



National Hospitals Information System

Gozo General Hospital
Gozo General Hospital

Hospital Activity Report 2006
Hospital Activity Report 2006

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The accuracy of information contained in this document may be limited by factors beyond the author's control.

Some data in this document may be subject to interpretation.

Data presented in this report is based on data which has been made available to the Department of Health Information from Gozo General Hospital. Numbers of episodes quoted and studied vary from figures on the Patient Administration System (PAS)

Users should always acknowledge the source in all works based on information supplied in this document.

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Introduction

This report provides information on hospital activity at Gozo General Hospital for the period from 1st January, 2006 to 31st December, 2006. It is based on data held in the Gozo General Hospital Activity Analysis database (GGH HAA) within the National Hospital Information System (NHIS) of the Department of Health Information (DHI). The data in the database is collected from both the Hospital Administration and from the hospital wards where a *Hospital Activity Form* is filled in, for every in-patient and day case, on discharge from hospital. Hospital Activity forms are collected only from the “acute” wards of the hospital. These include the *Male General Ward*, *Female General Ward*, the *Critical Care Unit*, the *Short Stay Ward* (Psychiatry), the *Maternity Ward*, the *Gynaecology Ward*, the *Paediatric Ward* and the *Nursery*. No data is collected from the Geriatric Wards and the Long Stay Ward (Psychiatry). Hospital Activity forms are then processed, validated and analysed at DHI.

Detailed tables present data for hospital characteristics where the patients were treated, selected demographic characteristics of discharged patients, conditions diagnosed, and surgical and nonsurgical procedures performed. Text tables show information on special topics including trends, the elderly, and hospital deaths.

Types of measurements shown are frequencies, rates, and percent distributions of discharges and days of care, and average lengths of stay. The estimates are presented by age group, and gender.

The hospital episodes related to women with deliveries, conditions diagnosed, and procedures performed, as well as to new-born infants are included in this report. Statistics on Obstetric cases are also reported on in much greater detail and at National level by the DHI National Obstetric Information System (NOIS).

Medical data for hospitalised patients are coded according to the *International Classification of Diseases, 10th Revision (ICD-10)*. A maximum of four diagnoses (1 main and 3 other diagnoses) and two for external cause of injury can be coded for each medical record. Operations/procedures are coded in ICD-9 CM-vol3 (procedures). Again up to four procedures can be coded. Within the conditions diagnosed and procedures performed, some specific categories will be presented because of large frequencies or because they are of special interest.

Familiarity with the definitions used in NHIS is important in interpreting the data on hospital utilisation. A list of definitions of terms used in this report is found at the back.

Summary data derived from GGHHAA 2006

Hospital Admissions from 01/01/2006 to 31/12/2006:	5021
Of which:	
Emergency admissions:	2578
Booked Admissions:	837
Day Cases:	1149
Unplanned Readmissions:	183
Babies born in hospital:	274
Total Hospital Discharges from 01/01/2006 to 31/12/2006:	5024
Of which:	
Discharged home:	4721
Discharged to Government Hospital:	101
Discharged to a Government/Private Residential Home:	47
Discharged to a Private Hospital/Clinic:	5
Discharged Dead:	150
Inpatient Discharges:	3875
Hospital days used:	21618

Summary

- During 2006, a total of 5024 patients, including newborn infants and day cases, were discharged from Gozo General Hospital. These patients used 21618 days of care.
- The overall average length of stay was of 4.3 days.
- Of all patients discharged from hospital, 20.5% were 75 years of age and over.
- 51.3 % of all hospital admissions were of an emergency nature.
- Private referrals to hospital (from “private” General Practitioners) accounted for 23.3% of all hospital episodes. 38.2 % of cases were self referred.
- 5.6% of all hospital admissions were due to injuries. 47.4 % of these were due to accidents which happened at home; 14.8% were due to recorded traffic accidents, and 4.9 % were due to accidents which occurred at sea or on the sea side.
- 93.9% of discharges were discharged home. 0.9% of discharges were discharged to a Government geriatric hospital or to a private residential home. 2.99% were deceased while in hospital.
- Approximately 60% of the deaths that occurred in hospital were the result of diseases of the circulatory system or malignant neoplasm; however only 9.63% of discharged patients had a main diagnosis of either of these two disease categories.
- Besides spontaneous vaginal delivery, chest pain and other lower respiratory tract infections were the leading diagnoses for discharges during the period of this report. The latter two diagnoses accounted for 165 and 163 discharges respectively and together made up 6.5% of all main diagnoses.
- At least one procedure was performed on 43.8 % of patients discharged from Gozo General Hospital in 2006. 91.8 % of these procedures were of a surgical nature. The rest of the procedures were of a non surgical nature.
- Approximately 28.1% of all surgical procedures were performed on patients who were 65 years of age or older.
- Obstetric procedures (episiotomy, Caesarean section, and repair of obstetric laceration) accounted for 9.7 % of the surgical procedures performed on hospital inpatients.

The above figures refer to data which is available on the GGHHAA database and not to PAS figures.

Hospital Data

Gozo General Hospital is the main State (Public) hospital in Gozo. It is a general hospital (ICHA*classification: HP.1.1) but also has dedicated geriatric care and psychiatric care wards.

Hospital facilities and equipment for 2006 were as follows:

Facilities	Total Number
Acute care beds (capacity)	104
Psychiatric (mental health) care beds	54
Long term care beds	121
Other beds (Renal Unit)	4
Total beds	283
Day care beds/places	Nil
Operation Theatres	2

*

Table 1.1: Facilities at Gozo General Hospital

Bed complement per ward is shown in the following table:

Ward	Number of Beds
Male General Ward (actual beds excluding "corsia")	31
Female General Ward (actual beds excl. "corsia")	31
Critical Care Unit (CCU)	7
Maternity Ward	10
Gynaecology Ward	10
Paediatric Ward	15
Male Geriatric Ward	40
Female Geriatric Ward	81
Short Stay Ward (Psychiatric)	12
Long Stay Ward (Psychiatric)	42
Renal Unit	4
Total Beds	283

*

Table 1.2: Facilities at Gozo General Hospital – bed compliment by ward

The hospital has two X ray and one ultrasound units in house.

* : International Classification of Health accounts

* : Data as supplied by Gozo General Hospital, March,2007.

Hospital workforce*

Human resources at Gozo General Hospital manpower are shown in tables 1.3 and 1.4.

Number of employed physicians	26
Number of service contracts with physicians	4
Number of employed dentists	2
Number of employed qualified midwives	9
Number of all employed qualified nurses	171
Number of employed caring staff (nursing aides, care workers, health attendants)	180
Number of employed physiotherapists	8
Number of employed other health care professionals (see next table)	34
Number of other staff employed at hospital (see below)	149

Table 1.3: Workforce at Gozo General Hospital.

Other health care professionals:

Laboratory technicians	7
Radiologists	5
Pharmacy technicians	5
Occupational therapists	5
ECG technicians	4
Dental hygienists	3
Speech therapists	2
Podologists	2
Dental technicians	1

Table 1.4: Other health care professionals at Gozo General Hospital.

Other staff employed at hospital include officers employed at hospital administration, barbers/hairdressers, gardeners, cooks, an engineer, technical officers, a boiler attendant, mortuary attendants, security officers, drivers, telephone operators, tradespersons, ward clerks, hospital orderlies, art/graphic designer and Chaplains.

* : Data as supplied by Gozo General Hospital, March, 2007. Numbers quoted refer to "head counts".

Hospital Episodes

Hospital episodes, or cases, in this report refer to *discharges* and the discharge date. Thus the number of episodes studied in the section on hospital discharges will refer to *completed episodes of care* where the date of discharge was on or before the 31st. December, 2006. The number of discharges includes episodes where the date of admission was in 2005 but the discharge date was in 2006. Admissions in 2006 that were discharged in 2007 are excluded from the count of discharges. They will be included in the report for hospital activity for 2007.

Hospital Admissions in 2006

A total number of 5021* admissions were recorded in the hospital activity database in the twelve-month interval considered in this report (Table 1).

Age groups (years)	Males	Females	Unspecified	Total	% of all patients
Under 1 (0)	155	143	0	298*	5.94
1 – 4	100	72	0	172	3.43
5 – 9	74	52	0	126	2.51
10 – 14	61	43	0	104	2.07
15 – 19	91	67	0	158	3.15
20 – 24	87	115	0	202	4.02
25 – 29	68	184	0	252	5.02
30 – 34	87	170	0	257	5.12
35 – 39	63	138	0	201	4.00
40 – 44	113	131	0	244	4.86
45 – 49	125	195	0	320	6.37
50 – 54	144	144	0	288	5.74
55 – 59	187	157	0	344	6.85
60 – 64	150	150	0	300	5.97
65 – 69	157	136	0	293	5.84
70 – 74	240	189	0	429	8.54
75 – 79	180	168	0	348	6.93
80 – 84	169	169	0	338	6.73
85 – 89	99	129	0	228	4.54
90 - 94	34	56	0	90	1.79
95 & over	9	8	0	17	0.34
Unspecified	6	6	0	12	0.24
Total	2399	2622	0	5021	100

*: 274 of these were newborn babies born in hospital

Table 2: Age/gender distribution of patients in admissions for 2006

Cases of “ward attenders” (16 in all) for whom a hospital activity data sheet was filled up were not entered into the database.

274 babies were born in hospital from 01/01/2006 to 31/12/2006. 272 were discharged in 2006. Babies born in hospital were not counted as “admissions” in previous reports; however, babies born in hospital are included in this report as they contribute to activity in the hospital. This is in line with current E.U. guidelines.

* This figure denotes the total number of admissions from 01/01/2006 to 31/12/2006 including day cases and babies born in hospital. It includes 44 admissions in 2006 that were discharged in 2007. 43 admissions in 2005 that were discharged in 2006 are not included.

2402 admissions were males and 2619 were females. 2578 or 51.3% were emergency admissions, 837 or 16.7% were booked inpatient admissions, 1149 or 22.9% were day care admissions, 183 or 3.6% were unplanned readmissions less than 28 days following discharge from hospital and 274 were babies born in hospital.

Ward admissions, and total admissions by method of admission, are shown schematically in Table 3 (Nursery admissions are excluded) and accompanying chart I.

Admitting Ward	Elective	Emergency	Day Cases	Unplanned Readmissions	TOTAL
MGW	224	917	451	159	1751
FGW	157	868	455	12	1492
CCU	21	356	7	7	391
Paediatric	45	349	15	1	410
Maternity	256	25	0	0	281
Gynaecology	132	29	206	3	370
SSW	2	34	15	1	52
Total	837	2578	1149	183	4747

MGW: Male ward (general), FGW: Female ward (General), CCU: Critical care unit, SSW: Short stay ward (Psychiatric)

Table 3: Total admissions (including day cases) to wards, excluding Nursery, from 01/01/2005 to 31/12/2005

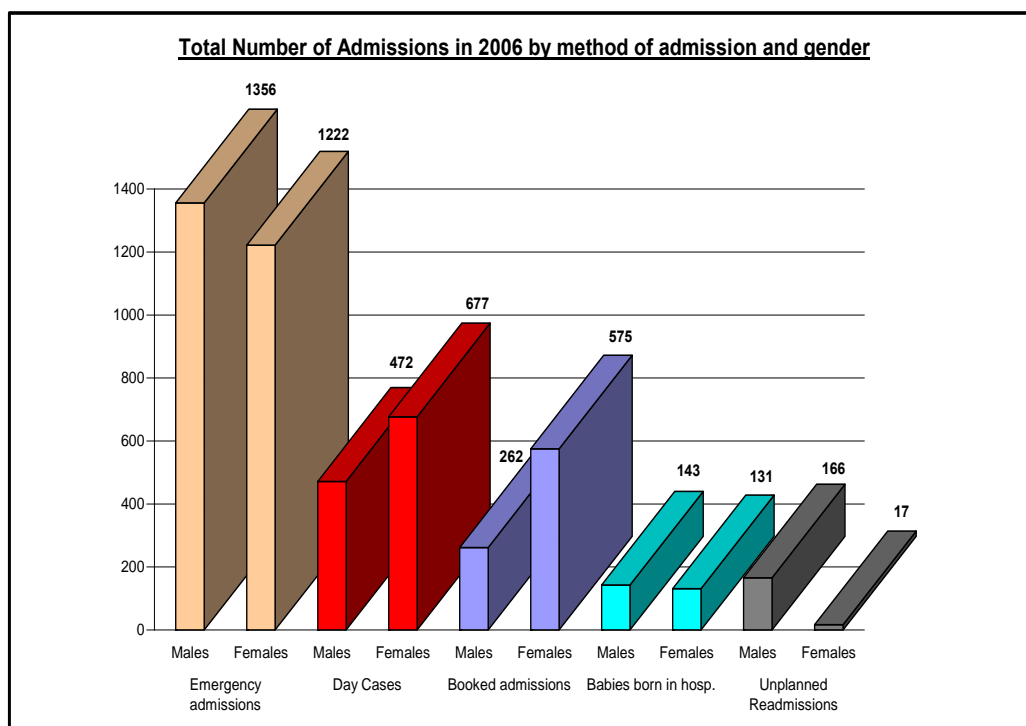


Chart I: All admissions (excluding "ward attenders") by method of admission

Comparison with ADT module – PAS system.

The ADT module – PAS system shows a total of 5247 episodes of care (inpatient admissions & day cases) for the period considered in this report. 31 of these admissions were still inpatients as on 01/01/2007. Babies born in hospital are not considered as admissions in the PAS system. Thus the PAS figure for admissions has to be compared with the number of admissions entered in the GGHHAA database but excluding the number of babies born in hospital i.e. 4747 admissions (5021 less 274). Age and gender distribution of admissions according to the PAS and the GGHHAA database are shown in the table 4.

Age Groups	PAS				GGH HAA		
	Males	Females	Gender not specified	Total PAS	Males	Females	Total GGHHAA
<1 year	31	20	0	51	12	12	24
1 - 4	92	68	1	161	100	72	172
5 - 9	61	49	9	119	74	52	126
10 - 14	72	43	0	115	61	43	104
15 - 19	96	89	1	186	91	67	158
20 - 24	96	153	0	249	87	115	202
25 - 29	91	203	2	296	68	184	252
30 - 34	92	189	0	281	87	170	257
35 - 39	84	131	0	215	63	138	201
40 - 44	122	145	1	268	113	131	244
45 - 49	136	211	1	348	125	195	320
50 - 54	166	153	1	320	144	144	288
55 - 59	197	163	3	363	187	157	344
60 - 64	180	192	0	372	150	150	300
65 - 69	193	147	13	353	157	136	293
70 - 74	228	193	13	434	240	189	429
75 - 79	193	185	2	380	180	168	348
80 - 84	163	172	13	348	169	169	338
85 - 89	93	120	1	214	99	129	228
90 - 94	30	57	2	89	34	56	90
>=95	22	33	0	55	9	8	17
Unknown age	14	13	3	30	6	6	12
TOTAL	2452	2729	66	5247	2256	2491	4747
%	46.73	52.01	1.26	100	47.52	52.48	100

Table 4: Age/gender distributions of admissions according to PAS and GGHHAA

25 admissions in the GGHHAA database do not feature in the PAS. A further 8 admissions in the GGHHAA database are listed as “ward attenders” in PAS. In the GGHHAA database patients transferred from the Geriatric unit to the “acute” wards are counted as admissions from a Government residential home. A hospital activity data sheet is forwarded to DHI in such cases. In PAS

these episodes are recorded as transfers within the hospital and not as admissions.

818 episodes are flagged as day cases on the PAS system. This is lower than the number of day cases recorded in the GGHAA database. One reason for this may be that day cases are often entered as inpatient, booked admissions on the PAS.

The male to female percentage distribution in admissions is very similar in both the PAS (46.7 / 52.1) and the GGHAA database (47.5 / 52.5).

The largest number of episodes of care were in the 70 – 74 age groups in both the GGHAA database (429) and the PAS (434) system.

The percentage “response rate”, i.e. comparison between admissions on the GGHAA database taken from episode data sheets sent from the hospital wards and admissions recorded on the PAS system, is shown in Table 5.

Admitting Ward	GGHAA	PAS	% Response Rate
Male General Ward	1751	1781	98.3%
Female General Ward	1492	1609	92.7%
Critical Care Unit	391	529	73.9%
Paediatric Ward	410	435	94.3%
Maternity Ward	281	300	93.7%
Gynaecology Ward	370	396	93.4%
Short stay Ward	52	195	26.7%

Table 5: Percentage response rate by hospital ward

The response rate is still poor from the Short Stay Ward and needs improvement from the Critical Care Unit.

Admissions following accidents/injuries.

283 or 5.6% of all admissions were due to an external cause or injury. Of these, 138 or 48.8% were due to accidents/injuries which occurred at “home”, and 60 or 21.2% were due to accidents/injuries sustained on the road. 42 or 70% of the latter were due to transport accidents (ICD10 codes V01 – V99) including motor vehicle accidents. Injuries sustained at the seaside accounted for 14 admissions or 4.9% of admissions to hospital due to accidents/injuries.

Admissions due to accidents/injuries had a total hospital stay of 793 hospital days. The overall average length of stay of these episodes of care was 2.8 days.

A breakdown of the number of injuries sustained, according to the site of accident/injury, which resulted in admission to hospital is shown in Table 6.

Accident/Injury Site	Code	Males	Females	Hospital Days
Home	10.0	60	78	501
Residential Institution	10.1	1	0	3
School, other institution and public administration area	10.2	5	3	62
Sports and athletic area	10.3	6	0	3
Sea & sea side	10.3a	13	1	23
Street/motorway	10.4	48	12	87
Trade or service area	10.5	8	1	33
Industrial and construction area	10.6	14	0	23
Farm	10.7	4	0	6
Other specifies places	10.8	7	2	27
Unspecified place	10.9	10	10	25
Total		176	107	793

Table 6: Number of hospital admissions and hospital stay following accidents/injuries

Other considerations regarding admissions

Sources of hospital admissions for the one year period under consideration were as follows (Table 7):

Source	Number of cases	% of all Admissions
Usual Residence	4284	85.33%
Temporary/summer residence	82	1.63%
Prison/Police Case	1	0.02%
Government Hospital	76	1.51%
Government Residential home	5	0.09%
Private hospital/clinic	5	0.09%
Private residential home	11	0.22%
Accident site	283	5.64%
Medical Institution abroad	0	0.00%
Babies born in hospital	274	5.47%
Unspecified	0	0.00%
Total	5021	100%

Table 7: Sources of all hospital admissions

The type of hospital inpatient care given is shown in Table 8.

Care Type	Number of Admissions
Acute Care	4636
Rehabilitative care	8
Palliative care	20
Geriatric evaluation and management	0
Psycho geriatric care	0
Mental health care (Psychiatric care)	33
Maintenance care (includes "social cases")	50
New-born care	274
Total	5021

Table 8: Admissions by type of care given

"Public referrals"^Ψ for admission to hospital accounted for 1654 or 32.9% of all hospital episodes, while 1168 or 23.3% were from "private"^{ΨΨ} referrals. 1916 patients or 38.2% of all patients referred themselves to hospital. In 9 cases, the type of referral to hospital was not specified.

^Ψ Public referrals include hospital referrals from other state hospital/state residential homes, geriatric hospitals and also referrals from Health Centres and by Health Centre doctors.

^{ΨΨ} Private referrals include referrals from private health care facilities, including private residential homes and also referrals by private community family doctors/specialists in Family Medicine.

Discharges

There were 5024 discharges, or *completed episodes of care* according to data resident within the GGHHAA database for the period from 01/01/2006 to 31/12/2006. This figure includes 47 admissions in 2005 that were discharged in 2006 but excludes 44 admissions in 2006 that were discharged in 2007.

Day Cases

1149 day care episodes were recorded in the hospital activity database from 01/01/2006 to 31/12/2006. The gender distribution of these episodes was 472 males to 677 females.

The total number of day case admissions by age groups is shown in Chart II.

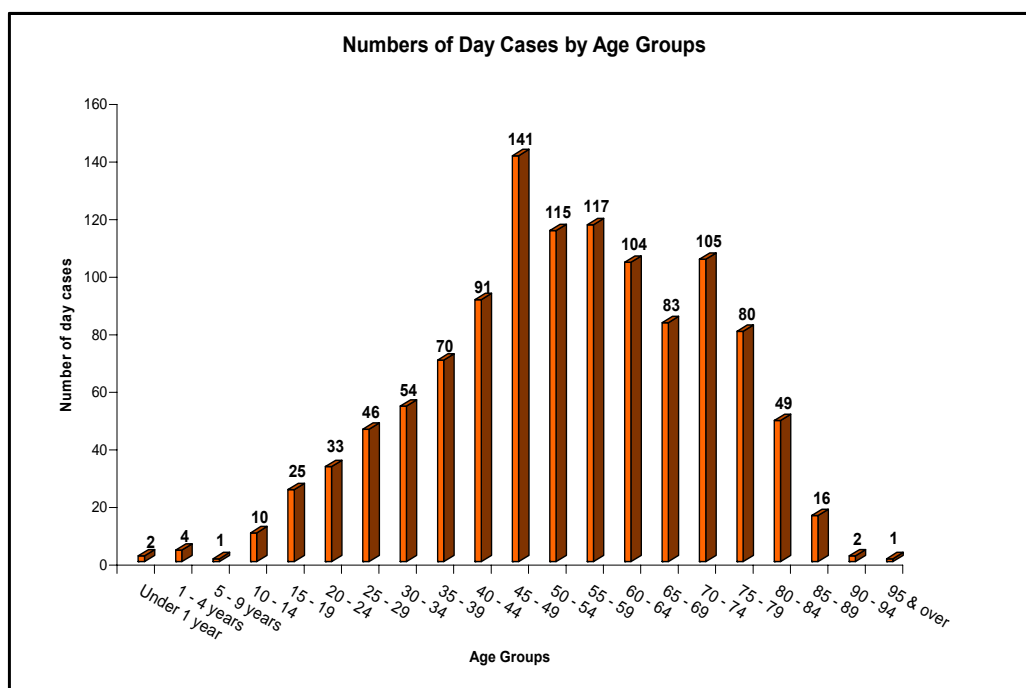


Chart II: Total day case distribution by age groups (years)

1134 day cases were admitted for procedures. 673 were females and 461 were males. 1081 patients had surgical procedures performed. Of these, 22 had two surgical procedures performed. Non surgical procedures were performed on 80 patients. 27 of the day cases had both a surgical and a non surgical procedure performed. 15 day care episodes had no procedure performed. The main non-surgical procedure was “*other non operative procedures including infusion of chemotherapeutic substances/ transfusion of packed cells and whole blood*” (ICD9 CM codes: 99.29, 99.14, 99.03) which accounted for 75% of all non surgical procedures.

The distribution of surgical procedures by age groups and gender performed on day cases is shown in Chart III

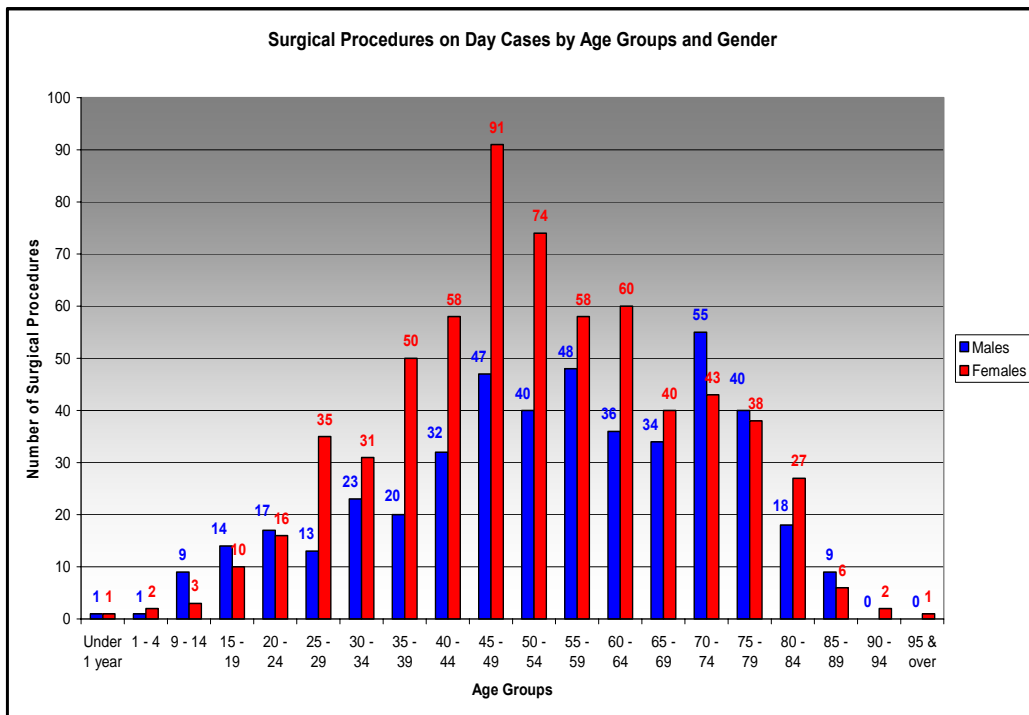


Chart III: Numbers of Surgical Procedures performed on day cases by age groups and gender.

The 1081 patients admitted for day care surgical procedures had 1103 procedures performed between them.

Hospital stay and discharge data on hospital episodes

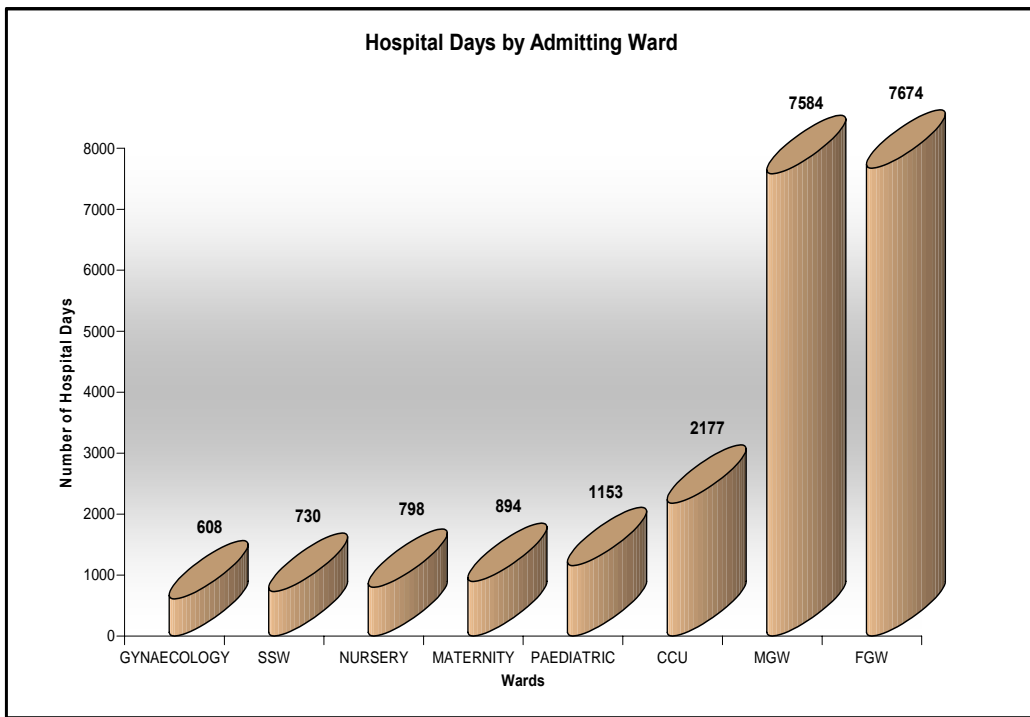
Of the 5024 recorded discharges in the GGHHAA database, 272 were babies born in hospital. 1149 discharges were related to day cases with a hospital stay of 0 days. In-patient episodes of care (i.e.: 5024 – 1149: 3875) used up a total of 21618 days of care.

The overall average length of stay (ALOS) was 4.3 days. The ALOS, excluding day cases, was 5.6 days (21618/3875).

The 272 babies born in hospital, who were discharged in 2006, used up 798 hospital days. Their ALOS was 2.9 days.

1455 of the discharged patients were 70 years of age or older. This figure represents 28.96% of all discharges from hospital for the year 2006. They used up 10446 or 48.3% of the total days of care (hospital days).

Charts IV and V show schematically hospital days by Ward of admission, and by Speciality respectively.



FGW: Female Ward (General), MGW: Male Ward (General), CCU: Critical care unit, SSW: Short stay ward

Chart IV: Total hospital days by ward of admission

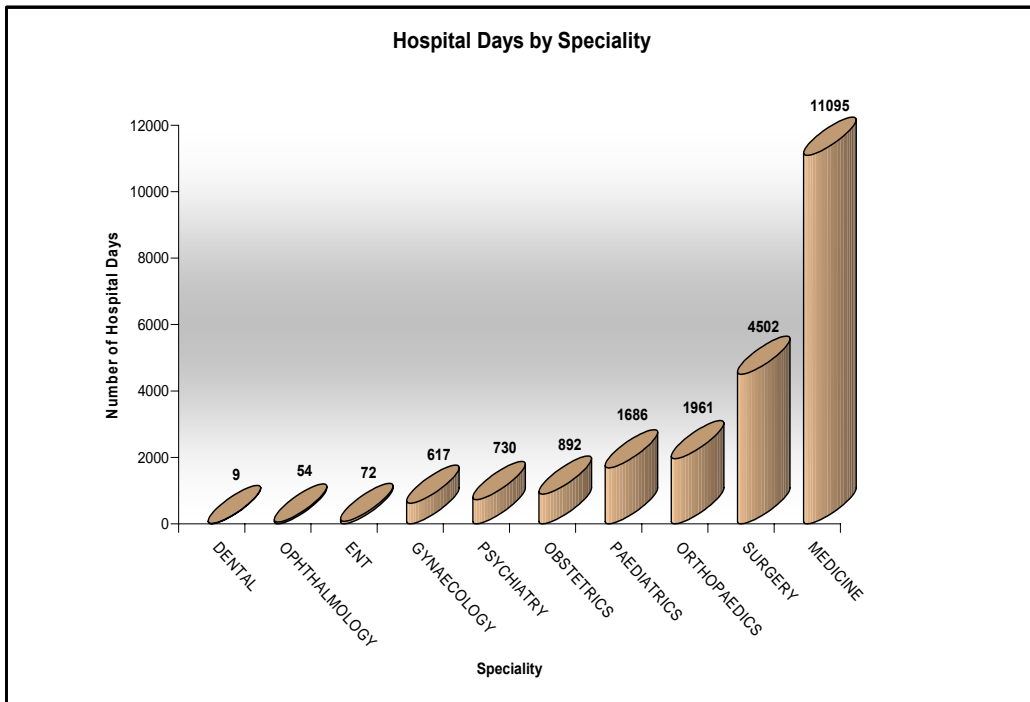


Chart V: Hospital days by Speciality

Table 9 shows the number of hospital days and overall ALOS by age groups and gender.

Age groups	Males	Hosp. Days	ALOS	Females	Hosp. Days	ALOS	TOTAL ALOS
< 1 year	155	459	2.96	143	415	2.90	2.93
1 – 4	100	344	3.44	72	177	2.46	3.03
5 - 9	73	185	2.53	52	131	2.52	2.53
10 – 14	61	123	2.02	43	105	2.44	2.19
15 – 19	91	278	3.05	67	146	2.18	2.68
20 - 24	87	253	2.91	116	317	2.73	2.81
25 – 29	68	159	2.34	185	447	2.42	2.40
30 - 34	87	242	2.78	169	427	2.53	2.61
35 – 39	63	124	1.97	137	319	2.32	2.20
40 - 44	111	375	3.38	131	285	2.18	2.73
45 – 49	126	247	1.96	193	655	3.39	2.83
50 - 54	141	472	3.35	143	294	2.06	2.70
55 – 59	188	808	4.30	157	592	3.77	4.06
60 - 64	152	718	4.72	151	484	3.21	3.97
65 – 69	159	894	5.62	136	676	4.97	5.32
70 - 74	243	1118	4.60	184	974	5.29	4.90
75 – 79	179	953	5.32	171	1296	7.58	6.43
80 - 85	167	1185	7.10	172	1469	8.54	7.83
85 – 89	100	764	7.64	129	1336	10.36	9.17
90 - 94	35	550	15.71	58	688	11.86	13.31
95 & >	9	51	5.67	8	62	7.75	6.65
Unspecified age	6	13	2.17	6	8	1.33	1.75
TOTAL	2401	10315	4.30	2623	11303	4.31	4.30

Table 9: Hospital days and ALOS by age groups and gender

4704 in-patients (93.6%) were discharged on medical advice while 171 (3.4%) were discharged at request. 150 patients (2.9%) were discharged dead.

Table 10 shows the destination of the discharged patients (excluding those who were discharged dead).

Discharge Destination	Number of discharges	% of discharges
Usual Residence (including temporary/summer residence)	4721	93.97%
Government Hospital	101	2.01%
Government Residential Home	37	0.74%
Private hospital/Clinic	5	0.09%
Private Residential home	10	0.20%

Table 10: Discharge destination as percentage of all discharges

Patients discharged dead from hospital

150 patients were discharged dead. Table 11 shows the number of patients discharged dead and the relative percentage of hospital discharges by selected diagnosis (adjusted to 'causes of death').

Cause of Death	Number of Deaths		% of discharges Ψ	
	Up to 64 yrs	>= 65 yrs	Up to 64 yrs	>= 65 yrs
Malignant Neoplasms (ICD10 codes C00 - D48)	6	29	0.18%	1.65%
Cerebrovascular diseases (ICD10 codes I60 - I69)	1	17	0.03%	0.96%
Pneumonia & other lower RTI's (ICD10 codes: J12 - J18 , J20 - J22)	5	19	0.15%	1.08%
Chronic lower respiratory disease (ICD10 codes J40 - J47)	1	2	0.03%	0.11%
Heart Failure (ICD10 code I50)	0	22	0.00%	1.25%
Ischaemic heart diseases (ICD10 codes I20 - I25)	0	15	0.00%	0.85%
Septicaemia (ICD10 code A41)	0	4	0.00%	0.23%
Infected bed sores (ICD10 code L89)	0	4	0.00%	0.23%
Renal failure (ICD10 codes N17, N18)	0	2	0.00%	0.11%
Other	3	20	0.27%	1.13%
<i>Subtotal</i>	16	134	0.49%	7.60%
Overall total	150		2.98%	

Ψ : based on 3263 discharges up to 64 years and 1762 discharges aged 65 or over. (Total number of discharges = 5024)

Table 11: Number & rate of deaths for hospital discharges by age and selected diagnosis/cause of death

Chart VI shows the age group and gender distribution of these patients.

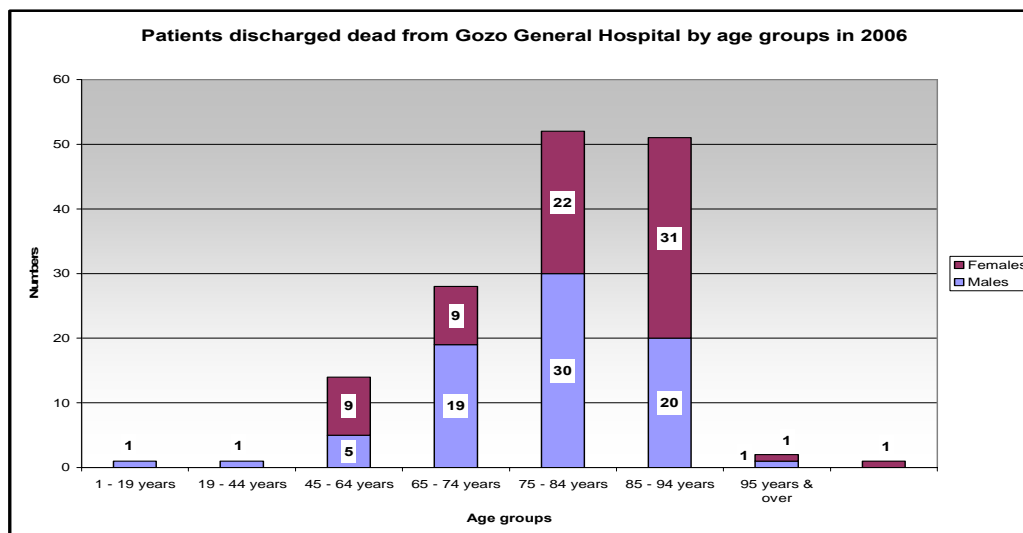


Chart VI: Discharged dead by age groups

The PAS lists 211 deaths within Gozo General Hospital during 2006. This number includes deaths in “long stay wards” of the hospital i.e. Male and Female Geriatric Wards and the Psychiatric Long Stay Ward. Linkage was made in-house at the Department of Health Information with the National Mortality Register. It transpired that 17 deaths in the “acute” wards of the hospital are not recorded in the GGHHAA database as no data sheet was forwarded from the hospital of these episodes of care. The GGHHAA database is missing 8 episodes of care leading to death from the Critical Care Unit, 6 episodes from the Female General Ward and 3 episodes from the Male General Ward. These episodes of care account for 208 hospital days which are not featured in the hospital activity database. The causes of death listed in the National Mortality Register for these episodes of care leading to death which are missing from the GGHHAA database are as follows:

Cause of Death	Number of Deaths
Malignant Neoplasms (ICD10 codes C00 - D48)	4
Ischaemic heart diseases (ICD10 codes I20 - I25)	7
Pneumonia & other lower RTI's (ICD10 codes: J12 - J18 , J20 - J22)	1
Vascular disease of intestine (ICD10 code: K55)	1
Cholelithiasis (ICD10 code: K80)	2
Phlebitis/thrombophlebitis (including DVT) (ICD10 code I80)	1
Infected bed sores (ICD10 code L89)	1
Total	17

Table 12: Episodes of care leading to death in hospital which have not been reported to GGHHAA

Better compliance is needed in reporting from particular acute care wards in Gozo General Hospital.

Hospital Utilisation

Table 13 shows some of measures used to study hospital utilisation. The figures quoted have been worked out from data available on the GGHAA database. They will vary from calculations on figures quoted in PAS.

Measure of Utilisation	GGH 2006
Total number of discharges considered in this report	5024
“Discharge” Rate	16207 *
Total number of bed days	21618
Rate of bed days per 100,000 population	69740 *
Overall ALOS in days	4.3
ALOS ,excluding day cases	5.6
% bed occupancy rate (for the 104 acute care beds only) ¹	52.92 % ¹
Overall bed turnover rate for acute care beds only ²	45.19 ²

* based on total Gozo population of 30998 – NSO Demographic review, 2005.

Table 13: Selected measures of all hospital utilisation

The overall discharge rate for patients 75 years of age and over was 3355.1 per 100,000 population. This was significantly higher than the rate of 2329.2 per 100,000 population for patients 65–74 years of age.

¹ Calculation: 20090 bed days (21618 less 730 bed days reported for SSW & 798 bed days reported for “Nursery” as baby cots are not included in bed counts) multiplied by 100 and divided by the product of 365 days and 104 acute care beds.

² Calculation: 4700 discharges (5024 less 52 reported discharges in SSW & 272 discharges from Nursery) divided by 104 (number of acute care beds)

Diagnosis

Hospital use measures, i.e. number of discharges, bed days (LOS), and discharge rates for the main diagnostic categories (according to ICD10) are shown in Table 14. The categories displayed account for all the discharges and days of care at Gozo General Hospital in the twelve month period being considered.

Diagnostic Group (by ICD10 chapters)	Numbers	LOS	Discharge Rate**
Infections and Parasitic Infections (ICD10 Codes A00 – B99)	40	228	129.0
Malignant Neoplasms (ICD10 codes C00 – C97), Carcinoma in situ & Benign Neoplasms (ICD10 Codes C00 – D48)	145	1003	467.8
Diseases of blood and blood forming organs (ICD10 codes D50 – D86)	61	171	196.8
Endocrine, nutritional and metabolic diseases (ICD10 codes E00 – E90)	79	804	254.9
Mental and behaviour disorders (ICD10 codes F00 – F99)	93	814	300.0
Diseases of the nervous system (ICD10 codes G00 – G99)	113	314	364.5
Diseases of the eye and adnexa (ICD10 codes H00 – H59)	220	50	709.7
Diseases of the ear and mastoid process (ICD10 codes H60 – H95)	27	61	87.1
Diseases of the circulatory system (ICD10 codes I00 – I99)	339	2592	1093.6
Diseases of the respiratory system (ICD10 codes J00 – J99)	422	2494	1361.4
Diseases of the digestive system (ICD10 codes K00 – K99)	660	2405	2129.2
Diseases of the skin and subcutaneous tissue (ICD10 codes L00 – L99)	138	457	445.2
Diseases of the musculoskeletal system and connective tissue (ICD10 codes M00 – M99)	185	830	596.8
Diseases of the genitourinary system (ICD10 codes N00 – N99)	400	935	1290.4
Pregnancy, childbirth and the puerperium (ICD10 codes O00 – O99)	309	913	996.8
Certain conditions originating in the perinatal period (ICD10 codes P00 – P96)	2	6	6.5
Congenital malformations (ICD10 codes Q00 – Q99)	3	5	9.7
Symptoms, signs and abnormal clinical & laboratory findings, not elsewhere classified (ICD10 codes R00 – R99)*	986	3427	3180.9
Injury, poisoning and other consequences of external causes (ICD10 codes S00 – T98)	325	1813	1048.5
Factors influencing health status and contact with health service (ICD10 codes Z00 – Z99)	477	2296	1538.8
Total	5024	21618	16207.5

*: This section includes those episodes where a diagnosis of the patients' complaints is not specified either as it is not known or else the patients are still undergoing investigation. Thus a symptom or a sign is entered as the main diagnosis.

** : based on total population estimate of 30998 according to Demographic Review 2005 - NSO

Table 14: Number of discharges, length of stay (LOS) and discharge rate from hospital by main discharge diagnosis according to ICD10 chapters

Table 15 portrays the number of discharges, the relevant hospital days, the average length of stay (ALOS), and the hospital days rate by detailed main diagnosis (according to ICD10 classification) for the “top 30” discharges which had the longest hospital stay (LOS). A full table with all the diagnosis and relative numbers of discharges is included at the end of this report (page 44).

Main Diagnosis	Number of episodes	Hospital Days	ALOS	Hosp. days per 100000 population*
Other lower respiratory tract infections (ICD10 codes J20 – J22) - chest infection, unspecified	213	1466	6.9	4729.3
Cerebrovascular disease (ICD10 codes I60 – I64)	54	879	16.3	2835.7
Fracture of femur (ICD10 code S72)	49	836	17.1	2696.9
Liveborn infants (healthy newborn babies) (ICD10 code Z38)	272	798	2.9	2574.4
Abdominal and pelvic pain (ICD10 code R10)	329	729	2.2	2351.8
Heart failure (ICD10 code I50)	85	562	6.6	1813
Single spontaneous delivery (ICD code O80)	206	552	2.7	1780.8
Mood (affective) disorders (ICD10 codes F30 – F39)	42	545	13	1758.2
Other non infective gastroenteritis and colitis (ICD10 code K52) - gastroenteritis, unspecified	150	511	3.4	1648.5
Pain in throat and chest (ICD10 code R07)	165	459	2.8	1480.7
Diabetes Mellitus (ICD10 codes E10 – E14)	45	440	9.8	1419.4
Dorsalgia (ICD10 code M54)	47	388	8.3	1251.7
Conduction disorders & arrhythmias (ICD10 codes I44 – I48)	87	374	4.3	1206.5
Infections of skin & subcutaneous tissue (ICD10 codes L00 – L08)	52	352	6.8	1135.6
Malignant neoplasms of trachea, bronchus and lung (ICD codes C33 – C34)	12	309	25.8	996.8
Other forms of delivery (assisted, multiple & LSCS) (ICD10 codes O81 – O84)	62	309	5	996.8
Acute myocardial infarction (ICD10 codes I21 - I22)	32	269	8.4	867.8
Inguinal hernia (ICD10 code K40)	58	245	4.2	790.4
Pneumonia (ICD10 codes J12 – J18)	28	201	7.2	648.4
Dyspepsia & other diseases of stomach and duodenum (ICD10 codes K29 – K31)	114	194	1.7	625.8
Fracture of lower leg, including ankle (ICD10 code S82)	15	188	12.5	606.5
Upper Respiratory Tract Infections & Influenza (ICD10 codes J00 – J11)	59	182	3.1	587.1
Chronic obstructive pulmonary disease & bronchiectasis (ICD10 codes J40 – J44, J47)	26	179	6.9	577.5
Anaemias (ICD10 codes D50 – D64)	60	169	2.8	545.2
Transient cerebral ischaemic attacks & related syndromes (ICD10 code G45)	25	162	6.5	522.6
Menstrual, menopausal & other female genital conditions – abnormal vaginal bleeding (ICD10 codes N91 – N95)	152	145	1	467.8

Main Diagnosis	Number of episodes	Hospital Days	ALOS	Hosp. days per 100000 population*
Gonarthrosis (ICD10 code M17)	17	132	7.8	425.8
Myoma of uterus (ICD10 code D25)	32	129	4	416.2
Diseases of the appendix (ICD10 codes K35 – K38)	27	129	4.8	416.2
Intestinal obstruction without hernia (ICD10 code K56)	15	129	8.6	416.2

*: Based on total population estimate of 30998 according to Demographic Review 2005 – NSO

Table 15: Number of episodes, bed days, ALOS and bed day rate by selected main discharge diagnosis

The top main diagnoses for all discharges (including day cases) are shown in Chart VII. Women for normal deliveries and normal babies born in hospital have been excluded.

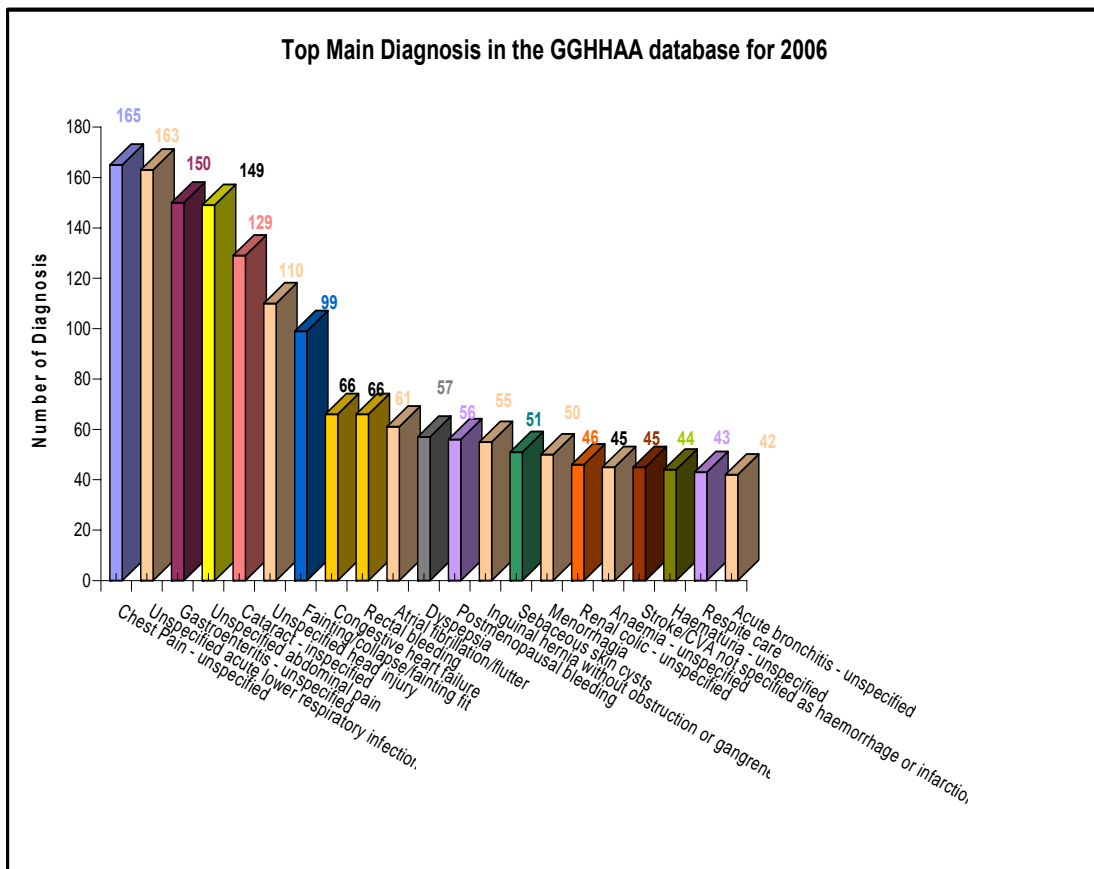


Chart VII: Top main diagnosis (excluding women for normal deliveries and normal babies born in hospital) for all admissions

Chart VIII shows the main diagnosis for inpatient episodes of care. Details in this chart exclude day cases, women for normal deliveries and normal babies born in hospital.

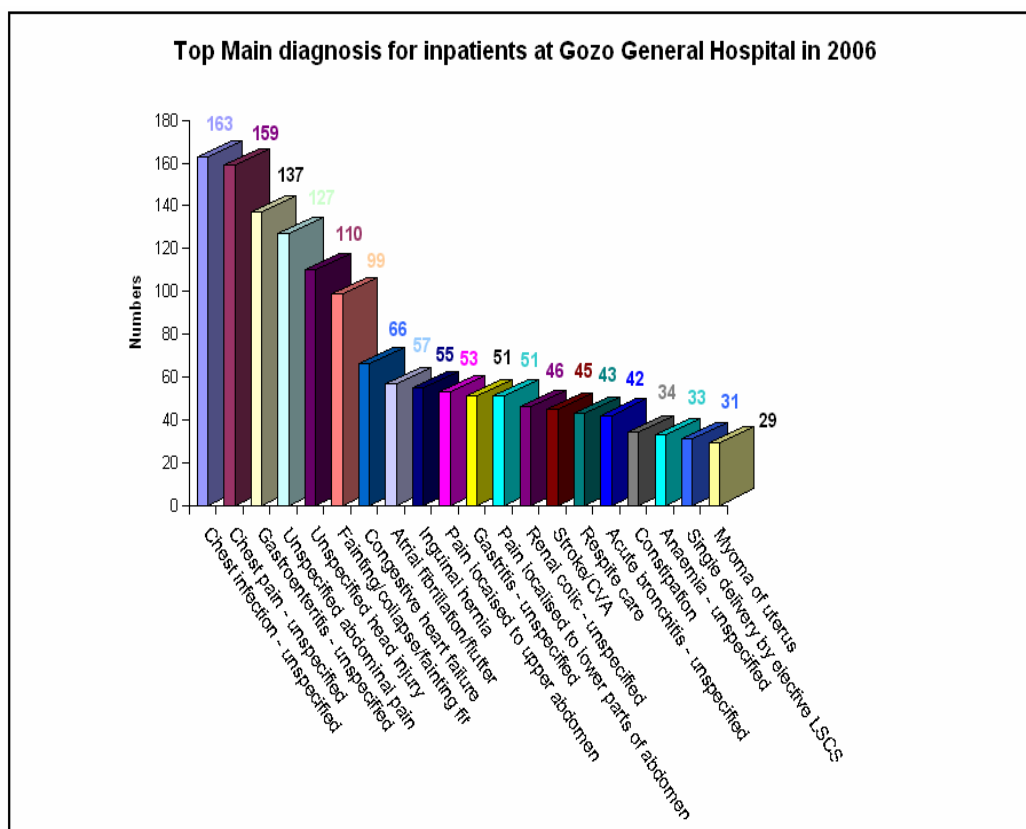


Chart VIII: Top main diagnosis for inpatient admissions excluding women for normal deliveries and normal babies born in hospital

Some of the “main diagnoses” are actually symptoms and not diseases as such. In many of these cases the patients were discharged without a definitive diagnosis as they were due for further investigation. The diagnosis “gastroenteritis – unspecified” includes all those episodes coded in ICD10 as “K52.9” which is the code for *non infective gastroenteritis and colitis-unspecified*. Thus the diagnosis of “gastroenteritis –unspecified” includes cases of unspecified diarrhoea, colitis and gastroenteritis where no causative organism was reported and the symptoms usually subsided within a few days.

The obvious changes in the distribution of the top main diagnosis in the two charts reflect the effect of diagnosis in day care episodes which are excluded in Chart VIII.

Women with deliveries

A total of 268 discharged patients were females hospitalised for deliveries (ICD-10 codes: O80 – O84). Deliveries recorded in the GGHHAA database for 2006 are shown in Table 16.

ICD10 Code	Type of delivery	Number of episodes
O80.9	Single spontaneous delivery - unspecified	206
O82.0	Single delivery by Elective lower segment Caesarean section	30
O82.1	Single delivery by emergency lower segment Caesarean section	25
O81.4	Single "vacuum extractor" delivery	2
O84.0	Multiple delivery (twin) - spontaneous	2
O84.2	Multiple delivery (twin) by lower segment Caesarean section	2
O81.3	Single "forceps" delivery - unspecified	1
TOTAL		268

Table 16: Women with deliveries in the GGHAA for 2006

Episodes of care for females with normal spontaneous deliveries made up 5.32 % of inpatient episodes of care for this period, their average length of stay was short (2.7 days) and they used 552 or 2.5% of inpatient bed days of care.

Selected Main Diagnosis

163 episodes of inpatient care had a main diagnosis of “acute lower respiratory tract infection” or “chest infection” These patients used up 1287 or 5.9% of all hospital days. They had an ALOS of 7.9 days. Age group and gender distribution of these patients is shown in Chart IX.

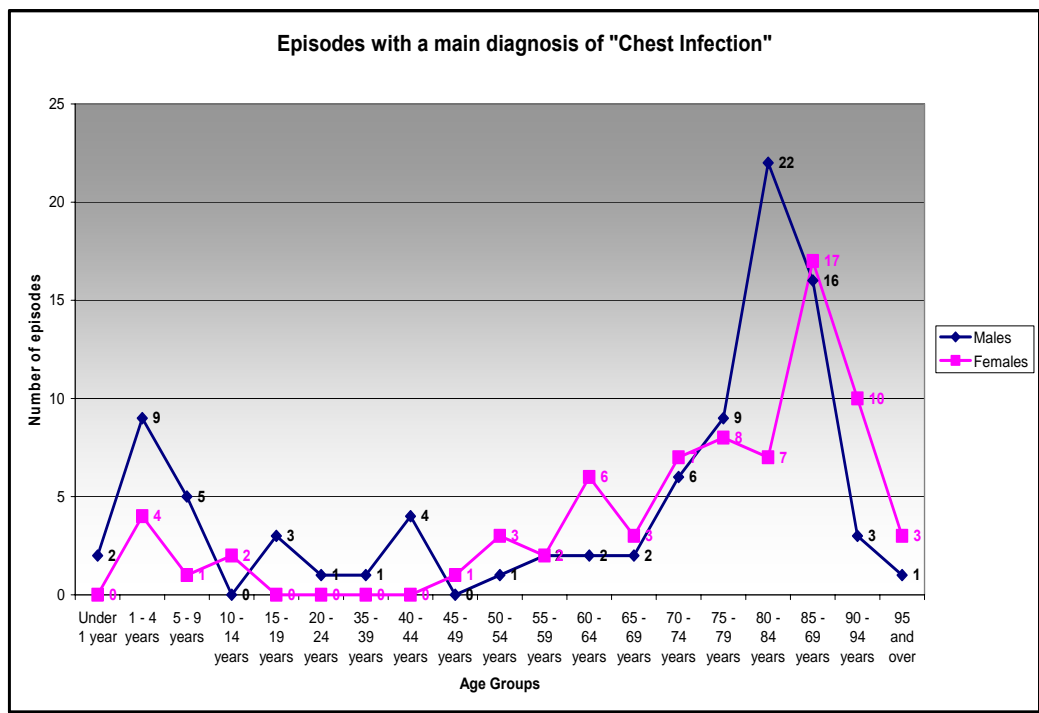


Chart IX: Age groups and gender distribution of episodes of care with a main diagnosis of “chest infection”

159 patients were discharged with a main diagnosis of “chest pain – unspecified” (ICD10 code R07.4). These episodes of care accounted for 459 hospital days. The average length of stay was 2.9 days. No definitive diagnosis for the chest pain was available for these episodes. The age and gender distribution for these episodes of care is shown in Chart X.

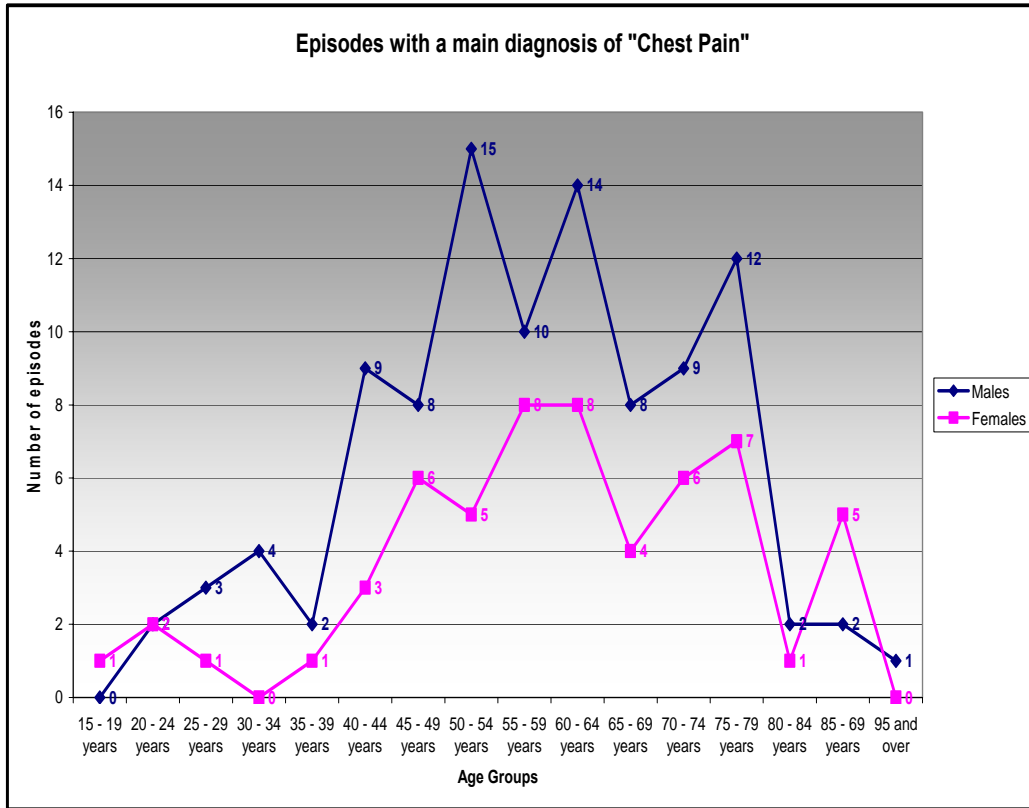


Chart X: Age/gender distribution of discharges with a main diagnosis of “Chest pain – unspecified”

Chronic obstructive airways disease (ICD-10 codes: J40 - J44) accounted for 26 discharges or 0.67% of all inpatient hospital discharges. The average length of stay was 6.88 days. The age/gender distribution of these discharges is shown in Chart XI

There were 13 discharges with a main diagnosis of asthma (J45) and they used up 54 bed days. 78 discharges were for a main diagnosis of acute bronchitis and pneumonia - unspecified (J20/J21 and J18). These had an average length of stay of 4.87 days and accounted for 380 or 1.76% of all bed days.

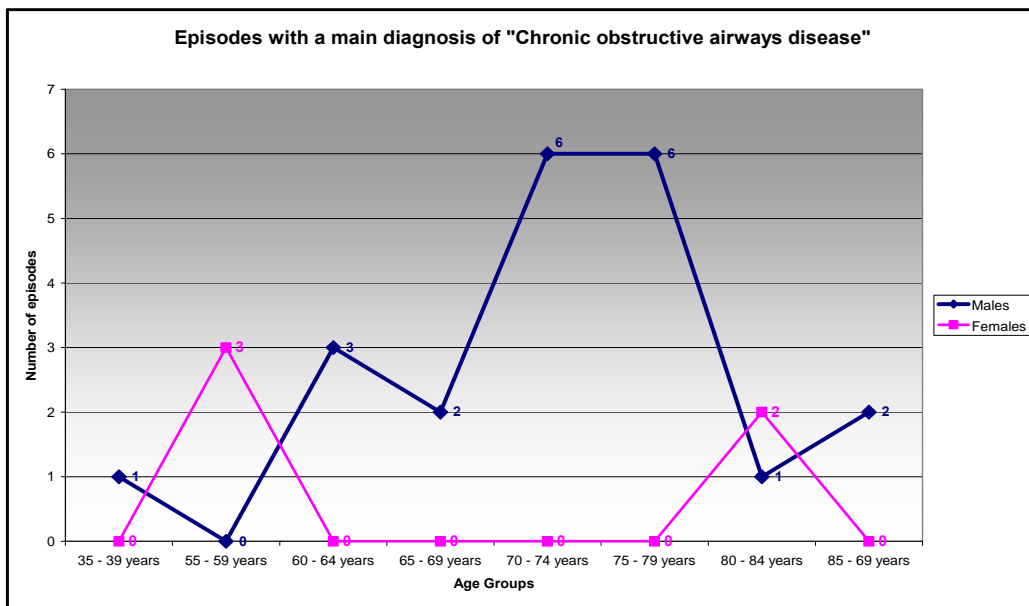


Chart XI : Age/gender distribution of discharges with a main diagnosis of "Chronic Obstructive airways disease"

Patients with a main diagnosis of ischaemic heart disease accounted for 56 inpatient episodes of care or 4.4% of all discharges. They had an average length of stay of 7.77 days and used up 435 or 2.01% of the total bed days. These patients included those with main diagnoses of angina pectoris (ICD10 code I20), myocardial infarction (ICD10 codes I21 – I22) and other ischaemic heart disease (ICD10 codes I23 – I25). The age/gender distribution of these discharges is shown in Chart XII

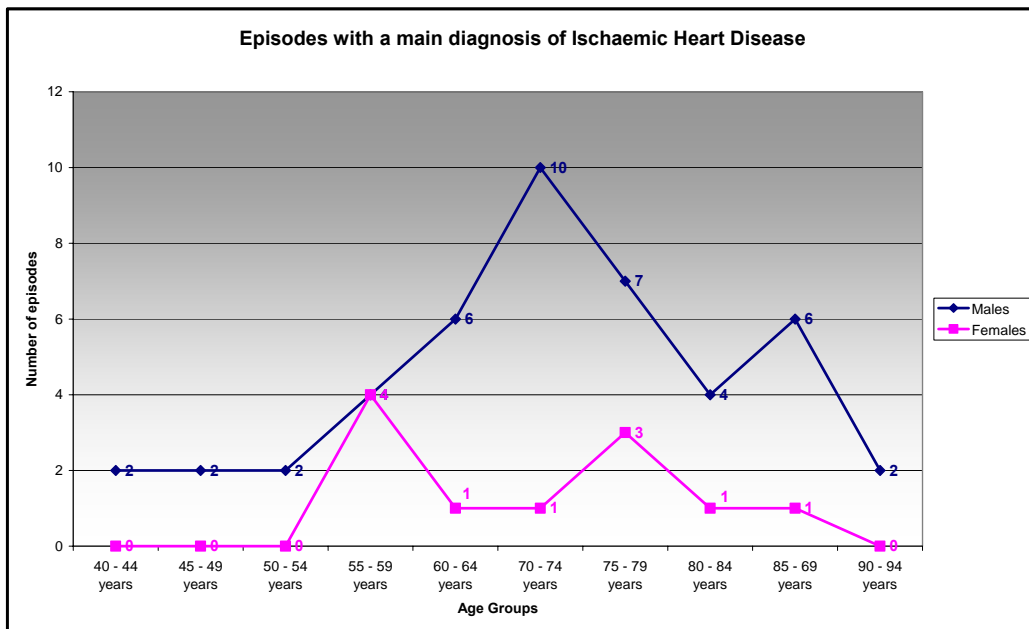


Chart XII: Age/gender distribution of discharges with Ischaemic heart disease.

There were 85 discharges with a main diagnosis of heart failure (ICD10 code I50). These episodes of care accounted for 562 or 2.6% of all hospital days. Average length of stay for these discharges was 6.61 days. Age/gender distribution of these discharges is depicted in Chart XIII

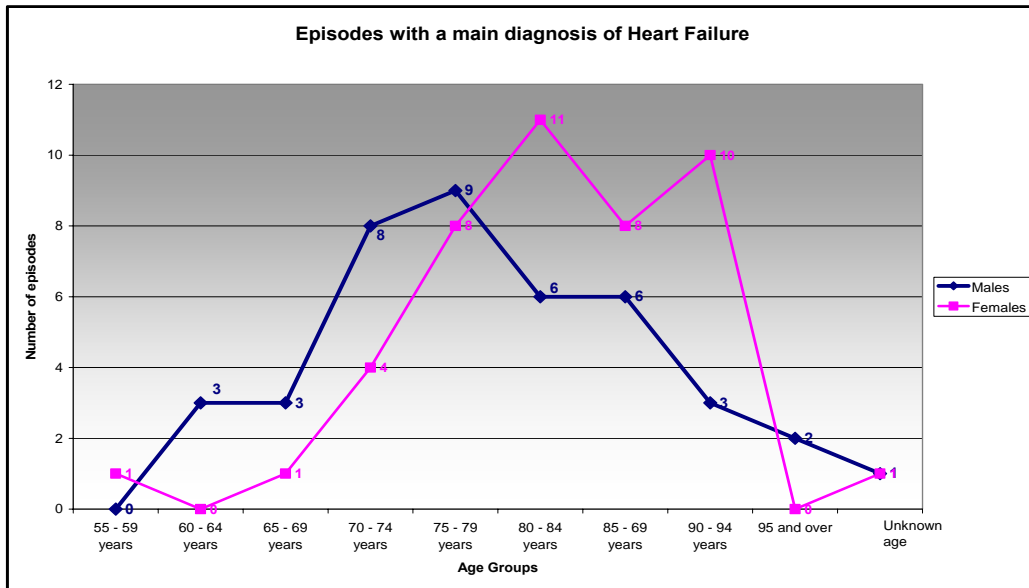


Chart XIII: Age/gender distribution of discharges with a main diagnosis of heart failure

The diagnosis in 54 episodes of inpatient care was cerebrovascular disease (ICD10 codes I60 – I69). These discharges accounted for 879 or 4.1% of all hospital days. 45 of these discharges had a main diagnosis of cerebrovascular accident – unspecified (ICD10 code I64). These discharges used up 791 hospital days and their age/gender distribution are shown in Chart XIV.

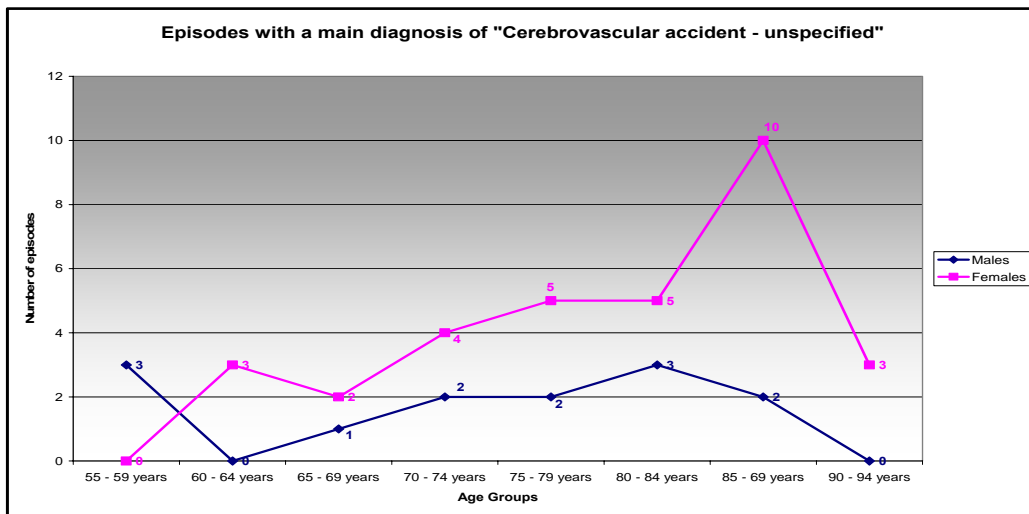


Chart XIV: Age/gender distribution of discharges with a main diagnosis of "cerebrovascular accident – unspecified"

Malignant neoplasms (ICD-10 codes: C00 – C97) were the main diagnosis for 76 patients or 1.96% of all discharges. The average length of stay for discharged patients with malignant neoplasms was 11.3 days and they used 3.97% of the total bed days. The largest number of episodes with a main diagnosis of malignant neoplasm was in the 80 - 84 age group for females and in the 60 - 64 age group for males. Age and gender distribution of these episodes of care and the most common sites of malignant neoplasm recorded are shown in Charts XV and XVI.

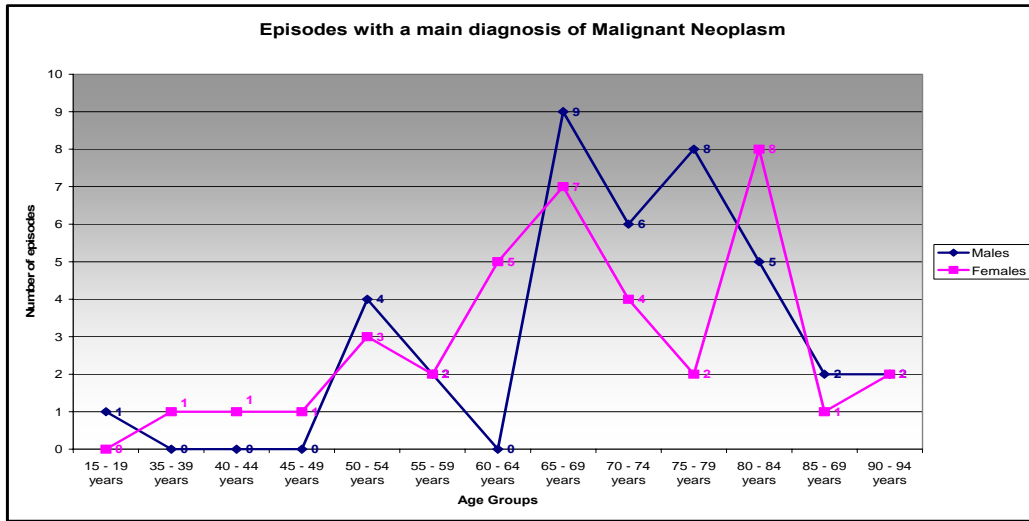


Chart XV: Age group and gender distribution of episodes of care with a main diagnosis of malignant neoplasm

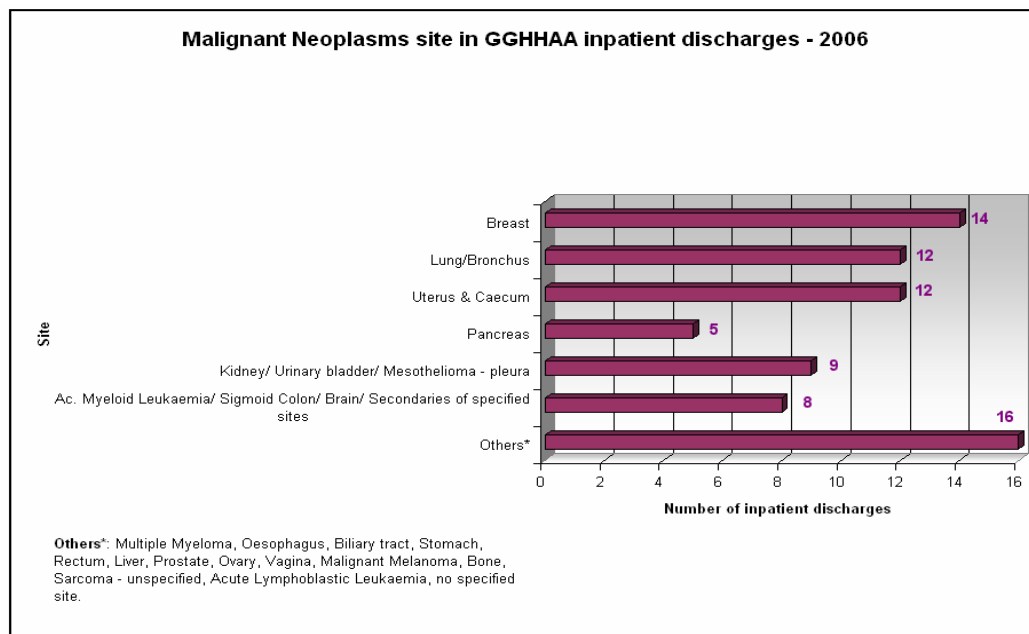


Chart XVI: Malignant neoplasms by site in GGHHAA discharges (2006)

Fractures of the femur (ICD-10 code: S72) accounted for 49 or 1.3% of inpatient hospital discharges. These had an average length of stay of 17.1 days and used up 836 or 3.8% of bed days.

The age group and gender distribution of these episodes of care is shown in chart XVII.

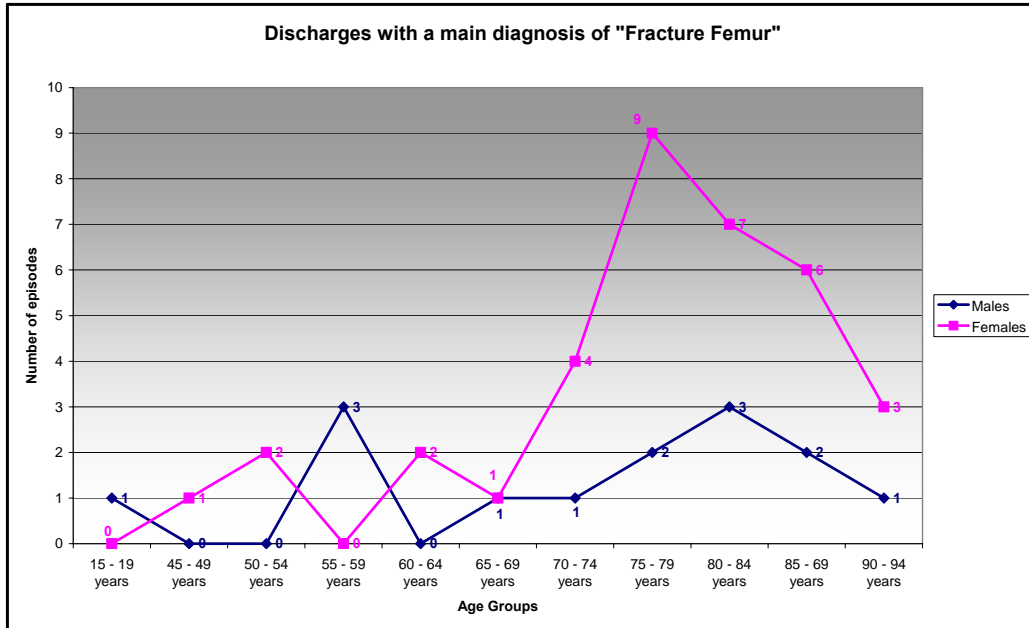


Chart XVII: Age group/gender distribution of discharges with fracture of femur

The external causes of episodes of care for fracture of femur are shown in the following pie chart.

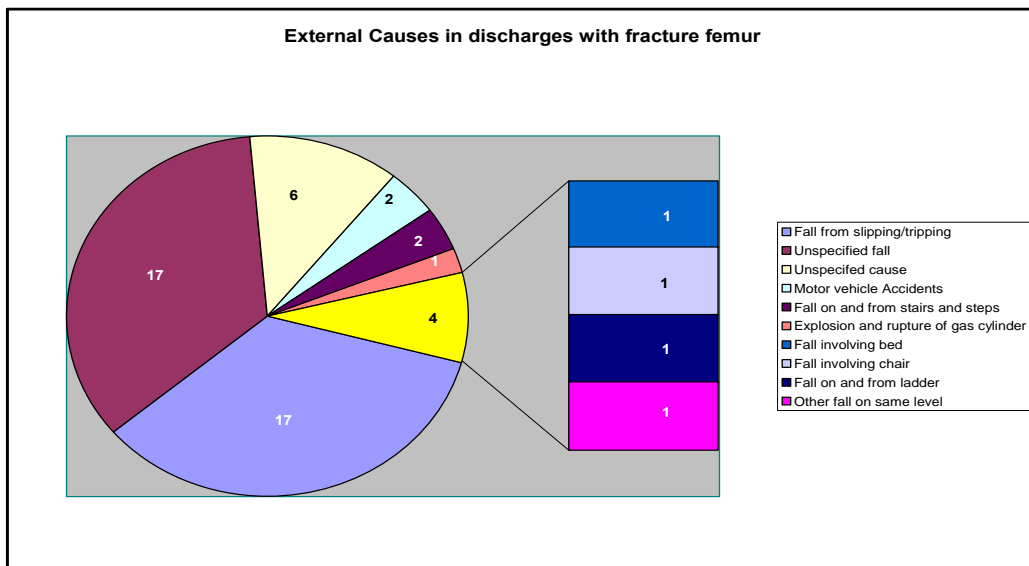


Chart XVIII: External causes in discharges for fractures of femur

Inpatients who were aged 65 years or older accounted for 1424 or 36.75% of all inpatient discharges. They used up 12033 or 55.7% of the total hospital days. The five most common diagnosis in this age group of patients were acute lower respiratory tract infection – unspecified (114 or 8.0%), congestive heart failure (62 or 4.3%), fainting and collapse (58 or 4.1%), chest pain – unspecified (57 or 4.0%), atrial fibrillation/flutter (42 or 2.9%) and cerebrovascular accident – unspecified (39 or 2.7%). 38 discharges in this group were for respite care and they used up 1058 hospital days.

Procedures

2198 patients had some form of procedure performed on them during their episodes of care at Gozo General Hospital during 2006. Thus 43.75% of all episodes of care were associated with one or more procedure. 21 discharges had their procedures performed at St. Luke's Hospital, Malta due to lack of facilities at Gozo General Hospital. These procedures included 10 CAT scans, 1 echocardiography and 10 coronary angiograms. In one of the latter cases, an angioplasty procedure (PTCA) was subsequently carried out.

Surgical procedures

At least one surgical procedure was reported in 2018 patients, or 40.17 % of all discharges (Chart XIX). 812 were males (40.3%) and 1206 (59.7%) were females. 1081 of these patients or 53.7% were admitted as day cases. 46 of the patients with surgical procedures had two reported procedures. Thus a total of 2064 surgical procedures were performed throughout 2006. This figure includes 11 surgical procedures performed at St. Luke's Hospital and the surgical procedures performed on day cases as well.

The proportion of discharges with at least one surgical procedure ranged from 0.10% in the 95 years and over age group to 10.38 % in the 45 to 49 age group. The latter group had the highest number of surgical procedures performed on them (209). The numbers and percentages of main surgical procedures by age groups and gender are shown in Table 17 and Chart XX.

Numbers and Percentages of Main surgical procedures						
Age Groups	Males		Females		Totals	
	Numbers	Percentage	Numbers	Percentage	Numbers	Percentage
Under 1 year	1	0.05%	1	0.05%	2	0.10%
1 - 4 years	13	0.64%	6	0.30%	19	0.94%
5 - 9 years	21	1.04%	10	0.50%	31	1.54%
10 - 14 years	17	0.84%	10	0.50%	27	1.34%
15 - 19 years	27	1.34%	21	1.04%	48	2.38%
20 - 24 years	27	1.34%	54	2.68%	81	4.01%
25 - 29 years	23	1.14%	125	6.19%	148	7.33%
30 - 34 years	37	1.83%	112	5.55%	149	7.38%
35 - 39 years	30	1.49%	93	4.61%	123	6.10%
40 - 44 years	45	2.23%	90	4.46%	135	6.69%

Age Groups	Males		Females		Totals	
	Numbers	Percentage	Numbers	Percentage	Numbers	Percentage
45 - 49 years	72	3.57%	137	6.79%	209	10.36%
50 - 54 years	55	2.73%	101	5.00%	156	7.73%
55 - 59 years	93	4.61%	86	4.26%	179	8.87%
60 - 64 years	62	3.07%	82	4.06%	144	7.14%
65 - 69 years	67	3.32%	62	3.07%	129	6.39%
70 - 74 years	98	4.86%	72	3.57%	170	8.42%
75 - 79 years	63	3.12%	60	2.97%	123	6.10%
80 - 84 years	35	1.73%	53	2.63%	88	4.36%
85 - 89 years	18	0.89%	19	0.94%	37	1.83%
90 - 94 years	7	0.35%	10	0.50%	17	0.84%
95 years & over	0	0.00%	2	0.10%	2	0.10%
Unknown age	1	0.05%	0	0.00%	1	0.05%
TOTALS	812	40.24%	1206	59.76%	2018	100.00%

Table17: Numbers and percentages of main surgical procedures by age groups and gender.

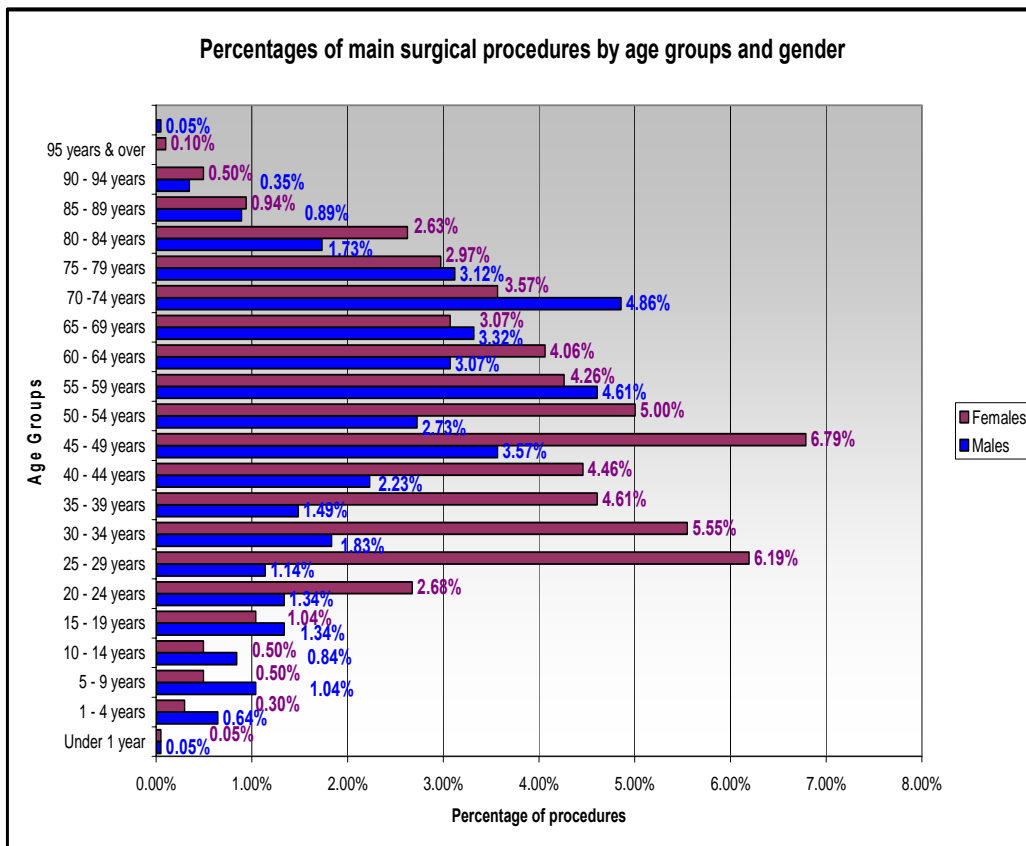


Chart XIX: Numbers of main surgical procedures by selected age groups and gender

Table 18 depicts the numbers all discharged patients, patients without procedures, patients with procedures and patients with surgical procedures by selected age groups and by gender.

Characteristics	All discharged patients	Patients without procedures	Patients with procedures	*Patients with surgical procedures
All patients	5024	2826	2198	2018
By age:				
Under 1 year	298	296	2	2
1 - 9 years	297	245	52	50
10 – 19 years	262	184	78	75
20 – 39 years	912	383	529	501
40 – 59 years	1190	475	715	679
60 – 79 years	1375	726	649	566
80 – 94 years	661	492	169	142
>=95 years & unspecified age	29	25	4	3
By gender				
Male	2401	1508	893	812
Female	2623	1318	1305	1206

*: Numbers refer to main or first listed operation/procedure.

Table 18: Number of patients discharged from hospital with and without procedures and with surgical procedures by selected age groups and gender

Table 19 show numbers and percentages of the “top” 25 main procedures performed on all discharges.

Main Surgical Procedure	Number of procedures	Percentage of procedures
Diagnostic procedures on large intestine - Colonoscopy	172	8.52
Dilatation and curettage including ERPC - 69.02, Diagnostic D&C - 69.09	140	6.89
Cataract extraction NOS	129	6.39
Diagnostic procedures on stomach - Gastroscopy	127	6.29
Other local excision/destruction of lesion or tissue of skin and subcutaneous tissue - mass/lump	117	5.80
Repair of current obstetric laceration	89	4.41
Diagnostic procedures on small intestine - OGD	81	4.01
Total abdominal hysterectomy	70	3.47
Cesarean Section and removal of foetus	57	2.82
Unilateral repair of inguinal hernia	56	2.78
Excision/destruction of lesion of eyelid - includes excision of cyst/chalazion/warts	50	2.48

Main Surgical Procedure	Number of procedures	Percentage of procedures
Episiotomy and repair	49	2.43
Diagnostic procedures on rectum/rectosigmoid - proctosigmoidoscopy/biopsy	48	2.38
Open reduction of fracture with internal fixation	45	2.23
Excision of lesion/tissue of skin and subcutaneous tissue - includes excision of pilonidal cyst (86.21), wound debridement (86.22,86.28), removal of nail or nail bed (86.23)	40	1.98
Lysis of adhesions and decompression of cranial and peripheral nerves - includes release of carpal tunnel (04.43), release of tarsal tunnel (04.44)	36	1.78
Joint replacement of lower extremity (81.51-total hip replacement // 81.52-partial hip replacement // 81.54 - TKR)	35	1.73
Diagnostic procedures of abdominal region - laparoscopy	33	1.64
Arthroscopy (80.26 - Knee)	32	1.59
Incision of skin and subcutaneous tissue - includes incision of pilonidal sinus (86.03)/ incision/drainage of abscess (86.04)/ incision & removal of f.b. (86.05)	30	1.49
Diagnostic procedures on uterus and supporting structures: 68.11: Digital exam of uterus/ 68.12 & 68.18:Hysteroscopy without and with biopsy	27	1.34
Laparotomy	26	1.29
Cystoscopy	25	1.24
Amputation of lower limb - toes/foot/ankle/below knee/knee/above knee/hip/pelvis	22	1.09
Appendectomy	22	1.09
Incision of chest wall/pleura - includes inserion of intercostal tube for drainage (34.04) and pleural tapping (34.09)	21	1.04

*: Codes mentioned refer to ICD9 CM – procedures codes for procedures

Table 19: Number and percentage of all listed main surgical procedures for discharged patients by the 25 most commonly performed surgical procedures

Main/first listed surgical procedures by category of operation/procedure are depicted in the following table.

Procedure category	Number of procedures	Percentage of Surgical procedures
Minor	928	45.99 %
Intermediate	598	29.63 %
Major	418	20.71 %
Major+	56	2.78 %
Complex Major	18	0.89 %
Total	2018	100 %

Categories are according to BUPA lists of procedures i.e. minor, intermediate, major, major+, and complex major procedures.

Table 20: Numbers and percentages of all main/first listed surgical procedure by BUPA category of procedures

Table 21 shows the distribution of all surgical procedures by age groups and the type of admission to hospital. Surgical Procedures on inpatients include all procedures performed on booked and emergency admissions, and unplanned readmissions to hospital. A further breakdown of all procedures performed on patients by type of admission is included at the end of this report (*Tables C & D*).

Age Groups	Inpatient Procedures	Day care Procedures	Total
Under 1 year	0	2	2
1 - 4 years	16	3	19
5 - 9 years	30	1	31
10 - 14 years	17	10	27
15 - 19 years	24	24	48
20 - 24 years	49	32	81
25 - 29 years	102	46	148
30 - 34 years	96	53	149
35 - 39 years	54	69	123
40 - 44 years	47	88	135
45 - 49 years	76	133	209
50 - 54 years	44	112	156
55 - 59 years	74	105	179
60 - 64 years	49	95	144
65 - 69 years	55	74	129
70 - 74 years	73	97	170
75 - 79 years	49	74	123
80 - 84 years	43	45	88
85 - 89 years	22	15	37
90 - 94 years	15	2	17
95 years & over	1	1	2
Unknown age	1	0	1
TOTAL	937	1081	2018

Table 21: All main/first listed surgical procedures by age groups and type of admission

Day care surgical procedures

1081 patients admitted as day cases had a diagnostic or therapeutic main surgical procedure recorded in the database. 22 day cases had 2 surgical procedures performed. The 20 most common surgical procedures performed on day cases are shown in Table 22.

Main Surgical Procedure	Number of procedures
Diagnostic procedures on large intestine - Colonoscopy	144
Dilatation and curettage including ERPC - 69.02: ERPC// 69.09: diagnostic D&C	128
Cataract extraction NOS	119
Other local excision/destruction of lesion or tissue of skin and subcutaneous tissue - lumps/mass	114
Diagnostic procedures on stomach - Gastroscopy	101
Diagnostic procedures on small intestine - OGD	70
Excision/destruction of lesion of eyelid - includes excision of cyst/chalazion/warts	49
Diagnostic procedures on rectum/rectosigmoid - proctosigmoidoscopy/biopsy	43
Lysis of adhesions and decompression of cranial and peripheral nerves - release of carpal tunnel (04.43)	33
Diagnostic procedures on uterus and supporting structures: 68.11: Digital exam of uterus/ 68.12 & 68.18:Hysteroscopy without and with biopsy	26
Arthroscopy (80.26 - Knee)	24
Cystoscopy	23
Diagnostic procedures of abdominal region - laparoscopy	22
Excision of lesion/tissue of skin and subcutaneous tissue - includes excision of pilonidal cyst (86.21), wound debridement (86.22,86.28), removal of nail or nail bed (86.23)	19
Manipulation of lacrimal passages	16
Psychiatric somatotherapy - ECT	15
Other operations on bladder - includes dilatation of bladder neck/ insertion and replacement of urinary catheter	8
Diagnostic procedures on lung and bronchus - bronchoscopy	6
Excision of pterygium/pinguacla	6
Incision of skin and subcutaneous tissue - includes incision of pilonidal sinus (86.03)/ incision/drainage of abscess (86.04)/ incision &removal of f.b. (86.05)	6
Excision of lesion of muscle, tendon and fascia of hand - ganglionectomy	5
Excision of other parts of mouth - 27.41:labial frenectomy/ 27.43:other excision of lesion of lip	5
Excision or other destruction of Bartholin's gland (cyst)	4
Excision/destruction of breast tissue - lumpectomy	4
Incision of chest wall/pleura - pleural tapping (34.09)	4

Table 22: Top 20 first listed surgical procedures performed on day cases.

The numbers of main or first listed surgical procedures performed on day cases are shown broken down by the BUPA categories of procedures in Chart XX.

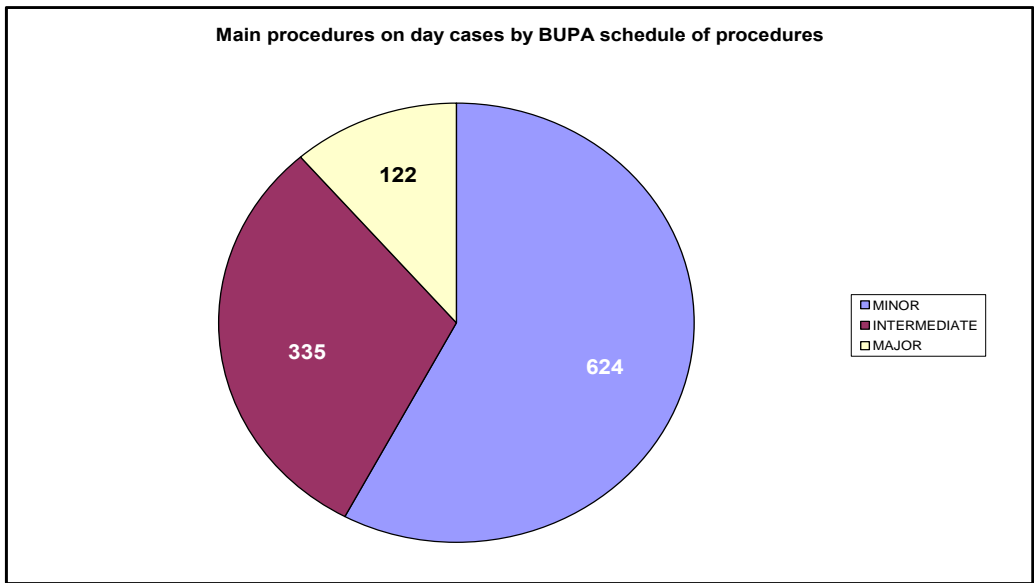


Chart XX: Main surgical procedures on day cases by BUPA category of procedures

Other considerations

Three common obstetric procedures i.e. episiotomy and repair, Caesarean section, and repair of obstetric laceration, accounted for 195 or 9.7% of all surgical procedures performed. 57 Caesarean sections were performed; of these 31 were elective procedures and 26 were emergency sections. The rate for Caesarean section per 100 deliveries was 21.3 (%). There were 23.2 episiotomies and 42.2 lacerations per 100 vaginal deliveries.

The numbers of obstetric procedures performed are depicted in Chart XXI.

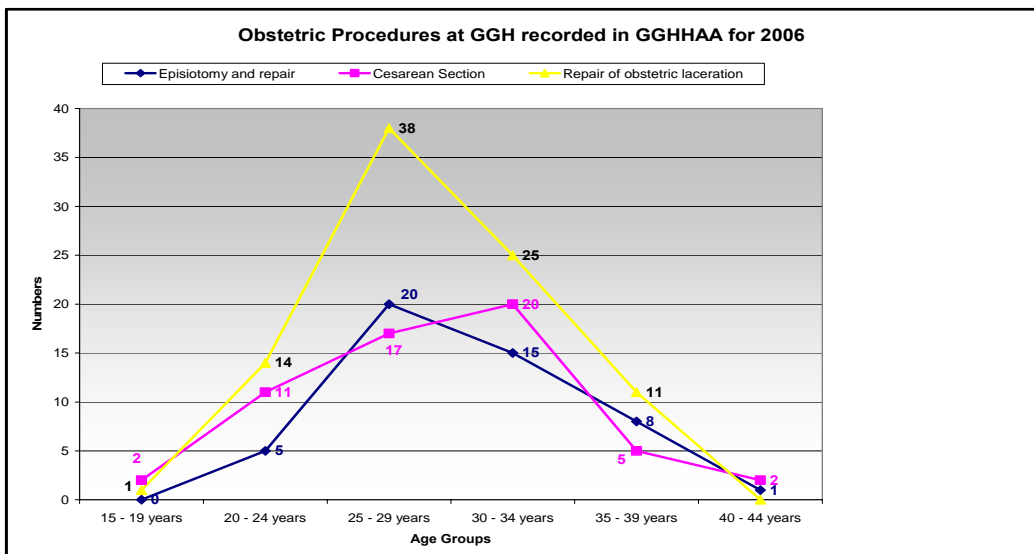


Chart XXI: Surgical Obstetric procedures performed

Surgical procedures on the digestive system amounted to 607 (31.1% of all surgical procedures) including diagnostic and screening endoscopies. The latter amounted to a total of 428 procedures. The most common surgical operations performed on the digestive system were hernia repairs (78), appendectomy (22) and exploratory laparotomy (26).

Surgical procedures on the female genital tract and organs, excluding obstetric procedures, made up 301 or 14.9% of all first listed surgical procedures. These included 7 procedures on the ovaries (ICD9 code 65), 256 procedures on the uterus and supporting structures (ICD9 codes 68 and 69), 9 procedures on the cervix (ICD9 code 67), 20 procedures on the vagina and *cul-de-sac* (ICD9 code 70), and 9 procedures on the vulva and perineum (ICD9 code 71). In addition 33 gynaecological laparoscopies were performed.

The hospital activity database recorded 219 surgical procedures on the eye. These include 58 procedures on the eyelids (ICD9 code 08), 19 procedures on the lachrymal system, 7 procedures on the cornea (excision of pterygium), 129 operations on the lens (cataract extraction) and 5 procedures on the retina.

175 operations on the musculo-skeletal system were recorded. These made up 8.7% of all surgical procedures performed. They included reduction of fractures and fixation (51), knee arthroscopies (32), 22 amputations, 16 knee replacements, 19 partial or total hip replacements, and 4 procedures for the removal of implanted devices (K wires etc.) from bone.

There were 48 recorded first listed surgical procedures on the ear, nose, and throat. These included tonsillectomy, with or without adenoidectomy (33), adenoidectomy (3), 5 procedures involving removal of nasal polyps, and 4 myringotomies with or without "grommet" insertion.

There were 48 recorded procedures on the urinary system. The bulk of these were cystoscopies (25) and insertion/replacement of indwelling urinary catheters (21).

31 surgical procedures on the male genital system are recorded. These comprise 11 procedures on the prostate (biopsy), 5 procedures on the scrotum and tunica vaginalis, 2 operations on the testes, 2 procedures on the spermatic cord, and 11 operations on the penis (circumcision/division of penile adhesions)

Non surgical procedures.

A total of 234 patients are recorded as having had a non-surgical procedure during their stay at Gozo General Hospital. 104 were males and 130 were females. 54 of these patients had also an associated surgical procedure performed. 80 of the non surgical procedures were performed on day care patients.

The ten most common non surgical procedures performed on the patients who were admitted to hospital solely for a non surgical procedure are shown in Table 23:

ICD9 Code	Procedure	Numbers of procedures performed
99.29	Injection or infusion of other therapeutic substance	55
99.03	Other transfusion of whole blood	26
99.62	Other electric countershock of heart - cardioversion	14
97.64	Removal/adjustment of indwelling urinary catheter	12
96.39	Other transanal enema (enema saponis)	10
87.03	C.A.T. scan of head - carried out at SLH	10
88.76	Diagnostic ultrasound of abdomen and retroperitoneum	10
73.4	Medical Induction of labour	8
88.60	Phlebography using contrast material	4
88.01	C.A.T. scan of abdomen – carried out at SLH	3
99.60	Cardiopulmonary resuscitation (CPR)	3
87.64	Lower GI series (Barium enema examination)	2
88.75	Diagnostic ultrasound of urinary system	2
88.79	Other diagnostic ultrasound (multiple sites)	2
97.74	Removal of other vaginal pessary	1

Table23: Most common recorded non surgical procedures performed at or through Gozo General Hospital in 2006.

A detailed list of all recorded procedures on the GGHHAA for 2006 is included in the section “Detailed Tables” at the end of the report.

Out patients sessions.♦

There were a total of 40562 out patient episodes at Gozo General Hospital throughout 2006. 11089 appointments involved new cases (referrals) and 29473 were follow-up appointments.

Clinic	New cases	Follow-ups	Total
Medical	839	2418	3257
Diabetic	45	1633	1678
Anti-coagulant clinic (ACC)	23	1495	1518
Shedule V Clinic	1816	1776	3592
Neurology Clinic	0	0	0
Dietician Clinic	0	72	72
VCC*	0	72	72
Asthma Clinic	0	72	72
Pace Maker Clinic	4	212	216
Acupuncture Clinic	0	275	275
Dental Clinic	2345	3606	5951
ENT Clinic	653	479	1132
Audiogram Clinic	2	140	142
Speech therapy Clinic	84	1501	1585
Psychiatric Clinic	51	1103	1154
Surgical	924	1799	2723
Orthopaedics	648	903	1551
Dermatology	533	565	1098
Antenatal Clinic	176	902	1078
Gynaecology Clinic	460	645	1105
Paediatric Clinic	260	1094	1354
Podology Clinic	1067	6359	7426
Radiotherapy Clinic	45	640	685
Ophthalmic Clinic	1111	1725	2836
Totals	11086	29486	40572

* Visiting Consultant Clinic. Also used for "cardiac" patients.

Table 24: Breakdown of out patients appointments for Gozo General Hospital throughout 2006 by clinic and category of appointment

♦ Data on out patients is not stored in the database on hospital activity. The figures in the out patients' appointments table were supplied by Gozo General Hospital.

Detailed Tables

The numbers of all discharges from Gozo General Hospital for 2006, bed days (LOS), ALOS and bed day (LOS) rate by main discharge diagnosis according to ICD10 classification are shown in the following table. The listed main diagnoses have been adapted from the International Shortlist for Hospital Morbidity Tabulation (ISHMT) collected by E.U.

Main Diagnosis	Number of episodes	LOS	ALOS	LOS per 100000 population*
Intestinal Infectious diseases except diarrhea (ICD10 codes A00 – A08)	2	15	7.5	48.4
Septicaemia (ICD10 codes A40 – A41)	5	82	16.4	264.5
Other infections and parasitic diseases (remainder of ICD10 codes A00 – B99)*	33	131	4.0	422.6
<i>Typhus (A75)</i>	7	24	3.4	77.42
<i>Meningococcal & viral Meningitis (A39, A87)</i>	7	18	2.6	58.07
<i>Viral infections & viraemia (B34)</i>	12	52	4.3	167.75
<i>Herpes virus infections B00 - B02)</i>	2	8	4.0	25.81
<i>Leishmaniasis (B55)</i>	1	29	29.0	93.55
<i>Warts</i>	4	0	0.0	0.00
Malignant neoplasms of colon, rectum and anus (ICD10 C18 – C21)	9	63	7.0	203.2
Malignant neoplasms of trachea, bronchus and lung (ICD codes C33 – C34)	12	309	25.8	996.8
Malignant neoplasms of skin (ICD10 codes C43 – C44)	6	14	2.3	45.2
Malignant neoplasms of breast (ICD10 code C50)	17	57	3.4	183.9
Malignant neoplasm of uterus (ICD10 codes C53 – C55)	7	81	11.6	261.3
Malignant neoplasm of ovary (ICD10 code C56)	1	4	4.0	12.9
Malignant neoplasm of prostate (ICD10 code C61)	1	66	66.0	212.9
Malignant neoplasm of urinary bladder (ICD code C67)	3	8	2.7	25.8
Other malignant neoplasms (remainder of ICD 10 codes C00 – C97)*	30	269	9.0	867.8
<i>Bone marrow tumours (C90 - C92)</i>	4	53	13.3	170.98
<i>Tumours of liver and hepatobiliary tree (C22, C24)</i>	3	33	11.0	106.46
<i>Metastatic neoplasms, tumours of unknown primary site (C79, C80)</i>	4	31	7.8	100.01
<i>Brain tumour (C71)</i>	3	27	9.0	87.10
<i>Tumour of pancreas (C25)</i>	5	54	10.8	174.20

Main Diagnosis	Number of episodes	LOS	ALOS	LOS per 100000 population*
<i>Malignant neoplasm of vagina (C52)</i>	1	13	13.0	41.94
<i>Neoplasm of bone and connective tissue (C41, C49)</i>	2	16	8.0	51.62
<i>Kidney tumours (C64)</i>	3	9	3.0	29.03
<i>Tumour of oesophagus (C15)</i>	1	21	21.0	67.75
<i>Mesotheloma (C45)</i>	3	7	2.3	22.58
<i>Tumour of stomach (C16)</i>	1	5	5.0	16.13
Myoma of uterus (ICD10 code D25)	32	129	4.0	416.2
Other benign neoplasms (remainder of ICD10 codes D00 – D48)*	26	3	0.1	9.68
<i>Lipomas (D17)</i>	12	3	0.3	9.68
<i>Melanocytic naevi (D22)</i>	9	0	0.0	0.00
<i>Other benign neoplasms of skin (D23)</i>	2	0	0.0	0.00
<i>Haemangioma (D18)</i>	1	0	0.0	0.00
<i>Polycythaemia (D45)</i>	1	0	0.0	0.00
<i>Benign neoplasm of vulva (D28)</i>	1	0	0.0	0.00
Anaemias (ICD10 codes D50 – D64)	60	169	2.8	545.2
Other diseases of the blood and blood forming organs and certain disorders of the immune mechanism (D65 – D89)	1	2	2.0	6.5
Diabetes Mellitus (ICD10 codes E10 – E14)	45	440	9.8	1419.4
Other endocrine, nutritional and metabolic diseases (remainder of ICD10 codes E00 – E90)*	34	364	10.7	1174.3
<i>Dehydration (E86)</i>	17	248	14.6	800.05
<i>Hypoglycaemia (E16)</i>	13	110	8.5	354.86
<i>Ovarian dysfunction - polycystic syndrome (E28.2)</i>	2	0	0.0	0.00
<i>Testicular dysfunction (E29)</i>	1	2	2.0	6.45
<i>Non toxic goitre (E04)</i>	1	4	4.0	12.90
Dementia (ICD10 codes F00 – F03)	5	28	5.6	90.3
Mental and behaviour disorders due to alcohol (ICD10 code F10)	17	18	1.1	58.1
Mental and behaviour disorders due to other psychotropic substance (ICD10 codes F11 – F19)	1	18	18.0	58.1
Schizophrenia and delusional disorders (ICD10 codes F20 - F29)	4	95	23.8	306.5
Mood (affective) disorders (ICD10 codes F30 – F39)	42	545	13.0	1758.2

Main Diagnosis	Number of episodes	LOS	ALOS	LOS per 100000 population*
Other mental and behaviour disorders (remainder of ICD10 codes F00 – F99)*	24	110	4.6	354.9
<i>Anxiety state, hysterical attacks (F41)</i>	21	66	3.1	212.92
<i>Organic brain syndrome (F06)</i>	2	18	9.0	58.07
<i>Obsessive compulsive disorder (F42)</i>	1	26	26.0	83.88
Multiple Sclerosis (ICD10 code G35)	15	0	0.0	0.0
Epilepsy (ICD10 codes G40, G41)	17	36	2.1	116.1
Transient cerebral ischaemic attacks & related syndromes (ICD10 code G45)	25	162	6.5	522.6
Other diseases of the nervous system (remainder of ICD10 codes G00 – G99)*	56	116	2.1	374.2
<i>Carpal tunnel syndrome (G56)</i>	36	1	0.0	3.23
<i>Meningitis - unspecified (G03)</i>	4	24	6.0	77.42
<i>Myotonic disorders and other myopathies (G71, G72)</i>	2	5	2.5	16.13
<i>Guillian Barre' syndrome (G61)</i>	2	19	9.5	61.29
<i>Migraine (G43)</i>	2	3	1.5	9.68
<i>Sleep apnoea (G47.3)</i>	2	13	6.5	41.94
<i>Benign Intracranial hypertension (G93.2)</i>	1	4	4.0	12.90
<i>Cerebellar ataxia (G11)</i>	1	17	17.0	54.84
<i>Cerebral palsy (G80)</i>	1	3	3.0	9.68
<i>Encephalitis (G05)</i>	1	14	14.0	45.16
<i>Nerve root & plexus compression (G55)</i>	1	6	6.0	19.36
<i>Facial nerve disorders (G51)</i>	1	0	0.0	0.00
<i>Todd's paralysis (G83)</i>	1	3	3.0	9.68
<i>Trigeminal neuralgia (G50)</i>	1	4	4.0	12.90
Cataract (ICD10 codes H25, H26, H28)	129	18	0.1	58.1
Other diseases of the eye (remainder of ICD10 codes H00 – H59)*	91	32	0.4	103.2
<i>Glaucoma (H40)</i>	1	0	0.0	0.00
<i>Other disorders of eyelids (warts, xanthelasma, entropion etc) (H02, H03)</i>	26	2	0.1	6.45
<i>Disorders of lacrimal system (H04)</i>	19	2	0.1	6.45
<i>Eyelid cysts (H00)</i>	32	0	0.0	0.00
<i>Pterygium (H11.0)</i>	7	0	0.0	0.00
<i>Retinal detachment (H33)</i>	5	28	5.6	90.33
<i>Strabismus (H50)</i>	1	0	0.0	0.00

Main Diagnosis	Number of episodes	LOS	ALOS	LOS per 100000 population*
Diseases of the ear and mastoid (ICD10 codes H60 – H95)*	27	61	2.3	196.8
<i>Otitis externa (H60)</i>	3	7	2.3	22.58
<i>Otitis media (H65, H66)</i>	7	15	2.1	48.39
<i>Labyrinthine Dysfunction (H83)</i>	12	37	3.1	119.36
<i>Conductive hearing loss (H90.2)</i>	2	1	0.5	3.23
<i>Impacted cerumen (H61.2)</i>	2	0	0.0	0.00
<i>Disorders of vestibular function (H81)</i>	1	1	1.0	3.23
Hypertensive diseases (ICD10 codes I10 – I15)	12	32	2.7	103.2
Angina Pectoris (ICD10 code I20)	10	56	5.6	180.7
Acute myocardial infarction (ICD10 codes I21 - I22)	32	269	8.4	867.8
Other ischaemic heart disease (ICD10 codes I23 – I25)	14	110	7.9	354.9
Pulmonary heart disease & diseases of pulmonary circulation (ICD10 codes I26 – I28)	1	2	2.0	6.5
Conduction disorders & arrhythmias (ICD10 codes I44 – I48)	87	374	4.3	1206.5
Heart failure (ICD10 code I50)	85	562	6.6	1813.0
Cerebrovascular disease (ICD10 codes I60 – I64)	54	879	16.3	2835.7
Varicose veins of lower extremities (ICD code I83)	6	14	2.3	45.2
Other diseases of the circulatory system (remainder of ICD10 codes I00 – I99)*	38	294	7.7	948.4
<i>Phlebitis/Thrombophlebitis (I80)</i>	15	103	6.9	332.28
<i>Haemorrhoids (I84)</i>	8	23	2.9	74.20
<i>Hypotension (I95)</i>	4	18	4.5	58.07
<i>Arterial Thromboembolism (I74)</i>	3	30	10.0	96.78
<i>Peripheral Vascular disease (I73)</i>	3	84	28.0	270.99
<i>Aortic aneurysm (I71)</i>	1	5	5.0	16.13
<i>Cardiomyopathy (I42)</i>	1	16	16.0	51.62
<i>Lymphangitis (I89)</i>	1	3	3.0	9.68
<i>Pericarditis (I31)</i>	1	1	1.0	3.23
<i>Valvular heart disease (I38)</i>	1	11	11.0	35.49
Upper Respiratory Tract Infections & Influenza (ICD10 codes J00 – J11)	59	182	3.1	587.1
Pneumonia (ICD10 codes J12 – J18)	28	201	7.2	648.4
Other lower respiratory tract infections (ICD10 codes J20 – J22)	213	1466	6.9	4729.3
Chronic diseases of tonsils and adenoids (ICD10 code J35)	34	57	1.7	183.9

Main Diagnosis	Number of episodes	LOS	ALOS	LOS per 100000 population*
Other diseases of the upper respiratory tract (ICD10 codes J30 – J34, J36 – J39)	9	7	0.8	22.6
Chronic obstructive pulmonary disease & bronchiectasis (ICD10 codes J40 – J44, J47)	26	179	6.9	577.5
Asthma (ICD10 codes J45, J46)	13	54	4.2	174.2
Other diseases of the respiratory system (ICD10 codes J60 – J99)*	40	348	8.7	1122.7
<i>Pleural effusion – unspecified (J90)</i>	18	100	5.6	322.60
<i>Pneumonitis due to solids & liquids - aspiration (J69)</i>	16	220	13.8	709.72
<i>Interstitial pulmonary disease with fibrosis (J84)</i>	2	2	1.0	6.45
<i>Pneumothorax (J93)</i>	1	15	15.0	48.39
<i>Other diseases of bronchus not elsewhere classified (J98)</i>	1	3	3.0	9.68
<i>Haemothorax (J84.2)</i>	1	6	6.0	19.36
<i>Respiratory failure (J96)</i>	1	2	2.0	6.45
Disorders of teeth & supporting structures (ICD10 codes K00 – K08)	13	19	1.5	61.3
Other diseases of oral cavity, salivary glands and jaws (ICD10 codes K09 – K14)	7	2	0.3	6.5
Diseases of the oesophagus (ICD10 codes K20 – K23)	7	58	8.3	187.1
Peptic Ulcer (ICD10 codes K25 – K28)	3	3	1.0	9.7
Dyspepsia & other diseases of stomach and duodenum (ICD10 codes K29 – K31)	114	194	1.7	625.8
Diseases of the appendix (ICD10 codes K35 – K38)	27	129	4.8	416.2
Inguinal hernia (ICD10 code K40)	58	245	4.2	790.4
Other abdominal hernia (ICD10 codes K41 – K46)	22	67	3.0	216.1
Crohn's disease & ulcerative colitis (ICD10 code K52)	4	19	4.8	61.3
Other non infective gastroenteritis and colitis (ICD10 code K52)	150	511	3.4	1648.5
Intestinal obstruction without hernia (ICD10 code K56)	15	129	8.6	416.2
Diverticular disease of intestine (ICD10 code K57)	18	107	5.9	345.2
Diseases of anus and rectum (ICD10 codes K60 – K62)	97	125	1.3	403.3
Other diseases of intestine (ICD10 codes K55, K58, K59, K63)	48	110	2.3	354.9

Main Diagnosis	Number of episodes	LOS	ALOS	LOS per 100000 population*
Alcoholic liver disease (ICD10 code K70)	6	68	11.3	219.4
Other diseases of liver (ICD10 codes K71 – K77)	3	19	6.3	61.3
Cholelithiasis (ICD10 code K80)	9	53	5.9	171.0
Other diseases of gall bladder & biliary tract (ICD10 codes K81 – K83)	19	124	6.5	400.0
Diseases of pancreas (ICD10 codes K85 – K87)	3	21	7.0	67.7
Other diseases of digestive system (remainder of ICD10 codes K00 – K99)*	37	402	10.9	1296.9
<i>Gastrointestinal haemorrhage (K92)</i>	<i>33</i>	<i>259</i>	<i>7.8</i>	<i>835.54</i>
<i>Peritonitis - unspecified (K65)</i>	<i>3</i>	<i>133</i>	<i>44.3</i>	<i>429.06</i>
<i>Mesenteric cyst (K66)</i>	<i>1</i>	<i>10</i>	<i>10.0</i>	<i>32.26</i>
Infections of skin & subcutaneous tissue (ICD10 codes L00 – L08)	52	352	6.8	1135.6
Dermatitis, eczema & papulosquamous disorders (ICD10 codes L20 – L45)	2	6	3.0	19.4
Other diseases of the skin and subcutaneous tissues (remainder of ICD10 codes L00 – L99)*	84	99	1.2	319.4
<i>Rashes (L50, L51)</i>	<i>3</i>	<i>3</i>	<i>1.0</i>	<i>9.68</i>
<i>Ulcers & pressure sores L89, L97)</i>	<i>10</i>	<i>95</i>	<i>9.5</i>	<i>306.47</i>
<i>Cysts including sebaceous cysts (L72)</i>	<i>55</i>	<i>1</i>	<i>0.02</i>	<i>3.23</i>
<i>Nail disorders incl. IGTN (L60)</i>	<i>12</i>	<i>0</i>	<i>0.0</i>	<i>0.00</i>
<i>Other skin lesions incl keloids, sinuses (L85, L91, L98)</i>	<i>4</i>	<i>0</i>	<i>0.0</i>	<i>0.00</i>
Coxarthrosis (ICD10 code M16)	6	73	12.2	235.5
Gonarthrosis (ICD10 code M17)	17	132	7.8	425.8
Internal derangement of the knee (ICD10 code M23)	2	0	0.0	0.0
Other arthropathies (ICD10 codes M00 – M15, M18 – M22, M24, M25)	52	78	1.5	251.6
Systemic connective tissue disorders (ICD10 codes M30 – M36)	2	12	6.0	38.7
Deforming dorsopathies & spondylopathies (ICD10 codes M40 – M49)	1	6	6.0	19.4
Intervertebral disc disorders (ICD10 codes M50, M51)	2	59	29.5	190.3
Dorsalgia (ICD10 code M54)	47	388	8.3	1251.7
Soft tissue disorders (ICD10 codes M60 – M79)	46	65	1.4	209.7

Main Diagnosis	Number of episodes	LOS	ALOS	LOS per 100000 population*
Other disorders of the musculoskeletal system and connective tissue (ICD10 codes M53, M80 – M99)*	10	17	1.7	54.8
<i>Non union of fracture/fracture following prosthesis insertion (M84, M96)</i>	2	9	4.5	29.03
<i>Osteomyelitis (M86)</i>	1	5	5.0	16.13
<i>Osteoporosis (M81)</i>	5	3	0.6	9.68
<i>Paget's disease (M88)</i>	2	0	0.0	0.00
Glomerular & renal tubulo-interstitial diseases (ICD10 codes N00 - N16)	4	39	9.8	125.8
Renal failure (ICD10 codes N17 – N19)	6	72	12.0	232.3
Urolithiasis (ICD10 codes N20 – N23)	46	120	2.6	387.1
Other diseases of urinary system (ICD10 codes N25 – N39)*	38	211	5.6	680.7
<i>Squamous metaplasia - bladder (N32)</i>	1	0	0.0	0.00
<i>Unspecified Urinary tract infection/incontinence (N39)</i>	35	211	6.0	680.69
<i>Urethral stricture & other disorders (N35, N36)</i>	2	0	0.0	0.00
Hyperplasia of prostate (ICD10 code N40)	5	43	8.6	138.7
Other diseases of male genital organs (ICD10 codes N41 – N45)*	23	41	1.8	132.3
<i>Disorders of epididymis (N45)</i>	4	11	2.8	35.49
<i>Hydrocoele (N47)</i>	4	7	1.8	22.58
<i>Phimosis & paraphimosis (N47)</i>	11	13	1.2	41.94
<i>Prostatitis (N41)</i>	1	5	5.0	16.13
<i>Scrotal inflammation (N49.2)</i>	1	2	2.0	6.45
<i>Torsion of testes (N44)</i>	2	3	1.5	9.68
Disorders of the breast – cysts/lumps/nipple discharge/ abscess (ICD10 codes N60 – N64)	17	18	1.1	58.1
Inflammatory diseases of female pelvic organs (ICD10 codes N70 – N77)	5	13	2.6	41.9
Menstrual, menopausal & other female genital conditions – abnormal vaginal bleeding (ICD10 codes N91 – N95)	152	145	1.0	467.8
Other disorders of the genitourinary system (remainder of ICD10 codes N00 – N99)*	104	233	2.2	751.7
<i>Polyps of genital tract (N84)</i>	26	10	0.4	32.26
<i>Non inflammatory disorders of ovary & tubes (incl. cysts) (N83)</i>	26	115	4.4	370.99

Main Diagnosis	Number of episodes	LOS	ALOS	LOS per 100000 population*
<i>Endometriosis (N80)</i>	19	42	2.2	135.49
<i>Female genital prolapse (N81)</i>	13	54	4.2	174.20
<i>Female infertility (N97)</i>	9	0	0.0	0.00
<i>Non inflammatory disorders of vagina & vulva (N89, N90)</i>	7	2	0.3	6.45
<i>Non inflammatory disorders of uterus except cervix (N85)</i>	2	10	5.0	32.26
<i>Dysplasia of cervix (N87)</i>	2	0	0.0	0.00
Other pregnancy with abortive outcome (ICD10 codes O00 –O03, O05 – O08)	24	10	0.4	32.3
Complications of pregnancy in antenatal period (ICD10 codes O10 – O48)	16	36	2.3	116.1
Complications of pregnancy during labour & delivery (ICD10 codes O60 – O75)	1	6	6.0	19.4
Single spontaneous delivery (ICD code O80)	206	552	2.7	1780.8
Other forms of delivery (assisted, multiple & LSCS) (ICD10 codes O81 – O84)	62	309	5.0	996.8
Other conditions originating in perinatal period except disorders related to short gestation and low birth weight (ICD10 codes P00 – P96 except P07)	2	6	3.0	19.4
Congenital malformations, deformations & chromosomal abnormalities (ICD codes Q00 – Q99)	3	5	1.7	16.1
Pain in throat and chest (ICD10 code R07)	165	459	2.8	1480.7
Abdominal and pelvic pain (ICD10 code R10)	329	729	2.2	2351.8
Other symptoms/signs and abnormal clinical & lab. findings (All ICD10 R codes except R07, R10 and R69)*	492	2239	4.6	7223.0
<i>Fainting/collapse (R55)</i>	98	473	4.8	1525.90
<i>Others S&S/abnormal lab results</i>	53	215	4.1	693.59
<i>Nausea, vomiting, heartburn, dysphagia (R11, R12, R13)</i>	46	91	2.0	293.57
<i>Haematuria (R31)</i>	44	120	2.7	387.12
<i>Palpitations/bradycardia/tachycardia (R00)</i>	39	91	2.3	293.57

Main Diagnosis	Number of episodes	LOS	ALOS	LOS per 100000 population*
<i>Localised swelling/mass/lump (R22)</i>	33	8	0.2	25.81
<i>Headache (R51)</i>	28	72	2.6	232.27
<i>Fever/PUO (R50)</i>	27	136	5.0	438.74
<i>Gangrene/necrosis (R02)</i>	26	481	18.5	1551.71
<i>Weakness/malaise/deterioration (R53)</i>	23	235	10.2	758.11
<i>Dyspnoea/Stridor (R06)</i>	22	98	4.5	316.15
<i>Anorexia/weight loss (R63)</i>	15	82	5.5	264.53
<i>Other S&S involving digestive system and abdomen (altered bowel habits) (R19)</i>	9	8	0.9	25.81
<i>Confusion (R41)</i>	8	35	4.4	112.91
<i>Convulsions not elsewhere classified (R56)</i>	7	63	9.0	203.24
<i>Dizziness (R42)</i>	7	15	2.1	48.39
<i>Retention of urine R33)</i>	7	16	2.3	51.62
Intracranial Injury (ICD10 Code S06)	1	2	2.0	6.5
Other injuries to the head (ICD10 codes S00 – S05, S07 – S09)	115	264	2.3	851.7
Fracture of forearm (ICD10 code S52)	7	7	1.0	22.6
Fracture of femur (ICD10 code S72)	49	836	17.1	2696.9
Fracture of lower leg, including ankle (ICD10 code S82)	15	188	12.5	606.5
Other injuries (ICD10 codes S10 – S51, S53 – S71, S73 – S81, S83 – T14, T79)*	87	328	3.8	1058.1
<i>Injuries of the neck (S10-S19)</i>	7	28	4.0	90.33
<i>Superficial of thorax (S20)</i>	9	25	2.8	80.65
<i>Fracture of ribs & thoracic spine (S22)</i>	11	66	6.0	212.92
<i>Unspecified injury of thorax (S29)</i>	1	4	4.0	12.90
<i>Sup. Injury of abdomen, lower back/pelvis (S30)</i>	12	29	2.4	93.55
<i>Fracture lumbar spine/pelvis (S32)</i>	8	76	9.5	245.18
<i>Sup. Injury- shoulder (S40)</i>	1	2	2.0	6.45
<i>Fracture - humerus (S42.3)</i>	1	0	0.0	0.00
<i>Sup. & open wounds - forearm (S50, S51)</i>	3	5	1.7	16.13
<i>open wounds of wrist/hand (S61), tendon injury -hand (S66), Crushing injury - hand (S67)</i>	5	1	0.2	3.23
<i>Sup. Injury of hip/thigh (S70)</i>	6	38	6.3	122.59
<i>Sup. Injury of lower leg (S80)</i>	4	19	4.8	61.29
<i>Open wound - lower leg (S81)</i>	3	2	0.7	6.45
<i>Sprain of ligaments of knee (S82)</i>	4	5	1.3	16.13

Main Diagnosis	Number of episodes	LOS	ALOS	LOS per 100000 population*
<i>Open wound - ankle& foot (S91)</i>	3	4	1.3	12.90
<i>Fracture of foot (S92), Dislocation - ankle (S93)</i>	4	5	1.3	16.13
<i>Sup. Injuries involving multiple body parts (T00)</i>	1	2	2.0	6.45
<i>Fractures involving mutiple body regions (T02)</i>	1	1	1.0	3.23
<i>Injuries of spine/trunk - level unspecified (T09)</i>	2	16	8.0	51.62
<i>Injuries of lower limb - unspecified level (T13)</i>	1	0	0.0	0.00
Burns and corrosions (ICD10 T20 – T32)	3	29	9.7	93.6
Poisoning by drugs, medications and biological substances & toxic effects of substances chiefly of a non medicinal source (ICD10 codes T36 – T65)	10	19	1.9	61.3
Complications of surgical and medical care, not elsewhere classified (ICD10 codes T80 – T88)	22	106	4.8	342.0
Other and unspecified effects of external causes	16	34	2.1	109.7
Medical observation & evaluation for suspected diseases and conditions (ICD10 code Z03)	5	6	1.2	19.4
Contraceptive management (ICD10 code Z30)	2	0	0.0	0.0
Liveborn infants (healthy newborn babies) (ICD10 code Z38)	272	798	2.9	2574.4
Other medical care (including radiotherapy/chemotherapy) (ICD10 code Z51)	1	6	6.0	19.4
Other factors influencing health status and contact with health services (remainder of ICD10 codes Z00 – Z99)*	197	1486	7.5	4793.9
<i>Examination & observation (Z04)</i>	4	6	1.5	19.36
<i>Follow up exam after treatment other than neoplasms (Z09)</i>	2	3	1.5	9.68
<i>Examination/screening for TB (Z11.1)</i>	1	0	0.0	0.00
<i>Examination/screening for neoplasm of intestine (Z12.1)</i>	8	2	0.3	6.45
<i>Examination/screening for cervical NG (Z12.4)</i>	1	1	1.0	3.23
<i>Examination/screening for prostate NG (Z12.5)</i>	8	15	1.9	48.39
<i>Examination/screening for neoplasm - other sites (Z12.8)</i>	2	0	0.0	0.00

Main Diagnosis	Number of episodes	LOS	ALOS	LOS per 100000 population*
<i>Supervision of high risk pregnancy (Z35)</i>	1	1	1.0	3.23
<i>Post partum care (Z39)</i>	2	9	4.5	29.03
<i>Procedures other than remedying health status (Z41)</i>	1	5	5.0	16.13
<i>Attention to artificial openings (Z43)</i>	6	54	9.0	174.20
<i>Adjustment of implanted device - pacemakers (Z45)</i>	4	3	0.8	9.68
<i>Fitting/adjustment of other devices - mainly urinary (Z46)</i>	23	13	0.6	41.94
<i>Orthopaedic follow up care (Z47)</i>	5	0	0.0	0.00
<i>Surgical follow up care (Z48)</i>	5	23	4.6	74.20
<i>Rehabilitation processes (Z50)</i>	8	85	10.6	274.21
<i>Specific procedures not carried out (Z53)</i>	23	9	0.4	29.03
<i>Problems related to med. Facilities - respite (Z75)</i>	43	1250	29.1	4032.52
<i>Family history of malignant neoplasms (Z80)</i>	28	0	0.0	0.00
<i>Family history of other specific disorders (Z83)</i>	1	0	0.0	0.00
<i>Personal history of malignant neoplasm (Z85)</i>	5	0	0.0	0.00
<i>Personal history of other neoplasms - intestinal polyps (Z86)</i>	13	7	0.5	22.58
<i>Personal history of other diseases (Z87)</i>	3	0	0.0	0.00
TOTAL	5024	21618	4.3	69740.0

*: Based on total population estimate of 30998 according to Demographic Review 2005 – NSO

Table A: All episode diagnoses listed in GGHHAA for 2006 together with hospital days spent (LOS), average length of stay (ALOS) and hospital bed day rate.

Note: The sections of the table which are in bold (blue) are further broken down into the respective diagnoses as they are entered in the database. The “break down” sections are in italics.

The following table shows numbers of surgical procedures performed by the method or category of admission, age groups, and gender. Counts of inpatient procedures include the procedures under categories of admission listed as: booked admissions, emergency admissions, and unplanned readmissions.

Age Groups	Booked Admissions		Emergency Admissions		Day Care Admissions		Unplanned Admissions		Total
	Males	Females	Males	Females	Males	Females	Males	Females	
Under 1 year	0	0	0	0	1	1	0	0	2
1 - 4 years	7	3	5	1	1	2	0	0	19
5 - 9 years	13	10	7	0	1	0	0	0	31
10 - 14 years	4	4	6	3	7	3	0	0	27
15 - 19 years	5	7	8	4	14	10	0	0	48
20 - 24 years	5	33	5	6	17	15	0	0	81
25 - 29 years	8	83	3	8	12	34	0	0	148
30 - 34 years	6	70	8	11	23	30	0	1	149
35 - 39 years	7	39	3	5	20	49	0	0	123
40 - 44 years	8	29	7	3	30	58	0	0	135
45 - 49 years	18	41	8	9	46	87	0	0	209
50 - 54 years	6	21	8	7	39	73	2	0	156
55 - 59 years	25	19	20	8	47	58	1	1	179
60 - 64 years	21	12	6	10	35	60	0	0	144
65 - 69 years	15	16	13	6	34	40	5	0	129
70 - 74 years	25	13	11	16	54	43	8	0	170
75 - 79 years	11	9	12	15	38	36	2	0	123
80 - 84 years	4	6	13	20	18	27	0	0	88
85 - 89 years	3	4	5	9	9	6	1	0	37
90 - 94 years	1	0	6	8	0	2	0	0	17

Age Groups	Booked Admissions		Emergency Admissions		Day Care Admissions		Unplanned Admissions		Total
	Males	Females	Males	Females	Males	Females	Males	Females	
95 years & over	0	0	0	1	0	1	0	0	2
Unknown age	0	0	1	0	0	0	0	0	1
Total	192	419	155	150	446	635	19	2	2018

Table B: All main surgical procedures listed in GGHHAA for 2006 by age groups, gender and category/method of admission to hospital.

Table C lists all the main/first listed procedures recorded in the GGHHAA database for 2006 for all completed episodes of care by ICD9 CM procedure codes, and method or category of admission.

ICD9 Code	Main Procedure	Booked Admission	Emergency Admission	Day Cases	Unplanned Readmission	Total
04.43	Release of carpal tunnel	3	0	33	0	36
06.39	Operations on thyroid and parathyroid – partial thyroidectomy	1	0	0	0	1
08.09	Incision of eyelid - includes severing of blepharorrhaphy	0	0	2	0	2
08.20	Excision/destruction of lesion of eyelid - Removal of meibomian gland	0	0	33	0	33
08.22	Excision/destruction of lesion of eyelid - excision of warts	1	0	10	0	11
08.25	Excision/destruction of lesion of eyelid - unspecified	0	0	6	0	6
08.49	Repair of entropion and ectropion	0	0	3	0	3
08.89	Other repair of eyelid - includes repair of laceration	0	0	1	0	1
08.92	Other operations on eyelid - includes epilation of eyelid	0	0	2	0	2
09.49	Manipulation of lacrimal passages	3	0	16	0	19
11.3	Excision of pterygium/pinguacula	1	0	6	0	7
13.19	Cataract extraction NOS	10	0	119	0	129
14.54	Operations on retina, choroid, vitreous, and posterior chamber - Repair of retinal detachment with laser photocoagulation	2	0	1	0	3
14.59	Operations on retina, choroid, vitreous, and posterior chamber - Other repair of retinal detachment	2	0	0	0	2
15.3	Operations on 2 or more extraocular muscles involving temporary detachment from globe - squint correction	0	0	1	0	1
18.09	Operations on external ear - Other incision of external ear	1	0	0	0	1
20.01	Myringostomy	1	0	2	0	3
20.09	Other myringotomy - aspiration of middle ear	1	0	0	0	1
20.1	Removal of tympanostomy tube	1	0	0	0	1
20.9	Other excision of middle ear - includes tympanectomy	0	0	1	0	1
21.31	Local excision or destruction of intranasal lesion - nasal polypectomy	4	0	0	0	4
21.32	Local excision or destruction of intranasal lesion – other lesions	0	0	1	0	1

ICD9 Code	Main Procedure	Booked Admission	Emergency Admission	Day Cases	Unplanned Readmission	Total
22.00	Aspiration and lavage of nasal sinuses	0	0	2	0	2
23.09	Extraction of tooth NOS	4	1	2	1	8
23.19	Surgical extraction of tooth	1	1	1	0	3
23.2	Restoration of tooth by filling	1	0	0	0	1
23.73	Removal and restoration of teeth - Apicoectomy	0	0	1	0	1
25.1	Excision or destruction of lesion or tissue of tongue	0	0	3	0	3
25.51	Repair of tongue and glossoplasty	0	1	0	0	1
25.91	Other operations on tongue - Lingual frenotomy	2	0	0	0	2
26.29	Operations on salivary glands and ducts - excision of salivary gland lesion	0	0	1	0	1
27.43	Excision of other parts of mouth - other excision of lesion of lip	0	0	5	0	5
28.2	Tonsillectomy	14	0	0	0	14
28.3	Tonsillectomy and adenoidectomy	17	1	1	0	19
28.6	Adenoidectomy without tonsillectomy	3	0	0	0	3
31.42	Laryngoscopy and other tracheoscopy	1	0	0	0	1
33.22	Diagnostic procedures on lung and bronchus - bronchoscopy	0	3	6	0	9
34.04	Incision of chest wall/pleura - inserion of intercostal tube for drainage	0	3	0	0	3
34.09	Incision of chest wall/pleura - pleural tapping (34.09)	2	10	4	2	18
37.78	Insertion of temporary transvenous pacemaker system	0	1	0	0	1
37.80	Insertion of permanent pacemaker	6	7	0	0	13
37.85	Replacement of any type of pacemaker	3	0	0	0	3
38.08	Embolectomy/thrombectomy	0	2	0	0	2
38.5	Ligation and stripping of varicose veins	4	0	0	0	4
38.93	Puncture of vessel - venous catheterisation, insertion of central venous (Hickman) line	0	1	0	0	1
38.95	Puncture of vessel – venous catheterisation for renal dialysis	0	1	0	0	1
39.95	Other operations on vessels	0	1	0	0	1
40.11	Diagnostic procedures on lymphatic structure - includes biopsy	0	0	1	0	1

ICD9 Code	Main Procedure	Booked Admission	Emergency Admission	Day Cases	Unplanned Readmission	Total
40.23	simple excision of lymphatic structure - excision of lymph nodes	1	0	1	0	2
41.31	Diagnostic aspiration of bone marrow	1	0	2	0	3
42.24	Operations on oesophagus	0	1	0	0	1
42.92	Dilatation of oesophageal stricture	0	1	0	0	1
43.11	Gastrostomy - includes insertion of PEG	0	2	0	0	2
43.6	Partial gastrectomy with anastomosis to duodenum (Billroth1)	0	1	0	0	1
44.13	Diagnostic procedures on stomach - including Gastroscopy	6	20	101	0	127
45.02	Incision. Excision, and anastomosis of intestine	0	1	0	0	1
45.16	Diagnostic procedures on small intestine - includes OGD	1	8	70	2	81
45.23	Diagnostic procedures on large intestine - including Colonoscopy/sigmoidoscopy	18	10	144	0	172
45.72	flexible sigmoidoscopy	0	1	0	0	1
45.76	flexible sigmoidoscopy	0	0	0	1	1
46.03	Exteriorisation of intestine - includes loop ileostomy, loop colostomy (Hartman's)	0	1	0	0	1
46.52	Colostomy	2	2	0	0	4
47.09	Appendectomy	0	22	0	0	22
48.23	Diagnostic procedures on rectum/rectosigmoid and perirectal tissue - including proctosigmoidoscopy/biopsy	2	3	43	0	48
48.36	Local excision or destruction of lesion or tissue of rectum	0	1	0	0	1
49.01	Incision of perianal tissue - includes drainage of perianal abscess	3	10	1	0	14
49.1	Incision/excision of anal fistula	4	0	0	0	4
49.39	Local excision of lesion of anus - incl: anal tags excision	2	0	0	0	2
49.46	Procedures on haemorrhoids including excision	3	3	0	0	6
49.59	Anal sphincterotomy	0	1	1	0	2
50.11	Diagnostic procedures on liver - : diagnostic percutaneous needle biopsy	0	0	1	0	1
51.22	Cholecystectomy	2	5	0	0	7
53.00	Unilateral repair of inguinal hernia	52	3	0	1	56
53.10	Bilateral repair of inguinal hernia	1	0	0	0	1
53.29	unilateral repair of femoral hernia	0	1	0	0	1

ICD9 Code	Main Procedure	Booked Admission	Emergency Admission	Day Cases	Unplanned Readmission	Total
53.49	Repair of umbilical hernia	12	0	2	0	14
53.59	Repair of other hernia without graft/prosthesis	4	2	0	0	6
54.11	Laparotomy	7	18	0	1	26
54.21	Diagnostic procedures of abdominal region - laparoscopy	9	2	22	0	33
54.91	Other operations of abdominal region - paracentesis	1	0	2	0	3
57.17	Cystotomy and cystostomy - percutaneous cystostomy	0	1	0	0	1
57.32	Cystoscopy	1	1	23	0	25
57.94	Other operations on bladder - insertion of indwelling urinary catheter	1	1	8	5	15
57.95	Other operations on bladder - replacement of indwelling urinary catheter	0	1	3	2	6
58.6	Dilatation of urethral stricture	0	0	1	0	1
60.11	Endoscopic prostate biopsy	10	0	0	1	11
61.0	Incision and drainage of scrotum and tunica vaginalis	0	0	0	1	1
61.2	Excision of hydrocoele	3	0	0	0	3
61.91	Aspiration of hydrocoele	0	0	1	0	1
62.3	Unilateral orchidectomy	1	0	0	0	1
62.9	Other operation on testes	0	1	0	0	1
63.1	Excision of varicocele of spermatic cord	1	0	0	0	1
63.52	Repair of spermatic cord - includes reduction of torsion of testes or spermatic cord	0	1	0	0	1
64.0	Circumcision	5	3	2	0	10
64.92	Other operations on penis - including divisions of penile adhesions	1	0	0	0	1
65.21	Marsupialization of ovarian cyst - excludes that by laparoscope	2	0	0	0	2
65.25	Other laparoscopic local excision or destruction of ovary	1	0	0	0	1
65.39	Unilateral oophorectomy	2	0	0	0	2
65.49	Unilateral salpingo-oophorectomy	2	0	0	0	2
67.12	Diagnostic procedures on cervix - 67.11: endocervical biopsy/ 67.12: punch biopsy of cervix	0	0	2	0	2
67.39	Cervical polypectomy/cautery of cervical erosion or polyp	1	0	2	0	3
67.59	Repair of internal cervical os - : other repair of cervical os (Shirodkar operation)	2	1	1	0	4

ICD9 Code	Main Procedure	Booked Admission	Emergency Admission	Day Cases	Unplanned Readmission	Total
68.11	Diagnostic procedures on uterus and supporting structures: Digital exam of uterus	0	0	1	0	1
68.12	Diagnostic procedures on uterus and supporting structures - Hysteroscopy without biopsy	0	0	20	0	20
68.18	Diagnostic procedures on uterus and supporting structures - Hysteroscopy with biopsy	1	0	5	0	6
68.29	Myomectomy	2	0	2	0	4
68.39	Subtotal hysterectomy - supracervical	9	1	0	0	10
68.4	Total abdominal hysterectomy	69	1	0	0	70
68.59	Vaginal hysterectomy	3	0	0	0	3
69.02	Dilatation and curettage - ERPC	4	4	13	0	21
69.09	Dilatation and curettage - diagnostic D&C	3	1	115	0	119
69.22	Manchester/Fothergill operation	2	0	0	0	2
70.13	Excision of vaginal tags/adhesions	0	0	2	0	2
70.22	Diagnostic procedures on vagina and cul-de-sac: 70.21: vaginoscopy// 70.22:culdoscopy	1	0	3	0	4
70.33	Local excision or destruction of vagina and cul-de-sac: 70.31: hymenectomy/ 70.33: excision of lesion of vagina	0	0	1	0	1
70.51	Anterior/posterior colporrhaphy / with/out Burch colposuspension	7	0	0	0	7
70.79	Pelvic floor repair	6	0	0	0	6
71.01	Incision of vulva and perineum - Lysis of vulvar adhesions	0	0	1	0	1
71.09	Incision of vulva and perineum - Other incision of vulva and perineum (Enlargement of introitus NOS)	0	0	0	1	1
71.23	Marsupialisationof Bartholin's gland cyst	0	0	3	0	3
71.3	Excision or other destruction of Bartholin's gland (cyst)	0	0	4	0	4
72.1	Forceps, vacuum and breech delivery	1	0	0	0	1
72.71	Forceps, vacuum and breech delivery	1	0	0	0	1
72.79	Forceps, vacuum and breech delivery	1	0	0	0	1
73.4	Medical induction of labour	12	0	0	0	12
73.6	Episiotomy and repair	49	0	0	0	49
74.1	Cesarean Section and removal of foetus	51	6	0	0	57

ICD9 Code	Main Procedure	Booked Admission	Emergency Admission	Day Cases	Unplanned Readmission	Total
75.69	Repair of current obstetric laceration	83	5	1	0	89
77.41	Biopsy of bone	0	0	1	0	1
77.51	Excision and repair of bunion and othe toe deformities - Wilson's /Keller's osteotomy	4	0	1	0	5
77.56	Excision and repair of bunion and othe toe deformities - osteotomy for hammer toe/claw toe	0	0	1	0	1
77.6	Local excision of lesion of bone - includes exostosis	0	0	1	0	1
78.66	Removal of internal fixation device (plates) - leg	0	0	1	0	1
78.67	Removal of internal fixation device (plates)- ankle/foot	0	0	2	0	2
78.69	Removal of internal fixation device (plates) – specified bone	1	0	0	0	1
78.89	Diagnostic procedure/exploration of bone	0	0	1	0	1
79.0	Closed reduction of fracture without internal fixation - unspecified	0	1	0	0	1
79.02	Closed reduction of fracture without internal fixation - forearm	1	1	2	0	4
79.06	Closed reduction of fracture without internal fixation - leg	0	1	0	0	1
79.12	Closed reduction of fracture with internal fixation - forearm	0	1	0	0	1
79.32	Open reduction of fracture with internal fixation - forearm	1	0	0	0	1
79.35	Open reduction of fracture with internal fixation - femur	0	29	1	1	31
79.36	Open reduction of fracture with internal fixation - leg	1	8	0	0	9
79.37	Open reduction of fracture with internal fixation – foot/ankle	0	1	0	0	1
79.38	Open reduction of fracture with internal fixation - foot	0	1	0	0	1
79.39	Open reduction of fracture with internal fixation – specified bone	1	1	0	0	2
79.69	Debridment of open fracture site	0	1	0	0	1
79.76	Closed reduction of dislocation	0	1	0	0	1
80.26	Arthroscopy (knee)	4	4	24	0	32
80.51	Excision or destruction of intervertebral disc	1	0	0	0	1
81.45	Other repair of joint of lower extremity – repair of cruciate ligaments	0	1	0	0	1
81.51	Joint replacement of lower extremity - total hip replacement	5	0	0	0	5

ICD9 Code	Main Procedure	Booked Admission	Emergency Admission	Day Cases	Unplanned Readmission	Total
81.52	Joint replacement of lower extremity -partial hip replacement	1	13	0	0	14
81.54	Joint replacement of lower extremity – total knee replacement	14	2	0	0	16
82.01	Incision of muscle, tendon, fascia and bursa of hand - includes exploration of tendon sheaths	0	0	3	0	3
82.21	Excision of lesion of muscle, tendon and fascia of hand - ganglionectomy	0	0	5	0	5
82.44	Suture of muscle, tendon and fascia of hand	0	0	1	0	1
82.8	Other plastic operations on hand	1	0	0	0	1
82.84	Other plastic operations on hand - repair of mallet finger	0	0	2	0	2
83.12	Division of muscle,tendon and fascia - includes tenotomy/fasciotomy	1	0	0	0	1
83.21	Diagnostic procedures on muscle,tendon, fascia and bursa including hand - biopsy	0	0	1	0	1
83.29	Other diagnostic procedures on muscle,tendon, fascia and bursa including hand	0	1	0	0	1
83.31	Excision of lesion of muscle,tendon,fascia and bursa - excision of ganglion (not hand)	0	0	2	0	2
83.5	Bursectomy	0	0	1	0	1
83.91	Other operation on muscle, tendon, fascia and bursa - includes lysis of adhesions, aspiration of bursa, injection of therapeutic substance into bursa	0	0	1	0	1
84.11	Amputation of lower limb - toe	3	5	1	2	11
84.12	Amputation of lower limb - foot	0	0	0	1	1
84.17	Amputation of lower limb – above knee amputation	1	7	0	2	10
85.0	Mastotomy - incision of skin over breast - drainage of abscess	0	0	1	0	1
85.21	Excision/destruction of breast tissue - lumpectomy	8	1	4	0	13
85.25	Excision/destruction of breast tissue – excision of nipple	1	0	0	0	1
85.41	Mastectomy	0	0	0	1	1
85.91	Other operations on breast - Aspiration of breast	0	0	1	0	1
86.03	Incision of skin and subcutaneous tissue - incision of pilonidal sinus	2	1	0	0	3
86.04	Incision of skin and subcutaneous tissue - drainage of abscess	4	17	2	0	23

ICD9 Code	Main Procedure	Booked Admission	Emergency Admission	Day Cases	Unplanned Readmission	Total
86.05	Incision of skin and subcutaneous tissue - removal of foreign body	0	0	3	0	3
86.09	Incision of skin and subcutaneous tissue – exploration of sinus	0	0	1	0	1
86.12	Diagnostic procedures of skin and subcutaneous tissue - biopsy	0	1	1	0	2
86.21	Excision of lesion/tissue of skin and subcutaneous tissue - excision of pilonidal cyst	3	0	0	0	3
86.22	Excision of lesion/tissue of skin and subcutaneous tissue - excisional wound debridement	2	16	6	0	24
86.23	Excision of lesion/tissue of skin and subcutaneous tissue - removal of nail or nail bed	0	0	13	0	13
86.3	Other local excision/destruction of lesion or tissue of skin and subcutaneous tissue – lump/mass	2	1	114	0	117
86.5	Suture or other closure of skin and subcutaneous tissue	0	1	0	0	1
86.59	Suture/closure except scalp	0	0	2	0	2
87.03	Diagnostic radiology – CAT scan - head	1	9	0	0	10
87.62	Diagnostic radiology – Upper GI series	0	1	0	0	1
87.64	Diagnostic radiology – Lower GI Series	2	0	0	0	2
88.01	Soft tissue x-rays of abdomen - CAT scan	0	3	0	0	3
88.26	Skeletal x-rays of extremities and pelvis	0	1	0	0	1
88.5	Angiocardiology using contrast material	0	10	0	0	10
88.60	Phlebography	0	5	0	0	5
88.72	Diagnostic ultrasound - echocardiography	0	1	0	0	1
88.75	Diagnostic ultrasound – urinary system	0	2	0	0	2
88.76	Diagnostic ultrasound - abdomen	2	8	0	0	10
88.77	Diagnostic ultrasound – peripheral vascular system	0	1	0	0	1
88.78	Diagnostic ultrasound – gravid uterus	0	1	0	0	1
88.79	Diagnostic ultrasound - other	0	2	0	0	2
89.41	Cardiac stress tests and pacemaker checks	0	1	0	0	1
94.27	Psychiatric somatotherapy - ECT	0	1	15	0	16
96.23	Nonoperative dilatation and manipulation - dilatation of rectum/anal sphincter	1	0	0	0	1

ICD9 Code	Main Procedure	Booked Admission	Emergency Admission	Day Cases	Unplanned Readmission	Total
96.39	Nonoperative alimentary tract irrigation, cleaning and local instillation - removal of impacted faeces/transanal enema	0	7	3	0	10
96.52	Other nonoperative irrigation and cleaning - ear irrigation and removal of wax	0	0	3	0	3
97.64	Replacement and removal of therapeutic appliances – removal of urinary catheter	1	0	1	0	2
97.71	Replacement and removal of therapeutic appliances - removal of intrauterine device	0	1	0	0	1
97.74	Replacement and removal of therapeutic appliances – removal of vaginal pessary	0	0	1	0	1
98.16	Nonoperative removal of foreign body	0	0	1	0	1
99.03	Other non operative procedures - transfusion of packed cells and whole blood	10	7	4	5	26
99.19	Other non operative procedures – injection of anticoagulant	0	1	0	0	1
99.25	Other non operative procedures – cancer chemotherapy	1	0	0	0	1
99.29	Other non operative procedures including infusion of chemotherapeutic substances	17	6	33	0	56
99.60	Other non operative procedures - CPR	0	4	0	0	4
99.62	Other non operative procedures - cardioversion	0	10	4	0	14
99.99	Other non operative procedures – other – blood letting	0	0	1	0	1
Total		655	379	1134	30	2198

Table C: All main/first listed procedures in GGHHAA for 2006 by method/category of admission to hospital.

Table D shows all procedures recorded on GGHHAA broken down by the different categories of procedures according to ICD9 and procedures carried out on inpatients and day cases.

ICD9 Code	Procedures	Procedures on Inpatients	Procedures on Day Cases	Total
01 - 05	Operations on the nervous system	3	33	36
06 - 07	Operations on the endocrine system	1	0	1
08 - 16	Operations on the eye	19	200	219
18 - 20	Operations on the ear	4	3	7
21 - 29	Operations on the nose, mouth and pharynx	51	17	68
30 - 34	Operations on the respiratory system	21	10	31
35 - 39	Operations on the cardiovascular system	26	0	26
40 - 41	Operations on haemic and lymphatic system	2	4	6
42 - 54	Operations on the digestive system	253	387	640
55 - 59	Operations on the urinary system	13	35	48
60 - 64	Operations on the male genital organs	28	3	31
65 - 71	Operations on the female genital organs	126	175	301
72 - 75	Obstetrical procedures	209	1	210
76 - 84	Operations on the musculoskeletal system	125	52	177
85 - 86	Operations on the integumentary system	61	148	209
87 - 99	Miscellaneous diagnostic and therapeutic procedures	122	66	188
Total	All Procedures	1064	1134	2198

Table D: All procedures by ICD9 codes broken down by procedures on inpatients and day cases.

Appendix

A hospital is a licensed establishment primarily engaged in providing medical, diagnostic, and treatment services that include physician, nursing, and other health services to inpatients and the specialised accommodation services required by inpatients. Hospitals may also provide outpatient services as a secondary activity.

Hospitalisation studies give a broad picture of the general health and health care treatment of the population. The number of hospital discharges is the most commonly used measure of the utilisation of hospital services. Hospital discharges, rather than admissions, are used because hospital abstracts for inpatient care are based on information gathered at the time of discharge i.e. at the end of an episode of care.

A patient is a person who is formally admitted for inpatient care in a hospital.

“Completed hospital episodes” refer to a count of the number of NHIS records submitted by participating hospitals that relate to episodes of hospital care that ended during the current year.

Inpatient care beds accommodate patients who are formally admitted (or ‘hospitalised’) to an institution for treatment and/or care and who stay for a minimum of one night in the hospital or other institution providing inpatient care.

A bed-day is a day during which a person is confined to a bed and in which the patient stays overnight in a hospital.

One-day cases (day cases) are defined as patients admitted to and discharged from inpatient treatment on the same calendar day. Day cases are excluded from inclusion in counts of inpatient care beds and bed days as both of these incorporate a patient who stays overnight (even if it is for one night) in hospital in their definition.

Calculation of percentage bed occupancy rates requires dividing the number of bed days by the product of days of the year or part thereof and the number of available beds (i.e. $(\text{Bed days}) / [365 * (\text{beds})]$ multiplied by a hundred).

The average turnover is the mean number of patients that have occupied any one particular hospital bed during the period under consideration. It is usually calculated by dividing the total number of discharges by the average number of available beds.

Discharge refers to the formal release of a patient by a hospital. It implies the termination of a period of hospitalisation or episode of care by death, or by disposition to place of residence, residential or nursing home, or another hospital. The terms “discharges” or “discharged patients” may be used synonymously.

Discharge rates are expressed by the number of discharges per 100,000 population.

A new-born baby is a patient admitted by birth to a hospital.

Average length of stay is calculated by dividing the number bed days by the number of separations (discharges including deaths) during the year. The latter will include day cases. The calculated ALOS may thus be biased depending on the relative proportion of day cases.

Care type. This may be:

Acute care:

The clinical intent or treatment goal is to manage labour (obstetric), cure illness or provide definitive treatment of injury, perform surgery, relieve symptoms of illness or injury (excluding palliative care), reduce severity of an illness or injury, protect against exacerbation and/or complication of an illness and/or injury which could threaten life or normal function, perform diagnostic or therapeutic procedures

Rehabilitative care:

This is care in which the clinical intent or treatment goal is to improve the functional status of a patient with an impairment, disability or handicap. It is usually evidenced by a multi-disciplinary rehabilitation plan comprising negotiated goals and indicative time frames which are evaluated by a periodic assessment using a recognised functional assessment measure.

Palliative care:

This is care in which the clinical intent or treatment goal is primarily quality of life for a patient with an active, progressive disease with little or no prospect of cure. It is usually evidenced by an interdisciplinary assessment and/or management of the physical, psychological, emotional and spiritual needs of the patient; and a grief and bereavement support service for the patient and their carers/family.

Geriatric evaluation and management:

This is care in which the clinical intent or treatment goal is to maximise health status and/or optimise the living arrangements for a patient with multi-dimensional medical conditions associated with disabilities and psychosocial problems, who is usually (but not always) an older patient.

Psychogeriatric care:

This is care in which the clinical intent or treatment goal is improvement in health, modification of symptoms and enhancement in function, behaviour and/or quality of life for a patient with an age-related organic brain impairment with significant behavioural or late onset psychiatric disturbance or a physical condition accompanied by severe psychiatric or behavioural disturbance.

Mental health care (Psychiatric care):

This is care restricted to admitted patients receiving care in psychiatric hospitals or in designated psychiatric units in acute hospitals.

Maintenance care:

This is care in which the clinical intent or treatment goal is prevention of deterioration in the functional and current health status of a patient with a disability or severe level of functional impairment. It involves care when it has been established that the patient does not require further complex assessment or stabilisation, and requires care over an indefinite period. This care includes that provided to a patient who would normally receive care in

another setting e.g. at home, or in a residential aged care service, by a relative or carer, that is unavailable in the short term. Many of the “social” cases in local state hospitals fall into this category.

New-born care:

This is initiated when the patient is born in hospital or is nine days old or less at the time of admission. New-born care continues until the care type changes or the patient is discharged.

Persons with mental illness may receive any one of the care types (except new-born care). Classification then depends on the principal clinical intent of the care received.

A procedure is a surgical or non surgical process, diagnostic procedure, or special treatment reported on the medical record of a patient.

“Discharges with procedures” refer to the number of patients discharged from hospital during the period of the report who underwent at least one procedure during their hospitalisation.

All listed procedures refer to the number of procedures listed on the patient’s medical record sheet. Non-surgical procedures are usually not considered to be surgical operations. They include radiography, radiotherapy, physical medicine and rehabilitation procedures. Surgical operations include all the procedures, which are not listed with “non-surgical procedures”. Some centres do not consider diagnostic endoscopies as surgical operations. This is not the case in this report.