Project to Collect Medical Near-Miss/ Adverse Event Information 2006 Annual Report

July 18, 2007

Center for Medical Adverse Event Prevention
Japan Council for Quality Healthcare

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Foreword

Eitaka Tsuboi
President
Japan Council for Quality Healthcare

Japan Council for Quality Healthcare (JCQHC) has been conducting various activities, such as the evaluation of medical services provided at hospitals, in order to maintain public confidence in healthcare services and improve the quality of the services. Public awareness of the promotion of medical safety and medical adverse event prevention has recently been rising.

The JCQHC Center for Medical Adverse Event Prevention has been conducting our Project to Collect Medical Near-Miss/Adverse Event Information to prevent medical adverse events and to promote medical safety. The collected information and the tabulation/analysis of the data are published and distributed to medical professionals, members of the public and administrative organizations in the form of periodic reports, annual reports and monthly fax newsletters. JCQHC would like to thank all cooperating medical institutions and relevant parties.

The 2006 annual report was prepared based on past reports. Numerous responses including inquiries about and publicity concerning a number of medical adverse events and their details appeared in past reports, indicating elevated social awareness of the promotion of medical safety and the prevention of medical adverse events. JCQHC will increase its efforts to enhance the content of future reports and establish an environment for convenient case reporting in order to provide useful information to the parties concerned through publication of the current report and periodic reports. Your suggestions for our future activities will be 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 2006 Annual Report

Kikuo Nomoto
Director
Center for Medical Adverse Event Prevention
Japan Council for Quality Healthcare

The Center for Medical Adverse Event Prevention has published nine periodic reports on medical adverse events reported by medical institutions as part of the Project to Collect Medical Near-Miss/Adverse Event Information that started in October 2004. As a project developed based on legal grounds, it is considered quite important for the promotion of medical safety in Japan.

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 medical near-misses/adverse events as an actual increase in medical near-miss incidents and adverse events, or to think that there is a decline in the safety at medical institutions.

The Japan Council for Quality Healthcare (JCQHC) deeply appreciates the cooperation of the medical institutions that have been participating in this project and reporting medical near-miss incidents/adverse events, as reports from participating institutions are the basis of this project.

JCQHC has been ensuring information feedback and holding workshops in which many medical institutions could participate. An effort has been made to establish an environment for easy case reporting, since some institutions are required to report medical adverse events by law. In addition to ensuring the confidentiality of personal information, reports have been prepared to include unidentifiable cases that could provide useful information to medical institutions. As a third-party organization occupying a neutral position in the healthcare community, JCQHC has been providing information to outside parties by collecting and analyzing data with an unbiased point of view.

The 2006 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 Voluntarily participating medical institutions that voluntarily participate in the project is also included. The cases used for the analysis of medical adverse events in past workshops and sample analyses are also provided in the current report as references for use in workshops held at medical institutions. Previous reports have raised public awareness, and numerous suggestions have been made by relevant parties as well as by the general public. Some medical institutions refer to our reports in their everyday operations. The current report will be useful as basic data for discussion on future medical safety in Japan.

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 was established within the JCQHC on July 1, 2004, and collection of near-miss/medical adverse event information in accordance with the law started on October 7, 2004. The Center comprehensively analyzes medical near-miss/adverse event information and, based on the policies of Management Committee(Note 1) of the Center, prepares reports through summaries of Comprehensive Evaluation Panel(Note 2) 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 3) for public review.

(Note 1) 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 2) Consisting of experts from each field, Comprehensive Evaluation Panel reviews and evaluates reports comprehensively as well as provides technological advice for analytical methods.

(Note 3) 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 [(Note 1)] and Project to Collect, Analyze, and Provide Medical Near-Miss Information. [(Note 2)] 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 3)]

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.

(Note 1) See Attachment 1.
(Note 2) See Attachment 2.
(Note 3) 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 LawLaw No. 22, 1947 (not including their branch hospitals), and advanced treatment facilities to report medical adverse events.
See Attachment 3 "Medical Institutions Subject to Reporting Requirement."

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(Note 1). 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 Center for Medical 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(Note 2).

(Note 1) See Material 4 "Medical Adverse Event Information Report Form."
(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).

(4) Education and training in the collection of information on medical adverse events [(Note 1)]

Two workshops on the medical adverse event information reporting system of JCQHC and techniques for analyzing the causes and underlying factors and the development of preventive measures (root cause analyses, RCA) were held in 2006 to train the persons responsible for managing medical safety and relevant personnel at the Voluntarily participating medical institutions.

1. Outline of the workshops

i) Date

a) First workshop: Saturday, March 18 and Sunday, March 19, 2006 (2 days)
b) Second workshop: Friday, July 7 and Saturday, July 8, 2006 (2 days)

ii) Participants

a) Heads of the medical safety management divisions at the Voluntarily participating medical institutions
b) People responsible for the management of medical safety and those with similar responsibilities at the Voluntarily participating 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) First workshop: 69 attendees (51 from the medical institutions subject to reporting requirements, 18 from voluntarily participating medical institutions)
Including 30 full-time medical safety managers

ii) Second workshop: 57 attendees (44 from the medical institutions subject to reporting requirements, 13 from voluntarily participating medical institutions)
Including 42 full-time medical safety managers

3. Details

The results of the questionnaire survey conducted in relation to the workshop attendees, the workshop materials, and an RCA example are shown in Attachment 5. DVDs of the first workshop were distributed to the Voluntarily participating medical institutions.

(Note 1) See Attachment 5 "Workshop on Medical Adverse Event Analysis and Reporting."

[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(Note 1).
General coded information will be collected only at designated medical institutions(Note 2).

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 Voluntarily participating medical institutions.

(Note 1) See Attachment 6 "Medical Near-Miss Information Report Form"
(Note 2) 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, 2006, 247 institutions have been designated by avoiding biases in institution size and location.
See Attachment 7 "List of Point Medical Institutions for Project to Collect Medical Near-Miss Information"

a) Medical near-miss cases covered by themes specified for individual collection periods(Note 1) (Fig. I-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-1 Themes for Descriptive Information Specified for Individual Collection Periods

Collection period	Month of occurrence	Theme
19th	2006 January to March	○ Cases involving patient misidentification or wrong-site surgeries/procedures ○ Cases related to placement and/or management of feeding tubes such as nasogastric tubes and percutaneous endoscopic gastrostomy (PEG) (not including self-removal of tube) ○ Cases involving errors or unexpected events occurred during enema procedure ○ Errors occurred in the process of dispensing process ○ Cases related to tests
20th	April to June	○ Cases related to placement and/or management of feeding tubes such as nasogastric tubes and percutaneous endoscopic gastrostomy (PEG) (not including self-removal of tube) ○ Cases involving errors or unexpected events occurred during enema procedure ○ Cases involving errors occurred in the dispensing process ○ Cases related to tests
21st	July to September	○ Cases involving errors occurred in the dispensing process ○ Cases related to tests ○ Cases related to insertion, placement, and management of drainage tube (not including accidental removal, self-removal of tube)
22nd	October to December	○ Cases related to tests ○ Cases related to insertion, placement, and management of drainage tubes (not including accidental removal or self-removal of tube) ○ 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 should be described along with the models)

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 Voluntarily participating medical institutions at the time of registration.

4. Report form

Code choice reporting and descriptive reporting are available(Note 3). In code choice reporting, applicable codes are checked or selected from pull-down lists. In descriptive reporting, descriptions are provided in relevant fields.

(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.

(Note 3) See Attachment 6 “Medical Near-Miss Information Report Form.”

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

1. Tabulation

Performed by the JCQHC Center for Medical 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).

[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 22 experts in general medicine or medical safety measures and general advisors (as of December 31, 2006)(Note 3), 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, 2006)(Note 4), 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). 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.

(Note 1) See "Project to Collect, Analyze, and Provide 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/Publication Website (http://www2.hiyari-hatto.jp/hiyarihatto.index.jsp).
(Note 3) See Attachment 8 "Center for Medical Adverse Event Prevention Management Committee Members."
(Note 4) See Attachment 9 "Center for Medical Adverse Event Prevention Comprehensive Evaluation Panel Members."

(3) Medical Adverse Event Prevention Division

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

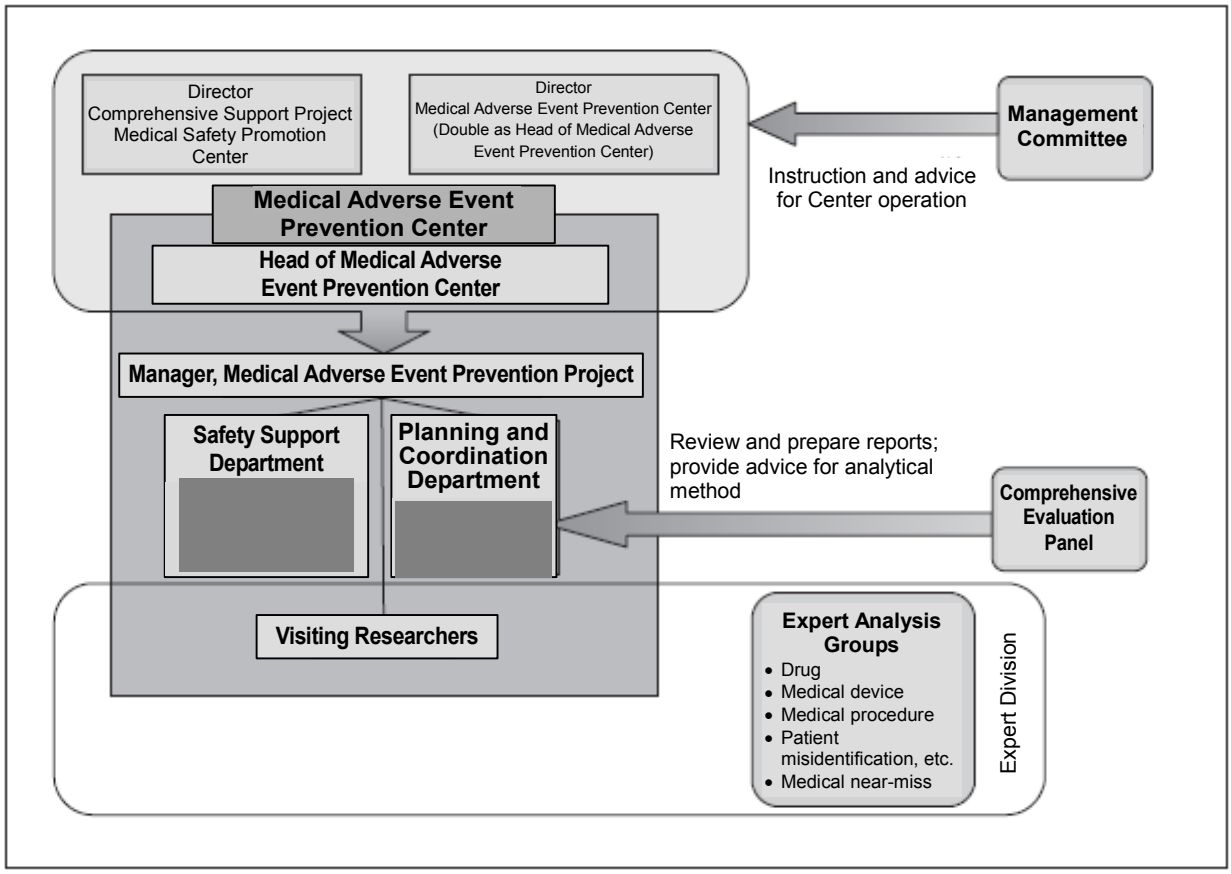
Consisting of staff with medical qualifications and visiting researchers, Planning and Coordination Department receives medical near-miss/adverse event reports and other useful information for medical safety as well as prepares and publishes project reports. The Department also visits medical institutions 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 Center for Medical Adverse Event Prevention. Information contained in initial reports is anonymized by Center 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.

Fig. I-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 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 voluntarily participating medical institutions

The number of medical institutions participating in Project to Collect, Analyze, and Provide Medical Adverse Event Information as of December 31, 2006 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 1)
Government	National University Corporation, etc	46	-
	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	4	7
	City/village	-	27
	Japan Association of Municipal and Prefectural Colleges and Universities	6	-
	Local independent administrative institutions	1	-
Mother body of public medical institution other than municipality	Japan Red Cross	-	54
	Saiseikai Imperial Gift Foundation	-	4
	National Welfare Federation of Agricultural Cooperatives	-	3
	National Health Insurance Association Federation		1
	All Japan Federation of Social Insurance Associations	-	36
	Employees' Pension Welfare Corporation	-	1
	Seamen's Insurance Society	-	1
	Mutual Aid Associations and their associations	-	7
Corporation	School juridical organization	49	6
	Healthcare corporation	-	101
	Charitable organization	-	16
	Company	-	7
	Other corporation	-	5
Individual practitioner		-	23
Total		273	300

(Note 1) 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, 2006 are shown below.

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

	2006											
	January	February	March	April	May	June	July	August	September	October	November	December
Number of Voluntarily participating medica institutions	2	2	1	2	1	1	3	2	1	0	1	2
Number of rejected registrations	0	0	0	0	0	0	0	0	0	1	0	0
Accumulated total	285	287	288	290	291	292	295	297	298	297	298	300

[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, 2006 is shown below.

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

	2006												Total
	January	February	March	April	May	June	July	August	September	October	November	December	
Number of reports made by medical institutions subject to reporting requirement	99	110	121	84	94	126	111	154	110	105	89	93	1,296
Number of reports made by voluntarily participating medical institutions	11	5	5	5	11	19	15	19	10	22	17	16	155
Number of medical institutions subject to reporting requirement	272	272	272	273	273	273	273	273	273	273	273	273	-
Number of Voluntarily participating medical institutions	285	287	288	290	291	292	295	297	298	297	298	300	-

(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, 2006, the number of reporting medical institutions subject to reporting requirement and the number of reports made between January 1 and December 31, 2006 are shown in Fig. II-1-4 and those by bed size 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, 2006, the number of medical institutions subject to reporting requirement is 273 institutions, and the total number of beds is 147,836.

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, 2006)	Number of reporting medical institutions	Number of reports
			January to December, 2006	January to December, 2006
Government	National University Corporation	46	45	339
	National Hospital Organization	146	100	458
	National Centers	8	7	69
	Sanatoriums for Hansen's Disease	13	4	11
Municipality	Prefecture	11	7	27
	City/village			
	Japan Association of Municipal and Prefectural Colleges and Universities			
	Local independent administrative institutions			
Corporation	School juridical organization	49	32	392
(Re-posted)	Advanced treatment hospital	81	77	755
Total		273	195	1,296

(Note 1) Total number of beds at medical institutions subject to reporting requirement as of December 31, 2006 is 147,836.

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 2006	January to December 2006	January to December 2006					
				Death	High	Low	Unknown (Note 2)	No choice	Total
0 - 19 beds	0	0	0	0	0	0	0	0	0
20 - 49 beds	14	5	15	0	1	7	7	0	15
50 - 99 beds	6	1	1	0	1	0	0	0	1
100 - 149 beds	4	1	1	0	0	0	1	0	1
150 - 199 beds	8	3	8	1	0	7	0	0	8
200 - 249 beds	11	7	24	3	3	12	6	0	24
250 - 299 beds	18	12	52	4	4	41	3	0	52
300 - 349 beds	25	18	60	2	12	31	15	0	60
350 - 399 beds	18	14	60	4	10	37	9	0	60
400 - 449 beds	25	17	78	9	7	48	13	1	78
450 - 499 beds	14	8	31	4	5	8	14	0	31
500 - 549 beds	13	10	75	5	17	49	4	0	75
550 - 599 beds	12	7	24	6	5	11	2	0	24
600 - 649 beds	26	23	179	18	30	110	21	0	179
650 - 699 beds	8	6	50	6	6	30	8	0	50
700 - 749 beds	12	9	64	12	12	27	13	0	64
750 - 799 beds	3	3	13	7	2	3	0	1	13
800 - 849 beds	12	11	76	18	8	33	16	1	76
850 - 899 beds	4	4	17	2	5	9	1	0	17
900 - 999 beds	10	10	67	12	10	33	11	1	67
1000 beds or more	30	26	401	39	63	235	64	0	401
Total	273	195	1,296	152	201	731	208	4	1,296

(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) "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	January to December, 2006
0	78
1	40
2	27
3	23
4	28
5	14
6	8
7	4
8	10
9	4
10	6
11 to 20	23
21 to 30	3
31 to 40	2
41 to 50	1
51 to 100	1
101 to 150	1
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, 2006 in the Voluntarily participating medical institutions as of December 31, 2006 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, 2006)	Number of reporting medical institutions	Number of reports
		January to December 2006	January to December 2006
Government	1	0	0
Municipality	34	8	21
Public medical institution	107	11	32
Corporation	135	28	102
Individual practitioner	23	0	0
Total	300	47	155

[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, 2006 is shown below.

Fig. II-1-8 Month of Occurrence

Month of occurrence		Number of events
2005	November and before	77
	December	74
2006	January	96
	February	118
	March	92
	April	108
	May	95
	June	120
	July	111
	August	121
	September	106
	October	76
	November	64
	December	37
	No choice(Note 1)	1
Total		1,296

(Note 1) "No choice" means no "month of occurrence" was selected.

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

Day of occurrence	Weekday					Holiday					No choice(Note 1)					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	
Mon.	41	52	48	49	190	3	1	3	2	9	1	0	0	0	1	200
Tue.	58	57	78	51	244	0	1	0	0	1	1	0	0	0	1	246
Wed.	48	41	51	49	189	0	1	1	0	2	0	0	0	0	0	191
Thu.	64	56	61	42	223	0	0	0	0	0	0	0	0	0	0	223
Fri.	60	43	61	51	215	1	1	0	1	3	2	0	0	0	2	220
Sat.	7	11	8	4	30	14	19	25	22	80	0	0	0	0	0	110
Sun.	0	0	0	0	0	25	21	39	16	101	1	0	0	0	1	102
No choice(Note 1)	1	0	0	0	1	0	0	0	0	0	3	0	0	0	3	4
Total	279	260	307	246	1,092	43	44	68	41	196	8	0	0	0	8	1,296

(Note 1) "No choice" means no "day of occurrence" or "weekday/holiday category" was selected.

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	18	11	10	13	52
2:00 – before 4:00	2	17	10	9	38
4:00 – before 6:00	14	10	16	6	46
6:00 – before 8:00	18	16	18	23	75
8:00 – before 10:00	26	25	33	21	105
10:00 – before 12:00	52	54	66	55	227
12:00 – before 14:00	39	24	40	33	136
14:00 – before 16:00	52	49	61	45	207
16:00 – before 18:00	42	38	44	26	150
18:00 – before 20:00	19	21	29	13	82
20:00 – before 22:00	14	15	16	17	62
22:00 – before 24:00	16	4	12	11	43
Time unknown	13	20	20	15	68
No choice(Note 1)	5	0	0	0	5
Total	330	304	375	287	1,296

(Note 1) "No choice" means no "time of occurrence" was selected.

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	11	13	11	18	53	10	12	10	17	49
	10s	8	6	13	7	34	7	6	10	5	28
	20s	8	10	19	13	50	5	10	17	10	42
	30s	17	15	17	16	65	13	13	16	12	54
	40s	17	24	34	20	95	16	22	29	15	82
	50s	34	51	55	41	181	31	44	49	38	162
	60s	42	64	73	46	225	40	59	65	40	204
	70s	78	74	94	67	313	74	69	84	66	293
	80s	41	36	50	51	175	33	35	43	48	159
	90 or above	8	6	3	6	23	8	6	2	6	22
	No choice(Note 1)	66	0	0	0	66	35	4	0	0	39
	Total	330	299	369	285	1,283	272	280	325	257	1,134
2 or more (Note 2)	Total	-	-	6	2	8	-	-	5	1	6
Aggregate total		330	299	375	287	1,291	272	280	330	258	1,140

(Note 1) "No choice" means no "patient age" was selected.

(Note 2) 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	148	148	181	156	633
	Female	106	151	188	129	574
	No choice(Note 1)	76	0	0	0	76
	Total	330	299	369	285	1,288
2 or more	Total	-	-	6	2	8
Aggregate total		330	299	375	287	1,291

(Note 1) "No choice" means no "sex of patient" was selected.

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	192	198	232	154	776
	Duration: 32 days or longer	71	77	91	97	336
	No choice(Note 1)	9	5	7	7	28
	Total	272	280	330	258	1,140
Outpatient	Initial visit	4	2	3	1	10
	Follow-up visit	16	22	42	28	108
	Total	20	24	45	29	118
No choice(Note 1)		38	0	0	0	38
Aggregate total		330	304	375	287	1,296

(Note 1) "No choice" means no "inpatient/outpatient status" or "duration of hospitalization" was selected.

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	274	258	311	241	1,084
Patient himself/herself	8	7	18	16	49
Patient's family/caregiver	4	10	8	7	29
Other patient	10	7	15	5	37
Others	24	22	23	18	87
No choice(Note 1)	10	0	0	0	10
Total	330	304	375	287	1,296

(Note 1) "No choice" means no "person who identified event" was selected.

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

Job title of person involved (Note 1)	Number of events				
	January to March	April to June	July to September	October to December	Total
Doctor	265	233	281	207	986
Dentist	7	11	8	16	42
Nurse	183	156	170	182	691
Assistant nurse	6	5	13	8	32
Pharmacist	2	6	6	0	14
Clinical engineer	1	1	1	2	5
Midwife	1	1	0	1	3
Nursing assistant	3	1	1	2	7
Radiological technologist	3	2	4	6	15
Clinical technologist	2	1	4	0	7
Physical therapist (PT)	1	1	1	1	4
Occupational therapist (OT)	0	0	2	0	2
Medical technologist	0	0	0	0	0
Dental hygienist	0	0	0	0	0
Others	19	18	27	26	90
No choice(Note 2)	23	0	0	0	23
Total	516	436	518	451	1,921

(Note 1) 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.

(Note 2) "No choice" means no "job title of person involved" was selected.

Fig. II-1-16 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	5	1.5	2	0.7	0	0.0	6	2.1	13	1.0
Drug	15	4.5	23	7.6	21	5.6	18	6.3	77	5.9
Blood transfusion	2	0.6	4	1.3	0	0.0	1	0.3	7	0.5
Treatment/procedure	112	33.9	108	35.5	137	36.5	93	32.4	450	34.7
Medical equipment, etc.	41	12.4	24	7.9	29	7.8	21	7.3	115	8.9
Medical device	13	3.9	7	2.3	10	2.7	8	2.8	38	2.9
Drainage tube or other tube	25	7.6	16	5.3	18	4.8	12	4.2	71	5.5
Dental equipment	3	0.9	1	0.3	1	0.3	1	0.3	6	0.5
Examination/test	16	4.8	22	7.2	25	6.7	9	3.1	72	5.6
Nursing care	76	23.0	69	22.7	101	26.9	93	32.4	339	26.2
Others	62	18.8	52	17.1	62	16.5	46	16.0	222	17.1
No choice(Note 1)	1	0.3	0	0.0	0	0.0	0	0.0	1	0.1
Total	330	100.0	304	100.0	375	100.0	287	100.0	1,296	100.0

(Note 1) "No choice" means no "summary of event" was selected.

Fig. II-1-17 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	52	15.8	33	10.9	38	10.1	29	10.1	152	11.7
High	43	13.0	57	18.8	63	16.8	38	13.2	201	15.5
Low	184	55.8	163	53.6	212	56.5	172	59.9	731	56.4
Unknown (Note 2)	47	14.2	51	16.8	62	16.5	48	16.7	208	16.0
No choice (Note 3)	4	1.2	0	0.0	0	0.0	0	0.0	4	0.3
Total	330	100.0	304	100.0	375	100.0	287	100.0	1,296	100.0

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

(Note 2) "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.

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

Fig. II-1-18 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	2	0.6	10	3.3	10	2.7	13	4.5	35	2.7
Outpatient treatment room	2	0.6	3	1.0	5	1.3	2	0.7	12	0.9
Outpatient lobby	1	0.3	0	0.0	0	0.0	0	0.0	1	0.1
Emergency room	4	1.2	3	1.0	4	1.1	3	1.0	14	1.1
Critical care center	6	1.8	2	0.7	2	0.5	3	1.0	13	1.0
Patient room	148	44.8	123	40.5	152	40.5	118	41.1	541	41.7
Ward treatment room	4	1.2	5	1.6	5	1.3	4	1.4	18	1.4
Operation room	61	18.5	42	13.8	73	19.5	47	16.4	223	17.2
ICU	6	1.8	13	4.3	5	1.3	6	2.1	30	2.3
CCU	1	0.3	2	0.7	0	0.0	1	0.3	4	0.3
NICU	0	0.0	3	1.0	1	0.3	1	0.3	5	0.4
Examination room	5	1.5	6	2.0	8	2.1	3	1.0	22	1.7
Catheterization laboratory	9	2.7	14	4.6	12	3.2	9	3.1	44	3.4
Radiotherapy room	2	0.6	2	0.7	2	0.5	3	1.0	9	0.7
Radiography room	8	2.4	7	2.3	12	3.2	3	1.0	30	2.3
Radioactive scanning room	0	0.0	0	0.0	1	0.3	0	0.0	1	0.1
Dialysis room	4	1.2	3	1.0	1	0.3	3	1.0	11	0.8
Delivery room	1	0.3	1	0.3	1	0.3	1	0.3	4	0.3
Rehabilitation room	1	0.3	1	0.3	2	0.5	1	0.3	5	0.4
Restroom	8	2.4	8	2.6	5	1.3	8	2.8	29	2.2
Hallway	8	2.4	6	2.0	16	4.3	14	4.9	44	3.4
Bathroom	4	1.2	8	2.6	6	1.6	3	1.0	21	1.6
Stairway	0	0.0	1	0.3	2	0.5	0	0.0	3	0.2
Unknown	3	0.9	6	2.0	3	0.8	5	1.7	17	1.3
Others	42	12.7	35	11.5	47	12.5	36	12.5	160	12.3
No choice (Note 1)	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Total	330	100.0	304	100.0	375	100.0	287	100.0	1,296	100.0

(Note 1) "No choice" means no "place of occurrence" was selected.

Fig. II-1-19 Cause of Event

Cause of Event (Note 1)	January to March		April to June		July to September		October to December		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Neglect to check	65	15.2	77	14.6	101	15.0	85	15.8	328	15.1
Neglect to observe	59	13.8	69	13.1	86	12.7	71	13.2	285	13.1
Misjudgment	43	10.0	66	12.5	86	12.7	74	13.7	269	12.4
Lack of knowledge	13	3.0	23	4.4	29	4.3	19	3.5	84	3.9
Deficiency of technique/skill	23	5.4	34	6.5	32	4.7	21	3.9	110	5.1
Delayed reporting	3	0.7	5	0.9	8	1.2	9	1.7	25	1.2
Under unusual physical condition	12	2.8	12	2.3	16	2.4	10	1.9	50	2.3
Under unusual psychological condition	11	2.6	5	0.9	8	1.2	4	0.7	28	1.3
System failure	7	1.6	12	2.3	15	2.2	13	2.4	47	2.2
Inadequate coordination	27	6.3	31	5.9	37	5.5	38	7.1	133	6.1
Inadequate documentation	5	1.2	6	1.1	9	1.3	10	1.9	30	1.4
Similarity in patient's appearance or name	0	0.0	0	0.0	1	0.1	0	0.0	1	0.0
Busy working condition	12	2.8	14	2.7	20	3.0	10	1.9	56	2.6
Problem in environment	12	2.8	14	2.7	17	2.5	15	2.8	58	2.7
Problem in the drug	3	0.7	1	0.2	3	0.4	6	1.1	13	0.6
Problem in medical device	4	0.9	3	0.6	12	1.8	9	1.7	28	1.3
Problem in other items	7	1.6	6	1.1	5	0.7	12	2.2	30	1.4
Problem in facility	13	3.0	10	1.9	14	2.1	7	1.3	44	2.0
Problem in education/training	5	1.2	32	6.1	24	3.6	19	3.5	80	3.7
Lack of explanation	16	3.7	24	4.6	29	4.3	16	3.0	85	3.9
Others	66	15.4	83	15.7	123	18.2	91	16.9	363	16.7
No choice (Note 2)	22	5.1	0	0.0	0	0.0	0	0.0	22	0.0
Total	428	100.0	527	100.0	675	100.0	539	100.0	2,169	100.0

(Note 1) "Cause of event" may be more than one.

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

Fig. II-1-20 Clinical Department

Clinical Department (Note 1)	January to March		April to June		July to September		October to December		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Internal medicine	22	5.6	22	6.1	29	6.2	25	7.2	98	6.2
Anesthesiology	11	2.5	11	3.0	14	3.0	6	1.7	42	2.7
Cardiovascular medicine	24	6.1	26	7.2	22	4.7	16	4.6	88	5.6
Neurology	8	2.0	7	1.9	13	2.8	10	2.9	38	2.4
Respiratory tract medicine	12	3.0	16	4.4	26	5.6	15	4.3	69	4.4
Gastrointestinal medicine	31	7.8	29	8.0	23	4.9	17	4.9	100	6.3
Hematology	9	2.3	7	1.9	7	1.5	6	1.7	29	1.8
Circulatory surgery	4	1.0	4	1.1	5	1.1	8	2.3	21	1.3
Allergy	1	0.3	0	0.0	0	0.0	0	0.0	1	0.1
Rheumatism	2	0.5	1	0.3	3	0.6	3	0.9	9	0.6
Pediatrics	14	3.5	13	3.6	15	3.2	17	4.9	59	3.7
General surgery	29	7.3	26	7.2	36	7.7	24	6.9	115	7.3
Orthopedics	30	7.6	26	7.2	51	10.9	23	6.6	130	8.3
Plastic surgery	7	1.8	3	0.8	3	0.6	5	1.4	18	1.1
Cosmetic surgery	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Neurosurgery	17	4.3	24	6.6	29	6.2	14	4.0	84	5.3
Respiratory surgery	15	3.8	11	3.0	10	2.1	4	1.1	40	2.5
Cardiovascular surgery	17	4.5	14	3.9	9	1.9	14	4.0	54	3.4
Pediatric surgery	3	0.8	0	0.0	3	0.6	3	0.9	9	0.6
Pain clinic	0	0.0	0	0.0	3	0.6	0	0.0	3	0.2
Dermatology	5	1.3	4	1.1	4	0.9	5	1.4	18	1.1
Urology	10	2.5	10	2.8	12	2.6	10	2.9	42	2.7
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	1	0.3	1	0.1
Gynecology/Obstetrics	6	1.5	13	3.6	16	3.4	7	2.0	42	2.7
Obstetrics	4	1.0	1	0.3	2	0.4	2	0.6	9	0.6
Gynecology	5	1.3	2	0.6	6	1.3	5	1.4	18	1.1
Ophthalmology	6	1.5	8	2.2	6	1.3	8	2.3	28	1.8
Otolaryngology	9	2.3	8	2.2	13	2.8	12	3.4	42	2.7
Psychosomatic medicine	1	0.3	0	0.0	0	0.0	0	0.0	1	0.1
Psychiatry	14	3.5	5	1.4	26	5.6	32	9.2	77	4.9
Rehabilitation	6	1.5	1	0.3	3	0.6	0	0.0	10	0.6
Radiology	10	2.5	9	2.5	13	2.8	12	3.4	44	2.8
Dentistry	2	0.5	5	1.4	2	0.4	4	1.1	13	0.8
Orthodontics	0	0.0	0	0.0	1	0.2	1	0.3	2	0.1
Pediatric dentistry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dental/oral surgery	6	1.5	4	1.1	3	0.6	8	2.3	21	1.3
Unknown	0	0	0	0.0	1	0.2	0	0.0	1	0.1
Others	50	12.6	53	14.6	58	12.4	32	9.2	193	12.3
No choice (Note 2)	6	1.5	0	0.0	0	0.0	0	0.0	6	0.4
Total	396	100.0	363	100.0	467	100.0	349	100.0	1,575	100.0

(Note 1) "Clinical department" may be more than one.

(Note 2) "No choice" means no "clinical department" was selected.

Fig. II-1-21 Years of Experience of Person Involved by Job Title (Doctor, Dentist, Nurse, Pharmacist)

Years of experience × Job title of person involved(Note 1)	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	8	23	15	5	51	0	2	1	2	5
1 year	5	2	1	8	16	0	1	0	2	3
2 years	10	5	6	8	29	1	0	0	2	3
3 years	15	9	11	9	44	0	0	2	1	3
4 years	23	8	16	11	58	1	1	1	1	4
5 years	5	11	16	7	39	1	0	0	0	1
6 years	10	15	12	14	51	0	0	0	1	1
7 years	14	10	16	11	51	0	1	0	0	1
8 years	12	14	18	8	52	0	0	2	0	2
9 years	16	14	9	9	48	0	0	0	0	0
10 years	10	14	19	14	57	0	0	0	1	1
11 to 20 years	76	83	96	63	318	3	4	1	4	12
21 to 30 years	27	23	30	29	109	1	1	0	2	4
30 years or longer	3	2	16	11	32	0	1	1	0	2
No choice(Note 2)	31	0	0	0	31	0	0	0	0	0
Total	265	233	281	207	986	7	11	8	16	42

(Note 1) 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.

(Note 2) "No choice" means no "years of experience" was selected.

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
20	16	17	19	72	1	0	0	0	1
15	19	19	16	69	0	1	1	0	2
17	12	11	12	52	0	0	0	0	0
9	14	14	21	58	0	0	0	0	0
6	12	11	12	41	0	1	1	0	2
10	6	10	13	39	0	0	0	0	0
13	9	8	7	37	0	0	0	0	0
5	5	7	1	18	0	0	1	0	1
5	3	2	5	15	0	0	0	0	0
8	5	3	6	22	0	0	0	0	0
2	7	3	3	15	0	0	0	0	0
30	31	30	42	133	0	1	3	0	4
24	15	30	16	85	0	3	0	0	3
3	2	5	9	19	1	0	0	0	1
16	0	0	0	16	0	0	0	0	0
183	156	170	182	691	2	6	6	0	14

Fig. II-1-22 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 1)	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	62	68	67	45	242	0	2	3	2	7
1 year	37	23	31	26	117	1	1	0	3	5
2 years	19	15	24	17	75	1	0	2	2	5
3 years	19	18	16	13	66	0	0	1	0	1
4 years	16	12	24	18	70	1	1	0	1	3
5 years	17	10	19	12	58	1	1	0	1	3
6 years	8	12	11	12	43	0	1	0	1	2
7 years	5	11	14	7	37	0	0	0	1	1
8 years	10	6	7	5	28	0	0	0	0	0
9 years	6	9	4	3	22	0	1	0	0	1
10 years	6	7	13	11	37	0	1	0	0	1
11 to 20 years	23	36	41	24	124	2	1	1	3	7
21 to 30 years	2	6	7	14	29	0	2	1	2	5
30 years or longer	0	0	3	0	3	0	0	0	0	0
No choice(Note 2)	35	0	0	0	35	1	0	0	0	1
Total	265	233	281	207	986	7	11	8	16	42

(Note 1) 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.

(Note 2) "No choice" means no "number of years at current department" was selected.

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
46	39	31	56	172	2	1	0	0	3
35	41	45	38	159	0	2	3	0	5
41	30	26	30	127	0	1	0	0	1
17	11	20	29	77	0	0	0	0	0
4	9	13	8	34	0	0	1	0	1
4	8	10	6	28	0	1	1	0	2
4	7	5	3	19	0	0	0	0	0
3	3	3	0	9	0	0	0	0	0
0	2	1	2	5	0	0	0	0	0
2	2	3	2	9	0	0	1	0	1
2	2	4	1	9	0	0	0	0	0
2	1	7	7	17	0	1	0	0	1
0	1	2	0	3	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0
23	0	0	0	23	0	0	0	0	0
183	156	170	182	691	2	6	6	0	14

Fig. II-1-23 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	4	4	1	10
<8 to 16 hours	3	1	2	1	7
<16 to 24 hours	1	1	1	1	4
<24 to 32 hours	5	6	9	2	22
<32 to 40 hours	4	33	12	15	64
<40 to 48 hours	65	58	83	66	272
<48 to 56 hours	30	48	59	20	157
<56 to 64 hours	29	31	42	49	151
<64 to 72 hours	20	27	29	23	99
<72 to 80 hours	7	5	7	9	28
<80 to 88 hours	8	7	15	13	43
<88 to 96 hours	7	0	2	1	10
96 hours or more	5	8	14	6	33
Unknown	8	4	2	0	14
No choice	72	0	0	0	72
Total	265	233	281	207	986
Average working hours (not including unknown/no choice)	53.8	50.9	53.9	54.3	53.2

(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-1-24 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	1	0	9	0	10
<8 to 16 hours	1	0	1	3	5
<16 to 24 hours	5	2	1	2	10
<24 to 32 hours	14	12	15	14	55
<32 to 40 hours	49	41	41	54	185
<40 to 48 hours	75	77	81	82	315
<48 to 56 hours	14	18	16	18	66
<56 to 64 hours	3	6	6	9	24
<64 to 72 hours	0	0	0	0	0
<72 to 80 hours	0	0	0	0	0
<80 to 88 hours	0	0	0	0	0
<88 to 96 hours	0	0	0	0	0
96 hours or more	0	0	0	0	0
Unknown	1	0	0	0	1
No choice	20	0	0	0	20
Total	183	156	170	182	691
Average working hours (not including unknown/no choice)	37.4	39.3	36.5	38.2	37.8

(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-1-25 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	91	93	122	93	399
1 time	74	64	92	74	304
2 times	17	23	23	18	81
3 times	5	10	4	4	23
4 times	1	1	1	1	4
5 times	0	1	0	0	1
6 times	0	0	1	0	1
7 times	0	0	1	0	1
Unknown	11	41	37	17	106
No choice	66	0	0	0	66
Total	265	233	281	207	986
Average number of night shifts (not including unknown/no choice)	0.68	0.78	0.68	0.66	0.70

Fig. II-1-26 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	28	27	41	34	130
1 time	54	40	37	47	178
2 times	68	55	62	70	255
3 times	13	22	18	19	72
4 times	2	3	2	5	12
5 times	0	1	0	0	1
6 times	0	0	0	0	0
7 times	0	0	0	0	0
Unknown	1	8	10	7	26
No choice	17	0	0	0	17
Total	183	156	170	182	691
Average number of night shifts (not including unknown/no choice)	1.44	1.57	1.39	1.51	1.48

Fig. II-1-27 Cause of Event and Summary of Event

Cause of event[(Note 1)] × 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	5	2	0	5	12	10	16	16	11	53	2	2	0	1	5	31	32	46	38	147	5	3	4	4	16
Neglect to observe	0	0	0	0	0	2	4	1	2	9	0	0	0	0	0	16	18	21	16	71	2	2	1	2	7
Misjudgment	1	1	0	2	4	4	1	3	4	12	0	1	0	0	1	21	28	31	25	105	2	2	2	3	9
Lack of knowledge	0	0	0	3	3	7	4	5	2	18	0	0	0	0	0	10	8	10	9	37	1	2	1	2	6
Deficiency of technique/skill	0	0	0	2	2	0	2	0	1	3	0	0	0	0	0	9	17	15	9	50	0	0	0	1	1
Delayed reporting	0	0	0	1	1	1	0	0	0	1	0	1	0	0	1	1	2	2	1	6	1	0	0	0	1
Under unusual physical condition	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	5	5	5	6	21	0	1	0	1	2
Under unusual psychological condition	1	0	0	0	1	1	0	1	0	2	0	1	0	0	1	2	0	3	2	7	1	0	0	0	1
System failure	0	0	0	1	1	2	4	3	0	9	0	1	0	0	1	3	2	4	6	15	0	1	1	1	3
Inadequate coordination	3	0	0	4	7	0	5	3	5	13	1	1	0	1	3	8	10	12	12	42	1	0	0	1	2
Inadequate documentation	0	0	0	0	0	3	2	0	1	6	0	1	0	0	1	1	1	1	1	4	1	0	0	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	1	0	1	0	0	0	0	0
Busy working condition	0	0	0	0	0	0	5	3	0	8	0	0	0	0	0	2	3	5	4	14	0	0	0	0	0
Problem in environment	0	0	0	0	0	1	1	0	1	3	0	1	0	0	1	2	1	1	3	7	0	0	0	1	1
Problem in the drug	0	0	0	1	1	0	1	2	2	5	0	0	0	0	0	1	0	1	2	4	0	0	0	0	0
Problem in medical device	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	4	0	2	3	9	8	1	5	3	17
Problem in other items	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	2	5	11	2	0	0	1	3
Problem in facility	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	2	4	0	1	0	0	1
Problem in education/training	0	0	0	3	3	4	5	4	1	14	0	1	0	0	1	5	6	5	4	20	0	2	0	1	3
Lack of explanation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	5	7	3	22	2	0	0	1	3
Others	0	0	0	0	0	1	4	4	2	11	0	2	0	0	2	36	30	52	26	144	4	2	1	1	8
No choice[(Note 2)]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10	0	0	0	0	0
Total	11	3	0	22	36	36	54	46	32	168	3	13	0	2	18	177	171	226	177	751	30	17	15	23	85

(Note 1) "Cause of event" may have been more than one.

(Note 2) "No choice" means no "cause of event" or "summary of event" was selected.

Medical equipment, etc.										Examination					Nursing care					Others					No choice[(Note 2)]					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	January to March	April to June	July to September	October to December	Total	
9	3	8	3	23	1	0	0	1	2	3	6	3	3	15	7	12	17	12	48	14	1	7	7	29	0	0	0	0	0	350
12	5	3	5	25	0	0	0	0	0	1	2	2	0	5	27	30	45	34	136	10	8	13	12	43	0	0	0	0	0	296
7	5	7	3	22	0	0	0	0	0	3	3	4	0	10	28	15	29	30	102	7	10	10	7	34	1	0	0	0	1	300
2	3	3	0	8	0	0	0	0	0	1	0	2	0	3	3	4	6	1	14	0	2	2	2	6	0	0	0	0	0	95
3	2	5	1	11	0	0	0	0	0	3	4	3	0	10	3	8	8	5	24	1	1	1	2	5	0	0	0	0	0	106
2	1	0	0	3	0	0	0	0	0	0	0	0	0	0	3	1	4	5	13	0	0	2	2	4	0	0	0	0	0	30
0	0	1	0	1	0	0	0	0	0	2	1	0	0	3	4	2	5	2	13	3	3	4	1	11	0	0	0	0	0	52
0	0	1	0	1	0	0	0	0	0	0	0	1	0	1	1	1	1	0	3	1	3	1	2	7	0	0	0	0	0	24
0	1	0	1	2	0	0	0	0	0	0	2	1	2	5	0	1	2	0	3	2	0	4	2	8	0	0	0	0	0	47
0	2	1	0	3	0	0	0	0	0	0	1	1	1	3	14	7	13	12	46	3	5	7	2	17	0	0	0	0	0	136
0	0	0	1	1	0	0	0	0	0	0	0	1	0	1	1	2	5	4	12	1	0	2	3	6	0	0	0	0	0	32
0	0	0	0	0	0	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	0	0	0	0	1	0	2	0	3	7	5	6	2	20	5	1	4	3	13	0	0	0	0	0	59
1	0	1	0	2	0	0	0	0	0	0	1	0	0	1	12	7	8	8	35	5	3	7	2	17	0	0	0	0	0	67
0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	13
3	0	1	1	5	2	0	0	0	2	0	0	1	1	2	0	1	1	0	2	0	0	2	1	3	0	0	0	0	0	41
1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	1	2	2	2	7	0	1	1	3	5	0	0	0	0	0	28
0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	7	4	6	2	19	3	5	8	3	19	0	0	0	0	0	45
0	2	2	1	5	0	0	0	0	0	2	5	1	0	8	7	5	9	7	28	4	6	3	2	15	0	0	0	0	0	97
0	0	0	0	0	0	0	0	0	0	1	2	2	0	5	18	14	16	10	58	4	3	4	2	13	0	0	0	0	0	101
4	3	1	3	11	0	1	1	0	2	3	4	10	4	21	10	12	29	27	78	27	25	25	28	105	0	0	0	0	0	382
0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	4	0	0	0	4	0	0	0	0	0	15
44	27	34	21	126	3	1	1	1	6	23	31	34	11	99	154	133	212	164	663	94	77	107	86	364	1	0	0	0	1	2,317

Fig. II-1-28 Situation and Potential of Residual Disability

	Death					High				
	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	1	0	1
Subcutaneous/intramuscular injection	0	0	0	0	0	0	0	0	0	0
Intravenous injection	0	0	0	0	0	1	0	1	1	3
Arterial injection	0	0	0	0	0	0	0	0	0	0
Peripheral intravenous drop	1	0	0	0	1	0	1	0	0	1
Central venous injection	1	0	0	0	1	1	0	0	0	1
Oral administration	1	0	0	0	1	0	1	0	1	2
Nose drop/eye drop/ear drop	0	0	0	0	0	0	0	0	0	0
Other drug prescription/administration	0	1	0	0	1	1	2	0	0	3
Oral drug dispensing/management	0	0	0	0	0	0	0	0	0	0
Injection dispensing/management	0	0	0	0	0	0	0	0	0	0
Dispensing/management, others	0	1	0	0	1	0	0	0	0	0
Related to blood transfusion										
Pre-transfusion testing	0	0	0	0	0	0	0	0	0	0
Blood transfusion	0	1	0	0	1	0	1	0	0	1
Blood transfusion, others	0	0	0	0	0	0	0	0	0	0
Related to treatment/procedure										
Craniotomy	1	1	0	0	2	0	1	2	0	3
Thoracotomy	0	0	0	1	1	3	3	2	0	8
Cardiotomy	1	0	1	0	2	1	0	0	1	2
Laparotomy	4	1	0	1	6	1	1	2	2	6
Extremities	0	0	1	0	1	1	1	1	0	3
Endoscopic surgery	1	0	0	0	1	1	1	2	1	5
Other surgery	1	0	0	0	1	0	7	6	0	13
Preparation for surgery	0	0	0	0	0	0	1	0	0	1
Preoperative procedure	1	0	0	0	1	0	0	1	0	1
Postoperative procedure	1	1	1	1	4	1	2	0	0	3
Surgery, others	1	0	1	0	2	4	0	1	1	6
General anesthesia (inhalation anesthesia and intravenous anesthesia)	0	0	0	0	0	0	0	0	0	0
Local anesthesia	0	0	0	0	0	0	0	0	1	1
Inhalation anesthesia	0	0	0	0	0	0	0	0	0	0
Intravenous anesthesia	0	0	0	0	0	0	0	1	0	1
Vertebral/epidural anesthesia	0	0	0	0	0	0	0	0	0	0
Anesthesia, others	0	0	0	0	0	0	0	0	0	0
Caesarean section	1	0	0	0	1	1	0	0	0	1
Delivery and artificial abortion, others	0	1	1	0	2	0	0	1	2	3
Blood purification (including hemodialysis)	1	1	0	0	2	0	0	0	0	0
IVR (ex. angiocatheter)	0	1	0	0	1	1	0	2	1	4
Radiotherapy	0	0	0	0	0	0	0	0	0	0
Rehabilitation	0	0	0	0	0	0	0	0	0	0
Invasive dental treatment	0	0	0	0	0	0	0	0	0	0

Low					Unknown					No choice[(Note 1)]					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	
															93
3	0	1	1	5	0	0	0	0	0	0	0	0	0	0	6
0	1	2	1	4	1	0	0	1	2	0	0	0	0	0	6
4	1	1	5	11	2	1	2	0	5	0	0	0	0	0	19
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
5	3	0	4	12	0	3	2	0	5	0	0	0	0	0	19
0	1	1	0	2	1	1	1	0	3	0	0	0	0	0	7
1	3	3	3	10	0	1	1	1	3	0	0	0	0	0	16
0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
0	3	0	0	3	0	0	0	0	0	0	0	0	0	0	7
0	2	1	0	3	0	0	2	1	3	0	0	0	0	0	6
0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
0	0	1	0	1	0	0	0	1	1	0	0	0	0	0	3
															7
0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
1	0	0	1	2	1	1	0	0	2	0	0	0	0	0	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
															402
0	4	1	1	6	0	1	1	0	2	0	0	0	0	0	13
3	2	0	1	6	0	1	1	2	4	0	0	0	0	0	19
3	0	2	1	6	0	0	0	2	2	0	0	0	0	0	12
9	6	9	4	28	0	2	0	0	2	0	0	0	0	0	42
0	0	3	1	4	0	0	0	0	0	0	0	0	0	0	8
3	3	5	5	16	1	0	0	1	2	1	0	0	0	1	25
6	3	8	10	27	1	2	6	3	12	0	0	0	0	0	53
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	4
3	1	3	1	8	1	0	1	0	2	0	0	0	0	0	17
1	4	7	4	16	3	0	2	0	5	0	0	0	0	0	29
1	0	1	0	2	1	0	1	0	2	0	0	0	0	0	4
0	1	0	0	1	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	1
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	1	0	1	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
2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	6
1	2	0	1	4	0	0	0	0	0	0	0	0	0	0	9
2	1	1	3	7	0	0	1	0	1	0	0	0	0	0	10
3	5	3	4	15	0	1	1	3	5	0	0	0	0	0	25
0	1	1	1	3	1	0	0	1	2	0	0	0	0	0	5
0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	2
0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1

	Death					High				
	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
Endoscopic treatment	3	1	1	0	5	1	1	1	0	3
Treatment, others	0	0	0	0	0	1	2	5	0	8
Central venous line	1	0	1	0	2	0	0	0	0	0
Peripheral venous line	1	0	0	0	1	0	0	0	0	0
Catheter for blood purification	0	0	0	0	0	0	0	0	0	0
Feeding tube (NG, ED)	0	0	0	0	0	1	0	0	1	2
Urethral catheter	0	0	0	0	0	0	0	0	0	0
Drainage procedure	0	0	0	0	0	1	1	0	0	2
Wound care	0	0	1	0	1	0	2	0	0	2
Tube placement, others	0	1	0	0	1	0	0	0	0	0
Tracheal intubation	0	0	0	0	0	0	0	1	0	1
Tracheotomy	1	0	0	0	1	0	0	0	0	0
Cardiac compression	0	0	0	0	0	0	0	0	0	0
Oxygen therapy	0	0	0	0	0	0	0	0	0	0
Emergency procedure, others	0	0	0	1	1	0	0	0	0	0
Related to use/management of medical equipment (device)										
Mechanical ventilator	0	0	0	2	2	0	1	1	0	2
Oxygen therapy equipment	0	0	0	0	0	0	1	0	0	1
Oxygenator	0	0	0	0	0	0	0	0	0	0
Defibrillator	0	0	0	0	0	0	0	0	0	0
Pace maker	1	0	0	0	1	0	0	0	0	0
Infusion/transfusion pump	0	0	0	0	0	0	0	0	1	1
Blood purification device	0	0	0	0	0	0	0	0	0	0
ECG, blood pressure monitor	0	0	0	0	0	0	0	0	0	0
Pulse oxymeter	0	0	0	0	0	0	0	0	0	0
Use/management of medical equipment (device), others	2	0	0	0	2	2	1	0	0	3
Related to use/management of drainage tube or other tube										
Central venous line	1	1	1	1	4	0	0	0	1	1
Peripheral venous line	0	0	0	0	0	0	0	0	0	0
Tracheal tube	0	1	0	0	1	0	0	2	0	2
Tracheal cannula	1	0	0	1	2	1	0	0	0	1
Feeding tube (NG, ED)	0	0	0	0	0	0	0	0	0	0
Urethral catheter	0	0	0	0	0	0	0	0	0	0
Chest drainage tube	0	0	0	0	0	0	1	0	0	1
Abdominal drainage tube	0	0	0	0	0	0	0	0	0	0
Ventricular/cisternal drainage tube	0	0	0	0	0	1	0	0	0	1
Subcutaneous continuous suction drainage tube	0	0	0	0	0	0	0	0	0	0
Epidural catheter	0	0	0	0	0	0	0	0	0	0
Catheter/line for blood purification	0	0	1	0	1	0	0	1	0	1
Use/management of drainage tube or other tube, others	0	0	0	0	0	1	1	1	1	4

Low					Unknown					No choice[(Note 1)]					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	
4	3	4	4	15	0	0	0	3	3	0	0	0	0	0	26
3	6	4	4	17	0	3	3	2	8	0	0	0	0	0	33
5	2	4	1	12	2	0	1	1	4	0	0	0	0	0	18
0	1	1	1	3	0	0	0	0	0	1	0	0	0	1	5
0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1
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	1	1	1	3	0	0	0	1	1	0	0	0	0	0	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
3	2	3	1	9	0	0	2	0	2	0	0	0	0	0	12
0	0	1	0	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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	1
															43
1	1	0	0	2	0	0	0	1	1	0	0	0	0	0	7
2	0	0	0	2	0	0	1	0	1	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	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	0	0	1	1	0	0	0	1	0	0	0	0	0	3
0	1	0	1	2	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
4	4	8	3	19	1	1	0	0	2	0	0	0	0	0	26
															84
2	0	3	0	5	4	0	1	1	6	0	0	0	0	0	16
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	1	1	4	1	0	0	0	1	0	0	0	0	0	8
1	0	0	0	1	1	0	0	1	2	0	0	0	0	0	6
1	0	3	0	4	0	1	0	0	1	0	0	0	0	0	5
1	1	0	0	2	0	0	1	0	1	0	0	0	0	0	3
2	3	1	1	7	0	2	2	0	4	0	0	0	0	0	12
1	1	0	1	3	1	0	0	0	1	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1
0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3
1	6	3	3	13	3	1	2	1	7	0	0	0	0	0	24

	Death					High				
	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	0	0	0	1	1
Sample collection, others	0	0	0	0	0	0	0	0	0	0
General imaging	0	0	0	0	0	0	0	0	0	0
MRI	0	0	0	0	0	0	0	1	0	1
Angiocatheter-aided imaging	1	0	0	0	1	0	0	1	0	1
Lower gastrointestinal imaging	0	0	0	0	0	1	0	0	0	1
Imaging, others	0	0	0	0	0	0	0	0	0	0
Upper gastrointestinal	1	0	0	0	1	0	1	2	0	3
Lower gastrointestinal	0	0	0	0	0	0	0	0	0	0
Bronchoscopy	0	0	0	0	0	0	0	0	0	0
Endoscopic examination, others	0	0	0	0	0	0	0	0	0	0
Pathological examination	0	0	0	0	0	0	0	0	0	0
Examination, others	0	0	1	0	1	0	0	0	0	0
Related to nursing care										
Endotracheal/oral suctioning	0	0	0	0	0	0	0	0	0	0
Changing position	0	0	0	0	0	0	1	1	0	2
Bed bath	0	0	0	0	0	0	0	0	0	0
Help with changing clothes	0	0	0	0	0	0	0	0	1	1
Help with eating	1	0	1	0	2	0	0	2	3	5
Help with bathing	0	0	0	1	1	1	0	0	0	1
Help with elimination	0	0	0	0	0	0	0	1	0	1
Help with moving	0	0	0	0	0	2	1	1	0	4
Transportation	0	0	0	0	0	0	0	0	0	0
Tending patient's belongings	0	0	0	0	0	1	0	0	0	1
Meal serving	0	0	0	0	0	0	0	0	0	0
Patient observation	2	0	1	0	3	0	2	3	2	7
Nursing care, others	0	2	0	2	4	1	1	0	0	2
Oral intake	0	0	1	0	1	0	1	0	1	2
While taking a walk	0	0	0	0	0	0	0	0	1	1
While moving from one place to another	0	2	1	3	6	5	3	5	2	15
While going out/sleeping out	0	0	1	1	2	0	0	0	0	0
While eating	0	0	0	0	0	0	0	1	1	2
While bathing	0	0	0	1	1	0	0	0	0	0
While excreting	0	0	0	0	0	0	0	0	2	2
While sleeping	0	1	0	3	4	1	3	0	0	4
Recuperation, others	2	0	4	1	7	0	0	2	2	4
Others	6	7	11	6	30	4	10	3	4	21
No choice(Note 1)	12	7	7	3	29	1	1	5	3	10
Total	52	33	38	29	152	43	57	63	38	201

(Note 1) "No choice" means no "situation" or "potential of residual disability" was selected.

Low					Unknown					No choice[(Note 1)]					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	
															70
0	1	4	0	5	0	0	0	0	0	0	0	0	0	0	7
1	0	1	1	3	1	2	0	0	3	0	0	0	0	0	6
0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	2
1	0	1	0	2	0	0	0	2	2	0	0	0	0	0	5
0	5	1	0	6	0	0	0	0	0	0	0	0	0	0	8
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
1	1	3	0	5	1	0	1	2	4	0	0	0	0	0	9
1	1	3	1	6	0	1	0	0	1	0	0	0	0	0	11
1	1	1	0	3	2	0	0	0	2	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	2	2	1	5	0	0	0	0	0	0	0	0	0	0	5
0	0	0	1	1	0	0	1	0	1	0	0	0	0	0	2
3	1	1	0	5	0	1	1	0	2	0	0	0	0	0	8
															365
1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	2
1	0	2	2	5	0	2	0	0	2	0	0	0	0	0	9
0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	2
0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	3
1	1	2	0	4	0	0	0	0	0	0	0	0	0	0	11
1	1	2	2	6	0	0	0	0	0	0	0	0	0	0	8
4	2	4	4	14	0	0	0	0	0	0	0	0	0	0	15
1	3	5	4	13	0	1	0	1	2	0	0	0	0	0	19
0	0	0	1	1	1	0	0	0	1	0	0	0	0	0	2
1	0	0	1	2	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
1	4	8	9	22	1	1	3	1	6	0	0	0	0	0	38
10	2	6	8	26	3	2	1	2	8	0	0	0	0	0	40
0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	4
1	0	2	1	4	0	0	0	0	0	0	0	0	0	0	5
20	14	17	18	69	4	2	3	3	12	0	0	0	0	0	102
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3
1	1	1	1	4	0	0	0	0	0	0	0	0	0	0	6
2	3	2	1	8	0	1	0	0	1	0	0	0	0	0	10
8	2	3	4	17	0	0	0	1	1	0	0	0	0	0	20
1	1	3	1	6	0	0	1	2	3	0	0	0	0	0	17
6	9	13	5	33	1	0	1	0	2	0	0	0	0	0	46
15	7	18	12	52	4	8	11	0	23	0	0	0	0	0	126
17	6	11	16	50	1	7	3	4	15	2	0	0	0	2	106
184	163	212	172	731	47	51	62	48	208	4	0	0	0	4	1,296

Fig. II-1-29 Place of Occurrence and Inpatient/Outpatient Status

Place of Occurrence × Inpatient/Outpatient Status	Inpatient					Outpatient				
	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	1	0	0	1	2	9	10	13	34
Outpatient treatment room	0	0	1	1	2	2	3	4	1	10
Outpatient lobby	0	0	0	0	0	1	0	0	0	1
Emergency room	2	0	0	1	3	2	3	4	2	11
Critical care center	6	2	2	3	13	0	0	0	0	0
Patient room	129	123	151	118	521	0	0	1	0	1
Ward treatment room	4	5	5	4	18	0	0	0	0	0
Operation room	57	41	70	46	214	0	1	3	1	5
ICU	6	13	5	6	30	0	0	0	0	0
CCU	1	2	0	1	4	0	0	0	0	0
NICU	0	3	1	1	5	0	0	0	0	0
Examination room	4	5	6	1	16	1	1	2	2	6
Catheterization laboratory	7	14	10	9	40	1	0	2	0	3
Radiotherapy room	1	2	2	3	8	1	0	0	0	1
Radiography room	5	7	8	2	22	2	0	4	1	7
Radioactive scanning room	0	0	0	0	0	0	0	1	0	1
Dialysis room	4	3	1	3	11	0	0	0	0	0
Delivery room	1	1	1	1	4	0	0	0	0	0
Rehabilitation room	1	1	1	1	4	0	0	1	0	1
Restroom	5	8	5	7	25	0	0	0	1	1
Hallway	7	6	13	14	40	0	0	3	0	3
Bathroom	3	8	6	3	20	0	0	0	0	0
Stairway	0	1	2	0	3	0	0	0	0	0
Unknown	3	5	3	5	16	0	1	0	0	1
Others	26	29	37	28	120	8	6	10	8	32
No choice(Note 1)	0	0	0	0	0	0	0	0	0	0
Total	272	280	330	258	1,140	20	24	45	29	118

(Note 1) "No choice" means no "place of occurrence" or "inpatient/outpatient status" was selected.

No choice[Note 1]					Aggregate total
January to March	April to June	July to September	October to December	Total	
0	0	0	0	0	35
0	0	0	0	0	12
0	0	0	0	0	1
0	0	0	0	0	14
0	0	0	0	0	13
19	0	0	0	19	541
0	0	0	0	0	18
4	0	0	0	4	223
0	0	0	0	0	30
0	0	0	0	0	4
0	0	0	0	0	5
0	0	0	0	0	22
1	0	0	0	1	44
0	0	0	0	0	9
1	0	0	0	1	30
0	0	0	0	0	1
0	0	0	0	0	11
0	0	0	0	0	4
0	0	0	0	0	5
3	0	0	0	3	29
1	0	0	0	1	44
1	0	0	0	1	21
0	0	0	0	0	3
0	0	0	0	0	17
8	0	0	0	8	160
0	0	0	0	0	0
38	0	0	0	38	1,296

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

Summary of Event × Potential of Residual Disability	Death					High				
	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
Drug	2	0	0	0	2	1	1	2	4	8
Blood transfusion	0	1	0	0	1	0	1	0	0	1
Treatment/procedure	24	10	6	6	46	20	27	36	13	96
Medical equipment, etc.	3	2	2	3	10	4	2	4	1	11
Medical device	1	0	0	2	3	2	2	1	0	5
Drainage tube or other tube	2	2	2	1	7	2	0	3	1	6
Dental equipment	0	0	0	0	0	0	0	0	0	0
Examination/test	2	1	3	0	6	1	2	1	1	5
Nursing care	5	5	7	9	26	6	13	15	12	46
Others	16	14	20	11	61	10	11	5	7	33
No choice(Note 1)	0	0	0	0	0	1	0	0	0	1
Total	52	33	38	29	152	43	57	63	38	201

(Note 1) "No choice" means no "summary of event" or "potential of residual disability" was selected.

Low					Unknown					No choice[Note 1]					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	
4	2	0	4	10	1	0	0	2	3	0	0	0	0	0	13
9	16	10	12	47	3	6	9	2	20	0	0	0	0	0	77
1	1	0	1	3	1	1	0	0	2	0	0	0	0	0	7
55	57	70	52	234	9	14	25	22	70	4	0	0	0	4	450
19	15	18	13	65	15	5	5	4	29	0	0	0	0	0	115
7	3	7	5	22	3	2	2	1	8	0	0	0	0	0	38
10	11	10	7	38	11	3	3	3	20	0	0	0	0	0	71
2	1	1	1	5	1	0	0	0	1	0	0	0	0	0	6
9	14	19	5	47	4	5	2	3	14	0	0	0	0	0	72
57	40	72	61	230	8	11	7	11	37	0	0	0	0	0	339
30	18	23	24	95	6	9	14	4	33	0	0	0	0	0	222
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
184	163	212	172	731	47	51	62	48	208	4	0	0	0	4	1,296

Fig. II-1-31 Place of Occurrence and Potential of Residual Disability

Place of Occurrence × Potential of Residual Disability	Death					High				
	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	1	0	1	0	1	2	1	4
Outpatient treatment room	0	0	0	1	1	1	0	0	1	2
Outpatient lobby	0	0	0	0	0	0	0	0	0	0
Emergency room	1	1	0	0	2	0	1	1	0	2
Critical care center	2	1	0	0	3	0	0	1	0	1
Patient room	24	17	16	16	73	17	22	22	18	79
Ward treatment room	0	0	1	0	1	1	1	0	0	2
Operation room	7	1	3	2	13	11	9	20	8	48
ICU	2	3	2	1	8	1	4	0	2	7
CCU	0	0	0	0	0	1	1	0	0	2
NICU	0	0	0	0	0	0	1	0	0	1
Examination room	2	1	0	0	3	1	1	2	0	4
Catheterization laboratory	0	1	1	1	3	2	2	3	0	7
Radiotherapy room	1	1	0	0	2	0	0	0	0	0
Radiography room	3	0	1	0	4	1	4	2	1	8
Radioactive scanning room	0	0	0	0	0	0	0	0	0	0
Dialysis room	1	1	0	0	2	0	0	1	0	1
Delivery room	0	1	0	0	1	0	0	1	1	2
Rehabilitation room	0	0	0	0	0	0	0	0	0	0
Restroom	2	2	1	0	5	0	2	0	0	2
Hallway	0	0	2	2	4	1	2	1	2	6
Bathroom	0	0	0	2	2	1	1	0	0	2
Stairway	0	0	0	0	0	0	0	1	0	1
Unknown	0	0	0	0	0	0	1	0	0	1
Others	7	3	10	4	24	5	4	6	4	19
No choice(Note 1)	0	0	0	0	0	0	0	0	0	0
Total	52	33	38	29	152	43	57	63	38	201

(Note 1) "No choice" means no "place of occurrence" or "potential of residual disability" was selected.

Low					Unknown					No choice[Note 1]					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	
1	5	6	7	19	1	4	1	5	11	0	0	0	0	0	35
1	3	4	0	8	0	0	1	0	1	0	0	0	0	0	12
1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
3	1	3	3	10	0	0	0	0	0	0	0	0	0	0	14
4	1	0	3	8	0	0	1	0	1	0	0	0	0	0	13
84	62	88	68	302	23	22	26	16	87	0	0	0	0	0	541
2	4	3	3	12	0	0	1	1	2	1	0	0	0	1	18
34	25	39	28	126	8	7	11	9	35	1	0	0	0	1	223
3	6	2	3	14	0	0	1	0	1	0	0	0	0	0	30
0	1	0	0	1	0	0	0	1	1	0	0	0	0	0	4
0	2	1	1	4	0	0	0	0	0	0	0	0	0	0	5
2	2	5	2	11	0	2	1	1	4	0	0	0	0	0	22
6	10	5	6	27	0	1	3	2	6	1	0	0	0	1	44
0	1	2	2	5	1	0	0	1	2	0	0	0	0	0	9
2	1	5	1	9	2	2	4	1	9	0	0	0	0	0	30
0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
2	2	0	3	7	1	0	0	0	1	0	0	0	0	0	11
1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4
1	1	2	1	5	0	0	0	0	0	0	0	0	0	0	5
5	4	4	7	20	1	0	0	1	2	0	0	0	0	0	29
6	4	12	9	31	1	0	1	1	3	0	0	0	0	0	44
3	6	6	1	16	0	1	0	0	1	0	0	0	0	0	21
0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	3
3	1	3	5	12	0	4	0	0	4	0	0	0	0	0	17
20	20	20	19	79	9	8	11	9	37	1	0	0	0	1	160
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
184	163	212	172	731	47	51	62	48	208	4	0	0	0	4	1,296

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

	Death					High				
	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	0	0	0
Overdose	1	0	0	0	1	1	0	1	0	2
Dosing speed too fast	0	0	0	0	0	0	0	0	0	0
Patient misidentification	0	0	0	0	0	0	0	0	0	0
Drug mix-up	0	0	0	0	0	0	0	0	1	1
Wrong dosing method	0	0	0	0	0	0	0	0	0	0
Drug prescription/administration, others	1	1	0	0	2	2	3	1	1	7
Dispensing error (wrong dose/number)	0	0	0	0	0	0	0	0	0	0
Dispensing/drug management, others	0	0	0	0	0	0	0	0	0	0
Drug/blood product management, others	0	1	0	0	1	0	1	0	0	1
Related to blood transfusion										
Cross-match error	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
Transfusion testing, others	0	0	0	0	0	0	0	0	0	0
Irradiation of blood products, blood transfusion, others	0	1	0	0	1	0	1	0	0	1
Related to treatment/procedure										
Patient misidentification	0	0	0	0	0	0	0	0	0	0
Wrong site treatment/procedure	1	0	0	0	1	0	1	0	0	1
Wrong examination/treatment/ procedure, others	0	0	0	0	0	0	0	0	0	0
Wrong method (technique)	2	1	0	0	3	1	3	3	2	9
Neglected/forgotten treatment/procedure	0	0	0	0	0	0	0	0	0	0
Unnecessary treatment/procedure	0	0	0	0	0	0	0	0	0	0
Wrong patient position	0	0	0	0	0	0	0	0	0	0
Wrong examination/treatment, others	3	0	0	1	4	1	4	1	0	6
Aspiration	0	0	0	0	0	1	0	0	0	1
Retained foreign object	0	0	0	0	0	0	0	1	0	1
Treatment/procedure, others	13	7	8	3	31	15	15	23	8	61
Use/management of medical equipment (device)										
Assembly	0	0	0	0	0	0	1	0	0	1
Forgot to set up/turn on power	0	0	0	0	0	0	0	0	0	0
Malfunction	0	0	0	0	0	1	0	0	0	1
Lack of knowledge	0	0	0	0	0	0	0	0	0	0
Forgot to set alarm	0	0	0	0	0	0	0	0	0	0
Range of alarm setup	0	0	0	0	0	0	0	0	0	0
Neglect in inspection/management before or during device operation	0	0	0	0	0	0	1	0	0	1
Error in sterilization/cleaning technique	0	0	0	0	0	0	0	0	0	0
Breakage	1	0	0	0	1	0	0	0	0	0
Use/management of medical equipment (device), others	2	0	0	2	4	1	1	1	1	4

Low					Unknown					No choice[(Note 1)]					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	
															92
1	1	1	0	3	1	0	0	0	1	0	0	0	0	0	4
3	4	1	5	13	2	2	2	3	9	0	0	0	0	0	25
0	0	1	0	1	0	2	1	0	3	0	0	0	0	0	4
3	2	1	0	6	0	0	1	0	1	0	0	0	0	0	7
3	1	0	1	5	0	1	2	0	3	0	0	0	0	0	9
1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	2
1	4	3	8	16	1	1	1	0	3	0	0	0	0	0	28
0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1
0	2	2	0	4	0	0	1	1	2	0	0	0	0	0	6
1	1	1	0	3	0	0	1	0	1	0	0	0	0	0	6
															7
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
1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	2
0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	4
															402
0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	2
2	2	3	3	10	0	1	0	1	2	0	0	0	0	0	14
0	1	2	0	3	2	0	1	0	3	0	0	0	0	0	6
9	3	16	6	34	1	0	2	2	5	0	0	0	0	0	51
0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	2
1	0	1	0	2	1	0	0	1	2	0	0	0	0	0	4
1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	2
2	6	4	5	17	0	0	0	2	2	0	0	0	0	0	29
2	1	1	0	4	1	0	1	1	3	0	0	0	0	0	8
10	9	5	11	35	0	2	7	2	11	0	0	0	0	0	47
26	28	33	24	111	4	8	8	12	32	2	0	0	0	2	237
															50
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	1	0	1	0	0	0	1	1	0	0	0	0	0	3
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	0	0	0	0	0	0	0	0	0
1	1	2	4	8	0	1	1	0	2	0	0	0	0	0	11
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	0	2	0	4	0	0	0	0	0	0	0	0	0	0	5
6	5	3	1	15	3	2	0	0	5	0	0	0	0	0	28

	Death					High				
	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	1	0	1	0	0	0	0	0
Self-removal	0	0	1	0	1	0	0	0	0	0
Spontaneous dislodgment	0	0	0	0	0	0	0	0	0	0
Disconnection	0	0	0	0	0	1	0	1	1	3
Blockage	1	0	0	0	1	1	0	0	0	1
Breakage/severance	0	0	0	0	0	0	0	0	0	0
Wrong connection	0	0	0	0	0	0	0	0	0	0
Air bubble in tube	0	0	0	0	0	0	0	0	0	0
Use/management of drainage tube or other tube, others	1	2	0	2	5	1	2	3	1	7
Related to examination										
Patient misidentification	0	0	0	0	0	0	0	0	0	0
Wrong examination/evaluation technique	1	0	0	0	1	0	1	0	0	1
Error in sample collection	0	0	0	0	0	0	0	0	1	1
Sample misidentification	0	0	0	0	0	0	0	0	0	0
Lost sample	0	0	0	0	0	0	0	0	0	0
Sample contamination	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
Preparation of examination device/ equipment	0	0	0	0	0	0	0	0	0	0
Result reporting	0	0	0	0	0	0	0	0	0	0
Examination, others	1	1	1	0	3	1	0	4	0	5
Related to nursing care										
Fall	1	2	2	3	8	6	6	5	7	24
Fall from bed	0	1	1	0	2	1	0	2	0	3
Collision	0	0	0	0	0	0	0	0	0	0
Restraint	0	0	0	0	0	0	0	0	0	0
Severe decubitus (involving muscle layer, Stage III/IV)	0	0	0	0	0	1	0	1	1	3
Aspiration	2	0	1	1	4	0	1	3	5	9
Accidental ingestion	0	0	0	0	0	0	0	0	0	0
Nursing care/recuperation, others	2	2	3	6	13	3	5	4	2	14
Transportation, others	0	0	1	0	1	0	0	1	0	1
Going out/staying out without notice	0	0	0	1	1	0	0	0	0	0
Self medication, others	0	0	0	1	1	0	0	0	0	0
Meal/nutrition, others	0	0	1	0	1	0	0	0	0	0
Others	6	7	11	6	30	4	10	3	4	21
No choice(Note 1)	13	7	7	3	30	1	1	5	3	10
Total	52	33	38	29	152	43	57	63	38	201

(Note 1) "No choice" means no "details of event" or "potential of residual disability" was selected.

Low					Unknown					No choice[(Note 1)]					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	1	0	1	2	0	0	0	0	0	0	0	0	0	0	3
2	4	0	1	7	4	1	0	1	6	0	0	0	0	0	14
0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	3
2	0	1	1	4	0	0	1	0	1	0	0	0	0	0	8
0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	3
2	1	0	1	4	3	1	2	0	6	0	0	0	0	0	10
1	1	1	0	3	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
3	7	7	2	19	3	2	2	2	9	0	0	0	0	0	40
															69
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	3	1	1	6	0	1	0	0	1	0	0	0	0	0	9
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
0	0	0	1	1	1	0	1	0	2	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	1	1	2	0	0	1	0	1	0	0	0	0	0	3
6	10	16	2	34	2	3	1	4	10	0	0	0	0	0	52
															371
40	27	37	34	138	4	3	4	7	18	0	0	0	0	0	188
4	3	4	3	14	1	1	1	0	3	0	0	0	0	0	22
1	0	2	0	3	0	1	0	0	1	0	0	0	0	0	4
0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1
7	3	5	7	22	0	2	0	0	2	0	0	0	0	0	27
0	3	3	1	7	0	0	0	0	0	0	0	0	0	0	20
0	0	1	0	1	1	0	0	0	1	0	0	0	0	0	2
10	9	14	15	48	1	2	4	4	11	0	0	0	0	0	86
1	0	1	2	4	1	0	0	0	1	0	0	0	0	0	7
1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	3
2	0	1	2	5	2	0	0	0	2	0	0	0	0	0	8
0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	3
12	7	18	11	48	3	6	11	0	20	0	0	0	0	0	119
11	6	11	16	44	2	7	3	4	16	2	0	0	0	2	102
184	163	212	172	731	47	51	62	48	208	4	0	0	0	4	1,296

Fig. II-1-33 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	1	1	0	1	1	2	4	0	0	0	0	0	0	7	5	10	22	1	1	0	0	2
Outpatient treatment room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	3	2	9	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	1	1	0	1	0	1	2	0	0	0	0	0	2	2	3	0	7	0	0	0	0	0
Critical care center	0	0	0	1	1	1	0	0	1	2	0	0	0	0	0	3	0	1	1	5	0	0	0	0	0
Patient room	5	0	0	2	7	10	9	13	8	40	1	1	0	0	2	25	25	25	12	87	3	1	1	2	7
Ward treatment room	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	4	0	2	2	8	0	1	0	0	1
Operation room	0	0	0	0	0	0	1	2	1	4	0	1	0	1	2	43	35	60	40	178	6	1	8	3	18
ICU	0	1	0	0	1	1	1	0	2	4	0	0	0	0	0	3	5	2	1	11	1	0	0	1	2
CCU	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0
NICU	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	1	3	0	0	0	0	0
Examination room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	3	2	1	10	0	0	0	0	0
Catheterization laboratory	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	7	9	7	5	28	1	0	0	1	2
Radiotherapy room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	2	2	7	0	0	0	0	0
Radiography room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	2	7	2	14	0	1	0	0	1
Radioactive scanning room	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
Dialysis room	0	0	0	0	0	1	1	0	0	2	1	0	0	0	1	1	1	0	3	5	0	0	0	0	0
Delivery room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	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	2	0	2	0	0	0	0	0
Restroom	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
Hallway	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0
Bathroom	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	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	0	1	0	0	1	0	0	0	0	0
Others	0	0	0	0	0	2	7	5	2	16	0	2	0	0	2	10	10	12	9	41	1	2	1	1	5
No choice(Note 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
Total	5	2	0	6	13	15	23	21	18	77	2	4	0	1	7	112	108	137	93	450	13	7	10	8	38

(Note 1) "No choice" means no "place of occurrence" or "summary of event" was selected.

Medical equipment, etc.										Examination					Nursing care					Others					No choice					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	January to March	April to June	July to September	October to December	Total	
0	0	1	0	1	1	0	0	0	1	0	1	3	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	35
0	0	1	0	1	0	0	0	0	0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
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	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0	0	0	1	1	1	0	0	0	1	0	0	0	0	0	14
0	1	0	0	1	0	0	0	0	0	1	0	0	0	1	1	1	0	0	2	0	0	1	0	1	0	0	0	0	0	13
19	10	13	7	49	0	0	0	0	0	2	2	2	1	7	46	47	69	56	218	36	28	29	30	123	1	0	0	0	1	541
0	1	0	1	2	0	0	0	0	0	0	1	0	0	1	0	0	2	0	2	0	1	1	0	2	0	0	0	0	0	18
3	1	1	0	5	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	7	3	2	2	14	0	0	0	0	0	223
0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	1	2	1	0	4	0	4	1	1	6	0	0	0	0	0	30
1	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	4
0	0	0	0	0	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	5
0	0	0	0	0	0	1	0	0	1	1	2	5	2	10	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	22
0	0	0	0	0	0	0	0	0	0	0	5	4	2	11	0	0	0	0	0	1	0	1	0	2	0	0	0	0	0	44
0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	9
0	0	1	1	2	0	0	0	0	0	5	4	4	0	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30
0	0	0	0	0	0	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	0	0	1	0	1	1	1	0	0	2	0	0	0	0	0	11
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	2	0	0	0	1	1	0	0	0	0	0	5
0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	6	4	4	6	20	0	3	1	1	5	0	0	0	0	0	29
1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	4	5	9	12	30	3	0	6	2	11	0	0	0	0	0	44
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	6	4	2	16	0	1	2	1	4	0	0	0	0	0	21
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	3
0	1	0	0	1	0	0	0	1	1	0	0	0	0	0	3	0	2	4	9	0	4	1	0	5	0	0	0	0	0	17
1	1	0	1	3	1	0	1	0	2	4	5	5	4	18	10	2	7	12	31	13	6	16	7	42	0	0	0	0	0	160
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
25	16	18	12	71	3	1	1	1	6	16	22	25	9	72	76	69	101	93	339	62	52	62	46	222	1	0	0	0	1	1,296

[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 2006** made by medical institutions subject to reporting requirement between January 1 2006 and March 31 2007, 2006 is shown **by month of occurrence** below.

Fig. II-1-34 Month of Occurrence

Month of occurrence		Number of events
2006	January	97
	February	118
	March	92
	April	108
	May	98
	June	123
	July	122
	August	132
	September	113
	October	86
	November	90
	December	83
	No choice(Note 1)	1
Total		1,263

(Note 1) "No choice" means no "month of occurrence" was selected.

Fig. II-1-35 Day of Occurrence and Weekday/Holiday Category

Day of occurrence	Weekday						Holiday						No choice(Note 1)						Aggregate total
	January to March	April to June	July to September	October to December	No choice	Total	January to March	April to June	July to September	October to December	No choice	Total	January to March	April to June	July to September	October to December	No choice	Total	
Mon.	34	60	42	53	0	189	4	0	4	2	0	10	1	0	0	0	0	1	200
Tue.	60	65	75	47	0	247	1	0	0	0	0	1	1	0	0	0	0	1	249
Wed.	47	44	55	40	0	186	0	2	0	0	0	2	0	0	0	0	0	0	188
Thu.	60	55	59	38	0	212	0	0	0	0	0	0	0	0	0	0	0	0	212
Fri.	59	45	59	46	0	209	0	2	1	1	0	4	1	0	0	0	0	1	214
Sat.	8	9	6	5	0	28	11	21	28	17	0	77	0	0	0	0	0	0	105
Sun.	0	0	0	0	0	0	17	26	38	10	0	91	1	0	0	0	0	1	92
No choice(Note 1)	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	2	3
Total	269	278	296	229	0	1,072	33	51	71	30	0	185	5	0	0	0	1	6	1,263

(Note 1) "No choice" means no "day of occurrence" or "weekday/holiday category" was selected.

Fig. II-1-36 Time of Occurrence

Time of occurrence	Number of events					
	January to March	April to June	July to September	October to December	No choice	Aggregate total
0:00 – before 2:00	16	15	9	11	0	51
2:00 – before 4:00	7	11	8	10	0	36
4:00 – before 6:00	16	15	10	6	0	47
6:00 – before 8:00	17	17	21	19	0	74
8:00 – before 10:00	28	30	28	18	0	104
10:00 – before 12:00	52	56	67	41	0	216
12:00 – before 14:00	30	31	39	39	0	139
14:00 – before 16:00	47	60	60	34	0	201
16:00 – before 18:00	37	36	40	30	0	143
18:00 – before 20:00	17	21	33	13	0	84
20:00 – before 22:00	13	16	18	18	0	65
22:00 – before 24:00	11	4	16	8	0	39
Time unknown	13	17	18	12	0	60
No choice(Note 1)	3	0	0	0	1	4
Total	307	329	367	259	1	1,263

(Note 1) "No choice" means no "time of occurrence" was selected.

Fig. II-1-37 Patient Age

Number of patients	Patient age	Number of events						Inpatient					
		January to March	April to June	July to September	October to December	No choice	Total	January to March	April to June	July to September	October to December	No choice	Total
1 patient	0 to 9	9	17	15	18	0	59	8	15	15	16	0	54
	10s	7	10	11	5	0	33	7	9	7	5	0	28
	20s	8	15	20	11	0	54	6	14	17	10	0	47
	30s	14	17	19	15	0	65	11	15	18	12	0	56
	40s	18	24	37	16	0	95	17	22	29	14	0	82
	50s	36	47	48	36	0	167	30	42	41	35	0	148
	60s	54	65	63	48	0	230	53	57	58	43	0	211
	70s	70	85	91	60	0	306	67	77	84	57	0	285
	80s	40	40	53	44	0	177	33	38	48	41	0	160
	90 or above	6	5	5	5	0	21	6	5	4	5	0	20
	Total	262	325	362	258	0	1,207	238	294	321	238	0	1,091
2 patients or more	Total	6	4	5	1	1	17	4	3	4	0	0	11
No choice(Note 1)		39	0	0	0	0	39	19	0	0	0	0	19
Aggregate total		307	329	367	259	1	1,263	261	297	325	238	0	1,121

(Note 1) "No choice" means no "patient age" was selected.

Fig. II-1-38 Sex of Patients

Number of patients	Sex	Number of events					
		January to March	April to June	July to September	October to December	No choice (Note 1)	Total
1 patient	Male	146	163	175	136	0	620
	Female	109	162	187	122	0	580
	No choice(Note 1)	7	0	0	0	0	7
	Total	262	325	362	258	0	1207
2 patients or more	Total	6	4	5	1	1	17
No choice (Note 1)		39	0	0	0	0	39
Aggregate total		307	329	367	259	1	1,263

(Note 1) "No choice" means no "sex of patient" was selected.

Fig. II-1-39 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	No choice (Note 1)	Total
Inpatient	Duration: 0 to 31 days	188	207	218	150	0	763
	Duration: 32 days or longer	65	81	103	80	0	329
	No choice(Note 1)	8	9	4	8	0	29
	Total	261	297	325	238	0	1,121
Outpatient	Initial visit	4	1	4	0	0	9
	Follow-up visit	15	31	38	21	1	106
	Total	19	32	42	21	1	115
No choice(Note 1)		27	0	0	0	0	27
Aggregate total		307	329	367	259	1	1,263

(Note 1) "No choice" means no "inpatient/outpatient status" or "duration of hospitalization" was selected.

Fig. II-1-40 Person Who Identified Event

Person who identified event	Number of events					
	January to March	April to June	July to September	October to December	No choice (Note 1)	Total
Medical staff	263	282	306	221	1	1,073
Patient himself/herself	10	6	21	13	0	50
Patient's family/caregiver	6	9	6	8	0	29
Other patient	9	8	14	3	0	34
Others	14	24	19	14	0	71
No choice(Note 1)	5	0	1	0	0	6
Total	307	329	367	259	1	1,263

(Note 1) "No choice" means no "person who identified event" was selected.

Fig. II-1-41 Job Title of Person Involved

Job title of person involved (Note 1)	Number of events					
	January to March	April to June	July to September	October to December	No choice (Note 2)	Total
Doctor	270	266	261	187	1	985
Dentist	17	13	2	7	0	39
Nurse	168	170	170	174	0	682
Assistant nurse	6	8	13	5	0	32
Pharmacist	1	4	5	0	0	10
Clinical engineer	1	1	3	0	0	5
Midwife	1	0	0	1	0	2
Nursing assistant	2	3	0	2	0	7
Radiological technologist	3	1	7	3	0	14
Clinical technologist	2	1	4	0	0	7
Physical therapist (PT)	1	1	1	1	0	4
Occupational therapist (OT)	0	0	2	0	0	2
Medical technologist	0	0	0	0	0	0
Dental hygienist	0	0	0	0	0	0
Others	15	14	36	19	0	84
No choice(Note 2)	13	0	1	0	0	14
Total	500	482	505	399	1	1,887

(Note 1) 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.

(Note 2) "No choice" means no "job title of person involved" was selected.

Fig. II-1-42 Summary of Event

Summary of event	January to March		April to June		July to September		October to December		No choice (Note 1)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Ordering	3	1.0	2	0.6	5	1.4	1	0.4	0	0.0	11	0.9
Drug	14	4.6	22	6.7	22	6.0	13	5.0	1	100.0	72	5.7
Blood transfusion	2	0.7	3	0.9	0	0.0	3	1.2	0	0.0	8	0.6
Treatment/procedure	101	32.9	121	36.8	127	34.6	80	30.9	0	0.0	429	34.0
Medical equipment, etc.	40	13.0	19	5.8	26	7.1	25	9.7	0	0.0	110	8.7
Medical device	14	4.6	5	1.5	9	2.5	8	3.1	0	0.0	36	2.9
Drainage tube or other tube	24	7.8	13	4.0	17	4.6	16	6.2	0	0.0	70	5.5
Dental equipment	2	0.7	1	0.3	0	0.0	1	0.4	0	0.0	4	0.3
Examination/test	17	5.5	26	7.9	20	5.4	12	4.6	0	0.0	75	5.9
Nursing care	70	22.8	82	24.9	103	28.1	83	32.0	0	0.0	338	26.8
Others	60	19.5	54	16.4	64	17.4	42	16.2	0	0.0	220	17.4
Total	307	100	329	100	367	100	259	100	1	100	1,263	100

(Note 1) "No choice" means no "summary of event" was selected.

Fig. II-1-43 Potential of Residual Disability

Potential of residual disability (Note 1)	January to March		April to June		July to September		October to December		No choice (Note 3)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Death	44	14.3	38	11.6	32	8.7	29	11.2	0	0.0	143	11.3
High	45	14.7	54	16.4	56	15.3	44	17.0	0	0.0	199	15.8
Low	161	52.4	186	56.5	212	57.8	149	57.5	0	0.0	708	56.1
Unknown (Note 2)	55	17.9	51	15.5	67	18.3	37	14.3	1	100.0	211	16.7
No choice (Note 3)	2	0.7	0	0.0	0	0.0	0	0.0	0	0.0	2	0.2
Total	307	100	329	100	367	100	259	100	1	100	1,263	100

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

(Note 2) "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.

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

Fig. II-1-44 Place of Occurrence

Place of Occurrence	January to March		April to June		July to September		October to December		No choice (Note 1)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Outpatient examination room	5	1.6	15	4.6	7	1.9	9	3.5	0	0	36	2.9
Outpatient treatment room	2	0.7	2	0.6	4	1.1	2	0.8	0	0	10	0.8
Outpatient lobby	1	0.3	0	0.0	2	0.5	0	0.0	0	0	3	0.2
Emergency room	4	1.3	1	0.3	7	1.9	0	0.0	0	0	12	1.0
Critical care center	4	1.3	2	0.6	3	0.8	1	0.4	0	0	10	0.8
Patient room	135	44.0	128	38.9	162	44.1	106	40.9	0	0	531	42.0
Ward treatment room	4	1.3	4	1.2	5	1.4	2	0.8	0	0	15	1.2
Operation room	59	19.2	56	17.0	61	16.6	49	18.9	0	0	225	17.8
ICU	8	2.6	13	4.0	4	1.1	6	2.3	0	0	31	2.5
CCU	0	0.0	0	0.0	0	0.0	1	0.4	0	0	1	0.1
NICU	0	0.0	4	1.2	1	0.3	0	0.0	0	0	5	0.4
Examination room	5	1.6	7	2.1	9	2.5	7	2.7	0	0	28	2.2
Catheterization laboratory	7	2.3	15	4.6	7	1.9	6	2.3	0	0	35	2.8
Radiotherapy room	1	0.3	3	0.9	1	0.3	3	1.2	0	0	8	0.6
Radiography room	6	2.0	8	2.4	9	2.5	3	1.2	0	0	26	2.1
Radioactive scanning room	0	0.0	0	0.0	1	0.3	0	0.0	0	0	1	0.1
Dialysis room	3	1.0	3	0.9	2	0.5	2	0.8	0	0	10	0.8
Delivery room	1	0.3	1	0.3	2	0.5	0	0.0	0	0	4	0.3
Rehabilitation room	1	0.3	1	0.3	2	0.5	1	0.4	0	0	5	0.4
Restroom	6	2.0	6	1.8	8	2.2	7	2.7	0	0	27	2.1
Hallway	6	2.0	10	3.0	18	4.9	9	3.5	0	0	43	3.4
Bathroom	4	1.3	12	3.6	3	0.8	4	1.5	0	0	23	1.8
Stairway	0	0.0	1	0.3	2	0.5	0	0.0	0	0	3	0.2
Unknown	5	1.6	4	1.2	4	1.1	7	2.7	0	0	20	1.6
Others	31	10.1	20	6.1	35	9.5	28	10.8	1	100	115	9.1
No choice (Note 1)	9	2.9	13	4.0	8	2.2	6	2.3	0	0	36	2.9
Total	307	100	329	100	367	100	259	100	1	100	1,263	100

(Note 1) "No choice" means no "place of occurrence" was selected.

Fig. II-1-45 Factor of Event

Cause of Event (Note 1)	January to March		April to June		July to September		October to December		No choice (Note 2)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Neglect to check	82	14.7	93	15.6	95	14.4	71	15.3	1	33.3	342	15.0
Neglect to observe	75	13.5	72	12.1	88	13.3	64	13.8	0	0.0	299	13.1
Misjudgment	80	14.4	71	11.9	83	12.6	68	14.6	0	0.0	302	13.2
Lack of knowledge	24	4.3	28	4.7	26	3.9	12	2.6	1	33.3	91	4.0
Deficiency of technique/skill	22	4.0	35	5.9	32	4.8	17	3.7	0	0.0	106	4.6
Delayed reporting	5	0.9	8	1.3	10	1.5	7	1.5	0	0.0	30	1.3
Under unusual physical condition	15	2.7	12	2.0	16	2.4	9	1.9	0	0.0	52	2.3
Under unusual psychological condition	10	1.8	5	0.8	7	1.1	5	1.1	0	0.0	27	1.2
System failure	12	2.2	17	2.8	9	1.4	10	2.2	0	0.0	48	2.1
Inadequate coordination	28	5.0	36	6.0	39	5.9	28	6.0	0	0.0	131	5.7
Inadequate documentation	7	1.3	7	1.2	13	2.0	6	1.3	0	0.0	33	1.4
Similarity in patient's appearance or name	0	0.0	1	0.2	0	0.0	1	0.2	0	0.0	2	0.1
Busy working condition	16	2.9	16	2.7	16	2.4	13	2.8	0	0.0	61	2.7
Problem in environment	17	3.1	13	2.2	15	2.3	14	3.0	0	0.0	59	2.6
Problem in the drug	1	0.2	2	0.3	5	0.8	4	0.9	0	0.0	12	0.5
Problem in medical device	13	2.3	4	0.7	13	2.0	8	1.7	0	0.0	38	1.7
Problem in other items	4	0.7	7	1.2	8	1.2	6	1.3	0	0.0	25	1.1
Problem in facility	15	2.7	15	2.5	13	2.0	5	1.1	0	0.0	48	2.1
Problem in education/training	20	3.6	25	4.2	17	2.6	16	3.4	1	33.3	79	3.5
Lack of explanation	24	4.3	39	6.5	27	4.1	26	5.6	0	0.0	116	5.1
Others	77	13.8	91	15.2	128	19.4	75	16.1	0	0.0	371	16.3
No choice(Note 2)	9	1.6	0	0.0	1	0.2	0	0.0	0	0.0	10	0.4
Total	556	100	597	100	661	100	465	100	3	100	2,282	100

(Note 1) "Cause of event" may be more than one.

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

Fig. II-1-46 Clinical Department

Clinical Department (Note 1)	January to March		April to June		July to September		October to December		No choice (Note 2)		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Internal medicine	21	5.5	21	5.3	30	6.7	21	6.8	0	0.0	93	6.1
Anesthesiology	12	3.2	14	3.5	9	2.0	10	3.2	0	0.0	45	2.9
Cardiovascular medicine	23	6.1	27	6.8	24	5.3	15	4.9	0	0.0	89	5.8
Neurology	6	1.6	5	1.3	16	3.5	6	1.9	0	0.0	33	2.1
Respiratory tract medicine	14	3.7	18	4.5	19	4.2	18	5.8	0	0.0	69	4.5
Gastrointestinal medicine	27	7.1	29	7.3	19	4.2	16	5.2	0	0.0	91	5.9
Hematology	11	2.9	6	1.5	8	1.8	5	1.6	0	0.0	30	2.0
Circulatory surgery	3	0.8	3	0.8	9	2.0	7	2.3	0	0.0	22	1.4
Allergy	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Rheumatism	2	0.5	2	0.5	3	0.7	1	0.3	0	0.0	8	0.5
Pediatrics	10	2.6	15	3.8	17	3.8	14	4.5	0	0.0	56	3.6
General surgery	30	7.9	28	7.1	32	7.1	20	6.5	1	100.0	111	7.2
Orthopedics	29	7.7	33	8.3	44	9.8	20	6.5	0	0.0	126	8.2
Plastic surgery	5	1.3	6	1.5	0	0.0	5	1.6	0	0.0	16	1.0
Cosmetic surgery	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Neurosurgery	17	4.5	31	7.8	27	6.0	15	4.9	0	0.0	90	5.9
Respiratory surgery	15	4.0	9	2.3	7	1.6	5	1.6	0	0.0	36	2.3
Cardiovascular surgery	15	4.0	16	4.0	9	2.0	11	3.6	0	0.0	51	3.3
Pediatric surgery	2	0.5	1	0.3	3	0.7	5	1.6	0	0.0	11	0.7
Pain clinic	0	0.0	0	0.0	3	0.7	0	0.0	0	0.0	3	0.2
Dermatology	5	1.3	6	1.5	3	0.7	4	1.3	0	0.0	18	1.2
Urology	10	2.6	7	1.8	18	4.0	8	2.6	0	0.0	43	2.8
Venereology	0	0.0	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	1	0.3	0	0.0	1	0.1
Gynecology/Obstetrics	9	2.4	13	3.3	16	3.5	4	1.3	0	0.0	42	2.7
Obstetrics	2	0.5	2	0.5	2	0.4	4	1.3	0	0.0	10	0.7
Gynecology	5	1.3	4	1.0	8	1.8	4	1.3	0	0.0	21	1.4
Ophthalmology	3	0.8	9	2.3	7	1.6	4	1.3	0	0.0	23	1.5
Otolaryngology	11	2.9	10	2.5	13	2.9	8	2.6	0	0.0	42	2.7
Psychosomatic medicine	1	0.3	0	0.0	0	0.0	0	0.0	0	0.0	1	0.1
Psychiatry	13	3.4	8	2.0	32	7.1	22	7.1	0	0.0	75	4.9
Rehabilitation	5	1.3	1	0.3	3	0.7	0	0.0	0	0.0	9	0.6
Radiology	10	2.6	8	2.0	11	2.4	11	3.6	0	0.0	40	2.6
Dentistry	4	1.1	5	1.3	1	0.2	3	1.0	0	0.0	13	0.8
Orthodontics	0	0.0	1	0.3	0	0.0	1	0.3	0	0.0	2	0.1
Pediatric dentistry	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Dental/oral surgery	5	1.3	5	1.3	5	1.1	3	1.0	0	0.0	18	1.2
Unknown	0	0.0	1	0.3	0	0.0	1	0.3	0	0.0	2	0.1
Others	50	13.2	53	13.4	53	11.8	37	12.0	0	0.0	193	12.6
No choice (Note 2)	3	0.8	0	0.0	0	0.0	0	0.0	0	0.0	3	0.2
Total	379	100	397	100	451	100	309	100	1	100	1,537	100

(Note 1) More than one "clinical department" may have been involved in one event.

(Note 2) "No choice" means no "clinical department" was selected.

Fig. II-1-47 Years of Experience of Person Involved by Job Title (Doctor, Dentist, Nurse, Pharmacist)

Years of experience × Job title of person involved(Note 1)	Doctor						Dentist				
	January to March	April to June	July to September	October to December	No choice (Note 2)	Total	January to March	April to June	July to September	October to December	Total
0 year	14	10	7	6	0	37	0	3	0	2	5
1 year	2	2	3	6	0	13	2	1	0	0	3
2 years	7	7	8	5	0	27	1	0	0	2	3
3 years	14	9	12	6	0	41	0	1	1	1	3
4 years	22	14	11	8	0	55	1	1	1	0	3
5 years	5	13	18	6	0	42	1	0	0	0	1
6 years	11	13	16	13	0	53	1	0	0	0	1
7 years	17	12	14	13	0	56	0	1	0	0	1
8 years	17	14	14	12	1	58	0	2	0	0	2
9 years	20	15	7	12	0	54	0	0	0	0	0
10 years	13	22	15	14	0	64	0	0	0	1	1
11 to 20 years	78	95	91	61	0	325	7	3	0	1	11
21 to 30 years	27	34	29	20	0	110	3	0	0	0	3
30 years or longer	4	6	16	5	0	31	1	1	0	0	2
No choice(Note 2)	19	0	0	0	0	19	0	0	0	0	0
Total	270	266	261	187	1	985	17	13	2	7	39

(Note 1) 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.

(Note 2) "No choice" means no "years of experience" was selected.

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	
20	9	16	24	69	0	0	0	0	0	111
14	23	15	15	67	0	1	1	0	2	85
14	10	11	13	48	0	0	0	0	0	78
12	15	16	17	60	0	0	0	0	0	104
6	16	11	8	41	0	0	1	0	1	100
9	9	9	15	42	0	0	0	0	0	85
12	12	8	4	36	0	0	0	0	0	90
6	5	7	1	19	1	0	0	0	1	77
3	4	2	6	15	0	0	0	0	0	75
8	8	3	3	22	0	0	0	0	0	76
2	6	3	6	17	0	0	0	0	0	82
29	31	34	44	138	0	1	3	0	4	478
23	19	29	11	82	0	2	0	0	2	197
1	3	6	7	17	0	0	0	0	0	50
9	0	0	0	9	0	0	0	0	0	28
168	170	170	174	682	1	4	5	0	10	1,716

Fig. II-1-48 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 1)	Doctor						Dentist				
	January to March	April to June	July to September	October to December	No choice (Note 2)	Total	January to March	April to June	July to September	October to December	Total
0 year	77	54	57	38	0	226	0	4	1	2	7
1 year	36	32	26	22	0	116	3	1	0	1	5
2 years	22	18	21	17	0	78	0	2	0	2	4
3 years	19	17	14	14	1	65	0	0	1	0	1
4 years	18	16	20	13	0	67	1	1	0	0	2
5 years	14	15	20	9	0	58	1	1	0	1	3
6 years	7	15	12	13	0	47	1	1	0	0	2
7 years	10	14	8	12	0	44	0	0	0	1	1
8 years	8	7	8	7	0	30	0	0	0	0	0
9 years	9	8	5	6	0	28	1	0	0	0	1
10 years	6	14	9	10	0	39	1	0	0	0	1
11 to 20 years	25	47	46	16	0	134	5	2	0	0	7
21 to 30 years	4	8	13	10	0	35	4	1	0	0	5
30 years or longer	0	1	2	0	0	3	0	0	0	0	0
No choice(Note 2)	15	0	0	0	0	15	0	0	0	0	0
Total	270	266	261	187	1	985	17	13	2	7	39

(Note 1) 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.

(Note 2) "No choice" means no "number of years at current department" was selected.

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
50	29	37	53	169	0	1	0	0	1	403
35	46	43	34	158	0	2	3	0	5	284
38	31	23	32	124	0	0	0	0	0	206
14	14	22	25	75	0	0	0	0	0	141
3	14	13	5	35	0	0	1	0	1	105
2	11	7	12	32	1	1	0	0	2	95
4	10	3	2	19	0	0	0	0	0	68
3	2	3	1	9	0	0	0	0	0	54
1	2	3	1	7	0	0	0	0	0	37
1	5	1	2	9	0	0	1	0	1	39
1	2	5	0	8	0	0	0	0	0	48
1	2	9	7	19	0	0	0	0	0	160
0	2	1	0	3	0	0	0	0	0	43
0	0	0	0	0	0	0	0	0	0	3
15	0	0	0	15	0	0	0	0	0	30
168	170	170	174	682	1	4	5	0	10	1,716

Fig. II-1-49 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	No choice	January to December
<0 to 8 hours	1	6	0	2	0	9
<8 to 16 hours	5	1	0	2	0	8
<16 to 24 hours	1	1	1	1	0	4
<24 to 32 hours	4	7	10	1	0	22
<32 to 40 hours	12	23	26	24	0	85
<40 to 48 hours	85	70	67	60	0	282
<48 to 56 hours	35	44	53	15	0	147
<56 to 64 hours	31	43	45	35	0	154
<64 to 72 hours	24	33	26	19	0	102
<72 to 80 hours	0	8	4	9	0	21
<80 to 88 hours	9	13	16	12	0	50
<88 to 96 hours	5	1	1	2	0	9
96 hours or more	7	12	10	4	0	33
Unknown	6	4	2	1	0	13
No choice	45	0	0	0	1	46
Total	270	266	261	187	1	985
Average working hours (not including unknown/no choice)	51.5	53.3	53.8	52.4	-	52.8

(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-1-50 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	No choice	January to December
<0 to 8 hours	1	3	6	3	0	13
<8 to 16 hours	1	0	1	3	0	5
<16 to 24 hours	5	1	1	4	0	11
<24 to 32 hours	13	15	14	11	0	53
<32 to 40 hours	45	37	49	54	0	185
<40 to 48 hours	74	88	73	81	0	316
<48 to 56 hours	12	20	18	11	0	61
<56 to 64 hours	3	6	8	7	0	24
<64 to 72 hours	0	0	0	0	0	0
<72 to 80 hours	0	0	0	0	0	0
<80 to 88 hours	0	0	0	0	0	0
<88 to 96 hours	0	0	0	0	0	0
96 hours or more	0	0	0	0	0	0
Unknown	1	0	0	0	0	1
No choice	13	0	0	0	0	13
Total	168	170	170	174	0	682
Average working hours (not including unknown/no choice)	37.2	38.8	37.3	36.8	-	37.5

(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-1-51 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	No choice	January to December
Zero	104	114	103	78	0	399
1 time	75	76	92	67	0	310
2 times	20	29	17	13	0	79
3 times	5	9	4	5	0	23
4 times	0	1	2	1	0	4
5 times	0	1	0	0	0	1
6 times	0	0	1	0	0	1
7 times	0	1	0	0	0	1
Unknown	23	35	42	23	0	123
No choice	43	0	0	0	1	44
Total	270	266	261	187	1	985
Average number of night shifts (not including unknown/no choice)	0.64	0.77	0.69	0.68	-	0.70

Fig. II-1-52 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	No choice	January to December
Zero	25	35	40	38	0	138
1 time	56	39	36	49	0	180
2 times	61	54	66	64	0	245
3 times	13	27	13	17	0	70
4 times	2	4	3	4	0	13
5 times	0	1	0	0	0	1
6 times	0	0	0	0	0	0
7 times	0	0	0	0	0	0
Unknown	0	10	12	2	0	24
No choice	11	0	0	0	0	11
Total	168	170	170	174	0	682
Average number of night shifts (not including unknown/no choice)	1.43	1.56	1.39	1.42	-	1.45

Fig. II-1-53 Cause of Event and Summary of Event

Cause of event (Note 1) × 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	No choice (Note 2)	Total	January to March	April to June	July to September	October to December	No choice (Note 2)	Total	January to March	April to June	July to September	October to December	No choice (Note 2)	Total	January to March	April to June	July to September	October to December	No choice (Note 2)	Total	January to March	April to June	July to September	October to December	No choice (Note 2)	Total
Neglect to check	3	2	4	1	1	11	9	16	14	9	0	48	2	2	0	3	0	7	34	42	40	30	0	146	4	3	4	3	0	14
Neglect to observe	0	0	0	0	0	0	3	3	1	1	0	8	0	0	0	0	0	0	21	18	24	13	0	76	2	2	2	1	0	7
Misjudgment	1	1	2	0	0	4	5	2	3	2	0	12	0	1	0	0	0	1	28	27	30	19	0	104	4	1	2	2	0	9
Lack of knowledge	0	0	2	1	1	4	6	6	5	1	0	18	0	0	0	0	0	0	10	12	8	4	0	34	2	0	2	1	0	5
Deficiency of technique/skill	0	0	2	0	0	2	0	1	0	1	0	2	0	0	0	0	0	0	11	19	13	8	0	51	0	0	1	0	0	1
Delayed reporting	0	0	1	0	0	1	1	0	0	0	0	1	0	1	0	0	0	1	0	3	1	3	0	7	1	0	0	0	0	1
Under unusual physical condition	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	5	4	7	3	0	19	0	1	1	0	0	2
Under unusual psychological condition	1	0	0	0	0	1	1	0	1	0	0	2	0	1	0	0	0	1	2	1	2	4	0	9	1	0	0	0	0	1
System failure	0	0	1	0	0	1	3	4	1	1	0	9	0	1	0	0	0	1	3	4	3	4	0	14	1	1	0	1	0	3
Inadequate coordination	2	0	3	1	0	6	1	6	3	3	0	13	1	1	0	1	0	3	6	12	13	9	0	40	1	0	0	2	0	3
Inadequate documentation	0	0	0	0	0	0	3	0	1	0	0	4	0	1	0	0	0	1	1	1	2	0	0	4	1	0	0	0	0	1
Similarity in patient's appearance or name	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0
Busy working condition	0	0	0	0	0	0	2	4	3	1	0	10	0	0	0	0	0	0	1	5	4	4	0	14	0	0	0	1	0	1
Problem in environment	0	0	0	0	0	0	1	0	0	1	0	2	0	1	0	0	0	1	1	1	2	2	0	6	0	0	0	1	0	1
Problem in the drug	0	0	1	0	0	1	0	2	2	1	0	5	0	0	0	0	0	0	1	0	2	1	0	4	0	0	0	0	0	0
Problem in medical device	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	4	0	4	2	0	10	6	1	5	3	0	15
Problem in other items	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3	5	1	0	10	1	0	0	1	0	2
Problem in facility	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	4	1	0	0	0	0	1
Problem in education/training	0	0	3	0	1	4	4	3	2	1	0	10	0	1	0	0	0	1	4	4	4	3	0	15	1	0	1	0	0	2
Lack of explanation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	9	9	7	0	29	2	0	0	1	0	3
Others	0	0	0	0	0	0	1	4	7	0	0	12	0	1	0	1	0	2	30	33	43	24	0	130	5	1	2	1	0	9
No choice (Note 2)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	7	0	0	0	0	0	0
Total	7	3	19	3	3	35	40	51	44	22	0	157	3	12	0	6	0	21	176	199	217	142	0	734	33	10	20	18	0	81

(Note 1) "Cause of event" may have been more than one.

(Note 2) "No choice" means no "cause of event" or "summary of event" was selected.

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	No choice(Note 2)	Total	January to March	April to June	July to September	October to December	No choice(Note 2)	Total	January to March	April to June	July to September	October to December	No choice(Note 2)	Total	January to March	April to June	July to September	October to December	No choice(Note 2)	Total	January to March	April to June	July to September	October to December	No choice(Note 2)	Total	
6	5	7	6	0	24	1	0	0	1	0	2	3	6	3	3	0	15	7	14	17	9	0	47	13	3	6	6	0	28	342
10	5	3	4	0	22	0	0	0	0	0	0	3	0	2	3	0	8	26	34	42	31	0	133	10	10	14	11	0	45	299
7	4	5	5	0	21	0	0	0	0	0	0	3	5	1	1	0	10	22	20	31	30	0	103	10	10	9	9	0	38	302
1	3	3	2	0	9	0	0	0	0	0	0	0	2	0	0	0	2	3	4	5	1	0	13	2	1	1	2	0	6	91
2	2	5	1	0	10	0	0	0	0	0	0	3	5	2	1	0	11	4	8	7	4	0	23	2	0	2	2	0	6	106
0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3	2	6	2	0	13	0	1	2	1	0	4	30
0	0	1	1	0	2	0	0	0	0	0	0	1	1	0	1	0	3	4	4	3	3	0	14	5	2	3	1	0	11	52
0	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	1	2	0	0	0	3	4	0	3	1	0	8	27
1	0	0	1	0	2	0	0	0	0	0	0	1	3	1	1	0	6	0	2	1	1	0	4	3	2	2	1	0	8	48
0	1	1	1	0	3	0	0	0	0	0	0	1	0	2	1	0	4	11	11	12	7	0	41	5	5	5	3	0	18	131
0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	1	4	6	2	0	13	1	1	2	4	0	8	33
0	0	0	0	0	0	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	1	0	1	0	0	0	0	0	0	1	0	2	0	0	3	7	6	4	2	0	19	5	1	3	4	0	13	61
1	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	8	7	7	9	0	31	6	2	6	1	0	15	59
0	0	0	0	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	0	12
2	0	1	1	0	4	1	0	0	0	0	1	0	0	1	1	0	2	0	1	1	0	0	2	0	1	1	1	0	3	38
1	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	2	0	6	1	1	1	2	0	5	25
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	7	5	6	1	0	19	4	10	6	3	0	23	48
1	2	1	2	0	6	0	0	0	0	0	0	0	2	1	0	0	3	6	8	4	7	0	25	4	5	1	3	0	13	79
0	1	0	0	0	1	0	0	0	0	0	0	0	2	2	2	0	6	16	19	9	14	0	58	2	8	7	2	0	19	116
4	2	3	2	0	11	0	1	0	0	0	1	4	7	9	4	0	24	10	18	32	22	0	82	23	24	32	21	0	100	371
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	2	10
36	27	33	28	0	124	2	1	0	1	0	4	22	35	27	18	0	102	136	172	194	149	0	651	101	87	107	78	0	373	2,282

Fig. II-1-54 Situation and Potential of Residual Disability

Situation × Potential of Residual Disability	Death						High					
	January to March	April to June	July to September	October to December	No choice (Note 1)	Total	January to March	April to June	July to September	October to December	No choice (Note 1)	Total
Related to drug												
Drug preparation	0	0	0	0	0	0	0	1	0	0	0	1
Subcutaneous/intramuscular injection	0	0	0	0	0	0	0	0	0	0	0	0
Intravenous injection	0	0	0	0	0	0	0	0	1	1	0	2
Arterial injection	0	0	0	0	0	0	0	0	0	0	0	0
Peripheral intravenous drop	1	0	0	0	0	1	0	1	0	0	0	1
Central venous injection	1	0	0	0	0	1	1	0	0	0	0	1
Oral administration	1	0	0	0	0	1	0	2	0	0	0	2
Nose drop/eye drop/ear drop	0	0	0	0	0	0	0	0	0	0	0	0
Other drug prescription/administration	0	1	0	0	0	1	2	0	0	0	0	2
Oral drug dispensing/management	0	0	0	0	0	0	0	0	0	0	0	0
Injection dispensing/management	0	0	0	0	0	0	0	0	0	0	0	0
Dispensing/management, others	0	1	0	0	0	1	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
Blood transfusion	0	1	0	0	0	1	0	1	0	0	0	1
Blood transfusion, others	0	0	0	0	0	0	0	0	0	0	0	0
Related to treatment/procedure												
Craniotomy	1	1	0	0	0	2	0	2	0	1	0	3
Thoracotomy	0	0	1	1	0	2	2	1	2	1	0	6
Cardiotomy	0	0	1	0	0	1	1	0	0	1	0	2
Laparotomy	5	0	0	1	0	6	1	0	3	0	0	4
Extremities	0	0	1	0	0	1	1	2	0	0	0	3
Endoscopic surgery	1	0	0	0	0	1	1	1	2	1	0	5
Other surgery	0	0	0	0	0	0	2	8	2	2	0	14
Preparation for surgery	0	0	0	0	0	0	1	0	0	0	0	1
Preoperative procedure	1	0	0	0	0	1	0	1	0	0	0	1
Postoperative procedure	1	2	0	1	0	4	2	1	1	0	0	4
Surgery, others	1	0	1	0	0	2	0	1	2	1	0	4
General anesthesia (inhalation anesthesia and intravenous anesthesia)	0	0	0	0	0	0	0	0	0	1	0	1
Local anesthesia	0	0	0	0	0	0	0	0	0	1	0	1
Inhalation anesthesia	0	0	0	0	0	0	0	0	0	0	0	0
Intravenous anesthesia	0	0	0	0	0	0	0	0	1	0	0	1
Vertebral/epidural anesthesia	0	0	0	0	0	0	0	0	0	0	0	0
Anesthesia, others	0	0	0	0	0	0	0	0	0	0	0	0
Caesarean section	0	0	0	1	0	1	1	0	0	0	0	1
Delivery and artificial abortion, others	0	1	1	0	0	2	0	0	2	1	0	3
Blood purification (including hemodialysis)	0	1	0	0	0	1	0	0	0	0	0	0
IVR (ex. angiocatheter)	0	1	0	0	0	1	0	1	2	1	0	4
Radiotherapy	0	0	0	0	0	0	0	0	0	0	0	0
Rehabilitation	0	0	0	0	0	0	0	0	0	1	0	1
Invasive dental treatment	0	0	0	0	0	0	0	0	0	0	0	0

Low						Unknown						No choice[(Note 1)]						Aggregate total
January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	
																		85
1	1	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
0	1	3	1	0	5	1	0	1	0	0	2	0	0	0	0	0	0	7
3	2	2	4	0	11	3	0	2	0	0	5	0	0	0	0	0	0	18
0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4	3	2	2	0	11	0	3	2	0	0	5	0	0	0	0	0	0	18
0	1	0	0	0	1	0	1	1	0	1	3	0	0	0	0	0	0	6
0	3	3	2	0	8	0	1	2	0	0	3	0	0	0	0	0	0	14
0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1	2	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	6
0	1	1	0	0	2	1	0	2	0	0	3	0	0	0	0	0	0	5
0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	2
0	0	1	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	3
																		8
0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1	0	0	2	0	3	1	0	0	0	0	1	0	0	0	0	0	0	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
																		385
0	4	2	1	0	7	0	2	0	0	0	2	0	0	0	0	0	0	14
2	0	2	0	0	4	2	0	1	1	0	4	0	0	0	0	0	0	16
3	1	2	0	0	6	0	0	1	1	0	2	0	0	0	0	0	0	11
10	6	7	4	0	27	0	1	0	1	0	2	0	0	0	0	0	0	39
0	1	3	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	8
3	5	5	6	0	19	2	0	0	0	0	2	0	0	0	0	0	0	27
6	7	8	8	0	29	3	3	5	1	0	12	0	0	0	0	0	0	55
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
4	0	4	2	0	10	0	1	0	0	0	1	0	0	0	0	0	0	19
2	8	7	1	0	18	2	2	0	0	0	4	0	0	0	0	0	0	28
0	1	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	3
0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	1	0	1	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	1
0	0	1	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	2
0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	6
3	0	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	9
2	1	2	1	0	6	0	1	0	1	0	2	0	0	0	0	0	0	9
2	7	1	3	0	13	1	1	1	2	0	5	0	0	0	0	0	0	23
2	0	0	2	0	4	0	0	0	1	0	1	0	0	0	0	0	0	5
0	0	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1

Situation × Potential of Residual Disability	Death						High					
	January to March	April to June	July to September	October to December	No choice[Note 1]	Total	January to March	April to June	July to September	October to December	No choice[Note 1]	Total
Endoscopic treatment	1	1	1	0	0	3	2	0	1	0	0	3
Treatment, others	0	0	0	0	0	0	1	3	3	0	0	7
Central venous line	1	0	1	1	0	3	0	0	0	0	0	0
Peripheral venous line	0	0	0	0	0	0	0	0	0	0	0	0
Catheter for blood purification	0	0	0	0	0	0	0	0	0	0	0	0
Feeding tube (NG, ED)	0	0	0	0	0	0	1	0	0	1	0	2
Urethral catheter	0	0	0	0	0	0	0	0	0	0	0	0
Tube placement, others	0	1	0	1	0	2	0	0	0	0	0	0
Drainage procedure	0	0	0	0	0	0	0	1	0	0	0	1
Wound care	0	0	1	0	0	1	2	0	0	0	0	2
Tracheal intubation	0	0	0	0	0	0	0	0	1	0	0	1
Tracheotomy	0	0	0	0	0	0	0	0	0	0	0	0
Cardiac compression	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
Emergency procedure, others	0	0	0	1	0	1	0	0	0	0	0	0
Related to use/management of medical equipment (device)												
Mechanical ventilator	0	0	0	2	0	2	0	1	1	1	0	3
Oxygen therapy equipment	0	0	0	0	0	0	1	0	0	0	0	1
Oxygenator	0	0	0	0	0	0	0	0	0	0	0	0
Defibrillator	0	0	0	0	0	0	0	0	0	0	0	0
Pace maker	1	0	0	0	0	1	0	0	0	0	0	0
Infusion/transfusion pump	0	0	0	0	0	0	0	0	0	1	0	1
Blood purification device	0	0	0	0	0	0	0	0	0	0	0	0
ECG, blood pressure monitor	0	0	0	0	0	0	0	0	0	0	0	0
Pulse oxymeter	0	0	0	0	0	0	0	0	0	0	0	0
Use/management of medical equipment (device), others	2	0	0	0	0	2	2	0	0	0	0	2
Related to use/management of drainage tube or other tube												
Central venous line (Drainage tube, other tubes…)	1	1	2	0	0	4	0	0	0	2	0	2
Peripheral venous line	0	0	0	0	0	0	0	0	0	0	0	0
Tracheal tube	0	1	0	0	0	1	0	0	2	0	0	2
Tracheal cannula	1	0	0	1	0	2	0	0	0	0	0	0
Feeding tube (NG, ED) (Use of drainage tube, other tubes…)	0	0	0	0	0	0	0	0	0	0	0	0
Urethral catheter (Drainage tube, other tubes…)	0	0	0	0	0	0	0	0	0	0	0	0
Chest drainage tube	0	0	0	0	0	0	0	0	0	0	0	0
Abdominal drainage tube	0	0	0	0	0	0	0	0	0	0	0	0
Ventricular/cisternal drainage tube	0	0	0	0	0	0	1	0	0	0	0	1
Subcutaneous continuous suction drainage tube	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
Catheter/line for blood purification	0	1	0	0	0	1	0	0	1	0	0	1
Use/management of drainage tube or other tube, others	0	0	0	1	0	1	0	2	0	1	0	3

Low						Unknown						No choice[(Note 1)]						Aggregate total
January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	
3	3	6	1	0	13	0	0	1	2	0	3	0	0	0	0	0	0	22
4	4	3	4	0	15	1	3	1	2	0	7	0	0	0	0	0	0	29
3	3	4	0	0	10	2	0	2	0	0	4	0	0	0	0	0	0	17
0	3	0	0	0	3	0	0	0	0	0	0	1	0	0	0	0	1	4
0	0	0	0	0	0	0	0	0	1	0	1	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	2
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1	1	3	0	0	5	0	0	1	0	0	1	0	0	0	0	0	0	8
0	2	1	1	0	4	0	0	1	0	0	1	0	0	0	0	0	0	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
0	0	2	0	0	2	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	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	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	1
																		39
1	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	7
2	0	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	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	1	0	0	0	0	1	0	0	0	0	0	0	2
0	1	0	1	0	2	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
4	4	7	2	0	17	2	0	0	0	0	2	0	0	0	0	0	0	23
																		83
0	0	3	2	0	5	3	0	2	0	0	5	0	0	0	0	0	0	16
0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
0	0	1	1	0	2	1	0	0	0	0	1	0	0	0	0	0	0	6
0	0	0	1	0	1	0	0	1	0	0	1	0	0	0	0	0	0	4
1	0	3	0	0	4	1	0	0	0	0	1	0	0	0	0	0	0	5
1	1	0	0	0	2	0	0	1	0	0	1	0	0	0	0	0	0	3
6	1	0	2	0	9	1	1	2	0	0	4	0	0	0	0	0	0	13
1	1	1	0	0	3	1	0	0	0	0	1	0	0	0	0	0	0	4
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	0	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	2
0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
2	7	1	4	0	14	3	2	1	0	0	6	0	0	0	0	0	0	24

Situation × Potential of Residual Disability	Death						Hogh					
	January to March	April to June	July to September	October to December	No choice(Note 1)	Total	January to March	April to June	July to September	October to December	No choice(Note 1)	Total
Related to examination												
Blood drawing	1	0	0	0	0	1	0	0	1	0	0	1
Other sample collection	0	0	0	0	0	0	0	0	0	0	0	0
General imaging	0	0	0	0	0	0	0	0	0	0	0	0
MRI	0	0	0	0	0	0	0	1	0	0	0	1
Angiocatheter-aided imaging	1	0	0	0	0	1	0	1	1	1	0	3
Lower gastrointestinal imaging	0	0	0	0	0	0	1	0	0	0	0	1
Other imaging	0	0	0	1	0	1	0	0	0	0	0	0
Upper gastrointestinal	0	0	0	0	0	0	0	1	2	0	0	3
Lower gastrointestinal	0	0	0	0	0	0	0	0	0	0	0	0
Bronchoscopy	0	0	0	0	0	0	0	0	0	0	0	0
Other endoscopic examination	0	0	0	0	0	0	0	0	0	0	0	0
Pathological examination	0	0	0	0	0	0	0	0	0	0	0	0
Examination, others	0	0	1	0	0	1	0	0	0	0	0	0
Related to nursing care												
Endotracheal/oral suctioning	0	0	0	0	0	0	0	0	1	0	0	1
Changing position	0	0	0	0	0	0	1	0	1	0	0	2
Bed bath	0	0	0	0	0	0	0	0	0	0	0	0
Help with changing clothes	0	0	0	0	0	0	0	0	0	1	0	1
Help with eating	0	1	0	0	0	1	0	0	2	5	0	7
Help with bathing	0	0	0	1	0	1	1	0	0	0	0	1
Help with elimination	0	0	0	0	0	0	0	0	1	1	0	2
Help with moving	0	0	0	0	0	0	2	1	1	0	0	4
Transportation	0	0	0	0	0	0	0	0	0	0	0	0
Tending patient's belongings	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
Patient observation	2	0	1	1	0	4	0	2	5	1	0	8
Other nursing care	0	3	0	0	0	3	1	1	0	0	0	2
Oral intake	0	1	0	0	0	1	0	1	0	1	0	2
While taking a walk	0	0	0	0	0	0	0	0	0	1	0	1
While moving from one place to another	1	1	2	2	0	6	3	4	5	2	0	14
While going out/sleeping out	0	0	1	0	0	1	0	0	0	0	0	0
While eating	0	0	0	0	0	0	0	0	1	1	0	2
While bathing	0	0	0	1	0	1	0	0	0	0	0	0
While excreting	0	0	0	0	0	0	0	0	0	2	0	2
While sleeping	0	1	0	3	0	4	2	1	0	0	0	3
Recuperation, others	1	2	2	2	0	7	0	1	1	2	0	4
Others	10	7	9	5	0	31	8	8	3	3	0	22
No choice(Note 1	8	8	6	2	0	24	1	2	4	4	0	11
Total	44	38	32	29	0	143	45	54	56	44	0	199

(Note 1) "No choice" means no "situation" or "potential of residual disability" was selected.

Low						Unknown						No choice[(Note 1)]						Aggregate total
January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	
																		70
0	2	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	6
1	1	1	1	0	4	0	2	0	0	0	2	0	0	0	0	0	0	6
0	0	1	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	2
0	0	2	0	0	2	0	0	1	1	0	2	0	0	0	0	0	0	5
1	3	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	9
0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
0	2	3	1	0	6	1	0	1	2	0	4	0	0	0	0	0	0	11
1	4	1	0	0	6	0	1	0	0	0	1	0	0	0	0	0	0	10
2	0	1	1	0	4	2	0	0	0	0	2	0	0	0	0	0	0	6
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	3	1	1	0	5	0	0	1	0	0	1	0	0	0	0	0	0	6
0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	2
2	0	1	0	0	3	1	0	0	0	0	1	0	0	0	0	0	0	5
																		360
0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
1	1	1	1	0	4	0	2	0	1	0	3	0	0	0	0	0	0	9
0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
0	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
1	2	1	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	13
1	1	3	1	0	6	0	0	0	0	0	0	0	0	0	0	0	0	8
4	3	3	4	0	14	0	0	0	0	0	0	0	0	0	0	0	0	16
1	3	6	3	0	13	0	1	0	1	0	2	0	0	0	0	0	0	19
0	0	0	1	0	1	1	0	0	0	0	1	0	0	0	0	0	0	2
1	0	0	1	0	2	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
1	6	9	8	0	24	0	1	4	0	0	5	0	0	0	0	0	0	41
8	2	8	8	0	26	2	2	2	1	0	7	0	0	0	0	0	0	38
0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	4
0	0	2	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
20	14	17	16	0	67	4	2	4	3	0	13	0	0	0	0	0	0	100
0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
1	1	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	6
2	4	1	1	0	8	0	1	0	0	0	1	0	0	0	0	0	0	10
6	2	3	3	0	14	0	0	1	0	0	1	0	0	0	0	0	0	17
1	2	2	2	0	7	0	1	2	0	0	3	0	0	0	0	0	0	17
5	12	11	5	0	33	0	0	1	0	0	1	0	0	0	0	0	0	45
11	10	18	10	0	49	6	10	11	6	0	33	0	0	0	0	0	0	135
10	7	16	12	0	45	4	4	5	4	0	17	1	0	0	0	0	1	98
161	186	212	149	0	708	55	51	67	37	1	211	2	0	0	0	0	2	1,263

Fig. II-1-55 Place of Occurrence and Inpatient/Outpatient Status

Place of Occurrence × Inpatient/Outpatient Status	Inpatient						Outpatient					
	January to March	April to June	July to September	October to December	No choice(Note 1)	Total	January to March	April to June	July to September	October to December	No choice(Note 1)	Total
Outpatient examination room	0	1	0	0	0	1	5	14	7	9	0	35
Outpatient treatment room	0	0	1	1	0	2	2	2	3	1	0	8
Outpatient lobby	0	0	0	0	0	0	1	0	2	0	0	3
Emergency room	1	0	1	0	0	2	3	1	6	0	0	10
Critical care center	4	2	3	1	0	10	0	0	0	0	0	0
Patient room	121	128	161	106	0	516	0	0	1	0	0	1
Ward treatment room	4	4	5	2	0	15	0	0	0	0	0	0
Operation room	57	53	59	49	0	218	0	3	2	0	0	5
ICU	8	13	4	6	0	31	0	0	0	0	0	0
CCU	0	0	0	1	0	1	0	0	0	0	0	0
NICU	0	4	1	0	0	5	0	0	0	0	0	0
Examination room	4	5	6	5	0	20	1	2	3	2	0	8
Catheterization laboratory	6	14	6	6	0	32	1	1	1	0	0	3
Radiotherapy room	1	3	1	3	0	8	0	0	0	0	0	0
Radiography room	5	7	6	2	0	20	1	1	3	1	0	6
Radioactive scanning room	0	0	0	0	0	0	0	0	1	0	0	1
Dialysis room	3	3	2	2	0	10	0	0	0	0	0	0
Delivery room	1	1	2	0	0	4	0	0	0	0	0	0
Rehabilitation room	1	1	1	1	0	4	0	0	1	0	0	1
Restroom	4	6	8	6	0	24	0	0	0	1	0	1
Hallway	5	10	15	9	0	39	0	0	3	0	0	3
Bathroom	3	12	3	4	0	22	0	0	0	0	0	0
Stairway	0	1	2	0	0	3	0	0	0	0	0	0
Unknown	5	4	4	6	0	19	0	0	0	1	0	1
Others	21	13	27	22	0	83	5	7	8	6	1	27
No choice(Note 1)	7	12	7	6	0	32	0	1	1	0	0	2
Total	261	297	325	238	0	1,121	19	32	42	21	1	115

(Note 1) "No choice" means no "place of occurrence" or "inpatient/outpatient status" was selected.

No choice[Note 1]						Aggregate total
January to March	April to June	July to September	October to December	No choice[Note 1]	Total	
0	0	0	0	0	0	36
0	0	0	0	0	0	10
0	0	0	0	0	0	3
0	0	0	0	0	0	12
0	0	0	0	0	0	10
14	0	0	0	0	14	531
0	0	0	0	0	0	15
2	0	0	0	0	2	225
0	0	0	0	0	0	31
0	0	0	0	0	0	1
0	0	0	0	0	0	5
0	0	0	0	0	0	28
0	0	0	0	0	0	35
0	0	0	0	0	0	8
0	0	0	0	0	0	26
0	0	0	0	0	0	1
0	0	0	0	0	0	10
0	0	0	0	0	0	4
0	0	0	0	0	0	5
2	0	0	0	0	2	27
1	0	0	0	0	1	43
1	0	0	0	0	1	23
0	0	0	0	0	0	3
0	0	0	0	0	0	20
5	0	0	0	0	5	115
2	0	0	0	0	2	36
27	0	0	0	0	27	1,263

Fig. II-1-56 Summary of Event and Potential of Residual Disability

Summary of Event × Potential of Residual Disability	Death						High					
	January to March	April to June	July to September	October to December	No choice(Note 1)	Total	January to March	April to June	July to September	October to December	No choice(Note 1)	Total
Ordering	0	0	0	0	0	0	0	0	0	0	0	0
Drug	2	0	0	0	0	2	1	3	1	3	0	8
Blood transfusion	0	1	0	0	0	1	0	1	0	0	0	1
Treatment/procedure	15	7	9	8	0	39	19	27	27	17	0	90
Medical equipment, etc.	3	3	2	3	0	11	4	2	3	3	0	12
Medical device	1	0	1	1	0	3	3	1	1	1	0	6
Drainage tube or other tube	2	3	1	2	0	8	1	1	2	2	0	6
Dental equipment	0	0	0	0	0	0	0	0	0	0	0	0
Examination/test	1	3	1	0	0	5	1	3	2	2	0	8
Nursing care	5	7	5	7	0	24	6	12	15	15	0	48
Others	18	17	15	11	0	61	14	6	8	4	0	32
No choice(Note 1)	0	0	0	0	0	0	0	0	0	0	0	0
Total	44	38	32	29	0	143	45	54	56	44	0	199

(Note 1) "No choice" means no "summary of event" or "potential of residual disability" was selected.

Low						Unknown						No choice[(Note 1)]						Aggregate total
January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	
2	2	3	1	0	8	1	0	2	0	0	3	0	0	0	0	0	0	11
7	14	12	9	0	42	4	5	9	1	1	20	0	0	0	0	0	0	72
1	1	0	3	0	5	1	0	0	0	0	1	0	0	0	0	0	0	8
52	69	71	40	0	232	13	18	20	15	0	66	2	0	0	0	0	2	429
19	11	15	17	0	62	14	3	6	2	0	25	0	0	0	0	0	0	110
6	2	6	4	0	18	4	2	1	2	0	9	0	0	0	0	0	0	36
11	8	9	12	0	40	10	1	5	0	0	16	0	0	0	0	0	0	70
2	1	0	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
9	17	14	7	0	47	6	3	3	3	0	15	0	0	0	0	0	0	75
50	53	71	53	0	227	9	10	12	8	0	39	0	0	0	0	0	0	338
21	19	26	19	0	85	7	12	15	8	0	42	0	0	0	0	0	0	220
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
161	186	212	149	0	708	55	51	67	37	1	211	2	0	0	0	0	2	1,263

Fig. II-1-57 Place of Occurrence and Potential of Residual Disability

Place of Occurrence × Potential of Residual Disability	Death						High					
	January to March	April to June	July to September	October to December	No choice(Note 1)	Total	January to March	April to June	July to September	October to December	No choice(Note 1)	Total
Outpatient examination room	0	0	1	0	0	1	1	3	0	0	0	4
Outpatient treatment room	0	0	0	1	0	1	1	0	0	1	0	2
Outpatient lobby	0	0	0	0	0	0	0	0	0	0	0	0
Emergency room	2	0	0	0	0	2	1	0	1	0	0	2
Critical care center	1	1	0	0	0	2	0	0	1	0	0	1
Patient room	23	17	16	14	0	70	19	15	25	19	0	78
Ward treatment room	0	1	0	0	0	1	1	0	0	0	0	1
Operation room	7	0	3	3	0	13	9	14	12	12	0	47
ICU	2	4	2	0	0	8	2	3	0	2	0	7
CCU	0	0	0	0	0	0	0	0	0	0	0	0
NICU	0	0	0	0	0	0	0	1	0	0	0	1
Examination room	0	1	0	0	0	1	2	0	3	2	0	7
Catheterization laboratory	0	2	1	0	0	3	1	3	1	0	0	5
Radiotherapy room	0	1	0	0	0	1	0	0	0	0	0	0
Radiography room	1	0	1	1	0	3	2	4	0	1	0	7
Radioactive scanning room	0	0	0	0	0	0	0	0	0	0	0	0
Dialysis room	0	1	0	0	0	1	0	0	1	0	0	1
Delivery room	0	1	0	0	0	1	0	0	2	0	0	2
Rehabilitation room	0	0	0	0	0	0	0	0	0	0	0	0
Restroom	1	1	1	0	0	3	0	2	0	2	0	4
Hallway	0	1	1	2	0	4	1	2	2	1	0	6
Bathroom	0	0	0	3	0	3	1	1	0	0	0	2
Stairway	0	0	0	0	0	0	0	0	1	0	0	1
Unknown	0	0	0	1	0	1	0	1	0	1	0	2
Others	4	5	5	4	0	18	3	2	7	2	0	14
No choice(Note 1)	3	2	1	0	0	6	1	3	0	1	0	5
Total	44	38	32	29	0	143	45	54	56	44	0	199

(Note 1) "No choice" means no "place of occurrence" or "potential of residual disability" was selected.

Low						Unknown						No choice[(Note 1)]						Aggregate total
January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	
2	7	4	6	0	19	2	5	2	3	0	12	0	0	0	0	0	0	36
1	2	3	0	0	6	0	0	1	0	0	1	0	0	0	0	0	0	10
1	0	0	0	0	1	0	0	2	0	0	2	0	0	0	0	0	0	3
1	1	6	0	0	8	0	0	0	0	0	0	0	0	0	0	0	0	12
3	0	2	1	0	6	0	1	0	0	0	1	0	0	0	0	0	0	10
67	73	89	61	0	290	26	23	32	12	0	93	0	0	0	0	0	0	531
1	3	4	2	0	10	1	0	1	0	0	2	1	0	0	0	0	1	15
35	32	39	26	0	132	8	10	7	8	0	33	0	0	0	0	0	0	225
3	6	2	4	0	15	1	0	0	0	0	1	0	0	0	0	0	0	31
0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1
0	3	1	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	5
2	5	5	4	0	16	1	1	1	1	0	4	0	0	0	0	0	0	28
4	8	2	6	0	20	1	2	3	0	0	6	1	0	0	0	0	1	35
1	2	1	2	0	6	0	0	0	1	0	1	0	0	0	0	0	0	8
1	2	5	0	0	8	2	2	3	1	0	8	0	0	0	0	0	0	26
0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2	2	1	2	0	7	1	0	0	0	0	1	0	0	0	0	0	0	10
1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
1	1	2	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	5
5	3	6	4	0	18	0	0	1	1	0	2	0	0	0	0	0	0	27
5	7	13	5	0	30	0	0	2	1	0	3	0	0	0	0	0	0	43
3	10	3	1	0	17	0	1	0	0	0	1	0	0	0	0	0	0	23
0	1	1	0	0	2	v	0	0	0	0	0	0	0	0	0	0	0	3
4	1	4	4	0	13	1	2	0	1	0	4	0	0	0	0	0	0	20
13	10	13	18	0	54	11	3	10	4	1	29	0	0	0	0	0	0	115
5	7	5	2	0	19	0	1	2	3	0	6	0	0	0	0	0	0	36
161	186	212	149	0	708	55	51	67	37	1	211	2	0	0	0	0	2	1,263

Fig. II-1-58 Details of Event and Potential of Residual Disability

Details of Event × Potential of Residual Disability	Death						High					
	January to March	April to June	July to September	October to December	No choice(Note 1)	Total	January to March	April to June	July to September	October to December	No choice(Note 1)	Total
Related to drug												
Dose error	0	0	0	0	0	0	0	0	0	0	0	0
Overdose	1	0	0	0	0	1	0	1	0	0	0	1
Dosing speed too fast	0	0	0	0	0	0	0	0	0	0	0	0
Patient misidentification	0	0	0	0	0	0	0	0	0	0	0	0
Drug mix-up	0	0	0	0	0	0	0	0	0	1	0	1
Wrong dosing method	0	0	0	0	0	0	0	0	0	0	0	0
Drug prescription/administration, others	1	1	0	0	0	2	3	2	1	0	0	6
Dispensing error (wrong dose/number)	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
Drug/blood product management, others	0	1	0	0	0	1	0	1	0	0	0	1
Related to blood transfusion												
Cross-match error	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
Transfusion testing, others	0	0	0	0	0	0	0	0	0	0	0	0
Irradiation of blood products, blood transfusion, others	0	1	0	0	0	1	0	1	0	0	0	1
Related to treatment/procedure												
Patient misidentification	0	0	0	0	0	0	0	0	0	0	0	0
Wrong site treatment/procedure	0	0	0	0	0	0	0	1	0	1	0	2
Wrong examination/treatment/ procedure, others	0	0	0	0	0	0	0	0	0	0	0	0
Wrong method (technique)	1	1	0	0	0	2	4	3	1	3	0	11
Not implemented/forgotten (treatment/procedure)	0	0	0	0	0	0	0	0	0	0	0	0
Unnecessary treatment/procedure	0	0	0	0	0	0	0	0	0	0	0	0
Wrong patient position	0	0	0	0	0	0	0	0	0	0	0	0
Wrong examination/treatment, others	2	0	0	1	0	3	4	1	1	0	0	6
Aspiration	0	0	0	0	0	0	1	0	0	0	0	1
Retained foreign object	0	0	0	0	0	0	0	1	0	0	0	1
Treatment/procedure, others	9	7	8	6	0	30	9	16	20	9	0	54
Use/management of medical equipment (device)												
Assembly	0	0	0	0	0	0	0	1	0	0	0	1
Forgot to set up/turn on power	0	0	0	0	0	0	0	0	0	0	0	0
Malfunction	0	0	0	0	0	0	1	0	0	0	0	1
Lack of knowledge	0	0	0	0	0	0	0	0	0	0	0	0
Forgot to set alarm	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
Neglect in inspection/management before or during device operation	0	0	0	0	0	0	0	0	0	0	0	0
Error in sterilization/cleaning technique (medical equipment, etc)	0	0	0	0	0	0	0	0	0	0	0	0
Breakage (medical equipment, etc)	1	0	0	0	0	1	0	0	0	0	0	0
Use/management of medical equipment (device), others	2	0	0	2	0	4	2	0	1	2	0	5

Low						Unknown						No choice[Note 1]						Aggregate total
January to March	April to June	July to September	October to December	No choice[Note 1]	Total	January to March	April to June	July to September	October to December	No choice[Note 1]	Total	January to March	April to June	July to September	October to December	No choice[Note 1]	Total	
																		84
0	2	0	0	0	2	1	0	0	0	0	1	0	0	0	0	0	0	3
2	2	5	3	0	12	1	2	5	0	1	9	0	0	0	0	0	0	23
0	1	0	0	0	1	1	1	1	0	0	3	0	0	0	0	0	0	4
3	2	1	0	0	6	0	0	1	0	0	1	0	0	0	0	0	0	7
1	1	0	2	0	4	1	1	1	0	0	3	0	0	0	0	0	0	8
1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
0	2	5	5	0	12	1	1	1	0	0	3	0	0	0	0	0	0	23
0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
0	1	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	2
2	3	2	0	0	7	0	0	2	0	0	2	0	0	0	0	0	0	11
																		8
0	1	0	0	0	1	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
1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
0	0	0	2	0	2	1	0	0	0	0	1	0	0	0	0	0	0	5
																		385
0	0	1	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	2
3	3	2	3	0	11	2	0	0	0	0	2	0	0	0	0	0	0	15
0	1	2	0	0	3	1	1	0	0	0	2	0	0	0	0	0	0	5
7	10	10	6	0	33	1	1	2	1	0	5	0	0	0	0	0	0	51
0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
0	0	1	2	0	3	1	0	0	1	0	2	0	0	0	0	0	0	5
0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
4	5	3	3	0	15	0	0	0	2	0	2	0	0	0	0	0	0	26
2	2	0	0	0	4	0	1	0	1	0	2	0	0	0	0	0	0	7
8	9	9	7	0	33	2	5	2	2	0	11	0	0	0	0	0	0	45
28	32	37	16	0	113	5	7	10	7	0	29	1	0	0	0	0	1	227
																		45
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	0	0	0	0
0	1	0	0	0	1	0	0	0	1	0	1	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
1	2	2	3	0	8	0	1	1	0	0	2	0	0	0	0	0	0	10
1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
2	0	2	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	5
6	2	3	1	0	12	3	1	0	0	0	4	0	0	0	0	0	0	25

Details of Event × Potential of Residual Disability	Death						High					
	January to March	April to June	July to September	October to December	No choice(Note 1)	Total	January to March	April to June	July to September	October to December	No choice(Note 1)	Total
Related to use/management of drainage tube or other tube												
Infusion leakage	0	0	1	0	0	1	0	0	0	0	0	0
Self-removal	0	1	0	0	0	1	0	0	0	0	0	0
Spontaneous dislodgment	0	0	0	0	0	0	0	0	0	1	0	1
Disconnection	0	0	0	0	0	0	0	1	0	1	0	2
Blockage	1	0	0	0	0	1	0	0	0	0	0	0
Breakage/severance	0	0	0	0	0	0	0	0	0	0	0	0
Wrong connection	0	0	0	0	0	0	0	0	0	0	0	0
Air bubble in tube	0	0	0	0	0	0	0	0	0	0	0	0
Use/management of drainage tube or other tube, others	1	2	1	2	0	6	1	1	3	1	0	6
Related to examination												
Patient misidentification (examination)	0	0	0	0	0	0	0	0	0	0	0	0
Wrong examination/evaluation technique	0	0	0	1	0	1	0	1	0	0	0	1
Error in sample collection	0	0	0	0	0	0	0	0	1	0	0	1
Sample misidentification (examination)	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
Sample contamination	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
Preparation of examination device/ equipment	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
Examination, others	2	0	1	0	0	3	1	2	3	1	0	7
Related to nursing care												
Fall	2	1	3	2	0	8	6	5	5	8	0	24
Fall from bed	0	1	1	0	0	2	0	0	2	0	0	2
Collision	0	0	0	0	0	0	0	0	0	0	0	0
Restraint	0	0	0	0	0	0	0	0	0	0	0	0
Severe decubitus (involving muscle layer, Stage III/IV)	0	0	0	0	0	0	0	0	1	1	0	2
Aspiration (nursing care)	0	1	0	1	0	2	0	1	5	6	0	12
Accidental ingestion (nursing care)	0	0	0	0	0	0	0	0	0	0	0	0
Nursing care/recuperation, others	2	5	1	6	0	14	4	5	4	2	0	15
Transportation, others	0	1	0	0	0	1	0	0	1	0	0	1
Going out/staying out without notice	0	0	0	0	0	0	0	0	0	0	0	0
Self medication, others	0	0	0	1	0	1	0	0	0	0	0	0
Meal/nutrition, others	0	0	1	0	0	1	0	0	0	0	0	0
Others	10	7	9	5	0	31	8	8	3	3	0	22
No choice(Note 1)	9	8	6	2	0	25	1	2	4	4	0	11
Total	44	38	32	29	0	143	45	54	56	44	0	199

(Note 1) "No choice" means no "details of event" or "potential of residual disability" was selected.

Low						Unknown						No choice[(Note 1)]						Aggregate total
January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	January to March	April to June	July to September	October to December	No choice[(Note 1)]	Total	
																		83
0	1	0	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4
2	2	0	1	0	5	5	0	1	0	0	6	0	0	0	0	0	0	12
0	0	2	0	0	2	1	0	0	0	0	1	0	0	0	0	0	0	4
0	0	1	2	0	3	0	0	1	0	0	1	0	0	0	0	0	0	6
0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2
2	1	0	2	0	5	2	1	2	1	0	6	0	0	0	0	0	0	11
2	1	0	0	0	3	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	0	0	0	0
5	7	6	4	0	22	3	2	2	0	0	7	0	0	0	0	0	0	41
																		69
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	2	1	0	0	3	0	1	0	0	0	1	0	0	0	0	0	0	6
0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
0	1	0	0	0	1	0	0	1	0	0	1	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	1	1	0	0	2	0	0	1	1	0	2	0	0	0	0	0	0	4
6	12	12	4	0	34	3	2	2	3	0	10	0	0	0	0	0	0	54
																		363
35	30	38	31	0	134	3	4	8	3	0	18	0	0	0	0	0	0	184
4	3	4	5	0	16	0	1	1	0	0	2	0	0	0	0	0	0	22
1	1	1	0	0	3	0	1	0	0	0	1	0	0	0	0	0	0	4
0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
4	5	6	4	0	19	0	2	0	1	0	3	0	0	0	0	0	0	24
0	4	3	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	21
0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
9	10	13	15	0	47	2	2	5	3	0	12	0	0	0	0	0	0	88
1	0	1	2	0	4	1	0	0	0	0	1	0	0	0	0	0	0	7
1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
1	0	2	1	0	4	1	0	0	0	0	1	0	0	0	0	0	0	6
0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	3
9	10	18	9	0	46	6	8	11	6	0	31	0	0	0	0	0	0	130
6	7	16	12	0	41	5	4	5	4	0	18	1	0	0	0	0	1	96
161	186	212	149	0	708	55	51	67	37	1	211	2	0	0	0	0	2	1,263

Fig. II-1-59 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	No choice(Note 1)	Total	January to March	April to June	July to September	October to December	No choice(Note 1)	Total	January to March	April to June	July to September	October to December	No choice(Note 1)	Total	January to March	April to June	July to September	October to December	No choice(Note 1)	Total	January to March	April to June	July to September	October to December	No choice(Note 1)	Total
Outpatient examination room	0	0	1	0	0	1	0	2	2	0	0	4	0	0	0	0	0	0	3	10	1	8	0	22	1	1	0	0	0	2
Outpatient treatment room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	0	8	0	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	0	0	0	0	0
Emergency room	0	0	1	0	0	1	0	1	1	0	0	2	0	0	0	0	0	0	2	0	3	0	0	5	0	0	0	0	0	0
Critical care center	0	0	1	0	0	1	1	0	0	1	0	2	0	0	0	0	0	0	2	0	2	0	0	4	0	0	0	0	0	0
Patient room	3	0	1	1	0	5	10	7	16	6	0	39	1	1	0	1	0	3	25	23	28	8	0	84	2	0	1	4	0	7
Ward treatment room	0	1	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2	0	6	0	0	0	0	0	0
Operation room	0	0	0	0	0	0	0	2	1	1	0	4	0	0	0	1	0	1	41	48	52	38	0	179	6	3	6	2	0	17
ICU	0	1	0	0	0	1	1	1	0	2	0	4	0	0	0	1	0	1	4	5	2	0	0	11	1	0	0	1	0	2
CCU	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	0
NICU	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	1	0	0	3	0	0	0	0	0	0
Examination room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	2	3	0	11	0	0	0	0	0	0
Catheterization laboratory	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	4	8	5	4	0	21	1	0	1	0	0	2
Radiotherapy room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	2	0	6	0	0	0	0	0	0
Radiography room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	3	4	2	0	11	1	0	0	0	0	1
Radioactive scanning room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0
Dialysis room	0	0	0	0	0	0	1	1	0	0	0	2	1	0	0	0	0	1	0	1	1	2	0	4	0	0	0	0	0	0
Delivery room	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	4	0	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	2	0	0	2	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	0	0	0	0	0
Hallway	0	0	0	0	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	0
Bathroom	0	0	0	0	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	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	0	0	0	0	0
Unknown	0	0	0	0	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	0
Others	0	0	0	0	0	0	1	6	2	3	1	13	0	2	0	0	0	2	9	10	14	8	0	41	2	1	1	1	0	5
No choice(Note 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
Total	3	2	5	1	0	11	14	22	22	13	1	72	2	3	0	3	0	8	101	121	127	80	0	429	14	5	9	8	0	36

(Note 1) "No choice" means no "place of occurrence" or "summary of event" was selected.

Medical equipment, etc.												Examination						Nursing care						Others						Aggregate total
Drainage tube or other tube						Dental equipment, etc																								
January to March	April to June	July to September	October to December	No choice (Note 1)	Total	January to March	April to June	July to September	October to December	No choice (Note 1)	Total	January to March	April to June	July to September	October to December	No choice (Note 1)	Total	January to March	April to June	July to September	October to December	No choice (Note 1)	Total	January to March	April to June	July to September	October to December	No choice (Note 1)	Total	
0	0	1	0	0	1	1	0	0	0	0	1	0	2	2	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	36
0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	10
0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	2	0	0	2	3
0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	0	0	1	0	0	1	1	0	0	0	0	1	12
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	1	0	0	0	1	10
17	12	11	9	0	49	0	0	0	0	0	0	2	3	2	1	0	8	44	56	64	49	0	213	31	26	39	27	0	123	531
1	1	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	1	0	0	2	0	0	2	1	1	0	0	0	2	15
3	0	1	3	0	7	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	7	3	1	4	0	15	225
0	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	0	0	4	1	4	0	1	0	6	31
0	0	0	0	0	0	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	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	5
0	0	0	0	0	0	0	0	0	0	0	0	2	4	5	4	0	15	0	0	1	0	0	1	0	0	1	0	0	1	28
0	0	0	0	0	0	0	0	0	0	0	0	2	5	1	2	0	10	0	0	0	0	0	0	0	1	0	0	0	1	35
0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	8
0	0	1	1	0	2	0	0	0	0	0	0	3	5	4	0	0	12	0	0	0	0	0	0	0	0	0	0	0	0	26
0	0	0	0	0	0	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	0	0	0	0	0	1	0	0	1	1	1	0	0	0	2	10
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	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	0	0	0	1	1	0	0	0	2	0	0	0	1	0	1	5
1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	5	6	5	0	20	1	1	2	1	0	5	27
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7	11	9	0	31	2	2	6	0	0	10	43
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	7	3	3	0	17	0	4	0	1	0	5	23
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	0	1	3
0	0	0	1	0	1	0	0	0	1	0	1	0	0	0	1	0	1	3	0	3	4	0	10	2	3	0	0	0	5	20
2	0	1	0	0	3	0	1	0	0	0	1	5	5	4	3	0	17	8	2	8	13	0	31	13	6	13	6	0	38	151
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	13	17	16	0	70	2	1	0	1	0	4	17	26	20	12	0	75	70	82	103	83	0	338	60	54	64	42	0	220	1,263

[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, 2006 is shown below.

Fig. II-1-60 Month of Occurrence

Month of occurrence		Number of events
2006	January	107
	February	123
	March	99
	April	121
	May	104
	June	144
	July	129
	August	148
	September	130
	October	115
	November	110
	December	120
	No choice(Note 1)	1
Total		1,451

(Note 1) "No choice" means no "month of occurrence" was selected.

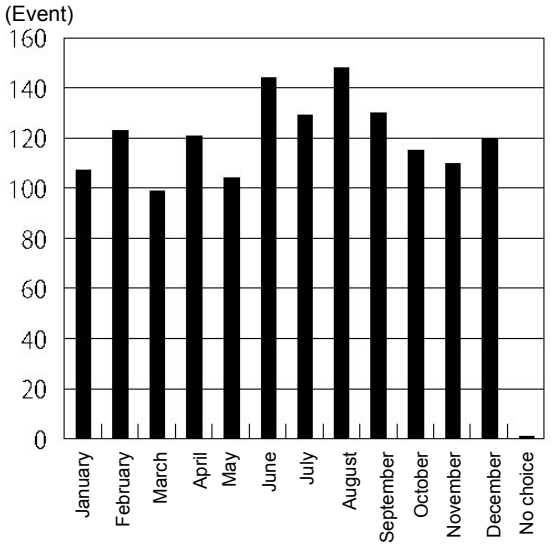


Fig. II-1-61 Day of Occurrence and Weekday/Holiday Category

Day of occurrence	Weekday	Holiday	No choice (Note 1)	Total
Mon.	212	11	1	224
Tue.	263	1	1	265
Wed.	219	2	0	221
Thu.	253	0	0	253
Fri.	234	6	2	242
Sat.	43	86	0	129
Sun.	0	112	1	113
No choice(Note 1)	1	0	3	4
Total	1,225	218	8	1,451

(Note 1) "No choice" means no "day of occurrence" or "weekday/holiday category" was selected.

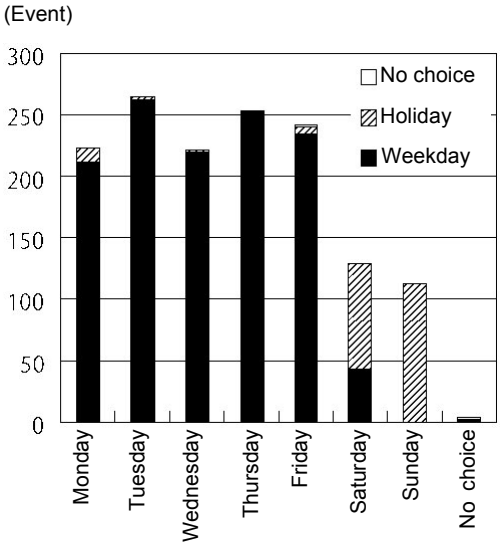
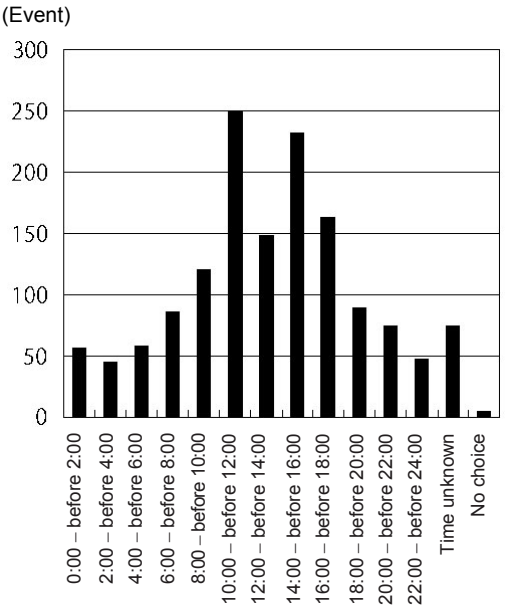


Fig. II-1-62 Time of Occurrence

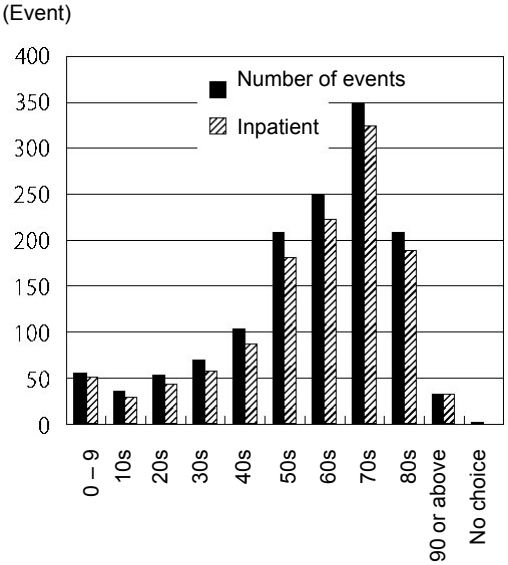
Time of occurrence	Number of events
0:00 – before 2:00	57
2:00 – before 4:00	45
4:00 – before 6:00	58
6:00 – before 8:00	86
8:00 – before 10:00	121
10:00 – before 12:00	249
12:00 – before 14:00	149
14:00 – before 16:00	232
16:00 – before 18:00	164
18:00 – before 20:00	89
20:00 – before 22:00	74
22:00 – before 24:00	48
Time unknown	74
No choice(Note 1)	5
Total	1,451



(Note 1) "No choice" means no "time of occurrence" was selected.

Fig. II-1-63 Patient Age(Note 1)

Number of patients	Patient age	Number of events	Inpatient
1 patient	0 to 9	55	51
	10s	35	29
	20s	53	44
	30s	70	57
	40s	103	87
	50s	208	181
	60s	248	223
	70s	349	325
	80s	209	188
	90 or above	33	32
	No choice	1	0
	Total	1,364	1,217
2 patients or more	Total	23	15
No choice(Note 2)	Total	64	34
Aggregate total		1,451	1,266



(Note 1) 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.

(Note 2) "No choice" means no "patient age" was selected.

Fig. II-1-64 Sex of Patients

Number of patients	Sex	Number of events
1 patient	Male	700
	Female	653
	No choice(Note 1)	11
	Total	1,364
2 patients or more	Total	23
No choice	Total	64
Aggregate total		1,451

(Note 1) "No choice" means no "Sex of Patients" was selected.

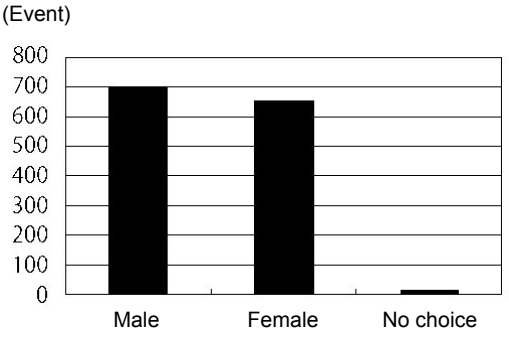


Fig. II-1-65 Inpatient/Outpatient Status and Duration of Hospital Stay

Inpatient/outpatient status		Number of events
Inpatient	Duration: 0 to 31 days	849
	Duration: 32 days or longer	383
	No choice(Note 1)	34
	Total	1,266
Outpatient	Initial visit	11
	Follow-up visit	133
	Total	144
No choice(Note 1)		41
Aggregate total		1,451

(Note 1) "No choice" means no "inpatient/outpatient status" or "duration of hospitalization" was selected.

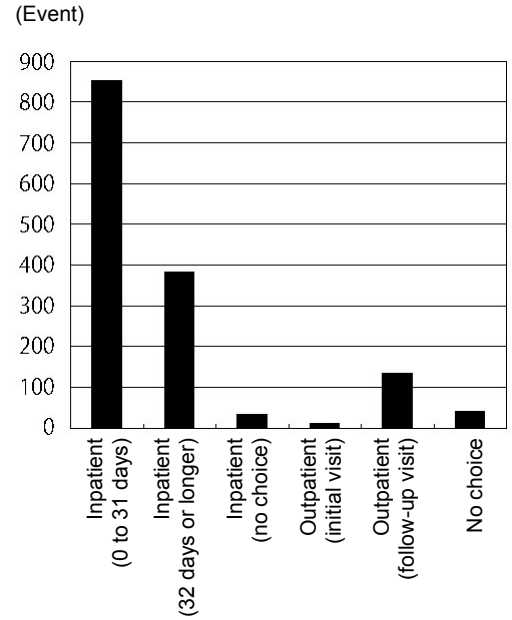


Fig. II-1-66 Person Who Identified Event

Person who identified event	Number of events
Medical staff	1,216
Patient himself/herself	56
Patient's family/caregiver	31
Other patient	41
Others	96
No choice(Note 1)	11
Total	1,451

(Note 1) "No choice" means no "person who identified event" was selected.

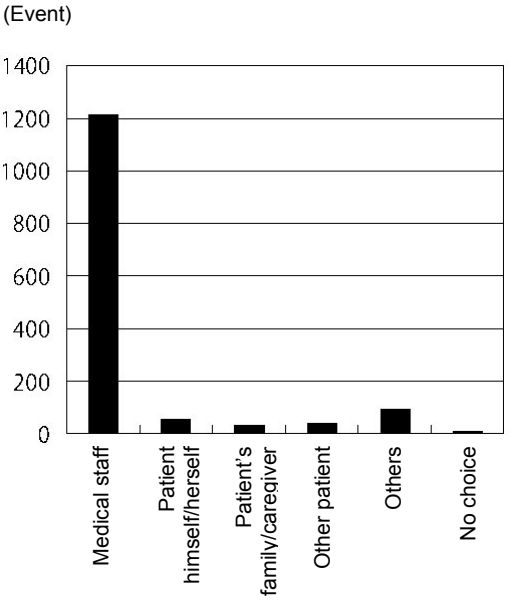
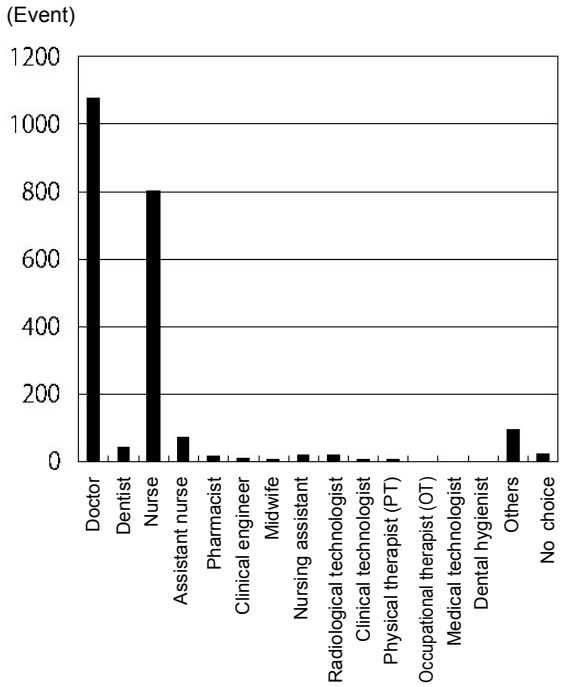


Fig. II-1-67 Job Title of Person Involved

Job title of person involved (Note 1)	Number of events
Doctor	1,077
Dentist	42
Nurse	803
Assistant nurse	72
Pharmacist	15
Clinical engineer	10
Midwife	3
Nursing assistant	18
Radiological technologist	18
Clinical technologist	7
Physical therapist (PT)	6
Occupational therapist (OT)	2
Medical technologist	0
Dental hygienist	0
Others	97
No choice(Note 2)	25
Total	2,195



(Note 1) 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.

(Note 2) "No choice" means no "job title of person involved" was selected.

Fig. II-1-68 Summary of Event

Summary of event	January to December, 2006	
	Number of events	%
Ordering	15	1.0
Drug	92	6.3
Blood transfusion	8	0.6
Treatment/procedure	491	33.8
Medical equipment, etc.	127	9.0
Medical device	40	2.8
Drainage tube or other tube	81	5.6
Dental equipment	6	0.4
Examination/test	83	5.7
Nursing care	391	26.9
Others	243	16.7
No choice(Note 1)	1	0.1
Total	1,451	100.0

(Note 1) "No choice" means no "summary of event" was selected.

Fig. II-1-69 Potential of Residual Disability

Potential of Residual Disability(Note 1)	January to December, 2006	
	Number	%
Death	176	12.1
High	225	15.5
Low	819	56.4
Unknown(Note 2)	227	15.6
No choice(Note 3)	4	0.3
Total	1,451	100.0

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

(Note 2) "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.

(Note 3) "No choice" means no "Potential of residual disability" was selected.

Fig. II-1-70 Place of Occurrence

Place of Occurrence	January to December, 2006	
	Number	%
Outpatient examination room	41	2.8
Outpatient treatment room	15	1.0
Outpatient lobby	1	0.1
Emergency room	16	1.1
Critical care center	13	0.9
Patient room	611	42.1
Ward treatment room	18	1.2
Operation room	237	16.3
ICU	32	2.2
CCU	4	0.3
NICU	5	0.3
Examination room	23	1.6
Catheterization laboratory	46	3.2
Radiotherapy room	10	0.7
Radiography room	35	2.4
Radioactive scanning room	1	0.1
Dialysis room	14	1.0
Delivery room	4	0.3
Rehabilitation room	6	0.4
Restroom	32	2.2
Hallway	52	3.6
Bathroom	22	1.5
Stairway	4	0.3
Unknown	17	1.2
Others	191	13.2
No choice(Note 1)	1	0.1
Total	1,451	100.0

(Note 1) "No choice" means no "place of occurrence" was selected.

Fig. II-1-71 Cause of Event

Cause of Event (Note 1)	Number	%
Neglect to check	406	15.3
Neglect to observe	342	12.9
Misjudgment	347	13.1
Lack of knowledge	115	4.3
Deficiency of technique/skill	126	4.7
Delayed reporting	35	1.3
Under unusual physical condition	65	2.4
Under unusual psychological condition	28	1.1
System failure	54	2.0
Inadequate coordination	159	6.0
Inadequate documentation	38	1.4
Similarity in patient's appearance or name	2	0.1
Busy working condition	72	2.7
Problem in environment	83	3.1
Problem in the drug	15	0.6
Problem in medical device	46	1.7
Problem in other items	30	1.1
Problem in facility	58	2.2
Problem in education/training	109	4.1
Lack of explanation	111	4.2
Others	400	15.1
No choice(Note 2)	16	0.6
Total	2,657	100.0

(Note 1) "Cause of event" may be more than one.

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

Fig. II-1-72 Clinical Department

Clinical Department (Note 1)	Number	%
Internal medicine	127	7.2
Anesthesiology	45	2.6
Cardiovascular medicine	94	5.4
Neurology	40	2.3
Respiratory tract medicine	80	4.6
Gastrointestinal medicine	110	6.3
Hematology	31	1.8
Circulatory surgery	24	1.4
Allergy	1	0.1
Rheumatism	9	0.5
Pediatrics	59	3.4
General surgery	126	7.2
Orthopedics	147	8.4
Plastic surgery	18	1.0
Cosmetic surgery	0	0.0
Neurosurgery	91	5.2
Respiratory surgery	41	2.3
Cardiovascular surgery	58	3.3
Pediatric surgery	9	0.5
Pain clinic	3	0.2
Dermatology	20	1.1
Urology	56	3.2
Venereology	0	0.0
Proctology	2	0.1
Gynecology/Obstetrics	46	2.6
Obstetrics	9	0.5
Gynecology	21	1.2
Ophthalmology	33	1.9
Otolaryngology	47	2.7
Psychosomatic medicine	1	0.1
Psychiatry	105	6.0
Rehabilitation	11	0.6
Radiology	45	2.6
Dentistry	13	0.7
Orthodontics	2	0.1
Pediatric dentistry	0	0.0
Dental/oral surgery	22	1.3
Unknown	1	0.1
Others	201	11.5
No choice (Note 2)	7	0.4
Total	1,755	100.0

(Note 1) More than one “clinical department” may have been involved in one event.

(Note 2) “No choice” means no “clinical department” was selected.

Fig. II-1-73 Years of Experience of Person Involved by Job Title (Doctor, Dentist, Nurse, Pharmacist)

Job title of person involved (Note 1) × 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	No choice (Note 2)	Total
Doctor	52	17	32	47	66	46	57	55	56	50	62	345	125	35	32	1,077
Dentist	5	3	3	3	4	1	1	1	2	0	1	12	4	2	0	42
Nurse	88	76	62	69	48	44	41	25	20	25	17	160	91	20	17	803
Pharmacist	1	2	0	0	2	0	0	1	1	0	0	4	3	1	0	15

(Note 1) 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.

(Note 2) "No choice" means no "years of experience" was selected.

Fig. II-1-74 Number of Years Person Involved (Doctor, Dentist, Nurse, Pharmacist) Has Been Working at Current Department

Job title of person involved (Note 1) × 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	No choice (Note 2)	Total
Doctor	257	137	83	80	74	61	46	42	29	23	38	134	34	3	36	1,077
Dentist	7	5	5	1	3	3	2	1	0	1	1	7	5	0	1	42
Nurse	206	189	140	92	39	29	21	12	5	10	10	23	3	0	24	803
Pharmacist	3	5	1	0	1	2	0	0	1	1	0	1	0	0	0	15

(Note 1) 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.

(Note 2) "No choice" means no "Number of years at current department" was selected.

Fig. II-1-75 Working Hours (in week previous to event) of Person Involved (Doctors)

Working hours	January to December, 2006
>0 to 8 hours	16
>8 to 16 hours	9
>16 to 24 hours	4
>24 to 32 hours	23
>32 to 40 hours	67
>40 to 48 hours	297
>48 to 56 hours	182
>56 to 64 hours	163
>64 to 72 hours	106
>72 to 80 hours	31
>80 to 88 hours	44
>88 to 96 hours	13
96 hours or more	35
Unknown	14
No choice	75
Total	1,077
Average working hours	52.9

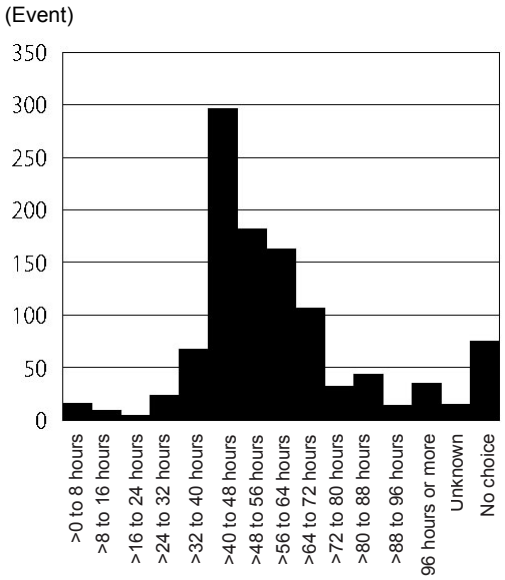


Fig. II-1-76 Working Hours (in week previous to event) of Person Involved (Nurses)

Working hours	January to December, 2006
>0 to 8 hours	13
>8 to 16 hours	6
>16 to 24 hours	15
>24 to 32 hours	69
>32 to 40 hours	221
>40 to 48 hours	357
>48 to 56 hours	74
>56 to 64 hours	26
>64 to 72 hours	0
>72 to 80 hours	0
>80 to 88 hours	0
>88 to 96 hours	0
96 hours or more	0
Unknown	1
No choice	21
Total	803
Average working hours	37.5

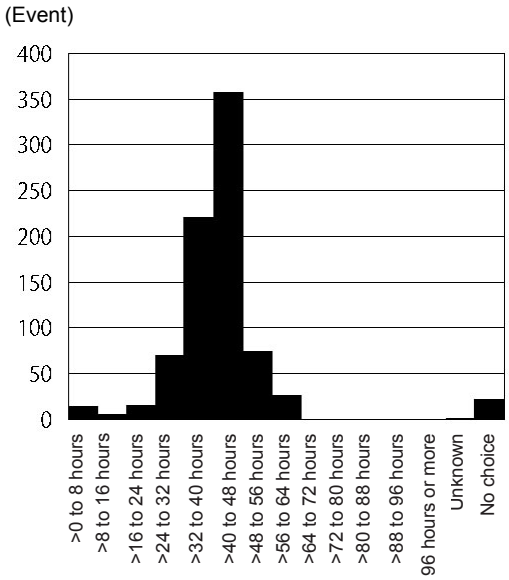


Fig. II-1-77 Number of Night Shifts (in week previous to event) of Person Involved (Doctors)

Number of night shifts	January to December, 2006
Zero	446
1 time	328
2 times	87
3 times	23
4 times	7
5 times	2
6 times	2
7 times	1
Unknown	114
No choice	67
Total	1,077
Average number of night shifts (not including unknown/no choice)	0.70

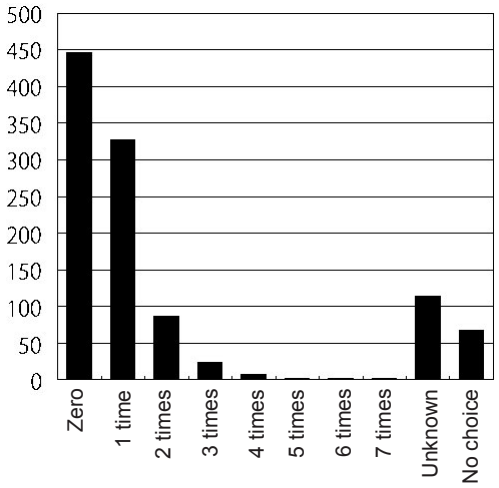


Fig. II-1-78 Number of Night Shifts (in week previous to event) of Person Involved (Nurses)

Number of night shifts	January to December, 2006
Zero	166
1 time	224
2 times	274
3 times	77
4 times	14
5 times	1
6 times	0
7 times	0
Unknown	29
No choice	18
Total	803
Average number of night shifts (not including unknown/no choice)	1.41

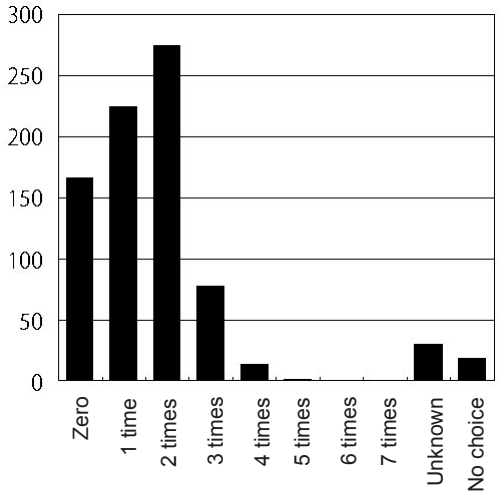


Fig. II-1-79 Cause of Event and Summary of Event

Cause of Event[Note 1] × Summary of Event	Ordering	Drug	Blood transfusion	Treatment/ procedure	Medical equipment, etc.			Examination/test	Nursing care	Others	No choice[Note 2]	Total
					Medical device	Drainage tube or other tube	Dental equipment					
Neglect to check	14	65	5	163	17	28	2	19	59	34	0	406
Neglect to observe	0	13	0	80	7	30	0	8	158	46	0	342
Misjudgment	5	16	1	122	9	26	0	14	114	39	1	347
Lack of knowledge	4	22	0	44	6	10	0	3	17	9	0	115
Deficiency of technique/skill	3	4	0	61	1	12	0	11	27	7	0	126
Delayed reporting	1	1	1	10	1	3	0	1	13	4	0	35
Under unusual physical condition	0	2	0	24	2	2	0	4	19	12	0	65
Under unusual psychological condition	1	3	1	8	1	1	0	1	5	7	0	28
System failure	1	9	1	19	3	3	0	6	4	8	0	54
Inadequate coordination	7	16	3	51	2	3	0	6	52	19	0	159
Inadequate documentation	1	7	1	6	1	1	0	2	13	6	0	38
Similarity in patient's appearance or name	0	1	0	1	0	0	0	0	0	0	0	2
Busy working condition	0	10	0	18	0	2	0	3	26	13	0	72
Problem in environment	0	3	1	10	1	2	0	1	47	18	0	83
Problem in the drug	1	6	1	4	0	0	0	1	2	0	0	15
Problem in medical device	0	0	1	11	18	6	2	2	2	4	0	46
Problem in other items	0	0	0	11	3	2	0	0	8	6	0	30
Problem in facility	1	0	0	4	1	0	0	1	29	22	0	58
Problem in education/training	4	16	1	23	3	6	0	8	33	15	0	109
Lack of explanation	0	1	0	26	3	0	0	6	60	15	0	111
Others	0	13	2	149	9	11	2	22	82	110	0	400
No choice[Note 2]	0	0	0	10	0	0	0	1	1	4	0	16
Total	43	208	19	855	88	148	6	120	771	398	1	2,657

(Note 1) "Cause of event" may be more than one.

(Note 2) "No choice" means no "Cause of event" or "summary of event" was selected.

Fig. II-1-80 Situation and Potential of Residual Disability

Situation × Potential of Residual Disability	Death	High	Low	Unknown	No choice(Note 1)	Total
Related to drug						108
Drug preparation	0	1	7	0	0	8
Subcutaneous/intramuscular injection	0	0	4	0	2	6
Intravenous injection	2	3	12	0	5	22
Arterial injection	0	0	1	0	0	1
Peripheral intravenous drop	1	2	15	0	5	23
Central venous injection	1	1	3	0	3	8
Oral administration	1	2	13	0	3	19
Nose drop/eye drop/ear drop	0	0	2	0	0	2
Other drug prescription/administration	2	3	3	0	1	9
Oral drug dispensing/management	0	0	3	0	3	6
Injection dispensing/management	0	0	0	0	1	1
Dispensing/management, others	1	0	1	0	1	3
Related to blood transfusion						7
Blood test	0	0	1	0	0	1
Blood transfusion	1	1	2	0	2	6
Blood transfusion, others	0	0	0	0	0	0
Related to treatment/procedure						437
Craniotomy	2	4	6	0	2	14
Thoracotomy	1	8	7	0	4	20
Cardiotomy	2	2	6	0	2	12
Laparotomy	6	7	31	0	3	47
Extremities	1	3	5	0	0	9
Endoscopic surgery	2	9	16	1	2	30
Other surgery	1	13	29	0	12	55
Preparation for surgery	0	1	0	0	0	1
Preoperative procedure	1	1	2	0	0	4
Postoperative procedure	4	3	8	0	2	17
Surgery, others	2	8	17	0	5	32
General anesthesia (inhalation anesthesia and intravenous anesthesia)	0	0	2	0	2	4
Local anesthesia	0	1	1	0	0	2
Inhalation anesthesia	0	0	0	0	1	1
Intravenous anesthesia	0	1	0	0	0	1
Vertebral/epidural anesthesia	0	0	2	0	1	3
Anesthesia, others	0	0	0	0	0	0
Caesarean section	1	1	4	0	0	6
Delivery and artificial abortion, others	2	3	4	0	0	9
Blood purification (including hemodialysis)	2	0	8	0	1	11
IVR (ex. angiocatheter)	2	4	15	0	5	26
Radiotherapy	0	0	3	0	2	5
Rehabilitation	0	0	3	0	0	3
Invasive dental treatment	0	0	1	0	0	1
Endoscopic treatment	5	4	15	0	3	27
Treatment, others	0	8	21	0	8	37

Situation × Potential of Residual Disability	Death	High	Low	Unknown	No choice(Note 1)	Total
Central venous line	4	0	13	0	4	21
Peripheral venous line	1	1	4	1	0	7
Catheter for blood purification	0	0	1	0	1	2
Feeding tube (NG, ED)	0	2	0	0	0	2
Urethral catheter	0	0	0	0	0	0
Procedure related to drainage	0	2	3	0	2	7
Wound care	1	2	0	0	0	3
Tube placement, others	1	0	9	0	2	12
Tracheal intubation	0	1	1	0	0	2
Tracheotomy	1	0	0	0	0	1
Cardiac compression	0	0	0	0	0	0
Oxygen therapy	0	0	2	0	0	2
Emergency procedure, others	1	0	0	0	0	1
Related to use/management of medical equipment (device)						47
Mechanical ventilator	2	2	2	0	1	7
Oxygen therapy equipment	0	1	2	0	2	5
Oxygenator	0	0	0	0	0	0
Defibrillator	0	0	0	0	0	0
Pace maker	1	0	0	0	0	1
Infusion/transfusion pump	0	1	2	0	1	4
Blood purification device	0	0	2	0	0	2
ECG, blood pressure monitor	0	0	0	0	0	0
Pulse oxymeter	0	0	0	0	0	0
Use/management of medical equipment (device), others	2	3	20	0	3	28
Related to use/management of drainage tube or other tube						92
Central venous line	4	1	5	0	6	16
Peripheral venous line	0	0	0	0	0	0
Tracheal tube	1	2	4	0	1	8
Tracheal cannula	2	1	2	0	4	9
Feeding tube (NG, ED)	1	1	4	0	2	8
Urethral catheter	0	0	2	0	1	3
Chest drainage tube	0	1	7	0	4	12
Abdominal drainage tube	0	0	3	0	1	4
Ventricular/cisternal drainage tube	0	1	0	0	0	1
Subcutaneous continuous suction drainage tube	0	0	1	0	0	1
Epidural catheter	0	0	0	0	1	1
Catheter/line for blood purification	1	1	1	0	0	3
Use/management of drainage tube or other tube, others	0	4	14	0	8	26
Related to examination						78
Blood drawing	1	1	5	0	1	8
Sample collection, others	0	0	4	0	3	7
General imaging	0	0	5	0	0	5
MRI	0	1	2	0	2	5
Angiocatheter-aided imaging	1	1	6	0	0	8
Lower gastrointestinal imaging	0	1	1	0	0	2

Situation × Potential of Residual Disability	Death	High	Low	Unknown	No choice(Note 1)	Total
Imaging, others	1	0	5	0	4	10
Upper gastrointestinal	1	3	6	0	1	11
Lower gastrointestinal	1	0	3	0	2	6
Bronchoscopy	0	0	0	0	0	0
Endoscopic examination, others	0	0	5	0	1	6
Pathological examination	0	0	1	0	1	2
Examination, others	1	0	5	0	2	8
Related to nursing care						419
Endotracheal/oral suctioning	0	0	2	0	0	2
Changing position	0	2	5	0	2	9
Bed bath	0	0	2	0	0	2
Help with changing clothes	0	1	3	0	0	4
Help with eating	3	5	5	0	0	13
Help with bathing	1	1	7	0	0	9
Help with elimination	0	1	14	0	0	15
Help with moving	0	4	17	0	3	24
Transportation	0	0	1	0	1	2
Tending patient's belongings	0	1	2	0	0	3
Meal serving	0	0	0	0	0	0
Patient observation	6	9	30	0	6	51
Nursing care, others	4	2	28	0	8	42
Oral intake	1	2	0	0	1	4
While taking a walk	0	1	4	0	0	5
While moving from one place to another	7	19	73	0	12	111
While going out/sleeping out	2	0	1	0	0	3
While eating	0	2	6	0	0	8
While bathing	1	0	8	0	1	10
While excreting	0	4	21	0	1	26
While sleeping	4	5	12	0	4	25
Recuperation, others	8	5	36	0	2	51
Others	33	21	55	0	27	136
No choice(Note 1)	34	12	62	2	17	127
Total	176	225	819	4	227	1,451

(Note 1) "No choice" means no "situation" or "potential of residual disability" was selected.

Fig. II-1-81 Place of Occurrence and Inpatient/Outpatient Status

Place of Occurrence × Inpatient/Outpatient Status	Inpatient	Outpatient	No choice(Note 1)	Total
Outpatient examination room	1	40	0	41
Outpatient treatment room	3	12	0	15
Outpatient lobby	0	1	0	1
Emergency room	3	13	0	16
Critical care center	13	0	0	13
Patient room	590	1	20	611
Ward treatment room	18	0	0	18
Operation room	227	6	4	237
ICU	32	0	0	32
CCU	4	0	0	4
NICU	5	0	0	5
Examination room	17	6	0	23
Catheterization laboratory	42	3	1	46
Radiotherapy room	9	1	0	10
Radiography room	26	8	1	35
Radioactive scanning room	0	1	0	1
Dialysis room	12	2	0	14
Delivery room	4	0	0	4
Rehabilitation room	4	2	0	6
Restroom	28	1	3	32
Hallway	48	3	1	52
Bathroom	21	0	1	22
Stairway	3	1	0	4
Unknown	16	1	0	17
Others	140	42	9	191
No choice(Note 1)	0	0	1	1
Total	1,266	144	41	1,451

(Note 1) "No choice" means no "place of occurrence" or "inpatient/outpatient status" was selected.

Fig. II-1-82 Summary of Event and Potential of Residual Disability

Summary of Event × Potential of Residual Disability	Death	High	Low	Unknown	No choice(Note 1)	Total
Ordering	0	0	12	3	0	15
Drug	4	9	58	21	0	92
Blood transfusion	2	1	3	2	0	8
Treatment/procedure	52	106	257	72	4	491
Medical equipment, etc.	11	12	68	36	0	127
Medical device	3	5	22	10	0	40
Drainage tube or other tube	8	7	41	25	0	81
Dental equipment (device), etc	0	0	5	1	0	6
Examination/test	9	6	50	18	0	83
Nursing care	30	55	268	38	0	391
Others	68	35	103	37	0	243
No choice	0	1	0	0	0	1
Total	176	225	819	227	4	1,451

Fig. II-1-83 Place of Occurrence and Potential of Residual Disability

Place of Occurrence × Potebtial of Residual Disability	Death	High	Low	Unknown	No choice(Note 1)	Total
Outpatient examination room	2	4	23	12	0	41
Outpatient treatment room	1	2	9	3	0	15
Outpatient lobby	0	0	1	0	0	1
Emergency room	3	2	11	0	0	16
Critical care center	3	1	8	1	0	13
Patient room	89	88	341	93	0	611
Ward treatment room	1	2	12	2	1	18
Operation room	13	52	133	38	1	237
ICU	9	7	15	1	0	32
CCU	0	2	1	1	0	4
NICU	0	1	4	0	0	5
Examination room	4	4	11	4	0	23
Catheterization laboratory	4	8	27	6	1	46
Radiotherapy room	2	0	6	2	0	10
Radiography room	6	9	11	9	0	35
Radioactive scanning room	0	0	1	0	0	1
Dialysis room	2	1	10	1	0	14
Delivery room	1	2	1	0	0	4
Rehabilitation room	0	0	6	0	0	6
Restroom	5	2	22	3	0	32
Hallway	4	8	37	3	0	52
Bathroom	2	2	17	1	0	22
Stairway	0	1	3	0	0	4
Unknown	0	1	12	4	0	17
Others	25	26	96	43	1	191
No choice(Note 1)	0	0	1	0	0	1
Total	176	225	819	227	4	1,451

(Note 1) "No choice" means no "place of occurrence" or "potential of residual disability" was selected.

Fig. II-1-84 Details of Event and Potential of Residual Disability

Details of Event × Potentila of Residual Disability	Death	High	Low	Unknown	No choice(Note	Total
Related to drug						107
Dose error	0	0	3	1	0	4
Overdose	1	2	13	9	0	25
Dosing speed too fast	0	0	1	3	0	4
Patient misidentification	0	0	10	1	0	11
Drug mix-up	0	1	8	3	0	12
Wrong dosing method	0	0	3	1	0	4
Drug prescription/administration, others	5	8	18	3	0	34
Dispensing error (wrong dose/number)	0	0	1	0	0	1
Dispensing/drug management, others	0	0	4	2	0	6
Drug/blood product management, others	1	1	3	1	0	6
Related to blood transfusion						7
Cross-match error	0	0	1	0	0	1
Error in documentation/recording of results	0	0	0	0	0	0
Transfusion testing, others	0	0	2	0	0	2
Irradiation of blood products, blood transfusion, others	1	1	0	2	0	4
Related to treatment/procedure					437	
Patient misidentification	0	0	1	1	0	2
Wrong site treatment/procedure	1	1	10	2	0	14
Wrong examination/treatment/procedure, others	0	0	3	3	0	6
Wrong method (technique)	4	14	42	5	0	65
Not implemented/forgotten (treatment/procedure)	0	0	2	0	0	2
Unnecessary treatment/procedure	0	0	2	3	0	5
Wrong patient position	0	0	1	1	0	2
Wrong examination/treatment, others	4	9	20	2	0	35
Aspiration	0	1	4	3	0	8
Retained foreign object	0	1	37	12	0	50
Treatment/procedure, others	34	63	117	32	2	248
Use/management of medical equipment (device)						54
Assembly	0	1	0	0	0	1
Forgot to set up/turn on power	0	0	0	0	0	0
Malfunction	0	1	1	2	0	4
Lack of knowledge	0	0	1	0	0	1
Forgot to set up alarm	0	0	0	0	0	0
Range of alarm setup	0	0	0	0	0	0
Neglect in inspection/management before or during device operation	0	1	8	2	0	11
Error in sterilization/clean technique (equipment, etc)	0	0	1	0	0	1
Breakage	1	0	4	1	0	6
Use/management of medical equipment (device), others	4	4	17	5	0	30
Related to use/management of drainage tube or other tube						92
Infusion leakage	1	0	2	0	0	3
Self-removal	1	0	9	6	0	16
Spontaneous dislodgment	0	0	2	2	0	4
Disconnection	0	3	4	1	0	8

Details of Event × Potential of Residual Disability	Death	High	Low	Unknown	No choice(Note 1)	Total
Blockage	1	1	0	1	0	3
Breakage/severance	0	0	4	6	0	10
Wrong connection	0	0	3	0	0	3
Air bubble in tube	0	0	0	0	0	0
Use/management of drainage tube or other tube, others	6	8	19	12	0	45
Related to examination	77					
Patient misidentification (examination)	0	0	1	0	0	1
Wrong examination/evaluation technique	1	1	6	1	0	9
Error in sample collection	0	1	0	0	0	1
Sample misidentification (examination)	0	0	2	1	0	3
Lost sample	0	0	1	2	0	3
Sample contamination	0	0	0	0	0	0
Management of analytical device/equipment	0	0	0	0	0	0
Preparation of examination device/equipment	0	0	0	0	0	0
Result reporting	0	0	2	1	0	3
Examination, others	5	5	36	11	0	57
Related to nursing care	425					
Fall	9	31	156	18	0	214
Fall from bed	2	4	18	3	0	27
Collision	0	0	3	1	0	4
Restraint	0	0	1	0	0	1
Severe decubitus (involving muscle layer, Stage III/IV)	0	3	22	3	0	28
Aspiration (nursing care)	5	9	9	0	0	23
Accidental ingestion (nursing care)	0	0	2	1	0	3
Nursing care/recuperation, others	17	16	58	11	0	102
Transportation, others	1	1	4	1	0	7
Going out/staying out without notice	1	0	3	1	0	5
Self medication, others	1	0	6	2	0	9
Meal/nutrition, others	1	0	1	0	0	2
Others	33	21	51	24	0	129
No choice(Note 1)	35	12	56	18	2	123
Total	176	225	819	227	4	1,451

(Note 1) "No choice" means no "details of event" or "potential of residual disability" was selected.

Fig. II-1-85 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	No choice(Note 1)	Total
					Medical device	Drainage tube or other tube	Dental equipment					
Outpatient examination room	2	5	1	24	2	1	1	5	0	0	0	41
Outpatient treatment room	0	0	0	9	0	2	0	3	0	1	0	15
Outpatient lobby	0	0	0	0	0	0	0	1	0	0	0	1
Emergency room	1	3	0	7	0	0	0	3	1	1	0	16
Critical care center	1	2	0	5	0	1	0	1	2	1	0	13
Patient room	7	48	2	97	8	56	0	8	251	133	1	611
Ward treatment room	2	0	0	8	1	2	0	1	2	2	0	18
Operation room	0	4	2	191	19	5	1	1	0	14	0	237
ICU	1	4	0	12	2	2	0	0	4	7	0	32
CCU	0	1	0	2	0	1	0	0	0	0	0	4
NICU	0	1	0	3	0	0	0	0	1	0	0	5
Examination room	0	0	0	10	0	0	1	11	0	1	0	23
Catheterization laboratory	0	1	0	30	2	0	0	11	0	2	0	46
Radiotherapy room	0	0	0	8	0	0	0	1	0	1	0	10
Radiography room	0	0	0	15	1	2	0	16	0	1	0	35
Radioactive scanning room	0	0	0	1	0	0	0	0	0	0	0	1
Dialysis room	1	2	1	6	0	0	0	0	1	3	0	14
Delivery room	0	0	0	4	0	0	0	0	0	0	0	4
Rehabilitation room	0	0	0	3	0	0	0	0	2	1	0	6
Restroom	0	1	0	3	0	2	0	0	21	5	0	32
Hallway	0	0	0	2	0	1	0	0	36	13	0	52
Bathroom	0	0	0	1	0	0	0	0	17	4	0	22
Stairway	0	0	0	0	0	0	0	0	3	1	0	4
Unknown	0	0	0	1	0	1	1	0	9	5	0	17
Others	0	20	2	49	5	5	2	21	40	47	0	191
No choice(Note 1)	0	0	0	0	0	0	0	0	1	0	0	1
Total	15	92	8	491	40	81	6	83	391	243	1	1,451

(Note 1) "No choice" means no "place of occurrence" or "summary of event" was selected.

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 registered medical institutions. Summary of the project as of December 31, 2006 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

Total number of Voluntarily participating medical institutions	1,276
Designated medical institutions (among Voluntarily participating medical institutions)	247

Designated medical institutions are those participating in Project to Collect 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 designated medical institutions and their locations 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	27
100 to 199	39
200 to 299	24
300 to 399	50
400 to 499	23
500 to 599	25
600 or more	59
Total	247

Location	Number of medical institutions
Hokkaido	15
Tohoku	26
Kanto/Koshinetsu	58
Tokyo	16
Tokai/Hokuriku	39
Kinki	33
Chugoku/Shikoku	33
Kyushu/Okinawa	27
Total	247

The total number of beds at registered medical institutions participating in Project to Collect Medical Near-Miss Information as of December 31, 2006 is 103,610.

[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

		19th report	20th report	21st report	22nd report	Remarks
Month of occurrence		January to March	April to June	July to September	October to December	
Collection period		February 14 to May 15	May 16 to August 14	August 15 to November 13	November 14 to February 13, 2007	
Voluntarily participating medical institutions	**Total number of Voluntarily participating medical institutions**	1,273	1,276	1,277	1,277	
	Voluntarily participating medical institutions that made reports	332	370	341	345	
	Designated medical institutions(Note 1)	247	247	246	246	
	Designated medical institutions that made reports	239	239	226	236	Institutions with reporting difficulty in the 19th report: 8 institutions Institutions with reporting difficulty in the 20th report: 9 institutions Institutions with reporting difficulty in the 21st report: 9 institutions Institutions with reporting difficulty in the 22nd report: 2 institutions
Number of reports(Note 2)	**Total number of reports**	44,135	56,357	52,601	49,425	
	General coded information	42,754	54,025	50,768	48,067	
	Descriptive information	3,178	2,332	4,637	4,798	
Number of evaluable reports	**General coded information**	42,753	54,025	50,769	48,062	
	Descriptive information	1,620	2,250	1,849	1,925	

(Note 1) Designated medical institutions are those participating in Project to Collect Medical Near-Miss Information and agreed to cooperate to provide "general coded information." As of December 31, 2006, 247 institutions have been designated by avoiding biases in institution size and location.
See Attachment 7 "List of Designated Medical Institutions for Project to Collect Medical Near-Miss Information"

(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	14,408
February	14,073
March	14,247
April	16,400
May	18,574
June	17,760
July	17,522
August	17,030
September	15,118
October	16,532
November	16,369
December	15,051
Month unknown	2,525
Total	195,609

Fig. II-2-5 Time of Occurrence

Time of occurrence	Number of events				
	19th	**20th**	**21st**	**22nd**	**Total**
0:00 – before 2:00	2,484	2,914	2,790	2,760	10,948
2:00 – before 4:00	1,825	1,926	2,021	2,005	7,777
4:00 – before 6:00	1,659	1,901	1,996	1,897	7,453
6:00 – before 8:00	3,187	3,700	3,665	3,393	13,945
8:00 – before 10:00	4,773	6,047	5,800	5,565	22,185
10:00 – before 12:00	5,305	6,828	6,224	5,898	24,255
12:00 – before 14:00	4,233	5,467	4,805	4,759	19,264
14:00 – before 16:00	3,904	5,242	4,713	4,557	18,416
16:00 – before 18:00	3,910	5,236	4,789	4,571	18,506
18:00 – before 20:00	3,655	4,602	4,421	4,366	17,044
20:00 – before 22:00	2,977	3,425	3,444	3,188	13,034
22:00 – before 24:00	2,461	2,783	2,756	2,618	10,618
Time unknown	2,380	3,954	3,345	2,485	12,164
Total	42,753	54,025	50,769	48,062	195,609

Fig. II-2-6 Place of Occurrence

Place of Occurrence	Number of events				
	19th	20th	21st	22nd	Total
Outpatient examination room	759	854	704	753	3,070
Outpatient lobby	88	122	86	107	403
Outpstient, facility others	515	648	591	595	2,349
Emergentcy room	260	299	299	274	1,132
Nurse station	4,161	5,876	5,165	4,824	20,026
Patient room	24,062	30,010	28,647	27,041	109,760
Treatment room	719	1,078	860	763	3,420
Bathroom	177	204	256	216	853
Ward facility, others	1,802	2,305	2,302	2,049	8,458
Operation room	1,140	1,522	1,306	1,276	5,244
Delivery room	37	32	43	33	145
ICU	1,181	1,451	1,431	1,295	5,358
CCU	259	356	288	332	1,235
NICU	525	614	511	459	2,109
ICU, others	459	359	338	402	1,558
Examination room	730	838	736	716	3,020
Rehabilitation room	171	209	192	233	805
IVR room	24	33	32	30	119
Radiography/examination room	758	998	879	743	3,378
Radioactive scanning room	26	61	30	29	146
Radiotherapy room	38	60	35	44	177
Dialysis room	418	573	608	553	2,152
Pharmacy/blood transfusion unit	1,320	1,342	1,207	1,275	5,144
Nutritional management/ room/kitchen	275	404	373	353	1,405
Restroom	621	749	710	766	2,846
Hallway	647	773	826	704	2,950
Stairway	7	11	15	14	47
Unknown	787	1,185	1,256	1,347	4,575
Other place (within institution)	635	867	849	673	3,024
Other place (outside institution)	152	192	194	163	701
Total	42,753	54,025	50,769	48,062	195,609

Fig. II-2-7 Cause of Event

Cause of Event (Note 1)	19th		20th		21st		22nd		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Inadequate check	26,260	25.9	35,445	25.1	32,381	24.8	30,085	25.4	124,171	25.3
Inadequate observation	14,092	13.9	17,672	12.5	16,894	13.0	16,071	13.6	64,729	13.2
Misjudgment	8,232	8.1	10,789	7.7	9,820	7.5	8,568	7.2	37,409	7.6
Lack of knowledge/wrong knowledge	2,452	2.4	4,842	3.4	3,900	3.0	3,088	2.6	14,282	2.9
Deficiency of technique (skill)/erroneous technique (skill)	1,980	2.0	3,225	2.3	2,658	2.0	2,153	1.8	10,016	2.0
Reporting, etc. (forgotten, inadequate/incorrect, inappropriate)	1,669	1.6	2,867	2.0	2,554	2.0	2,222	1.9	9,312	1.9
Physical condition (ex. lack of sleep, being sick)	1,466	1.4	2,111	1.5	2,032	1.6	1,783	1.5	7,392	1.5
Psychological condition(ex. rushed, action based on false assumption)	13,391	13.2	18,835	13.4	17,306	13.3	15,457	13.1	64,989	13.2
System	1,611	1.6	2,426	1.7	2,169	1.7	1,974	1.7	8,180	1.7
Coordination	4,467	4.4	6,681	4.7	5,839	4.5	5,468	4.6	22,455	4.6
Record documentation	885	0.9	1,357	1.0	1,306	1.0	1,237	1.0	4,785	1.0
Similarity in patient's appearance (face, age) or name	174	0.2	212	0.2	211	0.2	190	0.2	787	0.2
Working condition	9,814	9.7	12,220	8.7	11,520	8.8	11,125	9.4	44,679	9.1
Environment	701	0.7	1,053	0.7	1,081	0.8	1,031	0.9	3,866	0.8
Medical/dental equipment (device), tool, material	926	0.9	1,141	0.8	1,160	0.9	951	0.8	4,178	0.9
Drug	938	0.9	1,228	0.9	1,212	0.9	1,066	0.9	4,444	0.9
Other items	433	0.4	509	0.4	555	0.4	531	0.4	2,028	0.4
Facility	199	0.2	334	0.2	319	0.2	306	0.3	1,158	0.2
Education/training	1,829	1.8	3,290	2.3	2,803	2.1	2,404	2.0	10,326	2.1
Explanation to patient/family	5,871	5.8	7,041	5.0	6,917	5.3	6,486	5.5	26,315	5.4
Others	3,909	3.9	7,661	5.4	7,815	6.0	6,115	5.2	25,500	5.2
Total	101,299	100.0	140,939	100.0	130,452	100.0	118,311	100.0	491,001	100.0

(Note 1) "Cause of event" may be more than one.

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

Cause of Event (Note 1)	Detailed cause of event	Number of events				
		19th	20th	21st	22nd	Total
Check	Inadequate checking	25,810	34,867	31,848	29,590	122,115
	Others	450	578	533	495	2,056
Observation	Inadequate observation	13,812	17,314	16,570	15,768	63,464
	Others	280	358	324	303	1,265
Psychological condition	Rushed	2,901	4,350	4,043	3,701	14,995
	Irritated	359	428	450	310	1,547
	Nervous	296	748	463	397	1,904
	Preoccupied with other thing	2,273	3,121	2,720	2,476	10,590
	Acted based on false assumption	4,999	6,965	6,506	5,661	24,131
	Acted unwittingly	1,698	2,202	2,079	1,882	7,861
	Others	865	1,021	1,045	1,030	3,961
Working condition	Busy	4,417	5,555	5,113	5,323	20,408
	Inadequate personnel management	210	188	198	105	701
	Interrupted procedure	396	592	458	469	1,915
	On duty	144	199	178	174	695
	After duty	54	62	48	53	217
	Worked on night shift	4,007	4,638	4,677	4,392	17,714
	After working on night shift	291	386	399	284	1,360
	Others	295	600	449	325	1,669
Judgment	Misjudgment	7,809	10,248	9,276	8,075	35,408
	Others	423	541	544	493	2,001
Explanation to patient/family	Inadequate explanation	2,531	3,097	2,943	2,615	11,186
	Incorrect explanation	60	113	79	90	342
	Insufficient understanding of patient/family	3,036	3,438	3,470	3,357	13,301
	Others	244	393	425	424	1,486
Coordination	Insufficient coordination between doctor and nurse	1,114	1,643	1,465	1,442	5,664
	Insufficient coordination between doctor and technical staff	115	104	107	74	400
	Insufficient coordination between doctor and administrative staff	26	21	20	27	94
	Insufficient coordination between doctors	104	132	110	125	471
	Insufficient coordination between nurses	2,301	3,640	3,104	2,806	11,851
	Insufficient coordination among technical staff	147	200	145	205	697
	Insufficient coordination among staff with different responsibilities	489	637	571	504	2,201
	Insufficient coordination between dentist and dental staff	0	0	0	0	0
	Others	171	304	317	285	1,077
Knowledge	Lack of knowledge	1,949	3,761	3,018	2,412	11,140
	Incorrect knowledge	308	641	478	357	1,784
	Others	195	440	404	319	1,358
Total		84,579	113,525	104,577	96,348	399,029

(Note 1) "Cause of event" may be more than one.

Fig. II-2-9 Patient Age

Age	Number of events				
	19th	20th	21st	22nd	Total
0 to 10	2,622	3,772	3,423	3,238	13,055
11 to 20	747	1,057	1,174	1,032	4,010
21 to 30	1,275	1,820	1,718	1,472	6,285
31 to 40	1,852	2,432	2,307	2,061	8,652
41 to 50	2,052	2,869	2,685	2,371	9,977
51 to 60	4,704	6,310	5,897	5,368	22,279
61 to 70	7,594	9,924	9,417	8,790	35,725
71 to 80	10,626	13,314	12,922	12,459	49,321
81 to 90	5,939	6,962	6,349	6,358	25,608
91 or above	1,014	1,086	955	1,068	4,123
Multiple patients involved	737	494	467	461	2,159
Unknown	3,591	3,985	3,455	3,384	14,415
Total	42,753	54,025	50,769	48,062	195,609

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

Effect	19th		20th		21st		22nd		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Detected before taking action: slight effect on patient (no treatment necessary)	4,927	11.5	6,738	12.5	5938	11.7	5,575	11.6	23,178	11.8
Detected before taking action: moderate effect on patient (treatment necessary)	1,391	3.3	2,097	3.9	1835	3.6	1,948	4.1	7,271	3.7
Detected before taking action: major effect on patient (life-threatening)	714	1.7	730	1.4	763	1.5	948	2.0	3,155	1.6
Action taken but patient not affected	29,973	70.1	37,293	69.0	35339	69.6	32,942	68.5	135,547	69.3
Unknown	1,682	3.9	2,368	4.4	2113	4.2	2,098	4.4	8,261	4.2
Others	4,066	9.5	4,799	8.9	4781	9.4	4,551	9.5	18,197	9.3
Total	42,753	100.0	54,025	100.0	50,769	100.0	48,062	100.0	195,609	100.0

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

Years of Experience of Person Involved	Number of events				
	19th	20th	21st	22nd	Total
0 year	5,640	6,293	7,902	6,716	26,551
1 year	3,855	5,769	5,060	4,616	19,300
2 years	3,538	4,419	4,196	4,050	16,203
3 years	2,859	3,984	3,633	3,349	13,825
4 years	2,360	3,373	2,873	2,826	11,432
5 years	1,885	2,671	2,283	2,017	8,856
6 years	1,686	1,995	1,751	1,726	7,158
7 years	1,529	1,714	1,523	1,538	6,304
8 years	1,143	1,658	1,434	1,277	5,512
9 years	1,102	1,302	1,191	1,251	4,846
10 years	1,052	1,722	1,457	1,308	5,539
11 to 20 years	6,525	7,785	6,978	6,953	28,241
21 to 30 years	3,433	4,187	3,840	3,747	15,207
30 years or longer	753	891	834	806	3,284
Multiple persons involved	1,448	2,004	1,629	1,616	6,697
Unknown	3,945	4,258	4,185	4,266	16,654
Total	42,753	54,025	50,769	48,062	195,609

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

Job Title of Person Involved (Note 1)	Number of events				
	19th	20th	21st	22nd	Total
Doctor	2,067	2,396	2,037	1,997	8,497
Dentist	27	37	33	24	121
Midwife	490	669	594	498	2,251
Nurse	34,659	44,503	42,057	39,678	160,897
Assistant nurse	674	799	735	720	2,928
Nursing assistant	244	304	263	256	1,067
Pharmacist	1,423	1,564	1,370	1,421	5,778
National registered dietitian	157	260	241	225	883
Dietitian	135	233	177	175	720
Cook/cooking staff	398	572	519	511	2,000
Radiological technologist	613	775	664	588	2,640
Clinical technologist	646	804	660	669	2,779
Medical technologist	10	7	4	5	26
Physical therapist (PT)	178	268	221	259	926
Occupational therapist (OT)	59	91	90	92	332
Speech therapist (ST)	7	15	9	25	56
Dental hygienist	9	10	6	5	30
Dental technician	1	1	3	1	6
Orthoptist	5	21	11	12	49
Psychiatric social worker	2	8	4	1	15
Clinical psychologist	2	2	1	4	9
Certified social worker	4	14	6	2	26
Certified care worker	57	61	61	42	221
Clinical engineering technologist	112	160	166	164	602
Children's supervisor/child minder	11	49	13	21	94
Administrative staff	387	395	361	377	1,520
Unknown	2,466	6,275	6,206	4,584	19,531
Others	548	430	572	509	2,059
Total	45,391	60,723	57,084	52,865	216,063

(Note 1) More than one "job title" could be involved in a case.

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

Patient Physical/Psychological State (Note 1)	Number of events				
	19th	20th	21st	22nd	Total
Disturbance of consciousness	3,212	3,634	3,516	3,393	13,755
Visual impairment	877	1,037	1,007	906	3,827
Hearing impairment	771	926	868	793	3,358
Dysarthria	848	900	850	851	3,449
Mental disorder	1,982	2,472	2,506	2,345	9,305
Dementia/amnesia	4,457	4,837	4,880	4,773	18,947
Upper extremity disability	2,263	2,698	2,599	2,429	9,989
Lower extremity disability	3,996	4,804	4,611	4,273	17,684
Gait disorder	5,005	5,745	5,719	5,437	21,906
Bed rest	5,768	7,286	6,335	6,162	25,551
Sleeping	886	1,006	1,100	946	3,938
Delirious	1,963	2,255	2,217	2,327	8,762
Under drug influence	2,480	2,991	2,905	2,891	11,267
Anesthetized/pre- or post-anesthesia	1,059	1,439	1,261	1,177	4,936
No disorder	9,814	13,795	13,053	12,105	48,767
Unknown	10,723	15,452	13,970	12,550	52,695
Others	4,225	5,334	5,500	4,840	19,899
Total	60,329	76,611	72,897	68,198	278,035

(Note 1) More than one "patient physical/psychological state" could be selected.

Fig. II-2-14 Sex of Patients

Sex	Number of events				
	19th	20th	21st	22nd	Total
Male	22,750	29,141	27,303	25,953	105,147
Female	17,707	22,134	21,054	19,725	80,620
Multiple patients involved	713	513	450	440	2,116
Unidentifiable	1,583	2,237	1,962	1,944	7,726
Total	42,753	54,025	50,769	48,062	195,609

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				
	19th	20th	21st	22nd	Total
0 year	10,422	13,533	14,402	13,024	51,381
1 year	6,740	9,446	8,178	7,633	31,997
2 years	5,382	6,752	6,095	5,876	24,105
3 years	3,614	5,133	4,479	4,199	17,425
4 years	2,508	3,344	2,930	2,713	11,495
5 years	1,631	2,244	2,014	1,876	7,765
6 years	1,052	1,313	1,160	1,120	4,645
7 years	734	903	860	780	3,277
8 years	500	588	538	564	2,190
9 years	337	421	361	347	1,466
10 years	329	486	475	452	1,742
11 to 20 years	1,282	1,385	1,253	1,368	5,288
21 to 30 years	339	459	380	393	1,571
30 years or longer	233	232	208	208	881
Multiple persons involved	1,450	2,006	1,636	1,628	6,720
Unknown	6,200	5,780	5,800	5,881	23,661
Total	42,753	54,025	50,769	48,062	195,609

Fig. II-2-16 Person Who Identified Incident

Person Who Identified Incident	Number of events				
	19th	20th	21st	22nd	Total
Person himself/herself	21,588	25,970	24,867	24,004	96,429
Coworker of same job title	12,094	17,286	15,665	14,126	59,171
Coworker of another job title	4,379	5,284	4,651	4,774	19,088
Patient himself/herself	1,622	2,106	2,159	1,917	7,804
Patient's family/caregiver	966	1,260	1,177	1,141	4,544
Other patient	1,055	1,120	1,107	1,039	4,321
Unknown	402	439	476	450	1,767
Others	647	560	667	611	2,485
Total	42,753	54,025	50,769	48,062	195,609

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

Situation	19th		20th		21st		22nd		Total	
	Number	%	Number	%	Number	%	Number	%	Number	%
Ordering/instruction	618	1.4	687	1.3	607	1.2	686	1.4	2,598	1.3
Communication process	1,174	2.7	1,520	2.8	1,341	2.6	1,437	3.0	5,472	2.8
Drug preparation	744	1.7	1,222	2.3	941	1.9	840	1.7	3,747	1.9
Prescription/drug administration	10,192	23.8	13,166	24.4	11,944	23.5	11,131	23.2	46,433	23.7
Dispensing, drug management, etc.	1,600	3.7	1,695	3.1	1,472	2.9	1,566	3.3	6,333	3.2
Blood transfusion	218	0.5	225	0.4	254	0.5	231	0.5	928	0.5
Surgery	599	1.4	773	1.4	678	1.3	604	1.3	2,654	1.4
Anesthesia	67	0.2	68	0.1	51	0.1	39	0.1	225	0.1
Delivery/mechanical abortion	22	0.1	21	0.0	35	0.1	25	0.1	103	0.1
Treatment, others	354	0.8	455	0.8	457	0.9	401	0.8	1,667	0.9
Procedure	331	0.8	485	0.9	408	0.8	393	0.8	1,617	0.8
Examination/interview	117	0.3	148	0.3	127	0.3	153	0.3	545	0.3
Use/management of medical equipment (device)	1,111	2.6	1,423	2.6	1,369	2.7	1,293	2.7	5,196	2.7
Use/management of drainage tube or other tube	7,362	17.2	7,843	14.5	7,584	14.9	7,467	15.5	30,256	15.5
Use/management of dental equipment (device)/material	7	0.0	9	0.0	5	0.0	9	0.0	30	0.0
Examination/test	3,107	7.3	4,035	7.5	3,531	7.0	3,274	6.8	13,947	7.1
Nursing care	4,433	10.4	5,002	9.3	5,013	9.9	4,977	10.4	19,425	9.9
Meal/nutrition	1,245	2.9	1,697	3.1	1,480	2.9	1,378	2.9	5,800	3.0
Nursing care, others	5,735	13.4	6,148	11.4	6,352	12.5	6,011	12.5	24,246	12.4
Supply transportation	47	0.1	61	0.1	51	0.1	46	0.1	205	0.1
Radiation control	10	0.0	24	0.0	12	0.0	8	0.0	54	0.0
Medical record and information management	434	1.0	587	1.1	485	1.0	472	1.0	1,978	1.0
Explanation to patient/family	288	0.7	377	0.7	368	0.7	323	0.7	1,356	0.7
Facility	95	0.2	104	0.2	101	0.2	85	0.2	385	0.2
Others	2,843	6.6	6,250	11.6	6,103	12.0	5,213	10.8	20,409	10.4
Total	42,753	100.0	54,025	100.0	50,769	100.0	48,062	100.0	195,609	100.0

Fig. II-2-18 Situation and Cause (19th Report)

Situation and Cause (Note 1)	Check	Observation	Judgment	Knowledge	Technique (skill)	Reporting, etc.	Physical condition	Psychological condition	System
Ordering/instruction	488	45	73	34	14	56	19	149	62
Communication process	952	97	222	113	33	182	35	378	161
Drug preparation	641	66	88	42	43	22	22	245	31
Prescription/drug administration	8,869	1,548	1,485	676	385	440	396	3,643	470
Dispensing, drug management, etc.	1,391	131	138	83	91	36	74	644	71
Blood transfusion	156	32	35	27	28	14	8	67	19
Surgery	416	131	94	61	78	49	16	170	23
Anesthesia	36	13	14	6	14	1	1	14	2
Delivery/mechanical abortion	13	2	3	3	5	1	0	9	1
Treatment, others	222	108	98	24	42	14	13	108	14
Procedure	189	95	91	49	55	22	12	102	15
Examination/interview	68	15	22	6	8	8	5	28	8
Use/management of medical equipment (device)	819	301	148	157	144	32	32	318	53
Use/management of drainage tube or other tube	3,141	4,408	1,876	303	401	120	206	1,148	66
Use/management of dental equipment (device)/material	5	3	0	1	4	0	0	1	0
Examination/test	2,564	316	436	244	153	180	119	1,156	189
Nursing care	1,730	2,631	1,297	135	196	98	111	718	47
Meal/nutrition	1,070	199	115	54	45	45	25	329	77
Nursing care, others	1,321	3,032	1,255	84	62	41	167	538	32
Supply transportation	36	2	8	3	2	2	0	13	5
Radiation control	8	0	2	0	0	0	0	4	2
Medical record and information management	368	30	57	16	12	21	8	119	34
Explanation to patient/family	180	28	68	27	6	24	4	71	18
Facility	40	14	15	6	3	3	1	16	4
Others	1,420	820	499	177	124	175	81	583	75
Total	26,143	14,067	8,139	2,331	1,948	1,586	1,355	10,571	1,479

(Note 1) More than one "cause" could be selected.

Coordination	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
127	32	1	74	6	1	9	1	1	34	9	50	1,285
358	71	15	221	11	3	13	7	4	74	47	24	3,021
83	21	3	119	12	5	65	4	1	31	12	20	1,576
1,339	360	41	2,281	68	67	462	32	6	523	459	242	23,792
113	41	1	346	18	31	254	11	6	41	11	103	3,635
29	5	1	38	6	5	7	2	1	17	5	9	511
139	11	2	70	4	33	6	6	3	28	25	42	1,407
9	0	1	3	3	4	2	1	2	6	1	4	137
3	0	0	3	0	1	0	0	0	0	0	1	45
42	7	1	57	3	14	4	4	2	18	17	34	846
37	8	3	65	2	12	8	6	4	23	12	27	837
26	2	7	29	4	1	0	1	0	7	15	11	271
116	10	1	193	21	257	6	33	10	81	18	29	2,779
367	25	1	1,620	100	208	21	71	12	221	1,073	455	15,843
0	0	0	0	0	1	0	0	0	4	0	0	19
408	86	38	575	31	76	11	25	12	178	121	149	7,067
278	16	19	959	134	105	18	84	28	173	1,161	206	10,144
126	15	8	142	3	3	2	7	3	56	48	33	2,405
156	10	2	1,026	198	36	24	103	52	109	1,471	500	10,219
9	2	2	8	1	2	0	4	1	0	0	1	101
4	0	0	0	0	0	0	1	0	1	0	0	22
54	26	14	67	3	0	0	3	0	31	9	15	887
56	7	0	43	2	2	3	1	0	14	137	9	700
7	0	0	12	7	8	1	10	32	9	10	7	205
228	63	13	530	49	51	22	16	10	85	305	1,938	7,264
4,114	818	174	8,481	686	926	938	433	190	1,764	4,966	3,909	95,018

Fig. II-2-19 Situation and Cause (20th Report)

Situation and Cause (Note 1)	Check	Observation	Judgment	Knowledge	Technique (skill)	Reporting, etc.	Physical condition	Psychological condition	System
Ordering/instruction	558	84	89	62	15	71	20	191	95
Communication process	1,254	123	293	159	39	247	42	499	195
Drug preparation	1,072	115	182	112	87	58	39	443	55
Prescription/drug administration	11,651	2,327	2,271	1,348	666	672	492	5,094	683
Dispensing, drug management, etc.	1,482	190	173	124	108	40	76	709	71
Blood transfusion	170	33	57	42	24	15	10	90	19
Surgery	567	164	137	97	81	61	18	234	55
Anesthesia	37	17	10	7	16	1	2	19	2
Delivery/mechanical abortion	14	5	8	2	6	2	1	7	0
Treatment, others	293	175	131	43	69	38	20	146	31
Procedure	355	121	128	74	83	57	26	170	20
Examination/interview	95	28	42	13	9	12	7	32	9
Use/management of medical equipment (device)	1,082	406	224	211	185	48	56	467	57
Use/management of drainage tube or other tube	3,636	4,709	1,798	438	557	119	240	1,265	82
Use/management of dental equipment (device)/material	7	5	3	1	1	0	0	4	0
Examination/test	3,333	463	598	398	214	238	165	1,499	250
Nursing care	2,014	2,889	1,468	224	238	121	134	839	64
Meal/nutrition	1,462	273	199	98	77	93	40	440	77
Nursing care, others	1,524	3,347	1,265	104	55	51	148	536	35
Supply transportation	47	9	11	9	6	5	2	20	7
Radiation control	17	4	4	1	1	3	1	8	4
Medical record and information management	489	33	91	48	16	43	13	182	61
Explanation to patient/family	238	37	90	46	14	37	9	102	35
Facility	58	18	14	9	5	1	4	22	11
Others	3,798	2,054	1,437	921	582	686	395	2,062	328
Total	35,253	17,629	10,723	4,591	3,154	2,719	1,960	15,080	2,246

(Note 1) More than one "cause" could be selected.

Coordination	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
196	53	9	122	4	10	16	3	3	56	15	42	1,714
486	107	12	244	14	13	28	6	8	130	62	68	4,029
170	40	6	202	14	8	87	8	3	70	21	62	2,854
1,818	440	44	2,801	98	103	630	51	25	988	640	543	33,385
121	44	4	379	21	38	274	24	11	66	15	96	4,066
40	7	0	36	3	2	5	1	2	26	4	15	601
203	15	1	94	13	55	4	11	5	66	23	56	1,960
12	0	0	10	2	2	2	0	0	4	2	5	150
3	0	0	6	0	0	0	1	0	0	0	0	55
73	13	2	73	7	22	9	9	4	31	41	34	1,264
64	13	0	104	12	14	9	3	4	34	29	25	1,345
28	0	4	27	1	1	0	2	1	4	21	21	357
147	15	2	207	25	291	7	34	14	137	40	64	3,719
483	29	4	1,632	116	225	38	73	18	302	1,088	398	17,250
1	0	0	1	0	2	0	0	0	0	0	0	25
592	92	60	724	37	82	24	32	20	274	183	215	9,493
429	20	11	1,029	155	102	27	94	37	258	1,314	338	11,805
177	34	5	202	20	7	2	8	6	64	51	115	3,450
186	8	3	1,126	306	44	21	107	58	128	1,623	482	11,157
8	1	2	7	5	4	1	3	2	4	1	5	159
5	0	0	4	0	1	0	2	1	5	1	0	62
102	45	12	92	8	8	3	4	6	46	27	35	1,364
74	10	4	70	2	2	1	1	1	24	181	15	993
12	0	0	13	6	11	0	7	27	9	6	10	243
751	282	27	1,477	172	94	40	25	60	427	784	5,017	21,419
6,181	1,268	212	10,682	1,041	1,141	1,228	509	316	3,153	6,172	7,661	132,919

Fig. II-2-20 Situation and Cause (21st Report)

Situation and Cause (Note 1)	Check	Observation	Judgment	Knowledge	Technique (skill)	Reporting, etc.	Physical condition	Psychological condition	System
Ordering/instruction	505	64	94	48	16	65	23	181	71
Communication process	1,111	84	274	170	37	248	39	497	189
Drug preparation	815	90	108	83	62	49	44	331	53
Prescription/drug administration	10,487	2,023	1,900	1,011	550	592	470	4,699	595
Dispensing, drug management, etc.	1,270	154	157	106	80	36	64	591	51
Blood transfusion	192	29	57	56	29	15	11	81	19
Surgery	490	152	117	73	81	54	17	220	35
Anesthesia	33	14	10	10	15	5	6	24	6
Delivery/mechanical abortion	18	9	10	1	5	2	1	6	0
Treatment, others	304	138	125	45	62	29	23	173	25
Procedure	267	129	93	55	62	30	16	139	17
Examination/interview	86	23	27	13	5	16	7	42	8
Use/management of medical equipment (device)	1,006	334	195	210	156	50	43	457	61
Use/management of drainage tube or other tube	3,491	4,529	1,752	385	451	112	224	1,188	70
Use/management of dental equipment (device)/material	4	2	2	0	2	0	0	2	0
Examination/test	2,921	364	533	337	185	226	133	1,328	213
Nursing care	2,044	2,929	1,364	191	194	116	148	778	70
Meal/nutrition	1,273	217	172	70	57	107	32	398	72
Nursing care, others	1,575	3,595	1,279	98	79	75	185	587	53
Supply transportation	43	6	9	4	2	1	2	19	4
Radiation control	8	0	1	2	0	0	1	2	0
Medical record and information management	406	39	49	32	8	21	14	152	43
Explanation to patient/family	240	40	93	29	5	37	10	113	27
Facility	50	16	15	10	4	3	4	20	7
Others	3,589	1,884	1,296	684	451	526	341	1,759	265
Total	32,228	16,864	9,732	3,723	2,598	2,415	1,858	13,787	1,954

(Note 1) More than one "cause" could be selected.

Coordination	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
163	52	10	101	9	7	14	4	6	47	18	54	1,552
460	97	11	254	21	17	29	6	13	111	88	53	3,809
126	38	4	180	16	12	109	11	6	48	26	54	2,265
1,687	428	51	2,620	85	100	590	43	22	819	610	520	29,902
106	35	6	314	15	34	271	7	4	59	11	113	3,484
53	13	2	47	7	6	4	4	4	36	5	12	682
175	9	1	81	13	38	6	10	3	47	29	61	1,712
10	3	1	10	3	5	5	0	4	7	6	6	183
7	0	0	5	0	0	0	0	1	5	0	4	74
67	12	4	78	12	21	11	10	8	27	30	44	1,248
45	8	2	80	9	12	7	6	2	24	20	31	1,054
27	3	6	19	1	2	1	2	1	7	21	7	324
131	13	0	212	28	332	7	52	13	127	17	80	3,524
375	31	6	1,635	117	228	43	71	19	281	1,158	401	16,567
1	0	0	0	0	0	0	0	0	1	0	1	15
499	94	41	653	33	76	19	36	12	221	165	200	8,289
324	24	14	1,018	165	116	23	104	27	229	1,314	423	11,615
154	39	7	189	25	8	5	20	11	74	54	107	3,091
198	14	6	1,160	327	43	22	125	56	167	1,695	620	11,959
8	1	0	4	0	0	0	4	1	4	1	0	113
2	0	0	0	0	4	0	0	0	0	1	1	22
73	45	13	72	6	7	5	11	4	33	14	33	1,080
88	5	9	60	6	5	1	5	0	23	161	30	987
7	2	0	13	11	6	2	3	31	5	12	11	232
662	251	17	1,317	145	81	38	21	58	305	704	4,949	19,343
5,448	1,217	211	10,122	1,054	1,160	1,212	555	306	2,707	6,160	7,815	123,126

Fig. II-2-21 Situation and Cause (22nd Report)

Situation and Cause (Note 1)	Check	Observation	Judgment	Knowledge	Technique (skill)	Reporting, etc.	Physical condition	Psychological condition	System
Ordering/instruction	544	55	81	52	26	89	17	203	98
Communication process	1,163	82	222	121	30	210	39	448	171
Drug preparation	740	69	104	76	42	36	37	292	46
Prescription/drug administration	9,809	1,856	1,610	790	398	584	396	4,156	462
Dispensing, drug management, etc.	1,393	137	121	88	61	28	79	581	69
Blood transfusion	183	31	44	35	13	14	10	74	14
Surgery	385	132	88	50	53	50	23	165	31
Anesthesia	21	8	4	5	10	2	5	13	1
Delivery/mechanical abortion	12	7	8	0	1	2	0	3	3
Treatment, others	239	172	113	39	52	24	15	106	14
Procedure	257	100	98	51	52	28	17	129	17
Examination/interview	103	24	21	9	5	8	3	42	7
Use/management of medical equipment (device)	968	308	164	173	117	46	65	383	61
Use/management of drainage tube or other tube	3,231	4,545	1,629	287	356	95	216	1,129	78
Use/management of dental equipment (device)/material	7	1	0	2	1	1	0	1	0
Examination/test	2,585	342	429	273	200	179	123	1,138	180
Nursing care	2,010	2,947	1,165	164	190	97	143	817	66
Meal/nutrition	1,211	204	157	74	62	60	31	348	78
Nursing care, others	1,385	3,332	1,172	89	42	46	129	524	36
Supply transportation	37	4	7	3	2	1	2	20	1
Radiation control	6	2	1	0	0	1	0	3	2
Medical record and information management	387	39	51	29	13	23	7	163	47
Explanation to patient/family	214	27	58	28	5	22	10	98	27
Facility	47	9	21	7	4	4	2	17	7
Others	2,998	1,599	1,131	558	378	450	278	1,336	285
Total	29,935	16,032	8,499	3,003	2,113	2,100	1,647	12,189	1,801

(Note 1) More than one "cause" could be selected.

Coordination	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
178	52	9	124	10	8	14	5	5	43	21	49	1,683
380	119	6	259	12	8	22	13	3	95	50	41	3,494
103	27	2	162	9	8	81	8	2	37	23	19	1,923
1,604	415	44	2,528	94	67	546	50	15	704	545	286	26,959
132	42	3	357	10	29	255	20	11	64	11	70	3,561
40	1	2	34	2	5	1	2	2	24	2	8	541
133	14	0	65	11	42	7	10	1	39	23	56	1,378
6	0	0	5	0	1	0	0	0	2	4	5	92
7	0	0	1	2	2	0	0	0	3	3	2	56
51	7	1	71	11	16	5	9	7	14	32	31	1,029
61	5	1	72	8	16	4	4	1	15	26	24	986
41	0	9	24	2	1	0	0	1	8	22	2	332
135	9	1	228	18	310	7	38	6	100	17	36	3,190
380	30	5	1,603	122	190	22	80	11	243	1,026	336	15,614
1	0	0	1	0	3	0	1	0	1	0	0	20
463	77	50	567	35	61	13	28	15	179	135	182	7,254
329	15	8	1,075	177	85	24	108	32	206	1,182	231	11,071
165	32	3	163	11	4	0	11	7	76	45	47	2,789
152	9	2	1,078	321	32	27	110	69	147	1,702	496	10,900
5	0	0	9	1	1	1	1	0	1	0	4	100
3	0	0	0	0	1	0	0	0	1	0	0	20
75	48	17	80	8	6	2	6	3	31	17	17	1,069
62	5	2	59	3	3	2	2	0	13	152	7	799
8	1	0	8	9	5	1	5	28	7	3	6	199
556	233	25	1,050	140	47	32	20	81	267	702	4,160	16,326
5,070	1,141	190	9,623	1,016	951	1,066	531	300	2,320	5,743	6,115	111,385

Fig. II-2-22 Situation and Cause (Aggregated Table, 19th to 22nd Reports)

Situation and Cause (Note 1)	Check	Observation	Judgment	Knowledge	Technique (skill)	Reporting, etc.	Physical condition	Psychological condition	System
Ordering/instruction	2,095	248	337	196	71	281	79	724	326
Communication process	4,480	386	1,011	563	139	887	155	1,822	716
Drug preparation	3,268	340	482	313	234	165	142	1,311	185
Prescription/drug administration	40,816	7,754	7,266	3,825	1,999	2,288	1,754	17,592	2,210
Dispensing, drug management, etc.	5,536	612	589	401	340	140	293	2,525	262
Blood transfusion	701	125	193	160	94	58	39	312	71
Surgery	1,858	579	436	281	293	214	74	789	144
Anesthesia	127	52	38	28	55	9	14	70	11
Delivery/mechanical abortion	57	23	29	6	17	7	2	25	4
Treatment, others	1,058	593	467	151	225	105	71	533	84
Procedure	1,068	445	410	229	252	137	71	540	69
Examination/interview	352	90	112	41	27	44	22	144	32
Use/management of medical equipment (device)	3,875	1,349	731	751	602	176	196	1,625	232
Use/management of drainage tube or other tube	13,499	18,191	7,055	1,413	1,765	446	886	4,730	296
Use/management of dental equipment (device)/material	23	11	5	4	8	1	0	8	0
Examination/test	11,403	1,485	1,996	1,252	752	823	540	5,121	832
Nursing care	7,798	11,396	5,294	714	818	432	536	3,152	247
Meal/nutrition	5,016	893	643	296	241	305	128	1,515	304
Nursing care, others	5,805	13,306	4,971	375	238	213	629	2,185	156
Supply transportation	163	21	35	19	12	9	6	72	17
Radiation control	39	6	8	3	1	4	2	17	8
Medical record and information management	1,650	141	248	125	49	108	42	616	185
Explanation to patient/family	872	132	309	130	30	120	33	384	107
Facility	195	57	65	32	16	11	11	75	29
Others	11,805	6,357	4,363	2,340	1,535	1,837	1,095	5,740	953
Total	123,559	64,592	37,093	13,648	9,813	8,820	6,820	51,627	7,480

(Note 1) More than one "cause" could be selected.

Coordination	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
664	189	29	421	29	26	53	13	15	180	63	195	6,234
1,684	394	44	978	58	41	92	32	28	410	247	186	14,353
482	126	15	663	51	33	342	31	12	186	82	155	8,618
6,448	1,643	180	10,230	345	337	2,228	176	68	3,034	2,254	1,591	114,038
472	162	14	1,396	64	132	1,054	62	32	230	48	382	14,746
162	26	5	155	18	18	17	9	9	103	16	44	2,335
650	49	4	310	41	168	23	37	12	180	100	215	6,457
37	3	2	28	8	12	9	1	6	19	13	20	562
20	0	0	15	2	3	0	1	1	8	3	7	230
233	39	8	279	33	73	29	32	21	90	120	143	4,387
207	34	6	321	31	54	28	19	11	96	87	107	4,222
122	5	26	99	8	5	1	5	3	26	79	41	1,284
529	47	4	840	92	1,190	27	157	43	445	92	209	13,212
1,605	115	16	6,490	455	851	124	295	60	1,047	4,345	1,590	65,274
3	0	0	2	0	6	0	1	0	6	0	1	79
1,962	349	189	2,519	136	295	67	121	59	852	604	746	32,103
1,360	75	52	4,081	631	408	92	390	124	866	4,971	1,198	44,635
622	120	23	696	59	22	9	46	27	270	198	302	11,735
692	41	13	4,390	1,152	155	94	445	235	551	6,491	2,098	44,235
30	4	4	28	7	7	2	12	4	9	2	10	473
14	0	0	4	0	6	0	3	1	7	2	1	126
304	164	56	311	25	21	10	24	13	141	67	100	4,400
280	27	15	232	13	12	7	9	1	74	631	61	3,479
34	3	0	46	33	30	4	25	118	30	31	34	879
2,197	829	82	4,374	506	273	132	82	209	1,084	2,495	16,064	64,352
20,813	4,444	787	38,908	3,797	4,178	4,444	2,028	1,112	9,944	23,041	25,500	462,448

Fig. II-2-23 Situation and Effect

Situation and Effect	Slight effect on patient					Moderate effect on patient					Major effect on patient				
	19th	20th	21st	22nd	Total	19th	20th	21st	22nd	Total	19th	20th	21st	22nd	Total
Ordering/instruction	167	144	131	194	636	24	34	30	27	115	8	3	11	7	29
Communication process	180	227	213	228	848	47	61	43	50	201	29	29	20	29	107
Drug preparation	237	472	363	304	1,376	39	55	43	35	172	8	10	13	11	42
Prescription/drug administration	1,130	1,422	1,176	1,090	4,818	233	299	225	250	1,007	180	237	171	246	834
Dispensing, drug management, etc.	673	654	554	626	2,507	94	113	87	80	374	27	15	18	20	80
Blood transfusion	36	40	42	32	150	10	7	8	12	37	8	8	9	12	37
Surgery	59	108	83	72	322	56	80	64	53	253	17	28	12	18	75
Anesthesia	5	9	4	2	20	2	6	2	4	14	2	2	3	1	8
Delivery/mechanical abortion	1	0	2	1	4	0	1	1	0	2	0	1	0	0	1
Treatment, others	31	40	43	32	146	16	32	19	14	81	9	8	6	7	30
Procedure	30	36	32	34	132	14	23	22	12	71	10	18	16	10	54
Examination/interview	18	26	23	21	88	4	6	6	3	19	5	0	3	2	10
Use/management of medical equipment (device)	102	143	144	120	509	54	65	69	59	247	40	42	59	38	179
Use/management of drainage tube or other tube	293	411	384	344	1,432	262	252	297	313	1,124	136	90	133	116	475
Use/management of dental equipment (device)/material	0	0	1	0	1	0	3	2	1	6	0	0	0	0	0
Examination/test	454	635	530	462	2,081	85	97	99	67	348	20	21	15	20	76
Nursing care	414	481	462	348	1,705	174	232	192	163	761	42	46	50	48	186
Meal/nutrition	239	396	321	249	1,205	23	46	64	52	185	24	13	19	13	69
Nursing care, others	229	277	317	291	1,114	90	114	109	99	412	76	58	70	78	282
Supply transportation	15	11	9	13	48	1	3	3	3	10	0	2	0	0	2
Radiation control	3	4	2	1	10	0	2	0	0	2	0	0	0	0	0
Medical record and information management	74	118	96	95	383	8	16	10	17	51	2	3	7	5	17
Explanation to patient/family	42	40	44	54	180	9	10	8	7	34	9	4	5	2	20
Facility	24	17	16	10	67	2	9	6	4	21	4	3	3	1	11
Others	471	1,027	946	952	3,396	144	531	426	623	1,724	58	89	120	264	531
Total	4,927	6,738	5,938	5,575	23,178	1,391	2,097	1,835	1,948	7,271	714	730	763	948	3,155

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

Day of occurrence	Weekday					Holiday				
	19th	20th	21st	22nd	Total	19th	20th	21st	22nd	Total
Monday	5,507	7,212	5,984	6,292	24,995	371	51	305	206	933
Tuesday	5,791	7,502	6,987	6,859	27,139	364	17	16	14	411
Wednesday	6,601	7,491	7,234	7,000	28,326	20	297	13	28	358
Thursday	6,747	7,468	7,201	6,656	28,072	22	261	63	233	579
Friday	6,594	7,319	7,039	6,371	27,323	30	261	85	403	779
Saturday	1,863	2,103	2,237	1,989	8,192	2,643	3,471	3,496	3,074	12,684
Sunday	285	327	259	264	1,135	3,808	4,207	4,060	4,383	16,458
Day unknown	35	51	21	29	136	10	9	8	5	32
Total	33,423	39,473	36,962	35,460	145,318	7,268	8,574	8,046	8,346	32,234

Error occurred but patient not affected					Unknown					Others					Aggregate total
19th	20th	21st	22nd	Total	19th	20th	21st	22nd	Total	19th	20th	21st	22nd	Total	
323	371	336	392	1,422	25	34	11	19	89	71	101	88	47	307	2,598
822	1,080	962	1,000	3,864	25	50	42	46	163	71	73	61	84	289	5,472
425	623	463	422	1,933	18	20	18	18	74	17	42	41	50	150	3,747
7,969	10,117	9,412	8,612	36,110	311	509	420	409	1,649	369	582	540	524	2,015	46,433
656	732	642	672	2,702	54	58	40	51	203	96	123	131	117	467	6,333
139	146	161	146	592	10	14	19	13	56	15	10	15	16	56	928
369	439	407	339	1,554	22	36	31	37	126	76	82	81	85	324	2,654
41	34	26	18	119	0	4	4	3	11	17	13	12	11	53	225
17	17	23	15	72	0	0	0	1	1	4	2	9	8	23	103
224	293	289	285	1,091	14	20	15	19	68	60	62	85	44	251	1,667
208	338	251	274	1,071	21	18	19	13	71	48	52	68	50	218	1,617
71	72	75	103	321	5	12	1	8	26	14	32	19	16	81	545
779	1,016	925	917	3,637	45	46	52	48	191	91	111	120	111	433	5,196
5,365	5,682	5,447	5,295	21,789	189	240	219	248	896	1,117	1,168	1,104	1,151	4,540	30,256
5	6	2	7	20	1	0	0	0	1	1	0	0	1	2	30
2,183	2,772	2,457	2,331	9,743	118	174	139	129	560	247	336	291	265	1,139	13,947
3,286	3,629	3,656	3,666	14,237	84	121	126	170	501	433	493	527	582	2,035	19,425
834	1,099	948	979	3,860	39	41	37	32	149	86	102	91	53	332	5,800
4,125	4,435	4,556	4,299	17,415	183	201	228	231	843	1,032	1,063	1,072	1,013	4,180	24,246
24	39	32	24	119	1	4	2	2	9	6	2	5	4	17	205
5	15	7	6	33	1	1	0	0	2	1	2	3	1	7	54
296	358	290	299	1,243	19	37	30	23	109	35	55	52	33	175	1,978
193	270	240	219	922	10	16	17	16	59	25	37	54	25	141	1,356
50	51	55	49	205	4	11	5	4	24	11	13	16	17	57	385
1,564	3,659	3,677	2,573	11,473	483	701	638	558	2,380	123	243	296	243	905	20,409
29,973	37,293	35,339	32,942	135,547	1,682	2,368	2,113	2,098	8,261	4,066	4,799	4,781	4,551	18,197	195,609

Unknown					Aggregate total
19th	20th	21st	22nd	Total	
280	697	636	600	2,213	28,141
272	730	726	624	2,352	29,902
322	747	716	672	2,457	31,141
313	770	704	578	2,365	31,016
295	691	789	683	2,458	30,560
243	515	561	501	1,820	22,696
190	337	442	407	1,376	18,969
147	1,491	1,187	191	3,016	3,184
2,062	5,978	5,761	4,256	18,057	195,609

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 separately 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, 2006 are shown below.

(1) Management Committee meeting

Management Committee meetings were held 2 times between January 1, 2006 and December 31, 2006.

Fig. III-1-1 Management Committee Meeting

	Date	Agenda
5th	02/10/2006	• Current status of 2005 activities of Center for Medical Adverse Event Prevention • Current status of 2005 activities of Medical Safety Support Center Comprehensive Support Project • 2006 Project plan for Project to Collect Medical Near-Miss/Adverse Event Information (proposal) • 2006 Budget for Project to Collect Medical Near-Miss/Adverse Event Information (proposal)
6th	05/31/2006	• Outcome of 2005 Medical Safety Support Center Comrehensive Sapport Project • Outcome of 2005 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, 2006 and December 31, 2006.

Fig. III-1-2 Comprehensive Evaluation Panel Meeting

	Date	Agenda
8th	01/20/2006	• Project to Collect Medical Near-Miss/Adverse Event Information 4th Report (proposal)
9th	04/26/2006	• 2006 Project to Collect Medical Near-Miss/Adverse Event Information • Project to Collect Medical Near-Miss/Adverse Event Information 5th Report (proposal) • Workshop hosted by Center for Medical Adverse Event Prevention
10th	07/26/2006	• Project to Collect Medical Near-Miss/Adverse Event Information 2008 Annual Report (proposal) • Project to Collect Medical Near-Miss/Adverse Event Information 6th Report (proposal)
11th	10/05/2006	• Provision of medical safety information in Project to Collect Medical Near-Miss/Adverse Event Information
12th	10/31/2006	• Project to Collect Medical Near-Miss/Adverse Event Information 7th Report (proposal) • Provision of medical safety information in Project to Collect Medical Near-Miss/Adverse Event Information

[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 separately to analyze cases covered by individual themes.

Analysis Group meetings have been held on topics of “foreign objects retained during surgeries,” “medical adverse events associated with use of medical devices,” and “medical adverse events associated with drugs.” 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 Cases

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. Follow-up information obtained is used as data at Expert Analysis Group meetings.

In 2006, follow-up information on 107 medical adverse events was requested in writing. The breakdown is 54 events related to drugs, 28 events related to medical devices, 4 events related to medical procedures, 4 events related to patient misidentification and errors in surgery/treatment site, 1 event related to examination, as well asnd other 16 other events including retained foreign objects.

Reporting institutions were visited to collect follow-up information on 12 events. The breakdown is 5 events related to drugs, 1 event related to medical devices, 3 events related to medical procedures, 2 events related to patient misidentification and errors in surgery/treatment site, and 1 other 1 event.

2. Individual Theme Review by Expert Division

The 2007 annual report summarizes medical adverse events reported between January 1 and December 31, 2006 in the fifth to the 8th periodic reports. Medical adverse events reported before 2006 are also included as Notes.

[1] Medical Adverse Events Related to Drugs

Seventy-six medical adverse events related to drugs reported between January 1 and December 31, 2006 were analyzed. Summaries of the reported events are shown in Fig. III-1.

(1) Details of medical adverse events related to drugs

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

A. Ordering

The fifth report included five events. Two events involved a mix-up of similar drugs, one event involved the use of a contraindicated drug with an allergic patient, one event involved dose miscalculation, and one event involved the use of anticoagulant in a patient whose subdural hematoma was unnoticed.

The sixth report included six events. Four events involved errors in prescribed doses and one event involved an error in the oral dose order. One event involved discontinuation of anticoagulant without double-checking the order.

The seventh report included one event involving antiarrhythmic overdose due to the other physician's misunderstanding of the attending physician's order.

The eighth report included ten events. Four events involved drug overdose in patients treated at multiple medical institutions due to the current physicians' misunderstanding of prescriptions or referrals issued by previous physicians. All four events involved a mix-up of the amount of ingredients [content of drug (active ingredient) in the preparation](Note 1) and the amount of preparation (amount of drug prepared in appropriate properties and form by processing the drug with the excipient)(Note 2).

Some medical institutions put the precaution "doses shown in terms of the content of active ingredients" in the margin of outpatient prescriptions as part of the preventive measures.

(Note 1) While drugs containing a single substance can be prescribed in terms of their content, those containing multiple substances cannot be.

(Note 2) The terms "amount of ingredient" and "amount of preparation" are used in accordance with Standard for Questions in National Examination for Pharmacists (MHLW Food and Drug Safety Bureau No. 0310002; March 10, 2004).

B. Receiving order/briefing

The fifth report included two events. One event involved oral miscommunication of the drug administration route and the other involved inappropriate drug administration due to a misunderstanding of the order.

The sixth report included one event involving prescription mix-up of comparable drugs.

The seventh report included one event involving multiple errors in a physician's order and its receipt by a nurse.

The eighth report included no events.

C. Preparation

The fifth report included seven events. One event involved a drug mix-up, four events involved the wrong dose, one event involved the wrong drug concentration, and one event involved the wrong duration of treatment.

The sixth report included three events. Two events involved mix-up of drugs with similar appearance or name, and one event involved wrong dose.

The seventh report included six events. Four events involved a drug mix-up in dispensing, and one event involved a measurement error. The negligent overdose of a drug the inpatient had brought with him when he was admitted and subsequently kept by the nursing staff occurred in one event.

The eighth report included four events. Three of the events involved an overdose as the result of misreading a digit in drug preparation.

D. Drug administration

The fifth report included one event involving the use of the same drug that was to be given to another patient.

The sixth report included five events. One event involved a drug mix-up, two events involved the wrong dose due to the wrong setting on the syringe pump, and one event involved the wrong insulin dose. The addition of drug during continuous epidural infusion leading to shock occurred in one event.

The seventh report included six events. One event involved a drug mix-up due to negligent patient identification using the drug barcode, two events involved the wrong injection dose, and two events involved the wrong administration route. A mix-up of patient names after removing the drug from the bag and putting the patient's name on the tape occurred in one event. Preventive measures proposed after the event occurred included (1) a requirement that information required for patient care be entered into the ordering system, not hand written; (2) a requirement that drugs be brought to the bedside without removing them from the bags, and a prohibition that patients' names be written on the tape; and (3) a requirement that the patient name on the bag be cross-checked with the drug in the presence of the patient.

The eighth report included two events. One event involved a mix-up of similar patient names, and the other event involved an intravenous injection overdose.

E. Observation and monitoring after drug therapy

The fifth report included two events. Both events involved cardiopulmonary arrest in an elderly patient after intravenous administration of flunitrazepam.

The sixth report included four events. Both events occurred during the examination. The

patient's condition changed after oral medication in two events and during anticoagulant therapy or chemotherapy in two events.

The seventh report included two events. In one event, the patient recovered from the adverse drug reaction associated with the pre-examination procedure but subsequently became ill. In the other event, the patient took sleeping pills and subsequently had respiratory failure during the examination.

The eighth report included one event involving an adverse reaction to a drug.

F. Others

The fifth report included three events categorized as "others." One event involved intestinal obstruction and subsequent intestinal necrosis due to pre-examination treatment, and another event involved disturbed consciousness after using a contrast medium. The other event involved an unavoidable adverse drug reaction.

The sixth report included one event related to the deterioration of an unexpired reagent. The event had been reported to the manufacturer who subsequently modified the reagent.

The eighth report included three events involving miscommunication of an allergy or a contraindicated drug. One medical institution had a system in which an allergy warning was displayed on the clinical terminals but it could be easily missed. The proposed corrective measures included the use of a conspicuous allergy warning.

(2) Types of drugs involved in the medical adverse events

Types of drugs involved in 76 events reported between January 1 and December 31, 2006 are summarized in Fig. III-3.

The fifth report included three events related to anti-tumor drugs, four events related to cardiovascular drugs, and two events related to anti-diabetics (insulin). Other types of drugs involved in the reported events included a central nervous system drug in one event and an antibiotic in the other event.

The sixth report included two events related to anti-tumor drugs, three events related to cardiovascular drugs, and two events related to anti-diabetics (insulin).

The seventh report included one event related to an anti-tumor drug, one event related to a cardiovascular drug, and one event related to sleeping pills.

The eighth report included four events related to anti-tumor drugs.

(3) Medical near-miss incidents related to drugs

Medical near-miss incidents reported in the 19th report (January to March 2006), the 20th report (April to June 2006), the 21st report (July to September 2006), and the 22nd report (October to December 2006) (Note 1) were analyzed. The flow of drug therapy is summarized with the five processes of ordering, receiving order/briefing, preparation, drug administration, and observation and management after drug therapy. The five processes are recorded on the vertical axis and the details of events are recorded on the horizontal axis (Fig. III-4).

(Note 1) See pages 5 and 6 for the 1st to the 18th medical near-miss incident reports.

Events occurred in the preparation step, which is one of the descriptive information items to be reported. Important drug-related events reported in the 19th to the 21st medical near-miss incident reports were also analyzed.

A matrix was created with the types of drugs, namely oral, external, injection, and others, on the vertical axis, and the types of medical near-miss incidents, namely drug mix-ups, wrong dose, patient mix-ups, dispensing errors, bag/label mix-ups, packaging machine malfunctions/defects, and others, on the horizontal axis (Fig. III-5).

Medical near-miss incidents occurring in the drug preparation process generally involve pharmacists. They are to be included in events that occur in the preparation process in this report.
Common drugs involved in events related to drug preparation, namely (i) mix-up of drug A and drug B because they have similar names and (ii) mix-up of drug A and drug B because they have similar efficacy reported in the 18th and the 19th medical near-miss incident reports (Figs. III-6 and III-7), and those involved in drug mix-ups due to similar appearance (outer package) as reported in the 18th, 19th, and 20th reports (Fig. III-8) were also summarized. Drugs involved in medical near-miss incidents caused by two factors are summarized in Fig. III-9. None of the reported incidents involved three or more factors.

<Note>

Seventy-one drug-related incidents reported in the 17th (July to September 2005) and the 18th (October to December 2005) medical near-miss incident reports (Note 1) not discussed in "Individual Theme Review by Expert Division" in the 2005 annual report are summarized in this report (Fig. III-10).

Incidents that occurred in the drug preparation process and reported in the 18th medical near-miss incident report (Note 1) are also summarized (Fig. III-11).

Common medical near-miss incidents that occurred in the drug preparation process include the followings:

i. Similar drug name
ii. Similar dosage form
iii. Similar package (heat-sealed package)
iv. Similar efficacy

(Note 1) See pages 5 and 6 for the 1st to the 18th medical near-miss incident reports.

Fig. III-1 Summary of Medical Adverse Events Related to Drugs: 5th to 8th Reports

No.	Process in which event occurred	Potential of residual disability	Summary	Periodic report
[Drug mix-up]				
1	Ordering	Low	Mix-up of similar drugs in ordering	5th
2	Ordering	Low	Administration of a contraindicated drug to an allergic patient	
3	Preparation	Low	Administration of the same oral anti-tumor drug to be used with another patient	
4	Receiving order/briefing	Low	Prescription order for Allelock was mixed up with a similarly named drug, Aleric, and the latter drug was handed to the patient.	6th
5	Preparation	Low	Diamox was prescribed but Baktar with a similar appearance was included in the preparation instead.	
6	Preparation	Low	Almarl was mixed up with Amaryl in prescription, and the latter was prepared.	
7	Drug administration	Low	Mix-up with another eye drop stored in the same place	
8	Preparation	Unknown	Prescription of magnesium oxide instead of correct Biofermin The pharmacist who prepared the drug had made preparation errors three times in the past, which had been pointed out by the auditor. He/She was in a rush because the patient had pressed for the medication twice.	7th
9	Preparation	Unknown	Depakene granules were mixed up with Telesmin when filling a preparation bottle with the drug. The blood Depakene level in the patient who vomited was zero. The investigation detected the drug mix-up and identified seven patients who had received the wrong drug. The drug name was to be checked with the barcode reader and the record put on the container. However, the procedure was not followed because the container was empty.	
10	Preparation	Low	A physician consulted a pharmacist about using Kenketsu Venilon-I (a blood product) that had never been used at the hospital. The pharmacist ordered Kenketsu Glovenin-I (a blood product) instead and dispensed it to the ward. The wrong drug was used for three days without being noticed even by the ward nursing staff.	
11	Preparation	Low	The patient was immediately hospitalized with a suspected adverse drug reaction to an antiepileptic. Aleviatin was discontinued because of the elevated blood level, which remained high despite the treatment being discontinued. It turned out that Aleviatin was included in the outpatient prescription instead of Akineton. There was no checking system for drugs brought by patients.	
12	Drug administration	Unknown	Lactec was used instead of Lactec D. Patient identification by cross-checking the wrist band and the drug barcode was neglected.	

No.	Process in which event occurred	Potential of residual disability	Summary	Periodic report
[Wrong dose]				
13	Ordering	Unknown	Mix-up of drugs of the same class. The wrong drug was given at twice the usual dose to multiple patients.	
14	Ordering	Unknown	The height and weight of the patient were mistaken as the dose of an anti-tumor drug that should be titrated based on the body surface area.	
15	Preparation	High	Insulin overdose due to unit/mL confusion	5th
16	Preparation	Low	Insulin overdose due to unit/mL confusion	
17	Preparation	Death	Dose titration error in syringe pump set-up	
18	Preparation	Unknown	Overdose due to a wrong assumption that the prescribed dose was 10 times the normal dose	
19	Ordering	Low	Overdose of tranquilizer due to an erroneous computer entry of prescription, resulting in a decrease of level of consciousness	
20	Ordering	Unknown	The prescribed dose of anticoagulant was mistaken, and 10 times the intended dose was used (overdose).	
21	Ordering	Low	A wrong protocol for anti-tumor treatment was filed with the medical chart, and the physician on the next shift overdosed the patient based on the wrong protocol.	
22	Ordering	Low	Use of wrong drug concentration based on an oral order	
23	Ordering	Low	The prescribed dose was mistaken by one digit, and 10 times the intended dose was used (overdose).	6th
24	Preparation	Unknown	Insulin was given at the dose adjusted to the wrong drug dispensed at the pharmacy by mistake instead of the ordered dose for the time, resulting in an overdose.	
25	Drug administration	Low	Vasopressor overdose at 11 times the intended dose because of an error in setting up the syringe pump	
26	Drug administration	Unknown	The sedative was resumed without changing the infusion speed after blood infusion with a syringe pump. The patient who received the sedative at 10 times the intended dose became hypotensive.	
27	Drug administration	Unknown	Insulin overdose due to unit/mL confusion	

No.	Process in which event occurred	Potential of residual disability	Summary	Periodic report
28	Ordering	Low	Ancaron tablet (anti-arrhythmic) 200 mg was orally given for the initial three days followed by 100 mg for nonsustained ventricular tachyarrhythmia. The patient overdosed when the shift physician (not the attending physician) ordered Ancaron 200 mg by mistake.	7th
29	Receiving order/briefing	Unknown	When ordering morphine hydrochloride injection for a patient with hepatocellular carcinoma and bone metastasis, the attending physician entered "10" in the brackets "[ ] mL" in the injection order. He wrote "10 mg [1 mL] + normal saline 49 mL at 2 mL/h" in the order form. The other physician received morphine hydrochloride 50 mg/5 mL 2A at the pharmacy and brought it to the ward. A nurse prepared the drug by mixing morphine hydrochloride 2A (10 mL) with normal saline 40 mL to be injected at 2 mL/h. The attending physician started the injection of the prepared drug. The dose mix-up was identified when the remaining morphine was checked before returning it to the pharmacy.	
30	Preparation	High	The twice-weekly medications (anti-rheumatic and anti-folic acid metabolite) the inpatient brought (taken three times) were kept by the ward due to the change in the patient's condition. The medications were given daily by mistake, resulting in an overdose.	
31	Preparation	Low	The periodically prescribed Cercine powder 20 mg/day was prepared at 2 mg/day due to miscalculation. The wrong dose was undetected in the checking system, and the patient was underdosed for five days. A nurse identified the underdose when she found a smaller dose used for the patient compared with others while checking the prescriptions.	
32	Drug administration	Low	Prescribed Caprocin (anticoagulant) intradermal injection 2500 IU/0.1 mL was given at 2000 IU/0.8 mL.	
33	Drug administration	Low	In the second absorbed diphtheria-tetanus vaccination, the vaccine 0.5 mL was subcutaneously injected instead of 0.1 mL or less.	
34	Ordering	Unknown	A 12-year-old child visited the outpatient clinic for the second diphtheria-tetanus vaccination. The physician specified the vaccine dose at 0.5 mL in the order form and instructed the nurse to check the package insert before preparing the vaccine and make the package insert available. The package insert stated that the recommended dose was 0.1 mL for children aged 10 or above. However, the nurse prepared the vaccine at 0.5 mL for injection without suspecting anything was wrong. The physician saw the package insert but did not notice the recommended dose and injected 0.5 mL.	8th
35	Ordering	Low	The patient had been using oral warfarin (anticoagulant), which was discontinued before surgery. The cardiac surgeon ordered the initiation of intravenous heparin (anticoagulant) as soon as possible after surgery. The cardiac surgeon's order in the order form "IV heparin 3 mL followed by continuous undiluted heparin 0.5" was mistaken as "IV heparin 3 mL followed by continuous undiluted heparin 3". Warfarin overdose was found by a nurse who noticed the bloody drainage in the tube.	

No.	Process in which event occurred	Potential of residual disability	Summary	Periodic report
36	Ordering	Low	The attending physician ordered "undiluted heparin (anticoagulant) 4 mL (4000 IU)/h" when it should have been heparin 10000 IU (10 mL) for 24-hour injection. The nurse-in-charge was suspicious about the order and checked with the attending physician, who instructed the nurse to use the drug as ordered. The nurse started heparin injection as instructed. Heparin overdose was identified when the patient was found bleeding from the wound 12 hours later.	
37	Ordering	Low	The prescription issued by the previous physician provided the dose in "amount of ingredient." The prescription was wrongly assumed to be in "amount of preparation," resulting in an overdose. Drugs were prescribed in "amount of preparation" at the reporting medical institution.	
38	Ordering	Low	The referral issued by the previous physician said "Aleviatin 10% powder (anti-epileptic) 1.8 g," and the current physician prescribed Aleviatin 1800 mg. The physician did not understand the difference between the amount of preparation and amount of ingredient and instructed the pharmacist to prescribe Aleviatin 1800 mg, ignoring the pharmacist's inquiry.	
39	Ordering	Low	A copy of the prescription issued by the previous physician said "Phenobal 10% (hypnotic/sedative/anticonvulsant) 1.5 g/day," and the current physician prescribed "Phenobal 10% 1500 mg/day" using the hospital computer system. Phenobal was given at 1500 mg/day at the current hospital despite the previous physician's prescription "Phenobal 150 mg/day." The overdose was identified when the patient exhibited symptoms that included slurred speech. A dose shown in grams usually means the total amount of the drug (active ingredient and additives) and that shown in milligrams usually means the amount of active ingredient at the hospital pharmacy. The prescribed 1500 mg was therefore considered as the amount of active ingredient.	8th
40	Ordering	Unknown	The patient was referred to the current hospital by the previous one. The referral said "oral Selenica-R (antiepileptic) 1.25 g b.i.d (morning/evening)." The current physician entered "Selenica-R granule 400 mg/g; 1250 mg b.i.d (morning/evening)" in the computer ordering system as prescribed by the previous physician. The dispensing pharmacy prepared valproic acid 1250 mg (equivalent to Selenica-R granule 3.125 g). As a result, the patient received 2.5 times the amount specified in the patient information (the intended dose was valproic acid 500 mg).	
41	Ordering	Low	A terminal outpatient was using oral TS-1 (anti-tumor drug). The treatment was switched from outpatient oral TS-1 to inpatient intravenous chemotherapy (taxol). The patient brought TS-1 upon admission. However, the attending physician did not check the remaining amount of TS-1. An intern entered "TS-1 continued" in the computer system when checking the order for continuous use of the oral medication the patient brought upon admission, and oral TS-1 was continued even after admission.	

No.	Process in which event occurred	Potential of residual disability	Summary	Periodic report
42	Preparation	Low	Twice-daily intravenous Tazocin (antibiotic) 350 mg + normal saline 20 mL was ordered. Two vials of Tazocin 2.5 g were on the tray (one tray per patient). The nurse misread the dose information on the label as 0.25 g and had Tazocin 2.5 g and 1 g (2 vials, total of 3.5 g) ready for 350-mg injection. The drug was given to the patient at the wrong dose despite the injection syringe label saying "350 mg" as ordered. The dosing error was identified when the vial to be used for the second injection was found missing (because it had been used for the first injection).	
43	Preparation	Low	Denosine (antiviral) 150 mg + normal saline 100 mL was mixed up with Denosine 1500 mg + normal saline 100 mL and given intravenously.	
44	Preparation	Low	Intravenous Novantron (anti-tumor drug) 1.2 mg and Cylocide (anti-tumor drug) 50 mg were to be used in chemotherapy. An intern ordered Novantron 1 V (vial) in a case of last-minute dose change. A senior physician added "1.2 mg" to "Novantron 1V" in the injection order form in handwriting. The intern and a graduate student (pediatrician) double-checked the injection order but both of them misread "1.2 mg" as "12 mg" and injected Novantron 12 mg to the patient. Later a nurse checked the injection order form and found the ambiguous decimal point. The overdose was identified when the nurse checked with the intern about the ordered dose.	8th
45	Drug administration	Low	Diamox (carbonate dehydrogenase inhibitor) 500 mg was to be dissolved in a 20-mL syringe, and 250 mg (10 mL) was to be given intravenously. However, the whole 500 mg of Diamox was given.	
[Wrong method] (administration route, concentration, duration)				
46	Receiving order/ briefing	Low	Administration of narcotic by a syringe pump was orally ordered. However, the narcotic was injected intravenously.	
47	Preparation	Low	The wrong dose of heparin was used in heparin lock, resulting in an overdose.	5th
48	Preparation	Low	The order of two different drugs on alternate days was mistaken as same-day treatment, resulting in an overdose.	
49	Drug administration	Low	Sandostatin for subcutaneous injection was injected into the infusion line.	
50	Drug administration	Low	Ciproxan 300 (anti-microbial) labeled "to be diluted" was given without diluting. A nurse who was not in charge of the patient gave the treatment. The nurse was off on the previous day when the pharmacist gave precautions for administration of the drug.	7th

No.	Process in which event occurred	Potential of residual disability	Summary	Periodic report
51	Ordering	Unknown	The oral medication was continued after the patient was transferred from another hospital. A physician prescribed daily Rheumatrex (anti-rheumatic) 2 mg b.i.d morning/evening instead of once-weekly Rheumatrex by mistake. A pharmacist dispensed Rheumatrex to the ward without realizing the drug required certain intervals between doses, and even the nurse did not notice the wrong dosing, resulting in an overdose.	8th
52	Ordering	Low	In chemotherapy with Carboplatin (anti-tumor drug to be given on Day 1) + Topotecin (anti-tumor drug to be given on Day 1, Day 8, and Day 15), an erroneous computer entry made by the attending physician resulted in the preparation of Carboplatin on Day 8 when the drug was not to be given. The patient noticed the error and pointed it out. However, the drug was given to the patient due to prior miscommunication between the attending physician and the shift physician.	
[Wrong dosing speed] No event was reported.				
[Patient misidentification]				
53	Drug administration	Low	The same drug prepared for another patient was given by mistake.	5th
54	Drug administration	Low	Oxycontin (cancer pain relief) 35 mg prepared for a pre-examination fasting patient was given to another pre-examination fasting patient. The patient names were mixed up when putting the name on the tape after taking the drug out of the bag.	7th
55	Preparation	Unknown	A syringe prepared in the treatment room was checked but another syringe containing diuretic for another patient was taken to the hospital room and given to the patient by mistake. The double-check at the bedside was neglected.	8th
56	Drug administration	Low	The oral medication of another patient with a similar name was given by mistake. The patient name could not be checked with the patient himself because he was elderly and demented.	
[Others]				
57	Ordering	High	Acute subdural hematoma due to head contusion was overlooked. An anticoagulant was given to the patient, resulting in an aggravation of the symptoms.	5th
58	Receiving order/ briefing	High	The order for diuretic adjustment based on four-hour urine was mistaken as two-hour urine.	
59	Observation /monitoring after drug therapy	High	Cardiopulmonary arrest occurred after sleeping pills were given for sedation.	
60	Observation /monitoring after drug therapy	Unknown	Cardiopulmonary arrest occurred after sleeping pills were given for sedation.	
61	Others	Unknown	The patient had disturbed consciousness after a contrast medium was used.	

No.	Process in which event occurred	Potential of residual disability	Summary	Periodic report
62	Others	Death	Unavoidable accident due to an adverse drug reaction	5th
63	Others	Death	Intestinal obstruction and necrosis caused by pre-examination treatment	
64	Ordering	High	Brain infarction occurred in a post-operative patient treated with anticoagulant when the mode of administration was switched from intravenous to oral	6th
65	Drug administration	Unknown	Shock occurred in a patient after adding a continuous epidural injection drug for pain relief	
66	Observation/ monitoring after drug therapy	High	Brain infarction occurred in a patient treated with oral anticoagulant that was temporarily interrupted for examination for another disorder	
67	Observation/ monitoring after drug therapy	Death	Cardiac arrest in a chronic heart failure patient who took oral beta-blocker as a pre-treatment for coronary CT two hours earlier	
68	Observation/ monitoring after drug therapy	High	A patient treated with anticoagulant bled from the wound on Day 9 post-operation and received hemostatic treatment.	
69	Observation/ monitoring after drug therapy	Low	A patient's condition changed (shock) during chemotherapy (anti-tumor drug).	
70	Others	Unknown	Deteriorated reagent before its expiration date	
71	Observation/ monitoring after drug therapy	Death	Glucagon (pancreatic hormone) 1A was used for pre-endoscopic treatment. The patient became hypoglycemic with decreased level of consciousness after the endoscopy but recovered after receiving glucose. The patient was admitted to the hospital due to an abnormal blood test conducted post-endoscopy and subsequently lost consciousness and went into shock in the toilet.	7th
72	Observation/ monitoring after drug therapy	High	Anexate, a Silece antagonist, was given intravenously followed by Ambu ventilation in a patient whose blood oxygen level was decreased and respiration condition worsened during endoscopy.	
73	Observation/ monitoring after drug therapy	Low	Oral Panaldine was started. No abnormality was seen during the two-week inpatient monitoring period. However, the white blood cell count subsequently decreased.	8th
74	Others	Low	Lepetan suppository (analgesic) was prescribed for severe pain. The patient presented with headache and vomiting 30 minutes after using the drug at home. Neither the prescribing physician nor the nurse realized that Lepetan injection was contraindicated for the patient. The front cover of the patient medical chart containing contraindicated drug information was renewed, and the information had not been transcribed.	

No.	Process in which event occurred	Potential of residual disability	Summary	Periodic report
75	Others	Low	Sulperazon (antibiotic) 1 g + normal saline 100 mL was given intravenously to a patient with fever. The patient subsequently experienced numbness in the upper extremities and abdominal pain. Later it was found that antibiotics were contraindicated to the patient who was allergic to Sulperazon, as indicated in the referral from the previous physician. The attending physician entered the allergy information in the clinical terminal when the patient was admitted previously but did not include the information in the medical chart. The allergy warning display system on the clinical terminal and the vital sign chart were available. However, the display could be easily missed.	8th
76	Others	Low	A patient diagnosed with glaucoma based on the pre-upper endoscopy treatment received contraindicated Buscopan intramuscularly. The order to switch Buscopan to Glucagon was overlooked. The nurse was aware of the patient's glaucoma but misunderstood that the physician intentionally ordered Buscopan.	

Fig. III-2 Occurrence of Medical Adverse Events Involving Drugs: 5th to 8th reports

		Drug mix-up	Wrong dose	Wrong method			Wrong dosing speed	Patient misidentification	Others	Total
				Route of administration	Concentration	Duration				
Process	Ordering	2	16	0	0	2	0	0	2	22
	Receiving order/ briefing	1	1	1	0	0	0	0	1	4
	Preparation	7	10	0	1	1	0	1	0	20
	Implementation	2	6	1	1	0	0	3	1	14
	Post-procedural observation/management	0	0	0	0	0	0	0	9	9
	Others	0	0	0	0	0	0	0	7	7
Total		12	33	2	2	3	0	4	20	76

Fig. III-3 Type of Drugs Involved in Medical Adverse Events: 5th to 8th reports

Type of drug	Number of reports
	January to December, 2006
Blood product	1
Narcotic	2
Anti-tumor drug	10
Cardiovascular drug	8
Antidiabetic	4
Anxiolytic	2
Hypnotic	4
Other drugs	45
Total	76

Fig. III-4 19th to 22nd Occurrence of Medical Near-Miss Incidents Involving Drugs

		Drug mix-up	Wrong dose	Wrong method			Wrong dosing speed	Patient misidentification	Others	Total
				Route of administration	Concentration	Duration				
Process	Ordering	23	35	1	0	3	3	11	10	86
	Receiving order/ briefing	42	15	2	4	8	7	2	12	92
	Preparation	134	106	7	20	20	4	42	84 (Note 1)	417
	Implementation	71	49	37	6	21	15	66	18	283
	Post-procedural observation/management	2	6	1	0	0	38	0	23	70
	Others	1	2	0	0	1	0	0	14	18
Total		273	213	48	30	53	67	121	161	966

(Note 1) Including 52cases involving closed ports that should have been opened to mix drugs when preparing infusion solution.

Fig. III-5 19th to 22nd Occurrence of Near-Miss Events Related to Dispensing Process of Drugs

		Drug error			Dose error				Patient misidentification	Leak of delivery	Wrong drug package/label	Malfunction/defect of powder packaging machine	Others	Total
		Drug mix-up	Incorporation of wrong drug	Specification	Measuring/counting	Unit.	No. of days	Powder package						
Internal medicine	Tablets/capsule	355	27	183	228	2	35	31	9	47	44	23	38	1,022
	Powder/ granule	70	3	30	83	5	17	32	8	17	25	16	21	327
	Liquid for internal use	31	0	3	19	3	4	0	2	4	8	0	1	75
External medicine		88	2	39	29	1	0	2	5	8	6	1	13	194
Injection		222	13	103	64	2	7	0	10	16	23	1	30	491
Others		3	0	0	1	0	0	0	0	2	0	0	1	7
Unknown		15	4	13	18	1	19	12	41	23	38	1	29	214
Total		784	49	371	442	14	82	77	75	117	144	42	133	2,330

Fig. III-6 Major Drugs Mixed Up Due to Similar Product Names(Note 1)

Tablet/capsule		Powder		Solution	
A	B	A	B	A	B
Atarax (Anti-allergic laxative/ tranquilizer)	Atarax P (Anti-allergic laxative/tranquilizer)	Gastropylore (Stomachic digestive)	Gastrom (Gastritis/gastric ulcer treatment)	Elental P (Component nutrient)	Elental (Component nutrient)
Alotec (Asthma treatment/bronchodilator)	Allelock (Allergy treatment)	Kamikihito Extract Fine Granule (Chinese medicine)	Kamishoyosan Extract Fine Granule (Chinese medicine)		
Osteluc (Non-steroidal anti-inflammatory drug)	Olmetec (High-affinity AT1 receptor blocker)	Shibokuto (Chinese medicine)	Saireito (Chinese medicine)		
Osten (Osteoporosis treatment)	Osteluc (Non-steroidal anti-inflammatory drug)	Tsumura 37 (Chinese medicine)	Tsumura 34 (Ch inese medicine)		
Ganaton (Gastrointestinal prokinetic)	Gasmotin (Gastrointestinal prokinetic)	UFT E Fine Granule (Antimetabolite)	UFT Capsule (Antimetabolite)		
Klaricid (Macrolide antibiotic)	Cravit (Broad-spectrum oral antimicrobial)				
Keflex (Cephem antibiotic)	Kefral (Long-acting cephem antibiotic)				
Zantac (H2 blocker)	Zyloric (Hyperuricemia treatment)				
Singulair Chewable (Bronchial asthma treatment)	Singulair (Bronchial asthma treatment)				
Depakene (Anti-epileptic/antimanic)	Depakene R (Anti-epileptic/antimanic)				
Neuleptil (Psychoneurotic drug)	Nu-Lotan (A-II antagonist)				
Neurovitan (Multivitamin)	Neurotropin (Analgesic [descending inhibition promoter])				
Norvasc (Long-acting calcium channel antagonist)	Nolvadex D (Breast cancer treatment)				
Hydantol F (Anti-epileptic)	Hydantol D (Anti-epileptic)				
Ferromia (Soluble nonionic iron)	Foliamin (Folic acid)				
Pursennid (Laxative)	Prednisolone (Synthetic corticosteroid)				
Predonine (Corticosteroid)	Pursennid (Laxative)				
Prednisolone (Synthetic corticosteroid)	Predonine (Synthetic corticosteroid)				
Prednisolone (Synthetic corticosteroid)	Pursennid (Laxative)				
Prostal (Prostate hypertrophy/ cancer treatment)	Pletaal (Anti-platelet)				
Basen OD (Treatment for postprandial hyperglycemia in diabetes)	Takepron OD (Proton pump inhibitor)				
Periactin (Anti-allergic drug)	Persantin (Coronary circulation improving drug)				
Perdipine LA (Long-acting calcium channel antagonist)	Persantin L (Sustained-release anti-platelet)				
Menesit (Parkinson's disease treatment)	Medet (Anti-diabetic)				
Mucodyne (Airway mucus regulator/mucous membrane normalizer)	Mucosta (Gastritis/gastric ulcer treatment)				
Juvela N Soft (Cardiovascular drug)	Juvela (Vitamin E)				
Rythmodan R (Sustained-release anti-arrhythmic)	Rythmodan (Anti-arrhythmic)				
Livalo (HMG-CoA reductase inhibitor)	Lipovas (Anti-hyperlipidemia)				
Onealfa (Activated vitamin D3)	Warfarin (Warfarin potassium)				
Onealfa (Activated vitamin D3)	Vasolan (Ischemic heart disease treatment)				

(Note 1) Data from the 18th and 19th medical near-miss incident reports
Drug A was intended but drug B was given instead in the reported cases.
Descriptions in brackets are therapeutic efficacies claimed on the package insert.

External medication		Injection	
A	B	A	B
Meptin Air (Bronchodilator)	Meptin Kid Air (Bronchodilator)	Aminofluid (Glucose/electrolyte/amino acid supplement)	Trifluid (Combined sugar-sustaining agent)
		Amiparen (Multiple amino acids)	Aminoleban (Amino acid for hepatic encephalopathy)
		Albuminar (Plasma fraction preparation)	Albumin (Plasma fraction preparation)
		InnoLet R Injection (Other hormone)	InnoLet 30R Injection (Other hormone)
		Veen 3G (Blood substitute)	Solita T3 G (Maintenance fluid)
		Espo Injection 1500 Syringe (Human erythropoietin)	Epogin Injection Syringe 1500 (Human recombinant erythropoietin)
		Kenketsu Venoglobulin IH (Plasma fraction preparation)	Kenketsu Jochu-Globulin (Blood product)
		Kenketsu Glovenin I (Plasma fraction preparation)	Kenketsu Venilon I (Plasma fraction preparation)
		Cefamezin alfa (Synthetic cephalosporin)	Cefmetazon (Cephamycin antibiotic)
		Cefmetazon (Cephamycin antibiotic)	Cefamezin alfa (Synthetic cephalosporin)
		Injection solvent (Injection solvent)	Normal saline (Normal saline)
		Humacart (Anti-diabetic)	Humalog (Anti-diabetic)
		Fragmin (Anti-coagulant)	Novo-protamine sulfate (Heparin antagonist)

Fig. III-7 Major Drugs Mixed Up Due to Similar Efficacies (Note 1)

Tablet/capsule		Powder		External drug	
A	**B**	**A**	**B**	**A**	**B**
Acinon (H2 receptor antagonist)	Altat (H2 receptor antagonist)	Alosenn (Laxative)	Pursennid (Laxative)	Posterisan forte (ointment) (Hemorrhoid treatment)	Borraza-G ointment (Hemorrhoid treatment)
Aspara K (K aspartate)	Slow-K (Sustained-release potassium)	Selbex (Gastritis/gastric ulcer treatment)	Ulcerlmin (Gastritis/gastric ulcer treatment)	Tarivid ear drop (Otological drug)	Cravit eye drop (Broad-spectrum anti-microbial eye drop)
Anafranil (Antidepressant/enuresis treatment)	Tofranil (Antidepressant/enuresis treatment)	Tsumura Shakuyaku Kanzo-to Extract Granule (Chinese medicine)	Tsumura Toki Shakuyaku-san Extract Granule (Chinese medicine)	Tarivid eye ointment (Ophthalmologic drug)	Cravit eye drop (Broad-spectrum anti-microbial eye drop)
Allegra (Allergy treatment)	Alesion (Allergy treatment)	Biofermin-R (Antibiotic-resistant lactic acid bacterium antiflatulent)	Lac-B (Antiflatulent)	Neriproct ointment (Hemorrhoid treatment)	Posterisan (ointment) (Hemorrhoid treatment)
Ganaton (Gastrointestinal prokinetic)	Gasmotin (Gastrointestinal prokinetic)	Kalimate (Serum potassium lowering drug)	Kayexalate (Hyperkalemia treatment)		
Bisolvon (Airway mucus solubilizer)	Mucosolvan (Airway lubricant/expectorant)	Livact (Branched-chain amino acid)	Portolac (Hyperammonemia treatment)		
Prednisolone (Synthetic corticosteroid)	Predonine (Synthetic corticosteroid)				
Voltaren (Analgesic/anti-inflammatory)	Loxonin (Analgesic/anti-inflammatory/antipyretic)				
Mucodyne (Airway mucus regulator/ mucous membrane normalizer)	Mucosolvan (Airway lubricant/expectorant)				
Hypen (Analgesic antipyretic antiphlogistic)	Disopain (Non-steroidal anti-inflammatory drug)				
Laxoberon (Laxative)	Pursennid (Laxative)				
Lipitor (HMG-CoA reductase inhibitor)	Lipovas (Anti-hyperlipidemia)				
Nitorol (Ischemic heart disease treatment)	Nitropen (Sublingual tablet for angina treatment)				
Renivace (Long-acting ACE inhibitor)	Norvasc (Long-acting calcium channel antagonist)				

Injection	
A	**B**
Omepral injection (Proton pump inhibitor)	Gaster injection (H2 receptor antagonist)
Kenketsu Venoglobulin-IH (Plasma fraction preparation)	Kenketsu Venilon I (Plasma fraction preparation)
Tienam 0.5 g (Carbapenem antibiotic)	Modacin 1 g (Cephem antibiotic)
1-mol potassium chloride solution (Solution for electrolyte correction)	Aspara-K injection (K aspartate)
Morihepamin (Amino acid for hepatic failure)	Moripron-F (Multiple amino acid)

(Note 1) Data from the 18th and 19th medical near-miss incident reports
Drug A was intended but drug B was given instead in the reported cases.
Descriptions in brackets are therapeutic efficacies claimed on the package insert.

Fig. III-8 Major Drugs Mixed Up Due to Similar Appearance (Note 1)

Tablet/capsule		Powder		Solution	
A	B	A	B	A	B
Acetanol (Hypertension/angina/ arrhythmia treatment)	Sunrythm (Arrhythmia treatment)	No. 57 Onseiin (Chinese medicine)	No. 41 Hochuekikito (Chinese medicine)	Incremin syrup (Iron-deficiency anemia treatment)	Trichlor syrup (Hypnotic)
Adona (Hemostatic)	Warfarin (Warfarin potassium)	Daiken Chuto (Chinese medicine)	Choreito (Chinese medicine)	Depakene syrup (Anti-epileptic/antimanic)	Phenobal elixir (Hypnotic/sedative/ anti-spastic)
Altat capsule (H2 receptor antagonist)	Acinon capsule (H2 receptor antagonist)	Lac-B (Antiflatulent)	Biofermin (Antibiotic-resistant lactic acid bacterium antiflatulent)		
Alositol tablet (Anti-hyperuricemia)	Alesion tablet (Allergy treatment)	Magnesium oxide (Antacid/laxative)	Marzulene (Gastritis/gastric ulcer treatment)		
Urso tablet (Hepatic/biliary/gastrointestinal improving agent)	Zyloric tablet (Hyperuricemia treatment)	Sodium hydrogen carbonate (Antacid)	Sodium chloride (Dispensing agent [salt])		
IPD (Allergy treatment)	Rizaben (Allergy/keloid/hyperplastic scar treatment)	Marzulene (Gastritis/gastric ulcer treatment)	CaCO3 (Antacid/absorbent)		
Acardi capsule (Heart failure treatment)	Aspenon capsule (Arrhythmia treatment)				
Artane (Parkinson's syndrome treatment)	Akineton (Anti-Parkinson's disease)				
Amaryl (Sulfonylurea hypoglycemic)	Norvasc (Long-acting calcium channel antagonist)				
Gasmotin (Gastrointestinal prokinetic)	Ebastel (Long-acting selective H1 receptor antagonist)				
Calonal (Analgesic antipyretic)	Zyloric (Hyperuricemia treatment)				
Glakay (Vitamin K2 for osteoporosis treatment)	Diflucan (Deep mycosis t reatment)				
Coniel (Hypertension/angina treatment)	Lochol (HMG-CoA reductase inhibitor)				
Thiaton (Quinolizine antimuscarinic)	Sesden (Antispastic/analgesic)				
Depakene tablet (Anti-epileptic/antimanic)	Depaken R tablet (Anti-epileptic/antimanic)				
Depromel (Selective serotonin reuptake inhibitor)	Lochol (HMG-CoA reductase inhibitor)				
Panaldine 100 mg (Antiplatelet)	Resplen (Antitussive/airway mucus solubilizer)				
Harnal D (Treatment for dysuria related to prostatic hypertrophy)	Panaldine (Antiplatelet)				
Proheparum (Liver hydrolysate)	EPL (Liver disease/hyperlipidemia treatment)				
Bezatol SR (Anti-hyperlipidemic)	Zantac (H2 receptor antagonist)				
Pontal capsule (Analgesic/anti-inflammatory/ antipyretic)	Voltaren SR capsule (Sustained-release analgesic/anti-inflammatory)				
Mucosolvan (Airway lubricant/expectorant)	Thyradin S (Thyroid hormone)				
Myonal tablet (Myotonia treatment)	Methycobal tablet (Peripheral neuropathy treatment)				
Lipovas (Anti-hyperlipidemic)	Lipitor (HMG-CoA reductase inhibitor)				
Warfarin (Warfarin potassium)	Lasix (Diuretic/antihypertensive)				

(Note 1) Data from the 18th to 20th medical near-miss incident reports
Drug A was intended but drug B was given instead in the reported cases.
Descriptions in brackets are therapeutic efficacies claimed on the package insert.

External drug		Injection	
A	B	A	B
Anderm ointment (Non-steroidal anti-inflammatory topical drug)	Antebate ointment (Topical corticosteroid)	Aminotripa No. 2 (discontinued) (Amino acid/glucose/electrolyte solution for high-calorie fluid infusion)	Aminotripa No. 1 (discontinued) (Amino acid/glucose/electrolyte solution for high-calorie fluid infusion)
MS cold press (Analgesic/anti-inflammatory patch)	Catlep (Transdermal analgesic/anti-inflammatory)	Cefmetazon (Cephamycin antibiotic)	Sulperazon (Antibiotic containing beta-lactamase inhibitor)
Posterisan ointment (Hemorrhoid treatment)	Neriproct ointment (Hemorrhoid treatment)	NovoRapid 30 Mix Injection FlexPen (Insulin)	NovoRapid injection 300 FlexPen (Insulin)
		Primperan (Treatment for abnormal gastrointestinal function)	Lasix injection (Diuretic)
		Benambax (Carinii pneumonia treatment)	Targocid (Glycopeptide antibiotic)
		Methycobal (Peripheral neuropathy treatment)	Kaytwo N (Hemostatic mechanism activating vitamin)
		Lasix injection (Diuretic)	Bisolvon injection (Airway mucus solubilizer)
		Adelavin 9 (Liver extract)	Serotone (5-HT3 antagonist [antiemetic])
		Elaspol 100 (Neutrophil erastase inhibitor)	FOY (Protease inhibitor)
		HMG solution (Pituitary gonadotropin)	Luteum (Luteal hormone)
		Cefamezin alfa (Synthetic cephalosporin)	Flumarin (Oxacephem antibiotic)
		Pentcillin (Synthetic penicillin)	Biklin (Synthetic aminoglucoside antibiotic)
		Liple (PGE1)	Palux (PGE1)
		Rocephin (Cephem antibiotic)	Omepral (Proton pump inhibitor)

Fig. III-9 Major Drug Mixed Up Due to Two Factors (Note 1)

Tablet		Powder		External drug	
A	**B**	**A**	**B**	**A**	**B**
[**Similar product name] & [similar efficacy]**					
Acinon capsule (H2 receptor antagonist)	Altat capsule (H2 receptor antagonist)				
Ganaton capsule (Gastrointestinal prokinetic)	Gasmotin tablet (Gastrointestinal prokinetic)				
Nitorol (Ischemic heart disease treatment)	Nitropen (Sublingual tablet for angina treatment)				
Blopress (Long-acting angiotensin II receptor antagonist)	Minipress (Hypertension/dysuria treatment)				
Ferromia (Soluble nonionic iron)	Fero-Gradumet (Sustained-release iron)				
Lipitor (HMG-CoA reductase inhibitor)	Lipovas tablet (Hyperlipidemia treatment)				
Roccornal 100 mg (Circulatory function improving drug)	Lochol (HNG-CoA reductase inhibitor)				
Laxoberon tablet (Laxative)	Laxoberon solution (Laxative)				
[**Similar product name] & [similar appearance]**					
Basen OD (Treatment for postprandial hyperglycemia in diabetes)	Takepron OD (Proton pump inhibitor)			Anderm ointment (External non-steroidal anti-inflammatory drug)	Antebate ointment (External corticosteroid)
Persantin (Coronary circulation improving drug)	Pentasa (Ulcerative colitis/Crohn's disease treatment)			Hyalein Mini 0.3 (Keratoconjunctival epithelial disease treatment)	Hyalein Mini 0.1 (Keratoconjunctival epithelial disease treatment)
Rhythmy (Hypnotic)	Rize (Tranquilizer)				
[**Similar efficacy] & [similar appearance]**					
Artane (Parkinson's syndrome treatment)	Akineton (Anti-Parkinson's disease)	Magnesium oxide (Antacid/laxative)	Marzulene (Gastritis/gastric ulcer treatment)	Posterisan ointment (Hemorrhoid treatment)	Neriproct ointment (Hemorrhoid treatment)
Baymycard (Long-acting calcium channel antagonist)	Adalat L (Hypertension/angina treatment)				
Lipovas (Hyperlipidemia treatment)	Lipitor (HMG-CoA reductase inhibitor)				
Rinderon (Synthetic corticosteroid)	Predonine (Synthetic corticosteroid)				
Pontal capsule (Analgesic/anti-inflammatory/ antipyretic)	Voltaren SR capsule (Analgesic/anti-inflammatory)				

(Note 1) Data from the 18th and 21st medical near-miss incident reports
Drug A was intended but drug B was given instead in the reported cases.
Descriptions in brackets are therapeutic efficacies claimed on the package insert.

Injection	
A	**B**
Kenketsu Glovenin Nichiyaku 2.5 g (Plasma fraction preparation)	Kenketsu Venilon 2.5 g (Plasma fraction preparation)
Venoglobulin IH (Plasma fraction preparation)	Venilon I (Plasma fraction preparation)
Morihepamin (Amino acid for hepatic failure)	Moripron-F (Multiple amino acid)
Lactec 500 mL (Bodily fluid substitute; perfusion/lavage fluid for surgery)	Lactec G 500 mL (Extracellular fluid replacement)
NovoRapid 30 Mix Injection FlexPen (Pancreatic hormone)	NovoRapid Injection 300 FlexPen (Pancreatic hormone)
Novolin 30R FlexPen (Pancreatic hormone)	NovoRapid 30 Mix FlexPen (Pancreatic hormone)
Hydrocortone (Corticosteroid)	Solu-Cortef (Corticosteroid)

Fig. III-10 17th to 18th Occurrence of Medical Near-Miss Incidents Involving Drugs

		Drug mix-up	Wrong dose	Wrong method			Wrong dosing speed	Patient misidentification	Others	Total
				Route of administration	Concentration	Duration				
Process	Ordering	2	3	1	0	0	1	0	1	8
	Receiving order/ briefing	0	5	0	2	0	0	0	1	82
	Preparation	2	6	0	2	0	0	0	17 (Note 1)	27
	Implementation	3	1	2	0	3	3	0	2	14
	Post-procedural observation/management	0	0	0	0	0	5	0	5	10
	Others	0	0	0	0	0	0	0	4	4
Total		7	15	3	4	3	9	0	30	71

(Note 1) Including 15 cases involving closed ports that should have been opened to mix drugs when preparing infusion solution.

Fig. III-11 18th Occurrence of Near-Miss Events Related to Dispensing Process of Drugs

		Drug error			Dose error				Patient misidentification	Leak of delivery	Wrong drug package/label	Malfunction/defect of powder packaging machine	Others	Total
		Drug mix-up	Incorporation of wrong drug	Specification	Measuring/counting	Unit.	No. of days	Powder package						
Internal medicine	Tablets/capsule	103	6	48	49	0	17	24	2	5	25	10	8	297
	Powder/ granule	16	0	6	18	0	1	15	4	6	0	8	4	78
	Liquid for internal use	9	0	0	5	0	1	1	0	0	4	0	0	20
External medicine		24	0	8	4	0	0	0	0	7	3	0	3	49
Injection		85	2	39	18	0	0	0	0	5	8	3	6	166
Others		0	0	0	0	0	0	0	0	0	0	0	0	0
Unknown		0	0	4	5	19	4	4	15	3	22	3	9	88
Total		237	8	105	99	19	23	44	21	26	62	24	30	698

[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, 2006.

(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-12).

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 fifth report included two events in which the breathing circuit of the ventilator was pulled and the tracheal tube was accidentally withdrawn. The sixth report included two events in which the breathing circuit of the ventilator was pulled and the tracheal tube was accidentally withdrawn and one event in which the tracheal tube was connected into an artificial nose by mistake. The seventh and eighth reports each included two events in which the breathing circuit of the ventilator was dislodged.

D. Heated humidifier

No event was reported.

E. Settings/operation panel

The fifth report included one event in which the power switch was operated erroneously, and the 8th report included one event in which a setting error occurred.

F. Ventilator

The sixth report included one event involving a defect in the ventilator .

G. Others

No event was reported.

Many of the reported events involved the breathing circuit of the ventilator. The preventive measures taken at the reporting institutions included optimal positioning of the alarm device in terms of the distance between the ventilator and the patient and a procedure for patient position change that requires a nurse and an assistant who holds the breathing circuit of the ventilator while changing the patient's position.

(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-13). 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-14).

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 seventh report included six events related to flow setting.

E. Observation/management

The seventh report included one event involving necrotic ulcer secondary leakage from the insertion site. The eighth report included two events of insertion site leakage and one event in which all the remaining drug was administered because the infusion route was not clamped before removal.

F. Others

The seventh report included one event in which the entire dose was administered by mistake in the last hour for some reason. The eighth report included one event involving a failure to connect the syringe pump. Some institutions check the life of the devices in periodic maintenance procedures to ensure device safety.

(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 19th report (January to March 2006), the 20th report (April to June 2006), the 21st report (July to September 2006), and the 22nd report (October to December 2006) were analyzed (Fig. III-15).

B. Medical near-miss incidents related to infusion pumps

Medical near-miss incidents reported in the 20th report (April to June 2006), the 21st report (July to September 2006), and the 22nd report (October to December 2006) 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-16).

<Note>

Ventilator-related medical adverse events not discussed in "Individual Theme Review by Expert Division" in the 2005 annual report (those occurred in 2005 and included in the Fifth report) and medical near-miss incidents included in the 17th (July to September 2005) report are summarized in this report (Figs. III-17 and III-18).

Summaries and details of medical adverse events related to infusion pumps reported between October 2004 and December 31, 2005 are also included (Figs. III-19 and III-20).

Fig. III-12 Summary of Medical Adverse Events Related to Ventilator: 5th to 8th Reports

Category		Place	Potential of residual disability	Details	Periodic report
1	Power supply	Patient room	Death	A patient with progressive muscular dystrophy on 24-hour biphasic positive airway pressure (BiPAP) ventilator was found in cardiopulmonary arrest. The BiPAP ventilator was attached but the power was off. The cause of the power be turned off was unknown.	8th
2	Breathing circuit	Patient room	Unknown	Two nurses changed the diaper of a patient on a ventilator. The cannula was accidentally withdrawn because the cough reflex occurred when the patient was turned on his side.	5th
3	Breathing circuit	Operation room	Unknown	After the tracheotomy in the operation room, the patient was moved from the operating table to the ward bed, and a ventilator was attached to the tracheal cannula. The corrugated tube of the ventilator was tugged, and the tracheal cannula was withdrawn by accident during the procedure for preparing to return the patient to the ward.	
4	Breathing circuit	Patient room/ emergency center	High	The patient's respiratory condition was worsened, and the airway pressure was increased. The tracheal tube was detached from the ventilator, and bradycardia was followed by cardiac arrest.	6th
5	Breathing circuit	Patient room	Low	The airway pressure tube of the ventilator was connected to the artificial nose by mistake.	
6	Breathing Circuit	Patient room	Death	The endotracheal tube was accidentally withdrawn together with the holder when the patient on the ventilator was turned on the right side.	
7	Breathing circuit	Patient room	Low	A nurse went to check the patient when the alarms of the ventilator and the SpO_2 monitor went off. The tracheal cannula (tracheal tube) and the flexible tube were not connected tightly. SpO_2 was decreased, but the patient's condition improved after 30 seconds of Ambu bag use. The patient data was displayed on the bedside monitor but not transmitted to the recording room monitor.	7th
8	Breathing circuit	Patient room	High	When the nurse completed taking care of the patient in the next bed and turned around, the patient involved in the event was in cardiopulmonary arrest. The cannula was dislodged from the ventilator. The patient was resuscitated, and the heart rate returned but not the level of consciousness. The patient was expected to call for help if there was any problem with the ventilator because he was able to communicate with the voice call. The alarm of the ventilator on this patient was not as loud as that of the patient in the next bed.	

Category		Place	Potential of residual disability	Details	Periodic report
9	Breathing circuit	Patient room	Death	A patient with amyotrophic lateral sclerosis (ALS) was on a BiPAP ventilator. The patient had requested turning off the alarm because it went off frequently. The patient was checked after midnight, but the breathing circuit of the ventilator and the mask were found dislodged three hours later.	8th
10	Breathing circuit	X-ray room	High	After an emergency operation, the patient returned to ICU with the ventilator on to prevent further aggravation of the ischemic symptom in the lower extremities. The patient was subsequently moved from ICU to the angiography room for possible catheter treatment. The mobile ventilator was directly connected to the oxygen outlet in the angiography room. After the catheter treatment, the patient was found pale and with a faint pulse. The breathing circuit of the ventilator was subsequently found to be disconnected.	
11	Settings/ operation panel	Patient room	Mild	The patient was on a BiPAP ventilator. Oxygen was supplied through the reservoir mask only during meals. The family noticed the abnormality and pointed it out to the nurse who checked the ventilator. The nurse found the device was on stand-by without supplying oxygen and the tube (bypass tube) was disconnected from the mask.	5th
12	Settings/ operation panel	Patient room	Unknown	The pediatric ventilator (Bear Cub) was set at peak inspiratory pressure (PIP) 16, positive end-expiratory pressure (PEEP) 6, ventilation rate (Rate) 20, and low-pressure alarm 10. However, PIP was only around 12. PIP was subsequently decreased to around 10 every 30 minutes to one hour. The device was almost unable to pressurize four hours later. The patient's respiration was controlled by manual ventilation until a replacement ventilator arrived.	8th
13	Ventilator	ICU	High	The hypoventilation alarm went off after sputum suction occurred in the patient on a ventilator, but no abnormality was found. The alarm went off again followed by a gradual decrease in the heart rate. The ventilator was replaced.	6th

Fig. III-13 Summary of Medical Adverse Events Related to Infusion Pumps: 7th and 8th Report

No.	Accident process		Potential of residual disability	Summary	Periodic report
[Infusion pump]					
1	Settings/ operation panel	Flow setting	Low	The flow should have been set at 50 mL/h but was set at 500 mL/h by mistake.	7th
2	Observation/ management	Others	High	When removing Diprivan (general anesthesia) from the infusion pump after its discontinuation was ordered, the infusion line was left unclamped. All the remaining Diprivan solution was administered to the patient.	8th
3		Insertion site	Low	The nurse in charge checked the IV needle insertion site and saw there was no problem. Two hours later the patient had a fever of 38.3°C, and the nurse checked the patient's condition but not the needle insertion site. About two hours after the fever started, the nurse found swelling due to leakage in the left leg where the IV needle was inserted.	
4			Unknown	After the patient recovered from the anesthesia post-operation, the IV drip was switched from manual adjustment to infusion pump. The flow was set at 30 mL/h. The patient's hand was found swollen after about 10 hours. The patient received at least 375 mL of drug during the 10 hours before the leakage was found. The day-shift nurse and the evening-shift nurse checked the needle insertion site and the fingertips of the patient four times in total.	
[Syringe pump]					
5	Settings/ operation panel	Flow setting	Unknown	The flow of Inovan should have been 3 mL/h but was infused at 30 mL/h. After setting the flow, the set amount and the infusion route were not double-checked before pushing the start button.	7th
6			Low	The flow of Inovan (cardiotonic) should have been 2 mL/h but was set at 22 mL/h.	
7			Unknown	Nembutal 5 mL/h was resumed by using the same syringe pump used for the preceding blood infusion 50 mL/h without changing the flow speed.	
8			Low	The mixture of normal saline and Ciclosporine (immunosuppressant) was administered at 4.1 mL/h. Nurse B checked the patient when the alarm went off 45 minutes after ensuring 2 mL of the solution had been infused as scheduled. The nurse found that there was only 2 mL of solution remaining and the flow speed was set at 104.1 mL/h. It was a type of syringe pump that did not emit an alarm when the operation was interrupted and the set flow speed was changed when the panel was touched.	

No.	Accident process		Potential of residual disability	Summary	Periodic report
9	Settings/ operation panel	Flow setting	Unknown	A total of 44.5 mL of drug was to be administered in three hours by using a syringe pump, but the flow speed was set at 44.5 mL/h.	7th
10	Observation/ management	Insertion site	Low	Critpan (acute circulatory failure treatment) was administered by using a syringe pump. The patient complained about discomfort in the needle insertion site with mild swelling. Necrotic ulcer was diagnosed at the plastic surgery clinic, and a skin graft was required.	
11	Others		Low	Morphine hydrochloride 50 mg was diluted with 45 mL and started at 0.5 mL/h by using a syringe pump. The patient was checked three times during the initial three hours and 10 minutes. However, after four hours of treatment it was found that all remaining drug had been administered within one hour.	
12			Low	The anticoagulant Futhan was to be given by using a syringe pump in continuous hemodiafiltration (CHDF) for acute renal failure. Dialysis was started without double-checking the line connection, and about 150 mg of Futhan was given within a short time.	8th

Fig. III-14 Medical Adverse Events Related to Infusion Pumps: 7th and 8th 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
Line	**Syringe**		0	0	0
	Route	0	0	0	0
Settings/ operation panel	**Fixation**	0	0	0	0
	Flow setting	1	5	0	6
Observation/ management	**Insertion site**	2	1	0	3
	Others	1	0	0	1
Others		0	2	0	2
Total		4	8	0	12

Fig. III-15 Medical Near-Miss Incidents Related to Ventilators: 19th to 22nd Reports

Category	N
Power supply	5
Oxygen supply	3
Breathing circuit	43
Heated humidifier	10
Settings/operation panel	10
Ventilator	5
Others	13
Total	89

Fig. III-16 Medical Near-Miss Incidents Related to Infusion Pumps: 20th to 22nd Reports

		Infusion	Syringe	Others	Unknown	Total
Ordering		1	0	0	2	3
Power supply	**Power charge**	1	1	0	0	2
	Neglected power supply	10	3	0	2	15
	Others	1	1	0	0	2
Line	**Syringe**	0	1	0	0	1
	Route	27	19	0	4	50
Settings/ operation panel	**Fixation**	5	17	0	0	22
	Flow setting	77	22	0	13	112
	Others	17	14	1	1	33
Observation/ management	**Insertion site**	5	0	0	1	6
	Others	17	7	2	1	27
Others		28	13	3	7	51
Total		189	98	6	31	324

<Note>

Fig. III-17 Summary of Medical Adverse Events Related to Ventilators

October 2004 to December 31, 2005

Category		Details		Place	Potential of residual disability	Details	Periodic report
1	**Power supply**	Inappropriate power supply		Patient room	Low	The emergency line breaker was activated due to inappropriate use of an outlet at another ward, and the power to the ventilator was turned off.	6th
2	**Breathing circuit**	Leakage	Dis-connection	Unknown	Low	The tracheal tube was disconnected. The alarm went off but the patient remained in respiratory arrest for four to five minutes due to a delay in the nurse visiting.	
3	**Breathing circuit**	Line		Patient room	Low	The breathing circuit of the ventilator was too short and was tugged when the position was changed, resulting in accidental withdrawal of the tracheal tube.	
4	**Breathing circuit**	Others		Operation room	Unknown	When the patient was moved with the ventilator on, the corrugated tube was tugged and the tracheal tube was accidentally withdrawn.	
5	**Settings/ operation panel**	Power switch turned off		Patient room	Low	After the main switch was turned on, the ventilator was not started because the start button was pressed without checking the display. There was an error in checking the operation status.	

<Note>

Fig. III-18 Classificatsion of Medical Near-Miss Incidents Involving Mechanical Ventilator

Classification	Details			17th	
				Number of incidents (%)	Number of incidents by classification (%)
Power supply	1	Inappropriate power supply		3 (3.0)	6 (5.9)
	2	Inadequate code connection		1 (1.0)	
	3	Internal battery malfunction		2 (2.0)	
	4	Connection cable breakage		0 (0.0)	
Oxygen supply	1	Not supplied		2 (2.0)	4 (3.9)
	2	Not connected		1 (1.0)	
	3	Oxygen tank disconnected		0 (0.0)	
	4	Inappropriate handling of oxygen tank		0 (0.0)	
	5	Oxygen leakage		1 (1.0)	
Breathing circuit	1	Wrong connection	Confused expiration/ inspiration ports	3 (3.0)	51 (50.5)
			Location of pressure/ temperature sensor	0 (0.0)	
			Location	1 (1.0)	
	2	Inadequate connection		8 (7.9)	
	3	Inappropriate use of items		6 (5.9)	
	4	Line exchange required time		1 (1.0)	
	5	Breathing circuit blockage		3 (3.0)	
	6	Breakage		2 (2.0)	
	7	Leakage	Disconnection	18 (17.8)	
	8	Leakage	Disconnected cannula	2 (2.0)	
	9	Leakage	Breathing circuit breakage	5 (5.0)	
	10	Others		2 (2.0)	

Classification	Details			17th	
				Number of incidents (%)	Number of incidents by classification (%)
Heated humidifier	1	Power was off		5 (5.0)	10 (9.9)
	2	Wrong setting		2 (2.0)	
	3	Water supply		3 (3.0)	
	4	Breakage		0 (0.0)	
	5	Malfunction/defect		0 (0.0)	
Setting/ operation panel	1	Power blackout		5 (5.0)	20 (19.8)
	2	Setting	Alarm	1 (1.0)	
			Oxygen concentration	0 (0.0)	
			Oxygen flow	0 (0.0)	
			Mode	2 (2.0)	
			Mode/pressure	0 (0.0)	
			Ventilation	1 (1.0)	
			Pressure	4 (4.0)	
			Expiratory time	0 (0.0)	
			Respiratory rate	4 (4.0)	
			Wrong setup method	3 (3.0)	
	3	Inappropriate position of mode setup dial		0 (0.0)	
	4	Tidal volume display/high value due to sputum and moisture drops		0 (0.0)	
	5	Battery of graphic monitor was out		0 (0.0)	
Ventilator	1	Inappropriately secured ventilator		1 (1.0)	12 (11.9)
	2	Malfunction/defect		11 (10.9)	
Total				103 (100)	

<Note>

Fig. III-19 Summary of Medical Adverse Events Related to Infusion Pumps

October 2004 to December 31, 2005

No.	Accident process		Potential of residual disability	Summary	Periodic report
[Infusion pump]					
1	Settings/ operation panel	Flow setting	Unknown	Two infusion pumps were used. The main infusion pump was to be set at 40 mL/h and the anesthetic pump at 4 mL/h. However, anesthesia was administered at 40 mL/h.	7th
2			Low	Intravenous Catabon Hi should have been given at 2 mL/h but was given at 37 mL/h.	
[Syringe pump]					
3	Settings/ operation panel	Fixation	Unknown	The plunger was not secured in the pump slider hook, and the infusion was not started.	7th
4		Flow setting	Unknown	The drug should have been given at 5 mL/h but was given at 50 mL/h due to a setting error. The error was found when only 20 mL of the drug was remaining.	
[Unknown]					
5	Ordering		Low	The physician knew the setting procedure for the new pump was different from that for the old model but made a documentation error. The nurse noticed the error in the order but set the flow without checking with the physician. The drug was given at 240 mg/4h instead of intended 100 mg.	7th

<Note>

Fig. III-20 Medical Adverse Events Related to Infusion Pumps

October 2004 to December 31, 2005

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

[3] Medical Adverse Events Related to Medical Procedures

(1) Details of medical adverse events related to enema

In the third report (Note 1), information concerning events involving rectal perforation presumably caused by glycerin enema was considered by Expert Analysis Groups as information to be widely shared and described in detail. The Japanese Nursing Association published "Accident Report: Enema in Standing Position" to provide urgent safety information in February 2006. Medical adverse events related to enema are summarized in Fig. III-21.

The fifth report included one medical adverse event related to enema, in which glycerin enema was given to a standing patient in the toilet on his request, and rectal perforation subsequently occurred.

The seventh report included events related to enema reported on January 1, 2006 and thereafter.

Different types of enema are used for different purposes. Most reported events involved purgative (stool) enema. These include high-pressure enema in which an enema agent is injected from a pump held about 50 cm above with water pressure, as well as glycerin enema in which enema agent is injected with manual pressure.

Most reported events involved glycerin enema. Despite the in-house enema procedure that specifies that the patient should, in principle, be in the left lateral position, sometimes an enema is given while patients are standing or bending forward in the toilet on their request. The third (Note 1) and fifth (Note 2) reports included events that occurred in such cases as "Medical Adverse Event Information to be Shared," to draw attention to them. Some institutions have been using report on JCQHC's Project to Collect Medical Adverse Event Information as references for in-house information sharing or when warning patients who request that an enema be administered in the toilet.

One of the reported events involved rectal perforation following glycerin enema performed in accordance with the procedure that specifies the left lateral position on the bed. Preventive measures for such events include reviewing the necessity of preoperative enema based on the scheduled operative procedure, for example, whether laparotomy was involved.

The eighth report included one medical adverse event related to an enema. The report states, "The safety precautions for enema were not taken as something the person should keep in mind."

(2) Medical adverse events related to nasogastric/gastrostomy/enterostomy tube insertion/management

Of the medical adverse events reported between January 1 and June 30, 2006, events for which the event summary information code for drainage tube was selected and events for which other information codes were selected but involved insertion/management of nasogastric/gastrostomy/enterostomy tubes in patients who underwent percutaneous endoscopic gastrostomy (PEG) or intestinal tube (those involving tubes used for purposes other than nutritional feeding) were analyzed.

(Note 1) See p. 45 of the third report on Project to Collect Medical Adverse Event Information.
(Note 2) See p. 113 of the fifth report on Project to Collect Medical Adverse Event Information.

Medical adverse events related to nasogastric/gastrostomy/enterostomy tube insertion/management are summarized in Fig. III-22.

The occurrence of medical adverse events is summarized with the five situations, namely, initial tube insertion/procedure, tube replacement, nutritional feeding, observation/management, and others on the vertical axis and event details on the horizontal axis in the matrix (Fig. III-23).

A. Initial tube insertion/procedure

The sixth report included no event involving nasogastric tubes and one event involving gastrostomy in which other organs were damaged during the tube placement procedure.

B. Tube replacement

The sixth report included five events involving nasogastric tubes inserted into the trachea or the lungs. Bubbling sounds were checked in three of the events. Three events involving gastrostomy were included in the report. Gastrostomy tubes were inserted into the intestine or the abdominal cavity by accident.

The eighth report included two events involving insertion of nasogastric tube into an inappropriate site during replacement.

C. Nutritional feeding

The sixth report included two events involving nasogastric tubes and one event involving gastrostomy. Vomiting and fever related to nutritional feeding were reported.

D. Observation/management

The sixth report included no event involving nasogastric tubes and one event involving gastrostomy tube fixation.

Nutritional feeding through nasogastric or gastrostomy tubes and patient observation/management also take place at long-term care insurance facilities and special nursing homes.

(3) Medical near-miss incidents related to enema

Medical near-miss incidents occurred in 2006 and reported in the 19th (January to March 2006) and 20th (April to June 2006) reports were analyzed.

The occurrence of medical near-miss incidents related to enemas was summarized with the five steps in the enema procedure, namely, ordering, receiving order/briefing, preparation, implementation, and post-enema observation/management on the vertical axis, and incident details on the horizontal axis in the matrix (Fig. III-24).

(4) Medical near-miss incidents related to nasogastric/gastrostomy/enterostomy tube insertion/management

Medical near-miss incidents that occurred in 2006 and reported in the 19th (January to March 2006) and 20th (April to June 2006) reports were analyzed.

As with medical adverse events, the occurrence of medical near-miss incidents related to enemas was summarized with the five procedures, initial tube insertion/procedure, tube replacement, nutritional feeding, observation/management, and others on the vertical axis and incident details on the horizontal axis in the matrix (Fig. III-25).

<Note>

Medical adverse events related to enemas or nasogastric/gastrostomy/enterostomy tube insertion/management reported between October 2004 and December 31, 2005 not discussed in "Individual Theme Review by Expert Division" in the 2005 annual report are summarized in this report (Figs. III-26 and III-27). Medical near-miss incidents related to enema (Fig. III-28) or nasogastric/gastrostomy/enterostomy tube insertion/management (Fig. III-29) reported in the 17th (July to September 2005) and 18th (October to December 2005) medical near-miss incident reports are also summarized.

Fig. III-21 Summary of Medical Adverse Events Related to Enemas: 7th and 8th Reports

No.	Process	Potential of residual disability	Summary	Periodic report
[Glycerin enema]				
1	Toilet	Low	The patient requested for a preoperative enema to be performed in the toilet because of the presence of hemorrhoids. The patient stated that he would feel bad if he did a bowel movement right away. Rectum perforation was found after the enema was performed in the patient standing and bending forward in the toilet.	7th
2	Patient room	High	Preoperative enema was performed in the patient lying on the left side in bed. Rectum perforation was found after the enema. The patient's hemorrhage was overlooked.	
3	Toilet	Low	Glycerin enema was performed in the patient who experienced difficulty defecating. The patient requested that an enema be performed while he was standing and bending forward in the toilet. The patient started bleeding, and the hemorrhage required hemostatic treatment.	
4			The patient requested that an enema be performed in the toilet. Glycerin enema 120 mL was performed in the patient standing and bending forward in the toilet. The patient started bleeding when producing a hard stool. Endoscopic hemostasis was performed for the continuing hemorrhage after the physician's examination. The individual who performed the enema was aware of potential enema-related accidents included in the in-house safety alert. However, he/she did not think he/she might cause such an accident.	8th

Fig. III-22 Summary of Medical Adverse Events Related to Nasogastric/Gastrostomy/ Enterostomy Tube Insertion/Management: 6th to 8th Reports

No.	Place	Potential of residual disability	Summary	Periodic report
Events related to nasogastric tubes				
[Initial insertion/procedure: No event was reported]				
[Tube replacement: 7 events]				
1	Inappropriate site	High	The bubbling sound in the stomach was checked by two first-year nurses after feeding tube placement. The patient's respiratory condition deteriorated after the tube feeding was started, and the tube was found misplaced in the trachea. Thorough patient monitoring was not ensured after starting the tube feeding until the worsening of his respiratory condition.	6th
2	Inappropriate site	Low	The new nasogastric tube was misplaced in the trachea, reaching the lung. The misplaced tube was unnoticed, and the formula was fed to the patient. The hard tube material may be one of the factors causing the event.	
3	Inappropriate site	Low	The tube was misplaced in the bronchus. Racol was fed but started to flow backward into the ventilator line together with the cough reflex. The blood oxygen saturation level decreased. Whether the tube was inserted into the stomach was checked using an indirect method of listening for the bubbling sound through the abdominal wall. Backflow of stomach fluid was not checked.	
4	Inappropriate site	Unknown	A new gastric tube was inserted into the trachea, causing pneumothorax. The event was presumably caused by the misaligned gastric stoma: the stomach moved downward in the patient who received tube feeding in the gatched-up position, not in the complete supine position.	
5	Inappropriate site	Low	The new nasogastric tube was misplaced in the trachea, reaching the lung. The misplacement of the tube was unnoticed, and the formula was fed to the patient. The patient was in the status of post-subtotal gastrectomy. The nurses listened for the bubbling sound with a stethoscope to confirm correct tube placement in the remaining stomach, but the sound was unclear.	
6	Inappropriate site	High	The feeding tube placed in the previous hospital was replaced immediately after the patient was transferred due to occlusion. Some resistance was felt in the esophagogastric junction during the manual tube insertion, and the tube was placed with a guide wire. The patient lapsed into shock with high fever and abdominal distention three days later. Abdominal paracentesis showed ascites mixed with nutritional formula, suggesting formula leakage in the abdominal cavity. The position of the replaced tube had been checked by X-ray.	8th
7	Inappropriate site	Death	The feeding tube was smoothly inserted about 55 cm despite slight resistance at the pharynx. The nurse who replaced the tube thought the tube reached the stomach. Air was injected into the stomach to check the bubbling sound, and the nurse decided the tube was placed in the stomach. Suction showed only air and no liquid, and the nurse checked the bubbling sound once again and fixed the tube. The bubbling sound was also checked before feeding the patient the nutritional formula. Four hours later, a wheezing sound was heard and cyanosis occurred. An X-ray showed the tip of the feeding tube in the right lower lung. Radiopaque feeding tubes had been used since the previous year but X-ray confirmation of the tube position was not included in the operating procedure.	

No.	Place	Potential of residual disability	Summary	Periodic report
[Nutritional feeding: 2 events]				
8	Others	Low	The patient vomited while the pre-examination medication was administered through the gastric catheter. The patient was in a state of post-cranial surgery and unable to communicate. The cough reflex was absent. The procedure was not performed under the supervision of a physician.	6th
9	Others	Unknown	After the periodic tube replacement, the tube position was checked, followed by formula feeding. However, the level of consciousness decreased and the respiratory condition deteriorated.	
[Observation/management: No event was reported]				
Events related to gastrostomy/enterostomy tubes				
[Initial insertion/procedure: 1 event]				
10	Inappropriate site	Low	Part of the dilated colon was accidentally damaged during the laparoscopic gastrostomy. The gastric corpus behind the dilated colon was not checked thoroughly.	6th
[Tube replacement: 5 events]				
11	Inappropriate site	Unknown	Gastrostomy tube was misplaced in the abdominal cavity at the initial replacement. The tube was placed by an intern, and the instructing physician thought the tube placement was appropriate based on the insertion angle and direction. There was no routine checking procedure using a contrast medium.	6th
12	Inappropriate site	Low	The transcending colon was pierced by the replaced gastrostomy tube. The event was presumably caused by abdominal distention from flatulence, pushing the transcending colon upward over the stomach.	
13	Others	High	The esophagus was perforated by the replaced gastrostomy tube. The patient was not in a safe position during the tube placement. The risk of perforation had not been adequately explained.	
[Nutritional feeding: 1 event]				
14	Others	Death	The patient vomited and aspirated the vomit during nutritional feeding from the enterostomy tube. When the patient vomited was unknown due to inadequate observation during the busy period.	6th
[Observation/management: 1 event]				
15	Inappropriate site	Low	In the patient receiving at-home tube feeding, the tip of gastrostomy tube was found to have pierced the gastric wall and the diaphragm and reached the lung. The tube was too long and too hard for the post-gastrectomy patient.	6th

(Note 1) "Summary" includes a summary of event details and event background/factors reported as descriptive information.

Fig. III-23 Medical Adverse Events Related to Nasogastric/Gastrostomy/Enterostomy Tube Insertion/Management: 6th (Note 1) and 8th Reports

		Inappropriate site	Connection		Tube				Others	Total
			Leakage	Error	Misalignment/ withdrawal	Occlusion	Abnormality in fixation	Breakage/defect		
Initial tube insertion/ procedure	**Nasogastric tube**	3	0	0	0	0	0	0	0	3
	Gastrostomy	2	0	0	0	0	0	0	0	2
Tube replacement	**Nasogastric tube**	8	0	0	0	0	0	0	0	8
	Gastrostomy	9	0	0	0	0	0	0	2	11
Nutritional feeding	**Nasogastric tube**	0	0	0	1	0	0	0	2	3
	Gastrostomy	0	0	0	0	0	0	1	1	2
Observation/ management	**Nasogastric tube**	0	0	0	0	0	0	0	0	0
	Gastrostomy	1	0	0	1	0	0	0	0	2
Others	**Nasogastric tube**	0	0	0	0	0	0	0	0	0
	Gastrostomy	0	0	0	0	0	0	0	0	0
Total		21	0	0	2	0	0	1	5	31

(Note 1) Including events reported between October 2004 and December 31, 2005

Fig. III-24 Medical Near-Miss Incidents Related to Enemas: 19th and 20th Reports

		Drug mix-up	Wrong dose	Wrong method			Patient misidentification	Feeling sick/shock	Intestinal damage/hemorrhage	Others	Total
				Insertion site	Concentration	Frequency					
Process	Ordering	0	0	0	0	0	0	0	0	1	1
	Receiving order/briefing	1	0	0	0	1	0	0	0	2	4
	Preparation	2	0	0	1	0	1	0	0	0	4
	Implementation	1	1	1	0	0	3	1	5	0	12
	Post-procedural observation/management	0	0	0	0	0	0	0	0	0	0
Total		4	1	1	1	1	4	1	5	3	21

Fig. III-25 Medical Near-Miss Incidents Related to Nasogastric/Gastrostomy/ Enterostomy Tube Insertion/Management: 19th and 20th Reports

		Inappropriate site	Connection		Tube				Others	Total
			Leakage	Error	Misalignment/ withdrawal	Occlusion	Abnormality in fixation	Breakage/defect		
Initial tube insertion/ procedure	**Nasogastric tube**	2	0	0	0	0	0	0	0	2
	Gastrostomy	1	0	0	0	0	0	0	0	1
	Unknown	0	0	0	0	0	0	0	0	0
Tube replacement	**Nasogastric tube**	0	0	0	0	1	0	2	1	4
	Gastrostomy	3	0	2	0	1	1	2	3	12
	Unknown	0	0	0	0	0	0	0	0	0
Nutritional feeding	**Nasogastric tube**	1	7	2	1	15	1	0	4	31
	Gastrostomy	0	16	10	0	12	0	1	10	49
	Unknown	0	4	2	0	9	0	1	14	30
Observation/ management	**Nasogastric tube**	0	2	0	25	1	0	0	1	29
	Gastrostomy	0	5	1	29	2	0	7	8	52
	Unknown	0	5	0	3	0	0	0	3	11
Others	**Nasogastric tube**	0	0	0	0	0	0	0	0	0
	Gastrostomy	0	0	0	1	0	0	0	0	1
	Unknown	0	0	0	0	0	0	0	0	0
Total		7	39	17	59	41	2	13	44	222

<Note>

Fig. III-26 Summary of Medical Adverse Events Related to Enemas

From October 2004 to December 31, 2005

No.	Place	Potential of residual disability	Summary	Periodic report
[Glycerin enema]				
1	Toilet	Unspecified	The patient requested for preoperative glycerin enema to be performed in the toilet because of concern about a bowel movement before making it to the toilet. Rectum perforation was found after performing the enema in the patient, who was standing and bending forward in the toilet.	7th
2	Toilet	Low	Preoperative glycerin enema was to be performed in the toilet in patients who are able to walk according to the ward instruction. The enema was performed in the patient bending forward in the toilet. The patient was overly tense, and the catheter was inserted 5 cm at the third try. The patient started bleeding after the procedure, and rectum perforation was found.	
3	Toilet	Low	Pre-examination glycerin enema was performed in the patient standing up in the toilet to prevent possible stool leakage. The tip of the enema tube caused rectum laceration and perforation because the colon moved downward in the standing patient.	
4	Toilet	Low	The enema was performed in the patient who experienced difficulty in defecating in the toilet on his request. The procedure was repeated in the patient standing and bending forward because he had no bowel movement. The patient had tremor and fever after the procedure. A CT showed intestinal edema.	
[High-pressure enema]				
5	Ward treatment room	High	Pre-colonoscopic enema (high-pressure enema) was performed before the gastrointestinal examination. The patient subsequently experienced abdominal pain, and a CT showed peritonitis due to intestinal perforation. A diverticulum of sigmoid colon was identified. The perforation occurred presumably due to the fragile intestinal wall affected by the laxative and the pressure of the enema.	7th

<Note>

Fig. III-27 Summary of Medical Adverse Events Related to Nasogastric/Gastrostomy/ Enterostomy Tube Insertion/Management (Note 1)

From October 2004 to December 31, 2005

No.	Place	Potential of residual disability	Summary	Periodic report
Events related to nasogastric tubes				
[Initial insertion: 3 events]				
1	Inappropriate site	Low	Tube feeding was started on Day 1 post-operation. The blood oxygen level was reduced during the procedure. A chest X-ray showed the gastric tube inserted into the right lower lung. Gastric tube placement was not checked thoroughly, and aspiration was not predicted based on the changes in the patient's condition during tube feeding.	6th
2	Inappropriate site	Low	Tube misplacement in the left lung in the patient during emergency transportation. The bubbling sound of air injected through the gastric tube was slightly difficult to hear, but the individual who placed the tube determined that it was because the tip of the gastric tube was close to the cardia.	
3	Inappropriate site	Death	A gastric tube was placed under intravenous anesthesia in the patient who was treated at home. The cause of bleeding was determined as stress due to the prolonged procedure related to the difficulty in inserting the tube. An X-ray revealed that the tube had been placed in the trachea. Subsequent bradycardia was followed by cardiopulmonary arrest. The patient had been repeatedly resuscitated after cardiac arrest in the past. The patient had chronic respiratory failure.	
[Tube replacement: 1 event]				
4	Inappropriate site	Unknown	The bubbling sound was checked after the feeding tube was replaced. The blood oxygen level was subsequently decreased, and the patient vomited. It turned out that the tube was placed in the right lung. A newly graduated nurse performed the procedure alone. Feeding tube placement was one of the routine procedures performed by NICU nurses. However, the tube was misplaced.	6th
[Nutritional feeding: 1 event]				
5	Misalignment/ withdrawal	Low	A nasogastric tube was fastened on the nose and cheek with bandages. The bandages came off, and the tube was found dislodged during nutritional feeding. Inappropriate tube fixation was thought to be the cause since the patient was not in a state in which he could remove the tube himself.	6th
Events related to gastrostomy/enterostomy tubes				
[Initial insertion/procedure: 1 event]				
6	Inappropriate site	Low	Placement of the tip of gastrostomy tube in the stomach was checked after the procedure. Subsequent abdominal CT showed the tube piercing through the liver. The patient was scoliotic with severe spine deformation.	6th
[Tube replacement: 8 events]				
7	Inappropriate site	High	The patient with long-term gastrostomy had fever following tube replacement. Contrast radiography showed the tube misplaced in the abdominal cavity.	6th
8	Inappropriate site	High	The gastrostomy tube was replaced due to frequent leakages. The patient subsequently experienced fever, and it was suspected that the catheter tip was misplaced in the intestine. The patient had severe flatulence prior to the operation. The risk of intestinal damage should have been considered.	

No.	Place	Potential of residual disability	Summary	Periodic report
9	Inappropriate site	Low	In the initial gastrostomy tube replacement, the tube was misplaced in the abdominal cavity. Backflow of stomach fluid was not checked after the tube was placed, but misplacement was not suspected because the bubbling sound was present.	
10	Inappropriate site	Low	The patient experienced a fever after the gastrostomy tube was replaced with a gastrostomy button. A CT showed the absence of gastrostomy balloon in the stomach.	
11	Inappropriate site	Unknown	After the gastric catheter occlusion, the tube of the gastrostomy button was replaced with a button and its placement was checked by contrast radiography. The patient experienced a fever after nutritional feeding in the evening. The examination showed contrast leakage in the abdominal cavity. The patient was receiving care at a special nursing home where patient care was inadequate.	
12	Inappropriate site	Low	The patient started to complain about abdominal pain at the time of nutritional feeding after the initial gastrostomy tube replacement. An abdominal CT showed the tube was not in the stomach and the patient had peritonitis. Appropriate tube placement was not checked after replacing the tube.	6th
13	Inappropriate site	Low	The event occurred when the gastrostomy tube was replaced for the first time after the operation. Tube placement in the stomach was determined based on the same gastrostomal size as that at pre-replacement, and the patient was sent home. The patient lapsed into shock after receiving milk. It turned out the gastrostomy tube was misplaced in the closed cavity formed between the adhered liver and the intestine. The gastrostoma adhered to the surrounding tissues in two weeks. Tube placement was checked only based on the medical commonsense that normal saline injected into the abdominal cavity through a tube is dispersed and cannot be recovered.	
14	Others	Low	Peritonitis occurred two days after gastrostomy button replacement. The fistula was presumably formed during the replacement procedure.	
[Nutritional feeding: 1 event]				
15	Breakage of tube	Low	The formula leaked from the gastrostoma during tube feeding. The balloon at the tube tip was broken. There was lack of communication among the medical staff concerning gastrostomy tube fixation and the durability of the tube had not been reviewed. There was no additional tube management procedure.	6th
[Observation/management: 1 event]				
16	Misalignment/ withdrawal	Unspecified	The nurse's hand bumped the gastrostomy tube while helping the patient remove his clothes for a bedbath, and the tube was withdrawn. The suture for tube fixation had come off.	6th

(Note 1) "Summary" includes a summary of event details and event background/factors reported as descriptive information.

<Note>

Fig. III-28 Medical Near-Miss Incidents Related to Enemas: 17th and 18th Reports

		Drug mix-up	Wrong dose	Wrong method			Patient misidentification	Feeling sick/shock	Intestinal damage/hemorrhage	Others	Total
				Insertion site	Concentration	Frequency					
Process	Ordering	0	0	0	0	0	0	0	0	0	0
	Receiving order/briefing	0	0	0	0	1	0	0	0	0	1
	Preparation	0	2	0	0	0	0	0	0	0	2
	Implementation	0	0	3	0	1	0	0	5	0	9
	Post-procedural observation/management	0	0	0	0	0	0	4	0	0	4
Total		0	2	3	0	2	0	4	5	0	16

<Note>

Fig. III-29 Medical Near-Miss Incidents Related to Nasogastric/Gastrostomy/ Enterostomy Tube Insertion/Management: 17th and 18th Reports

		Inappropriate site	Connection		Tube				Others	Total
			Leakage	Error	Misalignment/ withdrawal	Occlusion	Abnormality in fixation	Breakage/defect		
Initial tube insertion/ procedure	**Nasogastric tube**	2	0	0	0	0	0	0	0	2
	Gastrostomy	1	0	0	0	0	0	0	0	1
	Unknown	0	0	0	0	0	0	1	0	1
Tube replacement	**Nasogastric tube**	3	0	0	0	0	0	0	0	3
	Gastrostomy	3	0	0	0	0	0	1	0	4
	Unknown	0	0	0	0	0	0	0	0	0
Nutritional feeding	**Nasogastric tube**	0	13	3	2	4	0	1	5	28
	Gastrostomy	0	16	6	3	10	0	0	1	36
	Unknown	0	0	0	0	3	0	1	0	4
Observation/ management	**Nasogastric tube**	0	0	0	6	4	0	0	1	11
	Gastrostomy	0	6	2	11	0	0	2	3	24
	Unknown	0	2	0	2	0	0	0	0	4
Others	**Nasogastric tube**	0	0	0	0	0	0	0	0	0
	Gastrostomy	0	0	1	0	0	0	1	0	2
	Unknown	0	0	0	0	0	0	0	0	0
Total		9	37	12	24	21	0	7	10	120

[4] Medical Adverse Events Related to Patient Misidentification, Wrong Site Surgery or Wrong Site Procedure

Medical adverse events related to patient misidentification, wrong site surgery or wrong site procedure reported between January 1 and September 30, 2006 were analyzed. The reported events are summarized in Fig. III-30.

(1) Details of medical adverse events related to patient misidentification, wrong site surgery or wrong site procedure

Occurrence of medical adverse events related to patient misidentification, wrong site surgeru or wrong site procedure was summarized with three types of mix-up, namely patient mix-up, site mix-up, and left/right mix-up, on the vertical axis and four situations, namely examination, operation, treatment/procedure, and others, on the horizontal axis in the matrix (Fig. III-31). The types of mix-up were summarized based on the factor codes provided in the report form (Fig. III-32).

A. Examination

The fifth report included one event involving a sample for pathological examination.

The sixth report included no events.

The seventh report included one event in which the CT image of another patient was developed as that for an emergency patient.

B. Operation

The fifth report included three events. Two events involved surgical site mix-ups: one involved intervertebral site mix-up in intervertebral decompression. Preventive measures for site mix-up or left/right confusion included the routine marking of surgical sites.

The sixth report included three events.

In one event, the blood to be transfused to the next patient was brought to the operation room by mistake, and resulted in a mismatched transfusion. One event involved intervertebral site mix-up, and the other event involved left/right confusion in surgical site marking.

The seventh report included four events, most of which involved left/right confusion.

Preventive measures proposed for the event in which the marking for the surgical site came off before the operation included, “1. the surgeon is to confirm the surgical site together with the patient and mark the surgical site on the skin with a felt-tip pen; 2. the marking is to be checked by the surgeon, the anesthesiologist, and the patient before anesthesia induction; 3. the surgeon is to verbally describe the surgery to be performed to the anesthesiologist and the circulating nurse who are to document the description in the anesthesia record; and 4. the image of the examination is to be checked before the operation.”

C. Treatment/procedure

The fifth report included one event that involved patient misidentification of the injection solution.

The sixth report included six events, four of which involved patient misidentification of drug therapy. In two events, the mix-ups occurred because drugs to be given to multiple patients were placed in the same tray. One event involved site mix-up due to confusion concerning multiple tube insertion sites and the corresponding entry in the record. One event involved left/right confusion of the treatment site.

The seventh report included six events. Three events involved patient misidentification of drug therapy. One event involved a sample mix-up, while two events involved site mix-up.

D. Others

The fifth report included one event that involved blood transfusion mix-up.

The sixth report included no events categorized as "Others".

The seventh report included one event in which a patient referral was prepared based on using the ID card of a different patient.

(2) Medical near-miss incidents related to patient misidentification, wrong site surgery or wrong site procedure

Medical near-miss incidents occurred in 2006 and reported in the 19th (January to March 2006) report were analyzed. As with the medical adverse event analysis, medical near-miss incidents were summarized with the three types of mix-up, namely, patient misidentification, wrong site, and left/right confusion, on the vertical axis and four situations, namely, examination, operation, treatment/procedure, and others, on the horizontal axis in the matrix (Fig. III-33).

<Note>

Medical adverse events related to patient misidentification, wrong site surgery or wrong site procedure reported between October 2004 and December 31, 2005 but not discussed in "Individual Theme Review by Expert Division" in the 2005 annual report are summarized together with their causes, situations and factors (Figs. III-34, III-35, and III-36). Medical near-miss incidents reported in the 16th (April to June 2005), 17th (July to September 2005), and 18th (October to December 2005) reports are also summarized (Fig. III-37).

Fig. III-30 Summary of Medical Adverse Events Related to Patient Misidentification, Wrong Site Surgery or Wrong Site Procedure: 5th to 7th Reports

No.	Place	Potential of residual disability	Summary	Periodic report
[Patient misidentification: 14 events]				
1	Examination	Low	Samples of a wrong patient were tested due to wrong labeling of the name. Samples were collected from 10 different sites. Correct sampling was ensured since a number of samples were to be collected. However, patient identification was inadequate.	5th
2	Treatment/ procedure	Low	An injection was given to the wrong patient without checking the name. Inadequate patient identification. Insufficient incident/accident awareness.	
3	Others	Unknown	Blood transfusion given to wrong patient. The patient identification could have been checked, but the procedure was performed based on a careless assumption.	
4	Operation	High	The blood to be transfused to the next patient was brought to the operation room by mistake, and it was accepted without double-checking, resulting in a transfusion being given to the wrong patient. There was no express order for a blood transfusion for the other patient, and the blood was thought to be for this patient.	6th
5	Treatment/ procedure	Low	The drug was accidentally placed on the tray containing drugs for a patient on chemotherapy and injected to the wrong patient. The drug was contraindicated for the patient in whom it was administered. A tray with the patient's name was prepared for each patient and brought to the bedside so the medication could be checked according to the in-house procedure. The drug syringe was placed on the tray of this patient by mistake when checking the drugs on another patient's tray.	
6	Treatment/ procedure	Low	The noon oral medication for another patient that had been placed on the tray was given to the wrong patient through a gastric tube. The mix-up occurred presumably because the cup containing the drug was not placed separately from the drugs for other patients.	
7	Treatment/ procedure	Low	Drug for patient A was injected to patient B.	
8	Treatment/ procedure	Low	Patient A and patient B with similar symptoms were simultaneously admitted to the emergency room. The same physician saw the patients and ordered treatment. The nurse saw the injection instruction and gave an injection to patient B, but the instruction was for patient A. The role sharing among nurses was not clear, and other tasks were performed simultaneously. The injection instruction was inadequately checked.	
9	Examination	Unknown	A CT was performed for an emergency outpatient, and an X-ray examination was conducted in another patient around the same time. The image was developed for the former patient in haste based on the latter patient's data. The name mismatch in the patient record and the film was identified by the radiologist who read the film.	7th
10	Treatment/ procedure	Low	Juvela N prescribed for the patient was documented in the record of the other patient with the latter's patient ID by the nurse based on a careless assumption. The drug was given to the wrong patient for two days.	
11	Treatment/ procedure	Unknown	Drugs prescribed for patient A and patient B with the same family name staying in the same room were all given intravenously to patient A on the round.	
12	Treatment/ procedure	Low	Type O sperm sample should have been used for artificial insemination. However, it was mixed up with sample of type A and the latter was inseminated.	

No.	Place	Potential of residual disability	Summary	Periodic report
13	Treatment/ procedure	Unknown	Oral medications for three patients were double-checked and placed on a tray. As a result of neglecting to check the names of the patients, Hyserenin fine granule (anti-epileptic) for patient B was given to patient A.	7th
14	Others	Unknown	After preparing and printing out a referral to the dental clinic based on the electronic medical chart, the ID of the wrong patient was put in it. The wrong patient was taken to the dental outpatient clinic, seen by a dentist, and returned to his room without treatment.	
[Wrong site: 6 events]				
15	Operation	Low	Site mix-up due to intervertebral misalignment despite prior marking. The surgical site was narrow and unclear to ensure minimum invasion, and this was the cause of the mix-up. The lumbar margin was difficult to distinguish for marking.	5th
16	Operation	Low	Misidentification of higher intervertebral site. Unknown	
17	Operation	Unknown	In a patient with spondylolytic spondylolisthesis, the wrong site (lower intervertebral space) was opened. Two intervertebral spaces were operated on instead of one. The surgeon had little experience at the hospital. Insufficient checking, insufficient information sharing, and insufficient patient identification.	6th
18	Treatment/ procedure	Low	One drainage tube was inserted in three different sites after the operation. Two of the tubes were later removed. However, an X-ray revealed that there was a tube remaining in the patient's body. Wrong site documentation in EvacuAce. There was no clear rule as to who was responsible for the documentation of EvacuAce/drainage tubes and where the documentation was to take place.	
19	Treatment/ procedure	Low	IV Serenace to be given through CV line was given through PTCD line by mistake. Both lines were covered with gauze.	7th
20	Treatment/ procedure	Unknown	Voltaren suppository for systemic pain was to be inserted in the patient standing in the toilet on her request after she defecated. The suppository was inserted in the vagina by mistake, and the patient started bleeding. The patient was on oral anticoagulant.	
[Left/right confusion: 7 events]				
21	Operation	Unknown	Left/right confusion in ordering intraocular lens caused by careless assumption and inadequate checking	5th
22	Operation	High	The right cranial area was marked for a ventriculoperitoneal shunt procedure, and the craniotomy was performed. The left/right confusion was identified based on the brain finding.	6th
23	Treatment/ procedure	Low	Left pleural effusion was identified by the outpatient chest X-P but paracentesis was performed on the right. Another physician who came to check on the procedure detected the left/right mix-up and stopped the procedure immediately. Echography and paracentesis were performed based on a totally wrong assumption.	

No.	Place	Potential of residual disability	Summary	Periodic report
24	Operation	Low	The surgical site for the fifth left intercostal tumor was marked on the previous day but the operation was postponed. The marking had worn off by the time the operation was performed one week later. The fifth intercostal space was checked under fluoroscopic guidance. The surgeon thought he saw a shadow and started the operation. The left/right confusion was identified by CT in the middle of the operation.	7th
25	Operation	Low	A prosthetic joint for left knee was placed in the right knee in an operation for rheumatoid arthritis operation. Postoperative X-ray found the left/right confusion, and the patient underwent the second operation.	
26	Operation	Low	A right trepanation was performed for left chronic subdural hematoma in an emergency patient. Left/right confusion was identified when the surgeon found no lesion on the right. There was no clear procedure for surgical site marking.	
27	Operation	Low	An intraocular lens adjusted to the power of the right eye was inserted in the left eye with a cataract. The patient had unexpected hyperopia after the operation. The surgeon and the nurse checked the type and size of the intraocular lens by using the intraocular lens description in the operation room, and the checking procedure was accurate. The physician made an error in documentation.	

Fig. III-31 Medical Adverse Events Related to Patient Misidentification, Wrong Site Surgery or Wrong Site Procedure: 5th to 7th Report

	Patient Misidentification	Wrong Site Surgery	Left/right confusion	Total
Examination	2	0	0	2
Operation	1	3	6	10
Treatment/procedure	9	3	1	13
Others	2	0	0	2
Total	14	6	7	27

Fig. III-32 Factors Causing Medical Adverse Events Related to Patient Misidentification, Wrong Site Surgery or Wrong Site Procedure: 5th to 7th Report

* Analysis based on factor codes provided in the report form (Note 1)

Factor (note 1)	Type of mix-up		
	Patient Misidentification	Wrong Site Surgery	Left/right confusion
Neglected checking	17	5	9
Neglected observation	2	1	2
Error of judgment	0	7	3
Insufficient knowledge	0	1	0
Insufficient technique/skill	0	1	0
Delayed reporting	2	0	0
In an unusual physical condition	0	1	0
In an unusual psychological condition	0	0	2
System problem	4	0	1
Lack of coordination	2	1	1
Inadequate documentation	0	0	0
Similar patient appearance/name	1	0	1
Busy working conditions	2	0	1
Environmental problem	0	0	0
Drug problem	0	0	0
Medical device problem	1	0	0
Problem in other article	0	0	1
Facility problem	0	0	0
Education/training problem	2	1	1
Insufficient explanation	0	0	0
Others	3	1	2
Total	36	19	24

(Note 1) Multiple factors may be selected.

Fig. III-33 Medical Near-Miss Incidents Related to Patient Misidentification, Wrong Site Surgery or Wrong Site Procedure: 19th Report

	Patient Misidentification	Wrong Site Surgery	Left/right confusion	Total
Examination	119	10	7	136
Operation	5	3	14	22
Treatment/procedure	161	2	4	167
Others	54	0	0	54
Total	339	15	25	379

<Note>

Fig. III-34 Background/Factor for Medical Adverse Events Related to Patient Misidentification, Wrong Site Surgery or Wrong Site Procedure

October 2004 to December 31, 2005

No.	Place	Potential of residual disability	Summary	Periodic report
[Patient misidentification: 6 events]				
1	Examination	High	Pathological examination was conducted for the sample of another patient due to a name labeling error. There was no clear procedure for pathological sampling, and the opportunity to check the sample was missed.	5th
2	Examination	High	Treatment with an inappropriate anticancer drug based on the blood test result of another patient. The background and the factor for the blood test of the other patient were unknown.	
3	Examination	Low	Blood sample was collected from the patient by using a sampling tube for the other patient without checking the patient name. The blood sampling was not conducted in accordance with the in-house procedure. There was a lack of understanding about team healthcare.	
4	Examination	Low	A blood sample was collected from the wrong patient. Problems were identified in sampling preparation and instruments used. Inadequate patient sample identification.	
5	Operation	Low	The intraocular lens of another patient was used. Unknown	
6	Others	High	Blood transfusion was performed in the wrong patient. Checking in accordance with the in-house procedure was not ensured. The clinic had been short of physicians, and on-duty physicians on that day were all busy with other tasks.	
[Wrong site surgery/procedure: 3 events]				
7	Operation	Low	Wrong site trepanation due to on-site surgical site mix-up in an emergency operation. The routine surgical site check was neglected since it was an emergency operation.	5th
8	Operation	Low	The intervertebral space to be operated on was checked and marked prior to the operation. However, the wrong intervertebral space was operated on. The surgical site was presumably mixed up because of the unique form of the lumbar vertebrae and the space between vertebral arches formed secondary to the lumbar spinal canal stenosis.	
9	Operation	Low	The intervertebral space to be operated on was checked and marked prior to the operation. However, the wrong intervertebral space was operated on. At one stage, the operation was erroneously believed to be a success. Due to intervertebral joint deformity and thickening related to the patient's advanced age, the wrong site was operated on despite prior marking. A postoperative X-ray confirmation was conducted by a physician working alone. The site mix-up was identified by the second X-ray performed at the ward and checked by multiple physicians.	
[Left/right confusion: 3 events]				
10	Operation	Low	Left/right eyes were confused despite the marking on the patient's palm. The operation was slightly delayed, and the staff were working in haste. The event was possibly caused by fatigue and impaired judgment (due to working on a the night shift on the previous day).	5th

No.	Place	Potential of residual disability	Summary	Periodic report
11	Operation	Low	Left/right mix-up in the craniotomy. The surgical site was not checked. A CT image taken at another hospital and brought by the patient was used in the simulation several days prior to the operation. The image showed a cranial view while images taken at the hospital showed a caudal view, resulting in the left/right mix-up.	5th
12	Treatment/ procedure	Low	The left and right of the X-ray image of an emergency patient were confused, and the chest drainage tube was inserted in the wrong side. The procedure was performed in haste and a physical examination was neglected. There were staff shortages related to the shift work.	

<Note>

Fig. III-35 Medical Adverse Events Related to Patient Misidentification, Wrong Site Surgery or Wrong Site Procedure

October 2004 to December 31, 2005

	Patient Misidentification	Wrong Site Surgery	Left/right confusion	Total
Examination	4	0	0	4
Operation	1	3	2	6
Treatment/procedure	0	0	1	1
Others	1	0	0	1
Total	6	3	3	12

<Note>

Fig. III-36 Factors Causing Medical Adverse Events Related to Patient Misidentification, Wrong Site Surgery or Wrong Site Procedure

* Analysis based on factor codes provided in the report form (Note 1) October 2004 to December 31, 2005

Factor (note 1)	Type of mix-up		
	Patient Misidentification	Wrong Site Surgery	Left/right confusion
Neglected checking	5	1	3
Neglected observation	0	0	1
Error of judgment	0	2	1
Insufficient knowledge	0	0	0
Insufficient technique/skill	0	0	0
Delayed reporting	2	0	0
In an unusual physical condition	0	0	0
In an unusual psychological condition	0	0	1
System problem	1	0	0
Lack of coordination	1	1	1
Inadequate documentation	0	0	0
Similar patient appearance/name	0	0	0
Busy working conditions	1	0	1
Environmental problem	0	0	0
Drug problem	0	0	0
Medical device problem	1	0	0
Problem in other article	0	0	0
Facility problem	0	0	0
Education/training problem	0	0	1
Insufficient explanation	0	0	0
Others	3	1	0
Total	14	5	9

(Note 1) Multiple factors may be selected.

<Note>

Fig. III-37 Medical Near-Miss Incidents Related to Patient Misidentification, Wrong Site Surgery or Wrong Site Procedure: 16th to 18th Reports

	Patient Misidentification	Wrong Site Surgery	Left/right confusion	Total
Examination	297	17	32	346
Operation	19	1	32	52
Treatment/procedure	162	4	13	179
Others	133	0	1	134
Total	611	22	78	711

[5] Medical Adverse Events Related to Pathology Tests

Medical adverse events related to pathology tests first became subject to reporting with the seventh periodic report. Reported medical adverse events for which a pathology test code was selected as the event summary code and those for which other codes were selected but considered related to pathology tests based on their details (Fig. III-38) were analyzed.

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

The flow of the pathology 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 that occurred between January and December 2006 (Figs. III-39 and III-40).

A. Ordering

No event was reported.

B. Form/label issuing

No event was reported.

C. Preparation

The seventh report included one event involving a sample mix-up.

The eighth report included no events.

D. Sample collection/testing

The seventh report included eight events. One event involved a sample mix-up, one event involved test item misidentification, one event involved the reuse of a used needle, four events involved blood sampling that resulted in nerve damage or numbness, and one event involved blood sampling that resulted in a bone fracture.

The eighth report included two events that involved blood sampling that resulted in pain or numbness.

E. Sample analysis/preparation

The seventh report included three events. One event involved a technical/procedural error, one event involved wrong measurement due to instrumental defect, and one event involved wrong measurement due to deteriorated reagent.

The eighth report included no events.

F. Evaluation/result reporting

The seventh report included three events. One event involved abnormality in the analytical instrument identified based on inconsistent test results, one event involved evaluation error in cross match test, and one event involved failure to submit test results due to a system malfunction.
The eighth report included one event in which the test result of another patient was reported by mistake.

(2) Medical near-miss incidents related to pathology tests

Incidents occurred in 2006 and reported in the 19th (January to March 2006), 20th (April to June 2006), 21st (July to September 2006), and 22nd (October to December 2006) medical near-miss incident reports were analyzed. Errors in the testing procedure and sample mix-ups identified by clinical technologists in laboratories, the descriptive information to be reported, and important incidents related to pathology tests were also analyzed. As with the analysis of medical adverse events, the flow of pathology test procedure was categorized into ordering, form/label issuing, preparation, sample collection/testing, sample analysis/preparation, and evaluation/result reporting (Fig. III-41).

<Note>

See Figs. III-42 to III-44 for a summary and details of incidents that occurred before 2006 and included in the 7th report.

Fig. III-38 Types of Medical Adverse Events Related to Pathology Tests

Type of test	Number of reported events
	January to September 2006
Sample test	10
Pathological examination	4
Physiological examination	1
Radiographic examination	21
Endoscopy	21
Ultrasound examination	1
MRI	1
Others	4
Total	63

Fig. III-39 Summary of Medical Adverse Events Related to Pathology Tests: 7th and 8th Report

No.	Fig. III-23	Process	Potential of residual disability	Summary	Periodic report
[Sample mix-up]					
1	Pathological examination	Preparation	Low	Thyroidectomy was performed based on the cytology. The examination of the removed thyroid showed no malignancy. During the re-examination, the histological preparation was found to have the other patient's name. The samples were mixed up in the microscopy.	7th
2	Pathological examination	Sample collection/ testing	Low	Mastectomy was performed based on the cytology. The pathological examination of the removed breast tissue showed fibroadenoma. The re-examination identified the sample mix-up in two patients who consecutively underwent outpatient needle biopsy.	
[Test item misidentification]					
3	Sample test	Sample collection/ testing	Unknown	The test item for blood sampling in a container for a special test was misidentified, and the sample was collected in a tube for biochemical examination.	7th
[Technological/procedural error]					
4	Pathological examination	Sample analysis/ preparation	Low	Samples were partially mixed up with others collected on the same day during the preparation procedure for pathological examination of adenocarcinoma. A right upper lobectomy, right lower partial lobectomy, and concurrent chest wall resection were performed in the following month. Postoperative microscopy found no malignancy. The operation was indicated for this patient even though there was no malignancy.	7th
[Device/instrument defect]					
5	Sample test	Sample analysis/ preparation	Unknown	One of the reagents was not divided due to a defect in the test instrument. Creatinine was shown to be 2.11 instead of the actual value of 0.72. Based on the test result, Radicut was disallowed in the patient. Slonnnon and Glyceol were started instead.	7th
6	Sample test	Sample analysis/ preparation	Unknown	The measurement was artificially high due to the deteriorated standard solution, which had not expired.	
7	Sample test	Evaluation/ result reporting	Low	Crosscheck of the measurement with the previous value required re-examination, which identified a possible error in the previous test. It turned out the analyzer was defective.	
[Evaluation error]					
8	Sample test	Evaluation/ result reporting	Low	Cross-matched blood was transfused in the patient who subsequently vomited. The inquiry made to the laboratory revealed a negative result had been reported to the patient with an incompatible blood type.	7th

No.	Fig. III-23	Process	Potential of residual disability	Summary	Periodic report
[Others]					
9	Sample test	Sample collection/ testing	Low	The patient had an irradiating pain during blood sampling but was left for monitoring. The symptoms were not alleviated, and the patient was diagnosed with left antebrachial cutaneous nerve damage due to blood sampling.	
10	Sample test	Sample collection/ testing	Low	Blood sampling was attempted in the right forearm, right upper arm, bilateral legs, and left forearm with no success. The abnormality was noticed when the right upper extremity was subsequently relaxed and the patient started to cry. The patient was diagnosed with humeral fracture. The patient had been bed-ridden with osteoporosis and multiple joint contracture/ deformity.	
11	Sample test	Sample collection/ testing	Low	A blood sample was collected by a laboratory technician. The patient experienced lancinating pain immediately after the butterfly needle was inserted into the median vein. The pain in the left hand persisted for one week, and the patient was treated at a neurological clinic.	7th
12	Sample test	Sample collection/ testing	Low	Blood sampling from the left brachial median artery was attempted three times with no success. The procedure was interrupted after the patient experienced numbness in the first to third fingers. An arterial blood sample was subsequently collected from the left groin. Numbness in the left upper arm, palm, and fingertips persisted even after the patient went home.	
13	Sample test	Sample collection/ testing	Low	The peripheral nerve was damaged due to arterial blood sampling. The patient later presented with numbness at the outpatient clinic.	
14	Sample test	Evaluation/ result reporting	Low	The test had been conducted but the result did not arrive due to a system malfunction.	
15	Physiological examination	Sample collection/ testing	Low	A box labeled “sterilized EMG needles” was used as a used needle bottle. The sample was collected by using one of the used needles in the box.	
16	Sample test	Sample collection/ testing	High	The patient did not complain about numbness or pain when the blood sample was collected from the right inner elbow. The patient went home but later presented with pain at the needle insertion site and numbness in the right hand at the emergency room. The patient also experienced coldness in the right hand and muscle weakness, and complex regional pain syndrome was suspected.	8th
17	Sample test	Sample collection/ testing	High	Hematoma was formed after blood sampling. The patient started to experience pain in the right arm and lost strength.	

No.	Fig. III-23	Process	Potential of residual disability	Summary	Periodic report
18	Sample test	Evaluation/ result reporting	Unknown	Prostate cancer was suspected based on the elevated prostate specific antigen (PSA). The patient underwent prostate biopsy and was told no malignancy was found. Two years later the patient had elevated PSA once again and was admitted to the hospital for detailed examination. The current attending physician checked the file containing electronic medical chart, patient referral and non-electronic test data and found two forms of past pathological examination reports. The correct pathological finding based on the examination conducted two years earlier was "malignant." However, there was the past examination result was recorded as "no malignancy" in the electronic medical chart. It turned out the correct finding and the explanation given to the patient were inconsistent.	8th

Fig. III-40 Medical Adverse Events Related to Pathology Tests: 7th and 8th Reports

	Mix-up					Technical/ procedural error	Device/ instrument		Result		Others	Total
	Sample	Patient	Test item	Site	Others		Operation error	Defect	Entry error	Evaluation error		
Ordering	0	0	0	0	0	0	0	0	0	0	0	0
Form/label issuing	0	0	0	0	0	0	0	0	0	0	0	0
Preparation	1	0	0	0	0	0	0	0	0	0	0	1
Sample collection/ testing	1	0	1	0	0	0	0	0	0	0	8	10
Sample analysis/ preparation	0	0	0	0	0	1	0	2	0	0	0	3
Evaluation/ result reporting	0	0	0	0	0	0	0	1	0	1	2	4
Total	2	0	1	0	0	1	0	3	0	1	10	18

Fig. III-41 Medical Near-Miss Incidents Related to Pathology Tests: 19th to 22nd Reports

	Mix-up					Technical/ procedural error	Device/ instrument		Result		Others	Total
	Sample	Patient	Test item	Site	Others		Operation error	Defect	Entry error	Evaluation error		
Ordering	0	5	2	2	1	2	0	0	0	0	33	45
Form/label issuing	10	15	41	0	30	2	0	1	1	0	32	132
Preparation	38	15	22	1	33	42	0	2	0	0	114	267
Sample collection/ testing	22	61	11	5	33	29	0	1	0	2	42	206
Sample analysis/ preparation	21	4	5	3	1	160	7	25	6	31	46	309
Evaluation/ result reporting	0	1	0	0	3	1	0	2	89	34	40	10
Total	91	101	81	11	101	236	7	31	96	67	307	1,129

<Note>

Fig. III-42 Types of Medical Adverse Events Related to Pathology Tests

Type of test	Number of reported events
	October, 2004 to December 2005
Sample test	6
Pathological examination	2
Physiological examination	0
Radiographic examination	18
Endoscopy	18
Ultrasound examination	1
MRI	4
Others	2
Total	51

<Note>

Fig. III-43 Summary of Medical Adverse Events Related to Pathology Tests

October 2004 to December 31, 2005

No.	Process	Potential of residual disability	Summary
[Sample mix-up]			
1	Form/ label issuing	High	A malignant tumor in the lung was strongly suspected based on the CT and cytological findings, and the patient underwent an operation. Postoperative examination of the removed lobe showed no malignancy. The re-examination revealed label misplacement on the samples of three patients. An operation would have been strongly recommended in this patient even if the cytology had shown no malignancy.
[Patient mix-up]			
2	Sample collection/testing	Low	A blood sample was collected in a tube for another patient due to a failure to check the name. The error was pointed out by the laboratory.
3	Sample collection/testing	High	The blood samples of patients were mixed up. The actual white blood cell count was 1600 but was reported as 6000, and the patient received IV taxol.
[Device/instrument defect]			
4	Sample analysis/ preparation	Low	TG measurement error occurred due to inadequate reagent placement in the analyzer.
[Result entry error]			
5	Evaluation/ result reporting	Low	The patient pointed out the wrong blood type on the documentation when he was admitted. The data from the previous hospitalization showed the wrong blood type, which belonged to another patient.
[Others]			
6	Sample collection/ testing	Unknown	The blood glucose measurement unit was set by mmol/L on the measuring device. The display showed 6.3 mmol/L (114 mg/dL). However, it was misrepresented as 63 mg/dL and hypoglycemic treatment was given.
7	Form/ label issuing	Unknown	Submission of a pathological examination request was neglected, and the sample was not submitted. The incident was noticed 15 days later when the physician-in-charge contacted the laboratory.
8	Form/ label issuing	No description	An additional sample (tissue) was not submitted for examination due to lack of briefing. The examination was not conducted.

<Note>

Fig. III-44 Medical Adverse Events Related to Pathology Tests

October 2004 to December 31, 2005

	Mix-up					Technical/ procedural error	Device/ instrument		Result		Others	Total
	Sample	Patient	Test item	Site	Others		Operation error	Defect	Entry error	Evaluation error		
Ordering	0	0	0	0	0	0	0	0	0	0	0	0
Form/label issuing	1	0	0	0	0	0	0	0	0	0	2	3
Preparation	0	0	0	0	0	0	0	0	0	0	0	0
Sample collection/ testing	0	2	0	0	0	0	0	0	0	0	1	3
Sample analysis/ preparation	0	0	0	0	0	0	0	1	0	0	0	1
Evaluation/ result reporting	0	0	0	0	0	0	0	0	1	0	0	1
Total	1	2	0	0	0	0	0	1	1	0	3	8

[6] Database of Medical Near-Miss Incidents

The Committee for Preparing the Database of Medical Near-Miss Incidents has been working to select events reported by medical institutions to which periodic topics for event collection periods are applied and to select other events to be included in the database as a reference for developing medical safety measures. The database of medical near-miss incidents, including incidents selected from those reported in the 19th, 20th, 21st, and 22nd reports in 2006, is now available together with information categorized according to the general codes (Note 1) (Fig. III-45).

Fig. III-45 Database of Medical Near-Miss Incidents

		Date	Incident No. and number of incidents included
19th	7th report	January to March	25 incidents selected from Incident No. 19-6 to No. 19-1247
20th	8th report	April to June	23 incidents selected from Incident No. 20-4 to No. 20-2125
21st	9th report	July to September	9 incidents selected from Incident No. 21-131 to No. 21-1278
22nd		October to December	15 incidents selected from Incident No. 22-134 to No. 22-1859

(Note 1) 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 2006, 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	Number of events	Periodic report
Nursing care	Patients were scolded during assisted bathing. The patients required assistance in both cases. In one event, the water temperature was not checked before bathing a recumbent patient in the elevating bath. In the other event, hot water came out from the faucet after switching from the shower.	2 events	5th
Drug	1) The patient on anticoagulant (warfarin) therapy had a brain infarction after temporarily discontinuing the drug in preparation for an examination at another clinical department (one event). 2) In a patient on anticoagulant (warfarin) therapy, warfarin was switched to heparin before the operation. The patient had a brain infarction when heparin was switched back to warfarin (one event). 3) A patient on anticoagulant (warfarin) therapy bled from the surgical wound on Day 9 and required hemostatic treatment (one event). Warfarin doses were adjusted based on thrombotest in all the cases. Two of the events occurred at the clinical department not responsible for regular anticoagulant dose adjustment. Lack of communication between the clinical departments involved in patient care was identified as a factor causing the events.	3 events	6th
Medical Treatment/ Medical procedure	The oral medication to be given to Patient B was concurrently given with the regular drug to patient A without checking patient names. Oral medications for three patients were prepared on the same tray. Two similar events had been reported in this project in the past. 1) The oral medication to be given through the gastric tube was put into the drug cup and placed on the tray containing the other patient's medications. The oral medication of the other patient was given to this patient by mistake. 2) Three injection syringes with no patient names were placed on a tray while preparing for normal saline lock (Note 1). The syringe used for patient A with some remaining drug inside was put back on the tray and subsequently used again for patient B. The drugs were mixed up while patient/drug crosscheck was neglected or impossible to conduct. There was either a lack or violation of certain rules.	1 event	7th

(Note 1) IV catheter (infusion catheter) is filled with normal saline for temporary disuse.

Summary	Details	Number of events	Periodic report
Drug	"Amount of preparation" was confused with "amount of ingredient" in four events, resulting in an overdose (See No. 4, No. 5, No. 6, and No. 7 in Fig. III-1, page 60, the 8th report for the event summaries). In all these cases in which the patients sought treatment at multiple medical institutions, the current physicians misunderstood the descriptions in the prescription or the referral issued by previous physicians and ordered treatment based on the misunderstanding.	4 events	8th
Left/right confusion	Two events involving left/right confusion of surgical site were reported. 1) The left eye was to be operated on. However, the physician wrote "right eye" on the operation room reservation request by mistake. He/She also entered "right eye" in the computer to order preoperative eye drop instillation at the ward. The left/right confusion was detected at the ward, and the eye drops were given to the left eye correctly. The entry in the operation room reservation request was not corrected, however, and the operation was conducted on the right eye. 2) The left knee was to be operated on. The surgical site was not marked on the previous day. After the patient was taken to the operation room, the nurse, the anesthesiologist, and the surgeon all confirmed operation on the left knee but the surgical site was not marked. The anesthesiologist even checked with the patient if the left knee was to be operated on. However, no one noticed the right knee was disinfected and covered with surgical drape, and the operation was performed. The surgical site was not marked in either case.	2 events	8th
Infusion pump	Two events involving injection site swelling due to extravascular leakage during continuous IV infusion using an infusion pump (See No. 2 and No. 3 in Fig. III-10, page 85, the 8th report for the event summaries). Both cases involved pediatric patients. In one event, the injection site was checked 4 hours and 20 minutes before the swelling was found. In the other event, the fingertip and the injection site were checked 4 times in 10 hours.	2 events	8th

[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." The fifth report included a similar event involving glycerin enema in a standing patient. The sixth report included a similar event involving insulin.

The seventh report included similar events involving glycerin enema in a standing patient and use of anti-rheumatic (methotrexate).

The eighth report included similar events involving glycerin enema in a standing patient and burns caused by nursing care.

Fig. III-3-2 Medical Adverse Event Information to Be Shared

Summary	Details	Periodic report
Medical procedure	Preoperative glycerin enema was performed in the patient standing in the toilet on his request. Rectal perforation occurred, presumably due to the enema.	5th
Drug	1) The unit for insulin was mistaken as mL and given intravenously. The fifth report included an event in which the unit of insulin was mistaken as mL and an event in which the insulin unit was mistaken by one digit and 10 times the intended dose was given. All three events involved a physician or a nurse with experience of less than a year. In two of the events, it was the first time for the caregiver to use insulin in the mode of administration.	6th
Medical procedure	Glycerin enema was performed in a patient who experienced difficulty in defecating while he was standing and bending forward in the toilet on his request. The patient subsequently experienced persistent bleeding and required hemostatic treatment.	7th
Drug	The patient had been on twice-weekly oral anti-rheumatic (methotrexate). The drug had been kept by the patient after he was admitted (the patient took the drug three times). After the examination, it became difficult for the patient to keep the drug. The drug was kept by the hospital but given daily thereafter by mistake, resulting in an overdose.	7th
Medical procedure	The patient requested that an enema be performed in the toilet. Glycerin enema 120 mL was given to the patient standing and bending forward in the toilet. The patient started bleeding when producing a hard stool. Endoscopic hemostasis was performed for the continuing hemorrhage after the physician's examination. The individual who performed the enema was aware of potential enema-related accidents included in the in-house safety alert. However, she did not think she might cause such an accident.	8th

Summary	Details	Periodic report
Nursing care	1) Hot water was prepared for a footbath for a patient in a coma by a nurse wearing rubber gloves. The nurse checked the water temperature by dipping her fingertips in the water. She thought it was not too hot, and started giving the footbath. The patient's skin became tight. The patient experienced redness and blisters in the lateral malleolus to the fifth toe and blisters in the medial malleolus of the left foot. 2) One sheet of bedbath towel kept in the warmer was taken out and placed on the patient's left forearm for two minutes before blood sampling because the blood vessel was not defined. The patient subsequently experienced persistent redness in the arm, two round blisters about 2.5 cm in diameter on the wrist, and small blisters on the upper forearm. 3) The water was initially too hot for a shower, and the temperature was immediately adjusted by turning on the cold water. After the shower, the patient had a horseshoe-shaped abrasion on the right hip, the left heel and the entire back, and redness and blisters in the third, fourth and fifth fingers of the right hand. The dermatologist diagnosed second-degree burns. The patients involved in the events were either unable to communicate at all or unable to communicate sufficiently.	8th