

Census Report 2012

Program Anestisiologi

Kementerian Kesihatan Malaysia

List of Tables

No.	Title
1	Anaesthetics administered according to techniques in KKM hospitals, 2012
2	Anaesthetics and nature of surgery in KKM hospitals, 2012
3	Anaesthetics for day care surgery and day of surgery admissions in KKM hospitals, 2012
4	Anaesthetic for LSCS and nature of surgery in KKM hospitals, 2012
5	Anaesthetics for LSCS and techniques of anaesthesia in KKM hospitals, 2012
6	Regional Anaesthesia and Analgesia, 2012
7	Acute pain service and techniques of pain control in KKM hospitals, 2012
8	Epidural analgesia for labour in KKM hospitals, 2012
9	No. of attendances at anaesthetic clinic in KKM hospitals, 2012
10	Admissions, patient days and bed-occupancy rates in ICU KKM hospitals, 2012
11	Admissions, patient days and bed-occupancy rates in HDU / PACU in KKM hospitals, 2012
12	Attendances, new cases and procedures at Chronic Pain Clinics in KKM hospitals, 2012
13	No. of anaesthetics administered in KKM hospitals, 2008-2012
14	No. of anaesthetics administered for emergency surgery in KKM hospitals, 2008 – 2012
15	Saturdays Lists in KKM Hospitals, 2012
16	Trends in output for Program Anestisiologi KKM, 2004-2012
17	Anaesthetic specialists in KKM hospitals, 2012
18	Anaesthetic medical officers and trainees in KKM hospitals, 2012
19	Anaesthetic /ICU nurses and assisted medical officers in KKM hospitals, 2012
20	Subspecialists under Program Anestisiologi in KKM hospitals, 2012
21	No. of ICU / HDU beds and OT in KKM hospitals 2012
22	Program Anestisiologi key performance indicators, 2012
23	Research, 2012

CENSUS REPORT 2012

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Program Anestisiologi is responsible for the provision of three major services:

- (1) anaesthetic service in the operating theatre and in non-OT locations
- (2) care of the critically ill in the intensive care units and
- (3) pain management.

This report is a compilation of census on workload, manpower, facilities and key performance indicators.

SUMMARY

1. A total of 82 hospitals provided anaesthetic service in Ministry of Health; 49 with resident anaesthetists. (Table 1)
2. The total no. of anaesthetics administered was 363039, an increase of 6.83% over the previous year. Of this number, 57.7% were for emergency surgery. (Table 2)
3. Hospitals with the most number of anaesthetics were: HKL (25947), H Ipoh (17072) and H Alor Setar (16360) (Table 2)
4. General anaesthesia was the most common technique (56.6%) followed by spinal anaesthesia (36.5%), epidural (0.6%), combined spinal and epidural (1.5%) and plexus block (0.7%) (Table 1)
5. The percentage of anaesthetics for emergency surgery increase from 57.2% in 2011 to 57.7% in 2012; only in five hospitals with specialists there were more elective surgery than emergency surgery i.e. HKL, H Putrajaya, HPP, H Selayang and H Sibü. This is a worrying trend as it reflects the relative shortage of OT time for elective surgery (Table 2 and 13)

6. There were 9838 anaesthetics administered for day care surgery; 33.8% of anaesthetics for elective surgery. A total of 2103 anaesthetics were administered as day of surgery admissions, a reduced of 9.7% from previous year. (Table 3)
7. 77.6% of all anaesthetics administered for LSCS were done as emergencies (Table 4) with the vast majority of them performed under spinal anaesthesia (87.9%); 9.3% of LSCS were done under general anaesthesia (Table 5)
8. A total of 91766 patients received post-operative pain management under the acute pain service; an increase of 12.18% over the previous year. 43.59% of patients had intra-theal morphine, 22.4% patient controlled analgesia and 14.3% epidural analgesia. (Table 7)
9. A total of 3597 parturients received epidural analgesia during labour; a reduce of 8.91% from the previous year. Hospitals with significant obstetric analgesia service were HKL, H Alor Setar, H Ipoh, H Putrajaya and H Kelang (Table 8)
10. The no. of patients who were seen at the anaesthetic clinics for preoperative assessment increased by 23.5% to 76686 with HKL, HSAJB and HMelaka having the most numbers (Table 9)
11. There were 50 general ICUs under Program Anestisiologi with a total admission of 35209, an increase of 7.93% from previous year. Hospitals with the highest admissions were: HKL, H Kelang and HSAJB. (Table 10)
12. Across the board, high bed occupancy rates (BOR) were recorded in ICU reflecting a severe shortage of ICU beds in MOH hospitals. 11 ICUs had BOR of >100%. The recommended BOR for ICU is 75% (Table 10)
13. The total no. of patients admitted to the high dependency units were 6212, an increasing of 3.69% over the previous year. Hospitals with high HDU workload (patient days) were H Ipoh, H Sungai Buloh and H Alor Setar (Table 11)
14. There were 17 chronic pain clinics with a total of 8954 patient attendances, an increase of 21.53% from the previous year. The number of new cases seen were 1347, an increase of 20.38%; similarly the no. of procedures done increased from 918 to 1951 (112.5% increase). H Selayang, H

Ipoh, and Hpulau Pinang had the highest no. of attendances. (Table 12)

15. A total of 9665 patients were operated under the Saturday List programme in 33 hospitals, of whom 7664 were done under general anaesthesia. (Table 15)
16. All the output indicators continued to show upward trends in the last six years; when compared with 2011, the following increases were noted: no. of anaesthetics administered (6.8%), no. of anaesthetics for day care surgery (17.6%), no. of patients under acute pain service (12.2%), no. of attendance at anaesthetic clinic (23.9%), no. of ICU admission (12.0%), no. of HDU admissions (3.69%) and no. of attendance at chronic pain clinic (21.5%). (Table 16)
17. As of 31st December 2012, there were 330 anaesthetists, 762 medical officers and 162 trainees in the Ministry of Health hospitals (Table 17, 18)
18. There were 330 assistant medical officers, 697 anaesthetic nurses and 2484 ICU nurses giving a total nursing and allied health workforce of 3515 (Table 18)
19. As of December 2012, there were 61 subspecialists (21% of total workforce) and 31 specialist trainees under Program Anestisiologi. There were 11 cardiac anaesthetists, 12 paediatric anaesthetists, 5 neuroanaesthetists, 3 obstetric anaesthetists, 16 intensivists and 14 pain specialists (Table 19)
20. There were 594 ICU beds of which 541 were functional (91%); this was an increase of 39 functional beds from the previous year. There were 88 functional HDU beds from a total of 151 (63%). (Table 20)
21. There were 401 functional operating theatres, an increase of 22 over the previous year. (Table 20)
22. Fifty-two hospitals submitted their mean KPI results. Most of the KPIs were within the national standards, however, H Serdang, HSAJB, H Umum Sarawak and H Selayang were outliers for waiting time for emergency surgery (Table 21)

CONCLUSION

Program Anestisiologi continued to expand in 2012 both in terms of scope and volume of work; the increase in manpower is reflected in increase in productivity.

Generally, key performance indicators were met. However, two major challenges remain:

- (1) shortage of operating time for elective surgery and
- (2) shortage of intensive care beds.

Concerted efforts must be taken to address these two issues.

Table 1 : Anaesthetics administered according to techniques in KKM hospitals, 2012

No.	HOSPITAL	General Anaesthesia	Spinal Anaesthesia	Epidural Anaesthesia	Combined Spinal & Epidural (CSE)	Combined General & Regional Anaesthesia (CGRA)	Plexus Blockade	Others	TOTAL
	PERLIS								
1	Kangar	2498	1660	21	181	181	74	60	4675
	KEDAH								
2	Alor Setar	10092	5421	59	23	697	34	34	16360
3	Langkawi	983	505	33	23	41	18	2	1605
4	Sultan Abdul Halim, Sungai Petani	4508	5295	24	105	39	100	170	10241
5	Kulim	2496	1394	6	68	177	1	164	4306
	PULAU PINANG								
6	Pulau Pinang	9527	3688	25	26	209	7	181	13663
7	Seberang Jaya	2484	3083	1	85	58	53	17	5781
8	Bukit Mertajam	986	730	0	69	56	1	4	1846
9	Kepala Batas	263	92	0	37	6	0	0	398
	PERAK								
10	Ipoh	11283	4951	182	352	161	37	106	17072
11	Seri Manjung	1816	1941	4	79	56	11	13	3920
12	Teluk Intan	2236	2531	27	187	147	1	0	5129
13	Taiping	5364	4109	222	0	243	45	101	10084
14	Slim River	844	492	15	26	27	7	0	1411
	SELANGOR								
15	Tuanku Ampuan Rahimah, Kelang	6462	5102	75	224	105	88	12	12068
16	Ampang	3515	2374	109	108	33	85	0	6224
17	Serdang	5841	3514	44	128	92	62	28	9709
18	Selayang	6300	3848	89	519	569	139	151	11615
19	Sungai Buloh	6089	4196	18	47	24	31	3	10408
20	Kajang	2154	1829	6	97	49	55	56	4246
	WILAYAH PERSEKUTUAN								
21	Kuala Lumpur	17925	6446	374	332	429	149	292	25947
22	Putrajaya	3491	2488	70	312	2	20	1	6384
23	Labuan	418	337	4	0	0	0	0	759
	NEGERI SEMBILAN								
24	Tuanku Jaafar, Seremban	5923	3901	31	326	44	33	0	10258
25	Tuanku Ampuan Najihah, Kuala Pilah	1131	1166	11	150	122	78	5	2663
26	Port Dickson	105	165	3	7	0	4	0	284
	MELAKA								
27	Melaka	8641	4154	223	55	105	150	33	13361
	JOHOR								
28	Sultanah Aminah, JB	8387	5369	28	218	191	38	1434	15665
29	Sultan Ismail, JB	4620	3101	43	167	73	18	43	8065
30	Muar	2493	2202	1	128	54	55	0	4933
31	Batu Pahat	2087	2448	0	100	60	65	0	4760
32	Segamat	1295	1746	1	50	23	7	82	3204
33	Kluang	699	832	10	17	12	3	0	1573
34	Kulai	267	270	0	2	26	0	0	565
	PAHANG								
35	Tengku Ampuan Afzan, Kuantan	6860	3423	34	207	103	91	74	10792
36	Temerloh	3135	3132	0	48	76	25	15	6431
37	Kuala Lipis	271	623	1	3	5	0	33	936
	TERENGGANU								
38	Sultanah Nur Zahirah, Kuala Terengganu	6491	3918	45	210	404	154	6	11228
39	Kemaman	694	918	1	28	33	35	16	1725
	KELANTAN								
40	Raja Perempuan Zainab II, Kota Bharu	6542	4022	2	215	383	13	32	11209
41	Kuala Krai	892	1143	5	64	28	24	0	2156
42	Tanah Merah	491	1087	0	38	26	36	0	1678

No.	HOSPITAL	General Anaesthesia	Spinal Anaesthesia	Epidural Anaesthesia	Combined Spinal & Epidural (CSE)	Combined General & Regional Anaesthesia (CGRA)	Plexus Blockade	Others	TOTAL
	SARAWAK								
43	Umum Sarawak	8561	4378	20	197	110	65	79	13410
44	Sibu	2964	2754	61	61	44	179	338	6401
45	Miri	2649	2035	13	94	100	21	14	4926
46	Bintulu	1243	1217	0	15	39	112	5	2631
47	Sarikei	317	209	0	2	4	12	33	577
48	Kapit	106	238	0	0	0	0	90	434
49	Serian	103	240	0	0	0	0	73	416
50	Bau	154	3	0	0	0	0	0	157
51	Lundu	34	50	0	0	0	0	182	266
52	Simunjan	14	54	0	0	0	0	0	68
53	Sri Aman	117	142	0	0	0	0	1	260
54	Betong	19	45	0	0	0	0	47	111
55	Saratok	55	1	0	0	0	0	32	88
56	Mukah	94	23	0	0	0	0	92	209
57	Daro	12	23	0	0	0	0	4	39
58	Kanowit	15	18	0	0	6	0	30	69
59	Lawas	77	30	0	0	1	0	75	183
60	Limbang	56	252	0	0	0	0	357	665
61	Marudi	30	108	0	0	0	0	65	203
	SABAH								
62	Queen Elizabeth	6778	1817	16	103	42	42	554	9352
63	Duchess Of Kent	2836	2227	96	8	11	0	55	5233
64	Likas	4791	3121	39	6	402	0	224	8583
65	Keningau	1274	728	3	5	28	1	1	2040
66	Tawau	2347	2343	11	25	134	89	339	5288
67	Kudat	139	33	0	0	0	0	167	339
68	Kota Marudu	90	10	0	0	0	0	131	231
69	Kota Belud	115	13	0	0	0	0	184	312
70	Mesra, Bukit Padang	385	0	0	0	0	0	0	385
71	Papar	0	0	0	0	0	0	72	72
72	Beaufort	173	137	0	0	0	0	7	317
73	Sipitang	7	0	0	0	0	0	42	49
74	Tenom	6	41	0	0	1	0	388	436
75	Tambunan	0	2	0	0	0	0	214	216
76	Ranau	213	20	0	0	0	0	1482	1715
77	Beluran	15	62	0	0	0	0	160	237
78	Pitas	32	1	0	0	0	0	30	63
79	Lahad datu	880	598	0	0	27	9	95	1609
80	Kunak	12	1	0	0	0	0	7	20
81	Semporna	75	0	0	0	0	0	13	88
82	Kuala Penyu	4	0	0	0	0	0	0	4
	TOTAL	205391	132620	2106	5577	6118	2377	8850	363039

Table 2 : Anaesthetics and nature of surgery in KKM hospitals, 2012

No.	HOSPITAL	Elective Surgery	Emergency Surgery		TOTAL
	PERLIS			(%)	
1	Kangar	1978	2697	57.7%	4675
	KEDAH				
2	Alor Setar	7002	9358	57.2%	16360
3	Langkawi	477	1128	70.3%	1605
4	Sultan Abdul Halim,Sungai Petani	3115	7126	69.6%	10241
5	Kulim	1644	2662	61.8%	4306
	PULAU PINANG				
6	Pulau Pinang	6964	6699	49.0%	13663
7	Seberang Jaya	1419	4362	75.5%	5781
8	Bukit Mertajam	1319	527	28.5%	1846
9	Kepala Batas	398	0	0.0%	398
	PERAK				
10	Ipoh	6896	10176	59.6%	17072
11	Seri Manjung	1284	2636	67.2%	3920
12	Teluk Intan	1511	3618	70.5%	5129
13	Taiping	4097	5987	59.4%	10084
14	Slim River	622	789	55.9%	1411
	SELANGOR				
15	Tuanku Ampuan Rahimah, Kelang	4925	7143	59.2%	12068
16	Ampang	2864	3360	54.0%	6224
17	Serdang	4763	4946	50.9%	9709
18	Selayang	6351	5264	45.3%	11615
19	Sungai Buloh	3649	6754	64.9%	10403
20	Kajang	1313	2933	69.1%	4246
	WILAYAH PERSEKUTUAN				
21	Kuala Lumpur	14199	11748	45.3%	25947
22	Putrajaya	3570	2814	44.1%	6384
23	Labuan	317	442	58.2%	759
	NEGERI SEMBILAN				
24	Tuanku Jaafar, Seremban	4912	5346	52.1%	10258
25	Tuanku Ampuan Najihah, Kuala Pilah	1137	1526	57.3%	2663
26	Port Dickson	77	207	72.9%	284
	MELAKA				
27	Melaka	4880	8481	63.5%	13361
	JOHOR				
28	Sultanah Aminah, JB	5373	10292	65.7%	15665
29	Sultan Ismail, JB	2747	5318	65.9%	8065
30	Muar	2292	2641	53.5%	4933
31	Batu Pahat	1627	3133	65.8%	4760
32	Segamat	1224	1980	61.8%	3204
33	Kluang	553	1020	64.8%	1573
34	Kulai	565	0	0.0%	565
	PAHANG				
35	Tengku Ampuan Afzan, Kuantan	5021	5771	53.5%	10792
36	Temerloh	2689	3742	58.2%	6431
37	Kuala Lipis	260	676	72.2%	936
	TERENGGANU				
38	Sultanah Nur Zahirah, Kuala Terengganu	4545	6683	59.5%	11228
39	Kemaman	624	1101	63.8%	1725
	KELANTAN				
40	Raja Perempuan Zainab II, Kota Bharu	4029	5886	59.4%	9915
41	Kuala Krai	648	1508	69.9%	2156
42	Tanah Merah	426	1252	74.6%	1678

No.	HOSPITAL	Elective Surgery	Emergency Surgery		TOTAL
	SARAWAK				
43	Umum Sarawak	5716	7694	57.4%	13410
44	Sibu	2967	3434	53.6%	6401
45	Miri	1345	3581	72.7%	4926
46	Bintulu	1071	1560	59.3%	2631
47	Sarikei	170	407	70.5%	577
48	Kapit	237	197	45.4%	434
49	Serian	225	191	45.9%	416
50	Bau	90	67	42.7%	157
51	Lundu	211	55	20.7%	266
52	Simunjan	29	39	57.4%	68
53	Sri Aman	125	135	51.9%	260
54	Betong	67	44	39.6%	111
55	Saratok	66	22	25.0%	88
56	Mukah	116	93	44.5%	209
57	Daro	19	20	51.3%	39
58	Kanowit	43	26	37.7%	69
59	Lawas	108	75	41.0%	183
60	Limbang	433	232	34.9%	665
61	Marudi	137	66	32.5%	203
	SABAH				
62	Queen Elizabeth	5071	4281	45.8%	9352
63	Duchess Of Kent	1945	3288	62.8%	5233
64	Likas	3209	5374	62.6%	8583
65	Keningau	723	1317	64.6%	2040
66	Tawau	1739	3549	67.1%	5288
67	Kudat	236	103	30.4%	339
68	Kota Marudu	120	111	48.1%	231
69	Kota Belud	178	134	42.9%	312
70	Mesra, Bukit Padang	385	0	0.0%	385
71	Papar	72	0	0.0%	72
72	Beaufort	154	163	51.4%	317
73	Sipitang	21	28	57.1%	49
74	Tenom	413	23	5.3%	436
75	Tambunan	47	169	78.2%	216
76	Ranau	606	1109	64.7%	1715
77	Beluran	153	84	35.4%	237
78	Pitas	36	27	42.9%	63
79	Lahad datu	570	1039	64.6%	1609
80	Kunak	11	9	45.0%	20
81	Semporna	14	74	84.1%	88
82	Kuala Penyu	18	39	68.4%	57
	TOTAL	153184	208591	57.7%	361736

Table 3 : Anaesthetics for Day Care Surgery and Day of Surgery Admissions in KKM hospitals, 2012

No.	HOSPITAL	Day Care Surgery	Day Of Surgery Admissions
	PERLIS		
1	Kangar	34	0
	KEDAH		
2	Alor Setar	1244	140
	PULAU PINANG		
3	Pulau Pinang	231	574
	PERAK		
4	Ipoh	1980	717
5	Seri Manjung	155	25
6	Slim River	84	4
	SELANGOR		
7	Tuanku Ampuan Rahimah, Kelang	638	0
8	Ampang	97	11
9	Serdang	753	0
10	Sungai Buloh	119	3
	WILAYAH PERSEKUTUAN		
11	Kuala Lumpur	549	304
12	Putrajaya	558	16
	NEGERI SEMBILAN		
13	Serenban	51	0
14	Port Dickson	5	35
	MELAKA		
15	Melaka	294	15
	PAHANG		
16	Tengku Ampuan Afzan, Kuantan	642	228
17	Temerloh	47	2
	TERENGGANU		
18	Sultanah Nur Zahirah, Kuala Terengganu	703	26
	SABAH		
19	Ranau	983	0
20	Tawau	237	0
21	Likas	427	3
22	Semporna	7	0
	TOTAL	9838	2103

Table 4 : Anaesthetic for LSCS and nature of surgery in KKM hospitals, 2012

No.	HOSPITAL	Elective LSCS	Emergency LSCS	TOTAL
	PERLIS			
1	Kangar	240	762	1002
	KEDAH			
2	Alor Setar	881	2524	3405
3	Langkawi	91	253	344
4	Sultan Abdul Halim, Sungai Petani	350	2963	3313
5	Kulim	344	871	1215
	PULAU PINANG			
6	Pulau Pinang	387	972	1359
7	Seberang Jaya	521	1557	2078
8	Bukit Mertajam	9	0	9
	PERAK			
9	Ipoh	774	2176	2950
10	Seri Manjung	270	815	1085
11	Teluk Intan	228	1326	1554
12	Taiping	549	1712	2261
13	Slim River	102	193	295
	SELANGOR			
14	Tuanku Ampuan Rahimah, Kelang	714	2519	3233
15	Ampang	598	1166	1764
16	Serdang	483	1485	1968
17	Selayang	577	1960	2537
18	Sungai Buloh	679	2092	2771
19	Kajang	109	824	933
	WILAYAH PERSEKUTUAN			
20	Kuala Lumpur	1157	3465	4622
21	Putrajaya	656	1370	2026
22	Labuan	56	196	252
	NEGERI SEMBILAN			
23	Tuanku Jaafar, Seremban	465	1225	1690
24	Tuanku Ampuan Najihah, Kuala Pilah	177	501	678
25	Port Dickson	32	71	103
	MELAKA			
26	Melaka	807	1034	1841
	JOHOR			
27	Sultanah Aminah, JB	614	2968	3582
28	Sultan Ismail, JB	320	1540	1860
29	Muar	180	743	923
30	Batu Pahat	275	1101	1376
31	Segamat	178	575	753
32	Kluang	145	423	568
	PAHANG			
33	Tengku Ampuan Afzan, Kuantan	537	1605	2142
34	Temerloh	568	1268	1836
35	Kuala Lipis	40	229	269
	TERENGGANU			
36	Sultanah Nur Zahirah, Kuala Terengganu	602	1886	2488
37	Kemaman	114	351	465
	KELANTAN			
38	Raja Perempuan Zainab II, Kota Bharu	493	2140	2633
39	Kuala Krai	111	426	537
40	Tanah Merah	88	541	629

No.	HOSPITAL	Elective LSCS	Emergency LSCS	TOTAL
	SARAWAK			
41	Umum Sarawak	339	2437	2776
42	Sibu	197	1123	1320
43	Miri	103	1138	1241
44	Bintulu	78	567	645
45	Sarikei	17	79	96
46	Kapit	46	118	164
47	Serian	1	48	49
48	Bau	3	26	29
49	Lundu	1	16	17
50	Simunjan	0	18	18
51	Sri Aman	30	82	112
52	Betong	4	22	26
53	Saratok	0	6	6
54	Mukah	1	14	15
55	Daro	0	9	9
56	Kanowit	0	6	6
57	Lawas	9	33	42
58	Limbang	35	117	152
59	Marudi	3	15	18
	SABAH			
60	Duchess Of Kent	376	1377	1753
61	Likas	642	2774	3416
62	Keningau	110	328	438
63	Tawau	242	1342	1584
64	Kudat	8	40	48
65	Kota Marudu	11	52	63
66	Kota Belud	5	59	64
67	Beaufort	10	116	126
68	Sipitang	0	1	1
69	Tenom	2	23	25
70	Ranau	10	115	125
71	Lahad Datu	136	387	523
72	Pitas	0	18	18
73	Kuala Penyu	0	3	3
	TOTAL	17940	62316	80256

Table 5 : Anaesthetics for LSCS and techniques of anaesthesia in KKM hospitals, 2012

No.	HOSPITAL	General Anaesthesia	Spinal Anaesthesia	Epidural Anaesthesia	CSE	Others *	TOTAL
	PERLIS						
1	Kangar	110	889	1	1	1	1002
	KEDAH						
2	Alor Setar	232	3132	41	0	0	3405
3	Langkawi	22	320	0	0	2	344
4	Sultan Abdul Halim, Sungai Petani	173	3139	0	1	0	3313
5	Kulim	326	867	6	16	0	1215
	PULAU PINANG						
6	Pulau Pinang	93	1191	23	3	49	1359
7	Seberang Jaya	132	1937	1	8	0	2078
8	Bukit Mertajam	0	9	0	0	0	9
	PERAK						
9	Ipoh	206	2517	170	20	37	2950
10	Seri Manjung	46	1037	2	0	0	1085
11	Teluk Intan	76	1382	1	48	47	1554
12	Taiping	65	2138	12	46	0	2261
13	Slim River	50	245	0	0	0	295
	SELANGOR						
14	Tuanku Ampuan Rahimah, Kelang	127	3030	69	7	0	3233
15	Ampang	143	1594	19	8	0	1764
16	Serdang	144	1801	18	5	0	1968
17	Selayang	120	2147	94	175	1	2537
18	Sungai Buloh	117	2623	7	5	19	2771
19	Kajang	63	861	5	1	3	933
	WILAYAH PERSEKUTUAN						
20	Kuala Lumpur	466	3589	285	194	88	4622
21	Putrajaya	142	1676	51	156	1	2026
22	Labuan	36	216	0	0	0	252
	NEGERI SEMBILAN						
23	Tuanku Jaafar, Seremban	147	1506	15	22	0	1690
24	Tuanku Ampuan Najihah, Kuala Pilah	23	583	7	39	26	678
25	Port Dickson	8	88	3	4	0	103
	MELAKA						
26	Melaka	441	1375	5	20	0	1841
	JOHOR						
27	Sultanah Aminah, JB	372	3210	0	0	0	3582
28	Sultan Ismail, JB	368	1474	6	0	12	1860
29	Muar	87	836	0	0	0	923
30	Batu Pahat	97	1279	0	0	0	1376
31	Segamat	20	733	0	0	0	753
32	Kluang	16	505	41	3	3	568
	PAHANG						
33	Tengku Ampuan Afzan, Kuantan	327	1794	7	2	12	2142
34	Temerloh	72	1764	0	0	0	1836
35	Kuala Lipis	13	256	0	0	0	269
	TERENGGANU						
36	Sultanah Nur Zahirah, Kuala Terengganu	221	2165	24	22	56	2488
37	Kemaman	48	415	0	1	1	465
	KELANTAN						
38	Raja Perempuan Zainab II, Kota Bharu	301	2306	2	14	10	2633
39	Kuala Krai	37	498	0	2	0	537
40	Tanah Merah	33	596	0	0	0	629

No.	HOSPITAL	General Anaesthesia	Spinal Anaesthesia	Epidural Anaesthesia	CSE	Others *	TOTAL
	SARAWAK						
41	Umum Sarawak	321	2440	3	3	9	2776
42	Sibu	81	1239				1320
43	Miri	134	1098		9		1241
44	Bintulu	44	600		1		645
45	Sarikei	40	56				96
46	Kapit	24	140				164
47	Serian	3	46				49
48	Bau	27	2				29
49	Lundu	0	17				17
50	Simunjan	2	16				18
51	Sri Aman	26	86				112
52	Betong	2	24				26
53	Saratok	6	0				6
54	Mukah	2	13				15
55	Daro	0	9				9
56	Kanowit	0	6				6
57	Lawas	23	19				42
58	Limbang	2	150				152
59	Marudi	0	18				18
	SABAH						
60	Duchess Of Kent	222	1504	7		20	1753
61	Likas	304	3073	39			3416
62	Keningau	54	362	1		21	438
63	Tawau	139	1442		1	2	1584
64	Kudat	46	2				48
65	Kota Marudu	53	10				63
66	Kota Belud	50	14				64
67	Beufort	69	57				126
68	Sipitang	1					1
69	Tenom	8	17				25
70	Ranau	105	20				125
71	Lahad Datu	118	387		2	16	523
72	Pitas	18					18
73	Kuala Penyu	3					3
	TOTAL	7447	70590	965	839	436	80277

Table 6 : No. Cases Under Regional Anaesthesia And Analgesia

BIL	HOSPITAL	Total Number of Nerve Blocks			No. of Nerve Blocks for anaesthesia	No. of Nerve Blocks for analgesia	Number of Upper Limb Blocks			Number of Lower Limb Blocks			Number of Trunk Blocks				Total
		Done with ultrasound	Done with nerve stimulator	Done with both			Done with ultrasound	Done with nerve stimulator	Done with both	Done with ultrasound	Done with nerve stimulator	Done with both	Paravertebral	Lumbar Plexus	TAP Blocks	Others	
	PERLIS																
1	Kangar	46	24		58	16	36	18		10	8		5	17	1		239
	KEDAH																
2	Alor Setar	7	61		68		7	27		34							204
3	Langkawi		18		18			18									54
4	Sultan Abdul Halim, Sungai Petani	98			98		66			31					1		294
5	Kulim										1						1
	PULAU PINANG																
6	Pulau Pinang						2			6							8
	PERAK																
7	Ipoh	6	12	19	37	0	5	4	11	1	8	8	0	0	0	0	111
8	Seri Manjung	0	24		11	13	0	2		0	22		0	0	0	0	72
9	Slim River					7											7
	SELANGOR																
10	TuanKu Ampuan Rahimah, Kelang	131			88	43	64			32						32	390
11	Serdang				62	21									2		85
12	Selayang	285			139	146	164			110				1	10		855
13	Sungai Buloh	21	25		25	2	11	13		8	10			1	2		118
14	Kajang	52	3		52	3	47	2		5	1		0	0	0	0	165
	WILAYAH PERSEKUTUAN																
15	Kuala Lumpur	377	66		282	162	185	28		153	37		9	1	27	10	1337
16	Putrajaya	23	18		26	12	6	6		17	12						120
	NEGERI SEMBILAN																
17	TuanKu Jaafar, Seremban	33	33		33		22	22		11	11						165
18	TuanKu Ampuan Najihah, Kuala Pilah	78	78		78		70	70		8	8						390
19	Port Dickson	20			4	18	16			2						4	64
	MELAKA																
20	Melaka	132	0		52	80	65	0		50					5	12	396
	JOHOR																
21	Muar	50	50		50		45	45		5	5				32	33	315
22	Batu Pahat	65			65		54			11							195
23	Segamat	7			7		7										21
24	Kluang	6	6		12	0	1	1		5	5		0	0	0	0	36
	PAHANG																
25	Tengku Ampuan Afzan, Kuantan	42	19		67	47	32	12	11	5	8	21				10	274
26	Temerloh	23	2		25	0	19			4	2						75
27	Kuala Lipis					3											3
	TERENGGANU																
28	Sultanah Nur Zahirah, Kuala Terengganu	129	25		61	93	76	14		53	11				15	7	484
	KELANTAN																
29	Raja Perempuan Zainab II, Kota Bharu			36	72	33			26						10		177
30	Tanah Merah	0	36	0	36	0	0	32		0	4						108
	SARAWAK																
31	Umum Sarawak	167	27	3	134	63	47	18	1	42	9	2	8	4	65	29	225
32	Sibu	159	20	2	147	32	105	20	0	52	0	2	0	0	0	0	179
33	Miri	6	15	0	19	2	1	3	0	8	9	0	0	0	0	0	21
34	Bintulu	88	0	6	88	6	70	0	0	18	0	6	0	0	3	10	107
	TOTAL	420	62	11	388	103	223	1207	1	120	18	10	8	4	68	39	532

Table 7 : Acute pain service and techniques of pain control in KKM hospitals, 2012

No.	HOSPITAL	Patient Controlled Analgesia (IV)	Epidural Analgesia	Intra-thecal Opioid	Nerve / Plexus Infusion	S/C Morphine	Morphine Infusion	Others	TOTAL
	PERLIS								
1	Kangar	149	313	12	0	0	30	0	504
	KEDAH								
2	Alor Setar	848	750	508	56	0	28	0	2190
3	Langkawi	168	38	181	0	0	0	0	387
4	Sultan Abdul Halim,Sungai Petani	504	174	0	0	0	13	345	1036
5	Kulim	28	66	596	1	0	0	447	1138
	PULAU PINANG								
6	Pulau Pinang	1146	451	836	37	23	19	0	2512
7	Seberang Jaya	326	164	560	89	21	87	2	1249
8	Bukit Mertajam	60	114	148	1	15	0	4	342
9	Kepala Batas	19	41	18	5	9	0	0	92
	PERAK								
10	Ipoh	928	442	2574	55	0	70	39	4108
11	Seri Manjung	168	123	230	0	0	1	0	522
12	Teluk Intan	283	196	0	0	0	29	21	529
13	Taiping	178	495	2139	0	0	45	0	2857
14	Slim River	57	72	0	7	0	0	0	136
	SELANGOR								
15	Tuanku Ampuan Rahimah, Kelang	1088	391	2863	0	3	0	35	4380
16	Ampang	267	327	725	79	56	0	0	1454
17	Serdang	234	264	212	21	454	0	0	1185
18	Selayang	1123	1196	2370	285	15	5	83	5077
19	Sungai Buloh	527	305	2148	17	336	0	2	3335
20	Kajang	67	178	270	36	7	0	569	1127
	WILAYAH PERSEKUTUAN								
21	Kuala Lumpur	2324	1072	3328	11	85	0	138	6958
22	Putrajaya	807	318	568	14	1	0	1850	3558
23	Labuan	0	1	117	0	0	0	0	118
	NEGERI SEMBILAN								
24	Tuanku Jaafar, Seremban	680	405	0	0	12	119	15	1231
25	Tuanku Ampuan Najihah, Kuala Pilah	78	183	195	0	3	0	0	459
26	Port Dickson	9	13	64	0	0	0	0	86
	MELAKA								
27	Melaka	980	98	2431	145	1358	43	70	5125
	JOHOR								
28	Sultanah Aminah, JB	1001	522	3086	0	550	0	393	5552
29	Sultan Ismail, JB	909	283	2056	28	236	0	213	3725
30	Muar	203	234	203	0	117	0	115	872
31	Batu Pahat	156	197	0	1	4	0	1	359
32	Segamat	114	46	97	0	59	0	10	326
33	Kluang	27	37	524	0	11	0	0	599

No.	HOSPITAL	Patient Controlled Analgesia (IV)	Epidural Analgesia	Intra-thecal Opioid	Nerve / Plexus Infusion	S/C Morphine	Morphine Infusion	Others	TOTAL
	PAHANG								
34	Tengku Ampuan Afzan, Kuantan	563	322	1897	101	294	56	0	3233
35	Temerloh	824	100	1584	0	2	7	21	2538
36	Kuala Lipis	0	16	256	0	0	1	1	274
	TERENGGANU								
37	Sultanah Nur Zahirah, Kuala Terengganu	950	500	2164	5	78	27	39	3763
38	Kemaman	41	52	417	0	40	0	262	812
	KELANTAN								
39	Raja Perempuan Zainab II, Kota Bharu	198	457	2269	6	346	993	207	4476
40	Kuala Krai	43	125	498	28	50	196	4	944
41	Tanah Merah	7	32	596	0	63	38	0	736
	SARAWAK								
42	Umum Sarawak	1093	621	11	0	14	0	77	1816
43	Sibu	260	173	134	0	37	0	71	675
44	Miri	179	205	1072	21	134	0	27	1638
45	Bintulu	14	38	43	155	55	59	16	380
	SABAH								
46	Queen Elizabeth	419	323	0	0	0	0	475	1217
47	Duchess Of Kent	347	82	0	0	0	0	234	663
48	Keningau	4	3	0	0	0	0	186	193
49	Likas	76	441	0	0	0	0	3022	3539
50	Tawau	117	131	0	0	0	0	1493	1741
	TOTAL	20591	13130	40000	1204	4488	1866	10487	91766

- * Epidural Analgesia (infusion or patient controlled, lumbar and caudal
- * Others (e.g s/c morphine)
- * Excludes patients not on APS follow up

Table 8 : Epidural analgesia for labour in KKM hospitals, 2012

No.	HOSPITAL	Epidural Analgesia For Labour
	KEDAH	
1	Kangar	5
	KEDAH	
2	Alor Setar	374
3	Langkawi	48
	Sultan Abdul Halim,Sungai Petani	2
4	Kulim	2
	PULAU PINANG	
5	Pulau Pinang	97
6	Seberang Jaya	18
	PERAK	
7	Ipoh	623
8	Seri Manjung	2
	SELANGOR	
10	Tuanku Ampuan Rahimah, Kelang	398
11	Ampang	87
12	Serdang	32
13	Selayang	218
14	Sungai Buloh	59
15	Kajang	10
	WILAYAH PERSEKUTUAN	
16	Kuala Lumpur	601
17	Putrajaya	401
	NEGERI SEMBILAN	
18	Tuanku Jaafar, Seremban	93
	MELAKA	
19	Melaka	124
	JOHOR	
20	Sultanah Aminah, JB	278
21	Sultan Ismail, JB	65
22	Muar	1
	PAHANG	
23	Tengku Ampuan Afzan, Kuantan	80
24	Temerloh	1
	TERENGGANU	
25	Sultanah Nur Zahirah, Kuala Terengganu	94
26	Kemaman	2
	KELANTAN	
27	Raja Perempuan Zainab II, Kota Bharu	17
28	Kuala Krai	3
	SARAWAK	
29	Umum Sarawak	21
30	Sibu	0
31	Miri	11
32	Bintulu	3
	SABAH	
33	Likas	177
34	Keningau	2
	TOTAL	3949

Table 9 : No. of attendances at anaesthetic clinic in KKM hospitals, 2012

No.	HOSPITAL	No. Of Patient Seen In Clinic
	PERLIS	
1	Kangar	987
	KEDAH	
2	Alor Setar	2000
3	Langkawi	14
4	Sultan Abdul Halim,Sungai Petani	2956
5	Kulim	154
	PULAU PINANG	
6	Pulau Pinang	3580
7	Seberang jaya	650
	PERAK	
8	Ipoh	4577
9	Seri Manjung	539
10	Teluk Intan	1023
11	Taiping	419
12	Slim River	392
	SELANGOR	
13	Tuanku Ampuan Rahimah, Kelang	2755
14	Ampang	2324
15	Serdang	1021
16	Selayang	3720
17	Sungai Buloh	1570
18	Kajang	446
	WILAYAH PERSEKUTUAN	
19	Kuala Lumpur	7612
20	Putrajaya	933
	NEGERI SEMBILAN	
21	Tuanku Jaafar, Seremban	3672
22	Tuanku Ampuan Najihah, Kuala Pilah	205
23	Port Dickson	55
	MELAKA	
24	Melaka	6587
	JOHOR	
25	Sultanah Aminah, JB	6943
26	Sultan Ismail, JB	5646
27	Muar	831
28	Batu Pahat	2996
29	Kluang	128
	PAHANG	
30	Tengku Ampuan Afzan, Kuantan	2786
31	Temerloh	1418
32	Kuala Lipis	19
	TERENGGANU	
33	Sultanah Nur Zahirah, Kuala Terengganu	2726
	KELANTAN	
34	Raja Perempuan Zainab II, Kota Bharu	2485
35	Kuala Krai	148
36	Tanah Merah	206
	SARAWAK	
37	Umum Sarawak	699
38	Sibu	0
39	Miri	534
40	Sarikei	50
	SABAH	
41	Queen Elizabeth	1867
42	Duchess Of Kent	576
43	Keningau	119
44	Tawau	882
	Total	76686

Table 10 : Admissions, patient days and bed-occupancy rates in ICU KKM hospitals, 2012

No.	HOSPITAL	No. Of Admissions	Patients Days	Bed Occupancy Rate
	PERLIS			
1	Kangar	355	1548	77.3%
	KEDAH			
2	Alor Setar	724	3482	96.7%
3	Langkawi	225	1464	67.0%
4	Sultan Abdul Halim, Sungai Petani	516	6	84.9%
5	Kulim	610	2575	100.5%
	PULAU PINANG			
6	Pulau Pinang	1338	6775	88.7%
7	Seberang Jaya	655	3	99.1%
8	Bukit Mertajam	1440	4	65.6%
9	Kepala Batas	226	1154	78.8%
	PERAK			
10	Ipoh	950	7	106.0%
11	Seri Manjung	405	4	92.3%
12	Teluk Intan	421	1644	123.8%
13	Taiping	1212	6113	92.7%
14	Slim River	362	1942	76.0%
	SELANGOR			
15	Tuanku Ampuan Rahimah, Kelang	2363	622	85.6%
16	Ampang	659	3410	77.9%
17	Serdang	768	4333	99.2%
18	Selayang	1321	7146	99.8%
19	Sungai Buloh	1327	66155	94.6%
20	Kajang	372	2193	77.2%
	WILAYAH PERSEKUTUAN			
21	Kuala Lumpur (GICU)	2001	9885	111.7%
	Kuala Lumpur (PICU)	597	4179	70.0%
22	Putrajaya	585	3	75.2%
23	Labuan	111	562	30.7%
	NEGERI SEMBILAN			
24	Tuanku Jaafar, Seremban	541	2698	114.6%
25	Tuanku Ampuan Najihah, Kuala Pilah	503	1747	61.8%
26	Port Dickson	243	5	85.5%
	MELAKA			
27	Melaka	1715	5	107.9%
	JOHOR			
28	Sultanah Aminah, JB	1802	5	105.6%
29	Sultan Ismail, JB	852	6	86.2%
30	Muar	672	3	97.5%
31	Batu Pahat	424	6	87.0%
32	Segamat	308	4	58.1%
33	Kluang	102	7	30.5%
	PAHANG			
34	Tengku Ampuan Afzan, Kuantan	623	13	106.4%
35	Temerloh	696	6	113.0%
36	Kuala Lipis	19	29	21.8%
	TERENGGANU			
37	Sultanah Nur Zahirah, Kuala Terengganu	1375	5	103.6%
	KELANTAN			
38	Raja Perempuan Zainab II, Kota Bharu	1303	5956	80.0%
39	Kuala Krai	171	6	69.8%
40	Tanah Merah	76	248	68.7%
	SARAWAK			
41	Umum Sarawak	896	4201	125.9%
42	Sibu	700	4439	6.0%
43	Miri	482	2221	76.1%
44	Bintulu	282	1325	88.3%
	SABAH			
45	Queen Elizabeth	1005	7007	93.4%
46	Duchess Of Kent	551	3849	87.9%
47	Likas	470	1995	76.9%
48	Keningau	499	1212	90.4%
49	Tawau	439	1597	80.7%
50	Lahad datu	250	1144	104.2%
	TOTAL	36542	164948	

Table 11 : Admissions, patient days and bed-occupancy rates in HDU / PACU in KKM hospitals, 2012

No.	HOSPITAL	No. Of Admissions	Patients Days	Bed Occupancy Rate
	PERLIS			
1	Kangar	207	1146	73.94%
	KEDAH			
2	Alor Setar	688	4242	88.66%
3	Sultan Abdul Halim, Sungai Petani	498	5	83.47%
	PERAK			
4	Ipoh	1549	7	106.00%
	SELANGOR			
5	Tuanku Ampuan Rahimah, Kelang	0	0	0.00%
6	Ampang	192	668	45.70%
7	Serdang	199	833	30.00%
8	Sungai Buloh	932	2526	54.00%
	NEGERI SEMBILAN			
9	Tuanku Jaafar, Seremban	435	1559	106.50%
	Melaka			
10	Melaka	161	1	31.30%
	JOHOR			
11	Muar	592	2	79.00%
12	Segamat	230	3	26.00%
	PAHANG			
13	Tengku Ampuan Afzan, Kuantan	227	3	79.40%
	TERENGGANU			
14	Kemaman	125	453	101.00%
	SARAWAK			
15	Umum Sarawak	177	731	25.80%
TOTAL		6212	12178	

Table 12 : Attendances, new cases and procedures at Chronic Pain Clinics in KKM hospitals, 2012

No.	HOSPITAL	Total No. Of Patients Seen In Clinic	No. Of New Cases	No. Of Procedures Done	Total No. Of Patients Seen In Ward
	KEDAH				
1	Alor Setar	19	10	0	10
	PULAU PINANG				
2	Pulau Pinang	1263	206	142	70
	PERAK				
3	Ipoh	1385	107	73	53
	SELANGOR				
4	Tuanku Ampuan Rahimah, Kelang	1051	141	910	14
5	Selayang	1389	157	241	235
6	Sungai Buloh	16	12	0	0
	WILAYAH PERSEKUTUAN				
7	Kuala Lumpur	636	103	299	75
	NEGERI SEMBILAN				
8	Tuanku Jaafar, Seremban	352	60	30	11
	MELAKA				
9	Melaka	886	173	42	567
	JOHOR				
10	Sultanah Aminah, JB	337	77	0	52
11	Sultan Ismail, JB	612	63	42	87
	PAHANG				
12	Tengku Ampuan Afzan, Kuantan	316	148	63	5
	TERENGGANU				
13	Sultanah Nur Zahirah, Kuala Terengganu	145	26	0	24
	KELANTAN				
14	Raja Perempuan Zainab II, Kota Bharu	547	64	109	0
15	Kuala Krai	2	0	0	2
	SARAWAK				
16	Umum Sarawak	40	115	106	20
17	Miri	1	2	0	1
	TOTAL	8954	1347	1951	1203

Table 13: No. of anaesthetics administered in KKM hospitals, 2008 – 2012

No.	HOSPITAL	2008	2009	2010	2011	2012
	PERLIS					
1	Kangar	3862	4346	4259	4447	4675
	KEDAH					
2	Alor Setar	12939	12586	13705	14300	16360
3	Langkawi	712	739	985	1203	1605
4	Sultan Abdul Halim, Sungai Petani	8268	8236	8350	9713	10241
5	Kulim	3249	3734	3895	4229	4306
	PULAU PINANG					
6	Pulau Pinang	11598	11754	12558	13044	13663
7	Seberang Jaya	6217	6601	6342	6758	5781
8	Bukit Mertajam	2061	2497	2343	1249	1846
9	Kepala Batas	481	562	250	294	398
	PERAK					
10	Ipoh	13836	15036	15356	16359	17072
11	Seri Manjung	3458	3702	3692	4026	3920
12	Teluk Intan	4749	4814	5171	5057	5129
13	Taiping	7429	7312	8790	9636	10084
14	Slim River	721	453	600	860	1411
	SELANGOR					
15	Tuanku Ampuan Rahimah, Kelang	11023	11545	10842	11949	12068
16	Ampang	3940	4694	5799	5928	6224
17	Serdang	6645	7740	7890	9145	9709
18	Selayang	9072	9038	9886	10297	11615
19	Sungai Buloh	7106	7104	7240	8421	10408
20	Kajang	3894	3445	3882	4202	4246
	WILAYAH PERSEKUTUAN					
21	Kuala Lumpur	24682	24180	25732	24865	25947
22	Putrajaya	4691	5348	5546	6117	6384
23	Labuan	522	505	542	570	759
	NEGERI SEMBILAN					
24	Tuanku Jaafar, Seremban	8616	8198	9141	10872	10258
25	Tuanku Ampuan Najihah, Kuala Pilah	2019	2127	2253	2352	2663
26	Port Dickson	NA	NA	NA	79	284
	MELAKA					
27	Melaka	12471	11639	12427	13191	13361
	JOHOR					
28	Sultanah Aminah, JB	12565	13091	14658	15136	15665
29	Sultan Ismail, JB	6068	6490	6675	7040	8065
30	Muar	4879	4879	4569	2523	4933
31	Batu Pahat	4529	4688	4465	4717	4760
32	Segamat	1396	1374	2029	2442	3204
33	Kluang	926	934	974	870	1573
34	Kulai	701	731	643	623	565
	PAHANG					
35	Tengku Ampuan Afzan, Kuantan	8673	8425	9101	10126	10792
36	Temerloh	5722	6566	6070	6214	6431
37	Kuala Lipis	358	502	785	1165	936
	TERENGGANU					
38	Sultanah Nur Zahirah, Kuala Terengganu	10904	11013	10879	10994	11228
39	Kemaman	1550	1652	1197	1600	1725
	KELANTAN					
40	Raja Perempuan Zainab II, Kota Bharu	10181	10521	9854	11007	11209
41	Kuala Krai	1035	2025	1746	2170	2156
42	Tanah Merah	740	865	1296	1766	1678

No.	HOSPITAL	2008	2009	2010	2011	2012
	SARAWAK					
43	Umum Sarawak	11073	10984	11351	12068	13410
44	Sibu	5709	6139	6087	6043	6401
45	Miri	3855	3937	4260	4474	4926
46	Bintulu	2333	2427	2357	2562	2631
47	Sarikei	953	831	594	823	577
48	Kapit	594	594	428	413	434
49	Serian	685	651	579	451	416
50	Bau	267	212	125	130	157
51	Lundu	297	329	89	337	266
52	Simunjan	116	60	9	63	68
53	Sri Aman	259	183	145	159	260
54	Betong	241	326	308	237	111
55	Saratok	114	65	26	52	88
56	Mukah	192	174	187	246	209
57	Daro	74	76	39	73	39
58	Kanowit	133	93	63	25	69
59	Lawas	160	138	101	129	183
60	Limbang	513	428	531	642	665
61	Marudi	160	160	157	163	203
	SABAH					
62	Queen Elizabeth	7393	5609	5701	6467	9352
63	Duchess Of Kent	3846	3827	3989	4444	5233
64	Likas	5152	6633	7764	8439	8583
65	Keningau	2592	2639	2632	2557	2040
66	Tawau	4144	4840	4350	4631	5288
67	Kudat	481	374	427	351	339
68	Kota Marudu	466	360	324	277	231
69	Kota Belud	441	467	367	465	312
70	Mesra, Bukit Padang	889	976	437	456	385
71	Papar	405	254	143	149	72
72	Beaufort	395	140	395	206	317
73	Sipitang	61	123	64	98	49
74	Tenom	424	437	508	479	436
75	Tambunan	298	328	283	232	216
76	Ranau	1125	1525	1428	1870	1715
77	Beluran	127	126	214	206	237
78	Kinabatangan	3	21	35	94	63
79	Lahad datu	1839	1429	1410	1255	1609
80	Kunak	0	0	24	11	20
81	Semporna	83	18	65	92	88
82	Kuala Penyu	NA	NA	NA	NA	4
	TOTAL	302022	309122	319628	341436	363039

Table 14: No. of anaesthetics administered for emergency surgery in KKM hospitals, 2008 - 2012

No	HOSPITAL	2008	2009	2010	2011	2012
	PERLIS					
1	Kangar	57.20%	45.20%	56.90%	57.39%	57.69%
	KEDAH					
2	Alor Setar	46.90%	50.00%	51.60%	55.89%	57.20%
3	Langkawi	62.90%	59.70%	69.80%	65.86%	70.28%
4	Sultan Abdul Halim,Sungai Petani	69.50%	67.10%	68.90%	69.00%	69.58%
5	Kulim	55.30%	53.10%	55.80%	62.80%	61.82%
	PULAU PINANG					
6	Pulau Pinang	46.20%	46.80%	48.90%	40.16%	49.03%
7	Seberang Jaya	72.40%	72.10%	71.70%	72.36%	75.45%
8	Bukit Mertajam	1.20%	1.00%	2.00%	1.28%	28.55%
9	Kepala Batas	0.00%	1.10%	0.00%	0.00%	0.00%
	PERAK					
10	Ipoh	58.30%	59.20%	59.60%	58.92%	59.61%
11	Seri Manjung	65.50%	62.90%	66.70%	66.57%	67.24%
12	Teluk Intan	61.70%	67.70%	68.20%	70.26%	70.54%
13	Taiping	67.80%	66.50%	64.60%	62.65%	59.37%
14	Slim River	64.40%	59.80%	57.50%	58.72%	55.92%
	SELANGOR					
15	Tuanku Ampuan Rahimah, Kelang	56.60%	53.30%	54.90%	54.05%	59.19%
16	Ampang	63.40%	61.40%	57.50%	56.49%	53.98%
17	Serdang	54.20%	52.60%	55.70%	50.51%	50.94%
18	Selayang	46.20%	45.30%	49.10%	48.85%	45.32%
19	Sungai Buloh	67.10%	69.00%	75.70%	67.39%	64.92%
20	Kajang	68.60%	73.20%	71.90%	70.69%	69.08%
	WILAYAH PERSEKUTUAN					
21	Kuala Lumpur	43.20%	42.90%	43.50%	44.67%	45.28%
22	Putrajaya	48.80%	49.60%	46.40%	46.07%	44.08%
23	Labuan	60.30%	78.20%	51.10%	51.58%	58.23%
	NEGERI SEMBILAN					
24	Tuanku Jaafar, Seremban	56.20%	56.10%	59.30%	55.21%	52.12%
25	Tuanku Ampuan Najihah, Kuala Pilah	60.00%	52.30%	57.50%	57.78%	57.30%
26	Port Dickson	NA	NA	NA	48.10%	72.89%
	MELAKA					
27	Melaka	56.70%	41.90%	59.90%	61.99%	63.48%
	JOHOR					
28	Sultanah Aminah, JB	71.20%	67.00%	66.90%	56.38%	65.70%
29	Sultan Ismail, JB	68.20%	57.00%	67.80%	65.91%	65.94%
30	Muar	62.60%	62.60%	57.30%	58.70%	53.54%
31	Batu Pahat	NA	64.50%	66.80%	67.95%	65.82%
32	Segamat	71.60%	78.50%	65.10%	65.11%	61.80%
33	Kluang	62.50%	56.30%	60.60%	69.77%	64.84%
34	Kulai	0.00%	0.00%	0.00%	0.00%	0.00%
	PAHANG					
35	Tengku Ampuan Afzan, Kuantan	48.80%	50.30%	53.40%	54.57%	53.47%
36	Temerloh	65.40%	65.50%	68.20%	67.04%	58.19%
37	Kuala Lipis	71.50%	61.80%	68.20%	63.78%	72.22%
	TERENGGANU					
38	Sultanah Nur Zahirah, Kuala Terengganu	61.40%	62.80%	64.70%	61.30%	59.52%
39	Kemaman	65.90%	68.30%	71.60%	65.19%	63.83%
	KELANTAN					
40	Raja Perempuan Zainab II, Kota Bharu	53.50%	55.10%	61.50%	56.64%	59.36%
41	Kuala Krai	61.80%	69.70%	68.80%	65.14%	69.94%
42	Tanah Merah	52.40%	63.10%	70.70%	74.24%	74.61%

No	HOSPITAL	2008	2009	2010	2011	2012
	SARAWAK					
43	Umum Sarawak	41.10%	58.40%	59.20%	60.82%	57.38%
44	Sibu	47.30%	52.30%	47.40%	49.03%	53.65%
45	Miri	56.60%	65.30%	70.50%	72.02%	72.70%
46	Bintulu	55.40%	60.60%	60.60%	59.91%	59.29%
47	Sarikei	65.10%	64.60%	66.50%	47.27%	70.54%
48	Kapit	44.80%	43.90%	33.90%	39.95%	45.39%
49	Serian	40.30%	49.80%	48.70%	58.31%	45.91%
50	Bau	50.20%	49.10%	83.20%	62.31%	42.68%
51	Lundu	22.90%	28.30%	65.20%	28.19%	20.68%
52	Simunjan	44.00%	45.00%	22.20%	57.14%	57.35%
53	Sri Aman	42.10%	39.30%	36.60%	47.17%	51.92%
54	Betong	46.90%	31.60%	36.00%	52.74%	39.64%
55	Saratok	36.80%	41.50%	38.50%	51.92%	25.00%
56	Mukah	42.70%	47.70%	43.90%	34.55%	44.50%
57	Daro	45.90%	73.70%	46.20%	35.62%	51.28%
58	Kanowit	55.60%	65.60%	31.70%	80.00%	37.68%
59	Lawas	51.90%	57.20%	45.50%	48.84%	40.98%
60	Limbang	31.00%	28.30%	25.40%	33.18%	34.89%
61	Marudi	49.40%	49.40%	43.30%	41.72%	32.51%
	SABAH					
62	Queen Elizabeth	52.10%	55.40%	55.70%	53.58%	45.78%
63	Duchess Of Kent	63.70%	64.90%	64.50%	62.20%	62.83%
64	Likas	58.20%	59.80%	63.10%	62.70%	62.61%
65	Keningau	55.60%	57.00%	53.80%	56.71%	64.56%
66	Tawau	56.10%	58.60%	65.10%	67.57%	67.11%
67	Kudat	42.80%	41.70%	38.20%	27.64%	30.38%
68	Kota Marudu	63.10%	63.10%	52.20%	46.57%	48.05%
69	Kota Belud	34.50%	27.20%	46.90%	38.49%	42.95%
70	Mesra, Bukit Padang	0.00%	0.00%	0.00%	0.00%	0.00%
71	Papar	30.60%	20.50%	0.00%	0.00%	0.00%
72	Beaufort	36.50%	50.00%	35.40%	46.60%	51.42%
73	Sipitang	37.70%	62.60%	57.80%	54.08%	57.14%
74	Tenom	10.60%	18.10%	10.40%	9.81%	5.28%
75	Tambunan	52.30%	99.70%	80.90%	73.71%	78.24%
76	Ranau	53.40%	59.40%	59.40%	69.20%	64.66%
77	Beluran	29.90%	35.70%	37.90%	46.60%	35.44%
78	Kinabatangan	0.00%	23.80%	65.70%	37.23%	42.86%
79	Lahad datu	52.60%	69.50%	81.00%	67.81%	64.57%
80	Kunak	0.00%	0.00%	0.00%	0.00%	45.00%
81	Semporna	77.10%	44.40%	76.90%	90.22%	84.09%
82	Kuala Penyu	NA	NA	NA	NA	68.42%
	AVERAGE	50.40%	55.80%	58.00%	57.24%	57.70%

Table 15: Saturdays Lists in KKM Hospitals, 2012

Bil	Hospital	No. of operations done under Saturday List						No. of Saturday elective list (as of Dec 31st 2012)	
		General Anaesthesia		Local Anaesthesia		Total			
		2011	2012	2011	2012	2011	2012	2011	2012
1	Kangar	116	42	30	6	146	48	45	48
2	Alor Setar	2	124	3	125	5	249	5	249
3	Sultan Abdul Halim,Sungai Petani	179	157	137	165	316	322	286	322
4	Kulim	24	24	0	0	24	24	24	24
5	Pulau Pinang	650	546	287	222	937	768	246	768
6	Seberang Jaya	148	36	249	31	397	67	49	67
	Bukit Mertajam	0	3	0	32	0	35	0	24
	Kepala Batas	0	1	0	8	0	9	0	9
7	Ipoh	5	387	0	0	5	387	224	387
8	Teluk Intan	30	37	0	0	30	37	30	37
9	Taiping	94	94	3	0	97	94	97	94
10	Tuanku Ampuan Rahimah, Kelang	389	180	116	52	505	232	505	232
11	Ampang	1	199	0	18	1	217	1	52
12	Serdang	432	428	0	0	432	428	100	98
13	Selayang	436	495	306	215	742	710	184	710
14	Sungai Buloh	116	116	0	0	116	116	116	116
15	Kajang	175	208	0	15	175	223	61	68
16	Kuala Lumpur	1042	1099	131	97	1173	1196	391	417
17	Putrajaya	307	298	10	14	317	312	3	47
18	Tuanku Jaafar, Seremban	71	181	46	48	117	229	117	229
19	Kuala Pilah	36	94	0	70	36	164	36	61
20	Melaka	329	185	25	8	354	193	138	80
21	Sultanah Aminah, JB	106	533	0	10	106	543	282	142
22	Sultan Ismail, JB	204	285	0	0	204	285	204	98
23	Muar	45	45	0	0	45	45	45	45
24	Tengku Ampuan Afzan, Kuantan	82	433	8	131	90	564	90	97
25	Temerloh	156	121	356	48	512	169	512	43
26	Kota Bharu	364	294	363	306	727	600	727	600
27	Kuala Krai	152	0	21	0	173	0	52	0
28	Kuala Terengganu	248	349	30	32	278	381	278	381
29	Likas	89	84	17	0	106	84	106	84
30	Umum Sarawak	146	361	159	203	305	564	51	170
31	Miri	135	149	0	63	135	212	41	55
32	Sibu	21	76	25	72	46	148	5	80
33	Queen Elizabeth	NA		NA		NA	0	350	415
TOTAL		6330	7664	2322	1991	8652	9655	5441	2640

Table 16: Trends in output for Program Anestisiologi, KKM, 2004-2012

	2004	2005	2006	2007	2008	2009	2010	2011	2012
									(% increase from 2010)
No. of anaesthetics administered	229686	266660	277271	286324	301321	308391	319628	339844	363039 6.83%
No. of anaesthetics for day care surgery	NA	NA	4777	5190	5363	5315	5543	8367	9838 17.58%
No. of patients under acute pain service	18731	22459	31131	40490	52440	61583	65319	81801	91766 12.18%
No. of patients under obstetric analgesia service	NA	3161	3367	3137	3363	3952	4370	3949	3597 ↓ 8.91%
No. of attendance at anaesthetic clinic	NA	NA	16266	20363	30795	48491	52880	61873	76686 23.94%
No. of ICU admissions	15115	13027	16234	20075	23928	24908	30089	32621	36542 12.02%
No. of HDU admissions	NA	NA	3226	3536	5662	7000	7474	5991	6212 3.69%
No. of attendance at chronic pain clinic	NA	NA	173	1785	3199	4622	6281	7368	8954 21.53%

Table 17: Anaesthetic specialists in KKM hospitals, 2012

NO	HOSPITAL	No. Of Specialist											
		Jusa A	Jusa B	Jusa C	U54 / U53	U52 / U51	U48 / U47	U44 / U43	Contract	Sessional	Paid Leave	Non-Paid Leave	TOTAL
	PERLIS												
1	Kangar			1		3							4
	KEDAH												
2	Alor Setar			2	9								11
3	Langkawi					1							1
4	Sultan Abdul Halim, Sg Petani			1	2				2				5
5	Kulim			1	1								2
	PULAU PINANG												
6	Pulau Pinang	1	1	5	9	2	2						20
7	Seberang Jaya			1	2	1							4
	PERAK												
8	Ipoh		1	1	12					1			15
9	Seri Manjung			1	1								2
10	Slim River				1								1
11	Teluk Intan			1		1							2
12	Taiping			1	4	1							6
	SELANGOR												
13	T. Ampuan Rahimah, Kelang			1	8	1			1				11
14	Ampang			3	5								8
15	Serdang		1	4	9								14
16	Selayang		3		15								18
17	Sungai Buloh		1	3	7				1				12
18	Kajang			1	2	1							4
	WILAYAH PERSEKUTUAN												
19	Kuala Lumpur	1		3	24		4						32
20	Putrajaya		1	2	3								6
21	Labuan				1								1
	NEGERI SEMBILAN												
22	Tuanku Jaafar, Seremban		1	1	6								8
23	T. Ampuan Najihah, Kuala Pilah				2								2
24	Port Dickson				1								1
	MELAKA												
25	Melaka			1	11					2			14
	JOHOR												
26	Sultanah Aminah, JB		2	5	4	4	3						18
27	Sultan Ismail, JB			2	4					2			8
28	Muar				3	1							4
29	Batu Pahat			1	2				1				4
30	Segamat				1								1
	PAHANG												
31	Tengku Ampuan Afzan, Kuantan			3	3	1							7
32	Kuala Lipis				1								1
33	Temerloh			1	3	2							6
	TERENGGANU												
34	Sltanh Nur Zahirah, K. Trganu		1		11								12
35	Kemaman				1								1
	KELANTAN												
36	RJ Prmpn Zainab II, K. Bharu		1	4	9								14
37	Tanah Merah				2								2
38	Kuala Krai			1	1								2
	SARAWAK												
39	Umum Sarawak	1	0	5	5	2	3						16
40	Sibu				1		2						3
41	Miri				1		2						3
42	Bintulu						1						1
43	Sarikei						1						1
	SABAH												
44	Queen Elizabeth		1	1	4	2	2						10
45	Likas				2	1	2						5
46	Keningau				1								1
47	Lahad datu				1								1
48	Sandakan				1		2						3
49	Tawau				1		1						2
	TOTAL	3	14	57	197	24	25	0	5	5	0	0	330

Table 18: Anaesthetic medical officers and trainees in KKM hospitals, 2012

NO	HOSPITAL	No. Of Service MO							No. Of Trainees						TOTAL
		U54 / U53	U52 / U51	U48 / U47	U44 / U43	U41	Other / Contract	TOTAL	U54 / U53	U52 / U51	U48 / U47	U44 / U43	U41	Other / Contract	
	PERLIS														
1	Kangar	2			14			16							0
	KEDAH														
2	Alor Setar	2	2		14		4	22							0
3	Langkawi				2			2							0
4	Sultan Abdul Halim, Sg Petani	1		1	17			19							0
5	Kulim	1	1		9			11							0
	PULAU PINANG														
6	Pulau Pinang	2	1	12				15		1	16	7			24
7	Seberang Jaya		1		18		1	20							0
8	Bukit Mertajam				5			5							0
9	Kepala Batas		1		1			2							0
	PERAK														
10	Ipoh			3	27		12	42			1	7			8
11	Seri Manjung		1	1	6			8							0
12	Slim River		1		4			5							0
13	Teluk Intan		1	1	7	1		10							0
14	Taiping			22				22							0
	SELANGOR														
15	T. Ampuan Rahimah, Kelang			2	12		1	15			1	4			5
16	Ampang	1		4	16			21							0
17	Serdang				20			20				2			2
18	Selayang			1	27		1	29			1	1			2
19	Sungai Buloh	1		1	31		1	34							0
20	Kajang	1		1	7		1	10							0
	WILAYAH PERSEKUTUAN														
21	Kuala Lumpur	2	1	1	14		1	19			28	29			57
22	Putrajaya			2	18			20			1				1
23	Labuan				2			2							0
	NEGERI SEMBILAN														
24	Tuanku Jaafar, Seremban	1		1	26		1	29			4	1			5
25	T. Ampuan Najihah, Kuala Pilah	1	1		12			14							0
26	Port Dickson			1	4			5							0
	MELAKA														
27	Melaka			4	27		17	48			3	2			5
	JOHOR														
28	Sultanah Aminah, JB			2	14		10	26			9	7			16
29	Sultan Ismail, JB			4	15		2	21							0
30	Muar	1			14			15							0
31	Batu Pahat				10		1	11							0
32	Segamat				3		3	6							0
33	Kluang		1		5		1	7							0
	PAHANG														
34	Tengku Ampuan Afzan, Kuantan	2	2	2	24		1	31			3				3
35	Temerloh		1	1	7		1	10							0
36	Kuala Lipis				3			3							0
	TERENGGANU														
37	Sltanh Nur Zahirah, K. Trganu	1		1	16			18		3	4	5			12
38	Kemaman	1			2			3							0
	KELANTAN														
39	RJ Prmpn Zainab II, K. Bharu	2		1	26			29		4	10	4			18
40	Tanah Merah				3			3							0
41	Kuala Krai				2	1		3							0
	SARAWAK														
42	Umum Sarawak				12	10		22		4					4
43	Sibu				9			9							0
44	Miri				10		1	11							0
45	Bintulu				3		1	4							0
46	Sarikei				2										
	SABAH														
46	Queen Elizabeth				25			25							0
47	Likas				15			15							0
48	Keningau				4			4							0
49	Lahad datu				3			3							0
50	Sandakan				10			10							0
51	Tawau				8			8							0
	TOTAL	22	15	69	585	12	61	762	0	12	81	69	0	0	162

Table 19: Anaesthetic /ICU nurses and assisted medical officers in KKM hospitals, 2012

NO	HOSPITAL	No. Of Allied Health Personnel																						
		MA							GA Nurse							ICU nurse							TOTAL	
		U42	U41	U36	U32	U32 (JT)	U29	Contract	U41	U36	U32	U32 (JT)	U29	U19 (JM)	Contract	U42	U41	U36	U32	U32 (JT)	U29	U19 (JM)		Contract
	PERLIS																							
1	Kangar				1		4			1	3		16				1		3		23			52
	KEDAH																							
2	Alor Setar				2		2				1		40					1	10		65			121
3	Langkawi				1		1				1		7						1		13			24
4	Sg Petani				2		2				1		19						15		17			56
5	Kulim				1		2						12						7		20			42
	PULAU PINANG																							
6	Pulau Pinang				3		5						34					1	4		111			158
7	Seberang Jaya				2		1						11						2		34			50
8	Bukit Mertajam				1								4						2		23			30
9	Kepala Batas										1		4						1		17			23
	PERAK																							
10	Ipoh		1		1		8				1		17			1	2		12		82			125
11	Seri Manjung				1	4					3		7						5		23			43
12	Teluk Intan				1		1				1		10						2		12			27
13	Slim River				2		1						3		3				1		16			26
14	Taiping				2		1						29						8		80			120
	SELANGOR																							
15	Kelang			1	2		11		1				14					1	9		110			149
16	Ampang			1	1		3						12				1		6		53			77
17	Serdang			1	1		9						5					1	4		68			89
18	Selayang			1			3												5		74			83
19	Sungai Buloh				1		4						32					1	7		108			153
20	Kajang				1		2				7		35					1	5		25			76
	W. PERSEKUTUAN																							
21	Kuala Lumpur	1	1	1	5		12																	20
22	Putrajaya				1		4						14						2		54			75
23	Labuan				1								2						2		10			15
	NEGERI SEMBILAN																							
24	Seremban		1		1		6						23						2		10			43
25	Kuala Pilah				2		5				1		14				1		6		24			53
26	Port Dickson						1						2						2		13			18
	MELAKA																							
27	Melaka		1		2		12						14					1	14		79			123
	JOHOR																							
28	Sultanah Aminah, JB				3		7				1		35				1		11		110			168
29	Sultan Ismail, JB			1	2						15								4		56			78
30	Muar				2		4				1		12						2		30			51
31	Batu Pahat				1		3						13				1	1	3		43			65
32	Segamat				1								6						4		25			36
33	Kluang												3						3		20			26
	PAHANG																							
34	Kuantan				2		2				1		32		1				10		49			97
35	Kuala Lipis						1						2						1		2			6
36	Temerloh				1		2						15					1	5		50			74
	TERENGGANU																							
37	Kuala Terengganu				3		6				2		38						11		87			147
38	Kemaman				1		1		1		1		12						1		9			26
	KELANTAN																							
39	Kota Bharu	1		1	3		6				12		31				1	1	15		93			164
40	Kuala Krai				1		1						14						2		25			43
41	Tanah Merah				1								10								9			20

NO	HOSPITAL	No. Of Allied Health Personnel																						
		MA							GA Nurse							ICU nurse							TOTAL	
		U42	U41	U36	U32	U32 (JT)	U29	Contract	U41	U36	U32	U32 (JT)	U29	U19 (JM)	Contract	U42	U41	U36	U32	U32 (JT)	U29	U19 (JM)		Contract
	SARAWAK																							
42	Umum Sarawak			4	12		9					2				1		0	9		85			122
43	Bau			0	1		1					1					0	0		0			3	
44	Lundu			0	1		0					0					0	0		0			1	
45	Serian			0	1		1					0					0	0		0			2	
46	Simunjan			0	1		0					0					0	0		0			1	
47	Sri Aman			0	1		1					0					0	0		0			2	
48	Betong			0	1		1					0					0	0		0			2	
49	Saratok			0	0		1					0					0	0		0			1	
50	Sarikei			1	1		1					0					0	1		0			4	
51	Kanowit			0	1		0					0					0	0		0			1	
52	Sibu			1	6		1					0					1	7		45			61	
53	Daro			0	0		1					0					0	0		0			1	
54	Mukah			0	1		1					0					0	0		0			2	
55	Bintulu			0	3		1					0					0	4		19			27	
56	Miri			1	0		1					2					1	2		30			37	
57	Marudi			0	1		1					0					0	0		0			2	
58	Limbang			0	2		0					0					0	0		0			2	
59	Lawas			0	2		0					0					0	0		0			2	
60	Kapit			0	1		1					0					0	0		0			2	
	SABAH																							
61	Queen Elizabeth			3	5		7					3	4				1	7		95			125	
62	Likas						4						6					3		37			50	
63	Keningau				1		4											2		18			25	
64	Lahad datu			1	1													1		16			19	
65	Sandakan				2		3				1		2					7		56			71	
66	Tawau				1		6						7	4				8		28			54	
67	Kudat				1																		1	
68	Kota Marudu				1		1																2	
69	Pitas				1		1																2	
70	Kota Belud				1		1																2	
71	Mesra Bukit Padang				1																		1	
72	Papar				1																		1	
73	Beaufort				1		1				1		1										4	
74	Kuala Penyu						1																1	
75	Sipitang				1																		1	
76	Tenom				1		1																2	
77	Tambunan				1																		1	
78	Ranau				1																		1	
79	Beluran						2																2	
80	Kinabatangan						1																1	
81	Kunak				1																		1	
82	Semporna				1																		1	
TOTAL		2		18	118	4	188	0	2	1	55	0	621	14	4	2	8	13	260	0	2201	0	0	3515
		330							697							2484								

Table 20: Subspecialists under Program Anestisiologi in KKM hospitals, 2012

No.	Hospital	Cardiac Anaesthesia		Pediatric Anesthesia		Neuro Anaesthesia		Obstetric Anesthesia		Anaesthesia for Transplant Surgery		Intensive Care (Adult)		Pain Management	
		Subspecialist	Trainee	Subspecialist	Trainee	Subspecialist	Trainee	Subspecialist	Trainee	Subspecialist	Trainee	Subspecialist	Trainee	Subspecialist	Trainee
1	Alor Setar											1			1
2	P. Pinang	5	3			2						1	2	1	
3	Ipoh			1					1				2	2	
4	Taiping											1			
5	Selayang			1				1				1		2	2
7	Sungai Buloh					1						1	2	1	
8	Serdang	2	4	1											
9	Kelang							1	1			1		1	
10	Kuala Lumpur			4	1		2	1	3			3	1	1	1
11	Seremban			1											
12	Melaka			1								2		2	
13	Kota Bharu		1	1								1	2	1	1
14	Kuantan	1				1									
15	Kuala Terengganu											2		1	
16	Sultanah Aminah, JB	3	1	1								2		1	
17	Sultan Ismail, JB													1	
21	Likas			1											
23	Putrajaya					1									
	Total	11	9	12	1	5	2	3	5	0	0	16	9	14	5

Total no. of subspecialists = 61

Total no. of subspecialty trainees = 31

Table 21: No. of ICU / HDU beds and OT in KKM hospitals 2012

NO	HOSPITAL	Facility					
		ICU Bed		HDU Bed		OR	
		Available	Functional	Available	Functional	Available	Functional
	PERLIS						
1	Kangar	5	5	4	4	4	4
	KEDAH						
2	Alor Setar	10	10	14	14	12	12
3	Langkawi						
4	Sultan Abdul Halim, Sungai Petani	10	7	10	7	9	7
5	Kulim	7	7	0	0	3	3
	PULAU PINANG						
6	Pulau Pinang	26	22	0	0	15	15
7	Seberang Jaya	8	8	0	0	3	3
8	Bukit Mertajam	6	6	0	0	3	3
9	Kepala Batas	4	4	0	0	4	4
	PERAK						
10	Ipoh	16	16	18	18	17	17
11	Seri Manjung	8	8	0	0	3	3
12	Teluk Intan	4	4	0	0	6	5
13	Taiping	20	20	0	0	4	4
14	Slim River	5	5	0	0	5	5
	SELANGOR						
15	Tuanku Ampuan Rahimah, Kelang	32	29	0	0	17	13
16	Ampang	12	12	10	4	13	6
17	Serdang	16	10	15	6	20	12
18	Selayang	20	20	0	0	22	18
19	Sungai Buloh	18	18	24	14	22	12
20	Kajang	6	6	0	0	3	3
	WILAYAH PERSEKUTUAN						
21	Kuala Lumpur	30	30	0	0	33	33
22	Putrajaya	11	11	0	0	9	8
23	Labuan	5	5	0	0	2	2
	NEGERI SEMBILAN						
24	Tuanku Jaafar, Seremban	8	8	5	5	16	10
25	Tuanku Ampuan Najihah, Kuala Pilah	8	8	0	0	3	2
26	Port Dickson	4	4	0	0	1	1
	MELAKA						
27	Melaka	22	22	2	2	11	11
	JOHOR						
28	Sultanah Aminah, JB	29	29	0	0	13	13
29	Sultan Ismail, JB	17	17	15	0	18	7
30	Muar	8	8	12	4	4	4
31	Batu Pahat	8	8	0	0	2	2
32	Segamat	4	4	6	4	2	2
33	Kluang	6	4	0	0	6	3
	PAHANG						
34	Tengku Ampuan Afzan, Kuantan	12	12	4	4	15	14
35	Temerloh	18	13	0	0	13	6
36	Kuala Lipis	3	1	0	0	3	2
	TERENGGANU						
37	Sultanah Nur Zahirah, Kuala Terengganu	20	18	0	0	16	13
38	Kemaman	2	2	0	0	2	2
	KELANTAN						
39	Raja Perempuan Zainab II, Kota Bharu	21	20	0	0	7	7
40	Kuala Krai						
41	Tanah Merah	6	2	0	0	2	1

NO	HOSPITAL	Facility					
		ICU Bed		HDU Bed		OR	
		Available	Functional	Available	Functional	Available	Functional
	SARAWAK						
42	Umum Sarawak	20	12	2	2	16	15
43	Bau	0	0	0	0	2	2
44	Lundu	0	0	0	0	2	2
45	Serian	0	0	0	0	2	2
46	Simunjan	0	0	0	0	2	1
47	Sri Aman	0	0	0	0	2	2
48	Betong	0	0	0	0	2	2
49	Saratok	0	0	0	0	2	2
50	Sarikei	6	0	0	0	4	3
51	Kanowit	0	0	0	0	2	2
52	Sibu	17	13	0	0	10	7
53	Daro	0	0	0	0	2	2
54	Mukah	0	0	0	0	2	2
55	Bintulu	5	5	0	0	3	3
56	Miri	8	8	0	0	2	2
57	Marudi	0	0	0	0	2	2
58	Limbang	0	0	0	0	2	2
59	Lawas	0	0	0	0	2	2
60	Kapit	0	0	0	0	3	3
	SABAH						
61	Queen Elizabeth	21	21	0	0	11	11
62	Likas	6	6	10	0	6	6
63	Keningau	4	4			3	3
64	Lahad datu	4	4			3	3
65	Beaufort					2	2
66	Beluran					2	2
67	Kota Belud					1	1
68	Ranau					2	2
69	Sandakan	18	18			5	5
70	Semporna					1	1
71	Tawau	10	7			7	7
72	Sipitang					1	1
73	Tambunan					1	1
74	Kinabatangan					1	0
75	Kota Marudu					2	2
76	Kudat					2	2
77	Kunak					1	0
78	Pitas					1	1
79	Tenom					1	1
80	Papar					2	0
	TOTAL	594	541	151	88	482	401

Table 22: Program Anestisiologi key performance indicators, 2012

No.	HOSPITAL	Percentage of patients awaiting Emergency Surgery more than 24 hrs due lack of OT time	Percentage of elective and emergency surgery patients who received Acute pain service.	Percentage of patients undergoing elective surgery who are assessed in Anesthetic Clinic	Incidence of intubation's in the Recovery room	Ventilator Care Bundle (VCB) Compliance	Number of mortality/morbidity audits/ meetings conducted in the Department (in 6 months)	Percentage of post operative patients leaving the recovery room with pain score of > 4	Percentage of patients having a pain score of < 4 within the first 24 hrs after elective and emergency surgery	Percentage of elective surgical cancellations after preoperative assessment in the anaesthetic clinic
1	Kangar	0.5	13.2	39.1	0.09	98.86		0	94.56	0.36
2	Alor Setar	1.5	14.2	31.3	0.03	90.4	12	0.05	92.1	0
3	Langkawi	0	25.77	0	0	100	0	0	0	0
4	Sungai Petani	0.15	10.9	90.2	0.03	100	6	0	96.25	0.57
5	Kulim	0	26.43	9.37	0.07	85.07	15	0	99.86	0
6	Pulau Pinang	0.42	22.98	55.1	0.01	92.8	19	0	86.32	0.73
7	Seberang Jaya	2.1	21.6	45	0	100	100	0	100	3.9
8	Bukit Mertajam	0.56	18.5		0	1.03	100	0	100	
9	Kepala Batas		23.1		0	99	100	0	100	
10	Ipoh	0.08	24	67.8	0.09	99	100	0	97.8	1.3
11	Taiping	1.94	28.33	10.23	0.03	98.43	100	0.19	75.85	1.19
12	Teluk Intan	0	13.5	78.4	0	100	5	0	86.24	1
13	Seri Manjung	0	13.32	41.98	0	98.48	6	3.64	82.68	2.04
14	Slim River	0	9.6	63	0.1	92	12	0	100	3.7
15	Tuanku Ampuan Rahimah, Kelang	0.43	36.1	55.9	0.02	93.4	100	0	86.9	5.6
16	Ampang	0	23.36	81.15	0.02	95.03		0	89.4	1.33
17	Sungai Buloh		0.25	31	43					
18	Selayang	0.81	17.1	61.1	0.02	96.76	23	0	89.12	1.21
19	Serdang	0.28	12.2	21.4	0	100	100		86.89	0.48
20	Kajang	0	26.2	34	0.02	93	100	1.9	94	3.6
21	Kuala Lumpur	0.04	26.35	51.93	0.06	96.6	158	0	86.7	5.64
22	Putrajaya	0	30.19	30.68	0.06	100		0	92.04	4.39
23	Labuan	0	15.54			100	12	0		
24	Tuanku Jaafar, Seremban	0.16	12.61	54.95	0	99.38	6	0	83.54	3.69
25	Tuanku Ampuan Najihah, Kuala Pilah	0	17.9	18.02	0	98	100	0.34	66.23	2.4
26	Port Dickson	0	30.28	71.43	0	100		0	97.67	0
27	Melaka	0.16	40	101.3	0.007	99.75	14	0	95.8	0.33
28	Sultanah Aminah, Johor Bahru	0.07	35.3	97.61	0.01	99.17	13	0	92.83	6.48
29	Sultan Ismail, Johor Bahru	0	46.19	73.58	0.01	97.9	133	0	96.6	0.63
30	Muar	0	17.56	35.03	0	97.74	12	0	95.38	4.6
31	Batu Pahat	14.97	30.93	67.94	0	97.6	100	0	100	0.76
32	Segamat	0.1	10.1		0	95.6	100	0.68		
33	Keluang	0	38.1	61.2	0		0	0	0	5.4
34	Tengku Ampuan Afzan, Kuantan	0.1	30.3	55.6	0.01	99.1	100	0	98.2	0.03
35	Temerloh	0	13.5	78.4	0	100		0	86.24	1
36	Kuala Lipis	0	1.9	7.3	0			0	0	0
37	Raja Perempuan Zainab II, Kota Bharu	0.05	43.15	60.15	0.01	97.17	24	0.01	99.29	0.72
38	Tanah Merah	0.08	43.86	47.79	0		12	0	93.48	0
39	Kuala Krai	0.12	34.87	15.98	0	100	3	0	97.46	5.1
40	Sultanah Nur Zahirah, Kuala Terengganu	0	31.7	60	0.0009	97.9		0	98.5	0.15
41	Kemaman	0	9.1		0	24.8	100	0	13.8	
42	Umum Sarawak, Kuching	12	13.55	12.23	0.05	37		0	74	0.72
43	Sibu	0	18.9			100	0	0	0	0
44	Sarikei		0.5	29.41						
45	Bintulu	0	14.4	0	0	88.3		0	100	0
46	Miri	0.14	33.3	39.7	0.02	100	0	0	97.7	0.19
47	Queen Elizabeth	0.14	11.88	33	0.029	91.19	100	0	80.4	1.6
48	Sandakan	7.39	12.88	25.63	0			0	100	0.38
49	Tawau	0	33.2	50.69	0.02	100	100	0.15	94.28	1.38
50	Keningau	0	5.57	19.82	0	100	12	0	97.3	0
51	Lahad Datu	1.01			1	1.18	0.17	1.11	1.33	
52	Likas	0	48.7		0.02	100	100	0	80	
National Standard		≤ 1%	≥ 10%	≥ 30%	≤ 0.3%	≥ 80%	6 times in 6 months	≤ 10 %	≥ 75 %	≤ 10 %

Table 23: Research, 2012

No.	Hospital	Title Of Study		Name Of Researcher
	PERLIS			
1	Kangar	1	Awareness Audit In MOH Hospital	Dr Rozaimah Bt Jamiran
	KEDAH			
2	Sultan Abdul Halim, Sungai Petani	1	Safety Outcome Analysis of TIVA/TCI in Hospital Sultan Abdul Halim Sungai Petani Kedah	T.Praba, SY Loh, S Anis Iryani, MS, Ahmad Zaini, M Kyaw, ZA Norhidayah & S Noraini
	PULAU PINANG			
3	Pulau Pinang	1	Reversal of Rocuronium Induced Neuromuscular Blockade with Sugammadex compared with Neostigmine During General Inhalational Anaesthesia: Impact on Utilization of OT Time	Vanitha Sivanaser, Chin Im Im, Adawiyah Abu Bakar, Luah Lean Wah, Dato Dr. Jahizah Hj Hassan
		2	POISE 2 Trial(Perioperative Ischemic Evaluation 2 Trial)	Vanitha Sivanaser, Chin Im Im, Lee Ming Lee, Luah Lean Wah, Dato Dr. Jahizah Hj Hassan
	PERAK			
4	Ipoh	1	National Audit On Awareness In Anaesthesia In High Risk Patients.	Dr Kavita / Dr Linda
		2	Acupressure For Post-Operative Nausea / Vomiting.	Dr Kavita / Dr Linda
5	Seri Manjung	1	Awareness Under General Anaesthesia Among High Risk Patients in MOH Hospital	Dr.Khairudin bin Zainal Abidin, SN Rosnayani Ngah & SN Suriani Muhamad
6	Teluk Intan	1	Awareness under general anaesthesia in MOH hospital Study.	Dr. Abdul Aziz b. Jusoh dan KKM
		2	Left Bundle Branch Block Under General Anesthesia in Athlete's Heart.	Dr. Kumarravadivel A/I Dharmalingam
		3	Survey on Patients Satisfaction in Receiving Spinal Anesthesia in Hospital Teluk Intan.	Dr. Kumarravadivel A/I Dharmalingam
		4	Kajian Kepuasan Pelanggan Unit ICU / CCU	S/N Irda Kartini
		5	Kajian Kepuasan ,Pelanggan Dewan Bedah Umum	Sister Chandrika Devi
		6	Kajian Kepuasan Pelanggan Klinik Anestesia	PPP Izham Halim b. Halim
7	Slim River	1	Study on Intubations and Complications	Anaesthetic Team
	SELANGOR			
15	Tuanku Ampuan Rahimah, Kelang	1	Per rectal Diclofenac and Paracetamol for Post LSCS Pain Relief	Dr Mohd Azizan Ghazali & Dr Mohd Rohisham Zainal Abidin
		2	Effects of Acupuncture On Intraoperative Haemodynamics and Nausea and Vomiting In Parturients Undergoing Lower Segment Caesarean Section Under Subarachnoid Block	Dr Chan See Yun, Dr Mohd Rohisham Zainal Abidin
		3	Study On Interval Between Decision and Delivery For Emergency Caeserean Section.	Dr Noraslawati Bt Razak & Dr Mohd Rohisham B Zainal Abidin
		4	Leadership Skills Amongst Anaesthetist Practising In OT	Dr Muralitharan Perumal
16	Ampang	1	Clinical Audit at Hospital Level : Audit on Safe Surgery Saves Lives Program (Oct 2011 - April 2012)	Dr Sobha G. Kurup, KJ Normee Bt Sabudin, KJ Lailatul Salwa bt. Tajudin & KJ Nururizza bt. Hashim
	WILAYAH PERSEKUTUAN			
22	Putrajaya	1	Will STOP-BANG questionnaire improves the detection rate of Obstructive Sleep Apnea patient by the Medical Officer	Dr Nor Azlin Dahlan, Dr Naim Tan Abdullah & Dr Zalina Abd. Razak
	NEGERI SEMBILAN			
24	Tuanku Jaafar, Seremban	1	Perioperative Ischemic Evaluation 2 Trial (POISE 2)	Dr Rajeswary & Dr Sharedah Adnan
26	Port Dickson	1	National Audit of Intensive Care Unit (MRIC)	Dr Hema Malini & Sr Hapisah Bt Mat
		2	Patient Satisfaction Survey for Acute Pain Service	Dr Hema Malini & Sn Nooraini Bt Ab Halim

No.	Hospital	Title Of Study		Name Of Researcher
	MELAKA			
27	Melaka	1	Poise 2 STUDY	Dr.zainal Abidin bin Othman & Dr. Anuwar Ariff
		2	The implementation of Nurse-Led preoperative Assessment Questionnaire (PAQ) in the Anesthetic Clinic.	Dr. Harijah Wahidin, Dr.Khalidah & Dr Irda Yuhanis
		3	The role of preoperative ketamine in prevention of chronic post surgical pain (CPSP) in patients undergoing appendectomy in Hospital Melaka? A Pilot study.	Dr. Harijah Wahidin, Dr.Shireen Srijiayan & Dr.Lydiana
	JOHOR			
29	Sultan Ismail, Johor Bahru	1	Awareness Study in a High Risk Patient Under GA	Dr.Suana bt Mohd Kushairi
		2	rFVIIa : National Registry in Managing Critical Bleeds in Non-Haemophilic Patients	Dr.Mohd Zaini bin Laman
		3	Malaysian Registry of Intensive Care (MRIC).	Dr.Mohd Zaini bin Laman
30	Muar	1	Outcome of Tracheostomy in HPSF.	Dr Kurien Matthew, Yusoff Norlina, Kasbollah Suzaliatun, Mahmud Sabariah, Ali Atiqah & Ismail Azizah
		2	Kajian Serta Penambahbaikan Pengetahuan & Sikap Pelawat Terhadap Waktu Melawat di Unit Rawatan Rapi HPSF.	Fadzli Wagiman, Jamilah Nordin,Siti Khairosmawati Kamaruddin
31	Batu Pahat	1	National Audit on awareness of patient under GA in MOH hospital.	Dr Kamisah, PPP Azrin & S/N Kamsiah
		2	Pemantauan kes Kecemasan lebih daripada 24 jam sebelum dan selepas pembukaan 2 OT sehingga pukul 9 malam.	Dr Chua Wei Yen & Dr Kamisah Mohd Taib
		3	Peningkatan Kadar Infeksi dari Sedutan "Tracheal" di Unit Rawatan Rapi Hospital Batu Pahat.	Sister Sariah Ahmad,S/N Zarini Busu, S/N Izafura, S/N Kesumawati, S/N Rashidah, S/N Ahmad Busu & S/N Noorhaezah
33	Kluang	1	Survey on the alertness of staff nurses in handling of emergency LSCS.	Sister Rosilawati Bt Abu Hassan
		2	General assessment regarding cardiac disease among staff nurses.	SN Zubidah Bt Zaini
		3	Pain as a 5th vital sign (comparison between visual analogue score with numerical analogue score)	SN Wahuhidayah Bt Yahya
	PAHANG			
35	Tengku Ampuan Afzan, Kuantan	1	POISE-2	Asmarawati Mohamad Yatim
37	Kuala Lipis	1	Non-compliance to SSSL protocol (Safe Surgery Saves Life) Hospital Kuala Lipis	Dr Siti Sarah binti Mohd Shukor
	TERENGGANU			
38	Sultanah Nur Zahirah, Kuala Terengganu	1	Nutrition Practice In ICU HSNZ	Dr Nik Azman, DR Chua SY & PN Kartini
		2	Intensive Care Over Nation (ICON)	DR Nik Azman, DR Nur Aiza & Sn Zawiah
	KELANTAN			
40	Raja Perempuan Zainab II, Kota Bharu	1	National Audit On Awareness Under General Anesthesia among High Risk Patients In MOH Hospitals	Dr Mazelan Bin Omar