5	0.4
Examination room	2	0.8	4	1.2	4	1.2	5	1.7	15	1.3
Catheterization laboratory	2	0.8	16	5.0	14	4.3	5	1.7	37	3.1
Radiotherapy room	3	1.2	2	0.6	1	0.3	4	1.3	10	0.8
Radiography room	3	1.2	2	0.6	7	2.2	6	2.0	18	1.5
Radioactive scanning room	0	0.0	1	0.3	0	0.0	0	0.0	1	0.1
Dialysis room	0	0.0	1	0.3	1	0.3	1	0.3	3	0.3
Delivery room	0	0.0	4	1.2	0	0.0	1	0.3	5	0.4
Rehabilitation room	0	0.0	0	0.0	2	0.6	1	0.3	3	0.3
Restroom	8	3.2	8	2.5	14	4.3	8	2.7	38	3.2
Hallway	9	3.6	11	3.4	13	4.0	13	4.3	46	3.9
Bathroom	3	1.2	11	3.4	3	0.9	4	1.3	21	1.8
Stairway	1	0.4	0	0.0	0	0.0	1	0.3	2	0.2
Unknown	3	1.2	3	0.9	3	0.9	10	3.3	19	1.6
Others	30	12.1	40	12.4	39	12.1	41	13.7	150	12.6
Total	248	100.0	322	100.0	322	100.0	299	100.0	1,191	100.0

Fig. II-1-55 Clinical Department

Clinical Department (Note)	January to March		April to June		July to September		October to December		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Internal medicine	24	8.5	27	6.7	31	7.6	31	8.4	113	7.7
Anesthesiology	7	2.5	8	2.0	10	2.5	8	2.2	33	2.3
Cardiovascular medicine	14	4.9	29	7.2	25	6.1	23	6.3	91	6.2
Neurology	12	4.2	13	3.2	10	2.5	7	1.9	42	2.9
Respiratory tract medicine	11	3.9	20	5.0	20	4.9	26	7.1	77	5.3
Gastrointestinal medicine	21	7.4	33	8.2	31	7.6	22	6.0	107	7.3
Hematology	3	1.1	8	2.0	6	1.5	5	1.4	22	1.5
Circulatory surgery	3	1.1	1	0.2	1	0.2	2	0.5	7	0.5
Allergy	0	0.0	0	0.0	1	0.2	1	0.3	2	0.1
Rheumatism	0	0.0	2	0.5	0	0.0	1	0.3	3	0.2
Pediatrics	10	3.5	24	5.9	16	3.9	19	5.2	69	4.7
General surgery	18	6.3	33	8.2	37	9.1	28	7.6	116	7.9
Orthopedics	24	8.5	41	10.1	49	12.0	41	11.1	155	10.6
Plastic surgery	1	0.4	3	0.7	2	0.5	2	0.5	8	0.5
Cosmetic surgery	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Neurosurgery	9	3.2	17	4.2	30	7.4	20	5.4	76	5.2
Respiratory surgery	6	2.1	13	3.2	6	1.5	4	1.1	29	2.0
Cardiovascular surgery	17	6.0	10	2.5	11	2.7	12	3.3	50	3.4
Pediatric surgery	10	3.5	4	1.0	0	0.0	1	0.3	15	1.0
Pain clinic	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dermatology	5	1.8	8	2.0	12	2.9	4	1.1	29	2.0
Urology	8	2.8	15	3.7	18	4.4	5	1.4	46	3.1
Venereology	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Proctology	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Gynecology/Obstetrics	5	1.8	10	2.5	2	0.5	6	1.6	23	1.6
Obstetrics	1	0.4	2	0.5	1	0.2	1	0.3	5	0.3
Gynecology	5	1.8	2	0.5	0	0.0	5	1.4	12	0.8
Ophthalmology	0	0.0	7	1.7	3	0.7	5	1.4	15	1.0
Otolaryngology	2	0.7	7	1.7	9	2.2	6	1.6	24	1.6
Psychosomatic medicine	0	0.0	1	0.2	1	0.2	0	0.0	2	0.1
Psychiatry	26	9.2	18	4.5	23	5.6	18	4.9	85	5.8
Rehabilitation	1	0.4	2	0.5	9	2.2	6	1.6	18	1.2
Radiology	6	2.1	5	1.2	8	2.0	8	2.2	27	1.8
Dentistry	4	1.4	5	1.2	3	0.7	3	0.8	15	1.0
Orthodontics	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Pediatric dentistry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dental/oral surgery	4	1.4	3	0.7	4	1.0	8	2.2	19	1.3
Unknown	2	0.7	0	0.0	0	0.0	0	0.0	2	0.1
Others	25	8.8	33	8.2	29	7.1	40	10.9	127	8.7
No choice (Note)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	284	100.0	404	100.0	408	100.0	368	100.0	1,464	100.0

(Note) More than one “clinical department” may have been involved in one event.

Fig. II-1-56 Cause of Event

Cause of Event (Note)	January to March		April to June		July to September		October to December		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Neglect to check	67	14.2	80	13.4	86	15.2	87	16.3	320	14.7
Neglect to observe	66	14.0	84	14.0	81	14.3	79	14.8	310	14.3
Misjudgment	59	12.5	95	15.9	79	13.9	70	13.1	303	13.9
Lack of knowledge	14	3.0	24	4.0	29	5.1	12	2.2	79	3.6
Deficiency of technique/skill	15	3.2	37	6.2	30	5.3	12	2.2	94	4.3
Delayed reporting	6	1.3	12	2.0	3	0.5	6	1.1	27	1.2
Under unusual physical condition	9	1.9	12	2.0	16	2.8	16	3.0	53	2.4
Under unusual psychological condition	1	0.2	10	1.7	4	0.7	11	2.1	26	1.2
System failure	15	3.2	14	2.3	9	1.6	16	3.0	54	2.5
Inadequate coordination	27	5.7	39	6.5	26	4.6	19	3.6	111	5.1
Inadequate documentation	5	1.1	5	0.8	2	0.4	3	0.6	15	0.7
Similarity in patient's appearance or name	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Busy working condition	11	2.3	13	2.2	12	2.1	16	3.0	52	2.4
Problem in environment	20	4.2	7	1.2	18	3.2	16	3.0	61	2.8
Problem in the drug	6	1.3	0	0.0	7	1.2	2	0.4	15	0.7
Problem in medical device	12	2.5	8	1.3	9	1.6	10	1.9	39	1.8
Problem in other items	6	1.3	4	0.7	4	0.7	6	1.1	20	0.9
Problem in facility	15	3.2	9	1.5	8	1.4	7	1.3	39	1.8
Problem in education/training	21	4.4	23	3.8	18	3.2	17	3.2	79	3.6
Lack of explanation	29	6.1	19	3.2	19	3.4	21	3.9	88	4.0
Others	69	14.6	104	17.4	107	18.9	109	20.4	389	17.9
Total	473	100.0	599	100.0	567	100.0	535	100.0	2,174	100.0

(Note) "Cause of event" may be more than one.

Fig. II-1-57 Cases Encouraged to be Reported (Note)

Cases encouraged to be reported	July to September		October to December		Total	
	Number	%	Number	%	Number	%
Accident due to use of contaminated drug/material/biologic product	1	0.3	0	0.0	1	0.2
Death or disability due to nosocomial infection	1	0.3	0	0.0	1	0.2
Suicide or suicide attempt during hospitalization	10	3.1	7	2.3	17	2.7
Escape of inpatient	1	0.3	0	0.0	1	0.2
Burn during hospitalization	1	0.3	4	1.3	5	0.8
Electric shock during hospitalization	0	0.0	0	0.0	0	0.0
Death or disability of patient due to facility fire	0	0.0	0	0.0	0	0.0
Handing over of infant to wrong parent	0	0.0	2	0.7	2	0.3
Others	308	95.7	286	95.7	594	95.7
Total	322	100.0	299	100.0	621	100.0

(Note) Data on "cases encouraged to be reported" has been collected since July.

Fig. II-1-58 Establishment of Accident Investigation Board (Note 1)

Establishment of accident investigation board(Note 2)	July to September		October to December		Total	
	Number	%	Number	%	Number	%
Existing internal investigation board	59	17.6	41	13.3	100	15.5
Existing external investigation board	2	0.6	1	0.3	3	0.5
Internal investigation board to be established	1	0.3	3	1.0	4	0.6
External investigation board to be established	1	0.3	0	0.0	1	0.2
Existing medical safety committee is in charge of investigation	228	67.9	225	72.8	453	70.2
Currently under consideration and undecided	8	2.4	3	1.0	11	1.7
Others	34	10.1	33	10.7	67	10.4
No choice(Note 3)	3	0.9	3	1.0	6	0.9
Total	336	100.0	309	100.0	645	100.0

(Note 1) Data on "availability of accident investigation board" has been collected since July.

(Note 2) Multiple choices acceptable

(Note 3) "No choice" means none of the checkboxes for "establishment of accident investigation board" was checked.

Fig. II-1-59 Summary of Event and Potential of Residual Disability

Summary of Event × Potential of Residual Disability	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Ordering	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3
Drug	1	0	2	0	3	2	1	4	1	8	9	9	3	3	24
Blood transfusion	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Treatment/procedure	6	17	9	9	41	17	10	18	9	54	41	40	27	17	125
Medical equipment, etc.	3	7	2	3	15	4	0	3	5	12	9	14	12	7	42
Medical device	0	1	1	1	3	2	0	1	2	5	6	2	8	2	18
Drainage tube or other tube	3	6	1	2	12	2	0	2	3	7	3	12	3	5	23
Dental equipment	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Examination/test	0	1	1	1	3	2	1	0	1	4	1	7	2	3	13
Nursing care	7	9	11	9	36	9	9	14	12	44	69	65	42	54	230
Others	9	10	8	13	40	5	3	3	8	19	16	23	16	15	70
Total	26	44	33	35	138	39	24	42	36	141	145	160	102	101	508

(Note) "None" and "No disability" were additional categories included as of July.

None[(Note)]					No disability[(Note)]					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	4
0	3	11	9	23	0	3	6	5	14	7	3	1	1	12	84
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1	9	26	25	61	0	7	13	9	29	11	16	2	2	31	341
0	4	10	9	23	0	2	4	2	8	2	7	3	2	14	114
0	0	1	1	2	0	1	4	1	6	0	3	1	1	5	39
0	4	8	7	19	0	1	0	1	2	1	4	2	1	8	71
0	0	1	1	2	0	0	0	0	0	1	0	0	0	1	4
0	1	2	3	6	0	0	2	4	6	1	1	1	0	3	35
0	15	32	31	78	0	4	7	12	23	13	10	9	1	33	444
0	2	8	7	17	0	1	6	3	10	3	5	2	2	12	168
1	35	89	84	209	0	17	38	35	90	37	42	18	8	105	1,191

Fig. II-1-60 Situation and Potential of Residual Disability

Situation × Potential of Residual Disability	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Related to drug															
Drug preparation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other drug preparations	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcutaneous/intramuscular injection	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3
Intravenous injection	0	0	0	0	0	1	1	1	1	4	4	1	0	3	8
Arterial injection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peripheral intravenous drop	0	0	0	0	0	1	0	1	0	2	0	3	1	0	4
Central venous injection	0	0	0	0	0	0	0	0	0	0	2	1	0	1	4
Oral administration	0	0	1	0	1	0	0	0	0	0	1	1	1	1	4
Nose drop/eye drop/ear drop	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Other drug prescription/administration	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1
Oral drug dispensing/management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Injection dispensing/management	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
Dispensing/management, others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Related to blood transfusion															
Pre-transfusion testing	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blood transfusion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blood transfusion, others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Related to treatment/procedure															
Craniotomy	1	0	0	1	2	1	0	1	0	2	2	1	1	0	4
Thoracotomy	0	1	0	0	1	2	0	1	0	3	1	0	1	0	2
Cardiotomy	0	1	0	0	1	1	0	0	1	2	1	0	0	0	1
Laparotomy	0	2	1	0	3	2	1	0	0	3	6	1	3	1	11
Extremities	0	0	0	0	0	1	0	0	0	1	0	0	1	2	3
Endoscopic surgery	0	0	1	0	1	3	1	2	1	7	1	3	3	3	10
Other surgery	0	2	0	2	4	0	2	2	1	5	3	6	7	0	16
Preparation for surgery	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1
Preoperative procedure	0	0	0	0	0	0	0	1	0	1	0	2	0	1	3
Postoperative procedure	1	1	0	1	3	1	1	1	0	3	0	1	0	0	1
Surgery, others	0	3	0	1	4	1	1	1	0	3	2	3	0	0	5
General anesthesia (inhalation anesthesia and intravenous anesthesia)	0	0	0	0	0	0	0	1	0	1	0	0	0	1	1
Local anesthesia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Inhalation anesthesia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intravenous anesthesia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vertebral/epidural anesthesia	0	0	0	0	0	0	0	0	1	1	0	0	1	1	2
Anesthesia, others	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Caesarean section	0	0	0	0	0	0	0	0	1	1	0	1	0	0	1
Delivery and artificial abortion, others	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1
Blood purification (including hemodialysis)	1	0	0	0	1	0	0	0	0	0	1	0	1	0	2
IVR (ex. angiocatheter)	0	0	2	0	2	2	0	4	0	6	2	2	4	2	10
Radiotherapy	0	0	0	0	0	0	0	1	0	1	1	0	1	0	2
Rehabilitation	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1

None[Note 1]					No disability[Note 1]					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
															90
0	1	2	1	4	0	0	1	0	1	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	0	1	1	2	1	0	0	0	1	7
0	2	6	1	9	0	0	1	2	3	3	1	1	0	5	29
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	3	0	4	0	1	0	0	1	2	1	0	1	4	15
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	1	4	5	0	2	2	1	5	3	2	0	0	5	20
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3
0	0	1	1	2	0	0	1	0	1	0	0	0	0	0	3
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
															0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
															319
0	1	2	0	3	0	0	0	0	0	0	0	0	1	1	12
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	7
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	5
0	0	1	2	3	0	2	0	0	2	2	1	0	0	3	25
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	5
0	1	3	0	4	0	1	0	0	1	0	1	0	0	1	24
0	0	3	3	6	0	0	0	1	1	0	5	0	0	5	37
0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	3
0	0	1	1	2	0	1	0	0	1	0	0	0	0	0	7
0	1	2	0	3	0	0	1	0	1	0	1	0	0	1	12
0	1	0	1	2	0	0	2	0	2	0	1	0	0	1	17
0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	3
0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4
0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
0	0	1	0	1	0	1	0	0	1	1	0	0	0	1	6
0	1	0	1	2	0	0	1	0	1	0	0	0	0	0	21
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	4
0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	4

Situation × Potential of Residual Disability	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Invasive dental treatment	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Endoscopic treatment	0	0	1	0	1	1	0	1	1	3	1	0	0	1	2
Treatment, others	0	2	3	0	5	0	0	1	0	1	4	4	3	1	12
Central venous line	2	1	1	0	4	0	0	0	1	1	2	3	1	0	6
Peripheral venous line	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
Catheter for blood purification	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Feeding tube (NG, ED)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Urethral catheter	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Drainage procedure	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
Wound care	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tube placement, others	0	0	0	0	0	0	0	1	0	1	1	0	1	1	3
Tracheal intubation	0	0	0	0	0	0	0	0	1	1	1	1	0	0	2
Tracheotomy	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0
Cardiac compression	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Oxygen therapy	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emergency procedure, others	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1
Related to use/management of medical device															
Vntilator	0	0	2	0	2	0	0	0	1	1	4	0	2	0	6
Oxygen therapy equipment	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
Oxygenator	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
Defibrillator	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pace maker	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Infusion/transfusion pump	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Blood purification device	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ECG, blood pressure monitor	0	1	0	0	1	2	0	0	0	2	0	0	0	0	0
Pulse oxymeter	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Use/management of medical device, others	0	0	0	0	0	0	0	0	0	0	2	2	3	3	10
Use/management of other dental devices and materials	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Related to use/management of drainage tube or other tube															
Central venous line (Drainage tube, other tubes…)	0	0	0	0	0	0	0	1	1	2	0	1	0	0	1
Peripheral venous line	0	0	0	0	0	1	0	0	0	1	0	0	1	0	1
Tracheal tube	1	3	0	3	7	0	0	1	2	3	1	0	1	0	2
Tracheal cannula	0	2	0	0	2	0	0	0	0	0	0	1	0	1	2
Feeding tube (NG, ED) (Use of drainage tube, other tubes…)	2	0	0	0	2	0	0	0	1	1	0	1	1	0	2
Urethral catheter (Drainage tube, other tubes…)	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Chest drainage tube	0	0	0	0	0	0	0	0	0	0	1	4	1	1	7
Abdominal drainage tube	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2
Ventricular/cisternal drainage tube	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subcutaneous continuous suction drainage tube	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Epidural catheter	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Catheter/line for blood purification	0	0	0	0	0	0	1	0	0	1	0	0	1	0	1
Use/management of drainage tube or other tube, others	0	0	1	1	2	0	0	1	0	1	0	4	1	3	8

None[Note 1]					No disability[Note 1]					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	3
0	0	1	3	4	0	1	0	0	1	1	1	2	0	4	15
0	0	1	3	4	0	1	3	3	7	2	0	0	1	3	32
0	1	2	4	7	0	1	4	3	8	1	1	0	0	2	28
0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	6
0	0	0	1	1	0	0	0	0	0	0	1	0	0	1	2
0	2	2	1	5	0	1	1	0	2	0	1	0	0	1	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
															48
0	0	0	0	0	0	0	2	1	3	2	0	0	1	3	15
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	1	2	3	0	0	3	1	4	1	2	1	0	4	21
0	0	0	1	1	0	0	0	1	1	0	0	0	0	0	3
															77
1	0	2	0	3	0	0	0	0	0	1	1	0	0	2	8
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	14
0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	6
0	0	1	1	2	0	0	0	1	1	0	0	0	1	1	9
0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	3
0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	10
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	2	1	4	7	0	0	0	0	0	1	0	0	0	1	19

Situation × Potential of Residual Disability	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Related to examination															
Blood drawing	0	1	0	0	1	1	0	0	0	1	0	0	1	0	1
Other sample collection	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Other physiological tests	0	0	0	0	0	0	0	0	0	0	2	0	0	1	3
General imaging	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
MRI	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Angiocatheter-aided imaging	0	0	0	0	0	2	0	0	0	2	0	2	0	1	3
Lower gastrointestinal imaging	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other imaging	0	0	0	1	1	0	0	0	0	0	0	1	0	0	1
Upper gastrointestinal	0	0	0	0	0	0	1	0	0	1	1	2	0	0	3
Lower gastrointestinal	0	0	1	0	1	0	0	0	0	0	1	0	0	1	2
Bronchoscopy	0	0	0	0	0	0	0	0	1	1	0	1	0	2	3
Other endoscopic examination	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Pathological examination	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Examination, others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Related to nursing care															
Endotracheal/oral suctioning	1	1	0	0	2	0	0	0	0	0	1	0	0	1	2
Changing position	0	0	0	0	0	0	0	1	1	2	2	4	1	0	7
Bed bath	0	0	0	1	1	1	0	0	1	2	0	2	0	1	3
Help with changing clothes	1	0	0	0	1	0	0	0	0	0	1	0	0	1	2
Help with eating	1	0	0	0	1	1	1	2	1	5	0	1	0	0	1
Help with bathing	0	0	0	1	1	0	0	0	1	1	2	3	1	1	7
Help with elimination	0	0	0	0	0	1	2	0	0	3	3	4	5	6	18
Help with moving	0	0	0	0	0	0	0	0	1	1	2	2	1	1	6
Transportation	0	0	0	1	1	0	0	0	0	0	0	1	0	1	2
Tending patient's belongings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Meal serving	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Patient observation	3	2	1	3	9	4	0	2	3	9	6	5	4	5	20
Other nursing care	1	0	2	1	4	1	0	4	1	6	9	8	11	9	37
Oral intake	1	0	0	2	3	0	0	0	0	0	1	0	0	0	1
Other feeding or nutrition support	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1
While taking a walk	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3
While moving from one place to another	1	1	2	2	6	1	2	1	1	5	25	17	15	15	72
While going out/sleeping out	0	1	2	0	3	0	0	0	0	0	0	0	1	0	1
While eating	0	0	0	1	1	1	0	0	1	2	1	1	0	0	2
While bathing	0	3	1	0	4	0	0	0	0	0	0	2	0	2	4
While excreting	0	0	0	1	1	0	0	3	0	3	7	9	0	0	16
While sleeping	1	0	2	0	3	2	2	1	3	8	3	1	3	2	9
Recuperation, others	1	1	1	0	3	0	2	2	2	6	5	8	6	12	31
Others	**6**	**7**	**5**	**9**	**27**	**1**	**2**	**1**	**4**	**8**	**9**	**10**	**10**	**6**	**35**
No choice(Note 2)	**0**	**6**	**1**	**1**	**8**	**3**	**2**	**0**	**0**	**5**	**10**	**14**	**0**	**1**	**25**
Total	**26**	**44**	**33**	**35**	**138**	**39**	**24**	**42**	**36**	**141**	**145**	**160**	**102**	**101**	**508**

(Note 1) "None" and "No disability" were additional categories included as of July.
(Note 2) "No choice" means no checkbox for "situation" was selected.

None[Note 1]					No disability[Note 1]					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
															42
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
0	0	1	0	1	0	0	0	1	1	0	1	0	0	1	8
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
0	0	1	0	1	0	0	1	0	1	1	0	0	0	1	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	0	1	1	0	0	1	0	1	0	0	0	0	0	5
0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
															488
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	5
0	0	0	1	1	0	0	0	0	0	1	0	0	1	2	12
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	7
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	4
0	1	0	1	2	0	0	1	0	1	1	0	0	0	1	11
0	0	1	0	1	0	1	0	1	2	1	0	1	0	2	14
0	0	1	2	3	0	0	0	1	1	0	0	1	0	1	26
0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	9
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	4
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	6	2	9	0	0	1	2	3	3	0	0	0	3	53
0	0	3	6	9	0	1	0	0	1	1	2	1	0	4	61
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	4
0	8	11	10	29	0	0	4	5	9	3	5	1	0	9	130
0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	6
0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	8
0	1	0	1	2	0	0	0	0	0	0	1	0	0	1	11
0	0	3	1	4	0	0	1	2	3	1	0	0	0	1	28
0	0	3	2	5	0	1	0	1	2	2	1	0	0	3	30
0	3	2	4	9	0	0	0	1	1	1	1	5	0	7	57
0	**1**	**2**	**4**	**7**	**0**	**0**	**3**	**2**	**5**	**0**	**3**	**1**	**0**	**4**	**86**
0	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**41**
1	**35**	**89**	**84**	**209**	**0**	**17**	**38**	**35**	**90**	**37**	**42**	**18**	**8**	**105**	**1,191**

Fig. II-1-61 Details of Event and Potential of Residual Disability

Details of Event × Potential of Residual Disability	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Related to drug															
Dose error	0	0	0	0	0	0	0	1	0	1	0	1	0	2	3
Overdose	0	0	0	0	0	1	0	1	0	2	1	1	1	2	5
Dosing speed too fast	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3
Patient misidentification	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drug mix-up	0	0	0	0	0	0	0	0	0	0	4	4	0	0	8
Wrong dosing method	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drug prescription/administration, others	0	0	2	0	2	1	1	0	0	2	1	3	1	1	6
Dispensing error (wrong dose/number)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dispensing/drug management, others	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
Drug/blood product management, others	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1
Related to blood transfusion															
Cross-match error	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Error in documentation/recording of results	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Transfusion testing, others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Irradiation of blood products, blood transfusion, others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Related to treatment/procedure															
Patient misidentification	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wrong site treatment/procedure	0	0	0	0	0	0	0	0	1	1	4	1	4	0	9
Wrong examination/treatment/ procedure, others	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
Wrong method (technique)	0	0	0	0	0	0	1	2	0	3	4	3	4	0	11
Not implemented/forgotten (treatment/procedure)	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Unnecessary treatment/procedure	0	0	0	0	0	1	0	0	0	1	0	2	0	0	2
Wrong patient position	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wrong examination/treatment, others	1	2	0	0	3	1	0	1	1	3	2	1	5	1	9
Aspiration	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Retained foreign object	0	0	0	0	0	0	0	0	0	0	4	4	2	3	13
Treatment/procedure, others	4	12	9	7	32	13	7	15	7	42	20	19	13	11	63
Use/management of medical device															
Assembly	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Forgot to set up/turn on power	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
Malfunction	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Lack of knowledge	0	1	0	0	1	0	0	0	0	0	0	0	1	0	1
Forgot to set alarm	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Range of alarm setup	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Neglect in inspection/management before or during device operation	0	0	0	0	0	1	0	0	0	1	1	0	0	1	2
Error in sterilization/cleaning technique (medical equipment, etc)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Breakage (medical equipment, etc)	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Use/management of medical device, others	1	1	2	0	4	1	0	1	1	3	3	2	3	1	9

None[Note 1]					No disability[Note 1]					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
															90
0	1	1	1	3	0	1	0	0	1	0	1	0	0	1	9
0	2	2	3	7	0	0	2	1	3	1	1	0	0	2	19
0	0	2	0	2	0	0	0	0	0	1	0	0	0	1	6
0	0	1	1	2	0	0	1	4	5	2	2	0	0	4	11
0	1	3	0	4	0	0	1	0	1	2	0	0	1	3	16
0	0	1	0	1	0	1	1	0	2	0	0	1	0	1	4
0	0	3	2	5	0	1	1	0	2	2	0	0	0	2	19
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	0	0	0	0	1	0	0	0	1	3
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
															0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
															319
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	1	2	3	6	0	0	0	1	1	0	2	0	1	3	20
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
0	1	3	0	4	0	0	3	2	5	0	5	0	0	5	28
0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	4
0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	3	3	0	0	1	0	1	1	1	0	0	2	21
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	3	4	3	10	0	1	0	2	3	2	2	0	0	4	30
0	5	15	15	35	0	8	9	4	21	5	5	3	2	15	208
															48
0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	3
0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	0	1	1	2	0	0	0	1	1	7
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
0	0	0	1	1	0	1	4	1	6	1	3	1	0	5	28

Details of Event × Potential of Residual Disability	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Related to use/management of drainage tube or other tube															
Infusion leakage	0	0	0	0	0	1	0	0	0	1	0	2	1	1	4
Self-removal	1	1	0	1	3	0	0	0	1	1	1	0	0	0	1
Spontaneous dislodgment	0	2	0	1	3	0	0	0	0	0	0	1	0	0	1
Disconnection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Blockage	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
Breakage/severance	0	0	0	0	0	0	0	1	0	1	0	0	0	1	1
Wrong connection	0	1	0	0	1	0	0	0	0	0	1	2	0	0	3
Air bubble in tube	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
Use/management of drainage tube or other tube, others	2	1	1	2	6	0	1	1	3	5	1	8	3	3	15
Related to examination															
Patient misidentification (examination)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wrong examination/evaluation technique	0	0	0	0	0	0	0	0	0	0	0	2	0	1	3
Error in sample collection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sample misidentification (examination)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lost sample	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sample contamination	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Management of analytical device/ equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Preparation of examination device/ equipment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Result reporting	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Examination, others	0	1	1	1	3	3	1	0	1	5	4	7	1	5	17
Related to nursing care															
Fall	1	1	5	3	10	2	5	5	4	16	41	41	30	35	147
Fall from bed	2	0	0	1	3	1	1	3	2	7	10	5	2	7	24
Collision	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Restraint	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0
Severe decubitus (involving muscle layer, Stage III/IV)	0	0	0	0	0	1	0	1	1	3	5	4	4	1	14
Aspiration (nursing care)	1	0	2	3	6	2	0	2	3	7	0	1	0	0	1
Accidental ingestion (nursing care)	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Nursing care/recuperation, others	5	8	5	4	22	5	3	4	5	17	11	17	10	13	51
Transportation, others	0	0	0	1	1	0	0	1	0	1	0	1	1	2	4
Going out/staying out without notice	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Self medication, others	1	0	0	1	2	0	0	0	1	1	1	0	1	0	2
Meal/nutrition, others	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Others	**6**	**7**	**5**	**9**	**27**	**1**	**2**	**1**	**4**	**8**	**9**	**10**	**10**	**6**	**35**
No choice(Note 2)	**0**	**6**	**1**	**1**	**8**	**3**	**2**	**0**	**0**	**5**	**10**	**14**	**0**	**1**	**25**
Total	**26**	**44**	**33**	**35**	**138**	**39**	**24**	**42**	**36**	**141**	**145**	**160**	**102**	**101**	**508**

(Note 1) "None" and "No disability" were additional categories included as of July.
(Note 2) "No choice" means no checkbox for "details of event" was selected.

None(Note 1)					No disability(Note 1)					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
															77
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	6
0	1	2	0	3	0	0	0	0	0	0	0	1	0	1	9
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	2	2	4	0	0	0	0	0	0	0	0	0	0	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1	2	2	3	8	0	0	0	1	1	2	5	1	1	9	44
															42
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	4
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1
0	1	3	2	6	0	0	2	2	4	0	0	1	0	1	36
															488
0	12	19	15	46	0	0	5	6	11	6	6	6	0	18	248
0	0	1	3	4	0	1	0	2	3	4	0	1	1	6	47
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	0	0	0	1	1	0	1	0	0	1	19
0	1	0	2	3	0	0	1	0	1	2	1	0	0	3	21
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
0	2	11	12	25	0	2	1	3	6	2	2	2	0	6	127
0	0	3	0	3	0	0	0	1	1	0	0	0	0	0	10
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	6
0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	3
0	**1**	**2**	**4**	**7**	**0**	**0**	**3**	**2**	**5**	**0**	**3**	**1**	**0**	**4**	**86**
0	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**41**
1	**35**	**89**	**84**	**209**	**0**	**17**	**38**	**35**	**90**	**37**	**42**	**18**	**8**	**105**	**1,191**

Fig. II-1-62 Place of Occurrence and Potential of Residual Disability

Place of Occurrence × Potential of Residual Disability	Death					High					Low				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Outpatient examination room	0	0	0	0	0	2	0	0	0	2	5	4	3	1	13
Outpatient treatment room	0	0	0	0	0	0	0	1	0	1	1	2	1	1	5
Outpatient lobby	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3
Emergency room	0	0	0	0	0	1	1	0	0	2	1	1	0	1	3
Critical care center	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3
Patient room	21	18	16	21	76	15	12	23	23	73	73	82	45	48	248
Ward treatment room	0	1	0	0	1	0	0	0	0	0	3	5	1	1	10
Operation room	1	8	1	4	14	8	3	6	5	22	15	11	17	7	50
ICU	0	1	2	0	3	3	0	0	2	5	3	2	3	1	9
CCU	0	0	0	0	0	0	0	0	0	0	2	0	1	0	3
NICU	0	1	0	0	1	0	0	0	0	0	0	0	1	2	3
Examination room	0	0	1	0	1	1	0	0	1	2	1	2	0	2	5
Catheterization laboratory	0	3	3	0	6	1	2	3	0	6	1	7	6	2	16
Radiotherapy room	0	0	0	0	0	1	0	1	0	2	2	0	0	2	4
Radiography room	0	0	0	0	0	0	0	1	0	1	2	1	1	1	5
Radioactive scanning room	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Dialysis room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delivery room	0	0	0	0	0	0	1	0	0	1	0	2	0	0	2
Rehabilitation room	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Restroom	1	1	0	0	2	1	0	2	1	4	6	6	2	2	16
Hallway	1	0	0	1	2	0	1	0	1	2	6	4	7	7	24
Bathroom	0	3	1	1	5	0	0	0	0	0	2	5	1	2	10
Stairway	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	1	0	0	1	1	1	0	0	2	1	0	1	5	7
Others	2	7	9	8	26	5	3	4	3	15	21	20	11	15	67
Total	26	44	33	35	138	39	24	42	36	141	145	160	102	101	508

(Note) "None" and "No disability" were additional categories included as of July.

None[(Note)]					No disability[(Note)]					Unknown					Aggregate total
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
0	0	2	4	6	0	1	6	4	11	2	0	1	0	3	35
0	0	0	1	1	0	0	0	1	1	3	0	0	0	3	11
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	4
0	0	0	0	0	0	0	2	0	2	0	0	0	0	0	7
0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	7
0	16	35	30	81	0	5	16	15	36	18	16	6	5	45	559
0	1	4	5	10	0	0	0	0	0	0	0	1	0	1	22
0	5	13	9	27	0	6	4	3	13	5	8	0	1	14	140
0	1	4	2	7	0	0	1	0	1	2	2	0	1	5	30
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	5
0	1	2	2	5	0	0	1	0	1	0	1	0	0	1	15
0	2	1	2	5	0	0	1	1	2	0	2	0	0	2	37
0	0	0	2	2	0	0	0	0	0	0	2	0	0	2	10
1	0	3	3	7	0	1	1	2	4	0	0	1	0	1	18
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	1	1	2	0	1	0	0	1	0	0	0	0	0	3
0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	5
0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	3
0	0	7	2	9	0	0	1	2	3	0	1	2	1	4	38
0	4	3	3	10	0	0	1	1	2	2	2	2	0	6	46
0	1	0	1	2	0	1	0	0	1	1	1	1	0	3	21
0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	2
0	1	2	5	8	0	0	0	0	0	1	0	0	0	1	19
0	3	9	11	23	0	1	3	4	8	2	6	3	0	11	150
1	35	89	84	209	0	17	38	35	90	37	42	18	8	105	1,191

Fig. II-1-63 Place of Occurrence and Inpatient/Outpatient Status

Place of Occurrence × Inpatient/Outpatient Status	Inpatient					Outpatient					Aggregate total
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
Outpatient examination room	2	0	0	1	3	7	5	12	8	32	35
Outpatient treatment room	0	0	0	1	1	4	2	2	2	10	11
Outpatient lobby	0	0	1	0	1	0	3	0	0	3	4
Emergency room	0	0	0	0	0	2	2	2	1	7	7
Critical care center	0	3	3	0	6	0	0	1	0	1	7
Patient room	127	149	141	142	559	0	0	0	0	0	559
Ward treatment room	3	7	6	6	22	0	0	0	0	0	22
Operation room	28	41	40	29	138	1	0	1	0	2	140
ICU	8	6	10	6	30	0	0	0	0	0	30
CCU	2	0	1	0	3	0	0	0	0	0	3
NICU	0	1	1	3	5	0	0	0	0	0	5
Examination room	1	3	4	4	12	1	1	0	1	3	15
Catheterization laboratory	2	16	14	5	37	0	0	0	0	0	37
Radiotherapy room	3	1	1	3	8	0	1	0	1	2	10
Radiography room	3	2	5	3	13	0	0	2	3	5	18
Radioactive scanning room	0	0	0	0	0	0	1	0	0	1	1
Dialysis room	0	1	1	1	3	0	0	0	0	0	3
Delivery room	0	4	0	1	5	0	0	0	0	0	5
Rehabilitation room	0	0	2	1	3	0	0	0	0	0	3
Restroom	8	8	13	8	37	0	0	1	0	1	38
Hallway	9	11	12	13	45	0	0	1	0	1	46
Bathroom	3	11	3	4	21	0	0	0	0	0	21
Stairway	1	0	0	1	2	0	0	0	0	0	2
Unknown	3	3	3	10	19	0	0	0	0	0	19
Others	27	32	35	33	127	3	8	4	8	23	150
Total	230	299	296	275	1,100	18	23	26	24	91	1,191

Fig. II-1-64 Cause of Event and Summary of Event

Cause of Event (Note) × Summary of Event	Ordering					Drug					Blood transfusion					Treatment /procedure					Medical equipment, etc.				
																					Medical device				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Neglect to check	0	2	0	2	4	16	17	16	14	63	0	1	0	0	1	25	23	31	22	101	4	2	10	5	21
Neglect to observe	0	0	0	0	0	1	5	3	1	10	0	0	0	0	0	13	15	17	12	57	2	1	6	5	14
Misjudgment	0	0	0	1	1	2	4	5	2	13	0	0	0	0	0	18	27	22	12	79	0	2	5	0	7
Lack of knowledge	0	1	0	0	1	3	3	6	3	15	0	0	0	0	0	1	7	11	1	20	1	2	4	2	9
Deficiency of technique/skill	0	0	0	0	0	0	3	1	0	4	0	0	0	0	0	10	20	15	5	50	2	1	1	0	4
Delayed reporting	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3	3	0	1	7	0	0	0	0	0
Under unusual physical condition	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	2	2	5	7	16	0	0	0	0	0
Under unusual psychological condition	0	1	0	0	1	0	3	1	1	5	0	0	0	0	0	0	2	0	4	6	0	0	2	0	2
System failure	0	2	0	1	3	4	2	4	3	13	0	1	0	0	1	6	1	3	3	13	1	1	2	2	6
Inadequate coordination	0	1	0	1	2	4	6	2	3	15	0	0	0	0	0	9	8	8	4	29	1	0	1	0	2
Inadequate documentation	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	1	0	1	1	3	0	0	1	0	1
Similarity in patient's appearance or name	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Busy working condition	0	0	0	0	0	1	4	1	3	9	0	1	0	0	1	5	1	3	3	12	1	0	0	1	2
Problem in environment	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0
Problem in the drug	0	0	0	0	0	4	0	4	0	8	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0
Problem in medical device	0	0	0	0	0	1	0	1	1	3	0	0	0	0	0	3	4	3	2	12	6	2	4	3	15
Problem in other items	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	1	5	1	0	0	1	2
Problem in facility	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	2	2	0	0	4	0	0	1	1	2
Problem in education/training	0	2	0	0	2	4	4	2	2	12	0	0	0	0	0	3	3	3	4	13	2	0	3	1	6
Lack of explanation	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	11	2	1	3	17	0	0	0	0	0
Others	0	0	0	0	0	0	2	6	3	11	0	0	0	0	0	23	45	35	29	132	1	2	1	1	5
Total	0	9	0	5	14	41	56	53	39	189	0	3	0	0	3	142	167	159	114	582	22	13	41	22	98

(Note) "Cause of event" may have been more than one.

Medical equipment, etc.										Examination					Nursing care					Others					Aggregate total
Drainage tube or other tube					Dental equipment																				
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
4	7	4	10	25	0	0	1	0	1	2	2	3	4	11	11	20	15	20	66	5	6	6	10	27	320
2	5	4	4	15	0	0	0	0	0	0	0	1	1	2	37	50	40	47	174	11	8	10	9	38	310
6	12	4	7	29	0	0	1	0	1	1	5	0	1	7	29	37	33	41	140	3	8	9	6	26	303
1	5	3	0	9	0	0	0	0	0	0	1	0	0	1	7	2	4	3	16	1	3	1	3	8	79
0	2	0	1	3	1	0	1	0	2	0	2	0	1	3	2	5	10	5	22	0	4	2	0	6	94
1	3	1	1	6	0	0	0	0	0	0	0	0	0	0	2	3	2	3	10	0	2	0	1	3	27
0	0	2	2	4	0	0	0	0	0	0	1	0	1	2	6	5	7	1	19	1	4	2	4	11	53
0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	3	0	5	9	0	1	0	1	2	26
1	2	0	3	6	0	0	0	0	0	0	0	0	0	0	2	2	0	2	6	1	3	0	2	6	54
3	2	3	3	11	0	0	0	0	0	0	1	0	0	1	9	10	9	6	34	1	11	3	2	17	111
0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	2	0	1	4	1	2	0	1	4	15
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	2	2	0	0	0	0	0	0	0	0	1	1	3	3	8	6	20	1	4	0	0	5	52
1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	11	5	16	10	42	4	2	2	4	12	61
0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	2	0	2	1	0	0	0	1	15
0	1	1	2	4	0	0	0	1	1	0	0	0	1	1	1	1	0	0	2	1	0	0	0	1	39
0	0	1	0	1	0	0	0	0	0	0	0	0	1	1	2	1	2	2	7	1	1	1	1	4	20
2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	9	6	5	5	25	2	1	1	0	4	39
0	0	2	1	3	0	0	0	0	0	0	0	0	0	0	11	7	7	7	32	1	7	1	2	11	79
0	0	0	1	1	0	0	0	0	0	1	2	0	0	3	12	13	15	13	53	5	1	3	4	13	88
3	8	4	3	18	0	0	0	0	0	1	4	5	6	16	26	28	36	41	131	15	15	20	26	76	389
24	47	29	42	142	1	0	4	1	6	6	18	9	18	51	182	203	211	218	814	55	83	61	76	275	2,174

Fig. II-1-65 Place of Occurrence and Summary of Event

Place of Occurrence × Summary of Event	Ordering					Drug					Blood transfusion					Treatment /procedure					Medical equipment, etc.				
																					Medical device				
	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total
Outpatient examination room	0	0	0	0	0	1	4	4	3	12	0	0	0	0	0	4	0	5	3	12	0	0	0	0	0
Outpatient treatment room	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	2	1	1	1	5	0	0	0	0	0
Outpatient lobby	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Emergency room	0	0	0	0	0	1	0	1	0	2	0	1	0	0	1	1	1	0	1	3	0	0	0	0	0
Critical care center	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	0
Patient room	0	2	0	2	4	13	9	15	9	46	0	0	0	0	0	18	27	23	22	90	5	2	6	5	18
Ward treatment room	0	0	0	0	0	1	1	1	0	3	0	0	0	0	0	1	4	3	3	11	0	0	1	0	1
Operation room	0	0	0	0	0	0	0	2	2	4	0	0	0	0	0	25	37	30	19	111	0	1	5	1	7
ICU	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	2	2	1	1	6	1	1	2	0	4
CCU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0
NICU	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1
Examination room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	6	0	0	0	0	0
Catheterization laboratory	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	12	11	3	28	0	0	1	1	2
Radiotherapy room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	1	1	5	0	2	0	0	2
Radiography room	0	0	0	0	0	1	0	1	1	3	0	0	0	0	0	2	2	3	1	8	0	0	0	0	0
Radioactive scanning room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dialysis room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0
Delivery room	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	3	0	1	4	0	0	0	0	0
Rehabilitation room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Restroom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hallway	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
Bathroom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stairway	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
Others	0	0	0	0	0	1	4	1	3	9	0	0	0	0	0	13	8	12	10	43	2	1	1	0	4
Total	0	2	0	2	4	19	19	27	19	84	0	1	0	0	1	76	99	95	71	341	8	7	16	8	39

Medical equipment, etc.										Examination					Nursing care					Others					Aggregate total
Drainage tube or other tube					Dental equipment																				
January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	January to March	April to June	July to September	October to December	Total	
0	0	1	0	1	0	0	0	1	1	2	0	2	2	6	1	0	0	0	1	1	1	0	0	2	35
0	1	0	0	1	1	0	0	0	1	0	0	0	1	1	0	0	0	1	1	1	0	0	0	1	11
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	1	0	2	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	7
0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	7
7	18	8	10	43	0	0	1	0	1	0	1	1	1	3	68	69	69	71	277	16	21	18	22	77	559
0	1	0	1	2	0	0	0	0	0	1	1	0	0	2	0	0	1	1	2	0	0	0	1	1	22
1	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	4	6	15	140
1	1	2	4	8	0	0	0	0	0	0	0	0	0	0	2	0	2	0	4	1	2	2	1	6	30
0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	1	5
0	1	1	0	2	0	0	0	0	0	1	0	1	2	4	0	0	0	0	0	1	1	1	0	3	15
0	0	0	0	0	0	0	0	0	0	0	3	1	1	5	0	0	0	0	0	0	1	1	0	2	37
0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	10
0	0	0	1	1	0	0	0	0	0	0	0	3	2	5	0	0	0	0	0	0	0	0	1	1	18
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	2	3
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	7	12	7	32	2	1	2	1	6	38
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	11	12	10	39	3	0	0	2	5	46
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11	3	4	21	0	0	0	0	0	21
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	2
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	3	2	9	15	1	0	0	1	2	19
0	3	1	1	5	0	0	0	0	0	0	5	0	2	7	10	6	14	13	43	4	13	10	12	39	150
9	27	16	19	71	1	0	2	1	4	4	11	8	12	35	98	112	115	119	444	33	44	43	48	168	1,191

[5] Details of Reports from Participating Medical Institutions (by Month of Report)

The tabulation of reports made by registered medical institutions (medical institutions subject to reporting requirement and voluntarily participating medical institutions) between January 1 and December 31, 2007 is shown below.

Fig. II-1-66 Month of Occurrence

Month of occurrence		Number of events
2006	November or before	99
	December	71
2007	January	118
	February	99
	March	106
	April	115
	May	126
	June	132
	July	140
	August	123
	September	113
	October	116
	November	143
	December	114
Total		1,445

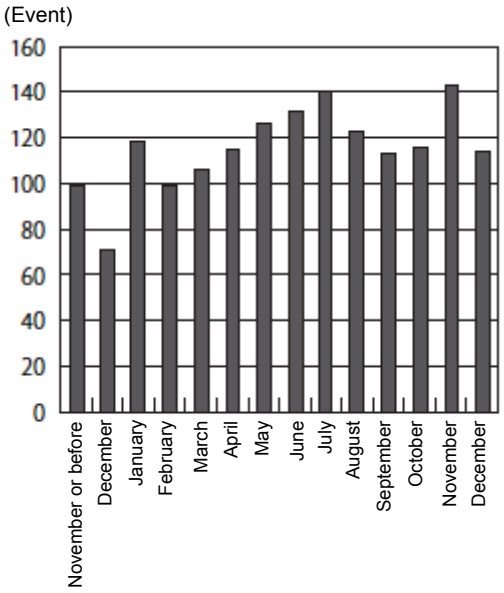


Fig. II-1-67 Day of Occurrence and Weekday/Holiday Category

Day of occurrence	Weekday	Holiday	Total
Mon.	213	15	228
Tue.	241	3	244
Wed.	234	2	236
Thu.	274	3	277
Fri.	212	10	222
Sat.	32	92	124
Sun.	1	113	114
Total	1,207	238	1,445

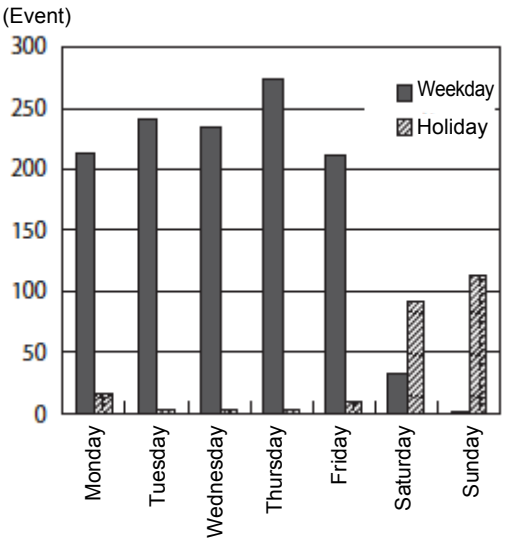


Fig. II-1-68 Time of Occurrence

Time of occurrence	Number of events
0:00 – before 2:00	59
2:00 – before 4:00	50
4:00 – before 6:00	69
6:00 – before 8:00	86
8:00 – before 10:00	125
10:00 – before 12:00	228
12:00 – before 14:00	162
14:00 – before 16:00	202
16:00 – before 18:00	153
18:00 – before 20:00	110
20:00 – before 22:00	79
22:00 – before 24:00	65
Time unknown	57
Total	1,445

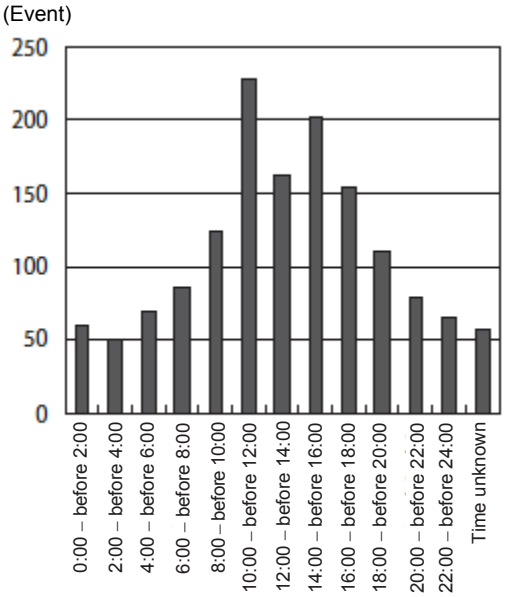
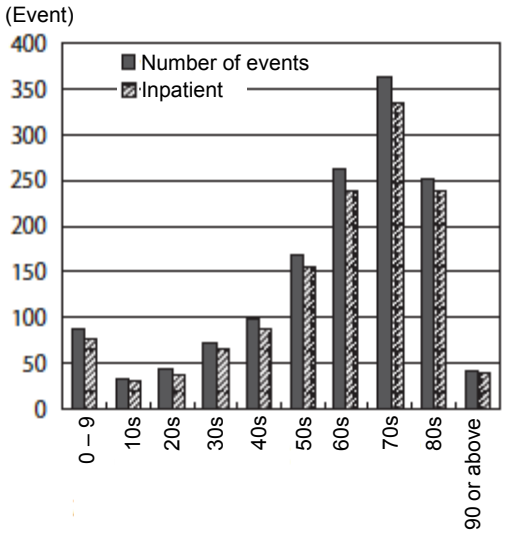


Fig. II-1-69 Patient Age(Note)

Number of patients	Patient age	Number of events	Inpatient
1 patient	0 to 9	87	77
	10s	33	30
	20s	44	36
	30s	73	65
	40s	98	88
	50s	168	155
	60s	262	239
	70s	363	334
	80s	252	239
	90 or above	42	39
	Total	1,422	1,302
2 patients or more	Total	23	20
Aggregate total		1,445	1,322



(Note) This item is the number of reports in which "1 patient" was selected in the checkbox of "Number of Patients" and does not include the number of reports in which "2 patients or more" was selected. The tabulation is not conducted because the selection of "2 patients or more" becomes described information, and the number of patients and patient age are not always listed.

Fig. II-1-70 Sex of Patients

Number of patients	Sex	Number of events
1 patient	Male	736
	Female	686
	Total	1,422
2 patients or more	Total	23
Aggregate total		1,445

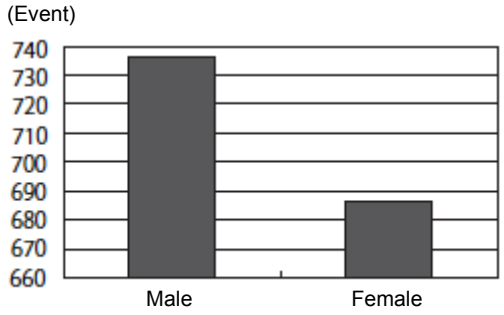


Fig. II-1-71 Inpatient/Outpatient Status and Duration of Hospital Stay

Inpatient/outpatient status		Number of events
Inpatient	Duration: 0 to 31 days	865
	Duration: 32 days or longer	436
	No choice(Note)	21
	Total	1,322
Outpatient	Initial visit	9
	Follow-up visit	114
	Total	123
Aggregate total		1,445

(Note) "No choice" means no "inpatient/outpatient status" or "duration of hospitalization" was selected.

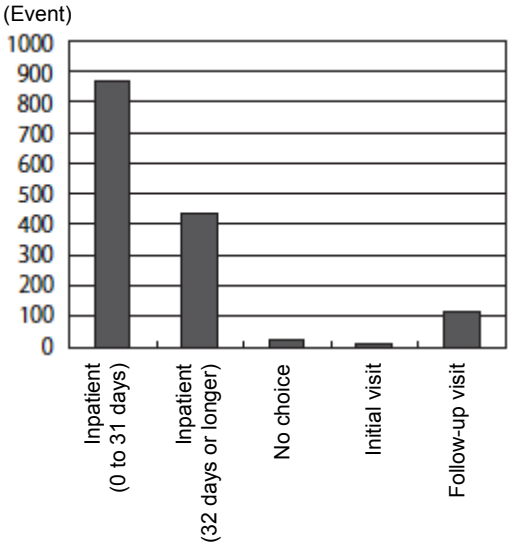


Fig. II-1-72 Person Who Identified Event

Person who identified event	Number of events
Medical staff	1,215
Patient himself/herself	52
Patient's family/caregiver	57
Other patient	38
Others	83
Total	1,445

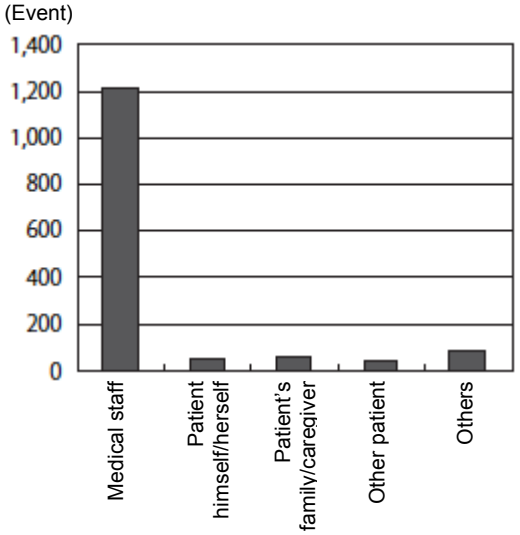
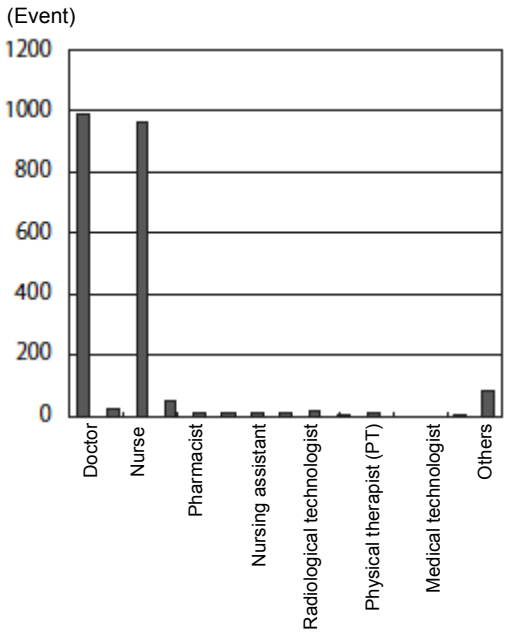


Fig. II-1-73 Job Title of Person Involved

Job title of person involved (Note)	Number of events
Doctor	988
Dentist	22
Nurse	959
Assistant nurse	56
Pharmacist	11
Clinical engineer	9
Midwife	8
Nursing assistant	9
Radiological technologist	16
Clinical technologist	3
Physical therapist (PT)	10
Occupational therapist (OT)	2
Medical technologist	0
Dental hygienist	3
Others	81
Total	2,177



(Note) Person involved is a person determined by the medical institution to have been involved in the event occurred; more than 1 person may have been involved.

Fig. II-1-74 Years of Experience of Person Involved by Job Title (Doctor, Dentist, Nurse, Pharmacist)

Job title of person involved (Note) × Years of experience	0 year	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 to 20 years	21 to 30 years	30 years or longer	Total
Doctor	17	19	35	43	50	54	55	53	45	49	71	360	120	17	988
Dentist	1	2	2	1	0	2	1	0	0	1	0	2	6	4	22
Nurse	75	94	93	70	56	42	50	39	25	28	38	180	138	31	959
Pharmacist	1	2	1	1	0	1	1	0	0	0	0	3	1	0	11

(Note) Person involved is a person determined by the medical institution to have been involved in the event occurred; more than 1 person may have been involved.

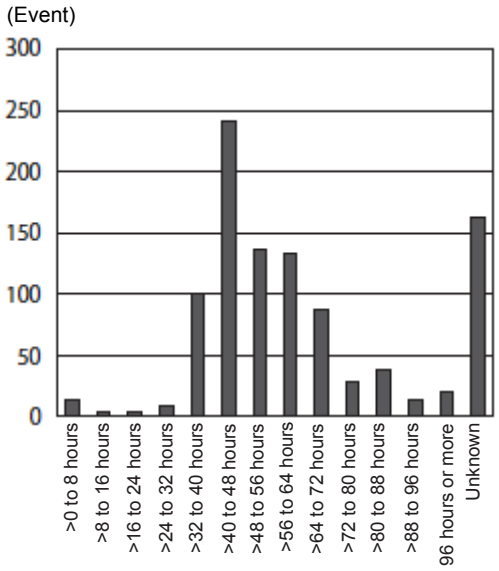
Fig. II-1-75 Number of Years Person Involved (Doctor, Dentist, Nurse, Pharmacist) Has Been Working at Current Department

Job title of person involved (Note) × Number of years at current department	0 year	1 year	2 years	3 years	4 years	5 years	6 years	7 years	8 years	9 years	10 years	11 to 20 years	21 to 30 years	30 years or longer	Total
Doctor	223	148	102	76	77	47	54	43	29	23	29	117	19	1	988
Dentist	4	0	3	0	1	1	1	0	0	1	0	4	4	3	22
Nurse	248	217	155	132	64	49	27	18	12	10	4	22	1	0	959
Pharmacist	2	3	1	1	1	0	0	0	0	0	0	2	1	0	11

(Note) Person involved is a person determined by the medical institution to have been involved in the event occurred; more than 1 person may have been involved.

Fig. II-1-76 Working Hours (in week previous to event) (Note 2) of Person Involved (Doctors) (Note 1)

Working hours	January to December, 2007
>0 to 8 hours	13
>8 to 16 hours	4
>16 to 24 hours	3
>24 to 32 hours	9
>32 to 40 hours	101
>40 to 48 hours	241
>48 to 56 hours	136
>56 to 64 hours	132
>64 to 72 hours	87
>72 to 80 hours	27
>80 to 88 hours	38
>88 to 96 hours	14
96 hours or more	21
Unknown	162
Total	988
Average working hours	52.2

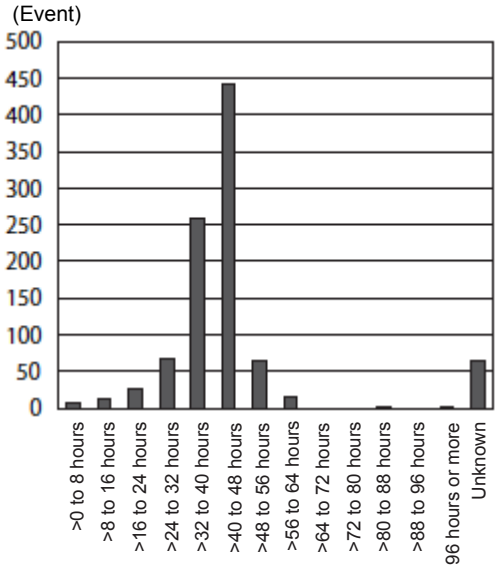


(Note 1) The person involved is a person determined by the medical institution to have been involved in the occurring event, including part-time employees. Multiple persons may have been involved and reported accordingly.

(Note 2) Working hours may also include hours worked outside the hospital.

Fig. II-1-77 Working Hours (in week previous to event) (Note 2) of Person Involved (Nurses) (Note 1)

Working hours	January to December, 2007
>0 to 8 hours	8
>8 to 16 hours	12
>16 to 24 hours	25
>24 to 32 hours	68
>32 to 40 hours	260
>40 to 48 hours	441
>48 to 56 hours	63
>56 to 64 hours	17
>64 to 72 hours	0
>72 to 80 hours	0
>80 to 88 hours	1
>88 to 96 hours	0
96 hours or more	1
Unknown	63
Total	959
Average working hours	37.0



(Note 1) The person involved is a person determined by the medical institution to have been involved in the occurring event, including part-time employees. Multiple persons may have been involved and reported accordingly.

(Note 2) Working hours may also include hours worked outside the hospital.

Fig. II-1-78 Number of Night Shifts (in week previous to event) of Person Involved (Doctors)

Number of night shifts	January to December, 2007
Zero	381
1 time	322
2 times	84
3 times	22
4 times	2
5 times	2
6 times	0
7 times	1
Unknown	174
Total	988
Average number of night shifts (not including unknown)	0.71

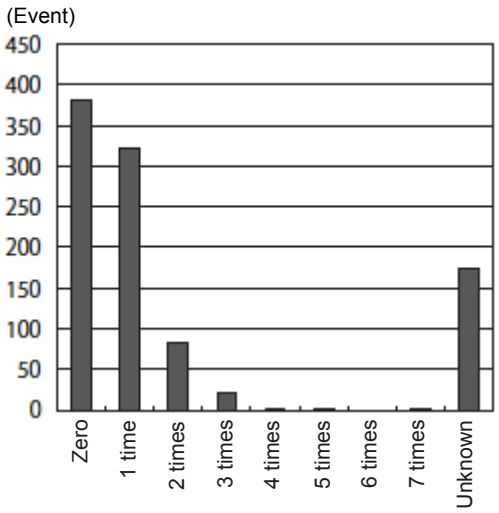


Fig. II-1-79 Number of Night Shifts (in week previous to event) of Person Involved (Nurses)

Number of night shifts	January to December, 2007
Zero	176
1 time	280
2 times	355
3 times	98
4 times	14
5 times	4
6 times	0
7 times	0
Unknown	32
Total	959
Average number of night shifts (not including unknown)	1.47

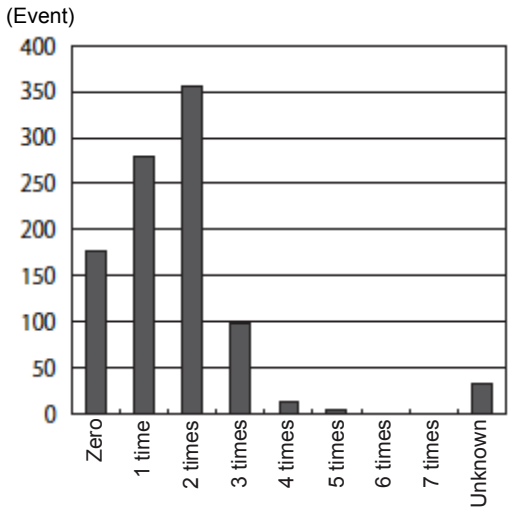


Fig. II-1-80 Summary of Event

Summary of event	January to December, 2007	
	Number of events	%
Ordering	4	0.3
Drug	89	6.2
Blood transfusion	7	0.5
Treatment/procedure	413	28.6
Medical equipment, etc.	150	10.4
Medical device	50	3.5
Drainage tube or other tube	94	6.5
Dental equipment	6	0.4
Examination/test	56	3.9
Nursing care	511	35.4
Others	215	14.9
Total	1,445	100.0

Fig. II-1-81 Potential of Residual Disability

Potential of Residual Disability(Note 1)	January to December, 2007	
	Number	%
Death	167	11.6
High	184	12.7
Low	657	45.5
None(Note 2)	199	13.8
No disability(Note 2)	97	6.7
Unknown(Note 3)	141	9.8
Total	1,445	100.0

(Note 1) "Potential of residual disability" is not necessarily associated with occurrence of event or negligence.

(Note 2) "None" and "No disability" were additional categories included as of July.

(Note 3) "Unknown" includes indefinite outcome at the time of reporting (within 2 weeks) and events of warning that did not affect patients' conditions in any way.

Fig. II-1-82 Intensity of Treatment(Note 1)

Intensity of treatment	July to December, 2007	
	Number	%
Intensive treatment(Note 2)	378	50.0
Minor treatment	292	38.6
No treatment	86	11.4
Total	756	100.0

(Note 1) "Intensity of treatment" data has been collected since July.

(Note 2) See Reference 1 of HPB Notification No. 0921001 (as of September 21, 2004).

Fig. II-1-83 Place of Occurrence

Place of Occurrence	January to December, 2007	
	Number	%
Outpatient examination room	37	2.6
Outpatient treatment room	13	0.9
Outpatient lobby	6	0.4
Emergency room	8	0.6
Critical care center	8	0.6
Patient room	657	45.5
Ward treatment room	21	1.5
Operation room	196	13.6
ICU	36	2.5
CCU	3	0.2
NICU	3	0.2
Examination room	23	1.6
Catheterization laboratory	40	2.8
Radiotherapy room	19	1.3
Radiography room	22	1.5
Radioactive scanning room	1	0.1
Dialysis room	4	0.3
Delivery room	5	0.3
Rehabilitation room	4	0.3
Restroom	44	3.0
Hallway	49	3.4
Bathroom	27	1.9
Stairway	2	0.1
Unknown	23	1.6
Others	194	13.4
Total	1,445	100.0

Fig. II-1-84 Clinical Department

Clinical Department (Note)	January to December, 2007	
	Number	%
Internal medicine	147	8.4
Anesthesiology	40	2.3
Cardiovascular medicine	112	6.4
Neurology	44	2.5
Respiratory tract medicine	85	4.9
Gastrointestinal medicine	116	6.6
Hematology	25	1.4
Circulatory surgery	14	0.8
Allergy	2	0.1
Rheumatism	5	0.3
Pediatrics	73	4.2
General surgery	137	7.8
Orthopedics	173	9.9
Plastic surgery	11	0.6
Cosmetic surgery	0	0.0
Neurosurgery	101	5.8
Respiratory surgery	35	2.0
Cardiovascular surgery	57	3.3
Pediatric surgery	22	1.3
Pain clinic	0	0.0
Dermatology	29	1.7
Urology	58	3.3
Venereology	0	0.0
Proctology	0	0.0
Gynecology/Obstetrics	27	1.5
Obstetrics	8	0.5
Gynecology	17	1.0
Ophthalmology	19	1.1
Otolaryngology	33	1.9
Psychosomatic medicine	3	0.2
Psychiatry	120	6.9
Rehabilitation	16	0.9
Radiology	38	2.2
Dentistry	16	0.9
Orthodontics	0	0.0
Pediatric dentistry	0	0.0
Dental/oral surgery	20	1.1
Unknown	3	0.2
Others	145	8.3
Total	1,751	100.0

(Note) More than one “clinical department” may have been involved in one event.

Fig. II-1-85 Cause of Event

Cause of Event (Note)	January to December, 2007	
	Number	%
Neglect to check	387	14.5
Neglect to observe	384	14.4
Misjudgment	359	13.4
Lack of knowledge	102	3.8
Deficiency of technique/skill	124	4.6
Delayed reporting	33	1.2
Under unusual physical condition	59	2.2
Under unusual psychological condition	40	1.5
System failure	71	2.7
Inadequate coordination	145	5.4
Inadequate documentation	23	0.9
Similarity in patient's appearance or name	2	0.1
Busy working condition	72	2.7
Problem in environment	81	3.0
Problem in the drug	18	0.7
Problem in medical device	47	1.8
Problem in other items	23	0.9
Problem in facility	53	2.0
Problem in education/training	95	3.6
Lack of explanation	132	4.9
Others	420	15.7
Total	2,670	100.0

(Note) "Cause of event" may be more than one.

Fig. II-1-86 Cases Encouraged to be Reported(Note)

Cases encouraged to be reported	July to December, 2007	
	Number	%
Accident due to use of contaminated drug/material/biologic product	2	0.3
Death or disability due to nosocomial infection	1	0.1
Suicide or suicide attempt during hospitalization	18	2.4
Escape of inpatient	2	0.3
Burn during hospitalization	6	0.8
Electric shock during hospitalization	0	0.0
Death or disability of patient due to facility fire	0	0.0
Handing over of infant to wrong parent	1	0.1
No applicable option	726	96.0
Total	756	100.0

(Note) Data on "cases encouraged to be reported" has been collected since July.

Fig. II-1-87 Establishment of Accident Investigation Board (Note 1)

Establishment of accident investigation board(Note 2)	July to December, 2007	
	Number	%
Existing internal investigation board	141	17.8
Existing external investigation board	11	1.4
Internal investigation board to be established	7	0.9
External investigation board to be established	1	0.1
Existing medical safety committee is in charge of investigation	531	66.9
Currently under consideration and undecided	18	2.3
Others	77	9.7
No choice(Note 3)	8	1.0
Total	794	100.0

(Note 1) Data on "availability of accident investigation board" has been collected since July.

(Note 2) Multiple choices acceptable

(Note 3) "No choice" means none of the checkboxes for "establishment of accident investigation board" was selected.

Fig. II-1-88 Summary of Event and Potential of Residual Disability

Summary of Event × Potential of Residual Disability	Death	High	Low	None (Note)	No disability (Note)	Unknown	Total
Ordering	0	0	3	1	0	0	4
Drug	4	7	32	16	16	14	89
Blood transfusion	0	0	5	0	1	1	7
Treatment/procedure	51	72	164	57	30	39	413
Medical equipment, etc.	18	16	63	26	10	17	150
Medical device	3	6	24	3	8	6	50
Drainage tube or other tube	15	9	38	21	1	10	94
Dental equipment (device), etc	0	1	1	2	1	1	6
Examination/test	5	7	28	6	5	5	56
Nursing care	41	56	280	76	20	38	511
Others	48	26	82	17	15	27	215
Total	167	184	657	199	97	141	1,445

(Note) "None" and "No disability" were additional categories included as of July.

Fig. II-1-89 Situation and Potential of Residual Disability

Situation × Potential of Residual Disability	Death	High	Low	None (Note)	No disability (Note)	Unknown	Total
Related to drug							**99**
Drug preparation	0	0	2	4	1	0	7
Other drug preparations	0	0	0	0	0	0	0
Subcutaneous/intramuscular injection	0	0	4	0	1	2	7
Intravenous injection	1	2	9	8	4	5	29
Arterial injection	0	0	0	0	0	0	0
Peripheral intravenous drop	0	2	5	4	1	4	16
Central venous injection	1	0	4	0	0	0	5
Oral administration	1	0	6	3	6	5	21
Nose drop/eye drop/ear drop	0	1	2	0	0	0	3
Other drug prescription/administration	1	0	2	0	1	1	5
Oral drug dispensing/management	0	0	1	1	2	0	4
Injection dispensing/management	0	1	1	0	0	0	2
Dispensing/management, others	0	0	0	0	0	0	0
Related to blood transfusion							**6**
Blood test	0	0	2	0	0	0	2
Blood transfusion	0	0	2	0	0	1	3
Blood transfusion, others	0	0	0	0	1	0	1
Related to treatment/procedure							**387**
Craniotomy	2	3	5	3	1	0	14
Thoracotomy	2	4	3	1	0	0	10
Cardiotomy	2	3	2	1	1	0	9
Laparotomy	3	4	14	4	3	4	32
Extremities	0	1	2	1	0	0	4
Endoscopic surgery	1	8	13	5	1	2	30
Other surgery	5	10	21	5	1	6	48
Preparation for surgery	0	1	1	0	1	0	3
Preoperative procedure	0	1	3	1	1	0	6
Postoperative procedure	3	3	4	3	1	1	15
Surgery, others	4	6	9	3	2	3	27
General anesthesia (inhalation anesthesia and intravenous anesthesia)	0	2	1	1	0	0	4
Local anesthesia	0	0	1	0	0	1	2
Inhalation anesthesia	0	0	0	0	0	0	0
Intravenous anesthesia	0	0	0	1	0	0	1
Vertebral/epidural anesthesia	0	1	2	1	0	0	4
Anesthesia, others	1	0	2	0	2	0	5
Caesarean section	1	1	1	2	0	0	5
Delivery and artificial abortion, others	0	1	1	0	0	0	2
Blood purification (including hemodialysis)	1	0	3	0	1	2	7
IVR (ex. angiocatheter)	3	7	12	1	1	0	24
Radiotherapy	0	1	4	0	0	0	5
Rehabilitation	1	2	0	1	0	1	5
Invasive dental treatment	0	0	1	0	1	1	3
Endoscopic treatment	1	3	6	3	1	4	18
Treatment, others	5	3	14	5	6	3	36
Central venous line	5	1	8	6	8	2	30

Situation × Potential of Residual Disability	Death	High	Low	None (Note)	No disability (Note)	Unknown	Total
Peripheral venous line	0	0	4	1	0	2	7
Catheter for blood purification	0	0	0	0	0	0	0
Feeding tube (NG, ED)	0	0	0	0	0	0	0
Urethral catheter	0	0	1	0	0	0	1
Procedure related to drainage	0	0	5	3	0	0	8
Wound care	0	0	0	1	0	1	2
Tube placement, others	1	0	3	5	2	2	13
Tracheal intubation	0	0	3	0	0	0	3
Tracheotomy	1	0	0	0	0	0	1
Cardiac compression	0	0	0	0	0	0	0
Oxygen therapy	0	0	0	0	0	0	0
Emergency procedure, others	1	1	1	0	0	0	3
Related to use/management of medical equipment (device)							**59**
Ventilator	2	2	7	0	3	3	17
Oxygen therapy equipment	1	0	0	0	0	0	1
Oxygenator	0	1	0	0	1	0	2
Defibrillator	0	0	0	0	0	0	0
Pace maker	0	0	0	1	0	0	1
Infusion/transfusion pump	1	0	0	0	0	0	1
Blood purification device	0	0	0	0	0	1	1
ECG, blood pressure monitor	1	2	0	0	0	0	3
Pulse oxymeter	0	0	1	0	0	0	1
Use/management of medical equipment (device), others	1	2	14	3	4	4	28
Use/management of other dental equipment (devices) and materials	0	0	1	1	2	0	4
Related to use/management of drainage tube or other tube							**97**
Central venous line	0	2	3	3	0	3	11
Peripheral venous line	0	1	1	0	0	1	3
Tracheal tube	7	3	3	3	0	0	16
Tracheal cannula	3	0	3	0	0	2	8
Feeding tube (NG, ED)	3	1	3	2	0	2	11
Urethral catheter	0	0	1	0	0	2	3
Chest drainage tube	0	0	10	1	0	2	13
Abdominal drainage tube	0	0	2	1	0	0	3
Ventricular/cisternal drainage tube	0	0	1	0	0	0	1
Subcutaneous continuous suction drainage tube	0	0	0	0	0	0	0
Epidural catheter	0	0	1	1	0	0	2
Catheter/line for blood purification	0	1	1	0	0	0	2
Use/management of drainage tube or other tube, others	3	2	10	8	0	1	24
Related to examination							**57**
Blood drawing	1	1	2	0	0	0	4
Sample collection, others	0	0	2	1	0	0	3
Other physiological tests	0	0	4	0	0	0	4
General imaging	0	0	2	0	0	2	4
MRI	0	0	1	0	1	1	3
Angiocatheter-aided imaging	0	4	4	0	1	1	10
Lower gastrointestinal imaging	0	0	0	1	0	0	1
Imaging, others	1	0	4	2	1	1	9

Situation × Potential of Residual Disability	Death	High	Low	None (Note)	No disability (Note)	Unknown	Total
Upper gastrointestinal	1	2	3	0	0	0	6
Lower gastrointestinal	1	0	3	1	1	0	6
Bronchoscopy	0	0	3	1	0	0	4
Endoscopic examination, others	0	0	2	0	0	0	2
Pathological examination	0	0	0	0	0	0	0
Examination, others	0	0	0	0	1	0	1
Related to nursing care							**561**
Endotracheal/oral suctioning	2	1	3	0	0	1	7
Changing position	0	2	8	1	0	3	14
Bed bath	1	2	2	1	0	0	6
Help with changing clothes	1	0	2	1	0	0	4
Help with eating	3	6	3	1	1	1	15
Help with bathing	1	2	11	1	2	2	19
Help with elimination	0	6	20	2	0	1	29
Help with moving	0	1	5	2	0	0	8
Transportation	1	0	1	1	0	0	3
Tending patient's belongings	0	0	0	1	0	0	1
Meal serving	0	0	0	0	0	0	0
Patient observation	11	11	27	9	3	3	64
Nursing care, others	4	6	42	9	2	6	69
Oral intake	3	0	1	0	0	0	4
Other feeding or nutrition support	1	0	1	0	1	0	3
While taking a walk	0	0	2	1	0	0	3
While moving from one place to another	6	7	83	29	10	10	145
While going out/sleeping out	4	0	0	2	0	0	6
While eating	0	2	4	3	0	0	9
While bathing	4	0	4	2	0	1	11
While excreting	1	5	16	4	2	1	29
While sleeping	4	9	17	4	2	3	39
Recuperation, others	4	6	46	8	1	8	73
Others	**26**	**12**	**42**	**7**	**5**	**18**	**110**
No choice (Note 2)	**17**	**9**	**35**	**2**	**2**	**4**	**69**
Total	**167**	**184**	**657**	**199**	**97**	**141**	**1,445**

(Note 1) "None" and "No disability" were additional categories included as of July.

(Note 2) "No choice" means no checkbox for "situation" was selected.

Fig. II-1-90 Details of Event and Potential of Residual Disability

Details of Event × Potentila of Residual Disability	Death	High	Low	None (Note)	No disability (Note)	Unknown	Total
Related to drug							**99**
Dose error	0	1	2	3	1	1	8
Overdose	1	1	9	5	4	2	22
Dosing speed too fast	0	0	4	2	0	1	7
Patient misidentification	0	0	0	2	4	4	10
Drug mix-up	0	0	10	4	1	3	18
Wrong dosing method	1	0	0	0	2	2	5
Drug prescription/administration, others	2	3	8	3	3	2	21
Dispensing error (wrong dose/number)	0	0	0	0	0	0	0
Dispensing/drug management, others	0	0	1	0	1	1	3
Drug/blood product management, others	0	1	2	1	0	1	5
Related to blood transfusion							**6**
Cross-match error	0	0	0	0	0	0	0
Error in documentation/recording of results	0	0	0	0	0	0	0
Transfusion testing, others	0	0	3	0	1	0	4
Irradiation of blood products, blood transfusion, others	0	0	1	0	0	1	2
Related to treatment/procedure							**387**
Patient misidentification	0	0	1	0	0	0	1
Wrong site treatment/procedure	0	2	14	6	2	2	26
Wrong examination/treatment/procedure, others	1	0	2	1	0	0	4
Wrong method (technique)	0	5	16	6	5	5	37
Not implemented/forgotten (treatment/procedure)	0	1	1	1	1	0	4
Unnecessary treatment/procedure	0	1	4	1	0	0	6
Wrong patient position	0	0	0	1	0	0	1
Wrong examination/treatment, others	4	5	9	3	1	2	24
Aspiration	0	0	2	0	0	0	2
Retained foreign object	0	0	17	11	4	6	38
Treatment/procedure, others	38	53	84	28	21	20	244
Use/management of medical equipment (device)							**59**
Assembly	0	0	1	0	1	1	3
Forgot to set up/turn on power	0	0	2	0	0	1	3
Malfunction	0	0	1	0	0	0	1
Lack of knowledge	1	0	1	1	0	0	3
Forgot to set up alarm	0	0	0	0	0	0	0
Range of alarm setup	0	0	0	0	0	0	0
Neglect in inspection/management before or during device operation	0	1	2	1	2	1	7
Error in sterilization/clean technique (equipment, etc)	0	0	0	0	0	0	0
Breakage	0	0	3	1	2	0	6
Use/management of medical equipment (device), others	5	6	13	2	5	5	36
Related to use/management of drainage tube or other tube							**97**
Infusion leakage	0	1	4	1	0	1	7
Self-removal	3	1	3	3	0	1	11
Spontaneous dislodgment	3	1	2	1	0	0	7
Disconnection	0	0	1	0	0	0	1
Blockage	0	0	3	0	0	0	3

Details of Event × Potentila of Residual Disability	Death	High	Low	None (Note)	No disability (Note)	Unknown	Total
Breakage/severance	0	1	4	4	0	1	10
Wrong connection	1	0	3	0	0	0	4
Air bubble in tube	0	1	0	0	0	0	1
Use/management of drainage tube or other tube, others	9	5	19	10	0	10	53
Related to examination							**57**
Patient misidentification (examination)	0	0	1	0	0	0	1
Wrong examination/evaluation technique	1	0	2	0	0	1	4
Error in sample collection	0	0	1	1	0	0	2
Sample misidentification (examination)	0	0	0	0	0	0	0
Lost sample	0	0	0	0	0	0	0
Sample contamination	0	0	0	0	0	0	0
Management of analytical device/equipment	0	0	0	0	0	0	0
Preparation of examination device/equipment	0	0	1	0	0	0	1
Result reporting	0	0	1	0	0	2	3
Examination, others	3	7	24	5	5	2	46
Related to nursing care							**561**
Fall	10	23	168	44	10	19	274
Fall from bed	3	7	32	4	3	7	56
Collision	0	0	1	1	0	0	2
Restraint	2	1	0	0	0	0	3
Severe decubitus (involving muscle layer, Stage III/IV)	0	2	15	0	1	2	20
Aspiration (nursing care)	8	10	3	2	1	3	27
Accidental ingestion (nursing care)	0	0	1	1	1	0	3
Nursing care/recuperation, others	25	21	72	24	5	8	155
Transportation, others	1	1	4	3	1	0	10
Going out/staying out without notice	1	0	0	1	1	0	3
Self medication, others	1	1	2	0	0	1	5
Meal/nutrition, others	0	0	0	2	1	0	3
Others	**26**	**12**	**42**	**7**	**5**	**18**	**110**
No choice (Note 2)	**17**	**9**	**35**	**2**	**2**	**4**	**69**
Total	**167**	**184**	**657**	**199**	**97**	**141**	**1,445**

(Note 1) "None" and "No disability" were additional categories included as of July.

(Note 2) "No choice" means no "details of event" was selected.

Fig. II-1-91 Place of Occurrence and Potential of Residual Disability

Place of Occurrence × Potebtial of Residual Disability	Death	High	Low	None (Note)	No disability (Note)	Unknown	Total
Outpatient examination room	0	4	16	4	9	4	37
Outpatient treatment room	0	1	6	2	1	3	13
Outpatient lobby	0	0	3	0	0	3	6
Emergency room	0	3	3	0	2	0	8
Critical care center	0	1	3	3	1	0	8
Patient room	89	85	308	74	40	61	657
Ward treatment room	1	0	10	9	0	1	21
Operation room	17	38	74	28	18	21	196
ICU	4	5	11	8	1	7	36
CCU	0	0	3	0	0	0	3
NICU	1	0	2	0	0	0	3
Examination room	1	4	11	4	2	1	23
Catheterization laboratory	7	5	19	5	2	2	40
Radiotherapy room	0	3	12	2	0	2	19
Radiography room	1	1	7	7	3	3	22
Radioactive scanning room	0	0	1	0	0	0	1
Dialysis room	0	0	2	1	1	0	4
Delivery room	0	1	2	1	1	0	5
Rehabilitation room	0	1	1	0	1	1	4
Restroom	3	7	19	8	2	5	44
Hallway	2	2	27	10	1	7	49
Bathroom	6	1	14	2	1	3	27
Stairway	0	0	0	0	1	1	2
Unknown	2	3	8	8	0	2	23
Others	33	19	95	23	10	14	194
Total	167	184	657	199	97	141	1,445

(Note) “None” and “No disability” were additional categories included as of July.

Fig. II-1-92 Place of Occurrence and Inpatient/Outpatient Status

Place of Occurrence × Inpatient/Outpatient Status	Inpatient	Outpatient	Total
Outpatient examination room	2	35	37
Outpatient treatment room	1	12	13
Outpatient lobby	1	5	6
Emergency room	0	8	8
Critical care center	7	1	8
Patient room	657	0	657
Ward treatment room	20	1	21
Operation room	191	5	196
ICU	36	0	36
CCU	3	0	3
NICU	3	0	3
Examination room	17	6	23
Catheterization laboratory	39	1	40
Radiotherapy room	18	1	19
Radiography room	17	5	22
Radioactive scanning room	0	1	1
Dialysis room	2	2	4
Delivery room	5	0	5
Rehabilitation room	4	0	4
Restroom	42	2	44
Hallway	48	1	49
Bathroom	27	0	27
Stairway	2	0	2
Unknown	22	1	23
Others	158	36	194
Total	1,322	123	1,445

Fig. II-1-93 Cause of Event and Summary of Event

Cause of Event(Note) × Summary of Event	Ordering	Drug	Blood transfusion	Treatment/ procedure	Medical equipment, etc.			Examination/test	Nursing care	Others	Total
					Medical device	Drainage tube or other tube	Dental equipment				
Neglect to check	4	66	5	128	28	33	2	19	72	30	387
Neglect to observe	0	10	1	68	15	22	1	7	214	46	384
Misjudgment	1	15	0	97	8	32	1	12	158	35	359
Lack of knowledge	1	21	0	26	12	13	0	2	19	8	102
Deficiency of technique/skill	0	3	0	63	5	7	2	6	28	10	124
Delayed reporting	0	4	0	9	0	7	0	0	9	4	33
Under unusual physical condition	0	0	0	14	0	5	0	5	24	11	59
Under unusual psychological condition	1	5	1	7	2	0	1	0	18	5	40
System failure	3	18	2	14	7	6	0	4	10	7	71
Inadequate coordination	2	18	3	40	3	13	0	5	38	23	145
Inadequate documentation	0	5	0	2	1	0	0	2	7	6	23
Similarity in patient's appearance or name	0	0	1	0	0	0	0	0	0	1	2
Busy working condition	0	9	1	16	3	3	0	3	31	6	72
Problem in environment	0	2	1	5	1	2	0	0	54	16	81
Problem in the drug	0	11	0	2	0	0	0	1	3	1	18
Problem in medical device	0	4	0	13	20	5	2	0	2	1	47
Problem in other items	0	0	0	6	2	1	0	1	9	4	23
Problem in facility	0	2	1	5	2	2	0	0	29	12	53
Problem in education/training	2	13	2	15	7	6	1	0	36	13	95
Lack of explanation	0	1	0	37	0	2	0	7	60	25	132
Others	0	11	1	144	6	21	0	16	133	88	420
Total	14	218	19	711	122	180	10	90	954	352	2,670

(Note) "Cause of event" may be more than one.

Fig. II-1-94 Place of Occurrence and Summary of Event

Place of Occurrence × Summary of Event	Ordering	Drug	Blood transfusion	Treatment /procedure	Medical equipment etc.			Examination	Nursing care	Others	Total
					Medical device	Drainage tube or other tube	Dental equipment				
Outpatient examination room	0	9	0	15	0	2	1	7	1	2	37
Outpatient treatment room	0	1	0	6	0	2	1	1	1	1	13
Outpatient lobby	0	0	0	0	0	0	0	0	2	4	6
Emergency room	0	2	1	3	0	0	0	0	0	2	8
Critical care center	0	1	0	2	0	2	0	0	3	0	8
Patient room	4	47	1	101	21	56	2	4	317	104	657
Ward treatment room	0	3	0	11	1	2	0	2	1	1	21
Operation room	0	4	0	152	12	7	1	0	0	20	196
ICU	0	3	3	7	4	8	0	0	5	6	36
CCU	0	0	0	2	0	0	1	0	0	0	3
NICU	0	0	0	0	1	1	0	0	0	1	3
Examination room	0	0	0	7	0	2	0	10	1	3	23
Catheterization laboratory	0	0	0	29	2	1	0	6	0	2	40
Radiotherapy room	0	0	0	9	5	1	0	3	0	1	19
Radiography room	0	3	0	9	0	1	0	8	0	1	22
Radioactive scanning room	0	0	0	0	0	0	0	1	0	0	1
Dialysis room	0	0	0	2	0	0	0	0	1	1	4
Delivery room	0	1	0	4	0	0	0	0	0	0	5
Rehabilitation room	0	0	0	1	0	0	0	0	1	2	4
Restroom	0	0	0	0	0	0	0	0	36	8	44
Hallway	0	1	0	1	0	0	0	0	42	5	49
Bathroom	0	0	0	0	0	0	0	0	26	1	27
Stairway	0	0	0	0	0	0	0	0	2	0	2
Unknown	0	0	0	2	0	2	0	1	16	2	23
Others	0	14	2	50	4	7	0	13	56	48	194
Total	4	89	7	413	50	94	6	56	511	215	1,445

2 Report on Project to Collect, Analyze, and Provide Medical Near-Miss Information

Medical near-miss information is provided by designated medical institutions and other voluntarily participating medical institutions. Summary of the project as of December 31, 2007 is reported herein.

[1] Voluntarily participating medical institutions

The number of voluntarily participating medical institutions in Project to Collect Medical Near-Miss Information is shown below.

Fig. II-2-1 Number of voluntarily participating medical institutions

	Numbers of medical institutions
Total number of voluntarily participating medical institutions	1,281
Designated medical institutions (among voluntarily participating medical institutions)	240

Designated medical institutions are those participating in Project to Collect, Analyze and Provide Medical Near-Miss Information and agreed to cooperate to provide "general coded information." Designated medical institutions have been selected by avoiding biases in institution size and location. The number of beds at the designated medical institutions and their locations as of December 31, 2007 are shown below.

Fig. II-2-2 Designated Medical Institutions by Number of Beds and Location

Number of beds	Number of medical institutions
0 to 99	26
100 to 199	39
200 to 299	24
300 to 399	44
400 to 499	25
500 to 599	27
600 or more	55
Total	240

Location	Number of medical institutions
Hokkaido	15
Tohoku	25
Kanto/Koshinetsu	57
Tokyo	15
Tokai/Hokuriku	36
Kinki	32
Chugoku/Shikoku	33
Kyushu/Okinawa	27
Total	240

The total number of beds at voluntarily participating medical institutions participating in Project to Collect, Analyze and Provide Medical Near-Miss Information as of December 31, 2007 is 99,901.

[2] Changes in Number of Reports

The summary of collection of medical near-miss information is shown below.

Fig. II-2-3 Changes in Number of Reports

		23rd report	24th report	25th report	26th report	Remarks
Month of occurrence		January to March	April to June	July to September	October to December	
Collection period		February 14 to May 21	May 22 to August 20	August 21 to November 19	November 20 to February 18, 2008	
Voluntarily participating medical institutions	**Total number of registered medical institutions**	1,277	1,283	1,281	1,281	
	Voluntarily participating medical institutions that made reports	334	343	344	317	
	Designated medical institutions(Note 1)	245	242	240	240	
	Designated medical institutions that made reports	236	233	232	231	Institutions with reporting difficulty in the 23rd report: 0 institution Institutions with reporting difficulty in the 24th report: 2 institutions Institutions with reporting difficulty in the 25th report: 3 institutions Institutions with reporting difficulty in the 26th report: 4 institutions
Number of reports(Note 2)	**Total number of reports**	46,340	57,902	56,302	54,521	
	General coded information	44,812	56,404	54,753	53,251	
	Descriptive information	3,347	4,769	4,707	3,969	
Number of evaluable reports	**General coded information**	44,812	56,404	54,750	53,250	
	Descriptive information	1,956	1,855	2,567	2,428	

(Note 1) Designated medical institutions are those participating in the Project to Collect, Analyze and Provide Medical Near-Miss Information and agreed to cooperate to provide "general coded information." As of December 31, 2007, 240 institutions have been designated by avoiding biases in institution size and location.

(Note 2) Reports from medical institutions are classified into (A) general coded information, (B) general coded information and descriptive information, and (C) descriptive information. "Total number of reports" shown in the table represents aggregated number of (A), (B), and (C); "number of general coded information" represents aggregated number of (A) and (B); and "number of descriptive information" represents aggregated number of (B) and (C).

[3] Details of Reports

Fig. II-2-4 Month of Occurrence

Month of occurrence	Number of reports
January	14,774
February	14,441
March	14,648
April	17,663
May	19,735
June	18,914
July	18,984
August	19,152
September	16,478
October	18,583
November	17,769
December	16,777
Month unknown	1,298
Total	209,216

Fig. II-2-5 Time of Occurrence

Time of occurrence	Number of events				
	23rd	24th	25th	26th	Total
0:00 – before 2:00	2,401	3,253	3,194	2,965	11,813
2:00 – before 4:00	1,913	2,158	2,175	2,168	8,414
4:00 – before 6:00	1,800	2,142	2,116	1,965	8,023
6:00 – before 8:00	3,153	3,908	3,799	3,673	14,533
8:00 – before 10:00	4,999	6,585	6,653	6,367	24,604
10:00 – before 12:00	5,409	7,168	6,551	6,470	25,598
12:00 – before 14:00	4,337	5,772	5,309	5,197	20,615
14:00 – before 16:00	3,939	5,367	5,022	4,917	19,245
16:00 – before 18:00	4,249	5,605	5,437	5,243	20,534
18:00 – before 20:00	3,857	5,199	5,068	4,885	19,009
20:00 – before 22:00	3,054	3,666	3,671	3,669	14,060
22:00 – before 24:00	2,499	2,880	3,005	2,955	11,339
Time unknown	3,202	2,701	2,750	2,776	11,429
Total	44,812	56,404	54,750	53,250	209,216

Fig. II-2-6 Place of Occurrence

Place of Occurrence	Number of events				
	23rd	24th	25th	26th	Total
Outpatient examination room	688	835	829	834	3,186
Outpatient lobby	92	144	156	119	511
Outpstient, facility others	537	707	710	669	2,623
Emergentcy room	249	326	286	272	1,133
Nurse station	4,457	6,057	5,688	5,535	21,737
Patient room	25,449	31,340	30,981	29,649	117,419
Treatment room	823	1,005	965	875	3,668
Bathroom	178	237	207	233	855
Ward facility, others	2,006	2,506	2,344	2,319	9,175
Operation room	1,239	1,765	1,563	1,587	6,154
Delivery room	18	45	36	40	139
ICU	1,213	1,455	1,457	1,586	5,711
CCU	289	300	307	298	1,194
NICU	437	793	692	697	2,619
ICU, others	337	464	454	396	1,651
Examination room	688	881	794	774	3,137
Rehabilitation room	174	252	214	193	833
IVR room	31	48	25	45	149
Radiography/examination room	627	857	770	848	3,102
Radioactive scanning room	46	109	83	42	280
Radiotherapy room	46	51	34	44	175
Dialysis room	491	606	622	710	2,429
Pharmacy/blood transfusion unit	1,171	1,373	1,373	1,308	5,225
Nutritional management/ room/kitchen	343	427	401	349	1,520
Restroom	703	755	734	754	2,946
Hallway	624	716	743	697	2,780
Stairway	13	14	19	26	72
Unknown	1,067	1,349	1,256	1,371	5,043
Other place (within institution)	591	796	812	794	2,993
Other place (outside institution)	185	191	195	186	757
Total	44,812	56,404	54,750	53,250	209,216

Fig. II-2-7 Cause of Event

Cause of Event (Note)	23rd		24th		25th		26th		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Inadequate check	27,677	25.0	35,889	24.5	34,772	24.6	33,502	23.9	131,840	24.5
Inadequate observation	15,019	13.6	17,961	12.2	17,998	12.7	17,690	12.6	68,668	12.7
Misjudgment	8,519	7.7	11,609	7.9	11,561	8.2	11,201	8.0	42,890	8.0
Lack of knowledge/wrong knowledge	2,703	2.4	4,768	3.2	4,408	3.1	3,877	2.8	15,756	2.9
Deficiency of technique (skill)/erroneous technique (skill)	2,118	1.9	3,353	2.3	3,060	2.2	3,004	2.1	11,535	2.1
Reporting, etc. (forgotten, inadequate/incorrect, inappropriate)	2,012	1.8	3,208	2.2	2,966	2.1	3,005	2.1	11,191	2.1
Physical condition (ex. lack of sleep, being sick)	1,715	1.5	2,100	1.4	2,182	1.5	2,220	1.6	8,217	1.5
Psychological condition(ex. rushed, action based on false assumption)	14,459	13.1	15,699	10.7	14,964	10.6	14,679	10.5	59,801	11.1
System	1,838	1.7	2,923	2.0	2,721	1.9	2,693	1.9	10,175	1.9
Coordination	4,942	4.5	6,594	4.5	6,222	4.4	6,246	4.5	24,004	4.5
Record documentation	1,043	0.9	1,699	1.2	1,665	1.2	1,708	1.2	6,115	1.1
Similarity in patient's appearance (face, age) or name	188	0.2	263	0.2	233	0.2	226	0.2	910	0.2
Working condition	10,549	9.5	12,054	8.2	11,928	8.4	12,088	8.6	46,619	8.7
Environment	857	0.8	1,402	1.0	1,369	1.0	1,548	1.1	5,176	1.0
Medical/dental device, tool, material	926	0.8	1,615	1.1	1,389	1.0	1,722	1.2	5,652	1.0
Drug	1,029	0.9	1,831	1.2	1,594	1.1	1,924	1.4	6,378	1.2
Other items	522	0.5	1,032	0.7	940	0.7	1,209	0.9	3,703	0.7
Facility	249	0.2	715	0.5	826	0.6	1,006	0.7	2,796	0.5
Education/training	2,063	1.9	3,622	2.5	3,444	2.4	3,345	2.4	12,474	2.3
Explanation to patient/family	6,084	5.5	7,005	4.8	7,021	5.0	7,098	5.1	27,208	5.0
Others	6,269	5.7	11,438	7.8	10,159	7.2	9,908	7.1	37,774	7.0
Total	110,781	100.0	146,780	100.0	141,422	100.0	139,899	100.0	538,882	100.0

(Note) "Cause of event" may be more than one.

Fig. II-2-8 Cause of Event (Details)

Cause of Event (Note)	Detailed cause of event	Number of events				
		23rd	24th	25th	26th	Total
Check	Inadequate checking	27,170	35,361	34,233	32,770	129,534
	Others	507	676	675	902	2,760
Observation	Inadequate observation	14,738	17,477	17,446	16,952	66,613
	Others	281	527	595	787	2,190
Psychological condition	Rushed	3,421	4,740	4,562	4,585	17,308
	Irritated	305	334	350	307	1,296
	Nervous	360	798	503	468	2,129
	Preoccupied with other thing	2,356	3,192	3,041	2,983	11,572
	Acted based on false assumption	5,463	7,378	6,779	6,712	26,332
	Acted unwittingly	1,683	2,595	2,520	2,499	9,297
	Others	871	1,446	1,480	1,621	5,418
Working condition	Busy	4,993	6,465	6,405	6,658	24,521
	Inadequate personnel management	91	126	115	117	449
	Interrupted procedure	486	537	504	491	2,018
	On duty	183	252	238	235	908
	After duty	29	66	50	52	197
	Worked on night shift	4,228	5,358	5,282	5,358	20,226
	After working on night shift	196	269	308	286	1,059
	Others	343	830	828	873	2,874
Judgment	Misjudgment	7,997	10,870	10,723	10,129	39,719
	Others	522	832	935	1,171	3,460
Explanation to patient/family	Inadequate explanation	2,433	3,313	3,203	3,183	12,132
	Incorrect explanation	70	183	194	189	636
	Insufficient understanding of patient/family	3,222	3,815	3,866	3,984	14,887
	Others	359	693	690	839	2,581
Coordination	Insufficient coordination between doctor and nurse	1,308	1,784	1,695	1,576	6,363
	Insufficient coordination between doctor and technical staff	53	70	87	74	284
	Insufficient coordination between doctor and administrative staff	27	26	20	24	97
	Insufficient coordination between doctors	91	149	141	116	497
	Insufficient coordination between nurses	2,577	3,781	3,452	3,426	13,236
	Insufficient coordination among technical staff	189	236	246	226	897
	Insufficient coordination among staff with different responsibilities	418	569	556	570	2,113
	Insufficient coordination between dentist and dental staff	0	0	0	0	0
	Others	279	557	566	732	2,134
Knowledge	Lack of knowledge	2,063	3,753	3,392	2,781	11,989
	Incorrect knowledge	342	541	482	419	1,784
	Others	298	644	698	814	2,454
Total		89,952	120,243	116,860	114,909	441,964

(Note) "Cause of event" may be more than one.

Fig. II-2-9 Patient Age

Age	Number of events				
	23rd	24th	25th	26th	Total
0 to 10	2,664	3,933	3,440	3,618	13,655
11 to 20	937	1,109	1,302	1,040	4,388
21 to 30	1,335	1,693	1,801	1,517	6,346
31 to 40	1,863	2,485	2,334	2,187	8,869
41 to 50	2,338	2,882	2,716	2,725	10,661
51 to 60	5,256	6,697	6,530	6,199	24,682
61 to 70	8,089	10,309	9,811	9,522	37,731
71 to 80	11,405	14,273	14,131	13,909	53,718
81 to 90	6,468	7,768	7,654	7,732	29,622
91 or above	1,137	1,246	1,199	1,278	4,860
Multiple patients involved	394	518	505	469	1,886
Unknown	2,926	3,491	3,327	3,054	12,798
Total	44,812	56,404	54,750	53,250	209,216

Fig. II-2-10 Effect of Medical Near-Miss Incident

Effect	23rd		24th		25th		26th		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Detected before taking action: slight effect on patient (no treatment necessary)	4,967	11.1	7,885	14.0	7,617	13.9	7,363	13.8	27,832	13.3
Detected before taking action: moderate effect on patient (treatment necessary)	1,980	4.4	2,703	4.8	2,649	4.8	2,534	4.8	9,866	4.7
Detected before taking action: major effect on patient (life-threatening)	805	1.8	999	1.8	992	1.8	893	1.7	3,689	1.8
Action taken but patient not affected	30,683	68.5	36,673	65.0	35,112	64.1	33,916	63.7	136,384	65.2
Unknown	2,144	4.8	2,950	5.2	3,044	5.6	3,000	5.6	11,138	5.3
Others	4,233	9.4	5,194	9.2	5,336	9.7	5,544	10.4	20,307	9.7
Total	44,812	100.0	56,404	100.0	54,750	100.0	53,250	100.0	209,216	100.0

Fig. II-2-11 Years of Experience of Person Involved

Years of Experience of Person Involved	Number of events				
	23rd	24th	25th	26th	Total
0 year	5,685	5,490	8,230	7,510	26,915
1 year	4,179	5,814	5,152	5,035	20,180
2 years	3,767	4,606	4,440	4,283	17,096
3 years	3,119	4,180	3,803	3,435	14,537
4 years	2,632	3,563	3,146	3,039	12,380
5 years	2,012	3,259	2,717	2,742	10,730
6 years	1,627	1,891	1,711	1,622	6,851
7 years	1,518	1,722	1,635	1,597	6,472
8 years	1,248	1,459	1,329	1,280	5,316
9 years	1,231	1,374	1,250	1,312	5,167
10 years	1,222	1,911	1,710	1,720	6,563
11 to 20 years	6,594	8,120	7,355	7,356	29,425
21 to 30 years	3,514	4,236	3,942	4,145	15,837
30 years or longer	801	1,141	1,081	1,194	4,217
Multiple persons involved	1,485	1,943	1,874	1,837	7,139
Unknown	4,178	5,695	5,375	5,143	20,391
Total	44,812	56,404	54,750	53,250	209,216

Fig. II-2-12 Job Title of Person Involved

Job Title of Person Involved (Note)	Number of events				
	23rd	24th	25th	26th	Total
Doctor	1,816	2,191	1,984	2,035	8,026
Dentist	31	39	38	45	153
Midwife	388	629	598	613	2,228
Nurse	37,009	46,765	45,464	44,247	173,485
Assistant nurse	719	881	759	786	3,145
Nursing assistant	233	314	334	293	1,174
Pharmacist	1,304	1,577	1,554	1,490	5,925
National registered dietitian	231	249	248	188	916
Dietitian	198	209	247	245	899
Cook/cooking staff	419	575	628	525	2,147
Radiological technologist	556	761	660	663	2,640
Clinical technologist	647	761	692	721	2,821
Medical technologist	2	6	5	9	22
Physical therapist (PT)	202	271	243	266	982
Occupational therapist (OT)	61	106	109	91	367
Speech therapist (ST)	13	14	22	22	71
Dental hygienist	7	8	11	19	45
Dental technician	1	1	2	10	14
Orthoptist	12	22	17	26	77
Psychiatric social worker	0	1	3	10	14
Clinical psychologist	3	4	7	12	26
Certified social worker	6	7	9	18	40
Certified care worker	47	59	39	50	195
Clinical engineering technologist	164	173	155	217	709
Children's supervisor/child minder	32	45	31	33	141
Administrative staff	301	451	441	417	1,610
Unknown	4,943	8,112	8,113	6,796	27,964
Others	523	613	639	584	2,359
Total	49,868	64,844	63,052	60,431	238,195

(Note) More than one "job title of Person Involved" could be involved in a case.

Fig. II-2-13 Patient Physical/Psychological State

Patient Physical/Psychological State (Note)	Number of events				
	23rd	24th	25th	26th	Total
Disturbance of consciousness	3,207	4,017	3,952	3,818	14,994
Visual impairment	934	1,270	1,153	1,111	4,468
Hearing impairment	735	955	939	971	3,600
Dysarthria	856	1,051	931	927	3,765
Mental disorder	2,118	2,355	2,329	2,410	9,212
Dementia/amnesia	4,756	5,342	5,287	5,389	20,774
Upper extremity disability	2,543	3,025	2,813	2,758	11,139
Lower extremity disability	4,252	5,279	4,956	5,034	19,521
Gait disorder	5,118	6,036	5,870	5,994	23,018
Bed rest	5,710	7,307	7,219	6,920	27,156
Sleeping	822	1,091	1,114	1,032	4,059
Delirious	2,139	2,434	2,416	2,565	9,554
Under drug influence	2,725	3,161	3,263	3,260	12,409
Anesthetized/pre- or post-anesthesia	1,083	1,558	1,469	1,468	5,578
No disorder	11,175	15,344	14,738	14,071	55,328
Unknown	11,727	15,576	15,823	13,536	56,662
Others	4,613	6,192	5,904	6,051	22,760
Total	64,513	81,993	80,176	77,315	303,997

(Note) More than one "patient physical/psychological state" could be selected.

Fig. II-2-14 Sex of Patients

Sex	Number of events				
	23rd	24th	25th	26th	Total
Male	23,966	30,225	29,346	28,670	112,207
Female	18,849	23,799	23,055	22,434	88,137
Multiple patients involved	385	540	491	468	1,884
Unidentifiable	1,612	1,840	1,858	1,678	6,988
Total	44,812	56,404	54,750	53,250	209,216

Fig. II-2-15 Number of Years Person Involved Has Been Working at Current Department

Number of Years Person Involved Has Been Working at Current Department	Number of events				
	23rd	24th	25th	26th	Total
0 year	11,569	13,671	15,737	14,957	55,934
1 year	7,233	9,926	8,779	8,861	34,799
2 years	5,556	6,866	6,404	6,226	25,052
3 years	3,970	5,365	4,864	4,508	18,707
4 years	2,600	3,789	3,309	3,134	12,832
5 years	1,824	2,601	2,300	2,232	8,957
6 years	1,053	1,388	1,240	1,182	4,863
7 years	781	936	859	866	3,442
8 years	504	600	618	652	2,374
9 years	409	460	376	451	1,696
10 years	486	632	580	594	2,292
11 to 20 years	1,273	1,551	1,431	1,552	5,807
21 to 30 years	356	440	393	418	1,607
30 years or longer	181	323	270	297	1,071
Multiple persons involved	1,486	1,947	1,872	1,829	7,134
Unknown	5,531	5,909	5,718	5,491	22,649
Total	44,812	56,404	54,750	53,250	209,216

Fig. II-2-16 Person Who Identified Incident

Person Who Identified Incident	Number of events				
	23rd	24th	25th	26th	Total
Person himself/herself	22,364	27,510	26,456	26,331	102,661
Coworker of same job title	13,273	18,180	17,581	16,692	65,726
Coworker of another job title	4,379	5,119	5,138	4,945	19,581
Patient himself/herself	1,781	2,134	2,176	1,966	8,057
Patient's family/caregiver	963	1,157	1,160	1,163	4,443
Other patient	966	1,079	1,063	1,015	4,123
Unknown	443	460	466	454	1,823
Others	643	765	710	684	2,802
Total	44,812	56,404	54,750	53,250	209,216

Fig. II-2-17 Situation in Which Medical Near-Miss Incident Occurred

Situation	23rd		24th		25th		26th		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Ordering/instruction	635	1.4	748	1.3	716	1.3	690	1.3	2,789	1.3
Communication process	1,280	2.9	1,540	2.7	1,340	2.4	1,369	2.6	5,529	2.6
Drug preparation	832	1.9	1,314	2.3	1,256	2.3	1,178	2.2	4,580	2.2
Prescription/drug administration	9,870	22.0	12,436	22.0	12,017	21.9	11,733	22.0	46,056	22.0
Dispensing, drug management, etc.	1,387	3.1	1,548	2.7	1,553	2.8	1,465	2.8	5,953	2.8
Blood transfusion	187	0.4	253	0.4	260	0.5	215	0.4	915	0.4
Surgery	572	1.3	718	1.3	685	1.3	657	1.2	2,632	1.3
Anesthesia	60	0.1	78	0.1	55	0.1	61	0.1	254	0.1
Delivery/mechanical abortion	20	0.0	22	0.0	20	0.0	27	0.1	89	0.0
Treatment, others	341	0.8	463	0.8	455	0.8	515	1.0	1,774	0.8
Procedure	334	0.7	406	0.7	404	0.7	407	0.8	1,551	0.7
Examination/interview	107	0.2	169	0.3	117	0.2	125	0.2	518	0.2
Use/management of medical equipment (device)	1,150	2.6	1,399	2.5	1,201	2.2	1,273	2.4	5,023	2.4
Use/management of drainage tube or other tube	7,139	15.9	7,561	13.4	7,729	14.1	7,978	15.0	30,407	14.5
Use/management of dental equipment (device)/material	3	0.0	6	0.0	11	0.0	6	0.0	26	0.0
Examination/test	2,993	6.7	3,524	6.2	3,353	6.1	3,113	5.8	12,983	6.2
Nursing care	4,543	10.1	5,033	8.9	4,681	8.5	4,985	9.4	19,242	9.2
Meal/nutrition	1,342	3.0	1,564	2.8	1,609	2.9	1,391	2.6	5,906	2.8
Nursing care, others	5,837	13.0	5,846	10.4	6,014	11.0	6,229	11.7	23,926	11.4
Supply transportation	37	0.1	46	0.1	58	0.1	56	0.1	197	0.1
Radiation control	10	0.0	26	0.0	16	0.0	18	0.0	70	0.0
Medical record and information management	402	0.9	479	0.8	473	0.9	488	0.9	1,842	0.9
Explanation to patient/family	299	0.7	330	0.6	327	0.6	315	0.6	1,271	0.6
Facility	91	0.2	108	0.2	111	0.2	108	0.2	418	0.2
Others	5,341	11.9	10,787	19.1	10,289	18.8	8,848	16.6	35,265	16.9
Total	44,812	100.0	56,404	100.0	54,750	100.0	53,250	100.0	209,216	100.0

Fig. II-2-18 Situation and Cause of Event (23rd Report)

Situation × Cause of Event(Note)	Check	Observation	Judgment	Knowledge	Technique (skill)	Reporting, etc.	Physical condition	Psychological condition	System	Coordination
Ordering/instruction	541	48	83	44	10	61	13	170	97	160
Communication process	1,073	59	203	105	26	191	31	425	148	393
Drug preparation	741	68	94	56	55	41	29	296	36	90
Prescription/drug administration	8,680	1,466	1,411	643	340	457	374	3,712	446	1,382
Dispensing, drug management, etc.	1,229	145	157	74	62	35	71	517	58	101
Blood transfusion	141	25	31	31	17	17	7	62	13	43
Surgery	391	126	95	54	63	40	16	162	34	129
Anesthesia	32	12	7	5	16	3	2	16	1	10
Delivery/mechanical abortion	13	7	7	3	3	2	1	5	0	0
Treatment, others	227	135	92	39	46	22	19	116	19	53
Procedure	198	91	80	35	51	31	15	100	13	36
Examination/interview	76	16	16	7	2	7	4	28	8	22
Use/management of medical equipment (device)	855	294	170	151	130	38	45	340	44	122
Use/management of drainage tube or other tube	2,949	4,385	1,650	269	356	96	194	1,118	71	371
Use/management of dental equipment (device)/material	1	1	2	0	1	0	0	0	1	0
Examination/test	2,466	291	440	260	262	199	121	1,075	183	399
Nursing care	1,727	2,700	1,133	139	156	80	112	667	65	304
Meal/nutrition	1,164	207	145	67	40	60	31	332	68	117
Nursing care, others	1,341	3,224	1,327	65	46	45	168	542	43	171
Supply transportation	32	6	7	3	3	2	2	12	3	4
Radiation control	7	1	2	2	0	1	0	4	2	1
Medical record and information management	345	18	49	18	11	29	13	127	48	74
Explanation to patient/family	197	24	56	19	8	26	8	80	18	54
Facility	46	13	18	6	2	1	2	16	6	10
Others	3,071	1,628	1,171	510	358	381	264	1,503	237	593
Total	27,543	14,990	8,446	2,605	2,064	1,865	1,542	11,425	1,662	4,639

(Note) More than one "cause of event" could be selected.

Record documentation	Similarity in patient's appearance (face, age) or name	Working condition	Environment	Medical/dental equipment, instrument, material	Drug	Other items	Facility	Education/training	Explanation to patient/family	Others	Total
39	6	100	6	6	18	2	4	37	16	42	1,503
88	9	230	5	9	19	10	3	72	52	23	3,174
21	5	179	6	5	102	4	1	35	13	17	1,894
352	41	2,275	71	82	508	45	10	492	470	286	23,543
31	4	297	11	28	233	14	2	52	17	45	3,183
9	0	36	2	4	1	2	0	14	5	5	465
11	1	69	11	40	6	9	1	46	24	45	1,373
0	0	7	0	3	0	0	0	3	1	8	126
0	0	2	0	1	0	0	0	2	2	1	49
8	2	69	8	19	10	10	3	26	28	25	976
10	1	74	5	7	2	2	0	16	18	28	813
2	6	12	1	4	1	1	3	8	13	7	244
7	1	165	19	256	3	31	9	89	14	34	2,817
26	11	1,557	100	204	32	76	10	216	1,069	320	15,080
0	0	0	0	1	0	1	0	0	0	0	8
64	44	556	26	73	16	36	9	193	121	83	6,917
11	9	961	147	80	20	118	21	190	1,186	255	10,081
25	6	146	2	5	4	13	1	63	46	56	2,598
8	9	1,121	279	41	23	110	60	110	1,486	514	10,733
1	0	5	2	0	2	2	1	3	0	0	90
0	0	0	1	1	0	0	1	3	0	1	27
32	10	59	7	1	1	9	0	35	19	18	923
7	5	43	5	4	5	4	3	18	129	10	723
0	0	10	8	4	0	7	22	5	3	2	181
230	18	1,113	124	48	23	16	76	270	666	4,444	16,744
982	188	9,086	846	926	1,029	522	240	1,998	5,398	6,269	104,265

Fig. II-2-19 Situation and Cause of Event (24th Report)

Situation × Cause of Event(Note)	Check	Observation	Judgment	Knowledge	Technique (skill)	Reporting, etc.	Physical condition	Psychological condition	System	Coordination
Ordering/instruction	620	74	113	109	34	85	44	230	129	203
Communication process	1,281	110	287	169	59	289	61	542	204	473
Drug preparation	1,123	122	170	140	92	78	67	434	90	173
Prescription/drug administration	10,833	2,064	2,101	1,301	605	738	521	4,669	590	1,769
Dispensing, drug management, etc.	1,335	166	164	106	80	41	74	581	68	110
Blood transfusion	192	37	51	52	19	24	13	100	21	56
Surgery	543	152	139	96	97	54	32	230	48	174
Anesthesia	47	22	18	10	14	6	3	28	3	11
Delivery/mechanical abortion	15	6	6	2	2	4	0	6	0	5
Treatment, others	316	143	127	52	56	34	19	149	31	65
Procedure	264	103	91	50	81	34	23	135	23	65
Examination/interview	127	27	26	12	7	12	5	49	18	23
Use/management of medical equipment (device)	1,001	336	190	193	149	50	40	366	58	146
Use/management of drainage tube or other tube	3,389	4,512	2,053	430	509	138	202	1,283	125	494
Use/management of dental equipment (device)/material	2	1	1	2	3	0	0	2	0	0
Examination/test	2,876	367	520	386	186	239	149	1,241	219	436
Nursing care	2,086	2,827	1,369	233	251	163	170	791	128	409
Meal/nutrition	1,327	238	196	102	76	81	38	408	90	167
Nursing care, others	1,437	3,179	1,391	101	57	53	136	567	54	212
Supply transportation	39	5	7	5	3	2	3	15	3	5
Radiation control	20	2	0	2	0	0	1	8	2	2
Medical record and information management	399	42	56	31	12	27	10	139	56	79
Explanation to patient/family	194	28	72	32	7	34	7	95	38	65
Facility	54	13	11	11	7	5	5	11	9	4
Others	6,369	3,385	2,450	1,141	947	1,017	477	3,620	916	1,448
Total	35,889	17,961	11,609	4,768	3,353	3,208	2,100	15,699	2,923	6,594

(Note) More than one "cause of event" could be selected.

Record documentation	Similarity in patient's appearance (face, age) or name	Working condition	Environment	Medical/dental equipment, instrument, material	Drug	Other items	Facility	Education/training	Explanation to patient/family	Others	Total
79	7	135	22	35	42	28	25	80	39	52	2,185
106	12	275	26	24	38	25	16	111	80	45	4,233
73	7	279	31	39	197	35	23	133	44	85	3,435
461	63	2,706	136	157	850	133	72	991	749	388	31,897
49	5	336	18	34	302	23	8	80	25	86	3,691
6	0	48	4	4	2	0	0	28	3	5	665
19	2	95	20	60	9	21	3	59	26	41	1,920
2	0	10	3	6	5	3	1	6	6	9	213
0	0	4	1	1	0	0	0	3	0	1	56
20	0	81	11	23	18	10	8	37	30	40	1,270
15	5	83	9	22	11	8	3	29	21	28	1,103
5	9	44	2	4	3	5	2	7	33	8	428
14	0	202	34	396	8	48	16	148	23	43	3,461
57	10	1,688	176	281	70	167	57	346	1,063	328	17,378
0	0	0	0	2	0	1	0	0	0	0	14
100	49	612	51	92	27	54	24	259	163	141	8,191
75	27	1,020	216	199	96	210	136	343	1,283	319	12,351
41	10	200	21	20	13	34	19	117	46	101	3,345
21	5	1,069	316	58	54	146	77	195	1,520	561	11,209
4	0	6	3	4	5	3	3	11	2	2	130
0	0	3	0	5	0	1	0	1	0	0	47
43	12	88	6	5	2	8	7	59	21	20	1,122
11	1	48	7	9	3	7	9	32	166	9	874
2	0	14	9	7	1	12	40	10	7	9	241
496	39	3,008	280	128	75	50	166	537	1,655	9,117	37,321
1,699	263	12,054	1,402	1,615	1,831	1,032	715	3,622	7,005	11,438	146,780

Fig. II-2-20 Situation and Cause of Event (25th Report)

Situation × Cause of Event (Note)	Check	Observation	Judgment	Knowledge	Technique (skill)	Reporting, etc.	Physical condition	Psychological condition	System	Coordination
Ordering/instruction	574	59	105	89	29	73	37	194	106	188
Communication process	1,103	110	256	147	47	204	49	489	181	424
Drug preparation	1,101	126	185	120	109	93	74	385	103	190
Prescription/drug administration	10,464	2,070	2,013	1,126	538	696	508	4,384	608	1,666
Dispensing, drug management, etc.	1,369	143	167	113	78	45	69	604	76	123
Blood transfusion	187	39	62	57	20	28	6	91	21	56
Surgery	516	149	134	89	92	58	40	214	45	174
Anesthesia	40	19	12	10	10	5	2	17	2	14
Delivery/mechanical abortion	7	8	9	0	3	3	0	5	1	6
Treatment, others	295	155	132	56	71	37	29	144	24	56
Procedure	280	106	94	65	66	43	32	143	21	60
Examination/interview	77	21	18	10	2	11	5	35	5	26
Use/management of medical equipment (device)	928	333	231	194	133	73	62	365	69	132
Use/management of drainage tube or other tube	3,595	4,766	2,115	380	445	119	239	1,210	95	429
Use/management of dental equipment (device)/material	4	1	3	1	1	1	1	4	2	1
Examination/test	2,773	408	536	371	209	251	165	1,203	238	489
Nursing care	1,995	2,698	1,308	259	224	136	161	835	97	322
Meal/nutrition	1,346	236	172	83	67	61	35	370	68	162
Nursing care, others	1,495	3,179	1,417	115	63	72	182	633	56	217
Supply transportation	42	6	12	3	4	3	4	18	4	6
Radiation control	13	5	5	4	3	3	3	7	1	1
Medical record and information management	401	34	66	34	18	29	16	142	52	68
Explanation to patient/family	214	36	74	33	16	35	10	89	39	81
Facility	45	10	14	12	9	8	3	18	9	10
Others	5,908	3,281	2,421	1,037	803	879	450	3,365	798	1,321
Total	34,772	17,998	11,561	4,408	3,060	2,966	2,182	14,964	2,721	6,222

(Note) More than one "cause of event" could be selected.

Record documentation	Similarity in patient's appearance (face, age) or name	Working condition	Environment	Medical/dental equipment, instrument, material	Drug	Other items	Facility	Education/training	Explanation to patient/family	Others	Total
60	4	120	25	30	34	20	24	82	49	48	1,950
106	12	271	26	30	38	26	28	131	75	38	3,791
62	4	253	32	43	161	38	27	134	57	44	3,341
462	51	2,741	133	148	771	119	86	917	730	405	30,636
48	4	315	20	29	251	23	7	90	23	51	3,648
5	3	50	7	6	3	4	3	30	3	8	689
19	1	97	20	51	10	18	9	68	28	31	1,863
3	0	12	0	2	1	1	2	4	1	2	159
1	0	5	0	0	0	0	0	1	1	2	52
15	0	82	15	21	10	9	8	32	26	47	1,316
18	0	107	15	16	11	15	15	42	30	26	1,205
2	11	24	2	2	1	3	0	13	9	8	285
30	1	205	30	301	20	55	18	143	46	26	3,395
54	9	1,682	153	265	65	171	68	341	1,098	384	17,683
1	0	5	0	7	1	2	0	2	1	0	38
93	43	672	54	85	32	47	43	244	156	123	8,235
61	9	976	182	147	60	151	133	270	1,227	269	11,520
55	9	188	26	18	13	30	27	103	53	145	3,267
22	6	1,159	332	50	37	113	118	196	1,733	528	11,723
1	0	14	2	3	2	6	1	10	1	4	146
0	0	2	0	1	0	1	1	1	0	0	51
53	9	70	22	19	11	20	20	60	18	27	1,189
14	2	52	9	15	11	13	18	38	155	13	967
3	0	13	12	6	3	18	32	18	12	18	273
477	55	2,813	252	94	48	37	138	474	1,489	7,912	34,052
1,665	233	11,928	1,369	1,389	1,594	940	826	3,444	7,021	10,159	141,474

Fig. II-2-21 Situation and Cause of Event (26th Report)

Situation × Cause of Event (Note)	Check	Observation	Judgment	Knowledge	Technique (skill)	Reporting, etc.	Physical condition	Psychological condition	System	Coordination
Ordering/instruction	556	52	94	65	29	78	42	216	103	181
Communication process	1,120	106	271	166	62	249	58	508	190	454
Drug preparation	1,025	123	169	115	93	97	63	381	106	200
Prescription/drug administration	10,283	2,000	1,960	1,031	582	728	550	4,451	591	1,763
Dispensing, drug management, etc.	1,269	155	155	92	61	36	73	565	69	128
Blood transfusion	176	38	56	46	21	17	7	95	19	43
Surgery	488	144	116	71	81	58	23	197	41	136
Anesthesia	36	14	13	1	6	1	4	10	2	11
Delivery/mechanical abortion	16	9	7	2	5	1	0	10	1	4
Treatment, others	332	181	146	52	82	43	37	171	35	71
Procedure	277	104	107	66	96	35	25	134	19	57
Examination/interview	85	18	21	8	3	9	3	25	4	17
Use/management of medical equipment (device)	965	357	218	182	172	77	63	405	93	157
Use/management of drainage tube or other tube	3,620	4,887	2,178	366	469	181	252	1,304	142	488
Use/management of dental equipment (device)/material	4	1	1	1	0	0	0	1	0	1
Examination/test	2,626	330	470	297	159	242	143	1,134	187	444
Nursing care	2,088	2,929	1,430	257	255	173	212	887	161	420
Meal/nutrition	1,170	187	148	81	47	66	45	312	64	121
Nursing care, others	1,618	3,341	1,446	134	97	100	202	628	76	240
Supply transportation	39	5	8	4	4	2	1	11	2	6
Radiation control	16	6	5	4	4	3	2	6	0	1
Medical record and information management	421	38	74	45	22	43	21	163	54	81
Explanation to patient/family	188	36	82	31	10	33	10	90	25	52
Facility	53	12	14	13	12	6	8	20	8	5
Others	5,031	2,617	2,012	747	632	727	376	2,955	701	1,165
Total	33,502	17,690	11,201	3,877	3,004	3,005	2,220	14,679	2,693	6,246

(Note) More than one "cause of event" could be selected.

Record documentation	Similarity in patient's appearance (face, age) or name	Working condition	Environment	Medical/dental equipment, instrument, material	Drug	Other items	Facility	Education/training	Explanation to patient/family	Others	Total
49	6	112	23	22	32	18	23	76	45	65	1,887
125	12	273	38	41	44	39	35	135	105	36	4,067
67	4	302	57	65	210	59	55	155	73	74	3,493
540	49	2,690	203	198	893	168	131	860	743	424	30,838
30	6	318	19	33	250	22	14	101	32	59	3,487
6	0	56	5	11	10	3	3	24	5	6	647
16	2	82	19	69	11	28	8	60	24	45	1,719
0	0	12	2	4	6	1	1	7	2	8	141
0	0	7	0	1	1	0	0	1	0	2	67
28	6	94	20	31	26	25	20	40	45	56	1,608
17	2	87	15	18	9	9	8	27	22	17	1,151
0	12	20	6	1	0	2	1	6	15	15	271
43	0	223	52	328	33	65	44	159	49	46	3,731
78	4	1,784	177	339	97	178	91	293	1,191	364	18,483
0	0	1	0	2	0	1	0	2	0	0	15
105	41	651	48	98	29	49	34	225	142	152	7,606
108	7	1,135	234	217	110	236	185	326	1,223	347	12,940
37	13	199	17	15	10	27	21	93	53	139	2,865
49	6	1,204	332	86	64	167	137	248	1,821	543	12,539
2	0	9	2	3	2	5	5	6	1	7	124
0	0	1	0	2	0	0	0	3	0	0	53
41	13	90	17	16	15	34	15	66	25	17	1,311
10	5	55	8	8	7	8	13	24	160	18	873
5	0	16	14	14	4	14	36	18	10	11	293
352	38	2,667	240	100	61	51	126	390	1,312	7,457	29,757
1,708	226	12,088	1,548	1,722	1,924	1,209	1,006	3,345	7,098	9,908	139,966

Fig. II-2-22 Situation and Cause of Event (Aggregated Table, 23rd to 26th Reports)

Situation × Cause of Event (Note)	Check	Observation	Judgment	Knowledge	Technique (skill)	Reporting, etc.	Physical condition	Psychological condition	System	Coordination
Ordering/instruction	2,291	233	395	307	102	297	136	810	435	732
Communication process	4,577	385	1,017	587	194	933	199	1,964	723	1,744
Drug preparation	3,990	439	618	431	349	309	233	1,496	335	653
Prescription/drug administration	40,260	7,600	7,485	4,101	2,065	2,619	1,953	17,216	2,235	6,580
Dispensing, drug management, etc.	5,202	609	643	385	281	157	287	2,267	271	462
Blood transfusion	696	139	200	186	77	86	33	348	74	198
Surgery	1,938	571	484	310	333	210	111	803	168	613
Anesthesia	155	67	50	26	46	15	11	71	8	46
Delivery/mechanical abortion	51	30	29	7	13	10	1	26	2	15
Treatment, others	1,170	614	497	199	255	136	104	580	109	245
Procedure	1,019	404	372	216	294	143	95	512	76	218
Examination/interview	365	82	81	37	14	39	17	137	35	88
Use/management of medical device	3,749	1,320	809	720	584	238	210	1,476	264	557
Use/management of drainage tube or other tube	13,553	18,550	7,996	1,445	1,779	534	887	4,915	433	1,782
Use/management of dental device/material	11	4	7	4	5	1	1	7	3	2
Examination/test	10,741	1,396	1,966	1,314	816	931	578	4,653	827	1,768
Nursing care	7,896	11,154	5,240	888	886	552	655	3,180	451	1,455
Meal/nutrition	5,007	868	661	333	230	268	149	1,422	290	567
Nursing care, others	5,891	12,923	5,581	415	263	270	688	2,370	229	840
Supply transportation	152	22	34	15	14	9	10	56	12	21
Radiation control	56	14	12	12	7	7	6	25	5	5
Medical record and information management	1,566	132	245	128	63	128	60	571	210	302
Explanation to patient/family	793	124	284	115	41	128	35	354	120	252
Facility	198	48	57	42	30	20	18	65	32	29
Others	20,379	10,911	8,054	3,435	2,740	3,004	1,567	11,443	2,652	4,527
Total	131,706	68,639	42,817	15,658	11,481	11,044	8,044	56,767	9,999	23,701

(Note) More than one "cause of event" could be selected.

Record documentation	Similarity in patient's appearance (face, age) or name	Working condition	Environment	Medical/dental equipment, instrument, material	Drug	Other items	Facility	Education/training	Explanation to patient/family	Others	Total
227	23	467	76	93	126	68	76	275	149	207	7,525
425	45	1,049	95	104	139	100	82	449	312	142	15,265
223	20	1,013	126	152	670	136	106	457	187	220	12,163
1,815	204	10,412	543	585	3,022	465	299	3,260	2,692	1,503	116,914
158	19	1,266	68	124	1,036	82	31	323	97	241	14,009
26	3	190	18	25	16	9	6	96	16	24	2,466
65	6	343	70	220	36	76	21	233	102	162	6,875
5	0	41	5	15	12	5	4	20	10	27	639
1	0	18	1	3	1	0	0	7	3	6	224
71	8	326	54	94	64	54	39	135	129	168	5,170
60	8	351	44	63	33	34	26	114	91	99	4,272
9	38	100	11	11	5	11	6	34	70	38	1,228
94	2	795	135	1,281	64	199	87	539	132	149	13,404
215	34	6,711	606	1,089	264	592	226	1,196	4,421	1,396	68,624
1	0	6	0	12	1	5	0	4	1	0	75
362	177	2,491	179	348	104	186	110	921	582	499	30,949
255	52	4,092	779	643	286	715	475	1,129	4,919	1,190	46,892
158	38	733	66	58	40	104	68	376	198	441	12,075
100	26	4,553	1,259	235	178	536	392	749	6,560	2,146	46,204
8	0	34	9	10	11	16	10	30	4	13	490
0	0	6	1	9	0	2	2	8	0	1	178
169	44	307	52	41	29	71	42	220	83	82	4,545
42	13	198	29	36	26	32	43	112	610	50	3,437
10	0	53	43	31	8	51	130	51	32	40	988
1,555	150	9,601	896	370	207	154	506	1,671	5,122	28,930	117,874
6,054	910	45,156	5,165	5,652	6,378	3,703	2,787	12,409	26,522	37,774	532,485

Fig. II-2-23 Situation and Effect

Situation × Effect	Slight effect on patient					Moderate effect on patient					Major effect on patient				
	23rd	24th	25th	26th	Total	23rd	24th	25th	26th	Total	23rd	24th	25th	26th	Total
Ordering/instruction	171	192	196	164	723	28	43	37	47	155	7	15	11	8	41
Communication process	200	263	204	229	896	49	38	44	56	187	23	36	24	27	110
Drug preparation	278	406	427	343	1,454	43	57	66	61	227	7	19	11	8	45
Prescription/drug administration	867	1,395	1,302	1,351	4,915	227	262	256	209	954	188	255	273	234	950
Dispensing, drug management, etc.	557	607	639	597	2,400	84	77	100	93	354	7	26	17	14	64
Blood transfusion	21	36	47	44	148	7	11	12	11	41	5	17	19	10	51
Surgery	60	69	95	89	313	49	80	63	69	261	14	30	30	25	99
Anesthesia	7	10	10	7	34	4	5	8	6	23	2	3	0	1	6
Delivery/mechanical abortion	1	3	0	1	5	2	0	2	2	6	0	1	0	0	1
Treatment, others	33	23	38	49	143	19	29	25	41	114	13	5	9	5	32
Procedure	23	48	47	40	158	15	14	21	16	66	5	10	8	20	43
Examination/interview	19	32	22	29	102	6	4	4	10	24	4	4	3	1	12
Use/management of medical device	105	199	145	154	603	48	65	40	59	212	33	39	38	31	141
Use/management of drainage tube or other tube	366	448	473	469	1,756	337	316	355	360	1,368	108	103	99	114	424
Use/management of dental device/material	1	0	5	0	6	0	0	0	0	0	0	0	0	0	0
Examination/test	401	526	504	447	1,878	87	113	106	90	396	13	21	22	17	73
Nursing care	281	381	380	358	1,400	143	211	176	131	661	37	46	45	42	170
Meal/nutrition	237	293	286	192	1,008	38	36	44	41	159	19	19	26	29	93
Nursing care, others	324	365	401	361	1,451	118	141	171	138	568	83	74	86	100	343
Supply transportation	10	10	13	11	44	1	0	3	3	7	0	0	0	2	2
Radiation control	0	7	5	8	20	0	0	1	1	2	0	0	0	0	0
Medical record and information management	74	92	98	98	362	13	9	15	16	53	6	2	5	8	21
Explanation to patient/family	44	49	68	52	213	6	6	4	8	24	2	3	4	2	11
Facility	20	22	20	22	84	8	8	8	8	32	1	5	3	0	9
Others	867	2,409	2,192	2,248	7,716	648	1,178	1,088	1,058	3,972	228	266	259	195	948
Total	4,967	7,885	7,617	7,363	27,832	1,980	2,703	2,649	2,534	9,866	805	999	992	893	3,689

Fig. II-2-24 Day of Occurrence and Weekday/Holiday Category

Day of occurrence	Weekday					Holiday				
	23rd	24th	25th	26th	Total	23rd	24th	25th	26th	Total
Monday	5,270	6,866	5,910	6,144	24,190	520	192	565	532	1,809
Tuesday	5,986	7,550	7,263	7,321	28,120	154	39	21	8	222
Wednesday	5,997	7,682	7,478	7,525	28,682	326	21	29	33	409
Thursday	6,667	7,398	7,386	7,431	28,882	20	241	9	35	305
Friday	6,633	7,214	7,259	6,786	27,892	46	249	85	285	665
Saturday	2,010	2,222	2,313	2,094	8,639	2,927	3,131	3,034	3,261	12,353
Sunday	199	368	362	352	1,281	3,526	4,377	4,444	4,127	16,474
Day unknown	14	33	25	30	102	7	9	5	8	29
Total	32,776	39,333	37,996	37,683	147,788	7,526	8,259	8,192	8,289	32,266

Error occurred but patient not affected					Unknown					Others					Aggregate total
23rd	24th	25th	26th	Total	23rd	24th	25th	26th	Total	23rd	24th	25th	26th	Total	
373	410	367	380	1,530	17	25	34	26	102	39	63	71	65	238	2,789
887	1,020	899	882	3,688	47	81	63	44	235	74	102	106	131	413	5,529
432	722	657	644	2,455	25	46	42	44	157	47	64	53	78	242	4,580
7,682	9,363	8,914	8,519	34,478	474	559	610	682	2,325	432	602	662	738	2,434	46,056
594	617	591	549	2,351	47	71	67	51	236	98	150	139	161	548	5,953
124	165	147	118	554	14	12	19	17	62	16	12	16	15	59	915
315	391	350	334	1,390	44	46	42	38	170	90	102	105	102	399	2,632
28	43	29	34	134	5	6	4	2	17	14	11	4	11	40	254
14	12	16	16	58	0	4	1	0	5	3	2	1	8	14	89
219	318	285	317	1,139	15	23	23	30	91	42	65	75	73	255	1,774
231	257	261	253	1,002	12	25	15	22	74	48	52	52	56	208	1,551
66	104	72	65	307	3	11	2	8	24	9	14	14	12	49	518
790	905	780	827	3,302	55	58	53	61	227	119	133	145	141	538	5,023
4,889	4,993	5,207	5,319	20,408	262	367	332	360	1,321	1,177	1,334	1,263	1,356	5,130	30,407
1	5	4	5	15	0	0	0	0	0	1	1	2	1	5	26
2,165	2,435	2,267	2,141	9,008	122	145	185	158	610	205	284	269	260	1,018	12,983
3,382	3,579	3,252	3,591	13,804	151	180	194	179	704	549	636	634	684	2,503	19,242
982	1,053	1,060	945	4,040	25	50	48	48	171	41	113	145	136	435	5,906
4,133	3,949	3,958	4,225	16,265	195	212	262	254	923	984	1,105	1,136	1,151	4,376	23,926
23	28	34	33	118	2	2	5	3	12	1	6	3	4	14	197
9	16	7	8	40	1	1	2	1	5	0	2	1	0	3	70
246	322	288	302	1,158	24	20	21	20	85	39	34	46	44	163	1,842
203	209	189	194	795	13	20	11	11	55	31	43	51	48	173	1,271
48	53	50	50	201	5	5	8	7	25	9	15	22	21	67	418
2,847	5,704	5,428	4,165	18,144	586	981	1,001	934	3,502	165	249	321	248	983	35,265
30,683	36,673	35,112	33,916	136,384	2,144	2,950	3,044	3,000	11,138	4,233	5,194	5,336	5,544	20,307	209,216

Unknown					Aggregate total
23rd	24th	25th	26th	Total	
460	1,208	1,125	995	3,788	29,787
539	1,341	1,243	1,093	4,216	32,558
553	1,425	1,333	1,159	4,470	33,561
578	1,356	1,360	1,169	4,463	33,650
578	1,371	1,399	1,128	4,476	33,033
411	1,045	990	855	3,301	24,293
334	852	888	677	2,751	20,506
1,057	214	224	202	1,697	1,828
4,510	8,812	8,562	7,278	29,162	209,216

III. Current Analysis of Medical Near-Miss/Adverse Event Information

Both medical adverse event information and medical near-miss information were collected in the project started in 2004. Since 2005, medical adverse event information and medical near-miss information covered by individual themes have been comprehensively analyzed.

1 Project Overview and Expert Division Activities

[1] Selection of Themes for Information to be Analyzed

Themes for information to be analyzed have been selected based on expert opinions and in light of (1) generality/universality, (2) event frequency, (3) effect on patients, (4) preventability/avoidability, and (5) nature as object lesson.

[2] Information to be Analyzed

Among medical adverse event information and medical near-miss information provided for the project, those covered by predetermined themes were selected and analyzed. Regarding medical near-miss information, individual Analysis Groups have determined relevant themes related to reported events and been collecting descriptive information.

[3] Analysis System

Analysis Groups consisting of medical safety experts have been reviewing all reported incidents/cases to understand their outlines and determine direction of analysis.
Individual Analysis Group meetings have been held to analyze cases covered by individual themes.

[4] Meetings

Management Committee (a subcommittee specified in the JCQHC act of endowment) meetings and Comprehensive Evaluating Panel meetings for this project held between January 1 and December 31, 2007 are shown below.

(1) Management Committee meeting

Management Committee meetings were held 2 times between January 1, 2007 and December 31, 2007.

Fig. III-1-1 Management Committee Meeting

	Date	Agenda
7th	02/14/2007	• 2007 Project to Collect Medical Near-Miss/Adverse Event Information (proposal) • Budget proposal for 2007 Project to Collect Medical Near-Miss/Adverse Event Information
8th	05/31/2007	• Outcome of 2006 Project to Collect Medical Near-Miss/Adverse Event Information

(2) Comprehensive Evaluation Panel meeting

Comprehensive Evaluation Panel meetings were held 5 times between January 1, 2007 and December 31, 2007.

Fig. III-1-2 Comprehensive Evaluation Panel Meeting

	Date	Agenda
13th	01/31/2007	• Project to Collect Medical Near-Miss/Adverse Event Information: The 8th report (proposal) • Provision of medical safety information in the Project to Collect Medical Near-Miss/Adverse Event Information
14th	05/10/2007	• 2007 Project to Collect Medical Near-Miss/Adverse Event Information • Project to Collect Medical Near-Miss/Adverse Event Information: The 9th report (proposal) • Provision of medical safety information in the Project to Collect Medical Near-Miss/Adverse Event Information • Workshop hosted by the Center for Medical Adverse Event Prevention • Revision of the Outline of the Project to Collect Medical Near-Miss/Adverse Event Information
15th	06/07/2007	• Project to Collect Medical Near-Miss/Adverse Event Information: 2006 annual report (proposal) • Provision of medical safety information in the Project to Collect Medical Near-Miss/Adverse Event Information
16th	08/02/2007	• Project to Collect Medical Near-Miss/Adverse Event Information: The 10th report (proposal) • Provision of medical safety information in the Project to Collect Medical Near-Miss/Adverse Event Information • Improvement of the accident information system in the Project to Collect Medical Near-Miss/Adverse Event Information
17th	11/15/2007	• Project to Collect Medical Near-Miss/Adverse Event Information: The 11th report (proposal) • Provision of medical safety information in the Project to Collect Medical Near-Miss/Adverse Event Information • Workshop hosted by the Center for Medical Adverse Event Prevention

[5] Expert Analysis Group Meeting

At meetings held once or twice a month, Expert Analysis Groups consisting of medical safety experts review all reported incidents/cases to understand their outlines and determine direction of analysis.

Also once or twice a month, individual Analysis Group meetings are held to analyze cases covered by individual themes.

Other than meetings to analyze cases covered by individual themes, “Important Medical Near-Miss Case Database Development Group” has been established as another expert analysis group to select especially important medical near-miss cases and develop a relevant database.

[6] Collection of Follow-Up Information of Medical Adverse Event information

When an Analysis Group determines that further detailed case information from the medical institution is necessary for analysis, it makes written inquiries to the reporting medical institution or, if the institution agrees to cooperate, visits the institution to collect follow-up information. The follow-up information obtained is used for development of medical safety measures.

In 2007, follow-up information on 165 medical adverse events was requested in writing, and 151 events were reported. The breakdown is 45 events related to drugs, 27 events related to medical procedures, 57 events related to medical devices, 7 events related to nursing care, and 15 events categorized as others.

Sixteen (17 events) of 17 medical institutions (18 events) participated in the on-site visits. A summary of the on-site visits is shown in Fig. III-1-3.

Fig. III-1-3 Summary of On-site Visits

GE019001	
Summary of event	The result of pathological tests attached to the patient's supplemental chart (containing non-electrical documents and data such as referral letters and test results), which was actually the test result of another patient, was given to the patient as his data.
Objective of on-site visit	• To investigate the underlying factor of the event and possible improvement measures • To check the method of documenting test results
Major findings of on-site visit	• Test results were separately attached to the inpatient chart and the supplemental chart. In the supplemental chart, the test results of another patient were attached above the results of the patient involved. The physician thought the test results attached above were of the patient involved and gave it to him. < Improvement > • Copies of pathological test results are no longer attached to supplemental charts. Test results of outpatients will be maintained in accordance with patient ID. • Attachment of test results to inpatient charts will be double-checked by two nurses.
GE019002	
Summary of event	The allergy information of the patient (allergic to antibiotics) was not passed on. (See No. 75, Fig. III-1, page 145 of the 2006 annual report)
Objective of on-site visit	• To investigate the alarm system of the clinic terminal including the allergy information display • To investigate how the information is organized in the clinic terminal, patient charts and vital charts
Major findings of on-site visit	• Patient information was separately documented in outpatient charts, inpatient charts, the clinic terminal and vital charts. Only vital charts were linked to the clinic terminal. An electronic chart system was about to be introduced. • Allergy alerts were displayed on the initial screen of the clinic terminal; however, they were not simultaneously displayed when changing the screen to enter drug information. < Improvement > • The system now shows flashing allergy alerts to draw the viewer's attention.

GE019003	
Summary of event	Left and right mix-up during an ophthalmologic surgery (See "Left and right mix-up" 1), Fig. III-3-1, page 201 of the 2006 annual report)
Objective of on-site visit	• To investigate the underlying factor • To investigate the procedure to prevent left and right mix-up during surgery
Major findings of on-site visit	• The PC used to enter data into the electronic chart was placed away from the ophthalmologic examination table, and the physician had to leave the examination table to enter data. • Left and right mix-up occurred easily because the physician conducted the examination with a hand-held slit-lamp microscope from the cranial direction. < Improvement > • Set up a rule to draw a mark above the eye to be operated on. • The surgery consent form and the surgical site will be checked by the surgeon, the anesthesiologist and the nurse immediately before surgery.
GE019004	
Summary of event	The injection solution in the prepared syringe was administered to another patient by mistake. (See No. 55, Fig. III-1, page 143 of the 2006 annual report)
Objective of on-site visit	• To review the accident • To educate the medical professional involved and investigate the training status
Major findings of on-site visit	• The injection guidebook was difficult to understand; it did not clearly specify what to do. • There was no uniform rule at the hospital. • Each clinical department was responsible for planning and implementing training programs for interns. There was no cross-organizational training system.
GE019005	
Summary of event	Ventilation difficulty at the time of anesthesia induction for the pediatric surgery due to crying of the pediatric patient
Objective of on-site visit	• To investigate the surgical procedure and the emergency procedure • To investigate the current status of pediatric surgery
Major findings of on-site visit	• The peripheral vascular access in the pediatric patient was performed by an anesthesiologist in the operation room. Vascular access should ideally be performed in the hospital ward before surgery; however, the shortage of anesthesiologists made it difficult. • There was no adequate local system to provide training for pediatric anesthesiologists. < Improvement > • An anesthesia explanatory leaflet will be given to individual patients in advance, and vascular access will be performed in the ward as much as possible.
GE019006	
Summary of event	Drug overdose due to misunderstanding of the note attached to the liquid medicine bottle (See No. 10, Fig. III-1, page 76 of the 9th report)
Objective of on-site visit	• To investigate the current management of liquid medicine • To investigate the current communication system and expected improvement measures
Major findings of on-site visit	• According to the operating procedure, the worksheet should have been checked for drug information. However, the note on the liquid medicine bottle was mainly referred to because it contained detailed information. • The prescription order information was not reflected in the worksheet in the system. < Improvement > • Notes will no longer be used as a communication tool. Worksheets will be used instead.

GE019007	
Summary of event	Xylocaine was administered instead of Isovist.
Objective of on-site visit	• To affirm the fact (e.g. prepared articles, the test order, the role of the personnel involved on the day) • To investigate the usage of colored syringes for different purposes • To confirm the implementation of the test procedure proposed in the improvement measures and how the experience of this incident was reflected in it
Major findings of on-site visit	• An injection syringe containing Xylocaine and another syringe containing Isovist were on the medication wagon. • The physician in charge did not intend to use Xylocaine. However, the assisting intern handed the syringe containing Xylocaine to the physician in charge, thinking Xylocaine was to be used. The physician in charge thought the syringe handed to him contained Isovist. • While an operating procedure related to the injection was available, its existence was not known by any of the staff members. < Improvement > • The operating procedure was revised and made known to all staff members. • Different color syringes are used for different drugs.
GE019008	
Summary of event	The blood transfusion product was given to the wrong patient (See "Blood transfusion" 1), Fig. IV-1, page 169 of the 9th report)
Objective of on-site visit	• To affirm the fact and investigate the underlying factor of the event • To investigate the double-checking method for blood products and the criteria for giving oral orders
Major findings of on-site visit	• The attending physician orally gave an order for blood transfusion for Patient B while standing by the bed of Patient A. The nurse wrongly thought the order was for Patient A since it was given at the bedside of Patient A. • The nurse cross-checked the blood transfusion order form and the product but did not check whether Patient A was to receive the blood transfusion. < Improvement > • The blood transfusion procedure and the oral ordering procedure were revised and made known to all staff members.
GE019009	
Summary of event	The drug in the injection syringe was mixed-up at the time of administration. (See No. 14, Fig. III-1, page 76 of the 9th report)
Objective of on-site visit	• To affirm the fact and investigate the underlying factor • To investigate expected system improvement measures
Major findings of on-site visit	• The injection was given later than scheduled. The injection syringe to be used for the patient could not be identified because the injection label was removed by the person involved who feared the patient might point out the injection time written in the syringe label was inconsistent with the actual time the injection was given. < Improvement > The person who cross-checked the worksheet and the drug (the label on the syringe) will put a name seal for confirmation. While the procedural steps have been increased, thorough assurance of other clinical work is expected.

GE019010	
Summary of event	Leakage from the peripheral intravenous injection site in a pediatric patient (See No. 15, Fig. III-1, page 76 of the 9th report)
Objective of on-site visit	• To investigate the current IV drip management in pediatric patients • To investigate the improvement measures
Major findings of on-site visit	• A double-lumen catheter was used for the central venous (CV) line. Reminaron (gabexate methylate) was injected into the peripheral venous line because one of the lumens was clogged. • The patient was monitored by the nurse every 3 hours; however, the information was not shared among the team members. < Improvement > • Although there is a risk of occlusion, use of triple-lumen catheter for the CV line will be considered. • A section for monitoring record confirmation was newly included in the follow-up sheet.
GE019011	
Summary of event	After a pump infusion had been completed, the flow volume setting on the pump was not changed for use of another drug.
Objective of on-site visit	• To affirm the fact • How the flow volume setting is confirmed • Whether a procedure for changing infusion fluid is available • What was included in the order form
Major findings of on-site visit	• Infusion fluid was administered at 125 mL/h with an infusion pump. Infusion of a different type of fluid at 20 mL/h was scheduled afterwards by using the same pump; however, the latter fluid was administered at 125 mL/h without changing the flow volume of the pump. • Flow volume check was neglected when the fluid bag was connected to the pump. • Dripping of infusion fluid was checked during the rounds but not the flow volume because the setting had been taken for granted. < Improvement > • Two types of infusion fluid that require different flow volumes will be administered by using two pumps. • The types of infusion pumps available at the institution will be organized.
GE019012	
Summary of event	An anticancer drug was administered to a patient for whom the treatment order was canceled. (See No. 23, page 63 of the 10th report)
Objective of on-site visit	• To affirm the fact (e.g. the process flow from the injection order to the implementation) • To investigate the order confirmation method at the time of injection • To confirm how the event was reflected in the improvement measures
Major findings of on-site visit	• The physician decided to cancel the scheduled anticancer drug because the WBC of the patient decreased. The physician did not sign the order form for the anticancer drug, deleted the order for the day on the computer, and told the nurse about the order. However, the cancellation of the anticancer drug was not documented in the medical chart. • The nurse took the patient to the treatment center because the order form for the anticancer drug injection in the medical chart did not say “cancellation.” Although the order form did not have the physician’s signature required for the injection, the anticancer drug was administered because there had been irregular cases such as another physician signing the form for the physician in charge. < Improvement > • Review the operating procedure. • Consider partial change of the ordering system.

GE019013	
Summary of event	A Stage IV decubitus ulcer occurred in the second joint of the left fifth finger of a 6-day-old infant due to pressure to the connection between the IV drip needle in the dorsal hand and the extension tube.
Objective of on-site visit	• To affirm the fact • To provide information for development of improvement measures
Major findings of on-site visit	< Improvement > • Injection sites used to be checked once daily but will be checked during every shift. • Monitoring will be carried out by more staff members after the experience. • Although the improvement measures are not sufficient for complete prevention of accidents such as this, the institution believes it is all it can do for the time being.
GE019014	
Summary of event	The physician prescribed Incremin syrup 15 mL x 7 days instead of 1.5 mL x 7 days. (See No. 9, page 62 of the 10th report)
Objective of on-site visit	• To affirm the fact • To investigate the audit system and the drug preparation procedure at the pharmacy • To investigate the alert function of the ordering system
Major findings of on-site visit	• The ordering alert system identifies the child's age (13 or above/below 13). No alert was given in this event. The audit by a pharmacist relied on his/her experience, and no official audit system was available. • Nurses and midwives only checked orders among themselves and not with the attending physician. • It was difficult to ensure thorough confirmation process of printing out an order label after entering a prescription order among the physicians at the institutions. < Improvement > • The procedure for medical adverse event prevention was revised, and the event was made known to all staff members as a precaution. • Using a warning setting by weight or age will be considered.
GE019015	
Summary of event	Patient mix-up in using intraocular lens in glaucoma surgery
Objective of on-site visit	• To investigate the underlying factor of the event • To investigate the management of medical materials brought into the operation room and used in patients
Major findings of on-site visit	• Intraocular lenses were managed in the ward. The lens was prepared in accordance with the intraocular lens order form containing information transcribed from the medical chart. < Improvement > • Intraocular lenses will be managed in the operation room and prepared after cross-checking with the medical chart.

GE019016	
Summary of event	The content of insulin provided in the vial label was misread (See No. 9, Fig. III-1, page 64 of the 11th report)
Objective of on-site visit	• To investigate the training program concerning insulin use and the method of continuous alerting • To investigate how the improvement measures are taken
Major findings of on-site visit	• The insulin vial label says, "Novorin R Injection 100"; however, the labeling style of insulin vials was thought to be the same as that of antibiotics that shows the total amount contained in the vial, such as "XX 1 g." • Insulin could be ordered in "units" or "mL" from the clinic terminal. < Improvement > • Ordering of insulin in "units" was made a hospital rule. • The GRM is making rounds to ensure the improvement measures are taken at the hospital.
GE019017	
Summary of event	Drug overdose due to mistaking of the content in one tablet shown in the label of the antitumor drug bottle as the total amount of the drug
Objective of on-site visit	• What information the prescription in the Cardex and the handwritten memo of the physician contained • How bottled tablets are dispensed at the pharmacy
Major findings of on-site visit	• The content of one tablet shown in the bottle label was wrongly thought to be the total amount of the drug. • The comment on dosage and administration was missed. • It was the first time the ward received bottled oral tablets.

2. Individual Theme Review by Expert Division

The 2007 annual report summarizes medical adverse events reported between January 1 and December 31, 2007 in the 9th to the 12th periodic reports. Medical adverse events reported before 2007 are also included as Notes.

[1] Medical Adverse Events Related to Drugs

Ninety-eight medical adverse events related to drugs reported between January 1 and December 31, 2007 were analyzed.

(1) Details of medical adverse events related to drugs

Summaries of the reported events are shown in Fig. III-2-1. In summarizing individual medical adverse events, the flow of drug therapy is categorized into ordering, receiving order/briefing, preparation, drug administration, observation and monitoring after drug therapy, and others (Fig. III-2-2).

A. Ordering

The 9th report included three events. Two of these events involved drug mix-up due to similar drug names.

One of the medical institutions is considering "color coding drugs by a target organ system such as the nervous system and circulatory system on the drug selection screen of the ordering system" as part of the improvement measures.

The 10th report included eight events. One of these events involved computer data entry error due to similar drug names, one event involved a drug dose mix-up of insulin 1 mL and 10 units, and one event involved miscommunication of changed order due to multiple ordering routes resulting in carrying out of the original order.

The 11th report included nine events. One of these events involved overdose due to misunderstanding of the prescription order, three events involved dosage and administration mix-up in chemotherapy, one event involved miscommunication of changed order due to multiple ordering routes resulting in carrying out of the original order, and two events involved prescription of a drug at ten times more than the supposed amount by mistake.

The 12th report included 10 events. Two of these events involved ordering of a wrong prescription dose of ten times more than the supposed amount for a pediatric patient by mistake, one event involved unit mix-up ("mg" and "mL"), two events involved use of a contraindicated drug in an allergic patient, and one event involved overdose due to misunderstanding of the description.

B. Receiving order/briefing

The 9th and the 10th reports did not include any event related to receiving order/briefing.

The 11th report included one event that involved a patient who did not take the drug he/she brought as instructed during his hospitalization.

The 12th report included one event that involved dose mix-up at the time of giving an oral order.

C. Preparation

The 9th report included six events. Four of these events involved ampoule or syringe mix-up at the time of preparing injection.

The 10th report included eight events. Two of these events involved drug mix-up due to similar appearance of medication bottles used at the hospital, and one event involved drug mix-up due to the similar appearance of drugs.

The 11th report included four events. One of these events involved insulin overdose due to content mix-up, and three events involved injection mix-up.

The 12th report included three events. One of these events involved drug mix-up due to similar appearance, one event involved drug mix-up at the time of preparation, and one event involved administration of insulin at a dose ten times higher due to misunderstanding of content in one unit.

D. Drug administration

The 9th report included five events. One of these events involved injection mix-up, one event involved management of oral liquid medicine, one event involved oral drug overdose, one event involved injection overdose, and one event involved injection concentration mix-up.

The 10th report included nine events. Two of these events involved mix-up of the drug in the syringe, and three events involved administration of the wrong oral liquid medicine due to patient mix-up.

The 11th report included five events. One of these events involved fluid infusion at a faster-than-ordered speed due to neglect of setting a fluid bag to the infusion pump, and three events involved injection syringe or cup mix-up.

The 12th report included 14 events. One of these events involved oral drug overdose due to misreading of the label on the oral liquid medicine bottle, four events involved administration route mix-up, five events involved administration of wrong drug due to patient mix-up, and one event involved an adverse drug reaction occurring after the drug remaining in the IV drip line was rapidly injected into the patient's body because of heparin lock.

E. Observation and monitoring after drug therapy

The 9th report included one event that involved extravascular leakage during the continuous IV drip of gabexate methylate.

The 10th report did not include any event related to observation and monitoring after drug therapy.

The 11th report included one event that involved extravascular leakage during the IV drip of an anticancer drug.

The 12th report included four events. One of these events involved extravascular leakage during the IV drip of an anticancer drug, and one event involved biopsy in a patient who was on Warfarin.

F. Others

The 9th report did not include any event categorized as others.

The 10th report included two events. One of these events involved lost narcotics, and the other was related to tooth extraction in a patient who was on Warfarin.

The 11th report included one event that involved administration of a contraindicated drug.

The 12th report included three events. One of these events involved postponed removal of screws after osteotomy of a patient because he was on an oral anticoagulant, and one event involved anticancer drug overdose occurring because the patient had extra anticancer drugs at hand.

(2) Medical near-miss incidents related to drugs

Medical near-miss incidents reported in the 23rd report (January to March), the 24th report (April to June), the 25th report (July to September), and the 26th report (October to December) (Note) were analyzed.

Events related to drugs brought by inpatients, which was one of the descriptive information items in the 23rd to the 25th Medical Near-Miss Incident Reports(Note), were also analyzed.

A. Events related to drugs

The events are summarized based on the flow of drug therapy such as "ordering," "receiving order/briefing," "preparation," "drug administration," "observation and monitoring after drug therapy," and "others" on the vertical axis and event details on the horizontal axis in the matrix (Fig. III).

B. Events related to management of drugs brought by inpatients

Since drugs prescribed by other medical institutions and brought by inpatients may be used together with drugs prescribed at the medical institution where the patient is treated, medical near-miss incidents related to drugs brought by inpatients were analyzed. The events are summarized based on the timing of using the drug brought by the patients such as "at the time of hospitalization," "at the time of subsequent prescription after hospitalization," "at the time of drug management," "at the time of discharge," and "others" on the vertical axis and event details on the horizontal axis in the matrix (Fig. III-2-4).

(Note) See pages 5 and 6 for the 1st to the 22nd medical near-miss incident reports.

Fig. III-2-1 Summary of Medical Adverse Events Related to Drugs: 9th to 12th Reports

No.	Process	Potential of residual disability	Summary	Periodic report
[Drug mix-up]				
1	Ordering	Low	Instead of Nu-Lotan (losartan potassium) 25 mg, Neuleptil (psychoneurotic drug) 25 mg was entered into the ordering screen by mistake and prescribed. The patient had disturbance of consciousness and required monitoring.	9th
2	Ordering	Unknown	Eight of 21 regular medications prescribed by the patient's former physician were used up. The attending physician (an intern) prescribed the eight medications. The intern prescribed Slow-K (potassium chloride) instead of Slo-bid (theophylline) from the ordering screen.	
3	Preparation	Low	A hormone loading test was conducted before and after surgery. The patient fell into a pre-shock state after intravenously receiving normal saline 20 mL and TRH (prolactin-releasing factor) 1 mL. At night a nurse found TRH had not been used for the test. The drug the patient had received was not TRH but Pitressin Injection (postpituitary hormone) that had been prescribed a few days earlier but not been used and unreturned to the pharmacy.	
4	Preparation	Low	An internist on duty at the emergency room gave an oral order for an intravenous injection of Primperan 1A (treatment for abnormal gastrointestinal function). A physician passed on the order to an emergency room nurse, received an ampoule, and intravenously administered the drug without checking the drug name. The internist on duty later found that the drug used was not Primperan but Lasix (diuretic) 20 mg.	
5	Preparation	Low	When preparing a central venous injection, 10% glucose was used instead of 50% glucose. The glucose concentration was increased after a periodic test showed hypoglycemia in the pediatric patient.	
6	Preparation	Low	When flushing an IVH (intravenous hyperalimentation) line with a heparin lock syringe, a nurse thought the product in the front of the drawer was a heparin lock syringe (anticoagulant) without checking the package, which was actually Xylocaine injection syringe (local anesthesia) 10 mL, took it out and injected it into the IVH line. Different kinds of pre-filled syringes (syringes which are filled in advance with liquid medicine to be injected) were stored in the same drawer.	

No.	Process	Potential of residual disability	Summary	Periodic report
7	Drug administration	Unknown	Intravenous injection of Lasix (diuretic) 1A was ordered for absence of urine flow. A nurse involved mistook Horizon (minor tranquilizer) 1A (10 mg) as Lasix and intravenously injected it. Four hours later Horizon was injected again instead of Lasix because urine flow was still absent. Two and a half hours later, the fact that Horizon had been injected twice instead of Lasix was discovered when Lasix was received from the pharmacy and stored in the medicine cart.	9th
8	Ordering	Low	The physician in charge wrote in the medial chart an order for subcutaneous injection of Hirtonin (treatment for prolonged disturbance of consciousness and spinocerebellar degeneration) 2A for the coming holiday in advance. An intern on duty on the holiday entered Hirnamin (psychoneurotic drug) 2A instead of Hirtonin 2A into the computer by referring to the medical chart under the supervision of a senior physician. A nurse who received the injection order requested the drug and injected it as ordered.	10th
9	Preparation	Low	A nurse prepared 80% trichloroacetic acid solution (reagent) instead of Burow's solution as ear drops (8% aluminum acetate solution) for ear instillation in a patient in his 20s by mistake because of the similar appearance of the medication bottles. A physician administered the ear drops to the patient.	
10	Preparation	Low	A nurse prepared 80% trichloroacetic acid solution instead of Burow's solution as ear drops for ear instillation in a patient in his 60s by mistake because of the similar appearance of the medication bottles. A physician administered the ear drops to the patient.	
11	Preparation	Unknown	Prograf (immunosuppressant) was intravenously administered to the patient instead of Zantac (H_2 receptor antagonist) by mistake. The cause of mix-up may be the similar appearance of the clear ampoule that had a white label with the drug name in five katakana characters in red ink.	
12	Drug administration	High	For nerve block in the operation of ingrown toenail, absolute ethanol was injected instead of Xylocaine 1% (local anesthesia) by mistake. The injection syringe containing absolute ethanol placed on the medication tray was mistaken as a syringe containing Xylocaine 1%. The drug name had been written on the syringe but was not checked.	
13	Drug administration	Low	During the endoscopic mucosal resection, sodium thiosulfate was connected to the puncture needle and 4 mL was submucosally injected by mistake instead of confirming the lesion by iodine stain and submucosally injecting normal saline near the tumor to raise it. Both normal saline and sodium thiosulfate (epipastic) were clear and colorless and contained in injection syringes of the same color. The drug names were written on the syringes but not sufficiently checked.	

No.	Process	Potential of residual disability	Summary	Periodic report
14	Drug administration	Low	0.05% Maskin water (antimicrobial) was used instead of Xylocaine 1% injection (local anesthesia) by mistake during skin biopsy.	10th
15	Preparation	None	A nurse thought she took out Adona and Transamin from the bag but they were actually Adona and Omnicain. The drugs were mixed into the IV drip solution and administered at 20 mL/h. Twenty minutes later another nurse found the Transamin that had to be used for the IV drip while looking for Omnicain for a liver biopsy in the outpatient examination room. The drug mix-up was identified when the empty ampoule of Omnicain was found in the ward.	11th
16	Preparation	None	Lasix injection was dispensed instead of the prescribed Bisolvon by mistake. A day shift nurse who prepared the drug noticed the mistake and thought to replace the Bisolvon with Lasix but did not. Unaware of the mix-up, a twilight shift nurse injected Bisolvon to the patient instead of Lasix injection.	
17	Preparation	No disability	A nurse prepared for vaccination based on the injection order form that said "DTP" which she took from the desk in the doctor's office. She checked the vaccine by reciting "DTP" aloud; however, she took "Bigen" (measles-rubella vaccine) from the same tray and handed it to the physician, saying "It's DTP." The physician thought it was DTP and injected it into the left upper arm of a pediatric patient without checking the outer box of the vaccine. The mix-up was identified when the physician removed the serial number sticker from the outer box of the vaccine to put into the medical chart.	
18	Drug administration	None	Oral medication prescribed for another patient was injected into the feeding tube of the patient in the evening. Injection syringes to be used for several patients were placed in the same tray.	
19	Drug administration	None	The attending physician of the patient gave an oral order for Lasix injection 80 mg to the doctor on duty over the phone after the night shift was over. Lasix injection 80 mg and Humulin R 30 units mixed in normal saline 20 mL for continuous IV drip for the patient were placed on separate trays. The doctor on duty took the tray containing Humulin R by mistake and intravenously injected it to the patient.	

No.	Process	Potential of residual disability	Summary	Periodic report
20	Drug administration	None	The attending physician intravenously injected Kakodin D 0.1% injection 50 mL in a 50-mL syringe prepared for the next injection on the patient's medication tray instead of Stronger Neo-Minophagen C in the evening. The physician did not check the sticker on the 50-mL syringe containing Kakodin D injection bearing the patient's name and the drug name and thought it was Stronger Neo-Minophagen C. The mix-up was identified by the attending physician for the first time when the physician injected Kakodin D injection 45 mL.	11th
21	Drug administration	High	An operation was scheduled to stitch up the open incisional wound in the eye from which anterior chamber fluid was leaking after cataract surgery. Normal saline, Isodine, and Hibitane gluconate are usually prepared in color-coded cups for cataract surgery. However, the nurse did not prepare normal saline because she had been told to only prepare for disinfection since there would only be one stitch. The doctor mistook the clear Hibitane gluconate solution as normal saline, drew the solution into the syringe and injected it into the cornea. The mix-up was identified when the doctor was alarmed to see the anterior chamber fluid had not cleared up and checked with the nurse.	
22	Preparation	None	Nurse A wrote "ephedrine 4 mg/mL" on a syringe and drew normal saline 9 mL into it while referring to the order form that said "dilute ephedrine 1A into normal saline 9 mL." She then took out the drug from the medicine cart to prepare the solution. Nurse A and Nurse B double-checked the order by placing the ampoule and the syringe side by side. The ephedrine solution was used during the surgery because the patient's blood pressure dropped; however, blood pressure rapidly increased. The drug mix-up was identified when Nurse B checked the empty ampoule and found it was Bosmin instead of ephedrine. The appearance of ephedrine ampoule was similar to that of Bosmin.	12th
23	Preparation	No disability	Phenytoin 10% powder was prepared instead of Phenobal powder. Phenytoin was contraindicated to the patient, and symptoms such as fever and rash appeared. The drug mix-up was identified when a nurse noticed the color of the powder was different from the usual medication and made an inquiry to the pharmacy two days later.	
[Wrong dose]				
24	Ordering	Low	Uromitexan (antidote) 1650 mg + normal saline 50 mL instead of Uromitexan 165 mg was started in a 12-year-old patient. The physician, who was not familiar with the ordering system, discovered the overdose 30 minutes later.	9th

No.	Process	Potential of residual disability	Summary	Periodic report
25	Preparation	Unknown	An outpatient operated on for diabetic retinopathy had a peritoneal dialysis catheter. After self-injecting 6 units of insulin at home as usual, the patient was taken to the hospital by ambulance with disturbance of consciousness due to hypoglycemia (47 mg/dL). It turned out the patient had received NovoRapid 30 Mix instead of NovoRapid 300 Mix.	
26	Drug administration	Low	The oral liquid medicine bottle containing Digosin Elixir (digitalis glycoside) 30 mL for Patient A transferred from another ward said "2.5 mL per dose" on the front and "17.5 mL" on the back. The leader nurse checked the method of administration with the ward pharmacist, who told her to draw out a necessary amount and orally administer the medicine without dilution in water. The leader nurse wrote "Have the patient swallow 2.5 mL at one time" on the post-it note and put it on the bottle. Nurse B who was on night shift interpreted the instruction "Have the patient swallow" as "Have the patient swallow (all) at once." Nurse B checked the label on the liquid medicine bottle that said "Digosin Elixir 2.5 mL" but not the amount contained in the bottle and orally administered all seven doses to the patient at once.	9th
27	Drug administration	Low	Intradermal 0.1 mL is the usual dose for tuberclinization; however, about a half of a 10-person dose (more than 0.5 mL) was injected in one person (precise amount unknown). The overdose was identified when the patient was presented with hotness in the entire forearm, induration of 2 cm x 3 cm and partial blistering at the time of evaluation.	
28	Drug administration	Low	The patient suddenly lost consciousness and fell over on Day 4 post-Caesarian section for hypertension in pregnancy, resulting in fracture of the right collarbone. The cause was identified to be an overdose (40 mg instead of the prescribed 20 mg) of Adalat (treatment for hypertension and angina). A decrease in blood pressure had been observed but not reported to the physician.	
29	Ordering	Low	Flumarin (oxacephem antibiotic) 250 mg per dose was ordered for a two-month-old patient, and a 0.5 g vial was dispensed at the pharmacy. The physician dissolved it in normal saline 2 mL and administered 1 mL, resulting in an overdose 10 times greater than scheduled (250 mg/kg instead of 25 mg/kg).	
30	Ordering	Low	The physician prescribed Incremin syrup (treatment for iron-deficiency anemia) 15 mL x 7 days at the time of the patient's discharge. The dose should have been entered as "1.5 mL" into the ordering system but the decimal point was missing. The mother of the patient realized the dose was different from what had been explained to her at the time of discharge and made an inquiry; however, she was told the prescription was correct, resulting in overdose. The warning function for proper dose prescription of the ordering system was not used.	10th

No.	Process	Potential of residual disability	Summary	Periodic report
31	Ordering	Low	Wakobital (hypnotic/sedative/antiepileptic drug) suppository 30 mg was used instead of the prescribed 15 mg. Although the prescribed amount was documented in the medical chart, there was no instruction in the comment section of the prescription form. The rules for prescription form preparation were not thoroughly observed after the introduction of the ordering system due to frequent changes of physicians.	
32	Ordering	High	Chemotherapy Regimen A consisted of "one-time administration of cisplatin (antitumor drug) 70 mg/day followed by a 3-week wash-out period" and Regimen B consisted of "cisplatin 70 mg divided into 5 doses and administered in 5 consecutive days." Regimen B was ordered by mistake. The person who saw the order thought it was Regimen A, and cisplatin 70 mg/day was administered for 3 days.	
33	Ordering	Unknown	The physician prescribed Therarubicin injection (antitumor drug) once daily x 2 days. Other physician mistook it as "twice daily x 2 days" and ordered an additional prescription. The original prescription order said "x 2," which meant 2 days. However, the latter physician mistook it as twice daily.	
34	Ordering	Low	The physician calculated the units of Novolin R injection to be "10 units" instead of "1 mL" at the time of ordering the prescription and wrote "0.1 V" in the ordering form. The physician handed an injection syringe to the nurse and told her to inject the drug to the patient. The nurse thought the drug had been diluted and injected it to the patient. The nurse checked the order again after the injection to find a 10-fold overdose and notified the physician.	10^{th}
35	Preparation	Low	Atropine sulfate powder (anticholinergic) 1.5 mg divided into three doses was prescribed at the internal medicine department. The outside pharmacy prepared atropine sulfate base powder (g/g) 1.5 g instead of atropine sulfate powder (mg/g), resulting in a 1000-fold overdose.	
36	Preparation	Unknown	Nurse A prepared the noon medication for a patient transferred from another hospital with the drugs the patient brought with him. Nurse B took over the noon medication. Nurse A found the noon medication was given at double the dose when she checked the remaining drugs the patient brought with them after coming back from lunch.	
37	Preparation	Low	The order form said "Solita T1 500 mL; Humacart R injection 300 units 3 mL 2 units." Nurse A received an order to switch "Humacart R injection" to "Humalin R" and administered the latter to the patient. Pre-dinner blood glucose measured by Nurse B was 24 mg/dL. Nurse A checked the insulin units she prepared for the morning IV drip and found she had used Humalin R injection 2 mL instead of 2 units.	

No.	Process	Potential of residual disability	Summary	Periodic report
38	Drug administration	Low	The nurse in charge visited the patient's room to inject Penfill 30 R 6 units before dinner. She checked the injection order form and set the injection syringe at 6 units as ordered. She went to the patient's bedside but was interrupted twice. When she checked the syringe once again in front of the patient, the indicator pointed the space between 5 units and 6 units. She set the indicator back to "0." She mistook the morning dose of 12 units written in the order form as the evening dose and injected 12 units. She found the mistake later when she signed the form.	10th
39	Ordering	None	The inpatient was seen by a physician from another clinical department. The physician from the other department wrote "please prescribe codein phosphate 60 mg x 3." He intended to prescribe codein phosphate 60 mg divided into three doses. The attending physician of the patient thought "x 3" written in the medical chart meant three times daily, however, and wrote "codein phosphate 180 mg divided into three doses" in the prescription form. The patient took codein phosphate 60 mg three times a day.	11th
40	Ordering	Low	The physician ordered Mystan 2 mg/kg/day instead of 0.2 mg/kg/day. The physician gave an oral order to the specialist when he entered the order into the computer system. The dose mix-up was overlooked at the pharmacy, and the wrong dose was given to the patient for six days.	
41	Ordering	No disability	When preparing a written prescription of ground Decadron tablets instead of entering the order into the computer system, the dose was written as 20 mg instead of 2 mg. The pharmacist prepared the drug as ordered. When the overdose was identified by the pharmacy, the pediatric patient had already taken the drug.	
42	Ordering	None	According to the protocol, a two-week wash-out period was required after postoperative chemotherapy (Adriacin and Briplatin). However, the chemotherapy drugs were given to the patient in the following week according to the order form. The overdose was identified after checking the protocol because of the advanced marrow suppression and mucosal damage compared to the usual post-chemotherapy condition.	
43	Preparation	Low	A nurse received an order for "Novolin R 100 injection 50 units + normal saline 50 mL, 1 mL/h" from the physician. The nurse wrongly thought Novolin R 50 units equaled 5 mL instead of 0.5 mL and injected 5 mL. Seeing the label that said "Novolin R 100 injection" on the vial, the nurse thought one vial contained 100 units and concluded 50 units equaled 5 mL. Continuous insulin therapy was rare in this ward, and insulin doses were usually ordered in "mL."	

No.	Process	Potential of residual disability	Summary	Periodic report
44	Ordering	None	Lasix 8 mg, Aldactone 8 mg, and Digosin 0.03 mg (all powder) were started in a pediatric patient. The heart rate started to occasionally drop to below 100. Ventricular pacing was started because the heart rate decreased to 47 and the peripheral temperature also decreased at 23:00. Two days later the attending physician found Digosin had been given 10 times the prescribed dose (0.3 mg).	
45	Ordering	None	Continuous IV Prograf 1 mg/day was scheduled according to the urologist's order. However, Prograf 1 mL (5 mg)/day was prescribed and given to the patient. The overdose was identified when the blood concentration of Prograf was elevated.	
46	Ordering	None	The physician prescribed isoniazid 3 g instead of 0.3 g to an outpatient due to an entry error. The patient was presented with light-headedness, diarrhea and vomiting at the emergency room in the afternoon on the next day. The isoniazid overdose was found when the prescription order form was checked. No inquiry was made at the outside pharmacy. The attending physician entered the number "3" first by mistake because isoniazid tablet was usually given in three tablets (300 mg) per dose.	
47	Ordering	None	"Norvasc 5 tablets" was entered on the prescription screen instead of "One Norvasc 5 mg tablet."	12th
48	Ordering	None	Oral rifabutin 300 mg/day had been given for tuberculous meningitis. Kaletra was subsequently prescribed for acquired immunodeficiency syndrome. Rifabutin needed to be decreased to avoid interaction with Kaletra when used together; however, the attending physician continued to prescribe 300 mg/day as usual. The patient became aware of vision loss in his right eye two and a half months later and consulted an ophthalmologist who diagnosed him with uveitis associated with rifabutin. Refabutin was discontinued, and corticosteroid eye drops were started. The rifabutin overdose was pointed out by another doctor when the attending physician reported the occurrence of uveitis at a conference.	
49	Ordering	Low	Oral Aleviatin, which the patient had been using pre-operation, was switched to IV drip post-operation. The prescription of oral Aleviatin 250 mg "divided into three doses" was mistaken as "x 3," and "Aleviatin injection 250 mg, 3A/day" was prescribed and given to the patient. A neurologist was consulted because the delirium was not improved. The wrong dose was identified when the test showed elevated blood phenytoin 14 days later.	

No.	Process	Potential of residual disability	Summary	Periodic report
50	Ordering	Low	Fragmin was started for DIC (disseminated intravascular coagulation) in a pediatric patient. The attending physician entered an order for fragmin 750 U/kg/day instead of 75 U/kg/day, resulting in a 10-fold overdose. Neither the pharmacist who prepared the fragmin nor the nurse who gave it to the patient realized the mistake, and fragmin was given for 5 consecutive days. The fragmin overdose was identified when the physician became suspicious because PT and APTT remained elevated despite the improvement of the systemic condition and other coagulation tests.	12th
51	Receiving order / briefing	No disability	The intern orally sought advice from the supervising doctor on PHS when the blood pressure of the patient dropped during anesthesia. The supervising doctor intended to use ephedrine 8 mg. He gave an oral order for IV ephedrine "2 mil," meaning diluted ephedrine 2 mL (ephedrine 1 mL (40 mg) is diluted by normal saline 9 mL as a general practice at the department). However, the intern gave the patient undiluted ephedrine 2 mL after hearing "2 mil."	
52	Preparation	None	Nurse A was about to mix Novolin R 1.4 mL (140 units) with the IV drip solution (Fulcaliq), thinking it was 14 units. Suspicious Nurse B found the mistake. Nurse A misunderstood that "insulin 1 unit equaled 0.1 mL (10 times more than the actual value)" when it actually equals 0.01 mL. Nurse A thought "10" on the scale of Myjector 0.1 mL equaled 1 unit.	
53	Drug administration	No disability	Oral Temodal and radiation therapy were started. "Temodal 100 mg 1C 1 x 5 days; Temodal 20 mg 1C 1 x 5 days before breakfast" was written in the CARDEX, meaning one Temodal 100 mg capsule and one Temodal 20 mg capsule (Temodal 120 mg in total) were scheduled to be given orally. The nurse took out a bottle of Temodal 100 mg capsules (containing 5 capsules) and a bottle of Temodal 20 mg capsules (containing 5 capsules) from the medicine bag. The bottle label said "Temodal 100 mg, 5 capsules." The nurse thought the total amount of Temodal contained in one bottle was 100 mg and 20 mg, respectively. The nurse gave five Temodal 100 mg capsules and five Temodal 20 mg capsules (10 capsules in total; Temodal 600 mg) to the patient. The overdose was found when the attending physician was told by the patient that he had taken 10 capsules.	

No.	Process	Potential of residual disability	Summary	Periodic report
54	Others	Low	GI therapy was scheduled for a patient born by caesarian. Physician A prepared the drug by referring to the protocol and started the medication with a syringe pump. Blood glucose was decreased to 56 mg/dL after about two hours and to 5 mg/dL after about five hours. Twenty-percent glucose 20 mL was intravenously injected. Later, the overdose 10 times greater than scheduled (intravenous Humalin R 1 mL (100 units) and 20% glucose 9 mL) was identified.	12th
[Wrong method]				
55	Drug administration	Unknown	Humalin R (antidiabetic) was continuously administered from the bypass tube of the main fluid infusion line. Concentration adjustment was thought necessary when changing the infusion line, and the level was set 10 times higher. Two hours later the mistake was found when the nurse on the next shift pointed out concentration adjustment was unnecessary.	9th
56	Ordering	None	Carboplatin and paclitaxel were given only once a week during chemotherapy. Carboplatin was to be used only on Day 1; however, it was given on Day 8 and Day 15 as well. The second-year intern had taken over the chemotherapy and gave an order for the first time. The mistake was identified when other physician saw the anticancer treatment table on Day 20. The accident was not prevented despite an inquiry being made by the pharmacy when the prescription order was given on Day 15.	11th
57	Ordering	High	Cisplatin was scheduled for only one day; however, it was given for three days. The order was not double-checked by the pharmacy because the chemotherapy had started on a weekend.	
58	Drug administration	Unknown	Horizon 10 mg 3/4 A (1.5 mL) was intravenously injected from the left inner elbow joint as a pretreatment for gastroscopy. Two days later the patient was presented with numbness, pain and movement disorder in the left first, second and third fingers and rash in the entire forearm that started on the day he received the injection. The cause was identified as the intra-arterial injection.	12th
59	Drug administration	No disability	The oral medication to be enterically administered was intravenously administered by mistake. The newly-grad nurse used a luer lock tip syringe instead of a catheter tip syringe used usually because of her lack of experience and knowledge.	
60	Drug administration	None	Hicaliq No. 1 was connected to the peripheral line instead of the IVH line.	

No.	Process	Potential of residual disability	Summary	Periodic report
61	Drug administration	Unknown	To carry out the physician's order for continuous subcutaneous injection of Phenobal, a syringe pump was used instead of the broken pump for continuous subcutaneous injection. Nurse A told Nurse B that a syringe pump would be used as a substitute. Nurse B cross-checked the order in the medical chart with the injection order form; however, she missed the description of subcutaneous injection in the latter. She did not check the drug name, units, or dosage when drawing the solution into the syringe. Nurse B took the syringe pump to the patient's room and connected it to the bypass line of the CV catheter. Thus Phenobal intended for subcutaneous injection was administered intravenously.	12th
[Wrong dosing speed]				
62	Drug administration	Death	After the bubble alarm went off, the nurse removed the bubbles and deactivated the alarm. Fifteen minutes later, the nurse heard the alarm of the infusion pump and went into the patient's room to find the pump to be empty.	10th
63	Drug administration	Low	Ultiva (analgesic for systemic anesthesia induction), which should have been slowly administered by continuous IV injection, was intravenously injected all at once.	
64	Drug administration	Low	"Solita T1 500 mL + KCL 10 mL" was administered to the patient at 30 mL/h with an infusion pump. When transferring the patient, the nurse in charge temporarily stopped the infusion pump and tightened the clasp of the infusion line a little. After transferring the patient, the nurse forgot to set up the infusion pump. Other nurse found it an hour later. A total of 140 mL was infused in an hour.	11th
[Patient misidentification]				
65	Preparation	Unknown	Fentanest (piperidine analgesic for anesthesia) 0.4 mg + normal saline 40 mL to be administered to Patient A with a syringe pump and Gaster (H_2 receptor antagonist) 1A + normal saline 20 mL for Patient B were prepared on separate trays and put on the same wagon. The medication for Patient B was delayed due to other procedures, and the sticker on the injection syringe containing the patient's name was removed. The syringe for Patient A was taken to the room of Patient B by mistake and the drug was given to Patient B.	9th
66	Drug administration	Unknown	Patient A was mistaken for Patient B and an oral drug for Patient B was given to Patient A.	10th
67	Drug administration	Unknown	The breakfast and medication for Patient A were checked and taken to Patient B although calling out Patient A's name. The medication for Patient A was given to Patient B.	
68	Drug administration	Unknown	The medication slips and drugs were taken to the patient room. The medication for Patient A was given to Patient B in the same room without the patient's name being checked immediately before medication.	

No.	Process	Potential of residual disability	Summary	Periodic report
69	Ordering	No disability	Patient B was seen by the physician after Patient A. The prescription of Valtrex 6T 3 x 2 days and Vesicum ointment was entered on the ordering screen. Later, the medical administration office pointed out that no medication had been prescribed to Patient B, and the physician entered the prescription once again. Patient A made an inquiry the next day, and it was found the prescription for Patient B had been entered on the screen for Patient A.	11th
70	Drug administration	No disability	Nurse A checked the chemotherapy drug with the attending physician and asked Nurse B to connect the anticancer drug to the infusion system before taking a break. Nurse B mistook the anticancer drug for another patient (5% glucose 250 mL + irinotecan (Campto) 106 mg) as that for the patient (normal saline 500 mL + paclitaxel (Taxol) 300 mg) and connected the former without checking "the injection order and record" and the name on the infusion bottle. The patient asked Nurse B why the drug name on the infusion bottle was different from the drug name in the protocol; however, Nurse B thought it was the difference between the product name and the generic name and did not check the drug. Nurse A returned from her break and checked the drug to find that the infusion bottle for another patient was connected.	12th
71	Drug administration	Unknown	The nurse drew the infusion solution (Neophyllin 1A + normal saline 100 mL) for Patient A into two 50-mL syringes and put a sticker containing the patient's name, room number, date of medication, and the drug name on each of them. Another nurse drew the infusion solution (Dormicum 5A + normal saline 90 mL) for Patient B into two 50-mL syringes and put a sticker containing the patient's name, drug name, and date of medication on each of them. The syringes for Patient A and Patient B were stored in the drug refrigerator. The nurse took out a 50-mL syringe for Patient B from the refrigerator by mistake and administered the drug to Patient A. The nurse did not check the patient's name on the sticker on the syringe.	
72	Drug administration	No disability	The nurse took out the noon medication for Patient A by checking the patient's name. When she entered the patient room, the feeding tube of Patient B caught her eye. She thought she should feed Patient B first. She injected the drug she was holding into the feeding tube of Patient B as the pre-feeding medication. The patient mix-up was identified when another nurse could not find the medication for Patient A.	
73	Drug administration	None	The person involved was asked by another staff member to give the bedtime medication to Patient A. The person involved went to the patient room and had the patient take the medication by saying "three tablets before you sleep." Later, it was found the medication for Patient B had been given to Patient A based on the report from the staff member.	

No.	Process	Potential of residual disability	Summary	Periodic report
74	Drug administration	None	Nurse A and Nurse B cross-checked the prescription forms with the medications on the tray for each patient. The medications for Patient C and Patient D were on the respective trays. Nurse B injected an oral medication to Patient C's infusion system, and Nurse A later found there was no medication on Patient D's tray. The empty package of the drug for Patient D was found in the garbage can. Nurse B injected the medication for Patient D into the infusion system of Patient C.	12th
[Others]				
75	Observation / monitoring after drug therapy	Low	Reminaron (gabexate mesilate) was given alone via peripheral venous line for DIC (disseminated intravascular coagulation). The drug was prepared at 0.2% concentration and administered at 2.5 mL/kg/h or lower according to the package insert. The total amount was 36 mg/kg or less. Despite periodic monitoring, the patient's left leg became swollen. The injection site under the protective gauze had whitish discoloration.	9th
76	Ordering	Unknown	Chemotherapy was suspended due to the decrease in WBC in the outpatient, and subcutaneous injection of Gran (G-CSF) was scheduled. The chemotherapy order form did not have a verifier's signature. The injection order for the day was deleted on the computer, and the order for subcutaneous injection was given to the nurse. The nurse subcutaneously injected Gran to the patient who asked "Will I also receive an infusion?" The nurse took the patient to the treatment center after checking the chemotherapy order form in the medical chart, which did not say "suspended." Although the order form did not have a verifying doctor's signature, chemotherapy was given to the patient at the treatment center because there had been cases in which some doctors who gave injections to patients signed the order forms in place of the ordering doctor. The deletion of the day's chemotherapy order was found by chance and thus the error was identified.	10th
77	Preparation	Low	Magnesium oxide (antacid/laxative) and Lac B fine granule (antiflatulent) were prepared and divided into packets. Hypen (nonsteroidal analgesic/anti-inflammatory drug) and Amoban (treatment for sleep disturbance) divided into packets immediately beforehand were mixed with the prepared powder medications.	
78	Preparation	Unknown	Eyedrops were prescribed for an inpatient with corneal ulcer. The drug was used without being dissolved.	
79	Others	Low	The patient had been taking MS Contin (sustained-release cancer pain treatment) 40 mg divided into two doses a day. Two night shift nurses opened the safe to prepare MS Contin and found one dose of MS Contin was missing. A night shift nurse in the team always signed when using MS Contin. The remaining tablets were never checked. When the one dose worth of MS Contin was lost is unknown.	

No.	Process	Potential of residual disability	Summary	Periodic report
80	Others	Unknown	The patient had been using Warfarin (warfarin potassium). The dentist saw the patient and determined tooth extraction was required. The dentist extracted a tooth from the patient after confirming the thromboplastin test of the patient was 33% half a year earlier. The wound was sutured to stop bleeding, which did not stop. The wound was sutured once again on the same day. Bleeding was eventually stopped but MAP (blood product) and albumin (plasma fraction product) were required based on the blood test conducted the next day.	10th
81	Ordering	No disability	The previous prescription was copied from the clinic terminal for an outpatient. The prescription displayed on the screen was one from a year earlier, thus a wrong prescription form was issued.	11th
82	Ordering	No disability	Postoperative patients usually have continuous anesthesia via epidural tube but this patient had IV fentanyl. The physician forgot to change the medication order, and epidural Anapeine dispensed preoperation had not been returned from the ward. During the twilight shift, Nurse A prepared Anapeine by referring to the order form and connected it to the IV line. She did not pay attention to the instruction "inject from epidural tube" in the order form. Nurse C found the medication error the next morning.	
83	Receiving order / briefing	No disability	The inpatient had a referral letter from another hospital. The physician read the referral letter and decided to continue the medication prescribed at the former hospital. The nurse was in charge of the medication. Later, the patient made an inquiry, and it turned out the patient had not taken some of the medication to be continued. The medication prescribed at the former hospital had only been checked with the patient; the information in the referral letter had not been reviewed.	
84	Observation / monitoring after drug therapy	Low	The physician started chemotherapy. "Five-percent glucose 250 mL + Taxol 90 mg" was added an hour later. About an hour after that, the nurse checked the injection site because the infusion speed was too slow. The injection site was swollen from leakage.	
85	Others	No disability	The patient referral letter and the outpatient pre-consultation form said the patient was allergic to penicillin. However, the information was not transcribed to the medical chart, and IV penicillin was started. Three days later the patient had rash, and the physician learned the patient was allergic to penicillin.	

No.	Process	Potential of residual disability	Summary	Periodic report
86	Ordering	Death	The patient had been undergoing chemotherapy with Topotecin. Pre-treatment WBC in Cycle 1 was 5900, that in Cycle 2 (a week later) was 4000, and that in Cycle 3 (two weeks later) was 2550. The patient's general condition was subsequently aggravated.	
87	Ordering	None	The attending physician ordered an abdominal CT. The examination order form indicated the patient had no allergy. Pre-CT IV Iopamiron was given, and the patient was taken to the abdominal CT room. After returning to the patient room, the patient had difficulty in breathing, wheeze, cold sweat, and SpO_2 of below 90. The patient's condition was reported to the attending physician. The medical history form in the medical chart said Iopamiron was contraindicated for the patient. The allergy to contrast dye was overlooked before the CT. Medical charts of allergic patients are to be marked on the back cover but the chart of the patient had not been marked. The attending physician also overlooked the patient's allergy.	
88	Ordering	Low	The patient had had mild dyspnea after taking Buffarin. The referral letter to the otologist from the patient's former physician described potential aspirin asthma. However, the anesthesiologist had not read the referral letter attached to the outpatient medical chart at the time of preoperative consultation and intravenously injected Ropion 50 mg, resulting in dyspnea.	12^{th}
89	Drug administration	No disability	Antimicrobial was injected with a syringe pump from the bypass tube of the IV line connected to Trifluid (maintenance fluid). Trifluid was to be stopped when injecting the antimicrobial. A T-shape stopcock had been connected to the IV infusion set. The antimicrobial was connected while adjusting the stopcock without closing the clasp of the infusion set. Thinking that the stopcock connected to Trifluid was closed, the person performed other procedures. However, the stopcock was open and Trifluid was administered during these procedures.	
90	Drug administration	None	IV Ultiva should be administered for over 30 seconds; however, a small amount of Ultiva was rapidly administered to the patient (due to pre-heparin lock flushing (amount unknown)) after the operation. Soldem 3A was started from the heparin locked line one hour after the patient returned to his room. The patient suddenly had rolling of the eyes, flexion contracture of both elbows and respiratory arrest. The vital signs later stabilized.	

No.	Process	Potential of residual disability	Summary	Periodic report
91	Drug administration	Low	Influenza vaccine injection had been given in the inner elbow of patients for 5 months. One month later a patient complained about swollen elbow after vaccination. He was followed up at the clinic but his symptoms did not improve. The patient was referred to an orthopedic clinic where he was diagnosed with bursitis. Other patients also sought consultation or filed complaints. The survey of all vaccinated people revealed 20 people had bursitis.	
92	Drug administration	None	The attending physician explained the possible adverse reactions of contrast dye before conducting a CT scan. Several minutes after injecting Omnipaque, the patient started to have wheezing. Blood pressure decreased, and the respiratory condition was aggravated. Despite administration of Bosmin and corticosteroid, the respiratory condition did not improve. Mechanical ventilation was started after intubation. The respiratory and general conditions rapidly improved thereafter. The ventilation tube was removed five hours later, and the patient's condition returned to the pre-CT level during that day.	
93	Observation / monitoring after drug therapy	None	After anesthesia induction, Cefmazon and Pridol were started before surgery. Several minutes later, the patient fell into shock with marked skin rash, immeasurable blood pressure and near-cardiac arrest.	
94	Observation / monitoring after drug therapy	High	The outpatient had been undergoing chemotherapy. An indwelling needle was placed in the right forearm, and IV Kytril was started followed by an anticancer drug (Adriacin) 25 minutes later. After IV Adriacin was completed, IV Oncovin was slowly started. Extravascular leakage of the anticancer drug was found during the IV therapy.	12th
95	Observation / monitoring after drug therapy	High	Based on the patient's medical history, cholangitis was suspected first. Sulperazon was selected as an antibiotic since the patient had used it without any allergic reaction. Veen F 500 mL + Sulperazon 1 g/normal saline 100 mL was started. The patient had nausea and sudden decrease of consciousness immediately after the treatment started. The consciousness level was 300 score based on the JCS (Japan Coma Scale), and the carotid artery pulse was faint. An airway was established followed by respiratory support with an ambulance bag.	
96	Observation / monitoring after drug therapy	None	After a needle biopsy in the pelvis for bone tumor, severe anemia occurred, which was treated with a blood transfusion. That the dose of Warfarin had been increased at the other institution immediately before the needle biopsy and the patient had had a bleeding tendency was not known. That the patient had been on Warfarin was known preoperation but the dose was not. PT-INR was abnormally high, and marked subcutaneous hemorrhage was seen at the injection site.	
97	Others	No disability	The patient was admitted for postoperative screw removal. The operation was postponed for five days when the post-admission medication check found that the patient had been on an anticoagulant Epadel. The use of an anticoagulant had not been expected since the patient had no past or present disorder that required one.	

No.	Process	Potential of residual disability	Summary	Periodic report
98	Others	No disability	The patient was given oral Endoxan 100 mg + Xeloda 2400 mg/day and IV Herceptin 120 mg. The next day oral Endoxan + Xeloda was switched to TS-1 120 mg/day. The patient complained about aggravation of stomatitis and diarrhea in the interview at the outpatient chemotherapy room eight days later and was referred to an outpatient clinic. It turned out Endoxan 100 mg + Xeloda 2400 mg/day and TS-1 120 mg/day had been simultaneously given for five days. Endoxan and Xeloda should have been completed; however, the patient still had these drugs.	12th

Fig. III-2-2 Occurrence of Medical Adverse Events Involving Drugs: 9th to 12th Reports

		Drug mix-up	Wrong dose	Wrong method			Wrong dosing speed	Patient misidentification	Others	Total
				Route of administration	Concentration	Duration				
Process	**Ordering**	3	18	0	0	2	0	1	6	30
	Receiving order/ briefing	0	1	0	0	0	0	0	1	2
	Preparation	12	6	0	0	0	0	1	2	21
	Drug administration	8	5	4	1	0	3	8	4	33
	Observation/monitoring after drug therapy	0	0	0	0	0	0	0	6	6
	Others	0	1	0	0	0	0	0	5	6
Total		23	31	4	1	2	3	10	24	98

Fig. III-2-3 Occurrence of Medical Near-Miss Incidents Related to Drugs: 23rd to 26th Report

		Drug mix-up	Wrong dose	Wrong method			Wrong dosing speed	Patient misidentification	Others	Total
				Route of administration	Concentration	Duration				
Process	Ordering	29	99	3	0	7	1	6	61	206
	Receiving order/ briefing	16	63	1	1	0	22	0	108	211
	Preparation	280	284	0	5	11	15	40	359(Note)	994
	Drug administration	82	175	24	2	4	371	70	755	1,483
	Observation/monitoring after drug therapy	0	3	0	0	0	51	0	71	125
	Others	1	9	0	0	0	0	0	200	210
Total		408	633	28	8	22	460	116	1,554	3,229

(Note) Including 32 cases involving closed ports that should have been opened to mix drugs when preparing infusion solution.

Fig. III-2-4 Occurrence of Near-Miss Incidents Related to Management of Drugs Brought by Patients at the time of hospitalization: 23rd to 25th Reports

		Drug mix-up	Dose error		Missed dose	Dosage error	Others	Total
			Overdose /underdose	Double dose				
Upon admission		7	10	13	9	3	13	55
When the drug brought by the patient was first prescribed after admission		4	8	23	4	1	3	43
Drug management	Managed by the patient	2	12	13	20	5	19	71
	Managed by the hospital	4	36	18	35	15	26	134
Upon discharge		0	0	0	0	0	12	12
Others		1	6	10	12	4	59	92
Total		18	72	77	80	28	132	407

[2] Medical Adverse Events Related to Medical Devices

The analysis of medical adverse events related to medical devices included events related to ventilators or infusion pumps (including syringe pumps) reported between January 1 and December 31, 2007.

(1) Medical adverse events related to ventilators

Medical adverse event related to ventilators were categorized according to situation/device part involved in the event: power supply, oxygen supply, breathing circuit, heated humidifier, setting/operation panel, ventilator, and others (Fig. III-2-5).

A. Power supply

The eighth report included one event in which the power was turned off for unknown reasons.

B. Oxygen supply

No event was reported.

C. Breathing circuit

The 9th report included two events involving disconnected breathing circuit. The 10th report included one event involving wrong circuit connection and one event involving a nearly pinched breathing circuit. The 11th report included one event involving a disconnected tracheal tube and two events involving wrong circuit connection. The 12th report included four events involving disconnected tracheal tube and one event involving wrong circuit connection.

D. Heated humidifier

No event was reported.

E. Settings/operation panel

The 9th report included one event involving a ventilator set at stand-by and not working (no ventilation).

F. Ventilator

The 10th report included one event involving defect of the ventilator.

G. Others

The 9th report included one event involving hypoventilation of a patient on a ventilator while changing clothes for some reason. The 11th report included one event related to BiPAP use.

(2) Medical adverse events related to infusion pumps

Medical adverse events related to infusion pumps were categorized according to situation/device part involved in the event: order, power supply, line, settings/operation panel, observation/management, and others (Fig. III-2-6). The reported incidents are summarized with order, power supply, line, setting/operation, observation/management, and others on the vertical axis and infusion pump and syringe pump on the horizontal axis (Fig. III-2-7).

The 12th report did not include any event related to infusion pumps.

A. Ordering

No event was reported.

B. Power supply

No event was reported in association with the power supply.

C. Line

No event was reported in association with the infusion pump line such as syringe or route.

D. Settings/operation panel

The 9th report included two events involving flow setting errors. The 10th report included one event involving an error in changing the pump speed when using multiple infusion pumps. The 11th report included two events involving flow setting errors.

E. Observation/management

The 9th and the 10th reports included one event each relating to monitoring and management of the injection site. The 11th report included events involving line occlusion and extravascular leakage. The improvement measures taken at one of the institutions include having the staff informed of the fact that it may take time to detect occlusion depending on the flow setting since the occlusion detecting sensor of the infusion pump is activated by occlusion pressure and that extravascular leakage does not set off the alarm.

F. Others

No report included events categorized as others.

(3) Details of medical near-miss incidents related to medical devices

A. Medical near-miss incidents related to ventilators

Medical near-miss incidents reported in the 23rd report (January to March, 2007), the 24th report (April to June, 2007), the 25th report (July to September, 2007), and the 26th report (October to December, 2007) were analyzed (Fig. III-2-8).

B. Medical near-miss incidents related to infusion pumps

Medical near-miss incidents reported in the 23rd report (January to March, 2007), the 24th report (April to June, 2007), and the 25th report (July to September, 2007) were summarized with ordering, power supply, line, settings/operation panel, observation/management, and others on the vertical axis and infusion pump and syringe pump on the horizontal axis (Fig. III-2-9).

Fig. III-2-5 Summary of Medical Adverse Events Related to Ventilator

No.	Category	Place	Potential of residual disability	Details	Periodic report
1	Power supply	Emergency center	Low	The portable ventilator (para pack) was connected to the patient when transferring him to the angiography room after admission to the emergency ward. The portable ventilator was not working when the patient reached the angiography room. The ventilator was started after switching to the piping in the angiography room.	11th
2	Power supply	ICU	Death	The accordion wall was closed to protect the privacy when the family was saying goodbye to the dead patient. The internal battery of the ventilator (Newport Ventilator Model e500 Wave) was low but nobody noticed the alarm sound.	
3	Breathing circuit	Patient room	High	The staff member who visited the patient room saw that the accordion hose of the ventilator circuit (BiPAP Synchrony) was disconnected. The patient was in cardiac-respiratory arrest but resuscitated successfully.	9th
4	Breathing circuit	Patient room	Low	After removing the water trap attached to the disposable circuit of the ventilator (Newport E200) to discard water, the trap was reattached. The ventilator alarm went off after 4 hours and 20 minutes. The patient was pale without chest movement. The respiratory condition of the patient improved after detaching the water trap and reattached again. The patient had been visited by the staff member twice during the 4 hours and 20 minutes but the alarm had not gone off.	
5	Breathing circuit	Patient room	Unknown	The patient underwent post-operative tracheotomy due to respiratory failure to manage his respiration with a ventilator (Servo Ventilator 300A). An endotracheal suctioning tube could not be fully inserted. The ventilator circuit had been connected during the day shift. The circuit was checked when the respiratory condition suddenly changed. The circuit was connected in a way no humidified air flowed to the patient. It turned out the humidifier had been connected to the expiratory port instead of the inspiratory port. There was no problem with ventilation.	10th

No.	Category	Place	Potential of residual disability	Details	Periodic report
6	Breathing circuit	Patient room	Low	A patient with acute hepatitis was managed with a ventilator (Bennett 7200e). Oxygen saturation (SpO_2) decreased, and blood pressure was below 90. The motorized bed was adjusted from a 30-degree head-raise to a flat position for suctioning and position change. The alarm went off for warning of hypoventilation. The ventilator circuit was checked, and the water trap was nearly pinching.	10th
7	Breathing circuit	Patient room	Low	The alarm of the ventilator (Servo Ventilator 300A) went off, and the nurse went to the patient room to find that the patient was struggling with a grimacing face. Ventilation was started with Jackson Rees (manual ventilation). After 20 seconds the patient lost consciousness. The tracheal tube was loose with its tip in the trachea.	
8	Breathing circuit	Emergency center	Low	The patient's neck got hyperextended when three nurses tried to move his body up in the bed. The physician noticed facial cyanosis. Saturated oxygen (SpO_2) was decreased, and the ventilator display showed abnormal tidal volume. Dislocation of the tracheal tube was suspected, and the tube was removed.	11th
9	Breathing circuit	ICU	Low	A day shift nurse assembled the ventilator with a warmer/humidifier (Servo Ventilation 300A) for pediatric use, and a physician from the intensive care unit (ICU) checked the operability of the ventilator. The tidal volume decreased after starting ventilation. The physician changed the tracheal tube and found an occlusion with organized phlegm at the tip of the tube. The humidifier was connected to the expiratory port instead of the inspiratory port at the assembly of the ventilator circuit, and the air had not been humidified for 7 hours.	
10	Breathing circuit	Patient room	None	The accordion hose attached to the air supply orifice of the ventilator (Newport HT50) was dislocated to set off the alarm when changing the patient's position. The dislocated hose was then connected to the expiratory vent by mistake.	

No.	Category	Place	Potential of residual disability	Details	Periodic report
11	Breathing circuit	Patient room	Unknown	The nurse changed the patient's position from a slightly right lateral position to a supine position after the excessive pressure alarm of the ventilator (Legendair) went off. The nurse left the patient after checking oxygen saturation (SpO_2). While the nurse attended another patient, another nurse heard the alarm of the ventilator/monitor and went to check on the patient to find the tracheal cannula and the circuit dislocated.	12th
12	Breathing circuit	Patient room	None	Four days after the circuit change, the inspection of the ventilator (BIRD8400STi) found that the circuit had been wrongly assembled. The flow sensor should have been connected to the expiratory port where the ventilator was connected to the breathing circuit but connected to the breathing circuit because they were connectable.	
13	Breathing circuit	Patient room	Low	The alarm of the humidifier went off when the nurse turned the patient to a lateral position by herself. The nurse turned off the alarm and checked the humidifier, finding no problem. Later, the alarm of the ventilator (CV5000) went off, and oxygen saturation (SpO_2) decreased. It turned out that the accordion hose of the humidifier was disconnected.	
14	Breathing circuit	Patient room	High	The patient was on a ventilator (Servo 900E). The nurse disconnected the water trap to remove the accumulated water. The alarm of the ventilator went off, and another nurse went to the patient room to find that the tidal volume meter indicated 0 mL. The ventilator (Servo 900E) was checked after it had been replaced with a new ventilator. It turned out the water trap had not been adequately connected.	
15	Breathing circuit	Patient room	Death	The patient was fighting for breath with elevated airway pressure. The ventilator (Servo 900E) setting was changed, a sedative was used, and the tracheal tube was immobilized to prevent dislocation. The monitor in the nurse station showed tachycardia, and the alarm went off. A nurse went to the patient room to find the accordion hose of the ventilator disconnected from the Vocalaid tube at the tracheotomy incision.	

No.	Category	Place	Potential of residual disability	Details	Periodic report
16	Settings/ operation panel	ICU	Low	The patient returned to the ICU ventilated with pure oxygen after reimplantation of ventricular assist device. A ventilator (EVITA 2 dura) was connected to the patient in the ICU. The ventilator was in the stand-by mode (the power was on and the setting was possible but the ventilator was not activated) for about eight minutes. Oxygen saturation was below 90% for about three to four minutes.	9th
17	Ventilator	Patient room	Low	The alarm of the ventilator (T-Bird VSO2) went off. A nurse went to the patient room to find the ventilator inactivated with the display showing "HW FAULT." Oxygen saturation (SpO_2) decreased, and the patient complained about dyspnea. The patient's condition had not changed after replacing the ventilator. The ventilator was an old model without a built-in pressure control device, and it was replaced with one that has the device.	10th
18	Others	Patient room	Death	The patient had been on an ECG monitor and an SpO_2 monitor since admission. The ventilator was turned on every evening from 19:00 until 9:00 next morning. At 20:30, Nurse A changed the patient's clothes and diaper because the formula had leaked from the tube connection. The SpO_2 monitor was placed on the foot, and the ventilator was removed for about 20 seconds to change the tops. After connecting the ventilator, Nurse A was about to change the underwear of the patient when another patient walked toward her. Nurse A left the patient to attend the other patient. Several minutes later when Nurse A was changing the diaper of another patient, she heard the alarm of the ventilator and the SpO_2 monitor. She immediately went to the patient to find him cyanotic.	9th
19	Others	Patient room	None	The patient had been on oxygen therapy with BiPAP (PiPAP Vision). The BiPAP mask was temporarily switched to a reservoir mask because the patient did not like the former mask. SpO_2 decreased, and the nurse in charge had the patient wear the BiPAP mask again. However, the patient's condition did not improve and thus the patient required intubation.	11th

No.	Category	Place	Potential of residual disability	Details	Periodic report
20	Others	ICU	High	Postoperative chest x-ray was performed in the ICU. The upper body of the patient on a ventilator (Ventilator 840) was lifted and lowered by two physicians, one nurse and one radiological technologist to insert a 1.5-cm-thick cassette/plate in the back. Oxygen saturation became unstable and arrhythmia occurred immediately after that. Endotracheal suction failed because the tube could not be inserted. A bronchoscopy found dislocation of tracheal cannula.	12th

Fig. III-2-6 Summary of Medical Adverse Events Related to Infusion Pumps

No.	Accident process		Potential of residual disability	Summary	Periodic report
[Infusion pump]					
1	Settings/ operation	Flow setting	Low	One infusion pump was used for the primary fluid infusion and the periodic medication. An antimicrobial 125 mL/h was started at 13:00, and Soldem 3A 500 mL + KCL 50 mL (2.5 ampoules) at 20 mL/h was scheduled at 16:00. The flow setting had not been changed, however, and the pump was turned on with the setting at 125 mL/h. The medication and patient were identified, but the pump setting was not checked when changing the IV drip line and the solution bottle at 16:30. A night shift nurse found the flow volume had not been changed to 20 mL/h.	9th
2	Settings/ operation	Flow setting	Unknown	Low-molecular-weight dextran and the primary infusion fluid had been administered at the same speed with an infusion pump. A flow change order for the primary fluid infusion was given. The line was not tracked when changing the setting, and the flow of low-molecular-weight dextran was changed instead of the primary fluid infusion.	10th
3	Observation/ management	Insertion site	Low	Blood access was obtained with an indwelling needle, and an anticancer drug was administered with an infusion pump. The insertion site was checked for leakage at 14:00. At 15:20 a staff member only asked the patient walking in the hallway how he was and did not check the insertion site. The elbow joint and the forearm of the patient were found swollen when the IV drip was completed at 18:35.	9th

No.	Accident process		Potential of residual disability	Summary	Periodic report
4	Observation/ management	Insertion site	Low	Blood access was obtained in the lower extremity, and medication was administered with an infusion pump. The lower extremity was immobilized and protected with a splint to prevent extravascular leakage. The insertion site was not checked but the infusion pump was working normally when changing the IV drip line while the patient was asleep. About five hours after the IV drip was started, the area from the left ankle to the dorsum of the foot was swollen and the skin color of the dorsum of the left foot was creamy white.	10th
[Syringe pump]					
5	Settings/ operation	Flow setting	None	Continuous injection of fentanyl (narcotic) 12A + normal saline 26 mL with a syringe pump (Terufusion Syringe Pump STC525) was newly started. One bolus 6 mL was followed by infusion at 6 mL/hour. Forty minutes later the low level alarm went off. It turned out that the flow had been set at 60 mL/h.	11th
6	Settings/ operation	Flow setting	None	The low level alarm of the syringe pump (Terufusion Syringe Pump TE331) used for Dormicum injection went off at night. A nurse changed the medication bag after checking the procedure with another nurse. Change of flow speed from 3 mL/h to 2 mL/h had been ordered. The power was turned off to reboot the pump, and the flow was set at 2 mL/h. Two hours later the completion alarm went off. Another nurse went to the patient room to find that the flow had been set at 20.0 mL/h. The medication was administered at a speed 10 times higher than ordered.	
7	Observation/ management	Insertion site	Low	IV Calcicol 2 mL + distilled water for injection 2 mL was started with a syringe pump (Atom Syringe Pump 1235N) from the bypass tube of the continuous IV drip line (right lower extremity) for a low calcium condition. The area from the right upper to lower thigh was swollen on Day 3, and the IV needle was removed. The indurations on the outside and the back of the right lower thigh and the right ankle suggested extravascular leakage.	
8	Observation/ management	Observation/ management (others)	Low	The T-shape stopcock on the IV line connected to the syringe pump containing Herbesser remained closed when moving the infusion line, and blood pressure was increased. The person did not know that it took time for the occlusion alarm to go off when the syringe pump was set at a very low speed.	

No.	Accident process		Potential of residual disability	Summary	Periodic report
[Unknown]					
9	Settings/ operation	Flow setting	Unknown	Patient-controlled epidural analgesia (PCEA) was used for post-Caesarian pain relief. The device was set at bolus injection (short-term injection) by changing the setting from 3 mL/h to 0 mL/h. About three hours later a ward nurse checked the setting to find the drug had been injected at 50 mL/h. The injection was stopped, and the epidural catheter was removed.	9th

Fig. III-2-7 Occurrence of Medical Adverse Events Related to Infusion Pumps: 9th and 12th Reports

		Infusion pump	Syringe pump	Unknown	Total
Ordering		0	0	0	0
Power supply	**Power charge**	0	0	0	0
	Neglected power supply	0	0	0	0
	Power supply (others)	0	0	0	0
Line	**Syringe**	0	0	0	0
	Route	0	0	0	0
Settings/ operation panel	**Fixation**	0	0	0	0
	Flow setting	2	2	1	5
	Settings/operation (others)	0	0	0	0
Observation/ management	**Insertion site**	2	1	0	3
	Observation/ management (others)	0	1	0	1
Others		0	0	0	0
Total		4	4	1	9

Fig. III-2-8 Medical Near-Miss Incidents Related to Ventilators: 23rd to 26th Reports

Category	N
Power supply	9
Oxygen supply	5
Breathing circuit	54
Heated humidifier	29
Settings/operation panel	26
Ventilator	12
Others	35
Total	170

Fig. III-2-9 Occurrence of Medical Near-Miss Incidents Related to Infusion Pumps: 23rd to 25th Reports

		Infusion	Syringe	Others	Unknown	Total
Ordering		7	18	0	3	28
Power supply	**Power charge**	3	1	0	0	4
	Neglected power supply	11	5	0	0	16
	Others	10	4	1	1	16
Line	**Syringe**	0	32	0	0	32
	Route	114	41	5	7	167
Settings/ operation panel	**Fixation**	7	38	0	0	45
	Flow setting	280	76	1	20	377
	Others	17	17	2	2	38
Observation/ management	**Insertion site**	10	2	0	1	13
	Others	66	62	4	1	133
Others		56	27	2	13	98
Total		581	323	15	48	967

[3] Medical Adverse Events Related to Medical Procedures

Medical adverse events related to insertion, placement or management of drainage tubes reported between January 1 and September 30, 2007 were categorized as "events involving continuous drainage of effusion, blood or air accumulated in the affected area with drainage tubes" for analysis.

(1) Medical adverse events related to insertion, placement or management of drainage tubes

Eighteen events related to insertion, placement or management of drainage tubes were reported between January 1 and September 30, 2007. The events were either categorized with an event summary code for "drainage tube" or with other codes but considered to have involved drainage procedures. The summary of events is shown in Fig. III-2-10. The operation process of insertion, placement or management of drainage tubes was categorized into "insertion/placement," "observation/management" and "removal" to facilitate summarizing medical adverse events in Fig. III-2-11.

A low-pressure continuous aspirator is defined as either i) an aspirator of which suction pressure is set either electronically or based on the amount of water or ii) an aspirator equipped with a decompression bag that ensures suctioning with mostly constant negative pressure.

A. Insertion/placement

The 9th report included five events. One event involved vascular damage associated with drainage tube insertion, and four events involved wrong site insertion (including right and left mix-up). Some institutions are considering use of ultrasonographic guidance for drainage tube insertion as part of the improvement measures.

The 10th report included two events related to drainage tube replacement. In one event the new tube was inserted into the lung under fluoroscopic guidance.

The 11th report included two events that involved organ damage or tube misplacement despite pre-procedural ultrasonographic confirmation of the insertion site.

B. Observation/management

The 9th report included two events. One event was related to a drainage tube while the other was related to a low-pressure continuous aspirator.

The 10th report included three events involving transfer of a patient with a drainage tube or a drainage tube confused with a central venous line.

The 11th report included two events involving drainage tube obstruction.

C. Removal

The 9th report included one event.

The 10th report included one event in which the drainage tube was severed before complete removal.

(2) Medical near-miss incidents related to insertion, placement or management of drainage tubes

Events occurring in 2007 and included in the 23rd (January to March, 2007) and the 24th (April to June, 2007) reports were analyzed.

As with medical adverse events, the process of insertion, placement or management of drainage tubes was categorized into "insertion/placement," "observation/management" and "removal" in Fig. III-2-12.

<Note>

Summary and details of medical adverse events related to insertion, placement or management of drainage tubes reported between October 2004 and December 31, 2006 are shown in Figs. III-2-13 and III-2-14. Medical near-miss incidents related to insertion, placement or management of drainage tubes (Fig. III-2-15) reported in the 21st (July to September, 2006) and the 22nd (October to December, 2006) medical near-miss incident reports are also summarized.

Fig. III-2-10 Summary of Medical Adverse Events Related to Insertion, Placement or Management of Drainage Tubes (9th to 11th Reports)

No.	Situation	Potential of residual disability	Summary	Periodic report
[Cerebral drainage]				
[Chest drainage]				
1	Insertion/ placement	Low	Right thoracic cavity drainage was performed for intractable pleural effusion. The confirmatory chest x-ray showed pneumothorax. A Trocar catheter was reinserted for continuous aspiration.	9th
2	Insertion/ placement	Low	The physician who diagnosed a patient with right pneumothorax based on auscultation found the collapsed left lung in the x-ray image shown on the monitor. Despite being suspicious about the inconsistency between the auscultation finding and the x-ray image, the physician inserted a Trocar catheter in the left thoracic cavity after checking the affected area on both the monitor and the film thinking immediate treatment would be required. After the procedure the physician was informed by a radiological technologist that the left and right of the x-ray film had been reversed.	
3	Insertion/ placement	Low	A drainage tube was inserted and placed in the right thoracic cavity for pleural effusion. The subsequent chest x-ray showed pneumothorax.	
4	Insertion/ placement	Low	A drainage tube was inserted into the left thoracic cavity under ultrasonographic guidance. Placement of the tip of the drainage tube in the left lower thoracic cavity was confirmed by x-ray immediately, which showed no abnormal finding. However, an x-ray performed the next day showed left pneumothorax.	
5	Observation/ management	Low	An 8-Fr Trocar aspiration catheter was inserted into the lung of a patient with interstitial pneumonia for low-pressure continuous aspiration. The extension tube and the antireflux aspiration valve (unidirectional valve) were found disconnected when changing the position of the patient. The alarm had not gone off to alert the disconnection.	
6	Observation/ management	Low	The CV catheter inserted into the right groin of a patient was connected to the Argyle catheter for thoracic cavity drainage and protruded from under the patient's pajama shirt instead of the IV drip line for fluid infusion. Argyle catheters are not usually used for thoracic cavity drainage; however, it was selected for the patient since the soft and thin tube would be less stressful.	
7	Removal	Low	Insertion of a central venous (CV) catheter caused pneumothorax, and a Trocar catheter was inserted into the left chest. Several days later the pneumothorax improved, and the Trocar catheter was removed to prevent potential risks caused by catheter placement. However, a Trocar catheter was required again because subcutaneous emphysema occurred with aggravation of left pneumothorax.	

No.	Situation	Potential of residual disability	Summary	Periodic report
8	Insertion/ placement	Unknown	A Trocar catheter was inserted for continuous aspiration after left upper lobectomy. The catheter was later replaced under fluoroscopic guidance due to poor lung expansion. A chest CT scan found the catheter placed in the left lower lobe. The catheter adhesion had been missed due to mild collapse of the lung.	10th
9	Insertion/ placement	Low	A drainage tube had been in place for a long time for empyema. Excessive granulation was found around the insertion site when the tube was replaced. One drainage tube was found missing during gauze change in the evening. A chest CT scan found the drainage tube in the thoracic cavity. The tube was removed under thoracoscopic guidance.	
10	Insertion/ placement	Low	A drainage tube was inserted into the pericardial mediastinum after valve replacement. Abdominal paracentesis under ultrasonographic guidance for abdominal distention found excessive bloody ascites in the abdominal cavity. An emergency operation found the mediastinal drainage tube penetrating the peritoneum.	11th
11	Insertion/ placement	Low	The highly viscous pleural effusion required strong negative pressure in thoracentesis. A test found empyema, and a Trocar catheter was inserted into the empyematic cavity by checking the position of the spleen under ultrasonographic guidance. The subsequent x-ray showed the catheter wrongly placed in the abdominal cavity.	
12	Observation/ management	None	A nurse saw 1300 mL of fluid was accumulated in the right thoracic cavity drainage bag. Thinking the bag would not be able to hold all the drainage fluid until the following morning, the nurse reported to the physician on duty who gave an order to remove the accumulated fluid from the bag with an aspirator. The drainage tube was clamped with a pair of forceps, and 600 mL of drainage fluid was suctioned. The patient complained about tightness in his chest. Inadequate clamping of the drainage tube might have caused reflux of air into the lung.	
13	Observation/ management	Unknown	When transferring a patient on a continuous aspirator attached to the thoracic cavity drainage tube for pneumothorax from the patient room to the treatment room, the nurse clamped the drainage tube to prevent reflux of the fluid in the drainage bag to the thoracic cavity. Aspiration was not resumed because the nurse forgot to remove the clamp after transferring the patient. The clamped drainage tube was found when the oxygen saturation of the patient decreased.	
[Abdominal drainage]				
14	Insertion/ placement	Death	Intraperitoneal hemorrhage occurred when PTCD (percutaneous transhepatic cholangio-drainage) was performed.	9th

No.	Situation	Potential of residual disability	Summary	Periodic report
15	Observation/ management	Low	An open-top was attached to the abdominal drainage tube because of excessive drainage fluid. The safety pin that prevents the tube from falling into a patient's body was removed to reattach the open-top, which was difficult. The drainage tube was found missing at night. An x-ray found the drainage tube fallen into the patient's body. The tube was surgically removed.	10th
16	Observation/ management	Low	High-calorie nutrient solution was connected to the catheter in the right abdomen for ascites drainage by mistake instead of the central venous line in the right groin. The high-calorie nutrient solution was injected into the abdominal cavity. Both catheters had the same type of Sure-plug (a connector for IV line).	
[Others]				
17	Observation/ management	Low	A drainage tube was inserted into the scapular skin flap after skin tumor removal. After returning to his room, the patient had bloody drainage fluid and subcutaneous hematoma possibly caused by the supine position taken when the patient awoke from anesthesia or the pressure/friction in the back when the patient was transferred to the patient room on a stretcher. Hemostatic treatment was performed under local anesthesia	10th
18	Removal	Low	A drainage tube was inserted into the wound during surgery for femoral neck fracture. The drainage tube was torn during the removal procedure and the remaining tube was removed under local anesthesia.	

Fig. III-2-11 Occurrence of Medical Adverse Events Related to Drainage Tube Insertion/Placement: 9th to 11th Reports

			Cranial	Chest	Abdomen	Others	Total
Insertion/placement			0	8	1	0	9
Observation/ management	**Abnormal insertion site**		0	0	0	0	0
	Drainage tube	**Wrong connection**	0	1	1	0	2
		Disconnection	0	1	0	0	1
		Obstruction	0	2	0	0	2
		Displacement/ accidental removal	0	0	1	0	1
		Others	0	0	0	1	1
	Low-pressure continuous aspirator	**Wrong pressure setting**	0	0	0	0	0
		Mishandling	0	0	0	0	0
		Defect	0	0	0	0	0
Removal			0	1	0	1	2
Others			0	0	0	0	0
Total			0	13	3	2	18

Fig. III-2-12 Occurrence of Medical Near-Miss Incidents Related to Drainage Tube Insertion/Placement: 23rd to 24th Reports

			Cranial	Chest	Abdomen	Others	Unknown	Total
Insertion/placement			0	0	0	0	0	0
Observation/management	**Abnormal insertion site**		0	0	0	0	0	0
	Drainage tube	**Wrong connection**	0	2	1	1	1	5
		Disconnection	6	21	7	8	5	47
		Obstruction	10	13	5	17	9	54
		Displacement/ accidental removal	4	24	11	15	4	58
		Others	9	11	2	1	0	23
	Low-pressure continuous aspirator	**Wrong pressure setting**	0	8	3	3	6	20
		Mishandling	0	10	0	0	4	14
		Defect	0	0	0	0	0	0
Removal			0	1	0	1	0	2
Others			6	14	10	1	4	35
Total			35	104	39	47	33	258

<Note>

Fig. III-2-13 Summary of Medical Adverse Events Related to Drainage Tube Insertion/Placement

October 2004 to December 31, 2006

No.	Situation	Potential of residual disability	Summary	Periodic report
[Cranial drainage]				
[Chest drainage]				
1	Insertion/ placement	Death	Alveolar damage occurred when an aspiration kit (a drainage catheter) was inserted after the diagnostic puncture for the postsurgical left pleural effusion.	
2	Insertion/ placement	Unknown	The liver of a patient with heart failure was damaged by the thoracic cavity drainage tube inserted without ultrasonographic guidance.	
3	Insertion/ placement	Death	Thoracic cavity drainage was performed to improve the respiratory condition of a patient with pleural effusion associated with aggravation of the general condition due to postoperative infection. The liver was damaged by the drainage tube inserted digitally for safety reasons.	
4	Insertion/ placement	Low	The left lung was damaged by the 8-Fr aspiration kit catheter (a drainage catheter) accidentally inserted into the pulmonary parenchyma for left thoracic cavity drainage for pleural effusion.	
5	Insertion/ placement	Low	Despite the ultrasonographic guidance, the thoracic cavity drainage tube for deaeration and purulent drainage for the left pneumothorax was inserted into the abdominal cavity instead of the thoracic cavity.	
6	Insertion/ placement	High	Based on the possible vascular damage occurring when a Trocar catheter was inserted into the thoracic cavity of a pneumothorax patient with an aggravated general condition, an additional drainage tube was inserted.	9th
7	Insertion/ placement	Low	The lung was damaged by a thoracic drainage tube inserted for pleural effusion.	
8	Insertion/ placement	Low	An extended thymectomy was performed for thymic tumor. Air leakage from the thoracic cavity drainage tube inserted during the operation was found when the patient returned to the patient room. Left lung bulla (emphysematous bulla) had been found during the operation. Later, subcutaneous emphysema developed in the precordial region. The chest x-ray did not find lung collapse. The patient was monitored without further treatment since oxygen saturation (SpO_2) was 100%. However, a further operation was eventually performed because the leakage from the drainage tube had not stopped.	
9	Insertion/ placement	Low	A double-lumen Trocar catheter was inserted 14 cm and placed for right pleural effusion drainage. The drainage was successful; however, the X-ray found catheter placed too low. The subsequent CT scan found the catheter penetrating the right diaphragm and the right hepatic lobe and reached the retroperitoneal space.	

No.	Situation	Potential of residual disability	Summary	Periodic report
10	Insertion/ placement	Low	The physician on duty performed thoracentesis for pleural cavity drainage in a patient with dyspnea and hypoxemia due to post-mitral valve replacement pleural effusion. The patient subsequently fell into shock.	
11	Insertion/ placement	Low	The thoracic cavity drainage tube was inserted into the abdominal cavity due to insertion site mix-up.	
12	Insertion/ placement	Low	The thoracic cavity drainage tube for treatment of carcinomatous pleurisy had been misplaced and reinserted. A chest CT scan found the tip of the drainage tube in the pulmonary parenchyma instead of the thoracic cavity.	
13	Insertion/ placement	Unknown	The tip of the thoracic cavity drainage tube was damaged during insertion under CT scan guidance.	
14	Insertion/ placement	High	A 16-G intravenous hyperalimentation (central venous) catheter was inserted after the removal of a thoracic cavity drainage tube in a post-operative patient who had undergone right upper lobectomy and mediastinal node dissection. Subcutaneous emphysema subsequently occurred, and an x-ray found lung damage.	
15	Insertion/ placement	Low	A Trocar catheter was inserted into the thoracic cavity for pneumothorax caused by a central venous catheter insertion. The catheter was removed five days later because the pneumothorax improved; however, the patient subsequently had pain and cyanosis. A Trocar catheter was inserted into the thoracic cavity again, and about one liter of blood was drained.	9th
16	Insertion/ placement	Low	The thoracic cavity drainage tube for empyema reached the pulmonary parenchyma.	
17	Insertion/ placement	Unknown	A resistance was felt when trying to remove the thoracic cavity drainage tube because of unimproved pneumothorax. The surgical removal of the tube found it had pierced one of the ribs.	
18	Observation/ management	Low	A pediatric patient was discharged from another hospital with an indwelling vascular catheter used as a thoracic cavity drainage tube. During the procedure to remove obstruction, the drainage tube (indwelling vascular catheter) was broken. The tip of the outer tube remained in the intercostals muscle.	
19	Observation/ management	Low	Continuous aspiration with a right thoracic cavity Trocar catheter was performed post-operation. The nurse replaced the continuous aspirator with a water seal device without putting distilled water in the water tank of the latter. Pneumothorax, which was thought to have occurred during the aspirator replacement, was found after the patient was transferred to another hospital.	
20	Observation/ management	Low	An 18-G central venous catheter was used for thoracic cavity drainage for right pleural effusion after liver surgery. The catheter was found mostly dislocated when the drainage fluid was discarded.	

No.	Situation	Potential of residual disability	Summary	Periodic report
21	Observation/ management	Low	The physician clamped the thoracic cavity drainage tube with forceps when transferring a patient to the angiography room. Subcutaneous emphysema was found in the hallway while transferring the patient.	9th
22	Observation/ management	Unknown	A patient with nonfunctioning left lung had a drainage tube in the right lung for pneumothorax. MERA Sucuum (a low-pressure continuous suction unit) was replaced with a new one when the continuous aspiration function of the drainage tube malfunctioned.	
23	Removal	Low	A pericardial/substernal drainage tube was to be removed from a patient after off-pump coronary artery bypass surgery. The physician documented a wrong tube insertion site in EvacuAce (disposable thoracic cavity drainage set), however, and the wrong drainage tube was removed.	
[Abdominal drainage]				
24	Insertion/ placement	Unknown	Left ascites drainage was performed in a patient who had peritonitis due to perforated gastric ulcer. An abscess-like lesion was found in the lower abdomen, and abscess drainage was performed under ultrasonographic guidance. Later, a digestive tract perforation associated with the puncture performed for drainage was found by gastrointestinal tract series.	9th
25	Insertion/ placement	High	Intra-abdominal abscess was punctured under ultrasonographic guidance to insert a guide wire for PTCD (percutaneous transhepatic cholangiodrainage) as a pre-drainage procedure. When the outer tube was inserted along the guide wire, the wire was bent and broken and fell into the abdominal cavity.	
26	Observation/ management	Low	After pelvic lymphanedectomy, a closed drainage device was placed on both sides. The physician pulled the left drainage tube and accidentally tore it. The torn tube was buried subcutaneously, which was later surgically removed under lumbar anesthesia.	
27	Observation/ management	Low	After gastrectomy, the drainage tube placed in the foramen of Winslow was buried in the abdominal cavity. The tube was surgically removed under anesthesia.	
28	Observation/ management	Unknown	A soft duple drainage tube was inserted in both sides at the time of gastrectomy and lower esophagectomy. Removal of the left drainage tube was attempted post-operation but failed because the tube was buried in the granulation tissues. An abdominal operation was required to remove the tube.	
29	Removal	Unknown	A resistance was felt when removing the drainage tube post-operation. A strong pull tore the catheter. The remaining drainage tube was removed under general anesthesia because the patient was a child.	

No.	Situation	Potential of residual disability	Summary	Periodic report
[Others]				
30	Observation/ management	High	An anesthesiologist found excessive drainage fluid from the spinal drainage tube placed to protect the spine on the day before the surgery to remove the thoracic aortic aneurysm. The post-operative brain CT scan found cerebellar infarction and hemorrhage possibly associated with the excessive cerebrospinal fluid drainage.	9th

<Note>

Fig. III-2-14 Occurrence of Medical Adverse Events Related to Drainage Tube Insertion/Placement

October 2004 to December 31, 2006

			Cranial	Chest	Abdominal	Others	Total
Insertion/placement			0	17	2	0	19
Observation/management	Abnormal insertion site		0	0	0	0	0
	Drainage tube	Wrong connection	0	0	0	0	0
		Disconnection	0	0	0	0	0
		Obstruction	0	2	0	0	2
		Displacement/ accidental removal	0	1	2	0	3
		Others	0	0	1	1	2
	Low-pressure continuous aspirator	Wrong pressure setting	0	0	0	0	0
		Mishandling	0	1	0	0	1
		Defect	0	1	0	0	1
Removal			0	1	1	0	2
Others			0	0	0	0	0
Total			0	23	6	1	30

Fig. III-2-15 Occurrence of Medical Near-Miss Incidents Related to Drainage Tube Insertion/Placement (21st to 22nd Reports)

			Cranial	Chest	Abdominal	Others	Unknown	Total
Insertion/placement			0	0	0	0	1	1
Observation/management	Abnormal insertion site		0	0	0	0	0	0
	Drainage tube	Wrong connection	0	3	0	1	3	7
		Disconnection	0	25	8	3	4	40
		Obstruction	13	8	18	11	5	55
		Displacement/ accidental removal	12	20	18	7	0	57
		Others	2	2	3	0	3	10
	Low-pressure continuous aspirator	Wrong pressure setting	0	8	4	7	0	19
		Mishandling	0	4	1	0	1	6
		Defect	0	2	0	0	0	2
Removal			0	0	1	0	0	1
Others			1	10	2	4	2	19
Total			28	82	55	33	19	217

[4] Medical Adverse Events Related to Pathology Tests

Medical adverse events related to pathology tests and reported between January 1 and March 31, 2007 were analyzed.

(1) Details of medical adverse events related to pathology tests

The flow of the laboratory test procedure was categorized into ordering, form-label issuing, preparation, sample collection/testing, sample analysis/preparation, and evaluation/result reporting to facilitate summarizing medical adverse events.

According to the summary of medical adverse events subject to the analysis in the 9th report, one event involved sample (vacuum tube) mix-up, and the other event involved residual numbness after blood sampling. The summary is shown in Fig. III-2-16.

Fig. III-2-16 Summary of Medical Adverse Events Related to Pathology Tests: 9th Report

No.	Test	Process	Potential of residual disability	Summary
1	Sample test	Preparation	Low	A cross matching test showed the patient's blood type was O, inconsistent with the previous test showing type B. On the previous day of blood sampling, a nurse cross-checked the vacuum tubes and the blood sampling orders, bundled tubes with rubber bands for individual patients, and put the bundles in cups for the respective patients. The cross matching test order form was wrapped around the bundle of tubes, which was put into another patient's cup after checking the patient's name on the form. The physician collected the blood sample without checking the patient's name. Later the additional cross matching test showed the patient's blood type was B.
2	Sample test	Sample collection/ testing	Low	The left median nerve was damaged by the needle inserted into the left brachial artery, resulting in numbness in the left first and second fingers.

[5] Medical Adverse Events Related to Nursing Care for Pediatric Patients

In this annual report, pediatric patients under the age of 15, or those usually treated by pediatricians, were included in the analysis. Pediatric patients were categorized by developmental stage, i.e. neonate (under 28 days), infant (28 days to under 1 year), toddler (1 year to under 6 years), schoolchild (6 years to under 12 years), and adolescent (12 years to under 15 years). The characteristics of pediatric patients include 1) being reared and cared for and in the growing/developmental process, 2) clinical progress may suddenly change, 3) directly getting information or cooperation from the patient tends to be difficult, 4) participation of parents and other family members in the treatment process is required in addition to that of the patient him/herself, and 5) severity assessment based on the early symptoms is difficult. The growth and developmental process and the participation of family members in the treatment process greatly affect the nursing care for pediatric patients.

Focusing on the nursing care for pediatric patients, medical adverse events involving patients under the age of 15 for which the code "nursing care" had been selected or those for which other codes had been selected but considered to be related to nursing care were analyzed. "Nursing care for pediatric patients" in this annual report refers to care provided to assist daily activities such as bathing, toileting and nutrition.

(1) Details of medical adverse events related to nursing care for pediatric patients

Twenty-three events related to nursing care for pediatric patients were reported between January 1 and December 31, 2007 (Fig. III-2-17). Details of medical adverse events were summarized according to the categories of meal (nutrition), hygiene, exercise, toileting, sleep/rest, and transfer as well as developmental stage (Fig. III-2-18).

(2) Details of medical near-miss incidents related to nursing care for pediatric patients

Medical near-miss incidents occurring in 2007 and included in the 23rd (January to March, 2007), the 24th (April to June, 2007), the 25th (July to September, 2007), and the 26th (October to December, 2007) reports were analyzed.

As with medical adverse events, details of medical near-miss incidents were summarized according to the categories of meal (nutrition), hygiene, exercise, toileting, sleep/rest, and transfer as well as developmental stage (Fig. III-2-19).

<Note>

Summary and details of medical adverse events related to nursing care for pediatric patients reported between October 2004 and December 31, 2006 are shown in Figs. III-2-20 and III-2-21.

Fig. III-2-17 Summary of Medical Adverse Events Related to Nursing Care for Pediatric Patients (10^{th} to 12^{th} Reports)

No.	Potential of residual disability	Summary	Periodic report
[Meal (nutrition)]			
1	No disability	A nurse replaced the obstructed feeding tube with a new 6-Fr JMS feeding tube. Formula was injected after checking for the bubbling sound, and the patient got cranky. The physician checked for the bubbling sound, and formula feeding was started again. SpO_2 subsequently decreased, and moist rale was heard in the right lung. The x-ray found the feeding tube in the left bronchial tube. The patient was one year old with developmental disorder and poor pharyngeal and cough reflexes. The risk of feeding tube misplacement was therefore high.	11^{th}
[Hygiene]			
2	Unknown	The mother of a nine-year-old patient removed the patient's shirt for bathing and found the tracheostomy tube was completely removed with the cannula tape still attached. Careful tracheostomy tube management had been ensured, and the mother had been instructed to watch out for detached cannula tape and pay attention to the tube when changing the patient's clothes. However, specific instructions, such as removing the patient's clothes while protecting the tracheostomy tube and having the patient wear an open-front shirt, had not been given.	10^{th}
3	None	Nurse A and the mother of a 12-year-old patient with disturbed consciousness washed the patient's genital area. Nurse A checked the water temperature by putting her ungloved finger into the water for one or two seconds. The skin of the buttocks of the patient turned brown and peeled after the washing procedure, and the patient was diagnosed with second-degree burn. Nurse B who was in charge of the patient had prepared the water hotter than usual by taking into consideration possible time lag before the procedure. Nurse A did not find the water hot when she checked the temperature. She wore gloves while washing the patient.	12^{th}
[Exercise]			
4	Low	An 11-month-old patient started to cry. The patient was moved from the cot (neonatal bed) to the Combi Rack (baby chair), and the chair belt was secured. The care provider heard the alarm of another patient's device and left the patient. She heard a thud right after that and returned to find the patient lying on the floor face down. The right forehead of the patient was red and swollen. The belt of the Combi Rack was unlatched. The head XP did not show fracture or any other abnormality.	10^{th}
5	Low	The parents of a one-year-old patient with symmelia were at the bedside during visiting hours. The bed rail was up. The nurse in charge told the parents to be sure to put the rail up every time they left the patient and left the room. Hearing a thud, the nurse went to the room to find that the patient had fallen off the bed and lying on the floor face up. The mother had been at the bedside but not paying attention to the patient, and the father had left the room without putting the bed rail up.	
6	Unknown	A nine-month-old patient fell off the bed when the nurse turned around to take the feeding bottle and the mother was looking away. The bed rail was all the way down but the nurse thought there would be no problem because the mother was there.	
7	Unknown	An 11-month-old patient fell off the bed while his mother's back was turned to him. Although the mother had been instructed to keep the bed rail up, she thought it would be fine to leave the rail down for only a few seconds.	
8	Unknown	A two-year-old patient turned and fell off the bed while her mother was looking away.	

No.	Potential of residual disability	Summary	Periodic report
[Toileting]			
[Sleep/rest]			
9	Unknown	The care provider left a five-year-old patient with cerebral palsy being cranky. She returned to the patient about 20 minutes later to find him unconscious with his face in the blanket covering the bed rail to protect the patient from bumping himself. The patient would throw his head back, arch his back and move in a certain direction when he got cranky. In this event the patient was thought to have got caught between the bed rails and immobilized with his forehead pressed into the protective blanket. After establishing the airway and suctioning the respiratory condition and the consciousness level were improved.	10th
[Transfer]			
10	Unknown	An eight-year-old patient with heart failure due to dilated cardiomyopathy associated with congenital myopathy was difficult to transfer since he was connected to eight syringe pumps hanging from the infusion bottle rack. The infusion bottle rack followed the patient's bed while he was transferred back to the ICU from the CT scan room. The top of the infusion bottle rack hit the upper wall and suddenly stopped when passing through the door. The bed was still moving, and the central venous line was pulled and removed from the patient.	
11	Low	A six-year-old patient with nemaline myopathy was using the ventilator only at night. Frequent suctioning was required due to excessive sputum. Sudden involuntary movements often occurred. The patient was off the ventilator and on the buggy car in the playroom during the daytime. An involuntary movement suddenly occurred when the nursery specialist removed the safety belt of the buggy car and tried to pick up the patient. The nursery specialist could not support the patient's weight (over 20 kg) or react to the sudden movement and fell forward. The front teeth of the patient hit the floor. The patient was seen on the day by an oral surgeon who found that one of the front primary teeth was loose. The loose tooth was extracted after explaining the accident to the family.	10th
12	Low	An eight-year-old patient with muscular dystrophy moved toward the table while in an electric wheelchair and crashed because of failed remote control operation. His fingers slipped on the remote control because his hand had been immobilized with a sponge and was unsteady.	11th
[Others]			
13	High	A nine-year-old patient with nodular sclerosis complained about pain in the knee joints when flexing and extending his knees. An x-ray and CT scan of the lower limbs found a fracture. The possible cause of the fracture was brittle bones due to long-term Cortril use and bed rest.	
14	High	The right upper limb of a seven-month-old patient had been restrained with a Velcro band around the elbow. The cuff of the pajama top had been tied with a rubber band to cover the fingers because the ileus tube would accidentally get hooked by the fingertips. No skin abnormality was found on Day 6. A nurse found inadequate circulation in the right fourth finger on Day 7.	10th

No.	Potential of residual disability	Summary	Periodic report
15	Low	When changing the water in the pot used in the treatment room, the lid fell off and the hot water was spilled on the small toes and thighs of a 0-month-old patient, causing burn.	
16	Low	A 0-month-old patient with suspected muscular dystrophy had been managed with a ventilator since birth. His position had been changed every two to three hours. A nurse found crust the size of 5 mm in the right side of the patient's head while measuring his weight. She cut the patient's hair to find a Stage IV decubitus the size of 3.3 cm x 0.5 cm.	
17	High	A nurse held a 10-month-old severely retarded patient to feed him and found swelling, hotness and skin discoloration in the left knee. The patient grimaced when the nurse touched the affected area. After the diagnosis of fracture of the distal femur, the affected area was immobilized with a splint. The patient had been bed-ridden for a long time without autokinetic movement and required assistance for all daily activities. The fracture was thought to be external damage occurred while the patient was being assisted. It seemed to have been several days since the fracture occurred; however, the patient had been in a good mood all along and no unusual condition had been seen.	10th
18	High	Swelling and hotness in the left thigh were found while changing diaper of a three-year-old severely retarded patient without voluntary movement. The x-ray found left femoral fracture. The fracture was thought to have been caused by certain stress put on the patient when changing diaper.	11th
19	Low	A patient underwent gastrostomy on the day he was born and had been receiving intensive care with sedative and muscle relaxant post-operation. Neck extension was prohibited to protect the surgical wound. The position of the patient could only be changed to the slight lateral position. Pressure on the back of his head could hardly be removed, and the skin condition could not be checked. A jelly pad had been placed under his head to remove pressure. Redness in the back of the head was found on Day 12 post-partum, however, and Stage III decubitus with necrotic tissue was diagnosed six days later.	
20	No disability	A buggy cart ride in the patient room was considered part of the physical therapy for an eight-year-old patient. The patient was temporarily taken to the bed, from which he fell off while the care provider was looking away to put a towel on the buggy cart. The rule to put up the bed rail while a patient is in the bed was not observed.	12th
21	No disability	During rehabilitation training, the care provider changed the position of a nine-year-old patient with developmental disorder without realizing his leg was hooked. Too much stress on the hip joint caused fracture.	
22	Low	The mother of a one-year-old patient put down the bed rail and sat on the bed. The patient fell off the bed when the mother turned around to turn on the TV.	
23	None	Something unusual was detected when the arms of a 10-year-old patient with Rett syndrome were raised to change his clothes and he started to cry. The x-ray found fracture. Callous had already formed, and when the fracture occurred was unknown. The patient had been carefully assisted in his daily activities since fracture could easily occur.	

Fig. III-2-18 Occurence of Medical Adverse Events Related to Nursing Care for Pediatric Patients: 10th to 12th Reports

	Neonate	Infant	Toddler	Schoolchild	Adolescent	Total
Meal (nutrition)	0	1	0	0	0	1
Hygiene	0	0	0	2	0	2
Exercise	0	3	1	1	0	5
Toileting	0	0	0	0	0	0
Sleep/rest	0	0	1	0	0	1
Transfer	0	0	1	3	0	4
Others	2	2	2	4	0	10
Total	2	6	5	10	0	23

Fig. III-2-19 Occurence of Medical Near-Miss Incidents Related to Nursing Care for Pediatric Patients: 23rd to 26th Reports

	Neonate	Infant	Toddler	Schoolchild	Adolescent	Unknown	Total
Meal (nutrition)	59	35	27	2	0	220	343
Hygiene	1	4	1	0	1	9	16
Exercise	3	32	102	8	0	240	385
Toileting	0	0	1	1	0	14	16
Sleep/rest	0	1	1	0	0	3	5
Transfer	0	1	5	3	0	33	42
Others	24	12	11	0	1	44	92
Total	87	85	148	14	2	563	899

<Note>

Fig. III-2-20 Occurence of Medical Adverse Events Related to Nursing Care for Pediatric Patients

October 2004 to December 31, 2006

	Neonate	Infant	Toddler	Schoolchild	Adolescent	Total
Meal (nutrition)	0	2	0	0	0	2
Hygiene	0	1	1	0	0	2
Exercise	0	0	0	1	1	2
Toileting	0	0	0	0	1	1
Sleep/rest	0	0	0	1	0	1
Transfer	0	0	0	0	1	1
Others	1	0	1	2	1	5
Total	1	3	2	4	4	14

<Note>

Fig. III-2-21 Medical Adverse Events Related to Nursing Care for Pediatric Patients

October 2004 to December 31, 2006

No.	Potential of residual disability	Summary
[Meal (nutrition)]		
1	High	A 0-month-old patient with Down's syndrome choked on formula after an operation for endocardial cushion defect. The patient required intubation and ventilation for decreased SpO_2, tachycardia, general pallor and hyposthenia.
2	Unknown	The care provider took the feeding bottle for Patient B to feed two-month-old Patient A. The two patients had the same family name. The name tags on the beds had both given names and family names; however, the specific labeling on the feeding bottles was unknown. The patient identities were checked with the nurse in charge, who fed Patient A with the breast milk of the mother of Patient B without checking the patient's identity. The mother of Patient B was Hbs antigen positive. Globulin was subsequently given to Patient A for prophylactic purpose.
[Hygiene]		
3	Low	A nine-month-old patient with cerebral hypoxia had extremely limited spontaneous breathing that required assisted ventilation from a cannula placed in the tracheotomy orifice. The ventilator and the ECG monitor were removed to give a bed bath to the patient who still had the PO_2 monitor attached. The patient immediately had decreased PO_2 and cyanosis. It turned out the cannula had been spontaneously removed. The accidental removal could not quickly be identified because the cannula had been covered with gauze.
4	Low	The care provider had a four-year-old post-valve replacement patient sit in the changing room to assist bathing. Seeing the patient could sit by himself, the care provider turned around to close the bathroom door. Hearing a thud, the care provider turned around to see the patient crying on the floor after having fallen forward and hitting his forehead on the floor. The patient had a swelling the size of 2.5 cm x 1.5 cm on the right forehead; however, the cranial CT scan found no abnormality.
[Exercise]		
5	Low	A 14-year-old patient with Ewing's sarcoma had been undergoing chemotherapy. He had lower limb weakness and mild gait disorder. The patient was out of his room and walking in the hallway because of the ward-wide linen change. The linen changer who was working in the hallway turned around and bumped into the patient who fell and sprained his ankle.
6	Low	A six-year-old patient with muscular dystrophy was jumping up and down on his bed. Later the patient reported, "I heard my leg snap." The x-ray showed tibial fracture that required a cast. The cause of the fracture was unknown.
[Toileting]		
7	Unknown	Swelling in the left thigh was found while changing diaper of a 12-year-old patient with cerebral palsy. The examination found a fracture. Certain stress may have been put on the thigh during diaper change.
[Sleep/rest]		
8	Low	An eight-year-old inpatient with pneumonia was fast asleep after taking Halcion. The buzzer in the nurse station went off, and the nurse went to the patient room to find him sitting by the bed, bleeding from his right eye. The cranial CT scan found subdural hematoma. Whether the hematoma was due to a fall was unknown.

No.	Potential of residual disability	Summary
[Transfer]		
9	Low	A 12-year-old patient with collagen disease called a nurse to get assistance for moving to the wheelchair to go to an in-house class. The mother had had the wheelchair ready by the bed. The nurse assisted the patient moving to the wheelchair without checking if the wheels were locked. The wheelchair moved backward, and the patient could not sit on the chair and fell with the nurse. The examination found a fractured fourth metatarsal that required a splint.
[Others]		
10	Unknown	A neonate had a birth weight of 3054 g. On the following day the weight was 3100 g, which suggested the wrong documentation of the birth weight. The wrong measurement may have been caused by the blanket removed from the mother's abdomen coming into contact with the scale plate.
11	Unknown	After a periodic dental check-up, a 7-year-old patient's third fingers on both hands and the right fourth finger got caught in the hinges between the seat bottom and seat back when the back of the seat was put up. The fingers were injured.
12	Low	A seven-year-old patient with cerebral palsy had had tracheotomy and been receiving oxygen 0.5 L from an artificial nose. Insertion of an IV drip needle for antibiotic therapy for fever was attempted but failed. The nurse inserted a peripheral IV indwelling catheter after warming the forearm with a hot face towel taken out of the bed bath wagon, put in a plastic bag and wrapped twice with a dry towel for one or two minutes. The skin turned red for a while but returned to its original color soon. The following day a blister was found on the forearm.
13	Low	A 14-year-old inpatient with a traffic injury was sending text messages to another patient in the hallway. The nurse tried to change the IV infusion bottles in the hallway, and the patient hit her in the head, saying, "Don't bother me." The patient further hit her in the head several times and grabbed her by the collar. The physician and another nurse tried to calm the patient, and the violence finally stopped when the patient's mother came.
14	High	A five-year-old patient with congenital cerebral palsy had been admitted with hypoxia and had a central venous catheter in the right groin. At first there was no abnormality; however, the care provider visited the patient room to check the IV line to find swelling in the right thigh. The x-ray found right femoral fracture, which may have been caused by diaper change or position change. The patient had been on steroids.

[6] Medical Adverse Events Related to Rehabilitation

Of medical adverse events reported between January 1 and December 31, 2007, five events categorized with the "place of occurrence" code for "functional training room" or with other codes but considered to have been related to rehabilitation and involving a rehabilitation specialist such as a physical therapist (PT), occupational therapist (OT) and speech therapist (ST) were analyzed.

(1) Details of medical adverse events related to rehabilitation

All five events related to rehabilitation and reported between January 1 and December 31, 2007 involved fracture or muscle rupture during exercise (Fig. III-2-22). In all events patients fell despite certain safety measures being taken.

(2) Details of medical near-miss incidents related to rehabilitation

Medical near-miss incidents occurring in 2007 and included in the 25th (July to September 2007) and the 26th (October to December 2007) reports were analyzed.

As with medical adverse events, the details of events are categorized into "Aspiration/accidental ingestion/suffocation," "Burn," "Patient mix-up," "Exercise-related fracture or muscle rupture," "Prosthesis/ orthosis," "Aggravation of general condition" and "Others" and summarized with types of rehabilitation involved in Fig. III-2-23.

<Note>

Summaries of 19 medical adverse events related to rehabilitation involving PT, OT or ST and reported between October 2004 and December 31, 2006 are shown in Fig. III-2-24. Details of events are categorized into "Aspiration/accidental ingestion/suffocation," "Burn," "Patient mix-up," "Exercise-related fracture or muscle rupture," "Prosthesis/orthosis," "Aggravation of general condition" and "Others" and summarized with types of rehabilitation involved in Fig. III-2-25.

Fig. III-2-22 Summary of Medical Adverse Events Related to Rehabilitation: 12th Report

No.	Potential of residual disability	Situation
[Exercise-related fracture or muscle rupture]		
1	High	The OT told the patient to sit on the platform and wait while he went to the rehabilitation room to get a cane, but the patient moved away from the platform. He turned around to go back to his walker by holding on to the parallel bars, tripped on the wheel of the walker and fell. Other OTs were around and saw the patient fall but could not prevent the accident.
2	Low	A patient could freely walk with a walker or crutches after hip replacement. On the day of the accident the patient walked to the rehabilitation room with his walker and was instructed to sit on the platform and wait. However, he did something different than usual and fell. The patient overestimated his own ability while the care provider expected the patient to behave as usual.
3	None	A patient walked to the rehabilitation room alone and was receiving balance training and side-walk training. The patient attempted to walk backwards using the handrail while the PT watched him from behind on the other side of the handrail. The patient could not lift his right heel from the floor and fell backward with both hands on the floor. The PT tried to grab the patient by the back of his shirt but could not prevent the fall, resulting in the patient falling on his bottom.
4	None	A patient with non-weight-bearing left lower limb lost his balance and fell during gait training with crutches. The PT stood right behind the patient to watch but could not react fast enough to prevent the fall. The patient was not wearing a waist belt.
5	Low	A patient with left hemiplegia lost his balance and fell forward during gait training. The PT was assisting the patient from behind on the left because the patient often fell backward when swinging his left arm forward but could not support the patient to prevent the fall.

Fig. III-2-23 Occurence of Medical Near-Miss Incidents Related to Rehabilitation: 25th to 26th Reports

	Aspiration/ accidental ingestion/ suffocation	Burn	Patient mix-up	Exercise-related fracture or muscle rupture	Prosthesis/ orthosis	Aggravation of general condition	Others	Total
Exercise	0	0	0	214	0	27	36	277
Physical therapy	0	3	0	0	0	0	3	6
Occupational therapy	0	1	0	11	0	5	14	31
Speech therapy	0	0	0	0	0	2	2	4
Unknown	1	0	2	6	0	5	7	21
Others	0	0	0	10	1	2	8	21
Total	1	4	2	241	1	41	70	360

<Note>

Fig. III-2-24 Summary of Medical Adverse Events Related to Rehabilitation

October 2004 to December 31, 2006

No.	Potential of residual disability	Summary
[Burn]		
1	Unknown	The PT took his eyes off a diabetic patient who was receiving microwave therapy with a new device for about 10 minutes. Asked how he was after about 10 minutes, the patient said "It feels hot." The microwave therapy was discontinued. The treated area had turned red. The patient later complained about a tingling sensation in the shoulder in the examination and was subsequently diagnosed with first-degree burn.
2	Low	Both knees of a patient with quadriparesis and hypertonia in the legs were treated with a hot pack. The PT left the patient to attend other patients for 15 to 20 minutes and returned to find the patient had suffered burns.
3	No description	A patient received hot pack treatment on both knees in the outpatient electric/thermal therapy room and went home. Later the patient felt discomfort in the knees and rolled up his pants to find that the areas where the hot packs had been applied had turned red.
4	Low	After surgery for femoral neck fracture, a patient with paresthesia had been receiving gait training with a walker for an aged person while warming the affected area with a hot pack. On the day of the accident the patient received rehabilitation training while warming the affected area with a hot pack as usual. Later the ward nurse found redness in the patient's thigh where the hot pack had been applied.
[Exercise-related fracture or muscle rupture]		
5	Unknown	After having been hospitalized and treated for fracture, a patient was receiving outpatient rehabilitation training. The patient suffered a fracture during supination training of the forearm.
6	Low	During the shoulder range of motion (ROM) training of a patient with about a 160-degree ROM of shoulder flexion, the PT raised the patient's left arm by holding the head of the humerus with his right hand and the proximal forearm with his left hand to prevent dislocation. A snapping sound was heard when the increased resistance was felt in the raised arm at about 90 degrees, and after that there was no resistance to the movement. The examination found a fracture. The patient had disturbance of consciousness, impaired motor function and sensation due to cerebral hypoxia.
7	Unknown	A patient with impaired upper and lower extremities slid forward in a wheelchair, and his upper body tilted backward. Thinking the patient would exhaust himself if he wheeled by himself in that position, the care provider attempted to assist him by supporting him at the waist. Too much pressure was put on the upper limb because the patient strained simultaneously, and the patient's right upper arm was fractured.
8	Low	A patient with increased muscle tone was receiving ROM training. When the knee was flexed hard, there was a sensation as if the joint was dislocated. Later the x-ray found supracondylar femur fracture. The patient had been bed-ridden, and his bones were fragile. The attempt to flex the knee overstressed the bones and muscles of the patient.
9	Low	A patient was walking between the parallel bars with his knees extended. After confirming the no-weight-bearing condition in the standing position, the patient was supported by the forearm while walking with a walker. After taking five or six steps, the patient started to bleed from the surgical wound. The x-ray found the avulsed bone fragment that required additional surgery. The bone strength was lower than expected because of osteoporosis associated with rheumatoid arthritis.

No.	Potential of residual disability	Summary
10	Low	A patient was thought to be able to walk without a PT's supervision according to the training-based assessment. However, the knee part of the prosthetic leg bent during gait training with a single crutch, and the patient fell and his right chest hit the crutch. The patient returned to the ward aided by a PT who did not report the fall to ward nurses. Two days later the patient was diagnosed with rib fracture.
11	Low	A patient with mild paralysis in the left arm was walking in the parking lot during outside gait training. The patient was talking and not paying attention to the tire chock on which he tripped and fell forward. He scratched both his hands and knees.
12	Unknwon	Total weight bearing activities were allowed for a post-hip replacement patient. The operated knee bent when the patient stopped after walking on two crutches for three meters. Fall was prevented by the PT who assisted the patient from behind; however, the patient was forced into a crouching position and later complained about knee pain. The x-ray found supracondylar femur fracture.
13	Low	A patient with sequelae of encephalitis had been receiving rehabilitation training for decreased ability to crawl due to increased weight. He was doing standing-up exercises on the platform in the training room for talipes equines correction. After the training session, the PT put the platform back to the horizontal position and removed the belt from the patient who subsequently turned and fell off the 45-cm-high platform while the PT left the platform for 20 to 30 seconds to put back the towel used for the training to a place two meters away.
14	Unknown	A patient complained about leg pain during the physical therapy session. The x-ray found tibial fracture.
15	Low	The PT told a patient to move to the higher bed because the low bed usually used for his training was occupied. The patient missed the bed when he tried to sit on it and fell on his paralyzed side.
16	Low	The patient entered the training room and practiced with a walker for an aged person. The PT watched the patient from a distance, thinking the patient would do fine by himself as he had the day before. However, the patient sat on the edge of the treatment bed and fell while the PT was looking away.
17	Low	The patient sprained his finger while playing "bounce-catch" with a medicine ball during rehabilitation training. The x-ray found fracture of the finger.
18	Unknown	A post-hip replacement patient turned from the supine position to the prone position by himself during the physical therapy session. He reported the hip joint had snapped. The x-ray found dislocated hip joint. Hip joint dislocation would not usually occur when turning from the supine position to the prone position. However, long-term non-weight bearing had caused arthrochalasis in the patient.
[Others]		
19	Low	An OT heard that a post-hip replacement patient had hit his back near the forearm when he fell in the bathroom at home several days earlier and that the injured back was now swollen. Elbow ROM training was started as part of the resumed occupational therapy program for the patient. The OT heard a dull sound from the proximal upper arm when he flexed the patient's elbow by holding the back of the distal upper arm and the back of the front proximal forearm. The examination found ulna fracture. The information on the fall was not considered well.

<Note>

Fig. III-2-25 Medical Adverse Events Related to Rehabilitation

October 2004 to December 31, 2006

	Aspiration/ accidental ingestion/ suffocation	Burn	Patient mix-up	Exercise-related fracture or muscle rupture	Prosthesis/ orthosis	Aggravation of general condition	Others	Total
Exercise	0	0	0	13	0	0	0	13
Physical therapy	0	4	0	0	0	0	0	4
Occupational therapy	0	0	0	0	0	0	1	1
Speech therapy	0	0	0	0	0	0	0	0
Others	0	0	0	1	0	0	0	1
Total	0	4	0	14	0	0	1	19

[7] Database of Medical Near-Miss Incidents

The Committee for Preparing the Database of Medical Near-Miss Incidents has been reviewing events to be widely shared to enhance medical safety, primarily those considered as warnings and reported by medical institutions. The database of medical near-miss incidents, including incidents selected from those reported in the 23rd, 24th, 25th, and 26th reports in 2007, is now available together with information categorized according to the general codes (Note) (Fig. III-2-26).

Fig. III-2-26 Database of Medical Near-Miss Incidents

		Date	Incident No. and number of incidents included
23rd	10th report	January to March	23 incidents selected from Incident No. 23-1 to No. 23-1956
24th	11th report	April to June	18 incidents selected from Incident No. 24-1 to No. 24-1855
25th	12th report	July to September	23 incidents selected from Incident No. 25-1 to No. 25-2567
26th	13th report	October to December	23 incidents selected from Incident No. 26-1 to No. 26-2428

(Note) See Medical Near-Miss (Important Cases) Information Database Development/Publication Website (http://www2. hiyari-hatto.jp/hiyarihatto/index.jsp)

3. Medical Adverse Event Information to Be Shared

[1] "Medical Adverse Event Information to Be Shared"

In the process of individual review by Expert Analysis Groups of medical adverse events reported by participating medical institutions in 2007, a decision was made to publish event summaries that should be widely shared. The event summaries are shown in Fig. III-3-1.

Fig. III-3-1 Medical Adverse Event Information to Be Shared

Summary	Details	Periodic report
Drug	1. Drug mix-up due to similar appearance 1) Horizon Injection 10 mg was used instead of Lasix Injection. Both drugs are contained in brown injection ampoules, and the care provider assumed the drug she used was Lasix. (See No. 7 in Fig. III-2-1, page 151 for details.) (KY019001) 2) Prograf was used instead of Zantac by mistake possibly due to its similar appearance of the clear ampoule that had a white label with the drug name in five katakana characters in red ink. (See No. 11 in Fig. III-2-1, page 151 for details.) (KY019002) 3) A nurse thought she took out Adona and Transamin from a bag but they were actually Adona and Omnicain. The drugs were mixed into the IV drip solution. (See No. 15 in Fig. III-2-1, page 152 for details.) (KY019003) 4) Bosmin was prepared instead of ephedrine for surgery. The appearance of the ampoules was similar. (See No. 22 in Fig. III-2-1, page 153 for details.) (KY019004)	9th, 10th, 11th, 12th
	2. Drug mix-up due to similar drug names 1) Instead of Nu-Lotan, Neuleptil was entered in the ordering system by mistake. (See No. 1 in Fig. III-2-1, page 150 for details.) (KY019005) 2) Instead of Slo-bid, Slow-K was entered in the ordering system by mistake. (See No. 2 in Fig. III-2-1, page 150 for details.) (KY019006) Both events involved drug mix-up at the time of electronic prescription.	9th

Summary	Details	Periodic report
Drug	3. Wrong medication order due to order entry error (terminal operation error). 1) An order for Hirnamin was entered as Hirtonin by mistake. (See No. 8 in Fig. III-2-1, page 151 for details.) (KY019007) 2) An order for Incremin syrup 1.5 mL was entered as 15 mL by mistake. (See No. 30 in Fig. III-2-1, page 154 for details.) (KY019008) 3) Fragmin 750 U/kg/day was prescribed instead of 75 U/kg/day by mistake. (See No. 50 in Fig. III-2-1, page 158 for details.) (KY019009)	10th, 12th
	4. Drug overdose due to misinterpretation of prescription form 1) A physician from another department wrote "codein phosphate 60 mg x 3." He intended to prescribe codein phosphate 60 mg divided into three doses. The physician in charge of the patient thought "x 3" meant three times daily, however, and wrote "codein phosphate 180 mg divided into three doses" in the prescription form. (See No. 39 in Fig. III-2-1, page 156 for details.) (KY019010)	11th
	5. Wrong duration of chemotherapy 1) According to the protocol, a two-week wash-out period was required after the chemotherapy (Adriacin and Briplatin). However, the drugs were given during the drug wash-out week. (See No. 42 in Fig. III-2-1, page 156 for details.) (KY019011) 2) A patient had been on chemotherapy with Carbopolatin, which was to be used only on Day 1. However, it was given on Days 8 and 15 as well. (See No. 56 in Fig. III-2-1, page 159 for details.) (KY019012) 3) Cisplatin was scheduled for only one day; however, it was given for three days. The order was not double-checked by the pharmacy because the chemotherapy was started on a weekend. (See No. 57 in Fig. III-2-1, page 159 for details.) (KY019013)	
	6. Wrong administration route 1) Hicaliq No. 1 was connected to the peripheral IV line instead of IVH line. (See No. 60 in Fig. III-2-1, page 159 for details.) (KY019014) 2) The oral medication to be enterically administered was intravenously administered by mistake. (See No. 59 in Fig. III-2-1, page 159 for details.) (KY019015) 3) The drug to be subcutaneously injected was connected to the bypass line of the CV catheter by mistake. (See No. 61 in Fig. III-2-1, page 160 for details.) (KY019016)	12th

Summary	Details	Periodic report
Drug	7. Overdose due to misreading of drug bottle label 1) The drug was given at five times the scheduled dose because the care provider read the description at the top of the bottle label and thought one bottle contained 100 mg. (See No. 53 in Fig. III-2-1, page 158 for details.) (KY019017)	12th
	8. Events related to communication of drug allergy information 1) Despite "no allergy" was marked in the test order form, the medical history form form said Iopamiron was not allowed. (See No. 87 in Fig. III-2-1, page 164 for details.) (KY019018) 2) Aspirin asthma was suspected according to the referral letter from a patient's former physician. However, the information was not passed on, and IV Ropion Injection 50 mg was given, resulting in dyspnea. (See No. 88 in Fig. III-2-1, page 164 for details.) (KY019019)	
Blood transfusion	1. Patient mix-up in blood transfusion 1) When Patient A returned to the patient room after surgery, the surgeon was giving an oral order for platelet concentrate transfusion for Patient B. The surgeon then left the room to perform surgery on another patient. The nurse in charge thought the order was for Patient A and gave the platelet concentrate prepared for Patient B to Patient A. (KY019020) 2) Concentrated red cell separately prepared for Patient A and Patient B was stored in the refrigerator. Blood transfusion for Patient A was ordered, and the concentrated red cell in a syringe was taken out of the refrigerator and given to Patient A. Later, the concentrated red cell given to Patient A was found to be that prepared for Patient B. The patients had the same given name (but different family name) which was written on the syringes in katakana. (KY019021)	9th
	2. Blood typing error in transfusion 1) The cross-match test with type B product and a patient's blood sample showed mild coagulation. The test proceeded because non-specific reaction was highly likely. The operation room (OR) requested the product immediately. Despite being told that the cross-match test had not been completed, the OR told the person to bring the product immediately without waiting for the test result. The person dispensed type B blood instead of RCC with potent coagulation. Further blood typing showed the patient was type A instead of type B. The type B blood (90 mL) was transfused in about five minutes, and then the transfusion was discontinued. The mark for A and B antigens testing with anti-A and anti-B reagents had been put on the test tube for anti-A and anti-B antibodies testing with A and B red cells and vice versa. (KY019022)	10th

Summary	Details	Periodic report
Treatment/ procedure	1. Use of wrong drug (different indication) prepared in a syringe for operation 1) Absolute ethanol was injected instead of Xylocaine 1% injection (local anesthesia) by mistake. (See No. 12 in Fig. III-2-1, page 151 for details.) (KY019023) 2) Sodium thiosulfate was connected to the puncture needle and injected instead of normal saline by mistake. (See No. 13 in Fig. III-2-1, page 151 for details.) (KY019024) 3) 0.05% Maskin water for disinfection was injected instead of Xylocaine 1% (local anesthesia) by mistake. (See No. 14 in Fig. III-2-1, page 152 for details.) (KY019025)	9th
	2. Communication error due to multiple ordering routes 1) Subcutaneous administration of Gran was scheduled after discontinuing IV chemotherapy. The chemotherapy order form did not have a verifier's signature. The injection order for the day was deleted on the computer. The injection order form in the medical chart did not say the injection had been canceled, and the injection was given. (See No. 76 in Fig. III-2-1, page 162 for details.) (KY019026)	10th
	3. Events related to use of T-shaped stopcock 1) A patient was receiving an IV drip from the peripheral venous line in both forearms. The right peripheral venous line was discontinued, and two types of drugs were simultaneously given from the left peripheral venous line with a T-shaped stopcock during the angiography. The line to one of the drugs was closed at the stopcock. (KY019027) 2) The T-shaped stopcock on the peripheral venous line was disconnected, and the patient started to bleed. The stopcock connection might have been loose because of the emergency situation. (KY019028)	11th
Medical device	1. Events related to magnetic resonance imaging (MRI) 1) A patient complained about hotness in the buttocks during the MRI session. The wet gauze applied to the abrasion in the buttocks might have resonated with the magnetism from the MRI device to cause the hot sensation. (KY019029) 2) The nurse prepared the drug to be used for MRI and placed it on an enamel tray. The tray was pulled by the magnetism of the MRI device and jumped in the air when the imaging table was moved. (KY019030)	9th

Summary	Details	Periodic report
Medical device	2. Connection of infusion solution to a wrong drainage tube in a patient with multiple drainage tubes 1) High-calorie nutrient solution was connected to the catheter in the right abdomen for ascites drainage by mistake instead of the central venous line in the right groin. The high-calorie nutrient solution was injected into the abdominal cavity. Both catheters had the same type of plug. (See No. 16 in Fig. III-2-10, page 183 for details.) (KY019031)	10th
	3. Difficult confirmation of medical material sterilization 1) Sterilized tampon gauze delivered by the manufacturer did not have clear indication of sterilization. The gauze was sterilized at the hospital before surgery and used in patients. Inquiry to the manufacturer revealed the person in charge of ordering the gauze had placed an order with a wrong product number, resulting in delivery of unsterilized gauze. Sterilization could not be confirmed easily by the indicator of tampon gauze. (KY019032) 2) Soft Spon X was used in surgery. Lack of expiration date on the product showed it was unsterilized, and the surgical site was cleansed. Soft Spon X was to be sterilized before storing on the shelf in the operation room. However, the clerk who received the product from the manufacturer did not know the rule and stored it unsterilized. Unsterilized Soft Spon X was thus mixed with sterilized one on the shelf. Sterilization status of individually-packed Soft Spon X was difficult to determine. (KY019033)	11th
	4. Wrong connection of ventilator circuit 1) The flow sensor should have been connected to the expiratory port of the ventilator but it was connected to the breathing circuit. (See No. 12 in Fig. III-2-5, page 173 for details.) (KY019034)	12th
	5. Events related to management of ventilator circuit 1) The water in the water trap of the ventilator (Servo 900E) connected to a patient was removed. Later, loose connection of one side of the water trap was found. (See No. 14 in Fig. III-2-5, page 173 for details.) (KY019035)	
Test	1. Miscommunication over the phone 1) The result of intraoperative rapid diagnosis was informed by the laboratory over the phone. The physician who received the call misheard “positive” as “negative” and explained the wrong result to the patient’s family after the operation. The mistake was found when the report was checked the following day. (KY019036)	10th

Summary	Details	Periodic report
Nursing care	1. Events related to articles used for nursing care (e.g. bed) 1) A patient had the earphone cord around his neck with the ear buds fixed to both bedrails. The earphones were connected to the TV on his left. He forgot about the earphones when he raised the electrical bed and was tangled with the earphone cord. The other patient in the next bed called the nurse station, saying, "The patient in the next bed is noisy." The nurse found the patient turning pale. The patient was treated and regained consciousness. (KY019037) 2) A patient had been receiving pain control medication including Oxycontin. After taking Lendormin the patient fell asleep sitting and leaning on the overbed table. He was later found with his upper body having fallen off the bed. It was thought that the overbed table on which the patient was leaning moved. (KY019038)	11th
Others	1. Events related to patient transfer 1) The infusion bottle rack followed after a patient's bed while he was transferred back to the ICU from the CT scan room. The top of the infusion bottle rack hit the upper wall and suddenly stopped moving when passing through the door. The bed was still moving, and the central venous line was pulled and removed from the patient. (KY019039)	9th
	2. Events related to facility management 1) The head nurse and the repairer initiated medical gas facility repair work. The repairer told the head nurse he was about to switch off the oxygen to replace the oxygen tank, and the head nurse said OK. The repairer closed the oxygen valve. The head nurse saw there was no replacement oxygen tank in front of the patient rooms and thought oxygen supply to all the patients had been resumed. Later the family of one of the patients called the nurse station to inform her of no oxygen supply. It turned out that oxygen tank replacement had not been completed in two patient rooms. (KY019040) 2) Transfusion blood for a patient was stored in the blood refrigerator at 5ºC. During nighttime electric construction in the pharmacy, the electrician pulled the plug of the refrigerator for about a minute and plugged in again. It turned out the plug was for another device, and the refrigerator had been turned off until the following day. The transfusion blood was no longer usable. (KY019041)	11th
	3. Events involving an error pointed out by the patient but not corrected 1) A patient asked the nurse why the drug name on the infusion bottle was different from the drug name in the protocol; however, the nurse thought it was the difference between the product name and the generic name and did not check the drug. (See No. 70 in Fig. III-2-1, page 161 for details.) (KY019042)	12th

[2] "Medical Adverse Event Information to Be Shared, Second Report"

Reported events similar to those included in Medical Adverse Event Information to Be Shared in the previous report were included herein as "Medical Adverse Event Information to Be Shared, Second Report." (Fig. III-3-2)

Fig. III-3-2 Medical Adverse Event Information to Be Shared (re-posted)

Summary	Details	Periodic report
Drug	1. Drug overdose due to misunderstanding of "product content" as "content of active ingredient" (page 201, 2006 annual report) 1) Atropine sulfate powder 1.5 mg divided into three doses was prescribed at the internal medicine department. The outside pharmacy prepared atropine sulfate base powder (g/g) 1.5 g instead of atropine sulfate powder (mg/g) by mistake. (See No. 35 in Fig. III-2-1, page 155 for details.) (FK019001)	10th
	2. Events involving insulin use (page 167, 2005 annual report) 1) The nurse in charge gave a patient 12 units of insulin according to the morning prescription instead of 6 units prescribed for the evening. (See No. 38 in Fig. III-2-1, page 156 for details.) (FK019002) 2) A nurse gave a patient 2 mL of Humalin R instead of the 2 units that had been ordered. (See No. 37 in Fig. III-2-1, page 155 for details.) (FK019003) 3) The physician thought insulin 1 mL equaled 10 units and gave a patient 10 times the scheduled dose. (See No. 34 in Fig. III-2-1, page 155 for details.) (FK019004) 4) A nurse misread the insulin vial and gave a patient Novolin R 5 mL instead of 50 units (0.5 mL). (See No. 43 in Fig. III-2-1, page 156 for details.) (FK019005) 5) The nurse had a misconception that insulin 1 unit equaled 0.1 mL (10 times the actual equivalence). (See No. 52 in Fig. III-2-1, page 158 for details.) (FK019006)	10th, 11th, 12th
	3. Events involving bleeding of patients on Warfarin (page 200, 2006 annual report) 1) Bleeding did not stop after tooth extraction in a patient on Warfarin, and the wound was sutured twice. Blood transfusion and albumin were required based on a blood test conducted the next day. (See No. 80 in Fig. III-2-1, page 163 for details.) (FK019007) 2) That the dose of Warfarin had been increased at the other institution immediately before the needle biopsy and the patient had had a bleeding tendency was not known. That the patient had been on Warfarin was known preoperation but not the dose. (See No. 96 in Fig. III-2-1, page 165 for details.) (FK019008)	10th, 12th

Summary	Details	Periodic report
Treatment/ procedure	1. Events involving intestinal perforation associated with glycerin enema (page 167, 2005 annual report; page 202, 2006 annual report) 1) The nurse gave glycerin enema 60 mL to a patient lying on his left side to prepare for prostate biopsy. A resistance was felt after inserting 5 cm; however, the nurse injected all 60 mL thinking the patient was just nervous and tense. The patient did not complain about pain during the procedure but later had no bowel movement or enema discharge and aggravation of hemorrhoidal pain. Perianal induration was found, and a CT scan showed extraintestinal air and fluid accumulation in the area from the anal to the right distal dorsal rectum. Intestinal perforation was diagnosed, followed by surgical drainage. The surgery found glycerin enema formulation had been injected extraintestinally through the mucous membrane and outside the sphincter muscle from the enema tube inserted in the 7-o'clock position of the anal verge. (FK019009) 2) A patient requested for enema because of dyschezia. The nurse gave glycerin enema to the patient lying on his left side. Six centimeters from the tip of the enema tube was lubricated with Vaseline and inserted into the patient's lubricated anal. A resistance was felt and the patient complained about pain when the tube was inserted about 2 cm. The tube was immediately removed and reinserted again in the same manner, and the glycerin enema formulation was injected. After the procedure the patient complained about nausea and pain in the anal. A 5-cm blister-like bulge formed in the proximal anal canal, and a CT scan found rectal perforation. The enema tube was thought to have hit hard stool in the rectum and bent, resulting in mucosal damage and subcutaneous glycerin injection. (FK019010)	10^{th}
	2. Surgical site mix-up (left and right) (page 201, 2006 annual report) 1) Right craniotomy was performed for left isolated hydrocephalus. (FK019011) 2) A patient was scheduled for surgery of the mass in the right shoulder. The surgical site was checked by the surgeon and the nurse in the ward on the day of surgery but was not marked. When the patient was laid on his stomach after anesthesia induction in the operation room, the mass could not be felt by touch. The left shoulder was determined as the surgical site based on the MRI image and ultrasonography. The left-right mix-up was identified when the patient complained he could still feel the mass in the right shoulder post-operation. The patient was operated again. The operating procedure to prevent surgical site mix-up established in January had not been followed. (FK019012) 3) Left-right mix-up was found after the right temporal area of a patient with left chronic subdural hematoma was shaved to perforate and incise the dura in the emergency operation. (FK019013) 4) Craniotomy was performed on the wrong side because the left temporal area had been marked instead of the right temporal area in an operation of chronic subdural hematoma. (FK019014) 5) A surgeon performed craniotomy on the left side based on the left-right indicator on the 3-dimensional CT angiographic (3DCTA) image. The wrong-side craniotomy was found by another surgeon. The 3DCTA image indicator had been processed by the substitute machine for about one month due to system version upgrade. The image data processed during the month had certain display-related information which was outside the specification. The left-right indicator had not been synchronized with the image rotation, resulting in the left-right mix-up by the surgeon. (FK019015)	10^{th}, 11^{th}, 12^{th}

Summary	Details	Periodic report
Nursing care	Events involving burn occurring during nursing care (pages 200 and 203, 2006 annual report) 1) The shower room had an overhead showerhead and a foot shower head. The care provider was bathing a severely retarded patient lying on the mattress by using the detachable overhead showerhead. Hot water leaked from the connection between the hose and the showerhead placed by the feet of the patient and immersed the patient's feet in the sponge mattress. The patient subsequently had a 3-cm blister on the left heel and 5 cm x 2 cm erosion in the dorsum of the right foot. (FK019016) 2) Nurse A stood on the right side of the bed to give a bed bath to a patient. She put a plastic bag containing steamed towels 20 cm away from the patient's right knee. Nurse B stood on the left side to wipe the patient's body. When the patient was laid on his right side, his right thigh was on the plastic bag with some steamed towels remaining inside. The nurses finished giving a bed bath and turned the patient to the spinal position to find a blister the size of 15 cm x 5 cm and partially peeled skin, which was later diagnosed as a second-degree burn. (FK019017) 3) The water temperature was set at 40ºC to bathe a severely retarded patient. The shower was turned off once, and the water was too hot when it was turned on again. Nurse A held the shower head in her right hand to let the water flow outside the basin while wiping the patient's face with a towel using her left hand. The patient was lying on his left side. Nurse B who came to help Nurse A turned down the water temperature setting but the water was still hot. The nurses saw the patient's left ear burned and peeled when the patient turned his head to the right. The burn was thought to have been caused by hot water splashing on the mattress on which the patient was lying. (FK019018) 4) A diabetic patient complained about numbness during dialysis treatment and requested a hot pack. The care provider put a hot pack in a plastic bag, put the plastic bag in a cloth sack for hot packs, covered the bag with a towel and put it on the patient's socked feet. She told the patient the pack was very hot and she would check on him after a certain time. Fifty minutes later the patient told the care provider to remove the hot pack because it was not effective and he could not feel the warmth because of the numbness. The care provider touched the patient's socked feet to find nothing abnormal, and the patient went home. Later the patient called to say he had blisters where the hot pack had been placed. (FK019019) 5) A patient requested a hot water bottle during chemotherapy. The care provider gave the patient a hot water bottle covered with a sack and towel and told him to remove it if it was too hot. The patient fell asleep. About four hours later the patient's foot turned red and was diagnosed with a first-degree cold burn. (FK019020) 6) A hot water bottle was used for a patient with cold legs. The bottle was filled with 60ºC water and put under the patient's feet. The coldness disappeared after an hour, and the bottle was removed. Later, skin erosion associated with burn was found. (FK019021) 7) Two nurses gave a patient in a vegetative state a bed bath. The bathtub was filled with hot water after the patient was washed on the stretcher. The nurses lowered the stretcher into the bathtub without checking the temperature, both thinking the other had already checked it. The stretcher was immediately raised when the water was found to be too hot; however, the patient had burn on the back, the buttocks, the back of both forearms, both heels, the back of the left elbow, the sacral region, and the dorsum of the left foot. 8) Expecting that the patient's hands would be quite dirty, the care provider covered the patient's hands with a steamed towel that had been cooled for a while after being taken out of the towel wagon. After waiting for an hour the care provider wiped the patient's hands with the towel and washed them with lukewarm water. Later she found the skin of the patient's hand had peeled in two places. The temperature of the steamed towel had been checked with a gloved hand to ensure appropriate warmth. (FK019022)	9^{th}, 10^{th}, 11^{th}, 12^{th}

Summary	Details	Periodic report
Nursing care	9) A patient was taking a shower while putting his paralyzed left hand on the mixing faucet for support. He did not feel the hotness of the faucet because of his paralysis. After taking a shower he noticed blisters and peeled skin on his left hand. (FK019023) 10) A nurse checked the water temperature by putting her bare finger in the water for one or two seconds and didn't think it was too hot. She gave a bath to a patient with gloved hands. After washing the patient the nurse found the skin of the patient's buttocks had turned brown and peeled, and was diagnosed with a second-degree burn. (FK019024) 11) A hot water bottle was used to warm a patient with leg paralysis during the twilight shift. The rubber water bottle was placed away from the patient's feet; however, a blood stain was found on the sheets around noon the following day. The patient had bled from the left third to fifth toes where the skin was peeled. The hot water bottle had been filled with 90ºC water. (FK019025)	9th, 10th, 11th, 12th

IV. Provision of Medical Safety Information

In addition to preparation and publication of periodic and annual reports, the service to provide part of the obtained information to the participating medical institutions by fax was started in 2006 as part of the Project to Collect Medical Adverse Event/Near-Miss Information.

Medical safety information was provided to medical institutions 13 times in total between December 2006 and December 2007.

1 Summary of the service to provide medical safety information

[1] Objective

Among the information collected in the Project to Collect Medical Adverse Event/Near-Miss Information, information to be widely shared will be provided to the participating medical institutions to promote prevention of occurrence/recurrence of medical adverse events.

[2] Medical institutions

A. Medical institutions subject to reporting requirements as well as voluntarily participating medical institutions in the Project to Collect, Analyze, and Provide Medical Adverse Event Information
B. Voluntarily participating medical institutions in the Project to Collect, Analyze, and Provide Medical Near-Miss Information

Starting with Medical Safety Information No. 6, the service has been offered to medical institutions that wished to receive fax information other than those described in A and B above. The service has been provided to 3,332 medical institutions so far.

[3] Information provision

Information is provided by fax.

Information is also made available to other parties concerned and the general public on the Japan Council for Quality Health Care website.

[4] Provided information

Medical Adverse Information No. 1 to No. 13 was issued between December 2006 and December 2007 (Fig. IV-1-1).

Fig. IV-1-2 shows events reported to the Division of Adverse Event Prevention by December 31, 2007 that were similar to those included in Medical Safety Information.

Fig. IV-1-1 Medical Safety Information So Far Provided

December 2006 to December 2007

No.	Details
No. 1	Misconception of insulin content
No. 2	Bone marrow depression due to antirheumatic (methotrexate) overdose
No. 3	Rectal perforation associated with glycerin enema
No. 4	Drug mix-up
No. 5	Burn during assisted bathing
No. 6	Misconception of insulin unit
No. 7	Extravascular leakage in pediatric patients
No. 8	Surgical site mix-up (left-right)
No. 9	Confusing of total product amount and content of active ingredient
No. 10	Magnetic material (e.g. metal product) taken in the MRI room
No. 11	Blood transfusion in wrong patient
No. 12	Contact during patient transfer
No. 13	Neglected check of infusion pump flow

Fig. IV-1-2 Similar Events Reported after Issuance of Medical Safety Information

Provision No.	Number of events reported after issuance	Event	Summary
No. 1, No. 6	4	Misconception of insulin content/unit	A nurse received an order for "Novolin R Injection 50 units + normal saline 50 mL." Seeing the label that said "Novolin R 100 Injection" on the vial (contains 10 mL = 1000 units), the nurse thought one vial contained 100 units, prepared an IV drip with 500 units instead of 50 units and administered it to the patient. (Medical Safety Information No. 16) (AN019001)
			An order for Humalin R Injection 2 units was given. However, the nurse prepared an IV drip with Humalin R Injection 2 mL and administered it to the patient. (AN019002)
			The physician ordered insulin therapy based on the misconception that insulin 1 mL equaled 10 units. A wrong-dose of insulin was given to the patient. (AN019003)
			Nurse A was about to mix Novolin R 1.4 mL (140 units) with the IV drip solution, thinking it was 14 units. Suspicious Nurse B found the mistake. Nurse A thought that "insulin 1 unit equaled 0.1 mL (10 times more than the actual value)" when it actually equals 0.01 mL. Nurse A thought "10" on the scale of Myjector 0.1 mL equaled 1 unit. (AN019004)

Provision No.	Number of events reported after issuance	Event	Summary
No. 3	2	Rectal perforation associated with glycerin enema	A nurse gave glycerin enema to a patient lying on his left side. A resistance was felt when inserting the enema tube; however, the nurse could not determine whether it was due to the tube passing through the anal sphincter or rectal perforation. Perianal induration was found and the patient was later diagnosed with intestinal perforation. (AN019005)
			A nurse gave glycerin enema to a patient lying on his left side. There was no resistance when inserting the enema tube, and the patient did not complain about pain. Later the patient had perianal pain and swelling. A examination found intestinal perforation. (AN019006)
No. 4	4	Drug mix-up	Instead of Nu-Lotan, Neuleptil was entered in the ordering screen by mistake and prescribed. (AN019007)
			An intern typed the word "Slo" to prescribe Slo-bid. Slow-K appeared on the screen, however, and the intern placed a prescription order without realizing the drug mix-up. (AN019008)
			The physician on duty on holidays entered the injection order into the system based on the order that had been given by the physician in charge. The physician on duty entered Hilnamin instead of Hirtonin by mistake, and the former drug was given to the patient. (AN019009)
			Phenytoin 10% powder was prepared instead of Phenobal powder. Phenytoin was contraindicated to a patient, and symptoms such as fever and rash appeared. The drug mix-up was identified when a nurse noticed that the color of the powder was different from the usual medication and made an inquiry to the pharmacy two days later. (AN019010)
No. 5	3	Burn during assisted bathing	Hot water leaked from the connection between the hose and the shower head and immersed a patient's feet, causing burn. (AN019011)
			The water temperature setting was turned down but the water was still hot when the nurse washed a patient's hair by holding the shower head in her hand. Later, the patient had burn (peeled skin and erosion) in the left ear. (AN019012)
			Two nurses lowered a patient on the stretcher into the bathtub without checking the temperature, both thinking the other had already checked it. The stretcher was immediately raised when the water was found to be too hot; however, the patient had burn in areas such as the back, the buttocks, the back of both forearms, and both heels. (Medical Safety Information No. 16) (AN019013)
No. 7	2	Extravascular leakage in pediatric patients	A patient was receiving continuous IV infusion with an infusion pump. The injection site in the right leg was covered with opaque tape. Three days later the area from the right thigh to lower leg was found to be swollen. (AN019014)
			A patient was receiving IV drip in the right arm. The injection site was covered with dressing. The right arm had been periodically checked without removing the dressing. Later the injection site was found swollen with skin tissue necrosis due to extravascular leakage. (AN019015)

Provision No.	Number of events reported after issuance	Event	Summary
No. 8	5	Surgical site mix-up (left-right)	Craniotomy was performed in the right side on a patient with hydrocephalus in the left lateral ventricle by mistake. (AN019016)
			A patient was scheduled for an emergency operation of left chronic subdural hematoma. The right temporal area was shaved to start the operation. Left-right mix-up was identified during perforation. (AN019017)
			A patient was scheduled for surgery of the mass in the right side of the back. The surgical site was checked by the surgeon and the nurse in the ward on the day of surgery but was not marked. The left side was determined as the surgical site based on the MRI image and ultrasonography. The left-right mix-up was identified by the patient himself post-operation. (Medical Safety Information No. 16) (AN019018)
			A patient was scheduled for an operation of chronic subdural hematoma. The surgical site was marked by the surgeon in the operation room. Inadequate confirmation of the surgical site led to marking of the left side of the head instead of right. The surgeon shaved the hair and brushed the scalp himself to start the operation. (AN019019)
			A surgeon performed craniotomy on the left side based on the left-right indicator on the 3-dimensional CT angiographic (3DCTA) image. The wrong-side craniotomy was found by another surgeon who sutured the wound. The 3DCTA image indicator had been processed by the substitute machine for about one month due to system version upgrade. The image data processed during the month had certain display-related information which was outside the specification. The left-right indicator had not been synchronized with the image rotation, resulting in the left-right mix-up by the surgeon. (AN091020)
No. 10	1	Magnetic material (e.g. metal product) taken into the MRI room	The metal detector was not used before the MRI examination because metal objects inside the patient's body had already been checked. After the examination the patient was found to be carrying a cell phone. The cell phone seemed broken at first but could be used later. (AN019021)

There has been no report of events similar to "No. 2 Bone marrow depression due to antirheumatic (methotrexate) overdose," "No. 9 Confusing of total product amount and content of active ingredient," "No. 11 Blood transfusion in wrong patient," "No. 12 Contact during patient transfer" or "No. 13 Neglected check of infusion pump flow."

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