

TECHNION - Israel Institute of Technology
The William Davidson Faculty of Industrial Engineering and Management

Center for Service Enterprise Engineering (SEE)

<https://web.iem.technion.ac.il/en/service-enterprise-engineering-see-lab/general-information.html>



HomeHospital (Rambam)

Database Tables and Fields

Professor Avishai Mandelbaum

Dr. Valery Trofimov, Igor Gavako, Ella Nadjharov

January 9, 2013

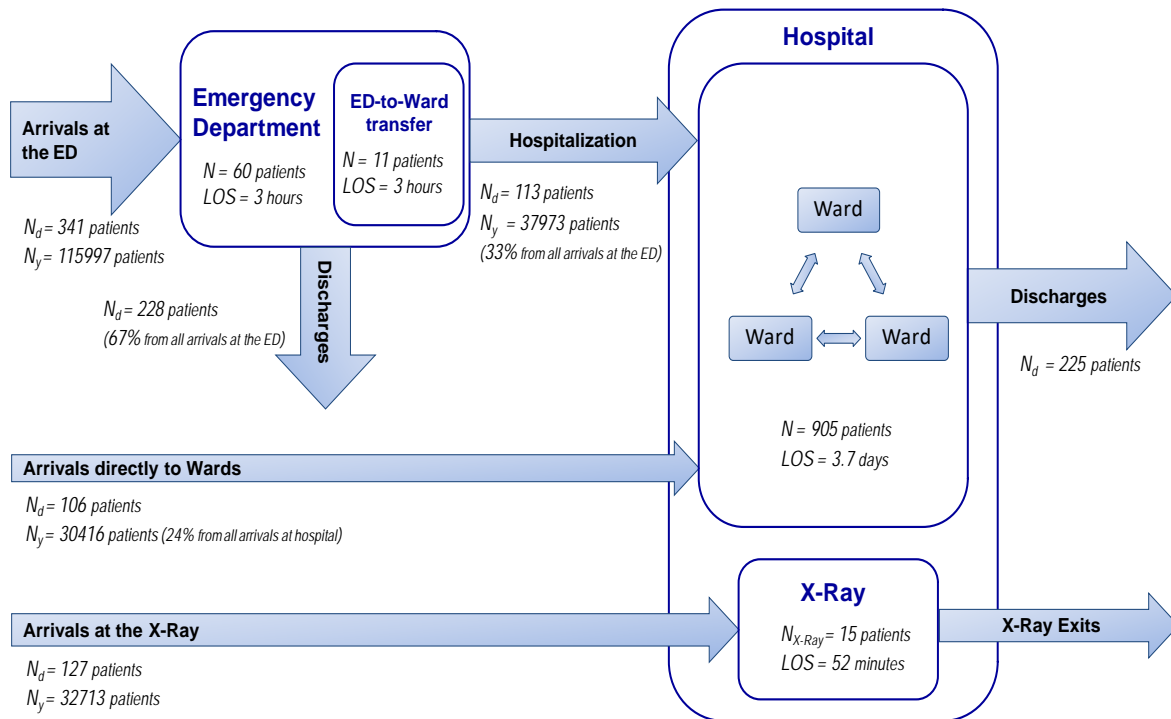
For Circulation

Contents

Hospital description	2
Data description	3
The visit table.....	4
The visit details table	5
The physical details table.....	5
The ward first procedure table	6
The X-Ray visits table	7
Appendix 1 Missing Values.....	8
Appendix 2 Dictionaries	9
gender.....	9
entry_exit	9
entry_group	10
hospital_unit.....	10
outcome_id.....	14
Appendix 3 Aggregated Dictionaries.....	16
outcome.....	16
department.....	16
ward_department.....	18
intensive_care_unit	20
pediatric_unit	20
Appendix 4 Flags	22
seg_type	22
Appendix 5 SEESat Variables	23

Hospital description

The data we rely on was collected at a large Israeli hospital. This hospital consists of about 1000 beds and 45 medical units. The data includes detailed information on patient flow throughout the hospital, over a period of several years (January 2004–October 2007). In particular, the data allows one to follow the paths of individual patients throughout their stay at the hospital, including admission, discharge, and transfers between hospital units. The data does not acknowledge resolutions within the ED or within wards.



N_d - average number of patients that arrived per weekday, for period January 1, 2004 - October, 31, 2007

N_y - average number of patients that arrived per year, for years 2004, 2005, 2006, all days (for year 2007 data not fully completed; missing two months - November and December).

N - average number of patients in ED/ED-to-Ward transfer/Wards, recorded at 12:00 per weekday, for period January 1, 2004 - October, 31, 2007

N_{X-Ray} - average number of patients in X-Ray at 10:00 per weekday, for period January 1, 2004 - October, 31, 2007

LOS - length of stay in ED/ED-to-Ward transfer/Wards/X-Ray per weekday, for period January 1, 2004 - October, 31, 2007

Data description

The **visit** table includes general information on each patient that enters the hospital on a particular day – each record in this table relates to a specific visit.

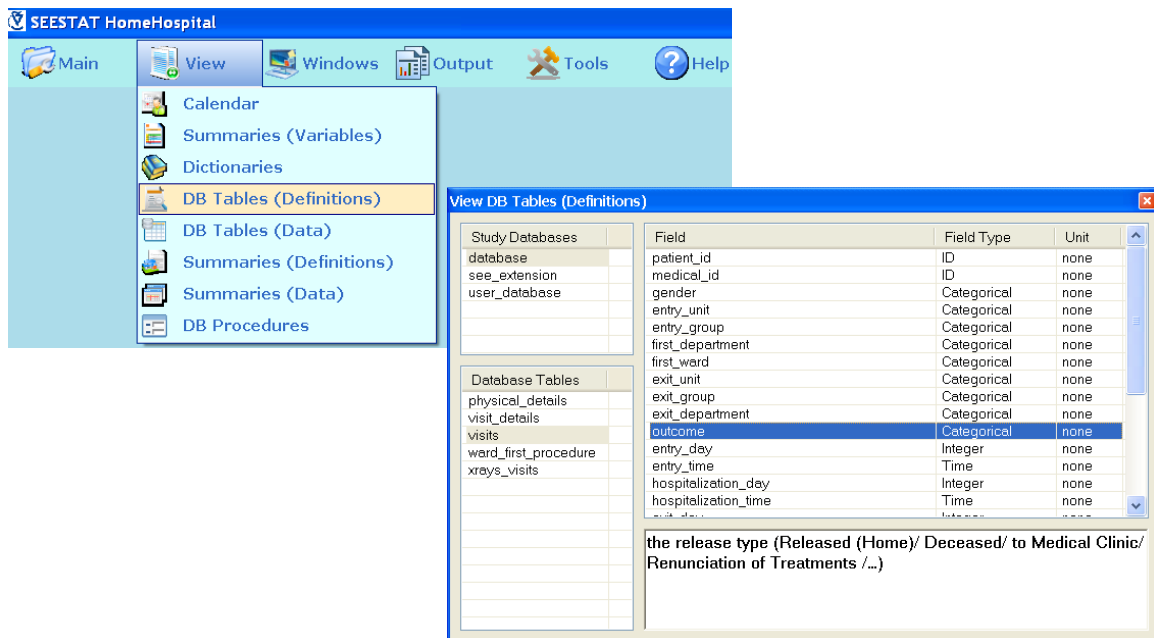
The **visit details** table includes information on each patient — each record in this table is associated with the hospital unit that the patient arrived at or was admitted to.

The **physical details** table includes information on each patient — each record in this table is associated with the hospital unit that the patient arrived at or was admitted to and information about the actual ward where the patient was located.

The **ward first procedure** table includes information on each patient — each record in this table is associated with the actual ward to which the patient was admitted and time of first procedure (filtering of values in this table: time of first procedure less than exit time, waiting time before first procedure greater than or equal to zero and less or equal to 20 hours).

The **x-ray visits** table includes information on each patient — each record in this table relates to a specific visit directly (external arrivals) to X-Ray.

Fields description available in SEESTat: click **View-> DB Tables (Definitions)** and select database table and field:



The visit table

1. patient_id – the ID number of the patient
2. medical_id – the medical case number
3. gender – the gender of the patient (see Appendix 1: [gender](#)).
4. entry_unit – the hospital unit that the patient arrives at or is admitted to (see Appendix 1: [entry_exit](#)).
5. entry_group – indicates the entry group: Emergency Department or directly to Hospital Department (see Appendix 1: [entry_group](#)).
6. first_department – the medical-ward code of the first department to which the patient is admitted (see Appendix 1: [hospital unit](#)).
7. first_ward – the medical-ward code of the first ward to which the patient is admitted (see Appendix 1: [hospital unit](#)).
8. exit_unit – the hospital unit from which the patient is released (see Appendix 1: [entry_exit](#))
9. exit_group – indicates the exit group: Emergency Department or Hospital Department (see Appendix 1: [entry_group](#))
10. exit_department – the medical-ward code of the hospital department from which the patient is released (see Appendix 1: [hospital unit](#))
11. outcome – the release type (Released (Home)/ Deceased/ to Medical Clinic/ Renunciation of Treatments /...) (see Appendix 1: [outcome_id](#))
12. entry_day* – the arrival date
13. entry_time** – time in seconds at which the patient arrives at the hospital
14. hospitalization_day* – the hospitalization date
15. hospitalization_time** – time in seconds at which the patient was hospitalized
16. exit_day* – the release date
17. exit_time** – time in seconds at which the patient was released
18. ED_dur – the patient's length of stay in the Emergency department, in seconds.
19. ED_dur_hours – the patient's length of stay in the Emergency department, in hours.
20. hospitalization_dur – the patient's total length of stay in hospital departments, in seconds.
21. hospitalization_dur_hours – the patient's total length of stay in hospital departments, in hours.

* Date is the number of days since the origin which is time 00:00:00 on 01/01/1970

**Time in seconds is the time since the origin which is time 00:00:00 on 01/01/1970

22. hospitalization_dur_days – the patient's total length of stay in hospital departments, in days.
23. age[#] – the patient's age on the arrival date, in years
24. num_dep – the number of departments in which the patient was hospitalized during his/her stay in the hospital

The visit details table

1. patient_id – the ID number of the patient
2. medical_id – the medical case number
3. gender – the gender of the patient (see Appendix 1: [gender](#)).
4. entry_group – indicates the entry group: Emergency Department or directly to Hospital Department (see Appendix 1: [entry_group](#)).
5. department – the medical-ward code of the department to which the patient was admitted (see Appendix 1: [hospital_unit](#)).
6. outcome – the termination type of segment (Released (Home)/ Hospitalization/ to Medical Clinic/ Removing/ Left on His Own/ Deceased/ Renunciation of Treatments/...) (see Appendix 1: [outcome_id](#)).
7. entry_day^{*} – the date when the patient is admitted to a hospital department
8. entry_time^{**} – time in seconds at which the patient is admitted to a hospital department
9. exit_day^{*} – the date when the patient exits from a hospital department
10. exit_time^{**} – time in seconds at which the patient exits from a hospital department
11. seg_type – state of the patient visit in hospital (Begin/End/Intermediate)
(see Appendix 3: [seg_type](#))
12. duration – the patient's length of stay in the department, in seconds.
13. duration_hours – the patient's length of stay in the department, in hours.
14. duration_days – the patient's length of stay in the department, in days.
15. age – the patient's age on the arrival date, in years

The physical details table

1. patient_id – the ID number of the patient
2. medical_id – the medical case number

[#] age of patient , when the patient's birth date is missing, then the value of the field age is stated to be equal to 999

3. gender – the gender of the patient (see Appendix 1: [gender](#)).
4. entry_group – indicates the entry group: Emergency Department or directly to Hospital Department (see Appendix 1: [entry_group](#)).
5. department – the medical-ward code of the department to which the patient was admitted (see Appendix 1: [hospital unit](#)).
6. outcome – the termination type of segment (Released (Home)/ Hospitalization/ to Medical Clinic/ Transferring/ Left on His Own/ Deceased/ Renunciation of Treatments/...) (see Appendix 1: [outcome_id](#)).
7. entry_day* – the date when the patient is admitted to a hospital department
8. entry_time** – time in seconds at which the patient is admitted to a hospital department
9. exit_day* – the date when the patient exits from a hospital department
10. exit_time** – time in seconds at which the patient exits from a hospital department
11. seg_type – state of the patient visit in hospital (Begin/End/Intermediate)
(see Appendix 3: [seg_type](#))
12. duration – the patient's length of stay in the department, in seconds.
13. duration_hours – the patient's length of stay in the department, in hours.
14. duration_days – the patient's length of stay in the department, in days.
15. age – the patient's age on the arrival date, in years
16. physical_department – the code of actual hospital ward where the patient was located
(see Appendix 1: [hospital unit](#))

The ward first procedure table

1. patient_id – the ID number of the patient
2. medical_id – the medical case number
3. gender – the gender of the patient (see Appendix 1: [gender](#)).
4. department – the medical-ward code of the department to which the patient was admitted (see Appendix 1: [hospital unit](#)).
5. entry_day* – the date when the patient is admitted to a hospital department
6. entry_time** – time in seconds at which the patient is admitted to a hospital department
7. exit_day* – the date when the patient exits from a hospital department
8. exit_time** – time in seconds at which the patient exits from a hospital department
9. duration – the patient's length of stay in the department, in seconds.
10. duration_hours – the patient's length of stay in the department, in hours.
11. duration_days – the patient's length of stay in the department, in days.
12. first_procedure_time – time of first procedure

13. first_procedure_difference – duration between entry_time and first_procedure_time, in seconds.
14. first_procedure_difference_min – duration between entry_time and first_procedure_time, in minutes.
15. first_procedure_difference_hours – duration between entry_time and first_procedure_time, in hours.
16. corr_duration – duration between first_procedure_time and exit_time, in seconds.
17. corr_duration_hours – duration between first_procedure_time and exit_time, in hours.
18. corr_duration_days – duration between first_procedure_time and exit_time, in days.
19. physical_department – the code of actual hospital ward where the patient was located (see Appendix 1: [hospital unit](#))
20. prev_entry_group – logical flag, indicates the previous entry group: Emergency Department or Hospital Department (see Appendix 1: [entry group](#)), for first patient's record prev_entry_group equal to zero.

The X-Ray visits table

1. patient_id – the ID number of the patient
2. medical_id – the medical case number
3. gender – the gender of the patient (see Appendix 1: [gender](#)).
4. department – the department code (Computed Tomography Unit/ Ultrasound Unit/ Mammography Unit/...) (see Appendix 1: [hospital unit](#)).
5. outcome – the release type (to Medical Clinic /...) (see Appendix 1: [outcome id](#))
6. entry_day* – the arrival date
7. entry_time** – time in seconds at which the patient arrives at the X-Ray unit
8. exit_day* – the release date
9. exit_time** – time in seconds at which the patient was released
10. duration – the patient's length of stay in X-Ray, in seconds.
11. age – the patient's age on the arrival date, in years

Appendix 1 Missing Values

January 1, 2004 – October 31, 2007 (each record relates to a specific visit)				
	total number of records	missing gender records	missing birth date records	missing exit date records
Hospital	565897	26 (0.005%)	1351 (0.24%)	44 (0.01%)
Directly to X-Ray	125005	13 (0.01%)	638 (0.51%)	-

- Missing value of **gender** was filled by “Unknown” value.
- Missing value of **birth date**: the value of the field age equal to 999.

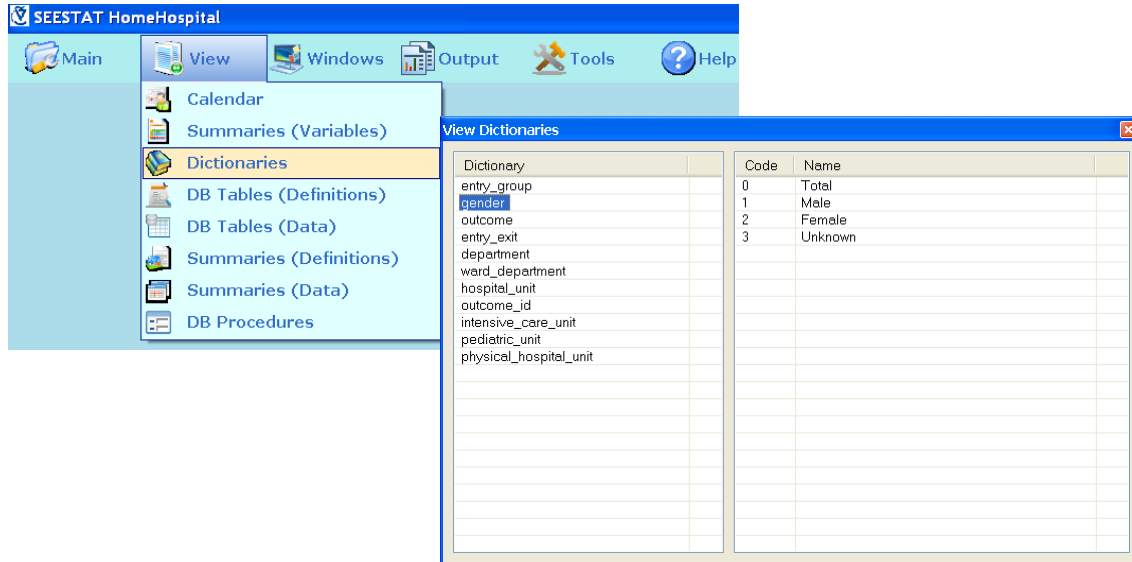
Example: missing birth date (visit_detail table)													
patient_id	medical_id	entry_group	department	entry_date	exit_date	outcome	entry_day	entry_time	exit_day	exit_time	seg_type	duration_hours	age
10069040	20117363	1	1	10/02/2005 11:21	10/02/2005 14:22	2	12824	1108034483	12824	1108045333	1	3	999
10069040	20117363	2	43	10/02/2005 14:22	13/02/2005 8:00	3	12824	1108045333	12827	1108281600	4	65	999
10069040	20117363	2	46	13/02/2005 8:00	14/02/2005 8:00	3	12827	1108281600	12828	1108368000	4	24	999
10069040	20117363	2	43	14/02/2005 8:00	14/02/2005 11:20	7	12828	1108368000	12828	1108380037	3	3	999

- Missing value of **exit date** (patient hospitalized indefinitely): value of field exit_day equals to 2932896 (31/12/9999); as a result, exit time is equal to zero and duration is calculated to be a negative quantity, and should be ignored.

Example: missing exit_date (visit_detail table)													
patient_id	medical_id	entry_group	department	entry_date	exit_date	outcome	entry_day	entry_time	exit_day	exit_time	seg_type	duration_hours	
10149261	20535648	2	46	25/09/2007 11:38	02/10/2007 12:17	6	13781	1190720293	13788	1191327427	1	168	
10149261	20535648	2	69	02/10/2007 12:17	10/10/2007 11:23	3	13788	1191327427	13796	1192015415	4	191	
10149261	20535648	2	70	10/10/2007 11:23	21/10/2007 14:06	3	13796	1192015415	13807	1192975577	4	266	
10149261	20535648	2	46	21/10/2007 14:06	02/11/2007 12:35	3	13807	1192975577	13819	1194006949	4	286	
10149261	20535648	2	47	02/11/2007 12:35	04/11/2007 12:32	3	13819	1194006949	13821	1194179575	4	47	
10149261	20535648	2	46	04/11/2007 12:32	28/11/2007 10:05	3	13821	1194179575	13845	1196244301	4	573	
10149261	20535648	2	47	28/11/2007 10:05	02/12/2007 10:01	3	13845	1196244301	13849	1196589688	4	95	
10149261	20535648	2	46	02/12/2007 10:01	31/12/9999	3	13849	1196589688	2932896	0	3	-332386	
10173918	20318333	1	1	06/09/2007 9:35	06/09/2007 10:44	2	13762	1189071312	13762	1189075459	1	1	
10173918	20318333	2	68	06/09/2007 10:44	31/12/9999	5	13762	1189075459	2932896	0	3	-330298	
10180217	20328622	1	1	23/09/2007 15:45	23/09/2007 17:55	2	13779	1190562331	13779	1190570142	1	2	
10180217	20328622	2	21	23/09/2007 17:55	31/12/9999	3	13779	1190570142	2932896	0	3	-330713	

Appendix 2 Dictionaries

Available in SEESTat: click **View**-> **Dictionaries** and select dictionary



2.1 gender

gender	
code	name
0	Total
1	Male
2	Female
3	Unknown

2.2 entry_exit

entry_exit	
code	name
0	Total
1	Emergency Internal Medicine Unit
2	Emergency Surgery Unit
3	Emergency Traumatology Unit
4	Emergency Orthopedic Unit
5	Emergency Otorhinolaryngology Unit
6	Emergency Ophthalmology Unit
7	Emergency Psychiatry Unit
8	Emergency Gynecology Unit
9	Pediatric Emergency Unit
10	Pediatric Surgery Emergency Unit
11	Emergency Maternity Unit

12	Hospitalization
13	Internal Medicine Division
14	Division of Surgery
15	Division of Obstetrics and Gynecology
16	Department of Anesthesiology
17	Pediatrics Department
18	Department of Pediatric Surgery
19	Division of Laboratory Services
20	Oncology Institute
22	Delay
23	Other DRG
24	Clinic
25	Trauma Unit (road accidents)
26	Trauma Unit (industrial accident)
30	Unknown

2.3 entry_group

entry group	
code	name
0	Total
1	Emergency Room
2	Hospital

2.4 hospital unit

hospital unit	
code	name
1	Emergency Internal Medicine Unit
2	Emergency Surgery Unit
3	Emergency Traumatology Unit
4	Emergency Orthopedic Unit
5	Emergency Otorhinolaryngology Unit
6	Emergency Ophthalmology Unit
7	Emergency Psychiatry Unit
8	Emergency Gynecology Unit
9	Pediatric Emergency Unit
10	Pediatric Emergency Surgery Unit
11	Emergency Maternity Unit
12	Chemotherapy Outpatient Center
13	Institute of Oncology
14	Chemotherapy Inpatient Oncology Unit
15	Radiotherapy Inpatient Oncology Unit
16	Institute for Immunology, Allergy and AIDS
17	Institute of Gastroenterology

18	Intensive Care Unit Gastroenterology
19	Institute of Hematology and Bone Marrow Transplant
20	Pediatric Hematology and Oncology Department2
21	Institute of Hematology and Bone Marrow Transplant1
22	Thrombosis and Hemostasis Unit
23	Department of Intensive and Critical Medicine
24	Department of Neurology
25	Cognitive Neurology Unit
26	EEG Institute
27	Department of Nephrology
28	Hypertension Clinic
29	Hemodialysis Unit
30	Kidney Transplant Unit
31	Institute of Endocrinology, Diabetes and Metabolism
32	Bone and Calcium Metabolism Unit
33	Department of Dermatology
34	Phototherapy Unit
35	Internal Medicine A
36	Intensive Care Unit A
37	Internal Medicine B
38	Intensive Care Unit B
39	Internal Medicine C
40	Intensive Care Unit C
41	Internal Medicine D
42	Intensive Care Unit D
43	Internal Medicine E
44	Intensive Care Unit
45	Internal Medicine Military
46	Department of Cardiology
47	Intensive Cardiac Care Unit
48	Arrhythmia and Electrophysiology (Pacemakers)
49	Congestive Heart Failure Clinic
50	Interventional (Angioplasty) Cardiology
51	Department of Rheumatology
52	Institute of Pulmonology
53	Pain Relief Unit
54	Department of Urology
55	Neuro-Urology Unit
56	Department of Otorhinolaryngology
57	Orthopedics A - Department
58	Orthopedics A - Department1
59	Orthopedic Oncology
60	Orthopedics B - Department
61	Orthopedics B - Department1
62	Department of General Surgery A
63	Department of General Surgery B
64	Department of Plastic Surgery
65	Intensive Care Burn Unit
66	Department of Thoracic Surgery

67	Hand Surgery Unit
68	Department of Vascular Surgery and Transplantation
69	Department of Cardiac Surgery
70	Intensive Care of Cardiac Surgery Unit
71	Department of Neurosurgery
72	Intensive Care of Neurosurgery Unit
73	Neuro-Oncology
74	Department of Maternity A
75	Department of Maternity B
76	Department of Newborn Care
77	Labor and Delivery Rooms
78	Department of Gynecology
79	Neonatal Intensive Care Unit (NICU)
80	Onco-Gynecology Unit
81	Endo-Gynecology Unit
82	High Risk Pregnancy Unit
83	Department of Psychiatry and Mental Health
84	Psychopathic Ward 5
85	Psychopathic Ward 6
86	Day Care Psychiatry Unit
87	Psychogeriatric Service
88	Department of Ophthalmology
89	Department of Oral and Maxillofacial Surgery
90	Institute of Endocrinology, Diabetes and Metabolism ¹
91	Proctology
92	Pathology Laboratory
93	Radiology Laboratory
94	Post-Anesthesia Recovery Unit
95	Ambulatory Operating Room
96	Pre-Operating Room
97	Delay
98	Hospitalization
99	Unit High Risk Pregnancy Unit
100	Department of Plastic Surgery (suture)
101	Emergency Medicine Unit ¹
102	Department of Pediatrics A
103	Department of Pediatrics B
104	Department of Pediatric Surgery
105	Pediatric Plastic Surgery Unit
106	Pediatric Oncology and Bone Marrow Transplant Unit
107	Pediatric Intensive Care Unit
108	Pediatric Hematology and Oncology Department
109	Pediatric Urology Clinic
110	Pediatric Orthopedics Unit
111	Pediatric Immunology and Allergy
112	Pediatric Endocrinology Clinic
113	Pediatric Otorhinolaryngology Unit
114	Pediatric Gastroenterology and Nutrition Unit
115	Pediatric Hemodialysis Unit

116	Pediatric Metabolism Unit
117	Pediatric Hematology and Oncology Department1
118	Department of Infectious Diseases
119	Pediatric Neurosurgery Unit
120	Department of Pediatric Cardiology
121	Pediatric Rheumatology Clinic
122	Pediatric Pulmonary Unit
123	Child and Adolescent Psychiatry Service
124	Pediatric Nephrology Unit
125	Pediatric Diabetes and Obesity Clinic
126	Pediatric Oral and Maxillofacial Surgery
127	Institute of Breast Health
128	Mammography Unit
129	Trauma Unit (road accidents)
130	Institute for Occupational Health
131	School of Radiology and Imaging
132	Institute of Nuclear Medicine
133	Computed Tomography Unit
134	Ultrasound Unit
135	Ultrasound Unit1
136	Ultrasound Unit2
137	Magnetic Resonance Imaging Unit
138	Oncology Clinic
139	Orthopedic Clinic
140	Orthopedic Clinic6
141	Ilizarov External Fixation Clinic
142	Eating Disorders Clinic
143	Institute of Breast Health (image-guided biopsies)
144	Orthopedic Clinic1
145	Orthopedic Clinic5
146	Orthopedic Clinic4
147	Non-Invasive Cardiology Unit
148	Hemodialysis Clinic
149	Hypertension Clinic1
150	Plastic Surgery Clinic
151	Plastic Surgery Clinic (Burn)
152	Lipid Disorders Clinic
153	Liver Clinic
154	Orthopedic Clinic7
155	Orthopedic Clinic3
156	Pain Relief Clinic
157	Neuro-Urology Clinic
158	Gynecology Clinic
159	Fertility and Sperm Bank Clinic
160	Periodontics and Oral Medicine Clinic
161	Medicinal Plant Clinic (violent patients unit)
162	Dental Clinic
163	Rehabilitation Heart Clinic
164	Institute for Occupational Health1

165	Pediatric Hematology and Oncology Clinic
166	Pediatric Hematology and Oncology Clinic1
167	Pediatric Neurosurgery Clinic
168	Immunology and Tissue Classification Laboratory
169	Endocrinology Laboratory
170	Biochemistry Laboratory
171	Blood Bank Laboratory
172	Sperm Bank Laboratory
173	Urgent Testing Laboratory
174	Toxicology Laboratory
175	Biochemistry Laboratory1
176	Microbiology Laboratory
177	Neurosurgery Laboratory
178	Cytology Laboratory
179	Ministry of Defense (rehabilitation)
180	Institute for Periodic Examinations
181	Invasive Imaging Tests
182	Hydrotherapy Pool (rehabilitative)
183	Orthopedic Clinic2
184	Department of Vascular Surgery and Transplantation1
185	Gynecology Clinic2
186	Department of Clinical Nutrition
187	X-ray Screening
188	Unknown2
189	Neurosurgery
190	Unknown1
191	Bone and Calcium Metabolism Unit1
192	Hearing and Speech Unit
193	Nutrition and Dietary Unit
194	Department of Physical Therapy
195	Bone Marrow Transplant Unit
196	Hemodialysis Clinic1
197	Endodontics and Dental Trauma Unit
198	Gynecology Clinic1
200	Unknown

2.5 outcome_id

outcome_id	
code	name
1	Emergency Room
2	Hospitalization
3	Removing
4	Beginning Removing
5	Completion Removing
6	Receiving

7	Released (Home)
8	Left on His Own
9	Left with Medical File
10	Deceased
11	Renunciation of Treatments
12	Cancellation
13	Medical Clinic
14	Other Institution
15	Other
20	Unknown

Appendix 3 Aggregated Dictionaries

3.1 outcome

outcome	
code	name
0	Total
1	Emergency Room
2	Hospitalization
3	Transfer
4	Released (Home)
5	Left on His Own
6	Deceased
7	Renunciation of Treatments
8	Medical Clinic
9	Other Institution
10	Other
11	Unknown

3.2 department

Aggregation by the medical profile of a hospital unit (Here, e.g. “Internal Medicine Unit” corresponds to “Internal Medicine A-E” in Appendix 2.)

department	
code	name
0	Total
1	Emergency Internal Medicine Unit
2	Emergency Surgery Unit
3	Emergency Traumatology Unit
4	Emergency Orthopedic Unit
5	Emergency Otorhinolaryngology Unit
6	Emergency Ophthalmology Unit
7	Emergency Psychiatry Unit
8	Emergency Gynecology Unit
9	Pediatric Emergency Unit
10	Pediatric Emergency Surgery Unit
11	Emergency Maternity Unit
12	Institute of Oncology
13	Institute for Immunology, Allergy and AIDS
14	Institute of Gastroenterology
15	Institute of Hematology and Bone Marrow Transplant
16	Department of Intensive and Critical Medicine

- 17 Department of Neurology
- 18 Department of Nephrology
- 19 Institute of Endocrinology, Diabetes and Metabolism
- 20 Department of Dermatology
- 21 Department of Internal Medicine
- 22 Intensive Care Unit
- 23 Department of Cardiology
- 24 Department of Rheumatology
- 25 Institute of Pulmonology
- 26 Pain Relief Unit
- 27 Department of Urology
- 28 Department of Otorhinolaryngology
- 29 Department of Orthopedics
- 30 Department of General Surgery
- 31 Department of Plastic Surgery
- 32 Department of Vascular Surgery and Transplantation
- 33 Department of Cardiac Surgery
- 34 Department of Neurosurgery
- 35 Department of Maternity
- 36 Department of Newborn Care
- 37 Department of Gynecology
- 38 Department of Psychiatry and Mental Health
- 39 Department of Ophthalmology
- 40 Department of Oral and Maxillofacial Surgery
- 41 Pathology Laboratory
- 42 Department of Anesthesiology
- 43 Delay
- 44 Hospitalization
- 45 Pediatrics Department
- 46 Pediatric Surgery Department
- 47 Pediatric Plastic Surgery Unit
- 48 Pediatric Intensive Care Unit
- 49 Pediatric Hematology and Oncology Department
- 50 Pediatric Urology Clinic
- 51 Pediatric Orthopedics Unit
- 52 Pediatric Immunology and Allergy
- 53 Pediatric Endocrinology Clinic
- 54 Pediatric Otorhinolaryngology Unit
- 55 Pediatric Gastroenterology and Nutrition Unit
- 56 Pediatric Hemodialysis Unit
- 57 Pediatric Metabolism Unit
- 58 Department of Infectious Diseases
- 59 Pediatric Neurosurgery Unit
- 60 Pediatric Cardiology Department
- 61 Pediatric Rheumatology Clinic
- 62 Pediatric Pulmonary Unit
- 63 Pediatric Nephrology Unit
- 64 Pediatric Diabetes and Obesity Clinic

65	Pediatric Oral and Maxillofacial Surgery
66	Institute of Breast Health
67	Trauma Unit (road accidents)
68	Institute for Occupational Health
69	School of Radiology and Imaging
70	Institute of Nuclear Medicine
71	Oncology Clinic
72	Orthopedic Clinic
73	Eating Disorders Clinic
74	Hemodialysis Clinic
75	Hypertension Clinic
76	Plastic Surgery Clinic
77	Lipid Disorders Clinic
78	Liver Clinic
79	Neuro-urology Clinic
80	Gynecology Clinic
81	Periodontics and Oral Medicine Clinic
82	Rehabilitation Heart Clinic
83	Pediatric Hematology and Oncology Clinic
84	Immunology and Tissue Classification Laboratory
85	Endocrinology Laboratory
86	Biochemistry Laboratory
87	Blood Bank Laboratory
88	Sperm Bank Laboratory
89	Urgent Testing Laboratory
90	Toxicology Laboratory
91	Microbiology Laboratory
92	Cytology Laboratory
93	Institute for Periodic Examinations
94	Department of Clinical Nutrition
95	Hearing and Speech Unit
96	Department of Physical Therapy
99	Unknown

3.3 ward_department

Aggregation by the size of hospital unit

ward_department	
code	name
0	Total
1	Internal Medicine A
2	Internal Medicine D
3	Internal Medicine C
4	Internal Medicine E
5	Internal Medicine B

- 6 Department of General Surgery B
- 7 Department of Pediatrics A
- 8 Labor and Delivery Rooms
- 9 Orthopedics A - Department
- 10 Department of Pediatrics B
- 11 Orthopedics B - Department
- 12 Department of General Surgery A
- 13 Department of Neurology
- 14 Department of Intensive and Critical Medicine
- 15 Intensive Cardiac Care Unit
- 16 Department of Maternity A
- 17 Chemotherapy Inpatient Oncology Unit
- 18 Department of Neurosurgery
- 19 Psychopathic Ward 5
- 20 Department of Maternity B
- 21 Department of Urology
- 22 Department of Gynecology
- 23 Pediatric Intensive Care Unit
- 24 Intensive Care of Neurosurgery Unit
- 25 Department of Ophthalmology
- 26 Radiotherapy Inpatient Oncology Unit
- 27 Department of Nephrology
- 28 Department of Cardiology
- 29 Department of Thoracic Surgery
- 30 Department of Dermatology
- 31 Department of Vascular Surgery and Transplantation
- 32 Department of Otorhinolaryngology
- 33 Pediatric Hematology
- 34 Department of Plastic Surgery
- 35 Psychopathic Ward 6
- 36 Department of Pediatric Surgery
- 37 Department of Cardiac Surgery
- 38 Intensive Care Unit A
- 39 Institute of Hematology and Bone Marrow Transplant
- 40 Intensive Care Unit D
- 41 Department of Rheumatology
- 42 Department of Oral and Maxillofacial Surgery
- 43 Intensive Care Unit B
- 44 Pediatric Neurosurgery Unit
- 45 Intensive Care Unit C
- 46 Pediatric Oncology
- 47 Hand Surgery Unit
- 48 Onco-Gynecology Unit
- 49 Pediatric Orthopedics Unit
- 50 Neonatal Intensive Care Unit (NICU)
- 51 Pediatric Plastic Surgery Unit
- 52 Intensive Care Burn Unit
- 53 Pediatric Oral and Maxillofacial Surgery
- 54 Intensive Care of Cardiac Surgery Unit

55	Department of Newborn Care
56	Pediatric Urology Clinic
57	Pediatric Otorhinolaryngology Unit
58	Pain Relief Unit
59	Pediatric Oncology and Bone Marrow Transplant Unit
60	Department of Pediatric Cardiology
61	Interventional (Angioplasty) Cardiology
62	Intensive Care Unit
63	Day Care Psychiatry Unit
65	Other

3.4 Intensive Care Unit

intensive_care_unit	
code	name
0	Total
1	Intensive Care Unit Gastroenterology
2	Department of Intensive and Critical Medicine
3	Intensive Care Unit A
4	Intensive Care Unit B
5	Intensive Care Unit C
6	Intensive Care Unit D
7	Intensive Care Unit
8	Intensive Cardiac Care Unit
9	Intensive Care Burn Unit
10	Intensive Care of Cardiac Surgery Unit
11	Intensive Care of Neurosurgery Unit
12	Neonatal Intensive Care Unit (NICU)
13	Pediatric Intensive Care Unit
14	Other

3.5 Pediatric Unit

pediatric_unit	
code	name
0	Total
1	Pediatric Hematology and Oncology Department2
2	Department of Pediatrics A
3	Department of Pediatrics B
4	Department of Pediatric Surgery
5	Pediatric Plastic Surgery Unit
6	Pediatric Oncology and Bone Marrow Transplant Unit
7	Pediatric Intensive Care Unit
8	Pediatric Hematology and Oncology Department
9	Pediatric Urology Clinic

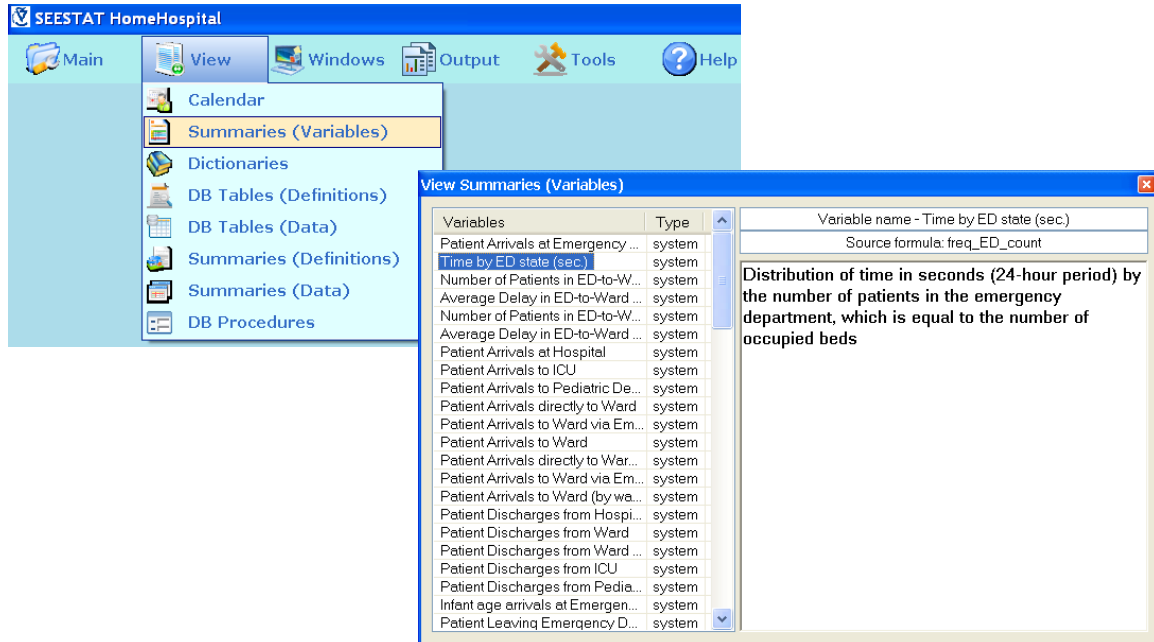
10	Pediatric Orthopedics Unit
11	Pediatric Immunology and Allergy
12	Pediatric Endocrinology Clinic
13	Pediatric Otorhinolaryngology Unit
14	Pediatric Gastroenterology and Nutrition Unit
15	Pediatric Hemodialysis Unit
16	Pediatric Metabolism Unit
17	Pediatric Hematology and Oncology Department1
18	Pediatric Neurosurgery Unit
19	Department of Pediatric Cardiology
20	Pediatric Rheumatology Clinic
21	Pediatric Pulmonary Unit
22	Pediatric Nephrology Unit
23	Pediatric Diabetes and Obesity Clinic
24	Pediatric Oral and Maxillofacial Surgery
25	Pediatric Hematology and Oncology Clinic
26	Pediatric Hematology and Oncology Clinic1
27	Pediatric Neurosurgery Clinic
28	Other

Appendix 4 Flags

seg_type	
code	name
1	segment start
2	segment start and end
3	segment end
4	middle segment

Appendix 5 SEESTat Variables

Available in SEESTat: click **View**-> **Summaries (Variables)** and select variable



Intraday

Patient Arrivals at Emergency Department - Number of patients that arrived at the emergency department for each of its units, during each time interval.

Patient Arrivals at Hospital - Number of patients that arrived at the emergency department or went directly to hospital (external arrivals), during each time interval.

Patient Arrivals to Ward - Number of patients that were admitted to the hospital (directly and via emergency department), for each department, by first ward code, during each time interval.

Patient Arrivals to Ward (by ward_department) - Number of patients that were admitted to the hospital (directly and via emergency department), for each department, by first ward code, by ward_department dictionary, during each time interval.

Patient Arrivals directly to Ward - Number of patients that were admitted directly to wards, for each department, by first ward code, during each time interval.

Patient Arrivals directly to Ward (by ward_department) - Number of patients that were admitted directly to wards by ward_department dictionary, for each department, by first ward code, during each time interval.

Patient Arrivals to Ward via Emergency Department - Number of patients that were admitted to hospital via emergency department, for each department, by first ward code, during each time interval.

Patient Arrivals to Ward via Emergency Department (by ward_department) - Number of patients that were admitted to hospital via emergency department, for each department, by first ward code, by ward_department dictionary during each time interval.

Patient Arrivals to ICU - Number of patients that were admitted to intensive care units, including transferring between wards, during each time interval.

Patient Arrivals to Pediatric Department - Number of patients that were admitted to pediatric hospital units, including transferring between wards, during each time interval.

Patient Discharges from Hospital - Number of patients that were discharged from the hospital, during each time interval.

Patient Discharges from Ward - Number of patients that were discharged from the hospital, for each department, during each time interval.

Patient Discharges from Ward (by ward_department) - Number of patients that were discharged from the hospital, by ward_department dictionary, for each department, during each time interval.

Patient Discharges from ICU - Number of patients that were discharged from intensive care units, including transferring between wards, for each department, during each time interval.

Patient Discharges from Pediatric Department - Number of patients that were discharged from pediatric units, including transferring between wards, for each department, during each time interval.

Patients Leaving Emergency Department - Number of patients that were discharged from the emergency department for each of its units, categorized by the cause of leaving, during each time interval.

Number of Patients in Ward (average) - Average number of patients in a hospital department per second for each hospital department, during each time interval.

Number of Patients in Ward (average) (by ward_department) - Average number of patients in a hospital department per second for each hospital department, by ward_department dictionary, during each time interval.

Number of Patients in Ward (by physical location) - Number of patients in a hospital department per second for each hospital department, during each time interval, by actual ward where the patient was located.

Number of Patients in ICU (average) - Number of patients in intensive care units per second for each hospital department, during each time interval.

Number of Patients in Pediatric Department (average) - Average number of patients in pediatric hospital units per second for each hospital department, during each time interval.

Number of Patients in Emergency Department (average) - Average number of patients in emergency department per second, for each of its units, during each time interval.

Number of Patients in ED-to-Ward transfer (average) - Average number of hospitalized patients in emergency department until their transfer to a ward is carried out, per second, during each time interval.

Number of Patients in ED-to-Ward transfer (average) (by ward_department) - Average number of patients in emergency department until their transfer to a ward is carried out, per second, during each time interval, by ward_department dictionary

Average Length of Stay in Emergency Department (hours) – Average length of stay (in hours) of patients in the emergency department, for each of its units, for each time interval. For each time interval, the average is computed among patients that arrived at the emergency department during this interval.

Average Length of Stay in Ward (hours) - Average length of stay (in hours) of patients in the hospital department, for each ward, during each time interval. For each time interval,

the average is computed among patients that were admitted to the department during this interval.

Average Delay in ED-to-Ward transfer (hours) - Average length of stay (in hours) in emergency department of patients until their transfer to a ward is carried out, during each time interval. For each time interval, the average is computed among patients that were admitted to the department during this interval.

Average Delay in ED-to-Ward transfer (hours) (by ward_department) - Average length of stay (in hours) in emergency department of patients until their transfer to a ward is carried out, during each time interval, by ward_department dictionary. For each time interval, the average is computed among patients that were admitted to the department during this interval.

Proportion of Admissions to Wards from Emergency Department – Proportion of patients that were moved from the emergency department to the hospital wards from among all those released from the emergency department, for each of its units, for each time interval.

Proportion of leaving for Home from Emergency Department - Proportion of patients that were released from the emergency department to home from among all those released from the emergency department, for each of its units, for each time interval.

Daily Totals

Patient Arrivals at Emergency Department - Number of patients that arrived at the emergency department on each day, for each of its units.

Patient Arrivals at Hospital -Number of patients that arrived at the emergency department or directly to the hospital (external arrivals), on each day.

Patient Arrivals to Ward via Emergency Department - Number of patients that were admitted to the hospital via emergency department, on each day.

Patient Arrivals to Ward via Emergency Department (by ward_department) - Number of patients that were admitted to the hospital via emergency department, on each day, by ward_department dictionary.

Patient Arrivals to Ward - Number of patients that were admitted to the hospital (directly or via emergency department), on each day.

Patient Arrivals to Ward (by ward_department) - Number of patients that were admitted to the hospital (directly or via emergency department), on each day, by ward_department dictionary.

Patient Arrivals directly to Ward - Number of patients that were admitted directly to wards, on each day.

Patient Arrivals directly to Ward (by ward_department) - Number of patients that were admitted directly to wards, by ward_department dictionary, on each day.

Patient Arrivals to Ward (by physical location, including transferring) - Number of patients that were admitted to the hospital, on each day, by the actual ward where the patient was located, including transferring between wards.

Patient Discharges from Hospital - Number of patients that were discharged from the hospital, on each day.

Patient Discharges from Ward - Number of patients that were discharged from wards, on each day.

Patient Discharges from Ward (by ward_department) -Number of patients that were discharged from wards, on each day, by ward_department dictionary.

Patient Leaving Emergency Department -Number of patients that were discharged from the emergency department for each of its units, categorized by the cause of leaving, on each day.

Average Length of Stay in Emergency Department (hours) - Average length of stay (in hours) in emergency department, on each day, for each of its units.

Average Length of Stay in Ward (hours) - Average length of stay (in hours) in wards, on each day.

Average Delay in ED-to-Ward transfer (hours) - Average length of stay (in hours) of patients in the emergency department until their transfer to a ward is carried out, on each day, for each of its units.

Average Delay in ED-to-Ward transfer (hours) (by ward_department) - Average length of stay of patients (in hours) in emergency department until their transfer to a ward is carried out, on each day, for each of its units, by ward_department dictionary

Proportion of Admissions to Wards from Emergency Department – Proportion of patients that were moved from the emergency department to the hospital wards from among all those released from the emergency department, on each day.

Proportion of leaving for Home from Emergency Department - Proportion of patients that were released from the emergency department to home from among all those released from the emergency department, on each day.

Distributions

Time by ED state (sec.) - Distribution of time in seconds (24-hour period) by the number of patients in the emergency department.

Patient age arrivals at Emergency Department (years) - Distribution of patients that arrived at the emergency department by their age.

Patient length of stay in Emergency Department - Distribution of the length of stay of patients in the emergency department, in seconds.

Patient length of stay in Emergency Department (hours) - Distribution of the length of stay of patients in the emergency department, in hours

Patient length of stay in Hospital (days) - Distribution of the total length of stay (in days) in the hospital, where admissions come from the emergency department or directly to a hospital department. The time is between the first arrival at the department and release from the hospital.

Patient length of stay in Hospital (hours) - Distribution of the total length of stay (in hours) in the hospital, where admissions come from the emergency department or directly to a hospital department. The time is between the first arrival at the department and release from the hospital.

Patient length of stay in Ward (days) - Distribution of the length of stay (in days) of patients in hospital departments.

Patient length of stay in Ward (days) (by ward_department) - Distribution of the length of stay (in days) of patients in hospital departments, by ward_department dictionary.

Patient length of stay in Ward (hours) - Distribution of the length of stay (in hours) of patients in hospital departments.

Patient length of stay in Ward (hours) (by ward_department) - Distribution of the length of stay (in hours) of patients in hospital departments, by ward_department dictionary.

Patient length of stay in ICU (hours) - Distribution of the length of stay (in hours) of patients in intensive care units.

Waiting time in ED-to-Ward transfer (minutes) - Distribution of the waiting time (in minutes) in the emergency department of patients until their transfer to a ward is carried out.

Waiting time in ED-to-Ward transfer (minutes) (by ward_department) - Distribution of the waiting time (in minutes) in the emergency department of patients until their transfer to a ward is carried out, by ward_department dictionary.