

Census Report

2016

Program Anestisiologi

Kementerian Kesihatan Malaysia

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CENSUS REPORT 2016

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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 84 hospitals provided anaesthetic service in Ministry of Health; 57 with resident anaesthetists. (Table 1)
2. The total no. of anaesthetics administered was 409723, an increase of 4.75% over the previous year. Of this number, 56.76% were for emergency surgery. (Table 2)
3. Hospitals with the most number of anaesthetics administered were: Hospital Kuala Lumpur (26417), Hospital Ipoh (16975) and Hospital Alor Setar (16581) (Table 2)
4. General anaesthesia was the most common technique (55.02%) followed by spinal anaesthesia (36.2%), epidural (0.9%), combined spinal and epidural (2.41%) and plexus block (1.13%) (Table 1)
5. The percentage of anaesthetics for emergency surgery reduced from 57.5% to 56.76% in 2016.

6. There were 12158 anaesthetics administered for day care surgery. An reduced of 3% from previous year. (Table 3)
7. 77.46% of all anaesthetics administered for LSCS were done as emergencies (Table 4) with the vast majority of them performed under spinal anaesthesia (87.15%); 8.46% of LSCS were done under general anaesthesia (Table 5)
8. A total of 136654 patients received post-operative pain management under the acute pain service; an increase of 8.26% over the previous year. 50.38% of patients had intra-thecal morphine, 19.71% patient controlled analgesia and 10.33% epidural analgesia. (Table 7)
9. A total of 6540 parturient received epidural analgesia during labour; an increase of 15.40% from the previous year. (Table 8)
10. The no. of patients who were seen at the anaesthetic clinics for preoperative assessment increased by 9.58% to 108414. (Table 9)
11. There were 54 general ICUs under Program Anestesiologi with a total admission of 41488, an increase of 1.70% from previous year. (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. 12 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 7449, an increase of 1.0% over the previous year. Hospitals with high HDU workload (patient days) were Hospital Sungai Buloh (Table 11)
14. There were 25 chronic pain clinics with a total of 15670 patient attendances, an increase of 9.60% from the previous year.

15. A total of 9002 patients were operated under the Saturday List programme in 39 hospitals, of whom 6851 were done under general anaesthesia. This represented a reduced of 8.6% from previous year. (Table 18)
16. All the output indicators continued to show upward trends in the last six years; when compared with 2015, the following increases were noted: no. of anaesthetics administered (\uparrow 4.75%), no. of patients under acute pain service (\uparrow 8.26% no. of attendance at anaesthetic clinic (\uparrow 9.58%), no. of ICU admission (\uparrow 1.70%), and no. of attendance at chronic pain clinic (\uparrow 9.60%). (Table 19)
17. As of 31th December 2016, there were 472 anaesthetists, 1136 medical officers and 202 trainees in the Ministry of Health hospitals (Table 20, 21)
18. There were 409 assistant medical officers, 1375 anaesthetic nurses and 3245 ICU nurses giving a total nursing and allied health workforce of 5029 (Table 22)
19. As of December 2016, there were 95 subspecialists (21% of total workforce) and 33 specialist trainees under Program Anestisiologi. There were 14 cardiac anaesthetists, 18 paediatric anaesthetists, 7 neuro anaesthetists, 9 obstetric anaesthetists, 28 intensivists and 19 pain specialists (Table 23)
20. There were 718 ICU beds of which 689 were functional (90%).. There were 108 functional HDU beds from a total of 176. (Table 24)
21. There were 463 functional operating theatres. (Table 24)
22. 55 hospitals submitted their mean KPI results. Most of the KPIs were within the national standards. (Table 25)

Table 1 : Anaesthetics administered according to techniques in KKM hospitals, 2016

No.	HOSPITAL	General Anaesthesia	Spinal Anaesthesia	Epidural Anaesthesia	Combined Spinal & Epidural (CSE)	Combined General & Regional Anaesthesia (GRA)	Plexus Blockade	Others	TOTAL
	PERLIS								
1	Kangar	2837	2295	46	278	121	93	37	5707
	KEDAH								
2	Alor Setar	10503	4865	19	206	499	63	426	16581
3	Langkawi	831	720	4	50	53	15	23	1696
4	Sultan Abdul Halim,Sungai Petani	5042	5831	142	155	13	284	5	11472
5	Kulim	2830	2017	2	132	74	3	43	5101
	PULAU PINANG								
6	Pulau Pinang	9779	3146	482	51	117	160	11	13746
7	Seberang Jaya	3427	3502	8	267	50	205	3	7462
8	Bukit Mertajam	876	436	0	105	57	0	2	1476
9	Kepala Batas	380	286	0	3	19	0	0	688
	PERAK								
10	Ipoh	10713	4844	180	577	312	215	134	16975
11	Seri Manjung	1473	2267	2	45	46	61	16	3910
12	Teluk Intan	2913	2118	3	245	68	8	6	5361
13	Taiping	5891	3981	237	353	64	100	164	10790
14	Slim River	684	550	1	52	3	16	1	1307
	SELANGOR								
15	Tuanku Ampuan Rahimah, Kelang	6792	4714	222	709	195	179	151	12962
16	Ampang	2399	4253	33	195	302	312	45	7539
17	Serdang	5991	3490	25	197	43	171	176	10093
18	Selayang	6600	5051	109	849	503	79	56	13247
19	Sungai Buloh	6648	4330	14	114	32	21	718	11877
20	Kajang	2644	2001	12	59	140	22	26	4904
21	Banting	365	355	54	37	7	0	0	818
22	Shah Alam	1942	1753	5	68	0	15	0	3783
	WILAYAH PERSEKUTUAN								
23	Kuala Lumpur	19528	4827	419	274	628	327	414	26417
24	Putrajaya	3715	3856	199	374	1	47	5	8197
25	Institut Kanser Negara	417	264	40	1	39	3	0	764
26	Labuan	340	430	0	0	5	0	0	775
	NEGERI SEMBILAN								
27	Tuanku Jaafar, Seremban	6744	4897	41	277	115	25	35	12134
28	Tuanku Ampuan Najihah, Kuala Pilah	1317	1533	9	115	35	19	0	3028
29	Port Dickson	252	187	0	50	34	27	4	554
	MELAKA								
30	Melaka	7676	5772	9	50	441	60	20	14028
	JOHOR								
31	Sultanah Aminah, JB	7965	5597	78	85	428	69	155	14377
32	Sultan Ismail, JB	5263	3529	72	360	175	17	3	9419
33	Muar	2541	2352	21	197	59	54	274	5498
34	Batu Pahat	2941	2816	10	204	100	181	0	6252
35	Segamat	1639	1731	12	136	29	10	7	3564
36	Kluang	1984	1627	0	74	148	55	0	3888
	PAHANG								
37	Tengku Ampuan Afzan, Kuantan	7122	4349	276	443	341	495	26	13052
38	Temerloh	3688	3546	4	52	26	15	138	7469
39	Kuala Lipis	794	1030	3	150	23	32	3	2035
	TERENGGANU								
40	Sultana Nur Zahirah, Kuala Terengganu	8024	5176	134	653	263	128	112	14490
41	Kemaman	826	1052	4	41	25	27	43	2018
	KELANTAN								
42	Raja Perempuan Zainab II, Kota Bharu	7196	4424	32	453	683	41	367	13196
43	Kuala Krai	1239	1225	5	80	30	71	5	2655
44	Tanah Merah	706	1262	1	44	19	7	4	2043

No.	HOSPITAL	General Anaesthesia	Spinal Anaesthesia	Epidural Anaesthesia	Combined Spinal & Epidural (CSE)	Combined General & Regional Anaesthesia (CGRA)	Plexus Blockade	Others	TOTAL
SARAWAK									
45	Umum Sarawak	9977	4322	139	408	432	117	79	15474
46	Pusat Jantung Sarawak	508	0	0	0	1	0	3	512
47	Sibu	3711	2725	393	176	94	252	10	7361
48	Miri	3035	1462	32	59	233	38	20	4879
49	Bintulu	1475	1416	14	28	13	86	17	3049
50	Sarikei	522	527	2	44	44	77	1	1217
51	Kapit	75	225	0	0	2	0	397	699
52	Serian	63	177	0	0	0	0	90	330
53	Bau	62	9	0	0	0	0	0	71
54	Lundu	7	36	0	0	0	0	176	219
55	Simunjan	8	9	0	0	0	0	4	21
56	Sri Aman	114	99	0	0	0	0	0	213
57	Betong	31	39	0	0	0	0	14	84
58	Saratak	8	8	0	0	0	0	0	16
59	Mukah	61	11	0	0	0	0	150	222
60	Daro	7	21	0	0	0	0	5	33
61	Kanowit	0	0	0	0	0	0	115	115
62	Lawas	37	65	0	0	0	0	48	150
63	Limbang	41	278	0	0	0	0	219	538
64	Marudi	6	43	0	0	0	0	21	70
SABAH									
65	Queen Elizabeth	2369	130	5	4	0	1	225	2734
66	Queen Elizabeth II	6159	1457	18	205	109	55	888	8891
67	Duchess Of Kent	2029	2173	9	49	96	6	5	4367
68	Likas	6061	3925	76	0	74	107	245	10488
69	Keningau	1095	916	54	43	59	133	16	2316
70	Tawau	2138	2535	5	14	26	8	63	4789
71	Kudat	113	50	0	0	7	0	41	211
72	Kota Marudu	110	5	0	0	0	0	73	188
73	Kota Belud	83	29	0	0	0	0	77	189
74	Mesra, Bukit Padang	865	0	0	0	0	0	0	865
75	Beaufort	84	189	0	0	0	0	197	470
76	Sipitang	32	21	0	0	0	0	38	91
77	Tenom	5	14	0	0	0	0	417	436
78	Tambunan	0	0	0	0	0	0	150	150
79	Ranau	144	45	0	0	11	0	2228	2428
80	Beluran	9	24	0	0	0	0	63	96
81	Pitas	32	1	0	0	0	0	22	55
82	Tuaran	63	159	0	0	0	0	11	233
83	Lahad datu	796	912	0	2	90	7	172	1979
84	Kunak	33	65	0	0	0	0	28	126
TOTAL		225445	148409	3716	9892	7656	4619	9986	409723

Table 2 : Anaesthetics and nature of surgery in KKM hospitals, 2016

No.	HOSPITAL	Elective Surgery	Emergency Surgery	TOTAL
	PERLIS		(%)	
1	Kangar	2241	3466	5707
	KEDAH			
2	Alor Setar	6634	9947	16581
3	Langkawi	613	1083	1696
4	Sultan Abdul Halim,Sungai Petani	3842	7630	11472
5	Kulim	2665	2436	5101
	PULAU PINANG			
6	Pulau Pinang	7343	6403	13746
7	Seberang Jaya	2364	5098	7462
8	Bukit Mertajam	1344	132	1476
9	Kepala Batas	365	323	688
	PERAK			
10	Ipooh	7337	9638	16975
11	Seri Manjung	1201	2709	3910
12	Teluk Intan	2029	3332	5361
13	Taiping	4663	6127	10790
14	Slim River	678	629	1307
	SELANGOR			
15	Tuanku Ampuan Rahimah, Kelang	5535	7427	12962
16	Ampang	3166	4373	7539
17	Serdang	4602	5491	10093
18	Selayang	6677	6570	13247
19	Sungai Buloh	4784	7093	11877
20	Kajang	1462	3442	4904
21	Banting	430	334	764
22	Shah Alam	1291	2492	3783
	WILAYAH PERSEKUTUAN			
23	Kuala Lumpur	15263	11154	26417
24	Putrajaya	3541	4003	7544
25	Institut Kanser Negara	702	5	707
26	Labuan	287	488	775
	NEGERI SEMBILAN			
27	Tuanku Jaafar, Seremban	5228	6906	12134
28	Tuanku Ampuan Najihah, Kuala Pilah	924	2104	3028
29	Port Dickson	204	350	554
	MELAKA			
30	Melaka	5759	8269	14028
	JOHOR			
31	Sultanah Aminah, JB	5210	9167	14377
32	Sultan Ismail, JB	3058	6361	9419
33	Muar	1688	3536	5224
34	Batu Pahat	2582	3670	6252
35	Segamat	1286	2278	3564
36	Kluang	1456	2432	3888
	PAHANG			
37	Tengku Ampuan Afzan, Kuantan	5552	7500	13052
38	Temerloh	2825	4644	7469
39	Kuala Lipis	642	1393	2035
	TERENGGANU			
40	Sultanah Nur Zahirah, Kuala Terengganu	5996	8494	14490
41	Kemaman	746	1272	2018
	KELANTAN			
42	Raja Perempuan Zainab II, Kota Bharu	5330	6274	11604
43	Kuala Krai	916	1737	2653
44	Tanah Merah	549	1494	2043

No.	HOSPITAL	Elective Surgery	Emergency Surgery	TOTAL
SARAWAK				
45	Umum Sarawak	7493	7981	15474 51.58%
46	Pusat Jantung Sarawak	444	68	512 13.28%
47	Sibu	3598	3763	7361 51.12%
48	Miri	1910	2969	4879 60.85%
49	Bintulu	826	2223	3049 72.91%
50	Sarikei	436	781	1217 64.17%
51	Kapit	483	216	699 30.90%
52	Serian	194	136	330 41.21%
53	Bau	62	9	71 12.68%
54	Lundu	185	34	219 15.53%
55	Simunjan	14	7	21 33.33%
56	Sri Aman	90	123	213 57.75%
57	Betong	42	42	84 50.00%
58	Saratok	11	5	16 31.25%
59	Mukah	172	50	222 22.52%
60	Daro	9	24	33 72.73%
61	Kanowit	115	0	115 0.00%
62	Lawas	86	64	150 42.67%
63	Limbang	334	204	538 37.92%
64	Marudi	36	34	70 48.57%
SABAH				
65	Queen Elizabeth	1640	1094	2734 40.01%
66	Queen Elizabeth II	4866	4025	8891 45.27%
67	Duchess Of Kent	1152	3215	4367 73.62%
68	Likas	4546	5942	10488 56.66%
69	Keningau	821	1495	2316 64.55%
70	Tawau	1422	3367	4789 70.31%
71	Kudat	86	125	211 59.24%
72	Kota Marudu	81	107	188 56.91%
73	Kota Belud	73	116	189 61.38%
74	Mesra, Bukit Padang	865	0	865 0.00%
75	Beaufort	236	234	470 49.79%
76	Sipitang	34	57	91 62.64%
77	Tenom	436	0	436 0.00%
78	Tambunan	11	139	150 92.67%
79	Ranau	754	0	754 0.00%
80	Beluran	50	46	96 47.92%
81	Pitas	21	34	55 61.82%
82	Tuaran	38	195	233 83.69%
83	Lahad datu	567	1412	1979 71.35%
84	Kunak	60	66	126 52.38%
TOTAL		175309	230108	405417 56.76%

Table 3 : Anaesthetics for Day Care Surgery and Day of Surgery Admissions in KKM hospitals, 2016

No.	HOSPITAL	Day Care Surgery	Day Of Surgery Admissions
	PERLIS		
1	Kangar	17	16
	KEDAH		
2	Alor Setar	1504	132
3	Langkawi	20	0
4	Sungai Petani	189	0
5	Kulim	61	0
	PULAU PINANG		
6	Pulau Pinang	231	1311
7	Seberang Jaya	37	76
8	Kepala Batas	24	28
	PERAK		
9	Ipooh	1625	1138
10	Seri Manjung	56	0
11	Teluk Intan	5	6
12	Taiping	39	8
13	Slim River	51	2
	SELANGOR		
14	Tuanku Ampuan Rahimah, Kelang	563	6
15	Ampang	264	1
16	Serdang	875	0
17	Selayang	340	11
18	Sungai Buloh	1409	0
19	Kajang	0	62
20	Shah Alam	193	16
	WILAYAH PERSEKUTUAN		
21	Kuala Lumpur	611	
22	Putrajaya	653	39
	NEGERI SEMBILAN		
23	Seremban	744	58
	MELAKA		
24	Melaka	344	102
	JOHORE		
25	Sultan Ismail, JB	445	62
	PAHANG		
26	Tengku Ampuan Afzan, Kuantan	459	23
27	Temerloh	105	0
	TERENGGANU		
28	Sultanah Nur Zahirah, Kuala Terengganu	664	3
	Kelantan		
29	Kuala Krai	0	11
	SARAWAK		
30	Umum Sarawak	207	0
31	Sibu	44	10
	SABAH		
32	Likas	584	10
33	Beaufort	167	0
34	Lahad Datu	0	48
	TOTAL	12530	3131

Table 4 : Anaesthetic for LSCS and nature of surgery in KKM hospitals, 2016

No.	HOSPITAL	Elective LSCS	Emergency LSCS	TOTAL
	PERLIS			
1	Kangar	183	1166	1349
	KEDAH			
2	Alor Setar	823	1811	2634
3	Langkawi	92	261	353
4	Sultan Abdul Halim,Sungai Petani	690	2818	3508
5	Kulim	301	849	1150
	PULAU PINANG			
6	Pulau Pinang	314	1065	1379
7	Seberang Jaya	478	1642	2120
8	Bukit Mertajam	40	20	60
	Kepala Batas	68	118	186
	PERAK			
9	Ipoh	910	1928	2838
10	Seri Manjung	334	861	1195
11	Teluk Intan	253	959	1212
12	Taiping	689	1379	2068
13	Slim River	93	183	276
	SELANGOR			
14	Tuanku Ampuan Rahimah, Kelang	719	2789	3508
15	Ampang	520	1775	2295
16	Serdang	373	1592	1965
17	Selayang	737	2945	3682
18	Sungai Buloh	714	2540	3254
19	Kajang	220	1054	1274
20	Banting	35	93	128
21	Shah Alam	247	1093	1340
	WILAYAH PERSEKUTUAN			
22	Kuala Lumpur	794	2964	3758
23	Putrajaya	1047	1925	2972
24	Labuan	71	220	291
	NEGERI SEMBILAN			
25	Tuanku Jaafar, Seremban	973	2926	3899
26	Tuanku Ampuan Najihah, Kuala Pilah	219	646	865
27	Port Dickson	1	2	3
	MELAKA			
28	Melaka	1286	2654	3940
	JOHOR			
29	Sultanah Aminah, JB	660	2548	3208
30	Sultan Ismail, JB	453	1586	2039
31	Muar	287	961	1248
32	Batu Pahat	305	958	1263
33	Segamat	87	607	694
34	Kluang	154	528	682
	PAHANG			
35	Tengku Ampuan Afzan, Kuantan	501	2139	2640
36	Temerloh	534	1850	2384
37	Kuala Lipis	89	470	559
	TERENGGANU			
38	Sultanah Nur Zahirah, Kuala Terengganu	692	2578	3270
39	Kemaman	188	411	599

No.	HOSPITAL	Elective LSCS	Emergency LSCS	TOTAL
KELANTAN				
40	Raja Perempuan Zainab II, Kota Bharu	649	2062	2711
41	Kuala Krai	129	504	633
42	Tanah Merah	126	708	834
SARAWAK				
43	Umum Sarawak	712	2417	3129
44	Sibu	183	1169	1352
45	Miri	170	683	853
46	Bintulu	92	680	772
47	Sarikei	18	159	177
48	Kapit	28	106	134
49	Serian	3	47	50
50	Bau	1	5	6
51	Lundu	1	7	8
52	Simunjan	0	2	2
53	Sri Aman	23	38	61
54	Betong	0	9	9
55	Saratok	0	1	1
56	Mukah	0	16	16
57	Daro	0	11	11
58	Kanowit	0	0	0
59	Lawas	2	33	35
60	Limbang	50	111	161
61	Marudi	1	9	10
SABAH				
62	Duchess Of Kent	240	1503	1743
63	Likas	834	3541	4375
64	Keningau	98	570	668
65	Tawau	284	1507	1791
66	Kudat	7	96	103
67	Kota Marudu	18	86	104
68	Kota Belud	10	97	107
69	Tuaran	6	131	137
70	Beaufort	8	138	146
71	Sipitang	1	42	43
72	Kunak	4	47	51
73	Ranau	8	80	88
74	Lahad Datu	142	729	871
75	Pitas	0	26	26
TOTAL		21022	72258	93280

Table 5 : Anaesthetics for LSCS and techniques of anaesthesia in KKM hospitals, 2016

No.	HOSPITAL	General Anaesthesia	Spinal Anaesthesia	Epidural Anaesthesia	CSE	* Others	TOTAL
	PERLIS						
1	Kangar	66	1173	12	44	2	1297
	KEDAH						
2	Alor Setar	71	2539	23	1	0	2634
3	Langkawi	22	329	1	1	0	353
4	Sultan Abdul Halim,Sungai Petani	103	3397	8	0	0	3508
5	Kulim	62	1062	2	24	0	1150
	PULAU PINANG						
6	Pulau Pinang	94	1226	15	22	22	1379
7	Seberang Jaya	85	2023	8	4	0	2120
8	Bukit Mertajam	0	60	0	0	0	60
9	Kepala Batas	5	181	0	0	0	186
	PERAK						
10	Ipooh	186	2174	171	299	8	2838
11	Seri Manjung	53	1141	0	1	0	1195
12	Teluk Intan	53	1040	0	89	30	1212
13	Taiping	213	1801	9	45	0	2068
14	Slim River	34	240	0	2	0	276
	SELANGOR						
15	Tuanku Ampuan Rahimah, Kelang	90	3191	63	164	0	3508
16	Ampang	59	2204	25	2	5	2295
17	Serdang	134	1765	21	45	0	1965
18	Selayang	159	3052	334	134	3	3682
19	Sungai Buloh	182	2996	7	1	68	3254
20	Kajang	104	1125	10	1	34	1274
21	Banting	5	93	0	0	3	101
22	Shah Alam	85	1235	6	14	0	1340
	WILAYAH PERSEKUTUAN						
23	Kuala Lumpur	325	2825	381	234	0	3765
24	Putrajaya	154	2525	197	96	0	2972
25	Labuan	15	276	0	0	0	291
	NEGERI SEMBILAN						
26	Tuanku Jaafar, Seremban	432	3407	37	8	15	3899
27	Tuanku Ampuan Najihah, Kuala Pilah	70	787	6	2	0	865
28	Port Dickson	0	3	0	0	0	3
	MELAKA						
29	Melaka	825	2996	113	6	0	3940
	JOHOR						
30	Sultanah Aminah, JB	308	2832	45	5	18	3208
31	Sultan Ismail, JB	214	1780	35	3	7	2039
32	Muar	40	1169	11	28	0	1248
33	Batu Pahat	77	1171	2	13	0	1263
34	Segamat	49	644	0	1	0	694
35	Kluang	65	594	0	3	20	682
	PAHANG						
36	Tengku Ampuan Afzan, Kuantan	216	2306	47	39	32	2640
37	Temerloh	240	2144	0	0	0	2384
38	Kuala Lipis	29	528	1	1	0	559
	TERENGGANU						
39	Sultanah Nur Zahirah, Kuala Terengganu	251	2604	128	214	73	3270
40	Kemaman	43	531	4	2	19	599

No.	HOSPITAL	General Anaesthesia	Spinal Anaesthesia	Epidural Anaesthesia	CSE	* Others	TOTAL
KELANTAN							
41	Raja Perempuan Zainab II, Kota Bharu	139	2519	14	19	20	2711
42	Kuala Krai	53	580	0	0	0	633
43	Tanah Merah	36	798	0	0	0	834
SARAWAK							
44	Umum Sarawak	400	2578	121	22	8	3129
45	Sibu	93	1255	4	0	0	1352
46	Miri	107	702	32	2	10	853
47	Bintulu	52	719	0	1	0	772
48	Sarikei	14	163	0	0	0	177
49	Kapit	13	121	0	0	0	134
50	Serian	0	50	0	0	0	50
51	Bau	5	1	0	0	0	6
52	Lundu	0	8	0	0	0	8
53	Simunjan	2	0	0	0	0	2
54	Sri Aman	11	50	0	0	0	61
55	Betong	1	8	0	0	0	9
56	Saratok	1	0	0	0	0	1
57	Mukah	10	6	0	0	0	16
58	Daro	8	3	0	0	0	11
59	Kanowit	0	0	0	0	0	0
60	Lawas	18	17	0	0	0	35
61	Limbang	0	161	0	0	0	161
62	Marudi	3	7	0	0	0	10
SABAH							
63	Duchess Of Kent						0
64	Likas	641	3658	76	0	0	4375
65	Keningau	105	534	36	4	3	682
66	Tawau	188	1601	1	1	0	1791
67	Kudat	79	24	0	0	0	103
68	Kota Marudu	99	5	0	0	0	104
69	Kota Belud	78	29	0	0	0	107
70	Tuaran	10	127	0	0	0	137
71	Beaufort	14	132	0	0	0	146
72	Sipitang	24	19	0	0	0	43
73	Kunak	7	44	0	0	0	51
74	Ranau	66	22	0	0	0	88
75	Lahad Datu	230	641	0	0	0	871
76	Pitas	25	1	0	0	0	26
TOTAL		7750	79752	2006	1597	400	91505

Table 6 : No. Of Cases Under Regional Anaesthesia And Analgesia in KKM hospitals, 2016

BIL	HOSPITAL	Total Number of Nerve Blocks		No. of Nerve Blocks for anaesthesia		Number of Upper Limb Blocks		Number of Lower Limb Blocks		Number of Trunk Blocks			Total
		Done with ultrasound	Done with nerve stimulator	No. of Nerve Blocks for analgesia	Done with ultrasound	Done with nerve stimulator	Done with ultrasound	Done with nerve stimulator	Paravertebral	Lumbar Plexus	TAP Blocks	Others	
	PERLIS												
1	Kangar	188	4	111	107	97	0	92	3	0	0	12	6 218
	KEDAH												
2	Alor Setar	523	14	205	392	249	1	212	7	2	0	41	31 597
3	Langkawi	1	14	10	5	1	9	0	5	0	0	0	0 15
4	Sultan Abdul Halim,Sungai Petani	284	284	284	0	211	211	43	43	0	0	23	7 284
5	Kulim	0	0	0	0	0	0	0	0	0	0	0	3 0
	PULAU PINANG												
6	Pulau Pinang	99	36			56	20	43	16		5	63	0
7	Seberang Jaya	208				166		39			3		0
	PERAK												
9	Ipoh	168	3	153	62	120	5	26	9	1	0	19	2 215
10	Seri Manjung	54	9	63	0	54	0	1	8	0	0	0	0 63
11	Teluk Intan	9		9		1		8					9
12	Taiping	116	116	116	116	93	93	23	23	0	0	0	0 232
13	Slim River	9			17			2					17
	SELANGOR												
14	Tuanku Ampuan Rahimah, Kelang	302	14	352	727	226	0	75	9	1	0	645	146 1079
15	Ampang	375	8	273	110	258	2	35	1	3	0	80	4 383
16	Serdang	253	252	253	1	74	74	178	178	0	0	1	0 254
17	Selayang	291	21	157	146	89	12	159	0	0	0	36	18 303
18	Sungai Buloh	33	6	28	6	13	0	9	0	6	0	4	1 34
19	Kajang	30	0	22	8	29	0	1	0	0	0	4	14 30
20	Shah Alam	21	9	30	0	6	1	11	3	0	0	9	0 30
	WILAYAH PERSEKUTUAN												
21	Kuala Lumpur	1066	8	738	370	258		475		28	0	80	236 1108
22	Putrajaya	38	9	42	5	4	3	4	3	0	38	4	3 47
23	Institut Kanser Negara	1	1			0	0	1	1	0	1	3	5
	NEGERI SEMBILAN												
24	Tuanku Jaafar, Seremban	92		36	56	37		32		1	0	21	1 92
25	Tuanku Ampuan Najihah, Kuala Pilah	30	30	30	0	15	15	15	15	0	0	0	0 30
26	Port Dickson	65	0	27	38	39	0	8	0	0	0	6	12 65
	MELAKA												
27	Melaka	135		10		45	5	63	5	0	0	4	14 10
	JOHOR												
28	Sultan Ismail, JB	127	57	102	25	49	25	32	32	0	0	22	24 127
29	Muar	106	7	47	130	58	6	28	1	0	0	30	56 177
30	Batu Pahat	181	0	160	21	165	0	16	0	0	16	3	22 181
31	Segamat	10	0	22	0	10	0	0	0	0	0	0	0 22
32	Kluang	121	0	75	46	25	0	60	0	0	0	36	0 121
	PAHANG												
33	Tengku Ampuan Afzan, Kuantan	308	2	518	380	132	254	60	329	3	4	82	27 898
34	Temerloh	16	78	11	83	11	2	4	14	0	0	0	63 94
35	Kuala Lipis	48	9	42	12	25	3	17	6	0	0	6	5 54
	TERENGGANU												
36	Sultanah Nur Zahirah, Kuala Terengganu	321	45	138	228	194	15	54	21	0	0	9	73 366
37	Kemaman	0	0	0	0	49	0	24	0	0	0	0	1097 0
	KELANTAN												
38	Raja Perempuan Zainab II, Kota Bharu	581	4	246	273	257	0	206	4	0	10	106	19 519
39	Tanah Merah	7	0	7	0	7	0	0	0	0	0	0	0 7
	SARAWAK												
40	Umum Sarawak	363	42	180	469	149	3	99	34	0	0	120	244 649
41	Sibu	233	0	230	22	210	1	32	1	1	0	11	0 252
42	Miri	122	35	38	132	68	19	29	15	0	0	33	50 170
43	Bintulu	98	0	96	9	82	0	4	0	0	0	3	7 105
44	Sarikei	79	1	82	40	55	1	12	0	0	0	15	3 122
	Sabah												
45	Queen Elizabeth II	0	0	0	0	135	0	87	6	2	1	12	4 0
46	Likas	259	0	0	259	32	0	227	0	0	0	13	136 259
47	Keningau	133	13	139	7	116	0	16	14	0	0	0	0 146
48	Tawau	22	0	0	0	22	0	0	0	0	0	0	0 0
	TOTAL	895	78	626	672	564	2835	164	50	1	0	207	444 9384

Table 6(Cont) : No. Of Cases Under Regional Anaesthesia And Analgesia in KKM hospitals, 2016
 (Complication)

BIL	HOSPITAL	Complication																		TOTAL	
		During block performance												Post op in ward			At 1 month				
		Poor needle visualization	failed block	technical difficulty	Horner's Syndrome	vascular puncture	failed stimulation	inadequate spread	anatomical variation	phrenic nerve	others	Persistent numbness	Persistent weakness	Failed catheter	Numbness	Weakness	Others				
	Perlis																				
1	Kangar		1				1					1	1							4	
	PULAU PINANG																				
2	Pulau Pinang	1	7	2	1			4	1			1	1							18	
	PERAK																				
3	Seri Manjung	20	2																	22	
	SELANGOR																				
4	Tengku Ampuan Rahimah, Kelang					1														1	
5	Selayang												1							1	
6	Sungai Buloh	5		2																7	
7	Kajang						6													6	
	WILAYAH PERSEKUTUAN																				
8	Kuala Lumpur	7		7	3	1		3	3			24	3	1						52	
	NEGERI SEMBILAN																				
9	Tuanku Jaafar, Seremban							1	1			2								4	
	JOHOR																				
10	Muar							3												3	
11	Segamat		2																	2	
12	Kluang	3	10																		
	PAHANG																				
13	Tengku Ampuan Afzan, Kuantan	7	8	4	2	3			2			6	3							35	
	TERENGGANU																				
14	Sultanah Nur Zahirah, Kuala Terengganu	2		1								12		2						17	
15	Kemaman		28																		
	SARAWAK																				
16	Umum Sarawak	25	9	6	1		1	7	11	1	3	5	1	63						133	
17	Sibu		14	1				11												26	
18	Sarikei		2	5		4	3	4												18	
	Sabah																				
19	Keningau			3																3	
20	Tawau			14																14	
	TOTAL	65	105	26	9	9	5	39	18	1	3	52	9	64	2	0	0		366		

Table 7 : Acute pain service and techniques of pain control in KKM hospitals, 2016

No.	HOSPITAL	Patient Controlled Analgesia (IV)	Epidural Analgesia	Intra-thecal Opiod	Nerve / Plexus Infusion	S/C Morphine	Morphine Infusion	Oral strong opioids (e.g morphine / oxycodone)*	TOTAL
	PERLIS								
1	Kangar	223	463	1084	193	61	1	30	2055
	KEDAH								
2	Alor Setar	988	492	1955	598	0	25	124	4182
3	Langkawi	77	69	374	13	0	5	2	540
4	Sultan Abdul Halim,Sungai Petani	225	144	3741	284	0	0	0	4394
5	Kulim	108	35	389	22	5	1	0	560
	PULAU PINANG								
6	Pulau Pinang	1092	392	1238	165	114	45	71	3117
7	Seberang Jaya	439	336	1302	462	11	1	1	2552
8	Bukit Mertajam	31	123	146	0	0	0	0	300
9	Kepala Batas	0	20	181	0	56	0	0	257
	PERAK								
10	Ipoh	1110	564	2432	216	0	71	0	4393
11	Seri Manjung	220	88	392	35	0	1	0	736
12	Teluk Intan	236	95	1083	9	2	0	0	1425
13	Taiping	280	437	2130	98	2	25	670	3642
14	Slim River	78	56	92	29	2	0	0	257
	SELANGOR								
15	Tuanku Ampuan Rahimah, Kelang	967	664	2925	0	7	0	524	5087
16	Ampang	311	414	1416	411	12	0	0	2564
17	Serdang	545	239	1375	235	211	1	0	2606
18	Selayang	1459	1272	3485	303	12	6	315	6852
19	Sungai Buloh	868	186	2668	30	178	0	13	3943
20	Kajang	148	116	645	42	131	0	0	1082
21	Banting	19	54	130	0	4	2	0	209
22	Shah Alam	306	64	1054	30	18	0	0	1472
	WILAYAH PERSEKUTUAN								
23	Kuala Lumpur	2236	92	1	1273	101	123	287	4113
24	Putrajaya	733	296	2424	37	3	0	153	3646
25	Institut Kanser Negara, Putrajaya	176	40	0	5	1	0	48	270
26	Labuan	0	5	306	0	107	0	0	418
	NEGERI SEMBILAN								
27	Tuanku Jaafar, Seremban	994	302	2627	142	32	13	16	4126
28	Tuanku Ampuan Najihah, Kuala Pilah	63	152	338	16	29	0	0	598
29	Port Dickson	29	32	37	58	0	0	3	159
	MELAKA								
30	Melaka	1606	113	3024	122	2848	71	100	7884
	JOHOR								
31	Sultanah Aminah, JB	1269	328	2806	90	391	53	19	4956
32	Sultan Ismail, JB	904	555	2690	110	246	3	1504	6012
33	Muar	324	275	730	188	47	0	79	1643
34	Batu Pahat	359	153	883	121	6	0	0	1522
35	Segamat	215	144	345	50	107	1	0	862
36	Kluang	446	61	554	114	26	0	0	1201

No.	HOSPITAL	Patient Controlled Analgesia (IV)	Epidural Analgesia	Intra-thecal Opiod	Nerve / Plexus Infusion	S/C Morphine	Morphine Infusion	Oral strong opioids (e.g morphine / oxycodone)*	TOTAL
	PAHANG								
37	Tengku Ampuan Afzan, Kuantan	631	638	2329	780	124	56	0	4558
38	Temerloh	1032	112	1753	53	0	3	0	2953
39	Kuala Lipis	154	155	421	32	0	0	0	762
	TERENGGANU								
40	Sultanah Nur Zahirah, Kuala Terengganu	1429	768	2407	228	2	64	323	5221
41	Kemaman	69	58	959	0	32	28	0	1146
	KELANTAN								
42	Raja Perempuan Zainab II, Kota Bharu	266	664	2687	181	301	1052	254	5405
43	Kuala Krai	86	118	645	71	43	213	0	1176
44	Tanah Merah	22	65	805	0	24	79	0	995
	SARAWAK								
45	Umum Sarawak	1656	1171	428	670	9	101	219	4254
46	Sibu	258	392	1404	319	89	19	227	2708
47	Miri	313	136	676	169	205	16	0	1515
48	Bintulu	168	52	292	22	194	9	24	761
49	Sarikei	65	58	136	79	0	0	108	446
	SABAH								
50	Queen Elizabeth II	820	425	5	267	7	30	0	1554
51	Duchess Of Kent	283	99	1520	30	175	6	36	2149
52	Keningau	0	181	474	149	66	31	1	902
53	Lahad Datu	50	10	447	37	9	4	4	561
54	Likas	431	74	3658	259	136	64	0	4622
55	Tawau	126	79	799	6	249	0	0	1259
	TOTAL	26943	14126	68847	8853	6435	2223	5155	132582

* Epidural Analgesia (infusion or patient controlled, lumbar and caudal

* Intra-thecal opioid intra-thecal morphine only given for LSCS

* Oral analgesics refers to cases being treated post op with oral analgesia only

* Only those patients on oral strong opioids alone (not those convert from PCA or epidural to oral strong opioids)

Table 8 : Obstetric Analgesia Service, KKM 2016

No.	HOSPITAL	Epidural Analgesia For Labour
	PERLIS	
1	Kangar	30
	KEDAH	
2	Alor Setar	86
3	Langkawi	5
4	Sultan Abdul Halim,Sungai Petani	6
5	Kulim	3
	PULAU PINANG	
6	Pulau Pinang	42
7	Seberang Jaya	53
	PERAK	
8	Ipoh	706
9	Seri Manjung	2
10	Teluk Intan	1
11	Taiping	1
	SELANGOR	
13	Tuanku Ampuan Rahimah, Kelang	423
14	Ampang	226
15	Serdang	14
16	Selayang	312
17	Sungai Buloh	87
18	Kajang	23
19	Shah Alam	32
	WILAYAH PERSEKUTUAN	
20	Kuala Lumpur	943
21	Putrajaya	1025
	NEGERI SEMBILAN	
22	Tuanku Jaafar, Seremban	100
23	Tuanku Ampuan Najihah, Kuala Pilah	8
	MELAKA	
24	Melaka	8
	JOHOR	
25	Sultanah Aminah, JB	298
26	Sultan Ismail, JB	242
27	Muar	91
	PAHANG	
28	Tengku Ampuan Afzan, Kuantan	157
29	Temerloh	1
30	Kuala Lipis	1
	TERENGGANU	
31	Sultanah Nur Zahirah, Kuala Terengganu	460
32	Kemaman	14
	KELANTAN	
33	Raja Perempuan Zainab II, Kota Bharu	23
34	Kuala Krai	219
35	Tanah Merah	2
	SARAWAK	
36	Umum Sarawak	467
37	Sibu	10
38	Miri	111
39	Bintulu	1
	SABAH	
40	Likas	184
41	Keningau	111
42	Dutchess Of Kent	2
43	Lahad Datu	10
	TOTAL	6540

Table 9 : No. of attendances at Anaesthetic Clinic in KKM hospitals, 2016

No.	HOSPITAL	No. Of Patient Seen In Clinic
	PERLIS	
1	Kangar	1786
	KEDAH	
2	Alor Setar	2485
3	Langkawi	40
4	Sultan Abdul Halim,Sungai Petani	372
5	Kulim	545
	PULAU PINANG	
6	Pulau Pinang	4771
7	Seberang jaya	1143
	PERAK	
8	Ipoh	5200
9	Seri Manjung	427
10	Teluk Intan	1497
11	Taiping	887
12	Slim River	349
	SELANGOR	
13	Tuanku Ampuan Rahimah, Kelang	3942
14	Ampang	2460
15	Serdang	2636
16	Selayang	4770
17	Sungai Buloh	2471
18	Kajang	681
19	Banting	187
20	Shah Alam	1168
	WILAYAH PERSEKUTUAN	
21	Kuala Lumpur	11057
22	Putrajaya	2697
23	Institut Kanser Negara, Putrajaya	245
	NEGERI SEMBILAN	
24	Tuanku Jaafar, Seremban	4806
25	Tuanku Ampuan Najihah, Kuala Pilah	731
26	Port Dickson	132
	MELAKA	
27	Melaka	7451
	JOHOR	
28	Sultanah Aminah, JB	7850
29	Sultan Ismail, JB	7588
30	Muar	1688
31	Batu Pahat	4166
32	Segamat	311
33	Kluang	1018
	PAHANG	
33	Tengku Ampuan Afzan, Kuantan	2918
34	Temerloh	1999
35	Kuala Lipis	302
	TERENGGANU	
36	Sultana Nur Zahirah, Kuala Terengganu	3974
37	Kemaman	515
	KELANTAN	
38	Raja Perempuan Zainab II, Kota Bharu	2121
39	Kuala Krai	219
40	Tanah Merah	308
	SARAWAK	
41	Umum Sarawak	4249
42	Sibu	1906
43	Miri	1255
44	Bintulu	36
45	Sarikei	66
	SABAH	
46	Queen Elizabeth	2775
47	Duchess Of Kent	876
48	Likas	1252
49	Keningau	253
50	Tawau	659
51	Lahad Datu	222
	Total	108414

Table 10 : Admissions, patient days and bed-occupancy rates in ICU KKM hospitals, 2016

No.	HOSPITAL	No. Of Admissions	Patients Days	Bed Occupancy Rate	Average length of stays (days)
PERLIS					
1	Kangar	647	3258.00	81.70%	5.17
KEDAH					
2	Alor Setar	652	3067.00	70.00%	8.4
3	Langkawi	179	1063.00	72.80%	2.9
4	Sultan Abdul Halim,Sungai Petani	974	11.85	74.09%	11.85
5	Kulim	645	2834.00	96.80%	4.41
PULAU PINANG					
6	Pulau Pinang	1373	8591.00	93.50%	6.25
7	Seberang Jaya	722	4090.00	86.20%	21.64
8	Bukit Mertajam	400	7685.00	113.70%	6.4
9	Kepala Batas	242	1169.00	79.89%	18.27
PERAK					
10	Ipoh	117	9164.00	83.54%	8.3
11	Seri Manjung	463	11.00	92.20%	4.34
12	Teluk Intan	380	1189.00	109.00%	3
13	Taiping	1469	7785.00	106.64%	5.29
14	Slim River	324	1993.00	78.00%	6.11
SELANGOR					
15	Tuanku Ampuan Rahimah, Kelang	1415	7.02	87.89%	4.82
16	Ampang	709	3908.00	88.97%	5.5
17	Serdang	794	5220.00	94.66%	5.8
18	Selayang	1433	9248.00	101.60%	6.5
19	Sungai Buloh	1078	6084.00	108.85%	5.64
20	Kajang	525	1833.00	83.69%	3.49
21	Shah Alam	545		73.27%	2.995
WILAYAH PERSEKUTUAN					
22	Kuala Lumpur (GICU)	2130	10543.00	112.70%	
	Kuala Lumpur (PICU)	183	8	78.00%	
23	Putrajaya	908	2.40	95.13%	3.34
24	Institut Kanser Negara (IKN)	165	597.00	41.00%	4.13
25	Labuan	185	877.00	48.50%	7.5
NEGERI SEMBILAN					
26	Tuanku Jaafar, Seremban	558	2732.00	94.00%	4.9
27	Tuanku Ampuan Najihah, Kuala Pilah	581	2894.00	82.22%	4.33
28	Port Dickson	258		80.30%	3.66
MELAKA					
29	Melaka	3407	5.00	92.30%	5092
JOHOR					
30	Sultanah Aminah, JB	1646	4.51	110.10%	4.51
31	Sultan Ismail, JB	1458	6355.00	82.91%	4.4
32	Muar	583	1.60	64.40%	3.22
33	Batu Pahat	729	3.00	67.00%	
34	Segamat	376	1362.00	92.75%	3.4
35	Kluang	165	5.23	88.75%	16.39
PAHANG					
36	Tengku Ampuan Afzan, Kuantan I	1147	12.50	104.50%	8.1
37	Temerloh	947	6.52	87.25%	6.07
38	Kuala Lipis	115	849.00	81.76%	2.3
TERENGGANU					
39	Sultanah Nur Zahirah, Kuala Terengganu	1597	55.40	107.56%	4.6
KELANTAN					
40	Raja Perempuan Zainab II, Kota Bharu	1677	81.60	97.09%	3.4
41	Kuala Krai	278	19.00	85.00%	
42	Tanah Merah	312	1210.00	66.20%	5.1
SARAWAK					
43	Umum Sarawak	1113	4654.00	104.84%	
44	Sibu	1493	7398.00	118.90%	
45	Miri	563	2813.00	96.33%	
46	Bintulu	406	1456.00	66.50%	
47	Sarikei	182	1272.00	92.30%	
SABAH					
48	Queen Elizabeth I	669	4988.00	98.96%	1.01
49	Queen Elizabeth II	449	3689.00	101.10%	7.2
50	Duchess Of Kent	868	5186	78.72	6.03
51	Likas	318	2699.00	82.00%	4.4
52	Keningau	226	1087.00	74.50%	4.9
53	Tawau	451	2044.00	87.10%	4.5
54	Lahad datu	259	0.00	87.53%	6.29
TOTAL		41488	143120.63	229.43%	

Table 11 : Admissions, patient days and bed-occupancy rates in HDU / PACU in KKM hospitals, 2016

No.	HOSPITAL	No. Of Admissions	Patients Days	Bed Occupancy Rate
	KEDAH			
1	Alor Setar	609	2999	69.00%
	PERAK			
2	Ipoh	954	5.87	60.47%
	SELANGOR			
3	Tengku Ampuan Rahimah, Kelang	965	8.92	87.89%
4	Ampang	202	796	65.46%
5	Serdang	451	1606	30.60%
6	Sungai Buloh	1202	6569	107.41%
	WILAYAH PERSEKUTUAN			
7	Kuala Lumpur	460	860	111.50%
	NEGERI SEMBILAN			
8	Tuanku Jaafar, Seremban	454	2611	102.20%
9	Port Dickson	95		52.80%
	MELAKA			
10	Melaka	397	0.95	52.70%
	JOHOR			
11	Muar	854	2.30	58.35%
12	Segamat	251	904	28.40%
	TERENGGANU			
13	Kemaman	157	538	74.72%
	SARAWAK			
14	Umum Sarawak	398	74.36	57.70%
	SABAH			
15	Queen Elizabeth II (Medical)	164	4	44.80%
16	Queen Elizabeth II (Neuro)	123	4	20.49%
17	Likas	9	152	10.40%
18	Lahad Datu	77		77.41%
TOTAL		7449	16975	61.79%

Table 12 : Pain Management Services in KKM Hospital (excluding APS and OAS),2016

No.	HOSPITAL	Total No. Of Patients Seen In Pain Clinic	Total No. Of New Cases Seen In Pain Clinic	Total No. Of Follow Up Cases Seen In Clinic	No. Of Ward Referrals (Chronic non cancer pain)	No. Of Ward Referrals (cancer pain)	No. Of Ward Referrals (acute pain)	No. Of Procedures Done in clinic/ward (excluding Acupuncture)	No. Of Procedures Done In OT	No. Of Acupuncture Session
	Perlis									
1	Kangar	103	44	103	17	8	32	0	5	10
	KEDAH									
2	Alor Setar	336	74	262	89	16	105	40	54	36
	PULAU PINANG									
3	Pulau Pinang	1951	216	1735	34	16	80	19	5	87
	PERAK									
4	Ipoh	1401	68	1333	29	9	222	10	54	1368
5	Taiping	680	72	597	13	9	26	20	23	374
	SELANGOR									
6	Tengku Ampuan Rahimah, Kelang	961	89	872	31	23	0	40	73	0
7	Serdang	2				6	2			
8	Selayang	2172	298	1881	120	75	334	7	124	99
9	Sungai Buloh	3		3						
10	Kajang						55			
	WILAYAH PERSEKUTUAN									
11	Kuala Lumpur	1659	207	1242	77	71	558		53	168
12	Institut Kanser Negara, Putrajaya	103	37	66	0	48	7	0	5	0
	NEGERI SEMBILAN									
13	Tuanku Jaafar, Seremban	661	113	548	78	20	231	40	39	0
	MELAKA									
14	Melaka	1710	163	1547	241	173		20		7
	JOHOR									
15	Sultanah Aminah, JB	439	103	403	29	23	213	1	0	0
16	Sultan Ismail, JB	1974	793	1181	15	63	113	4	38	0
17	Segamat					2	6			
	PAHANG									
18	Tengku Ampuan Afzan, Kuantan	153	46	110			17		9	
	TERENGGANU									
19	Sultanah Nur Zahirah, Kuala Terengganu	900	125	775	57	61	161	28	62	6
	KELANTAN									
20	Raja Perempuan Zainab II, Kota Bharu	462	54	408	29	67	258	16	115	6
	SARAWAK									
21	Ummum Sarawak	269	64	205	11	35	93	8	7	0
22	Miri	122	15	107	16	7	18	0	0	0
23	Sibu	58	20	38	6	27	41	0	1	0
24	Sarikei	2	2	0	0	0	0	0	1	0
	SABAH									
25	Queen Elizabeth II	1189	113	25	53	11	24	135	71	45
26	Dutchess Of Kent	74	22	55	16	9	14	3	1	0
27	Lahad Datu	222	222	0	3	0	0	0	0	0
	TOTAL	15670	2502	13066	859	690	2420	245	659	2161

Table 13: Anaesthetics administered according to techniques in KKM hospitals, 2016 (Paediatric)

No.	HOSPITAL	General Anaesthesia	Combined General & Regional Anaesthesia (CGRA)	Combined General & Plexus Blockade including Ilio-inguinal Block	MAC / Sedation	TIVA / TCI	TOTAL
	PERLIS						
1	Kangar	397	8	5	0	3	413
	KEDAH						
2	Alor Setar	391	0	193	0	0	584
3	Langkawi	131	10	4	17	0	162
4	Sultan Abdul Halim,Sungai Petani	675	0	0	0	0	675
5	Kulim	291	25	13	12	0	341
	PULAU PINANG						
6	Pulau Pinang	1105	39	8	0	0	1152
7	Seberang Jaya	319	0	106	0	0	425
8	Bukit Mertajam	64	11	1	0	0	76
9	Kepala Batas	28	17	2	0	0	47
	PERAK						
10	Ipooh	1473	91	141	0	5	1710
11	Seri Manjung	158	15	25	13	0	211
12	Teluk Intan	396	0	6	0	0	402
13	Taiping	681	14	0	0	0	695
	SELANGOR						
14	Tengku Ampuan Rahimah, Kelang	1012	0	97	0	0	1109
15	Serdang	1126	0	12	0	0	1138
16	Selayang	1150	9	40	2	0	1201
17	Sungai Buloh	668	0	0	107	0	775
18	Kajang	408	35	14	11	0	468
19	Shah Alam	257	0	0	0	0	257
	WILAYAH PERSEKUTUAN						
20	Kuala Lumpur	2607	328	63	65	0	3063
21	Putrajaya	309	0	0	0	0	309
22	Institut Kanser Negara, Putrajaya	9	0	0	0	0	9
23	Labuan	46	5	5	0	0	56
	NEGERI SEMBILAN						
24	Tuanku Jaafar, Seremban	1056	0	0	23	0	1079
25	Tuanku Ampuan Najihah, Kuala Pilah	257	0	2	0	0	259
26	Port Dickson	22	17	12	1	0	52
	MELAKA						
27	Melaka	435	54	3	0	0	492
	JOHOR						
28	Sultanah Aminah, JB	1167	227	4	4	4	1406
29	Sultan Ismail, JB	5263	175	127	0	0	5565
30	Muar	332	0	41	12	2	387
31	Batu Pahat	302	62	23	9	0	396
32	Segamat	177	17	14	23	0	231
33	Kluang	335	9	0	0	0	344
	PAHANG						
34	Tengku Ampuan Afzan, Kuantan	1305	63	35	7	0	1410
35	Temerloh	666	3	35	2	0	706
36	Kuala Lipis	161	5	0	3	0	169
	TERENGGANU						
37	Sultanah Nur Zahirah, Kuala Terengganu	1314	40	4	38	136	1532
38	Kemaman	162	28	9	7	0	206
	KELANTAN						
39	Raja Perempuan Zainab II, Kota Bharu	774	358	0	0	93	1225
40	Tanah Merah	143	1	0	3	0	147
	SARAWAK						
41	Umum Sarawak	1675	106	140	19	113	2053
42	Sibu	607	0	33	0	0	640
43	Miri	464	33	42	2	1	542
44	Bintulu	217	0	1	2	0	220
45	Sarikei	106	11	0	0	0	117
	SABAH						
46	Queen Elizabeth I	33	0	0	0	0	33
47	Queen Elizabeth II General	113	0	0	0	0	113
	Queen Elizabeth II Cardiac	21	0	0	0	0	21
48	Duchess Of Kent	257	21	11	0	0	289
49	Likas	3390	58	107	163	0	3718
50	Keningau	215	2	14	8	0	239
51	Tawau	135	7	0	0	0	142
52	Ranau	0	10	0	97	0	107
53	Lahad datu	134	0	0	0	0	134
	TOTAL	34939	1914	1392	650	357	39252

Table 14: Anaesthetics and nature of surgery in KKM hospitals, 2016 (Paediatric)

No.	HOSPITAL	Elective Surgery	Emergency Surgery		TOTAL
				(%)	
	PERLIS				
1	Kangar	260	153	37.0%	413
	KEDAH				
2	Alor Setar	386	184	32.3%	570
3	Langkawi	82	80	49.4%	162
4	Sultan Abdul Halim,Sungai Petani	336	339	50.2%	675
5	Kulim	206	135	39.6%	341
	PULAU PINANG				
6	Pulau Pinang	828	324	28.1%	1152
7	Seberang Jaya	218	207	48.7%	425
8	Bukit Mertajam	66	10	13.2%	76
9	Kepala Batas	47	0	0.0%	47
	PERAK				
10	Ipoh	945	765	44.7%	1710
11	Seri Manjung	83	128	60.7%	211
12	Teluk Intan	184	218	54.2%	402
13	Taiping	475	220	31.7%	695
	SELANGOR				
15	Tuanku Ampuan Rahimah, Kelang	790	319	28.8%	1109
17	Serdang	704	434	38.1%	1138
18	Selayang	802	399	33.2%	1201
19	Sungai Buloh	465	310	40.0%	775
20	Kajang	277	191	40.8%	468
21	Shah Alam	164	93	36.2%	257
	WILAYAH PERSEKUTUAN				
22	Kuala Lumpur	1821	1242	40.5%	3063
23	Putrajaya	160	98	38.0%	258
24	Labuan	27	29	51.8%	56
	NEGERI SEMBILAN				
25	Tuanku Jaafar, Seremban	626	453	42.0%	1079
26	Tuanku Ampuan Najihah, Kuala Pilah	144	115	44.4%	259
27	Port Dickson	27	25	48.1%	52
	MELAKA				
28	Melaka	388	104	21.1%	492
	JOHOR				
29	Sultanah Aminah, JB	819	587	41.7%	1406
30	Sultan Ismail, JB	3058	6361	67.5%	9419
31	Muar	166	221	57.1%	387
32	Batu Pahat	216	180	45.5%	396
33	Segamat	135	96	41.6%	231
34	Kluang	146	198	57.6%	344
	PAHANG				
35	Tengku Ampuan Afzan, Kuantan	679	731	51.8%	1410
36	Temerloh	389	317	44.9%	706
37	Kuala Lipis	642	1393	68.5%	2035
	TERENGGANU				
38	Sultanah Nur Zahirah, Kuala Terengganu	1002	530	34.6%	1532
39	Kemaman	121	85	41.3%	206
	KELANTAN				
40	Raja Perempuan Zainab II, Kota Bharu	1083	478	30.6%	1561
41	Tanah Merah	50	97	66.0%	147
	SARAWAK				
42	Ummum Sarawak	1254	805	39.1%	2059
43	Sibu	354	311	46.8%	665
44	Miri	290	252	46.5%	542
45	Bintulu	86	134	60.9%	220
46	Sarikei	61	56	47.9%	117
	SABAH				
47	Queen Elizabeth I	28	5	15.2%	33
48	Queen Elizabeth II (General)	112	1	0.9%	113
	Queen Elizabeth II (Cardiac)	20	1	4.8%	21
49	Duchess Of Kent	112	177	61.2%	289
50	Likas	2521	1197	32.2%	3718
51	Keningau	106	133	55.6%	239
52	Tawau	77	65	45.8%	142
53	Lahad datu	50	84	62.7%	134
	TOTAL	24088	21070	46.7%	45158

Table 15: Anaesthetics for day care surgery and day of surgery admissions in KKM hospitals, 2016 (Paediatric)

No.	HOSPITAL	Day Care Surgery	Day Of Surgery Admissions
	PERLIS		
1	Kangar	7	33
	KEDAH		
2	Langkawi	20	0
3	Sungai Petani	53	0
4	Kulim	12	0
	PULAU PINANG		
5	Seberang Jaya	9	45
6	Kepala Batas	24	3
	PERAK		
7	Ipoh	372	108
8	Seri Manjung	30	0
9	Teluk Intan	20	6
	SELANGOR		
10	Tengku Ampuan Rahimah, Kelang	276	2
11	Serdang	279	0
12	Selayang	177	10
13	Sungai Buloh	90	0
14	Kajang	0	62
15	Shah Alam	90	15
	WILAYAH PERSEKUTUAN		
16	Kuala Lumpur	348	0
17	Putrajaya	51	0
	NEGERI SEMBILAN		
18	Seremban	287	22
	MELAKA		
19	Melaka	454	38
	JOHOR		
20	Sultan Ismail, JB	445	62
	PAHANG		
21	Tengku Ampuan Afzan, Kuantan	172	23
22	Temerloh	20	0
	TERENGGANU		
23	Sultanah Nur Zahirah, Kuala Terengganu	257	0
	SARAWAK		
24	Umum Sarawak	122	0
	SABAH		
25	Likas	96	96
	TOTAL	3711	525

Table 16: No. of anaesthetics administered in KKM hospitals, 2012-2016

No.	HOSPITAL	2012	2013	2014	2015	2016
	PERLIS					
1	Kangar	4675	4575	4972	5331	5707
	KEDAH					
2	Alor Setar	16360	16330	16492	16398	16581
3	Langkawi	1605	2044	1921	1788	1696
4	Sultan Abdul Halim,Sungai Petani	10241	10443	11463	11651	11472
5	Kulim	4306	3951	4199	4583	5101
	PULAU PINANG					
6	Pulau Pinang	13663	11752	14014	13188	13746
7	Seberang Jaya	5781	3518	6580	7711	7462
8	Bukit Mertajam	1846	3340	1625	1410	1476
9	Kepala Batas	398	666	226	178	688
	PERAK					
10	Ipoh	17072	16520	17196	17535	16975
11	Seri Manjung	3920	3800	3954	4073	3910
12	Teluk Intan	5129	5036	5502	5448	5361
13	Taiping	10084	10320	10059	9517	10790
14	Slim River	1411	1425	1478	1280	1307
	SELANGOR					
15	Tuanku Ampuan Rahimah, Kelang	12068	13530	13747	13657	12962
16	Ampang	6224	6651	7386	7502	7539
17	Serdang	9709	NA	10422	9440	10093
18	Selayang	11615	12343	12692	12872	13247
19	Sungai Buloh	10408	11469	12214	12568	11877
20	Kajang	4246	4391	4896	4975	4904
21	Banting		NA	495	566	818
22	Shah Alam					3783
	WILAYAH PERSEKUTUAN					
23	Kuala Lumpur	25947	27020	25732	26404	26417
24	Putrajaya	6384	6304	7270	6922	8197
25	Institut Kanser Negara					764
26	Labuan	759	914	799	775	775
	NEGERI SEMBILAN					
27	Tuanku Jaafar, Seremban	10258	9922	10397	11371	12134
28	Tuanku Ampuan Najihah, Kuala Pilah	2663	3183	3077	2790	3028
29	Port Dickson	284	NA	733	776	554
	MELAKA					
30	Melaka	13361	13771	13827	14260	14028
	JOHOR					
31	Sultanah Aminah, JB	15665	16115	15616	15585	14377
32	Sultan Ismail, JB	8065	8346	9750	9321	9419
33	Muar	4933	4828	5014	4986	5498
34	Batu Pahat	4760	4578	5285	5662	6252
35	Segamat	3204	3556	3713	3336	3564
36	Kluang	1573	3008	3218	3737	3888
	PAHANG					
37	Tengku Ampuan Afzan, Kuantan	10792	10632	12350	14263	13052
38	Temerloh	6431	6504	6581	7106	7469
39	Kuala Lipis	936	NA	1826	1732	2035
	TERENGGANU					
40	Sultanah Nur Zahirah, Kuala Terengganu	11228	11446	11859	13929	14490
41	Kemaman	1725	1880	1810	NA	2018

No.	HOSPITAL	2012	2013	2014	2015	2016
KELANTAN						
42	Raja Perempuan Zainab II, Kota Bharu	11209	11008	11892	9251	13196
43	Kuala Krai	2156	2293	2144	2492	2655
44	Tanah Merah	1678	NA	1977	2015	2043
SARAWAK						
45	Umum Sarawak	13410	14510	14553	15317	15474
46	Pusat Jantung Sarawak					512
47	Sibu	6401	6651	6992	6871	7361
48	Miri	4926	4221	4544	4695	4879
49	Bintulu	2631	2586	2264	2587	3049
50	Sarikei	577	889	938	921	1217
51	Kapit	434	288	228	291	699
52	Serian	416	572	493	403	330
53	Bau	157	164	42	35	71
54	Lundu	266	261	225	210	219
55	Simunjan	68	27	34	44	21
56	Sri Aman	260	103	140	105	213
57	Betong	111	91	298	253	84
58	Saratok	88	60	39	37	16
59	Mukah	209	248	218	234	222
60	Daro	39	42	8	4	33
61	Kanowit	69	41	118	176	115
62	Lawas	183	234	144	104	150
63	Limbang	665	798	791	673	538
64	Marudi	203	117	100	91	70
SABAH						
65	Queen Elizabeth I	9352	10033	1374	2129	2734
66	Queen Elizabeth II			8933	8833	8891
67	Duchess Of Kent	5233	5259	5216	4600	4367
68	Likas	8583	8863	9183	9959	10488
69	Keningau	2040	1954	2190	2109	2316
70	Tawau	5288	5795	5478	5246	4789
71	Kudat	339	405	323	377	211
72	Kota Marudu	231	266	211	174	188
73	Kota Belud	312	299	295	179	189
74	Mesra, Bukit Padang	385	565	593	807	865
75	Papar	72	NA	NA	397	470
76	Beaufort	317	395	460	108	91
77	Sipitang	49	41	70	13	436
78	Tenom	436	224	NA	213	150
79	Tambunan	216	253	220	2026	2428
80	Ranau	1715	2037	2111	62	96
81	Beluran	237	206	165	59	55
82	Pitas	NA	56	NA	66	233
83	Kinabatangan	63	NA	81	2094	1979
84	Lahad Datu	1609	2053	2027	71	0
85	Kunak	20	NA	35	131	126
86	Semporna	88	53	44	8	0
87	Kuala Penyu	4	28	50	54	0
TOTAL		364482	360085	389645	393165	409723

Table 17: No. of anaesthetics administered for emergency surgery in KKM hospitals, 2012 – 2016

No	HOSPITAL	2012	2013	2014	2015	2016
PERLIS						
1	Kangar	57.69%	56.40%	58.50%	58.41%	60.73%
KEDAH						
2	Alor Setar	57.20%	55.70%	58.91%	61.32%	59.99%
3	Langkawi	70.28%	73.70%	69.74%	62.12%	63.86%
4	Sultan Abdul Halim,Sungai Petani	69.58%	66.70%	66.14%	66.85%	66.51%
5	Kulim	61.82%	59.10%	63.02%	74.56%	47.76%
PULAU PINANG						
6	Pulau Pinang	49.03%	43.50%	48.49%	48.67%	46.58%
7	Seberang Jaya	75.45%	88.20%	70.93%	70.54%	68.32%
8	Bukit Mertajam	28.55%	59.70%	11.20%	6.74%	8.94%
9	Kepala Batas	0.00%	0.00%	0.00%	18.54%	46.95%
PERAK						
10	Ipoh	59.61%	58.90%	57.93%	57.42%	56.78%
11	Seri Manjung	67.24%	63.30%	71.40%	70.59%	69.28%
12	Teluk Intan	70.54%	67.30%	59.69%	62.70%	62.15%
13	Taiping	59.37%	67.20%	62.13%	58.66%	56.78%
14	Slim River	55.92%	59.00%	49.12%	52.58%	48.13%
SELANGOR						
15	Tuanku Ampuan Rahimah, Kelang	59.19%	54.80%	55.67%	55.64%	57.30%
16	Ampang	53.98%	58.80%	58.85%	59.37%	58.01%
17	Serdang	50.94%	NA	52.09%	55.39%	54.40%
18	Selayang	45.32%	45.90%	47.65%	47.58%	49.60%
19	Sungai Buloh	64.92%	60.20%	59.87%	57.41%	59.72%
20	Kajang	69.08%	71.20%	73.67%	70.65%	70.19%
21	Banting	NA	NA	NA	43.29%	43.72%
22	Shah Alam	NA	NA	NA	NA	65.87%
WILAYAH PERSEKUTUAN						
23	Kuala Lumpur	45.28%	44.40%	45.48%	44.64%	42.22%
24	Putrajaya	44.08%	47.20%	48.18%	58.40%	53.06%
25	Institut Kanser Negara					0.71%
26	Labuan	58.23%	68.70%	66.71%	62.97%	62.97%
NEGERI SEMBILAN						
27	Tuanku Jaafar, Seremban	52.12%	54.60%	52.51%	54.71%	56.91%
28	Tuanku Ampuan Najihah, Kuala Pilah	57.30%	63.00%	65.32%	69.32%	69.48%
29	Port Dickson	72.89%	NA	57.71%	57.20%	63.18%
MELAKA						
30	Melaka	63.48%	59.20%	60.26%	40.53%	58.95%
JOHOR						
31	Sultanah Aminah, JB	65.70%	65.40%	67.99%	68.03%	63.76%
32	Sultan Ismail, JB	65.94%	65.40%	62.09%	63.39%	67.53%
33	Muar	53.54%	50.50%	68.27%	69.47%	67.69%
34	Batu Pahat	65.82%	60.90%	65.00%	60.61%	58.70%
35	Segamat	61.80%	63.40%	65.07%	67.45%	63.92%
36	Kluang	64.84%	68.70%	66.10%	57.99%	62.55%
PAHANG						
37	Tengku Ampuan Afzan, Kuantan	53.47%	55.70%	54.98%	57.47%	57.46%
38	Temerloh	58.19%	57.20%	58.38%	63.51%	62.18%
39	Kuala Lipis	72.22%	NA	72.73%	66.97%	68.45%
TERENGGANU						
40	Sultanah Nur Zahirah, Kuala Terengganu	59.52%	58.00%	57.29%	58.61%	58.62%
41	Kemaman	63.83%	64.50%	62.87%	NA	63.03%

No	HOSPITAL	2012	2013	2014	2015	2016
KELANTAN						
42	Raja Perempuan Zainab II, Kota Bharu	59.36%	57.40%	55.86%	58.97%	54.07%
43	Kuala Krai	69.94%	69.90%	62.69%	65.79%	65.47%
44	Tanah Merah	74.61%	NA	69.80%	69.88%	73.13%
SARAWAK						
45	Umum Sarawak	57.38%	53.80%	54.02%	53.94%	51.58%
46	Pusat Jantung Sarawak	NA	NA	NA	NA	13.28%
47	Sibu	53.65%	54.10%	50.40%	53.60%	51.12%
48	Miri	72.70%	66.70%	63.73%	60.09%	60.85%
49	Bintulu	59.29%	64.50%	65.68%	62.78%	72.91%
50	Sarikei	70.54%	57.40%	56.08%	53.09%	64.17%
51	Kapit	45.39%	43.40%	55.26%	45.02%	30.90%
52	Serian	45.91%	51.00%	55.98%	53.60%	41.21%
53	Bau	42.68%	15.20%	47.62%	60.00%	12.68%
54	Lundu	20.68%	44.80%	26.22%	18.57%	15.53%
55	Simunjan	57.35%	51.90%	44.12%	11.36%	33.33%
56	Sri Aman	51.92%	45.60%	45.71%	54.29%	57.75%
57	Betong	39.64%	28.60%	15.77%	15.02%	50.00%
58	Saratok	25.00%	33.30%	51.28%	40.54%	31.25%
59	Mukah	44.50%	47.60%	41.28%	23.50%	22.52%
60	Daro	51.28%	9.50%	87.50%	75.00%	72.73%
61	Kanowit	37.68%	12.20%	0.85%	0.00%	0.00%
62	Lawas	40.98%	46.60%	58.33%	44.23%	42.67%
63	Limbang	34.89%	29.30%	31.86%	29.57%	37.92%
64	Marudi	32.51%	51.30%	42.00%	57.14%	48.57%
SABAH						
65	Queen Elizabeth I	45.78%	47.50%	48.10%	31.52%	40.01%
66	Queen Elizabeth II				47.14%	45.27%
67	Duchess Of Kent	62.83%	64.60%	65.26%	70.00%	73.62%
68	Likas	62.61%	59.20%	60.13%	62.13%	56.66%
69	Keningau	64.56%	63.00%	66.62%	65.67%	64.55%
70	Tawau	67.11%	72.10%	73.55%	72.59%	70.31%
71	Kudat	30.38%	25.40%	46.75%	47.21%	59.24%
72	Kota Marudu	48.05%	54.50%	53.55%	68.39%	56.91%
73	Kota Belud	42.95%	44.80%	49.83%	53.63%	61.38%
74	Mesra, Bukit Padang	0.00%	0.00%	0.00%	0.00%	0.00%
75	Beaufort	51.42%	44.30%	50.87%	51.85%	49.79%
76	Sipitang	57.14%	92.70%	94.29%	0.00%	62.64%
77	Tenom	5.28%	100.00%	NA	79.81%	0.00%
78	Tambunan	78.24%	85.80%	80.45%	71.22%	92.67%
79	Ranau	64.66%	67.50%	68.71%	22.58%	0.00%
80	Beluran	35.44%	24.30%	16.36%	40.68%	47.92%
81	Pitas	NA	62.50%	56.79%	69.70%	61.82%
82	Tuaran	NA	NA	NA	NA	83.69%
83	Lahad datu	64.57%	70.00%	74.54%	0.00%	71.35%
84	Kinabatangan	42.86%	NA	NA	69.29%	NA
85	Kunak	45.00%	NA	34.29%	79.39%	52.38%
86	Semporna	84.09%	83.00%	43.18%	0.00%	NA
87	Kuala Penyu	68.42%	100.00%	98.00%	59.26%	NA
AVERAGE		57.70%	57.20%	57.63%	57.51%	56.76%

Table 18: Saturdays Lists in KKM Hospitals, 2016

Bil	Hospital	No. of operations done under Saturday List			No. of Saturday elective list (as of Dec 31st 2016)
		General Anaesthesia	Local Anaesthesia	Total	
1	Kangar	174	28	202	202
2	Alor Setar	347		347	111
3	Langkawi	73	2	75	26
4	Sultan Abdul Halim,Sungai Petani	143	0	143	143
5	Kulim	37	56	93	93
6	Pulau Pinang	480	237	717	167
7	Seberang Jaya	177	206	383	383
8	Ipoh	211	63	274	274
9	Seri Manjung	23	0	23	23
10	Teluk Intan	64	34	98	98
11	Taiping	30	79	109	109
12	Tuanku Ampuan Rahimah, Kelang	470	172	642	642
13	Ampang	110	13	123	123
14	Serdang	86	0	86	86
15	Selayang	181	0	181	174
16	Sungai Buloh	178	0	178	178
17	Kajang	122	0	122	122
18	Kuala Lumpur	756	209	965	965
19	Putrajaya	112	36	148	148
20	Tuanku Jaafar, Seremban	177	2	179	179
21	Kuala Pilah	83	0	83	83
22	Melaka	355	13	368	368
23	Sultanah Aminah, JB	321	24	345	106
24	Sultan Ismail, JB	277	0	277	277
25	Muar	46	0	46	46
26	Segamat	92	21	113	113
27	Tengku Ampuan Afzan, Kuantan	242	142	384	384
28	Temerloh	88	206	294	294
29	Kuala Terengganu	326	0	326	326
30	Kemaman	171	94	265	265
31	Kota Bharu	118	90	208	208
32	Kuala Krai	52	0	52	52
33	Tanah Merah	43	0	43	44
34	Umum Sarawak	114	52	166	166
35	Miri	156	165	321	91
36	Sibu	157	54	211	110
37	Queen Elizabeth	119	130	249	249
38	Likas	92	0	92	92
39	Sandakan	48	23	71	71
TOTAL		6851	2151	9002	7591

Table 19 Trends in output for Program Anestisiologi KKM 2004 - 2016

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	(% increase from 2015)
No. of anaesthetics administered	229686	266660	277271	286324	301321	308391	319628	339844	363039	358100	387631	391150	409723	↑ 4.75%
No. of anaesthetics for day care surgery	NA	NA	4777	5190	5363	5315	5543	8367	9838	10608	10922	12535	12158	↓ 3%
No. of patients under acute pain service	18731	22459	31131	40490	52440	61583	65319	81801	91766	98246	114131	126223	136654	↑ 8.26%
No. of patients under obstetric analgesia service	NA	3161	3367	3137	3363	3952	4370	3949	3597	4654	5298	5667	6540	↑ 15.40%
No. of attendance at anaesthetic clinic	NA	NA	16266	20363	30795	48491	52880	61873	76686	87522	91258	98938	108414	↑ 9.58%
No. of ICU admissions	15115	13027	16234	20075	23928	24908	30089	32621	36542	46906	40661	40793	41488	↑ 1.70%
No. of HDU admissions	NA	NA	3226	3536	5662	7000	7474	5991	6212	6402	7378	7375	7449	↑ 1.00%
No. of attendance at chronic pain clinic	NA	NA	173	1785	3199	4622	6281	7368	8954	10756	12196	14297	15670	↑ 9.60%

Table 20: Anaesthetic specialists in KKM hospitals, 2016

NO	HOSPITAL	No. Of Specialist									
		Jusa A	Jusa B	Jusa C	U54 / U53	U52 / U51	U48 / U47	U44 / U43	Contract	Sessional	Paid Leave
PERLIS											
1	Kangar			1	3		2				6
KEDAH											
2	Alor Setar			3	14						17
3	Langkawi				2						2
4	Sultan Abdul Halim,Sg Petani			2	5						7
5	Kulim				1	1					2
PULAU PINANG											
6	Pulau Pinang	1	2	8	15	1	1				28
7	Seberang Jaya			1	5		1	1			8
8	Bukit Mertajam				1						
9	Kepala Batas				1						1
PERAK											
10	Ipoh		1	2	15						18
11	Seri Manjung			1	1						2
12	Teluk Intan			1	2	1					4
13	Taiping			2	6						8
14	Slim River				1						1
SELANGOR											
15	T. Ampuan Rahimah, Kelang			2	10						12
16	Ampang		1	2	9	2					14
17	Serdang			4	8					6	18
18	Selayang			1	3	15	1		1		21
19	Sungai Buloh			1	3	9	4				17
20	Kajang			1	4						5
21	Banting				1	1					2
22	Shah Alam			1	3						4
WILAYAH PERSEKUTUAN											
23	Kuala Lumpur	1		6	36	1	5		1		50
24	Putrajaya		1	2	4						7
25	Institut Kanser Negara, Putrajaya			1	3	1					5
26	Labuan			1							1
NEGERI SEMBILAN											
27	Tuanku Jaafar, Seremban			1	10	1					12
28	T. Ampuan Najihah, Kuala Pilah				2						2
29	Port Dickson				1	1					2
MELAKA											
30	Melaka			2	13						15
JOHOR											
31	Sultanah Aminah, JB	1	1	6	12	4	2				26
32	Sultan Ismail, JB			2	5	1	3				11
33	Muar			1	3						4
34	Batu Pahat				3	1					4
35	Segamat				1						1
36	Kluang				2	2					4
PAHANG											
37	Tengku Ampuan Afzan, Kuantan		1	3	9	1	2			3	19
38	Temerloh			1	6						7
39	Kuala Lipis					1					1
TERENGGANU											
40	Sltanh Nur Zahirah, K. Trganu		1	2	14						17
41	Kemaman					2					2
KELANTAN											
42	RJ Prmpn Zainab II, K. Bharu		1	6	13						20
43	Kuala Krai					3					3
44	Tanah Merah					2					2
SARAWAK											
45	Umum Sarawak			1	9	1	7				18
46	Pusat Jantung Sarawak			2	1						3
47	Sibu			1	1	5	1				8
48	Miri				1	2					3
49	Bintulu						2				2
50	Sarikei				1	1					2
SABAH											
51	Queen Elizabeth I & II		1	3	12	4					20
52	Likas			1	6	1					8
53	Keningau					1					
54	Lahad datu						2				2
55	Sandakan				2	1	3				6
56	Tawau				1	2	3				6
TOTAL		3	12	80	310	40	35	0	1	2	0
										9	490

Table 21: Anaesthetic medical officers and trainees in KKM hospitals, 2016

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	TOTAL	
PERLIS																
1	Kangar	2		8	6			16								0
KEDAH																16
2	Alor Setar	2	1	13	8			24		1	6	1				8
3	Langkawi				4			4								0
4	Sultan Abdul Halim,Sg Petani	2	1	3	10	4		20								0
5	Kulim				6	6		12								0
PULAU PINANG																
6	Pulau Pinang	2	1	7	12			22		24	4					28
7	Seberang Jaya				5	26		31								0
8	Bukit Mertajam					7		7								0
9	Kepala Batas					5		5								0
PERAK																
10	Ipoh					23	10		33		6	3				9
11	Seri Manjung		1	2	8			11								0
12	Teluk Intan				4	9		13								0
13	Taiping					4	21		25							0
14	Slim River	1		2	4			7								0
SELANGOR																
15	T. Ampuan Rahimah, Kelang		1	11	20			32			3					3
16	Ampang	4	3	12	13		3	35								0
17	Serdang		1	7	19			27								0
18	Selayang				43		1	44			10					10
19	Sungai Buloh	1		8	30		1	40		1	6					7
20	Kajang	1	3	8	11			23								0
21	Banting				2	5		7								0
22	Shah Alam				17	9	6	32								32
WILAYAH PERSEKUTUAN																
23	Kuala Lumpur	3	3	21	68			95		64	2					66
24	Putrajaya	1	2	3	8			14		6	1					7
25	Institut Kanser Negara, Putrajaya		1	8	6											0
26	Labuan				1	1		2								2
NEGERI SEMBILAN																
27	Tuanku Jaafar, Seremban				16	15	4	35					3	3		38
28	T. Ampuan Najihah, Kuala Pilah	1		2	9	2		14								0
29	Port Dickson				4	2		6								6
MELAKA																
30	Melaka	1	2	18	15			36			5					5
JOHOR																41
31	Sultanah Aminah, JB	1		3	19			23		1	11	4				16
32	Sultan Ismail, JB			5	25		1	31								0
33	Muar	1		2	12			15								0
34	Batu Pahat				15			15								0
35	Segamat					9		9								0
36	Kluang	1		2	8			11								0
PAHANG																
37	Tengku Ampuan Afzan, Kuantan	3	2	5	21		8	39								0
38	Temerloh				2	16		18								0
39	Kuala Lipis			6				6								0
TERENGGANU																
40	Sultan Nur Zahirah, K. Trganu	1	1	6	30			38	1	1	9					11
41	Kemaman			3	5			8								0
KELANTAN																
42	RJ Prmpn Zainab II, K. Bharu	2		9	31			42		1	11					12
43	Tanah Merah		1		4			5								0
44	Kuala Krai				7	1		8								0
SARAWAK																
45	Umum Sarawak			5	48			53		8	9					17
46	Pusat Jantung Sarawak				3			3								3
47	Sibu			4	38			42								42
48	Miri			4	18			22								22
49	Bintulu			1	11			12								0
50	Sarikei				5		2	7								0
51	Kapit					1		1								1
SABAH																
52	Queen Elizabeth I & II		1	4	30			35		10	7					17
53	Likas	1	1	3	13			18								0
54	Keningau				3	4		7								0
55	Lahad datu					4		4								0
56	Sandakan			2	12			14								0
57	Tawau					16		16								0
TOTAL		31	32	300	794	6	26	1174	1	5	179	31	0	3	219	1393

Table 22: Anaesthetic /ICU nurses and assisted medical officers in KKM hospitals, 2016

NO	HOSPITAL	No. Of Allied Health Personnel														TOTAL					
		MA					GA Nurse					ICU nurse									
		U42	U41	U36	U32	U32 (KUP)	U29	U42	U41	U36	U32	U32 (KUP)	U29	U19 (JM)	U42	U41	U36	U32	U32 (KUP)	U29	
	PERLIS																				
1	Kangar			1	1	4				2	1	30				1	3	17	31	91	
	KEDAH									2	4	37		1		5		93	147		
2	Alor Setar	1	2	2						8						4		8	21		
3	Langkawi				1					16	26		1	1		3	28	43	125		
4	Sg Petani	3		4						4	10				1	13		19	50		
5	Kulim		1	2																	
	PULAU PINANG																				
6	Pulau Pinang	1	1	8	8					37		1		1	9		150	216			
7	Seberang Jaya			2	1				12	65	1			1	17		48	147			
8	Bukit Mertajam				1				2	2					7		19	31			
9	Kepala Batas				2				3	2					19		1	27			
	PERAK																				
10	Ipoh	1	2	3	4				1	2	30		1	1	1	5	13	121	185		
11	Seri Manjung		2		1				5	8					8	23		47			
12	Teluk Intan		1	1					2		15				5		22	46			
13	Taiping	1	2		2				1	4	25				2	20	71	128			
14	Slim River		3	2					4	23					4		16	52			
	SELANGOR																				
15	TAR, Kelang	1		2	10				2	31					14		144	204			
16	Ampang		1	2	3				2	21				1	4		58	92			
17	Serdang	1	4	8					2	26				1	4		81	127			
18	Selayang	1	1	6					2	29				1	7		93	140			
19	Sungai Buloh		1	5						44			1	1	6		135	193			
20	Kajang		1	2					4	4	32		1	1		2	3	21	71		
21	Banting		1	2											2		17	22			
22	Shah Alam	1	1	1	1				1	9			1		4		27	46			
	W. PERSEKUTUAN																				
23	Kuala Lumpur	1	1	5	14				3	72			1		6	3	157	263			
24	Putrajaya	1		1	3	1			1	3	18			1	2	14	41	86			
25	(IKN) Putrajaya		1	1	2						18			1	2		21	46			
26	Labuan									4				2		17	23				
	NEGERI SEMBILAN																				
27	Seremban	1	2		9						22				2	10	23	69			
28	Kuala Pilah		2		6				1		28				1		33	71			
29	Port Dickson			2						7			1		6		12	28			
	MELAKA																				
30	Melaka	1	1	1	7	6			8	37				1	19		89	170			
	JOHOR																				
31	Sultanah Aminah, JB	1	1	3	7				1	43			1	1	10		132	200			
32	Sultan Ismail, JB		1	1	7			1	3	1	92			1	4	6	71	188			
33	Muar		3	1	3					2	14			1	2	7	23	56			
34	Batu Pahat		4	3	1				4	3	12			1		8	5	43	84		
35	Segamat	1		4					2		10			1			26	44			
36	Kluang	1		4					2		10				4		23	44			
	PAHANG																				
37	Kuantan	1	1	3	7				9	46			2	1	26		99	195			
38	Temerloh			3	6				4	36			1		9		75	134			
39	Kuala Lipis		1	1						7					4		15	28			
	TERENGGANU																				
40	Kuala Terengganu	1	1	2	4	6			1	9	24		1		9	24	73	155			
41	Kemaman			2					1	12	4				1		13	33			

NO	HOSPITAL	No. Of Allied Health Personnel																			TOTAL	
		MA						GA Nurse						ICU nurse								
		U42	U41	U36	U32	U32 (KUP)	U29	U42	U41	U36	U32	U32 (KUP)	U29	U19 (JM)	U42	U41	U36	U32	U32 (KUP)	U29		
	KELANTAN																					
42	Kota Bharu			1	6	5	6			1	2	27	36			2	1	7	67	57	218	
43	Kuala Krai				1		1						14				3		28		47	
44	Tanah Merah				1						7		8								16	
	SARAWAK																					
45	Umum Sarawak		1	2	6		12									1		5		85	112	
46	Bau				1		1														2	
47	Lundu					1															1	
48	Serian			1	2																3	
49	Simunjan						2														2	
50	Sri Aman			1																	1	
51	Betong			1		1															2	
52	Saratok			1																	1	
53	Sarikei	1		1		1									1		1		15		20	
54	Kanowit					2															2	
55	Sibu		1	3		8							3		1	1		4		81	102	
56	Daro					1															1	
57	Mukah				1																1	
58	Bintulu		1	1		2									1		2		23		30	
59	Miri			1		1			3		8		1	1		2		2		36		53
60	Marudi				1																1	
61	Limbang			2																	2	
62	Lawas				1		1														2	
63	Kapit			2		1															3	
	SABAH																					
64	Q. Elizabeth I	1		1		5															7	
65	Q. Elizabeth II	1		5																	6	
66	Likas		3		4		1	1		16					1	2		46		74		
67	Keningau			1	1	3		1	3	9	15					1	3		17		54	
68	Lahad datu	1		1		1			1	2	22					1		19		48		
69	Sandakan		3		2			1		8										14		
70	Tawau		3		6				17				2	1	5		45		79			
71	Kudat																				NA	
72	Kota Marudu																				NA	
73	Pitas																				NA	
74	Kota Belud																				NA	
75	M. B. Padang																				NA	
76	Papar																				NA	
77	Beaufort																				NA	
78	Kuala Penyu																				NA	
79	Sipitang																				NA	
80	Tenom																				NA	
81	Tambunan																				NA	
82	Ranau																				NA	
83	Beluran																				NA	
84	Kinabatangan																				NA	
85	Kunak																				NA	
86	Semporna																				NA	
TOTAL		10	8	19	133	20	219	0	2	3	125	83	1161	1	8	23	18	297	243	2656	5029	
		409						1375						3245								

Table 23: Subspecialists under Program Anestisiologi in KKM hospitals, 2016

No.	Hospital	Cardiac Anaesthesia		Pediatric Anesthesia		Regional Anesthesia		Neuro Anaesthesia		Obstetric Anaesthesia		Anaesthesia for Transplant Surgery		Intensive Care (Adult)		Pain Medicine		TOTAL	
		Subspecialist	Trainee	Subspecialist	Trainee	Subspecialist	Trainee	Subspecialist	Trainee	Subspecialist	Trainee	Subspecialist	Trainee	Subspecialist	Trainee	Subspecialist	Trainee	Subspecialist	Trainee
1	Alor Setar													2		2		4	0
2	P. Pinang	5	1					1		1				1	2	1		9	3
3	Ipooh			1						1				2		2		6	0
4	Taiping													1		1		2	0
5	TAR Kelang									1				1		1		3	0
6	Serdang	2	2	1														3	2
7	Selayang			1						1				1		2	3	5	3
8	Sungai Buloh							1	1					3	2	1		5	3
9	Kuala Lumpur			6				2	2	2	2			4	2	1	1	15	7
10	Putrajaya							1										1	0
11	IKN Putrajaya															1		1	0
12	Seremban			1						1						1		3	0
13	Melaka			1										1		2		4	0
14	Sultanah Aminah, JB	3	2	2										2	1	1		8	3
15	Sultan Ismail, JB										1			1		1		2	1
16	Kuantan	1	1					1		1				1	1			3	3
17	Kuala Terengganu			1						1				2		1		4	1
18	Kota Baharu	1	1											2		1	1	5	1
19	Umum Sarawak			1				1						1				3	0
20	Sibu													1				1	0
21	Queen Elizabeth I & II	2	1											1				3	1
	Total	14	7	16	0	0	0	7	3	7	5	0	0	27	8	19	5	90	28

Total no. of subspecialists = 90

Total no. of subspecialty trainees = 28

Table 24: No. of ICU / HDU beds and OT in KKM hospitals 2016

NO	HOSPITAL	Facility					
		ICU Bed		HDU Bed		OR	
		Available	Functional	Available	Functional	Available	Functional
PERLIS							
1	Kangar	13	11	0	0	7	6
KEDAH							
2	Alor Setar	12	10	10	10	14	13
3	Langkawi	5	4	0	0	2	2
4	Sultan Abdul Halim,Sungai Petani	18	16	0	0	9	9
5	Kulim	8	8	0	0	3	3
PULAU PINANG							
6	Pulau Pinang	26	24	0	0	17	16
7	Seberang Jaya	13	13	0	0	5	5
8	Bukit Mertajam	7	7	0	0	3	3
9	Kepala Batas	4	4	0	0	4	4
PERAK							
10	Ipooh	28	25	20	20	18	18
11	Seri Manjung	6	6	0	0	3	3
12	Teluk Intan	4	4	0	0	6	5
13	Taiping	20	20	0	0	12	5
14	Slim River	5	5	0	0	4	3
SELANGOR							
15	Tuanku Ampuan Rahimah, Kelang	22	22	10	10	17	13
16	Ampang	12	12	12	4	13	13
17	Serdang	20	20	0	0	4	4
18	Selayang	25	25	0	0	22	18
19	Sungai Buloh	18	18	24	20	22	15
20	Kajang	6	6	0	0	3	3
21	Banting	10	7	0	0	1	1
22	Shah Alam	7	7	14	0	10	8
WILAYAH PERSEKUTUAN							
23	Kuala Lumpur	43	43	0	0	38	33
24	Putrajaya	11	11	0	0	9	9
25	Institut Kanser Negara, Putrajaya	8	8	0	0	4	4
26	Labuan	5	5	0	0	2	2
NEGERI SEMBILAN							
27	Tuanku Jaafar, Seremban	8	8	8	7	16	16
28	Tuanku Ampuan Najihah, Kuala Pilah	8	8	0	0	3	3
29	Port Dickson	4	4	2	2	1	1
MELAKA							
30	Melaka	22	22	2	2	11	11
JOHOR							
31	Sultanah Aminah, JB	29	29	0	0	13	13
32	Sultan Ismail, JB	21	21	20	8	18	18
33	Muar	8	8	14	4	4	4
34	Batu Pahat	10	10	0	0	6	6
35	Segamat	4	4	6	4	3	3
36	Kluang	6	6	0	0	6	4
PAHANG							
37	Tengku Ampuan Afzan, Kuantan	27	27	0	0	15	15
38	Temerloh	18	18	0	0	12	11
39	Kuala Lipis	4	4	0	0	3	3
TERENGGANU							
40	Sultanah Nur Zahirah, Kuala Terengganu	23	21	0	0	20	17
41	Kemaman	0	0	2	2	2	2

NO	HOSPITAL	Facility					
		ICU Bed		HDU Bed		OR	
		Available	Functional	Available	Functional	Available	Functional
	KELANTAN						
42	Raja Perempuan Zainab II, Kota Bharu	26	26	0	0	13	13
43	Kuala Krai	6	6	0	0	3	3
44	Tanah Merah	5	5	0	0	2	2
	SARAWAK						
45	Umum Sarawak	20	16	2	2	12	12
46	Bau	NA	NA	NA	NA	2	1
47	Lundu	NA	NA	NA	NA	2	1
48	Serian	NA	NA	NA	NA	2	1
49	Simunjan	NA	NA	NA	NA	2	1
50	Sri Aman	NA	NA	NA	NA	2	1
51	Betong	NA	NA	NA	NA	2	1
52	Saratok	NA	NA	NA	NA	2	1
53	Sarikei	6	3	NA	NA	4	3
54	Kanowit	NA	NA	NA	NA	2	1
55	Sibu	17	17	0	0	10	10
56	Daro	NA	NA	NA	NA	2	1
57	Mukah	NA	NA	NA	NA	2	1
58	Bintulu	6	6	0	0	3	3
59	Miri	8	8	0	0	5	3
60	Marudi	NA	NA	NA	NA	1	1
61	Limbang	NA	NA	NA	NA	2	2
62	Lawas	NA	NA	NA	NA	2	1
63	Kapit	NA	NA	NA	NA	3	2
	SABAH						
65	Queen Elizabeth I & II	28	26	24	9	24	14
66	Likas	12	9	4	2	9	9
67	Keningau	4	4	2	2	4	3
68	Lahad datu	4	4	0	0	3	3
69	Beaufort	NA	NA	NA	NA	2	2
70	Beluran	NA	NA	NA	NA	2	2
71	Kota Belud	NA	NA	NA	NA	1	1
72	Ranau	NA	NA	NA	NA	2	2
73	Sandakan	18	18	0	0	9	4
74	Semporna	NA	NA	NA	NA	1	1
75	Tawau	10	10	0	0	5	4
76	Sipitang	NA	NA	NA	NA	1	1
77	Tambunan	NA	NA	NA	NA	1	1
78	Kinabatangan	NA	NA	NA	NA	1	0
79	Kota Marudu	NA	NA	NA	NA	2	2
80	Kudat	NA	NA	NA	NA	2	2
81	Kunak	NA	NA	NA	NA	1	0
82	Pitas	NA	NA	NA	NA	1	1
83	Tenom	NA	NA	NA	NA	1	1
84	Papar	NA	NA	NA	NA	2	0
TOTAL		718	689	176	108	539	463

Table 25: Program Anestisiologi key performance indicators, 2016

No	Hospital	Department			General (Individual)		Cardiothoracic			Pain		Intensive care		
		% of major elective surgery patients who receive Acute Pain Service ($\geq 60\%$)	Ventilator care bundle (VCB) compliance rate ($\geq 90\%$)	% of elective surgical cancellations after pre-operative assessment in the Anaesthetic Clinic ($\leq 5\%$)	% of reintubation in OT and recovery room ($\leq 0.3\%$)	% of APS patients with pain score ≥ 4 24H after surgery ($\geq 75\%$)	% of accidental dural puncture ($<3\%$)	% Adult post-elective cardiopulmonary patient on arrival to CICU have blood glucose level $\geq 10\text{mmol/L}$ ($<5\%$)	% of carotid arterial puncture during central venous cannulation via internal Jugular Vein ($<5\%$)	% of re-intubation in Cardiac Intensive Care Unit after open heart surgeries ($\leq 5\%$)	% of in-patient referred for chronic pain seen within 24 hours ($>90\%$)	% of unplanned admission after day-case pain procedure ($<1\%$)	% of readmission within 48 hours of ICU discharge ($<3\%$)	% of unplanned extubation ($<5\%$)
1	Kangar	76.83	100	0.28	0.046	98.93	1.25	-	-	-	0	0	0.62	0
2	Alor Setar	97.78	100%	0	0.012	85	0.4	-	-	-	0	0	0	0
3	Langkawi	69.4	100	-	0	100	0	-	-	-	-	-	-	-
4	Sungai Petani	75.20	98.5	0	0.04	97.45	0	NR	NR	NR	NR	NR	NR	NR
5	Kulim	65.29	97.79	0.55	0.02	97.75	0	-	-	-	-	-	-	-
6	Pulau Pinang	70.9	95.5	0.125	0.038	90.67	0.41	4.2	4.3	0	100	0	1.45	2.25
7	Seberang Jaya	76.09	100	0.31	0.01	97.56	0.57	-	-	-	-	-	1.15	0.70
8	Bukit Mertajam	65.4	100	-	0	93	0	-	-	-	-	-	0.73	0.28
9	Kepala Batas	84.5	100	-	0	100	0	-	-	-	-	-	1.25	0.53
10	Ipoh	75.4	97.7	0.5	0.16	99.8	0,14	NA	NA	NA	100	0	0.5	0.4
11	Seri Manjung	75.8	100	0	0	77.1	0	NA	NA	NA	NA	NA	NA	NA
12	Taiping	66.87	98.54	0.00	0.03	92.38	0	NA	NA	NA	100	0	1.61	1.29
13	Teluk Intan	81.9	100	1.58	0	97	0	-	-	-	-	-	-	-
14	Slim River	85.3	96	0.5	0.14	91	1.81						0.6	0.48
15	Tuanku Ampuan Rahimah, Kelang	73.62	98	0.18	0.02	97.48	0.78	-	-	-	100	-	0.61	0.3
16	Ampang	85.3	98.7	0.69	0.05	92.7	2.28						0.85	1.22
17	Sungai Buloh	60.9	100	02.	0.03	97.73	0.68	NA	NA	NA	NA	NA	0.88	0.21
18	Selayang	82.07	96.89	0.79	0.01	96.46	0.54				100	0	0.84	0.38
19	Serdang	83.14	100	1,48	0.0	91.95	0.0	82.17	0.43	1.16				
20	Kajang	97.2	100	0.15	0.08	97.6	1.71							

No	Hospital	Department			General (Individual)		Cardiothoracic			Pain		Intensive care		
		% of major elective surgery patients who receive Acute Pain Service ($\geq 60\%$)	Ventilator care bundle (VCB) compliance rate ($\geq 90\%$)	% of elective surgical cancellations after pre-operative assessment in the Anaesthetic Clinic ($\leq 5\%$)	% of reintubation in OT and recovery room ($\leq 0.3\%$)	% of APS patients with pain score ≥ 4 24H after surgery ($\geq 75\%$)	% of accidental dural puncture ($<3\%$)	% of Adult post-elective cardiopulmonary patient on arrival to CICU have blood glucose level $\geq 10 \text{ mmol/L}$ ($<5\%$)	% of carotid arterial puncture during central venous cannulation via internal Jugular Vein ($<5\%$)	% of re-intubation in Cardiac Intensive Care Unit after open heart surgeries ($\leq 5\%$)	% of in-patient referred for chronic pain seen within 24 hours ($>90\%$)	% of unplanned admission after day-case pain procedure ($<1\%$)	% of readmission within 48 hours of ICU discharge ($<3\%$)	% of unplanned extubation ($<5\%$)
21	Banting	NA	98	2	0	100	0	NA	NA	NA	NA	NA	0	0
22	Kuala Lumpur	93.72	98.42	0.99	0.06	96.17	0.05				100	0	1.68	1.06
23	Putrajaya	100	100	3.02	0.03	90.02	0.3	NA	NA	NA	NA	NA	1.1	0.52
24	Labuan	97	100		0	99.7	0							
25	Tuanku Jaafar, Seremban	76.04	100	0.39	0.03	81.99	0	N/A	N/A	N/A	100	0	0.18	0.24
26	Tuanku Ampuan Najihah, Kuala Pilah	75.6	99.2	0.7	0.06	89.7	0.6	NA	NA	NA	NA	NA	0.51	0.63
27	Port Dickson	86.6	100	0	0	98.6	1.78							
28	Melaka	94.9	100	0.96	0.05	98.74	0	N/A	N/A	N/A	100	0	1.67	2.53
29	Sultanah Aminah, Johor Bahru	81.09	98.38	0.69	0.01	90.49	0.15	-	-	-	100	-	0.72	0.97
30	Sultan Ismail, Johor Bahru	94.24	99.74	0.15	0	93.14	0.17	-	-	-	100	0	0.5	2.07
31	Muar	73.1	100	3.38	0	99.5	0							
32	Batu Pahat	81.6	100	0.37	0	90.9	0	-	-	-	-	-	0	0
33	Segamat	83.8	100	0	0.12	95.2	0	NA	NA	NA	NA	NA	0	0
34	Keluang	85.33	100	0.19	0.23	91.87	0						1.27	0.49
35	Tengku Ampuan Afzan, Kuantan	69.02	99.34	0.42	0	94.50	0.2	0	0	0	-	-	0.2	0.3
36	Temerloh	87.11	98.81	0.96	0.01	95.27	0						0.21	0.31
37	Kuala Lipis	63.12	100	0	0	100	0						0	0
38	Raja Perempuan Zainab II, Kota Bharu	83.29	95.56	0.38	0.03	99.04	0.20	0.00	0.00	0.00	100	0	0.36	0
39	Kuala Krai	92.44	99.1	0	0	96.91	0	-	-	-	-	-	-	-
40	Tanah Merah	72.3	412	0.32	0.04	99.09	0						1.92	0.54

No	Hospital	Department			General (Individual)			Cardiothoracic			Pain		Intensive care	
		% of major elective surgery patients who receive Acute Pain Service ($\geq 60\%$)	Ventilator care bundle (VCB) compliance rate ($\geq 90\%$)	% of elective surgical cancellations after pre-operative assessment in the Anaesthetic Clinic ($\leq 5\%$)	% of reintubation in OT and recovery room ($\leq 0.3\%$)	% of APS patients with pain score <4 24H after surgery ($\geq 75\%$)	% of accidental dural puncture ($<3\%$)	% of Adult post-elective cardiopulmonary patient on arrival to CICU have blood glucose level $\geq 10 \text{ mmol/L}$ ($<5\%$)	% of carotid arterial puncture during central venous cannulation via internal Jugular Vein ($<5\%$)	% of re-intubation in Cardiac Intensive Care Unit after open heart surgeries ($\leq 5\%$)	% of in-patient referred for chronic pain seen within 24 hours ($>90\%$)	% of unplanned admission after day-case pain procedure ($<1\%$)	% of readmission within 48 hours of ICU discharge ($<3\%$)	% of unplanned extubation ($<5\%$)
41	Sultanah Nur Zahirah, Kuala Terengganu	87.22	100	0.68	0.04	96.62	0.78	-	-	-	100	0.0	1.94	0.77
42	Kemaman	100	100	0.19	0	95.97	0	NA	NA	NA	NA	NA	0	0
43	Umum Sarawak, Kuching (include Pusat Jantung Sarawak)	68.2	100	0.26	0.06	93.25	0.43	3.22	0.19	0.00	100	0	0.22	0.30
44	Sibu	79.6	100	0	0	99.6	0	-	-	-	100	0	0.7	0.08
45	Sarikei	93.70	100	1.70	0	97	0	-	-	-	0	0	0.8	1.1
46	Bintulu	80.32	100	0	0	98.63	0	-	-	-	0	0	3.2	0
47	Miri	72.93	100	0	0	98.13	0	-	-	-	100	0	1.45	0.21
48	Queen Elizabeth	69.55	100	0.72	0.06	82.49	0.68	4.5	2.4	0.7	100	0	0.09	0.33
49	Tawau	86.06	100	0.91	0.00	99.05	0.0	-	-	-	-	-	0.00	0.86
50	Likas	64.83	100	0.41	0.00	94.82	0.76	-	-	-	-	-	0.30	0.00
51	Sandakan	87.41	100	0.23	0.00	100	0.00	-	-	-	-	-	0.33	0.42
52	Keningau	81.3	100	0.00	0.00	99.9	0.39	-	-	-	-	-	0.00	0.00
53	Lahad Datu	96.77	82	1.50	0.00	100	0.00	-	-	-	-	-	0.00	0.00
54	Shah Alam (from July-Dec)	72	100	0.2	0	97.25	0.2						0.6	0.3
55	Institut Kanser Negara (IKN) Putrajaya	100	100	0.82	0	96.7	0	NA	NA	NA	100	NA	0.6	0