

NATIONAL HEALTHCARE ESTABLISHMENTS & WORKFORCE STATISTICS

2008-2009



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MINISTRY OF HEALTH MALAYSIA

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PREFACE

The Ministry of Health (MOH) recognises the critical need for healthcare data to aid in policy-making and planning to maintain the smooth running of a national healthcare system whilst ensuring that healthcare is accessible, equitable and reliable at all times.

As Malaysia progresses, the need for evidence to guide policy-making and monitoring will only increase further. It is to fulfill this important need that the National Healthcare Statistics Initiative (NHSI) was initiated in 2009. The NHSI aims to collect and collaborate with other data providers to produce reliable and timely data on the services, facilities, workforce and medical technologies available in the country. By working synergistically with other ministries and national statistics producers, we hope to fill important data gaps to allow a more comprehensive understanding of the current healthcare system.

The NHSI conducted several separate surveys on primary and hospital services in Malaysia and the findings have been presented in individual reports to provide easy references for all key players in these fields. Indeed these two key components of a healthcare system focus on different aspects of patient care and need to be analysed separately.

Being the gatekeepers of the healthcare system, primary care has a substantial role in disease prevention, early detection and treatment to improve the overall health of the population. Effective provision of primary care services will also inadvertently avoid overcrowding of secondary care facilities. Increasing emphasis on primary care is indeed a cost-effective and efficient way to reduce the burden of disease in the community, improve productivity of the nation and control the escalation of healthcare costs. For implementation of services to be effective, it needs to be guided by evidence in best practices, reliable data on the availability of resources and identification of areas of need.

Besides being reliable, these resources also need to be comparable to international parameters to gauge our performance in the regional and global levels. Such analyses require strong and sustained commitment from all key players in the healthcare field.

To all those that have contributed directly or indirectly to the success of the first NHSI report on primary care services in Malaysia, I thank you for your cooperation.



Dato' Dr. Hasan Abdul Rahman
Director General of Health, Malaysia

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- Director, Planning and Development Division, MOH
- Director, Family Health Development Division, MOH
- Director, Medical Practice Division, MOH
- Director, Clinical Research Centre, National Institutes of Health, MOH
- Health Informatics Centre, MOH
- State level Unit Kawalan Amalan Perubatan Swasta (UKAPS)
- UKAPS Selangor
- All participating public and private clinics and other institutions that provided data to the National Healthcare Establishment and Workforce Survey (NHEWS)
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ABOUT THE NATIONAL HEALTHCARE STATISTICS INITIATIVE

Background

The National Healthcare Statistics Initiative (NHSI) is an effort to collect, consolidate and analyse relevant data on the Malaysian healthcare system to provide a holistic view of the availability and distribution of services and workforce in the country. The NHSI applied a multipronged approach in obtaining this information and had several sub-projects under its wing, namely the:

- National Healthcare Establishment & Workforce Survey
- National Medical Device Survey
- National Medicine Use Survey
- National Medical Care Survey

Each project covers a specific component of the healthcare system. Essentially a healthcare system consists of 7 components:

- Physical facilities
- Human resources
- Medical technologies (medicines & devices)
- Financing
- Leadership and governance
- Information
- Service delivery.

Evidence-based policy-making means that, whenever possible, public policy decisions should be informed by careful analysis using sound and transparent data. More specifically, it may be defined as the systematic and rigorous use of statistics to achieve issue recognition, inform programme design and policy choice; forecast the future, monitor policy implementation, and evaluate policy impact. Policy outcomes are crucially affected by the extent to which relevant evidence is used to shape policy design, and by the speed with which the results of monitoring are fed back into policy implementation. We urgently need to develop the statistical capacity in Malaysia to improve the evidence base for healthcare policies, and to support the design, monitoring and evaluation of healthcare policy implementation.

The NHSI's intention is to put as much statistical information as possible about Malaysian healthcare in the public domain in a useful, easy to understand and credible manner.

Objectives

The NHSI is premised on the conviction that better use of statistics will lead to better policies and healthcare outcomes. We envisage that high quality healthcare statistics will have the following uses:

- Document the availability and distribution of healthcare facilities, services, workforce and medical technology (drugs and devices) in the country.
- Document the use of healthcare and medical technology (drugs and devices), and identify disparities in the use by socioeconomic status, geography, and other population characteristics.
- Monitor trends in healthcare delivery and use of medical technology (drugs and devices), and forecast future needs.
- Provide information for making changes in healthcare policies and programs.
- Evaluate the impact of healthcare policies and programs.

Survey strategy & data sources

The NHSI's strategy is to use available statistics where available; otherwise access available data to produce the required statistics. If the required data do not exist or are not available in usable form, the NHSI conducts provider-based surveys to collect the required data.

The family of healthcare surveys in NHSI, existing data sources and survey design are summarised below:

HEALTHCARE SURVEYS	AVAILABLE STATISTICS OR EXISTING DATA SOURCES	HEALTHCARE SURVEY TO COLLECT PREVIOUSLY UNAVAILABLE DATA
National Healthcare Establishment & Workforce Survey (NHEWS)	<ul style="list-style-type: none"> Healthcare facility, administrative and registration database Health professionals registers 	The Healthcare Establishment & Workforce Survey targeting registered hospitals and medical clinics in the country. The sampling frame for public facilities is from the Family Health Development Division, MOH and the sampling frame for private facilities is from the Medical Practice Division (CKAPS), MOH.
National Medicines Use Survey (NMUS)	<ul style="list-style-type: none"> Healthcare facility administrative records (purchasing, dispensing, etc) Pharmaceutical manufacturers' or distributors' drugs sales records 	Primary Care Prescription Survey. This is incorporated into the National Medical Care Survey (see 4 below).
National Medical Device Survey (NMDS)	<ul style="list-style-type: none"> Healthcare facility administrative records (asset inventory, purchasing, etc) Medical device manufacturers' or distributors' drugs sales records Radiation device registration data 	Survey on available medical technology in registered hospitals and medical clinics. This is incorporated into the Healthcare Establishment & Workforce Survey (see 1 above).
National Medical Care Survey (NMCS)	<ul style="list-style-type: none"> Routine health service statistics from Health Informatics Centre MOH, Department of Statistics and various patient registers Population mortality data from the National Registration Department (JPN) and Department of Statistics 	The National Medical Care Survey targeting sampled private primary care clinics and MOH Health Clinics (commonly known as <i>Klinik Kesihatan</i> or KK) in the country. The sampling frame for public facilities is from the Family Health Development Division and the sampling frame for private facilities is from the Medical Practice Division.

Administrative and legal authority underpinning data collection

Public hospitals and clinics under the jurisdiction of the Medical Development Division (Bahagian Perkembangan Perubatan) and Family Health Development Division (Bahagian Perkembangan Kesihatan Keluarga) respectively were directed to provide access to available data and participate in the healthcare surveys.

For private healthcare establishments and other private sector entities, legal authorities for the collection of such data by the MOH are provided by, where applicable, the Private Healthcare Facilities and Services Act 2006, Control of Drugs & Cosmetics Regulation 1984 and the soon to be introduced Medical Device Bill. The relevant regulatory authorities in the MOH are the Medical Practice Division, National Pharmaceutical Control Bureau and Medical Device Bureau. The Clinical Research Centre is the designated data collection agency.

Organisation and collaboration

The NHSI is a collaborative project among several organisations in the MOH. These are

- Medical Development Division (*Bahagian Perkembangan Perubatan*)
- Family Health Development Division (*Bahagian Pembangunan Kesihatan Keluarga*)
- Medical Practice Division (*Bahagian Amalan Perubatan*)
- Planning and Development Division (*Bahagian Perancangan and Pembangunan*) and its Health Informatics Centre (*Pusat Informatik Kesihatan*)
- Pharmaceutical Services Division (*Bahagian Farmasi*) and National Pharmaceutical Control Bureau (*Biro Pengawalan Farmaseutikal Kebangsaan*)
- Engineering Services Division (*Bahagian Perkhidmatan Kejuruteraan*) and Medical Device Bureau (*Biro Kawalan Peralatan Perubatan*)
- And the Clinical Research Centre (*Pusat Penyelidikan Klinikal*), which provides the necessary functional capacity, information infrastructure and quantitative techniques to support the project.

And of course the NHSI could not succeed without the cooperation of both public and private healthcare providers in the country, which ultimately provide most of the data that underlie its statistics.

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THE NHEWS STUDY METHODOLOGY

Introduction

The information provided in this report is a compilation of the statistics accessed from available sources and data collected from the National Healthcare Establishment and Workforce Survey (NHEWS) conducted among primary care providers.

Sample design

Clinics

The sampling frame of private general practice clinics and Health Clinics (henceforth called *Klinik Kesihatan, KK*) was constructed from multiple sources as there was no readily available sampling frame for the universe of clinics in Malaysia. The sources used include the following:

- The Family Health Development Division list of public clinics.
- The Medical Practice Division list of registered private medical clinics as of August-September 2009
- Malaysian Medical and Health Directory

There were a total of 806 KKs and 5104 private medical clinics in Malaysia during this study period.

Outpatient departments within public hospitals, universities, rural clinics (*Klinik Desa*) and Maternal & Child Health Clinics (*Klinik Ibu dan Anak*) were excluded from this survey.

The NHEWS collected data from all registered private medical clinics and all MOH KKs providing at least outpatient services. This was done to get a better picture of the number of primary care clinics in the country. The Clinical Research Centre (CRC) worked with *Cawangan Kawalan Amalan Perubatan Swasta* (CKAPS) under the Medical Practice Division, Family Health Development Division, Engineering Division and Medical Device Bureau of the MOH on the study design, conduct of study and collection of data.

Private clinic induction

Induction of private clinics began with the distribution of letters of introduction to the administrators or directors of the establishment.

The documents enclosed with the letter are as follows:

- Information brochure on the NHEWS
- Survey instruction manual
- An endorsement letter from the Director of Medical Practice Division

Approximately 14 days after mailing the letter of introduction, CRC staff called the clinics to determine whether they have received the letter and enclosed materials. If they received the documents, the staff then encouraged them to respond to the survey and answered any of their queries.

All private clinics were invited to attend the induction meeting. In view of the large number of clinics, several meetings were held in different states to encourage better participation.

The meetings were by region (details as follows):

NO	DATE	LOCATION	TARGETED PARTICIPANTS
1	5 th October 2009	Sungai Buloh, Selangor	Clinics from Selangor
2	6 th October 2009	Sungai Buloh, Selangor	Clinics from WP Kuala Lumpur
3	7 th October 2009	Serdang, Selangor	Clinics from Selangor
4	9 th October 2009	Kuala Terengganu	Clinics from Terengganu
5	11 th October 2009	Kuantan, Pahang	Clinics from Pahang
6	11 th October 2009	Johor Bharu, Johor	Clinics from Johor
7	20 th October 2009	Georgetown, Pulau Pinang	Clinics from Pulau Pinang
8	24 th October 2009	Alor Setar, Kedah	Clinics from Kedah & Perlis
9	25 th October 2009	Ipoh, Perak	Clinics from Perak
10	30 th October 2009	Kota Bharu, Kelantan	Clinics from Kelantan
11	31 st October 2009	Kota Kinabalu, Sabah	Clinics from Sabah
12	31 st October 2009	Kuching, Sarawak	Clinics from Sarawak
13	1 st November 2009	Kuching, Sarawak	Clinics from Sarawak
14	8 th November 2009	Georgetown, Pulau Pinang	Clinics from Pulau Pinang
15	14 th November 2009	Melaka	Clinics from Melaka
16	21 st November 2009	Seremban, Negeri Sembilan	Clinics from Negeri Sembilan
17	22 nd November 2009	Ipoh, Perak	Clinics from Perak

Public clinic induction

Induction of public clinics was conducted similar to induction of private clinics. Letters of introduction with forms were sent to all Klinik Kesihatan along with an endorsement letter from the Director of Family Health Development Division.

The MOH clinics were briefed during another set of meetings conducted around the country. Details as below:

NO	DATE	LOCATION	TARGETED PARTICIPANTS
1	25 th January 2010	Ipoh, Perak	KKs in Perak
2	3 rd February 2010	Alor Setar, Kedah	KKs in Kedah and Perlis
3	4 th February 2010	Kota Bharu, Kelantan	KKs in Kelantan
4	5 th February 2010	Kuantan, Pahang	KKs in Pahang
5	8 th February 2010	Johor Bharu, Johor	KKs in Johor
6	10 th February 2010	Georgetown, Pulau Pinang	KKs in Pulau Pinang
7	10 th February 2010	Kuching, Sarawak	KKs in Sarawak
8	12 th February 2010	Kota Kinabalu, Sabah	KKs in Terengganu
9	12 th February 2010	Seremban, Negeri Sembilan	KKs in Negeri Sembilan
10	1 st March 2010	Kuala Terengganu	KKs in Terengganu
11	4 th March 2010	W P Kuala Lumpur	KKs in WP Kuala Lumpur

Data collection and quality control

The NHEWS data collection was authorised under the Private Healthcare Facilities and Services Act 1998. Participation, however, was voluntary. Data collected in the NHEWS are consistent with the Personal Data Protection Act 2010. All information collected is held in the strictest confidence according to law and research ethics guidelines.

Approval for the NHEWS protocol was granted by the MOH Research and Ethics Committee (MREC) in 2010.

Two data collection procedures were used in the survey. Respondents had the option of either mode of submission.

1. Submission of paper Case Report Forms
2. Electronic submission of data via the eCRF

For both data collection procedures, an ongoing quality control program was conducted on the coding and entering of data. Several data security features were built into the data entry module along with other features such as compulsory data checking function, inconsistency checks and autocalculation to improve the quality of data and ensure the security of data. Data cleaning was then performed based on the results of edit checks. Data update and data checking of the dataset was performed when there was a query of certain fields as and when necessary. It could be due to requests by users, correction of data based on checking via data queries in the eCRF or after receiving results for preliminary data analysis. During data standardisation, missing data were handled based on derivation from existing data. Data de-duplication was also performed to identify duplicate records in the database that might have been missed out by source data providers.

Range checks and consistency checks were continued after the data entry was completed. Verification of certain outliers was done with the Source Data Providers via verbal and written communication and the data were cross checked against other sources of data such as the Health Information Management System reports, Malaysian Medical Council Doctor Database, professional societies, National Specialist Register and Registry Central Surveys.

The total number in the population, inclusion criteria, number of establishments included in the study and response rates are summarised in the table below:

Establishments	Total number in the population	Inclusion criteria	Number of establishments included in the study	Total number that responded (Response rate)
MOH clinics	809	Klinik Kesihatan with outpatient services	806	635 (78.8%)
Private primary care clinics	5104*	All primary care clinics	5104	1452 (28.4%)

* Total number of private primary care clinics excluding clinics with ambiguous existence and specialist clinics

Final query resolution / data cleaning / database lock

A final edit check run was performed prior to data locking to ensure that the data was acceptable for statistical analysis. All queries were resolved before the database was locked to ensure data quality and integrity. The final dataset was subsequently locked and exported to the statistician for analysis.

Statistical Methods

In this report, the quantity of primary care details such as establishments, services, facilities, activities, workforce and devices were expressed as an absolute count. The number of outcomes such as establishments, services, facilities, workforce and devices were expressed by state, sector and year.

The number of primary care details per 10000 inhabitants and per million inhabitants was calculated as follows:

$$\text{Number of primary care details/10000 population} = \frac{T}{P} \times 10000$$

$$\text{Number of primary care details /million population} = \frac{T}{P} \times 1\,000\,000$$

Where

T is an estimate of the total quantity of the variable available in the country in the year under consideration and

P is the mid-year population of Malaysia or the relevant geographic region where the survey was conducted.

$$\text{An estimate of the total quantity of the device/ service/ facility, } T = \sum W_i T_i$$

where;

T_i is the value of the quantity of device/ service/ facility available in the i^{th} facility in the year,

W_i is the sampling weight of the i^{th} facility

$$W_i = \frac{1}{p}$$

and

p = probability selected by logistic regression.

The sampling weight for each sampling unit or units of analysis therefore has the following components:

1. Probability of selection.

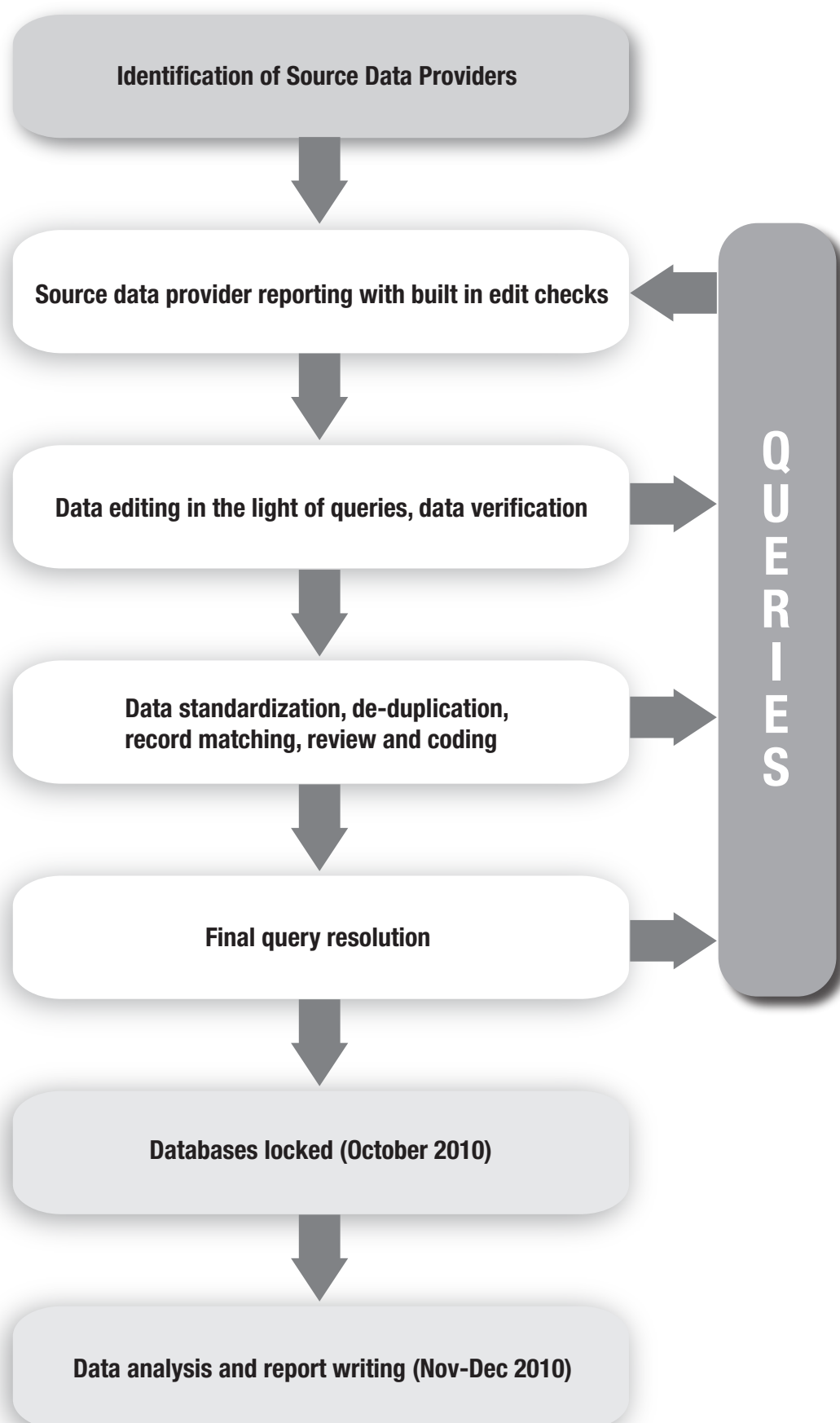
The basic weight was obtained by considering the reciprocals of the probability of the selection at each step of the sampling design.

2. Adjustment for non-response.

As the response rate was less than 100% for the clinic surveys, an adjustment to the sampling weight was required. The non-response adjustment weight was a ratio with the number of units in the population as the numerator and the number of responding sampling units as the denominator. The adjustment was to reduce the bias in an estimate to the extent that the non-responding units have the same characteristics as the responding units. Where this was unlikely, some adjustments were done taking into account differences in some relevant characteristics between responding and non responding units that may have influenced the number such as bed strength, staff strength, etc.

In this report, the response rates for the establishment details, services, facilities, activities, and workforce sections were considered together. Response rates for devices were considered separately. Thus the weight W assigned to a particular facility for the establishment details, services, facilities, activities and workforce analyses was the same, however, this could differ from the calculation of weights W in the device section.

SUMMARY OF STUDY PROCESS



ABBREVIATIONS

CKAPS	Cawangan Kawalan Amalan Perubatan Swasta
CRC	Clinical Research Centre
CRF	Case report form
DG	Director General of Health, Ministry of Health, Malaysia
eCRF	Electronic CRF
FMS	Family Medicine Specialist
FRACGP	Fellow of the Royal Australian College of General Practitioners
GP	General practices or practitioner
HIC	Health Informatics Centre
KK	Klinik Kesihatan
MDB	Medical Device Bureau
MOH	Ministry of Health, Malaysia
NA	Not applicable
N/K	Not known
NHEWS	National Healthcare Establishment & Workforce Survey
NHSI	National Healthcare Statistics Initiative
NIH	National Institutes of Health
NMCS	National Medical Care Survey
NMDS	National Medical Device Survey
NMUS	National Medicine Use Survey
SDP	Source data provider
PHFS	Private Healthcare Facilities and Services Act 1998
UKAPS	Unit Kawalan Amalan Perubatan Swasta
WHO	World Health Organization
WP	Wilayah Persekutuan
WP KL	WP Kuala Lumpur

CHAPTER 1 | OVERVIEW ON PRIMARY CARE SERVICES IN MALAYSIA

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Primary care is the basic or general healthcare that focuses on the point at which ideally a patient first seeks assistance from the medical care system. It also forms the basis for referrals to secondary and tertiary level care¹. To fulfil this function, primary care clinics have to be widely distributed and well equipped to allow appropriately trained staff to make sound clinical decisions on treatment and referrals. In Malaysia, there were 5104 private primary care clinics and 806 health clinics (henceforth known as Klinik Kesihatan or KK) reported in 2009. The overall density of primary care clinics was 2.09 per 10000 population and the number of private clinics outnumbered the public by 6.3 to 1. The highest and lowest densities per 10000 population by state were for Wilayah Persekutuan (WP) Kuala Lumpur (3.85) and Sabah & WP (1.02). Cross migration in health seeking behaviours could explain the high consultation rates per capita in WP Kuala Lumpur compared with the national average.

The overall primary care doctor to population ratio was 2.89 per 10000 population in 2009. The states with the highest and lowest densities per 10000 population were WP Kuala Lumpur (5.58) and Sarawak (1.02). Overall, 2.4% of primary care doctors were Family Medicine Specialists (FMS) and the majority of these specialists were in the public sector. Most of the qualified nurses providing primary care service were in public clinics as a large number of private clinics employ nursing aides with minimal formal training.

Four of the many services provided in the primary care setting were analysed; 1) chronic disease management, 2) provision of home visits, 3) occupational health services and 4) maternal services. Almost all public clinics provided maternal services compared with 63.3% of private clinics. A higher percentage of public primary care clinics (85.98%) provided chronic disease management compared with the private sector (77.19%). The figures calculated from this study were lower than predicted as management of chronic diseases is one of the core functions in primary care. This underestimation could be due to poor reporting.

Approximately 1.1 clinics per 10000 population provided home visit services. Most public clinics (91.2%) compared with about half of the private clinics, (45.6%) reported providing home visit services. However as private clinics far outnumber public clinics, 76% of this service was provided by private primary care providers. Over 66% of all clinics provided occupational health services with the private sector providing the bulk of these services.

Over 70% of public primary care clinics provided emergency transport (ambulance) facilities. This parameter was not analysed for private clinics. For imaging facilities, there were 0.28 clinics with imaging facilities per 10 000 population in 2009. Terengganu recorded the highest percentage (22.3%) of clinics with imaging facilities. Only 59.9% of primary care clinics in Malaysia had their own autoclaving facilities. When analysed by sector, 58.1% of public clinics and 60.2% of private clinics had such sterilisation facilities.

Perlis, Melaka, Terengganu and Kelantan were noted to have the most number of peak flow meter (PFM) per population with estimated 135.0, 131.3, 118.8 and 111.7 per million population respectively. Public clinics in Peninsular Malaysia were noted to have more PFM and nebulisers per clinic compared with those in Sabah, WP Labuan and Sarawak. There was an average of 1 electrocardiogram machine for every public clinic in Malaysia. Assuming each private clinic had not more than 1 machine, around a third of the clinics were equipped with electrocardiogram machines. The ratio of ultrasound machines to number of clinics was 0.56 in the public sector compared with 0.17 in the private sector. The number of X-Ray machines per number of clinics was 0.14 in the public sector and 0.05 in the private sector. Overall there were 13.08 general X-Ray devices per million population in the country in 2009.

The figures here were calculated based on responses to the 1st National Healthcare Establishment and Workforce Survey 2008-09 and estimation was done to obtain national figures. Further studies should be conducted to corroborate the findings of this national survey.

Reference:

1. World Health Organization (WHO) Centre for Health Development. Ageing and Health Technical Report, Volume 5: A Glossary of Terms for Community Health Care and Services for Older Persons, 2004. [Accessed on 30 June 2010]

CHAPTER 2 | PRIMARY CARE ESTABLISHMENTS IN MALAYSIA

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Summary: The overall density of primary care clinics in Malaysia was 2.09 per 10000 population in 2009; private clinics outnumbered the public by 6.3 to 1. Within Klang Valley, the district of Petaling exhibited the highest density of private primary care clinics (4.23 per 10000 population).

Primary Care is often the most accessed component of a healthcare system. The International Conference on Primary Care held at Alma Ata, Kazakhstan in 1978 defined primary healthcare as essential healthcare that is accessible and acceptable to members of the community and provided at an affordable cost. It forms an integral part of a country's healthcare system and is the first point of contact for the people with the healthcare system.¹

In Malaysia, primary care services are provided by both the public and private sectors and patients have the liberty of choice between the two sectors, albeit limited by affordability. The overall mission of the Ministry of Health Malaysia is to lead and work in partnership to ensure a high quality health system that provides equitable access to healthcare.²

Public healthcare is heavily subsidised in Malaysia and all citizens pay the same nominal fee for healthcare services. The Family Health Division of the Ministry of Health overlooks the delivery of public primary care services and aims to improve family health through a multipronged approach with cooperation and involvement from other sectors, relevant agencies and the community. Private primary care clinics provide services to the public at a fee and are regulated according to the Private Healthcare, Facilities and Services Act 1998.

The availability and distribution of primary care clinics in Malaysia is studied in this chapter. Although Wilayah Persekutuan (WP) Putrajaya is administratively under WP Kuala Lumpur, the population is reported under Selangor thus WP Putrajaya was analysed together with Selangor in this study. As people tend to use primary care facilities nearest to home, it is appropriate for the data to be analysed by state.

The density of both public and private primary care clinics in Malaysia was 2.09 per 10000 population in 2009. The greatest density by state was in WP Kuala Lumpur at 3.85 and the lowest density was in Sabah at 1.02. The states that showed a density less than the national average were Perlis, Kedah, Pahang, Terengganu, Kelantan, Sabah and Sarawak. (Table 2.1)

For the purpose of this study, Klang Valley was defined as areas covering the districts of Gombak, Klang, Petaling, Sepang and Hulu Langat within Selangor, WP Kuala Lumpur and WP Putrajaya. In this region, Petaling exhibited the highest density of private primary care clinics, however, it also had the lowest density of public primary care clinics. Hence the Ministry of Health is implementing initiatives to address the needs of the urban poor by establishing 1Malaysia clinics and having extended hours services in the urban public clinics (Table 2.2)

There was an increase in density of primary care clinics over the past 10 years from 1.7 to 2.09. The WP Kuala Lumpur, Selangor and Putrajaya region experienced the highest growth in density of 0.84 per 10000 population. A similar pattern is seen in all states except in Sarawak which experienced negative growth from 1.36 to 1.35; this could be due to the population increase exceeding the rate of increase in clinics. The overall increase in the number of primary care clinics was driven by the private sector which showed an increase of 57% as opposed to 15% in the public sector for Malaysia as a whole.

Table 2.3 looks into the total number of consultations carried out in the primary care setting. The consultation rate for most states was around the national average except for Perlis, WP Kuala Lumpur and Sabah and WP Labuan. WP Kuala Lumpur exhibited consultation rates of around 50% higher than the national average per population but when analysed together with Selangor, the figures were evened out. This could be explained by consultations being carried out in Kuala Lumpur for residents of Selangor. Perlis also exhibited high consultation rates which could possibly be due to cross border migration for healthcare services occurring in this state. Although these regions share similar characteristics of remote areas with difficult access to healthcare, Sabah and WP Labuan have higher population densities at 43 and 1035 per sq km respectively, compared with Sarawak (20 per sq km); thus explaining the lower consultation rates.³

The high per capita rate of consultation in some states and low in others should be interpreted cautiously. A high per capita rate could be due to strong health seeking behavior among the people, overuse of services, medical practices that encourage frequent visits or in fact increased morbidity rates in that population. On the other hand, low rates may not necessarily mean a healthier society; it could also be caused by increased preferences to traditional and complementary medicine or poorer health seeking behaviour. The figures should be studied along with information on the health status of the Malaysian population, local cultures and beliefs and the structure of the healthcare system in the country.

Table 2.1 Number and Density of Primary Care Clinics in Malaysia by State and Sector, 2000 to 2009*

STATE	SECTOR	2000		2005		2009	
		NUMBER	PER 10000 POPULATION	NUMBER	PER 10000 POPULATION	NUMBER	PER 10000 POPULATION
Malaysia	Public	701		781		806	
Malaysia	Private	3258		4359		5104	
Malaysia	Total	3959	1.7	5140	1.97	5910	2.09
Perlis	Public	7		9		9	
Perlis	Private	23		26		29	
Perlis	Total	30	1.45	35	1.56	38	1.58
Kedah	Public	45		50		52	
Kedah	Private	214		260		293	
Kedah	Total	259	1.55	310	1.68	345	1.72
Kedah & Perlis	Public	52		59		61	
Kedah & Perlis	Private	237		286		322	
Kedah & Perlis	Total	289	1.54	345	1.66	383	1.71
Pulau Pinang	Public	24		26		26	
Pulau Pinang	Private	281		357		418	
Pulau Pinang	Total	305	2.42	383	2.61	444	2.81
Perak	Public	62		70		73	
Perak	Private	377		442		494	
Perak	Total	439	2.06	512	2.27	567	2.37
Selangor & WP Putrajaya	Public	44		54		56	
Selangor & WP Putrajaya	Private	667		1028		1255	
Selangor & WP Putrajaya	Total	711	1.7	1082	2.28	1311	2.53
WP Kuala Lumpur	Public	8		11		14	
WP Kuala Lumpur	Private	409		556		624	
WP Kuala Lumpur	Total	417	2.94	567	3.64	638	3.85
Selangor & WP Putrajaya & WP Kuala Lumpur	Public	52		65		70	
Selangor & WP Putrajaya & WP Kuala Lumpur	Private	1076		1584		1879	
Selangor & WP Putrajaya & WP Kuala Lumpur	Total	1128	2.01	1649	2.62	1949	2.85
Negeri Sembilan	Public	33		38		38	
Negeri Sembilan	Private	151		195		232	
Negeri Sembilan	Total	184	2.17	233	2.46	270	2.66
Melaka	Public	22		25		26	
Melaka	Private	103		141		172	
Melaka	Total	125	2.09	166	2.33	198	2.57
Johor	Public	80		87		88	
Johor	Private	419		570		667	
Johor	Total	499	1.83	657	2.12	755	2.23
Pahang	Public	52		59		63	
Pahang	Private	150		195		209	
Pahang	Total	202	1.53	254	1.78	272	1.76
Terengganu	Public	35		36		38	
Terengganu	Private	77		112		137	
Terengganu	Total	112	1.05	148	1.46	175	1.56
Kelantan	Public	51		52		53	
Kelantan	Private	116		139		170	
Kelantan	Total	167	1.07	191	1.27	223	1.36
Sabah & WP Labuan	Public	68		75		78	
Sabah & WP Labuan	Private	160		208		257	
Sabah & WP Labuan	Total	228	0.73	283	0.94	335	1.02
Sarawak	Public	170		189		192	
Sarawak	Private	111		130		147	
Sarawak	Total	281	1.36	319	1.38	339	1.35

Numbers of clinics in 2000 and 2005 were estimated by the year the establishments (still operational in 2009) began their operations

Table 2.2 Number of Primary Care Clinics in Klang Valley by Town, 2009

DISTRICT	SECTOR	NUMBER	PER 10000 POPULATION
Selangor & WP Putrajaya & WP KL	Public	70	
Selangor & WP Putrajaya & WP KL	Private	1879	
Selangor & WP Putrajaya & WP KL	Total	1949	2.89
Gombak	Public	6	
Gombak	Private	124	
Gombak	Total	130	1.93
Klang	Public	8	
Klang	Private	149	
Klang	Total	157	1.91
Petaling	Public	6	
Petaling	Private	624	
Petaling	Total	630	4.23
Sepang*	Public	4	
Sepang	Private	36	
Sepang	Total	40	2.69
Ulu Langat	Public	7	
Ulu Langat	Private	211	
Ulu Langat	Total	218	1.93
WP KL	Public	14	
WP KL	Private	624	
WP KL	Total	638	3.75

*Includes WP Putrajaya

Table 2.3 Total Number and Rate of Primary Care Consults in Malaysia by State and Sector, 2008

STATE	SECTOR	NUMBER ('000)	PER CAPITA
Malaysia	Public	31161	
Malaysia	Private	47183	
Malaysia	Total	78344	2.81
Perlis	Public	527	
Perlis	Private	475	
Perlis	Total	1003	4.23
Kedah	Public	2008	
Kedah	Private	3457	
Kedah	Total	5465	2.81
Kedah & Perlis	Public	2535	
Kedah & Perlis	Private	3932	
Kedah & Perlis	Total	6467	2.97
Pulau Pinang	Public	1306	
Pulau Pinang	Private	4062	
Pulau Pinang	Total	5369	3.40
Perak	Public	3728	
Perak	Private	4179	
Perak	Total	7907	3.26
Selangor & WP Putrajaya	Public	4006	
Selangor & WP Putrajaya	Private	9292	
Selangor & WP Putrajaya	Total	13298	2.64
WP Kuala Lumpur	Public	818	
WP Kuala Lumpur	Private	6351	
WP Kuala Lumpur	Total	7168	4.21

STATE	SECTOR	NUMBER ('000)	PER CAPITA
Selangor & WP Putrajaya & WP Kuala Lumpur	Public	4823	
Selangor & WP Putrajaya & WP Kuala Lumpur	Private	15643	
Selangor & WP Putrajaya & WP Kuala Lumpur	Total	20466	3.04
Negeri Sembilan	Public	1492	
Negeri Sembilan	Private	2051	
Negeri Sembilan	Total	3543	3.54
Melaka	Public	1027	
Melaka	Private	1886	
Melaka	Total	2913	3.82
Johor	Public	3609	
Johor	Private	6690	
Johor	Total	10299	3.15
Pahang	Public	2016	
Pahang	Private	1912	
Pahang	Total	3928	2.59
Terengganu	Public	1310	
Terengganu	Private	1209	
Terengganu	Total	2519	2.43
Kelantan	Public	2221	
Kelantan	Private	1708	
Kelantan	Total	3929	2.40
Sabah & WP Labuan	Public	2157	
Sabah & WP Labuan	Private	2473	
Sabah & WP Labuan	Total	4630	1.41
Sarawak	Public	4937	
Sarawak	Private	1437	
Sarawak	Total	6374	2.58

Limitations:

- We recommend that WP Putrajaya and WP Labuan be analysed separately for a clearer description of primary care growth in these territories.
- Clinics that ceased operations prior to the conduct of this survey were unrepresented; thus the actual number of clinics operational in the past could differ from the figures presented here. The estimation was done to get an idea of the trend of increase in clinics over the past decade. The Malaysian Statistics Department estimated 3695 general practice clinics in 2005.⁴
- Besides analysing the rate of consultation per capita (Table 2.3), the consultation rates could alternatively be studied by facility in the different sectors and by location (urban versus rural) to further assess regional workload variability.

References

1. Declaration of Alma-Ata. International Conference on Primary Health Care, Alma-Ata; 1978 Sep 6-12; USSR. Available from: http://www.who.int/hpr/NPH/docs/declaration_almaata.pdf [Accessed on 14 December 2010]
2. Ministry of Health Malaysia [homepage on the internet]. Vision & Mission. Available from: http://www.moh.gov.my/v/visi_misi [Accessed on 14 December 2010]
3. Malaysia Basic Population Characteristics by Administrative Districts. June 2010. Department of Statistics Malaysia.
4. Services Statistics Health (Private Sector) Malaysia. 2008. Department of Statistics Malaysia

CHAPTER 3 | WORKFORCE IN PRIMARY CARE IN MALAYSIA

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Summary: The overall primary care doctor to population ratio was 2.89 per 10000 population in 2009. The states with the highest and lowest densities per 10000 population were Wilayah Persekutuan Kuala Lumpur (5.58) and Sarawak (1.02). Overall, 2.4% of the doctors providing primary care services in Malaysia are specialists in this field and the majority of them were in the public sector. Most qualified nurses in primary care clinics were in the public sector.

This chapter looks into the availability and distribution of doctors and nurses in the primary care setting. A primary care doctor in Malaysia is defined as any doctor who is registered with the Malaysian Medical Council (MMC) and works in a primary care clinic. Criteria for registration with the MMC are a medical degree from a recognised university and completion of housemanship training.

The overall primary care doctor to population ratio was 2.89 per 10000 population in 2009. The highest density was in Wilayah Persekutuan Kuala Lumpur at 5.58 per 10000 population and the lowest was in Sarawak at 1.02 per 10000 population. The states with a primary care doctor to population ratio lower than the national average were Perlis, Kedah, Pahang, Terengganu, Kelantan, Sabah, and Wilayah Persekutuan (WP) Labuan and Sarawak. (Table 3.1)

The overall distribution of public primary care doctors was 0.52 per 10000 population and the density for most states hovered around the national average except for Negeri Sembilan which showed the highest density of public primary care doctors at 1.11 per 10000 population. On the other hand, Sabah and Sarawak had the lowest density of public primary care doctors. Private primary care doctors outnumbered the public with a ratio of 4.6:1. The states with the highest private to public ratios were WP Kuala Lumpur (11.8:1), Penang (8.4:1) and Selangor (7.0:1). The states with the lowest private to public primary care doctors' ratios (in descending order) were Negeri Sembilan, Pahang, Kelantan, Sarawak and Perlis.

Nurses in primary care in Malaysia are made up of four categories based on their qualification whether diploma or degree (certified nurses) or certificate (community nurses, midwives and assistant nurses). Training for midwives and assistant nurses has been stopped since the late 80's and early 90's respectively; thus explaining the low numbers found in this study. The distribution of trained nursing staff in the country was heavily tilted towards the public sector in the primary care setting. A large number of private clinics employed nursing aides who are given on the job training. (Tables 3.2a and 3.2b)

Table 3.3 shows the distribution of Family Medicine Specialists (FMS) in Malaysia. There are two alternative pathways for medical officers to obtain this specialisation in Malaysia; through the University-run Masters programme or by obtaining FRACGP certification. Presently there are no specific guidelines on their specialist fees in private practice. Specialists serving in the public sector receive incentives similar to specialists in other clinical fields. This could explain the larger number of family medicine specialists in the public sector although there were fewer public clinics compared with private ones. In the public sector, 10.4% of the primary care doctors were FMS, however, in the private side there were only 0.68% FMS. Overall, 2.4% of the doctors providing primary care services in Malaysia are specialists in this field. This figure is lower than in countries such as Australia due to the differing primary care systems.¹ The Malaysian system allows doctors without a specialist qualification to practice as general practitioners as opposed to other countries that do not. The public sector introduced FMS in an effort to bring specialist services closer to the home and to deliver comprehensive quality primary care services. The FMS in the public sector are given the same recognition and remuneration as other clinical specialists, which is an incentive for them to remain in the public service. As FMS is a rapidly emerging specialty in Malaysia with the public sector taking a lead now, it is only a matter of time before the tide flows into the private sector once there is more demand for it from the people.

Table 3.1 Number and Density of Primary Care Doctors in Malaysia by State and Sector, 2009

STATE	SECTOR	NUMBER	PER 10000 POPULATION
Malaysia	Public	1438	
Malaysia	Private	6626	
Malaysia	Total	8064	2.89
Perlis	Public	18	
Perlis	Private	32	
Perlis	Total	50	2.11
Kedah	Public	88	
Kedah	Private	379	
Kedah	Total	467	2.4
Kedah & Perlis	Public	106	
Kedah & Perlis	Private	411	
Kedah & Perlis	Total	517	2.37
Pulau Pinang	Public	71	
Pulau Pinang	Private	596	
Pulau Pinang	Total	667	4.22
Perak	Public	156	
Perak	Private	598	
Perak	Total	754	3.11
Selangor & WP Putrajaya	Public	236	
Selangor & WP Putrajaya	Private	1652	
Selangor & WP Putrajaya	Total	1888	3.75
WP Kuala Lumpur	Public	74	
WP Kuala Lumpur	Private	876	
WP Kuala Lumpur	Total	950	5.58
Selangor & WP Putrajaya & WP Kuala Lumpur	Public	310	
Selangor & WP Putrajaya & WP Kuala Lumpur	Private	2528	
Selangor & WP Putrajaya & WP Kuala Lumpur	Total	2838	4.21
Negeri Sembilan	Public	111	
Negeri Sembilan	Private	271	
Negeri Sembilan	Total	382	3.82
Melaka	Public	56	
Melaka	Private	221	
Melaka	Total	277	3.64
Johor	Public	162	
Johor	Private	926	
Johor	Total	1088	3.33
Pahang	Public	119	
Pahang	Private	250	
Pahang	Total	369	2.43
Terengganu	Public	62	
Terengganu	Private	166	
Terengganu	Total	228	2.2
Kelantan	Public	93	
Kelantan	Private	188	
Kelantan	Total	281	1.71
Sabah & WP Labuan	Public	105	
Sabah & WP Labuan	Private	307	
Sabah & WP Labuan	Total	412	1.26
Sarawak	Public	87	
Sarawak	Private	164	
Sarawak	Total	251	1.02

Table 3.2a Number and Density of Primary Care Nurses (Staff Nurses and Community Nurses) in Malaysia by State and Sector, 2009

STATE	SECTOR	STAFF NURSES		COMMUNITY	
		NUMBER	PER 10000 POPULATION	NUMBER	PER 10000 POPULATION
Malaysia	Public	4661		6908	
Malaysia	Private	362		NA	
Malaysia	Total	5023	1.8	6908	2.48
Perlis	Public	147		200	
Perlis	Private	0		NA	
Perlis	Total	147	6.2	200	8.44
Kedah	Public	427		684	
Kedah	Private	0		NA	
Kedah	Total	427	2.2	684	3.52
Kedah & Perlis	Public	574		884	
Kedah & Perlis	Private	0		NA	
Kedah & Perlis	Total	574	2.63	884	4.06
Pulau Pinang	Public	201		380	
Pulau Pinang	Private	35		NA	
Pulau Pinang	Total	236	1.49	380	2.41
Perak	Public	399		609	
Perak	Private	34		NA	
Perak	Total	433	1.78	609	2.51
Selangor & WP Putrajaya	Public	479		475	
Selangor & WP Putrajaya	Private	109		NA	
Selangor & WP Putrajaya	Total	588	1.17	475	0.94
WP Kuala Lumpur	Public	122		169	
WP Kuala Lumpur	Private	35		NA	
WP Kuala Lumpur	Total	157	0.92	169	0.99
Selangor & WP Putrajaya & WP Kuala Lumpur	Public	600		644	
Selangor & WP Putrajaya & WP Kuala Lumpur	Private	144		NA	
Selangor & WP Putrajaya & WP Kuala Lumpur	Total	744	1.1	644	0.96
Negeri Sembilan	Public	329		283	
Negeri Sembilan	Private	15		NA	
Negeri Sembilan	Total	344	3.44	283	2.83
Melaka	Public	221		255	
Melaka	Private	18		NA	
Melaka	Total	239	3.14	255	3.35
Johor	Public	598		1048	
Johor	Private	36		NA	
Johor	Total	634	1.94	1048	3.21
Pahang	Public	427		303	
Pahang	Private	10		NA	
Pahang	Total	437	2.88	303	2
Terengganu	Public	349		305	
Terengganu	Private	16		NA	
Terengganu	Total	365	3.52	305	2.94
Kelantan	Public	390		727	
Kelantan	Private	8		NA	
Kelantan	Total	398	2.43	727	4.44
Sabah & WP Labuan	Public	298		504	
Sabah & WP Labuan	Private	37		NA	
Sabah & WP Labuan	Total	335	1.02	504	1.54
Sarawak	Public	276		967	
Sarawak	Private	8		NA	
Sarawak	Total	284	1.15	967	3.91

NA – not applicable

Table 3.2b Number and Density of Primary Care Nurses (Midwives and Assistant Nurses) in Malaysia by State and Sector, 2009

STATE	SECTOR	MIDWIVES		ASSISTANT NURSES	
		NUMBER	PER 10000 POPULATION	NUMBER	PER 10000 POPULATION
Malaysia	Public	274		482	
Malaysia	Private	NA		NA	
Malaysia	Total	274	0.1	482	0.17
Perlis	Public	7		5	
Perlis	Private	NA		NA	
Perlis	Total	7	0.3	5	0.21
Kedah	Public	21		39	
Kedah	Private	NA		NA	
Kedah	Total	21	0.11	39	0.2
Kedah & Perlis	Public	27		44	
Kedah & Perlis	Private	NA		NA	
Kedah & Perlis	Total	27	0.12	44	0.2
Pulau Pinang	Public	8		13	
Pulau Pinang	Private	NA		NA	
Pulau Pinang	Total	8	0.05	13	0.08
Perak	Public	17		46	
Perak	Private	NA		NA	
Perak	Total	17	0.07	46	0.19
Selangor & WP Putrajaya	Public	24		44	
Selangor & WP Putrajaya	Private	NA		NA	
Selangor & WP Putrajaya	Total	24	0.05	44	0.09
WP Kuala Lumpur	Public	NA		9	
WP Kuala Lumpur	Private	NA		NA	
WP Kuala Lumpur	Total	NA	0	9	0.05
Selangor & WP Putrajaya & WP Kuala Lumpur	Public	24		53	
Selangor & WP Putrajaya & WP Kuala Lumpur	Private	NA		NA	
Selangor & WP Putrajaya & WP Kuala Lumpur	Total	24	0.04	53	0.08
Negeri Sembilan	Public	12		17	
Negeri Sembilan	Private	NA		NA	
Negeri Sembilan	Total	12	0.12	17	0.17
Melaka	Public	2		10	
Melaka	Private	NA		NA	
Melaka	Total	2	0.03	10	0.13
Johor	Public	53		70	
Johor	Private	NA		NA	
Johor	Total	53	0.16	70	0.21
Pahang	Public	12		29	
Pahang	Private	NA		NA	
Pahang	Total	12	0.08	29	0.19
Terengganu	Public	23		23	
Terengganu	Private	NA		NA	
Terengganu	Total	23	0.22	23	0.22
Kelantan	Public	63		63	
Kelantan	Private	NA		NA	
Kelantan	Total	63	0.38	63	0.38
Sabah & WP Labuan	Public	32		111	
Sabah & WP Labuan	Private	NA		NA	
Sabah & WP Labuan	Total	32	0.1	111	0.34
Sarawak	Public	NA		2	
Sarawak	Private	NA		NA	
Sarawak	Total	NA	0	2	0.01

NA – not applicable

Table 3.3 Number and Distribution of Family Medicine Specialists in Malaysia by State and Sector, 2009

STATE	SECTOR	NUMBER	PER 10000 POPULATION
Malaysia	Public	149	
Malaysia	Private	45	
Malaysia	Total	194	0.07
Perlis	Public	3	
Perlis	Private	0	
Perlis	Total	3	0.12
Kedah	Public	12	
Kedah	Private	0	
Kedah	Total	12	0.06
Kedah & Perlis	Public	15	
Kedah & Perlis	Private	0	
Kedah & Perlis	Total	15	0.07
Pulau Pinang	Public	13	
Pulau Pinang	Private	6	
Pulau Pinang	Total	19	0.12
Perak	Public	9	
Perak	Private	16	
Perak	Total	25	0.1
Selangor & WP Putrajaya	Public	23	
Selangor & WP Putrajaya	Private	3	
Selangor & WP Putrajaya	Total	26	0.05
WP Kuala Lumpur	Public	11	
WP Kuala Lumpur	Private	6	
WP Kuala Lumpur	Total	17	0.1
Selangor & WP Putrajaya & WP Kuala Lumpur	Public	34	
Selangor & WP Putrajaya & WP Kuala Lumpur	Private	9	
Selangor & WP Putrajaya & WP Kuala Lumpur	Total	43	0.06
Negeri Sembilan	Public	11	
Negeri Sembilan	Private	2	
Negeri Sembilan	Total	13	0.13
Melaka	Public	4	
Melaka	Private	1	
Melaka	Total	5	0.06
Johor	Public	14	
Johor	Private	7	
Johor	Total	21	0.06
Pahang	Public	15	
Pahang	Private	1	
Pahang	Total	16	0.1
Terengganu	Public	14	
Terengganu	Private	1	
Terengganu	Total	15	0.13
Kelantan	Public	10	
Kelantan	Private	1	
Kelantan	Total	11	0.07
Sabah & WP Labuan	Public	7	
Sabah & WP Labuan	Private	0	
Sabah & WP Labuan	Total	7	0.02
Sarawak	Public	3	
Sarawak	Private	1	
Sarawak	Total	4	0.02

Limitations:

- The estimated number of doctors was calculated based on the total number of doctors practicing in each clinic in the country. As doctors may practice in more than one clinic, the figures presented here could be an overestimation of the true picture especially for the private sector.
- The number of Family Medicine Specialists was based on a list of verified names of specialists; thus each individual was only counted once.

Reference

1. Britt H, Miller GC, Charles J, et al. General practice activity in Australia, 2008–09. General practice series no. 25. Cat. no. GEP 25. Canberra: AIHW.

CHAPTER 4: PRIMARY CARE SERVICES IN MALAYSIA

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Summary: In 2009, 78.39% of primary care clinics in Malaysia provided chronic disease management, however, true figures could be higher than the figures presented here. Approximately half of all clinics provided home visit services (51.81%); more so in the public clinics. Over 66% of all clinics provided occupational health services with the private sector providing the bulk of these services. Almost all public primary care clinics provided maternal services (94.54%) compared with 63.28% of the private clinics.

This survey includes 806 public primary care clinics and 5104 private primary care clinics; giving a total of 5910 clinics. Three clinics in the public sector were excluded because these clinics provided maternal and child health services only. In the private sector, specialist clinics, dental clinics and clinics with unconfirmed existence were excluded. For both groups, those with extensive missing data and those clinics that did not return the CRF were excluded.

Overall, it is estimated that 78.39% (4633/5910) of primary care clinics in Malaysia provided chronic disease management in 2009. Out of this, 85.98% (693/806) of the public primary care clinics compared with 77.19% (3940/5104) in the private sector were providing this service. Chronic disease management is among the core services provided in primary care and the true figures could be higher than the ones presented here.

In the public sector, all clinics in Perlis and Wilayah Persekutuan Kuala Lumpur provided chronic disease management (Perlis 9, WPKL 14). The state with the lowest percentage of clinics providing this service was Pahang at 76.19% (48/63). In the private sector, the state with the highest percentage was Perlis (100%) and the lowest was Kelantan at 67.06% (114/170). At the population level, 1.66 clinics provided chronic disease management for every 10000 population. The highest was found in WP KL (2.81/10000 population) while the lowest was in Sabah & WP Labuan (0.83/10000 population). (Table 4.1)

Looking at the provision of home visits in the country, 51.81% (3062/5910) of primary care clinics provided this service. The estimated percentage of public primary care clinics providing this service was 91.19% (735/806) compared with 45.6% (2327/5104) in the private sector.

Comparing the provision of home visits between the states, the highest percentage for public sector was Perlis at 100% (9) and the lowest was Wilayah Persekutuan Kuala Lumpur at 21.4% (3/14). In the private sector, Kelantan had the highest percentage at 65.88% (112/170) and the lowest was Perlis at 31.03% (9/29).

On the whole, home visit services were provided by 1.10 clinics per 10000 populations. The highest was found in WP KL (1.53/10000 population) while the lowest was in Sabah & WP Labuan (0.6/10000 population). (Table 4.1)

A total of 66.07% (3905/5910) of primary care clinics in Malaysia provided occupational health services. In the public sector, an estimated 26.05% (210/806) of the clinics provided this service compared with 72.39% (3695/5104) in the private sector. The state with the highest provision of occupational health services in the public sector was Perlis at 55.6% (5/9) and the lowest was Sarawak at 8.33% (16/192). For the private sector, the highest was Sabah & WP Labuan at 91.05% (234/257) and the lowest was Perlis at 44.8% (13/29).

Overall, 1.40 clinics provided the services for every 10000 population in Malaysia. By state, the highest was found in WP KL (2.54/10000 population) and the lowest was in Sarawak (0.57/10000 population). (Table 4.2)

From the study, a total of 67.55% (3992/5910) of the primary care clinics in Malaysia provided maternal services. Almost all public primary care clinics provided this service (94.54%; 762/806), compared with 63.28% (3230/5104) of the private primary care clinics. Four states reported providing maternal services in all public clinics (Perlis, Perak, Terengganu and Kelantan) while WP Kuala Lumpur reported the lowest rate of 21.43% (3/14). In the private sector, Sabah & WP Labuan showed the highest percentage for maternal service at 89.49% (230/257) compared with Pahang which had the lowest, 44.50% (93/209).

As a country, in 2009, 1.43 clinics provided maternal services per 10000 population. Wilayah Persekutuan Kuala Lumpur had the highest (2.42/10000) and Sabah & WP Labuan had the lowest (0.92/10000). (Table 4.2)

Table 4.1 Number and Density of Primary Care Clinics Providing Chronic Disease Management and Home Visit Services in Malaysia by State and Sector, 2009

STATE	SECTOR	CHRONIC DISEASE MANAGEMENT		HOME VISIT	
		NUMBER	PER 10000 POPULATION	NUMBER	PER 10000 POPULATION
Malaysia	Public	693		735	
Malaysia	Private	3940		2327	
Malaysia	Total	4633	1.66	3062	1.1
Perlis	Public	9		9	
Perlis	Private	29		9	
Perlis	Total	38	1.6	18	0.76
Kedah	Public	41		47	
Kedah	Private	236		112	
Kedah	Total	277	1.43	159	0.82
Kedah & Perlis	Public	50		56	
Kedah & Perlis	Private	265		121	
Kedah & Perlis	Total	315	1.45	177	0.81
Pulau Pinang	Public	21		20	
Pulau Pinang	Private	330		169	
Pulau Pinang	Total	351	2.22	189	1.2
Perak	Public	60		71	
Perak	Private	378		239	
Perak	Total	438	1.8	310	1.28
Selangor & WP Putrajaya	Public	50		53	
Selangor & WP Putrajaya	Private	955		543	
Selangor & WP Putrajaya	Total	1005	2	596	1.18
WP Kuala Lumpur	Public	14		3	
WP Kuala Lumpur	Private	465		258	
WP Kuala Lumpur	Total	479	2.81	261	1.53
Selangor & WP Putrajaya & WP Kuala Lumpur	Public	64		56	
Selangor & WP Putrajaya & WP Kuala Lumpur	Private	1420		801	
Selangor & WP Putrajaya & WP Kuala Lumpur	Total	1484	2.2	857	1.27
Negeri Sembilan	Public	33		37	
Negeri Sembilan	Private	171		91	
Negeri Sembilan	Total	204	2.04	128	1.28
Melaka	Public	24		25	
Melaka	Private	137		87	
Melaka	Total	161	2.11	112	1.47
Johor	Public	80		82	
Johor	Private	523		355	
Johor	Total	603	1.84	437	1.34
Pahang	Public	48		53	
Pahang	Private	166		93	
Pahang	Total	214	1.41	146	0.96
Terengganu	Public	31		36	
Terengganu	Private	109		69	
Terengganu	Total	140	1.35	105	1.01
Kelantan	Public	47		52	
Kelantan	Private	114		112	
Kelantan	Total	161	0.98	164	1
Sabah & WP Labuan	Public	68		68	
Sabah & WP Labuan	Private	205		130	
Sabah & WP Labuan	Total	273	0.83	198	0.6
Sarawak	Public	167		179	
Sarawak	Private	122		60	
Sarawak	Total	289	1.17	239	0.97

Table 4.2 Number and Density of Primary Care Clinics Providing Occupational Health and Maternal Services in Malaysia by State and Sector, 2009

STATE	SECTOR	OCCUPATIONAL HEALTH		MATERNAL	
		NUMBER	PER 10000 POPULATION	NUMBER	PER 10000 POPULATION
Malaysia	Public	210		762	
Malaysia	Private	3695		3230	
Malaysia	Total	3905	1.4	3992	1.43
Perlis	Public	5		9	
Perlis	Private	13		18	
Perlis	Total	18	0.76	27	1.14
Kedah	Public	21		48	
Kedah	Private	193		148	
Kedah	Total	214	1.1	196	1.01
Kedah & Perlis	Public	25		57	
Kedah & Perlis	Private	206		166	
Kedah & Perlis	Total	231	1.06	223	1.02
Pulau Pinang	Public	10		21	
Pulau Pinang	Private	327		209	
Pulau Pinang	Total	337	2.13	230	1.46
Perak	Public	29		73	
Perak	Private	305		232	
Perak	Total	334	1.38	305	1.26
Selangor & WP Putrajaya	Public	31		56	
Selangor & WP Putrajaya	Private	962		885	
Selangor & WP Putrajaya	Total	993	1.97	941	1.87
WP Kuala Lumpur	Public	4		3	
WP Kuala Lumpur	Private	428		409	
WP Kuala Lumpur	Total	432	2.54	412	2.42
Selangor & WP Putrajaya & WP Kuala Lumpur	Public	35		59	
Selangor & WP Putrajaya & WP Kuala Lumpur	Private	1389		1293	
Selangor & WP Putrajaya & WP Kuala Lumpur	Total	1424	2.11	1352	2.01
Negeri Sembilan	Public	12		36	
Negeri Sembilan	Private	166		150	
Negeri Sembilan	Total	178	1.78	186	1.86
Melaka	Public	9		23	
Melaka	Private	128		109	
Melaka	Total	137	1.8	132	1.73
Johor	Public	18		85	
Johor	Private	508		440	
Johor	Total	526	1.61	525	1.61
Pahang	Public	16		61	
Pahang	Private	144		93	
Pahang	Total	160	1.05	154	1.02
Terengganu	Public	11		38	
Terengganu	Private	82		87	
Terengganu	Total	93	0.9	125	1.21
Kelantan	Public	20		53	
Kelantan	Private	80		129	
Kelantan	Total	100	0.61	182	1.11
Sabah & WP Labuan	Public	8		73	
Sabah & WP Labuan	Private	234		230	
Sabah & WP Labuan	Total	242	0.74	303	0.92
Sarawak	Public	16		183	
Sarawak	Private	125		91	
Sarawak	Total	141	0.57	274	1.11

Limitation

- The data presented here could be an underestimation of actual figures; this could be attributed to reporting errors. However, the data does present comparisons in pattern of service provision between states and sectors.

CHAPTER 5 | PRIMARY CARE FACILITIES IN MALAYSIA

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Summary: Over 70% of public primary care clinics provided emergency transport (ambulance) facilities. The parameter was not analysed for private clinics. Overall, there were 0.28 clinics with imaging facilities per 10000 population in 2009 with Terengganu having the highest percentage of clinics with imaging facilities (22.3%). More than half (59.9%) of primary care clinics in Malaysia had their own autoclaving facilities. When analysed by sector, 58.1% of public clinics and 60.2% of private clinics had such sterilisation facilities

In 2009, it is noted that 70.3% (567/806) of the public primary care clinics had emergency transport (ambulance) facilities. The data is not available for private primary care clinics.

All public primary care clinics in Perlis and 35% of Wilayah Persekutuan Kuala Lumpur (WP KL) clinics had ambulance facilities.

By population, Perlis had the highest ratio of this service at 0.38 per 10000 population followed by Pahang. By contrast, WP KL had the lowest ratio at 0.03/10000 population. (Table 5.1)

Both private and public primary care clinics had diagnosis/imaging rooms. On the whole, 13.3% (788/5910) of the primary care clinics in Malaysia had imaging facilities. Terengganu (22.3%) had the most clinics providing this service, followed by Pahang (19.12%) and Sabah & WP Labuan (17.31%) while Sarawak had the least of this service (4.7%).

In most states, the number of private clinics with this facility exceeds the number of public primary care clinics and the difference is greatest in Sabah & WP Labuan (20.2% of private sector clinics compared with a mere 5.1% of public sector clinics have imaging rooms).

In terms of population, there was about one such service for every 40000 population (0.28/10000 population). Wilayah Persekutuan KL had the highest ratio of this service (0.47/10000 population). This was followed by Negeri Sembilan (0.45/10000 population). Sarawak and Perlis had the lowest number of clinics offering this service for their population (0.13/10000 population). (Table 5.1)

A total of 59.9% of the primary care clinics in Malaysia had autoclaving facilities; where more private clinics (60.2%) used this method of sterilising compared with public primary care clinics (58.1%).

Among the states, Sarawak showed the largest difference between the two sectors, where 68.03% of the private clinics had autoclaves compared with 27.08% of the public primary care clinics. This could be because many of the clinics in this state were small and may have utilised sterilisation facilities available in nearby hospitals.

Wilayah Persekutuan KL had the highest number of clinics that had autoclaves per population (2.41/10000 population). The lowest numbers were seen in Sabah (0.45/10000) & WP Labuan and Sarawak (0.62/10000). (Table 5.1)

Table 5.1 Number and Density of Facilities in Primary Care Clinics in Malaysia by State and Sector, 2009

STATE	SECTOR	AUTOCLAVING		DIAGNOSIS/IMAGING ROOM		AMBULANCE SERVICES	
		NUMBER	PER 10000 POPULATION	NUMBER	PER 10000 POPULATION	NUMBER	PER 10000 POPULATION
Malaysia	Public	468		149		567	
Malaysia	Private	3073		639		NA	
Malaysia	Total	3541	1.27	788	0.28	567	0.2
Perlis	Public	7		3		9	
Perlis	Private	14		0		NA	
Perlis	Total	21	0.89	3	0.13	9	0.38
Kedah	Public	34		11		47	
Kedah	Private	156		24		NA	
Kedah	Total	190	0.98	35	0.18	47	0.24
Kedah & Perlis	Public	41		14		56	
Kedah & Perlis	Private	170		24		NA	
Kedah & Perlis	Total	211	0.97	38	0.17	56	0.26
Pulau Pinang	Public	12		7		15	
Pulau Pinang	Private	238		34		NA	
Pulau Pinang	Total	250	1.58	41	0.26	15	0.09
Perak	Public	57		21		59	
Perak	Private	284		55		NA	
Perak	Total	341	1.4	76	0.31	59	0.24
Selangor & WP Putrajaya	Public	46		14		45	
Selangor & WP Putrajaya	Private	768		143		NA	
Selangor & WP Putrajaya	Total	814	1.62	157	0.31	45	0.09
WP Kuala Lumpur	Public	11		2		5	
WP Kuala Lumpur	Private	399		78		NA	
WP Kuala Lumpur	Total	410	2.41	80	0.47	5	0.03
Selangor & WP Putrajaya & WP Kuala Lumpur	Public	57		16		50	
Selangor & WP Putrajaya & WP Kuala Lumpur	Private	1167		221		NA	
Selangor & WP Putrajaya & WP Kuala Lumpur	Total	1224	1.82	237	0.35	50	0.07
Negeri Sembilan	Public	29		8		31	
Negeri Sembilan	Private	153		37		NA	
Negeri Sembilan	Total	182	1.82	45	0.45	31	0.31
Melaka	Public	21		9		11	
Melaka	Private	114		16		NA	
Melaka	Total	135	1.77	25	0.33	11	0.14
Johor	Public	64		15		68	
Johor	Private	410		92		NA	
Johor	Total	474	1.45	107	0.33	68	0.21
Pahang	Public	37		11		50	
Pahang	Private	126		41		NA	
Pahang	Total	163	1.07	52	0.34	50	0.33
Terengganu	Public	34		5		33	
Terengganu	Private	93		34		NA	
Terengganu	Total	127	1.23	39	0.38	33	0.32
Kelantan	Public	39		10		47	
Kelantan	Private	94		28		NA	
Kelantan	Total	133	0.81	38	0.23	47	0.29
Sabah & WP Labuan	Public	25		6		62	
Sabah & WP Labuan	Private	124		52		NA	
Sabah & WP Labuan	Total	149	0.45	58	0.18	62	0.19
Sarawak	Public	52		27		85	
Sarawak	Private	100		5		NA	
Sarawak	Total	152	0.62	32	0.13	85	0.34

Limitation

- Some smaller clinics share ambulances and engage private ambulance services when necessary. The numbers presented here are for ambulances/emergency transport facilities that are managed by the clinics only.

CHAPTER 6 | PRIMARY CARE DEVICES IN MALAYSIA

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Summary: Public clinics in Peninsular Malaysia were noted to have more peak flow meters and nebulisers per clinic compared with those in Sabah, WP Labuan and Sarawak. There were 108 peak flow meters and 114 nebuliser machines per million population in 2009. There was an average of 1 electrocardiogram machine for every public clinic in Malaysia. The ratio of ultrasound machines to number of clinics was 0.56 in the public sector compared with 0.17 in the private sector meanwhile the ratio of X-Ray machines to the number of clinics was 0.14 and 0.05 in the public and private sectors respectively.

This chapter examines the availability of devices required in providing quality primary care services to the people. Based on current best practices in medicine and local burden of diseases, certain devices should be available in the primary care setting and these devices should be appropriately distributed geographically and between sectors to ensure good access¹. In this chapter we only took into consideration devices that were reported to be in functioning condition and were actually being used for patient care. The 5 devices analysed are devices that are relevant to the common reasons for patient visits to primary care clinics.

Respiratory conditions such as acute upper respiratory tract infections, acute tonsillitis and asthma form the largest percentage of diagnoses (34%), thus it is important for clinics to be equipped with the related diagnostic and therapeutic devices². Overall, there were more peak flow meters (PFMs) in public clinics compared with private clinics. Along with history and physical examination, peak expiratory flow is recommended in the assessment of the severity and response to treatment in patients with asthma^{3,4}. Public clinics in Peninsular Malaysia were noted to have more PFMs per clinic compared with their East Malaysian counterparts. This could be because a larger proportion of clinics in East Malaysia are smaller and situated in more rural settings⁵. The situation was reversed for private clinics where the number of these devices per clinic in Sabah and Sarawak were equal or exceeded the national average. States with a larger private general practice presence such as Selangor and Wilayah Persekutuan (WP) Kuala Lumpur did not necessarily have a large number of PFMs per million population. Perlis, Melaka, Terengganu and Kelantan were noted to have the most PFMs per population with estimated 135pmp, 131pmp, 119pmp and 112pmp respectively. (Table 6.1)

A similar pattern was noted for the availability of nebuliser machines when analysed per clinic however the difference between the 2 sectors was narrower for nebuliser machines. Nebuliser machines are useful in providing short acting bronchodilator therapy to patients with acute exacerbation of asthma and chronic obstructive pulmonary disease^{3,4,6}. When analysed by state, private clinics in Sarawak, Johor, Kelantan and Melaka had more than the national average of 0.38 nebulisers per clinic. This could be due to a combination of better equipped clinics and fewer clinics in these states. Public clinics in most states exceeded the national average number of nebulisers per clinic with the highest ratios noted in WP Kuala Lumpur, Pulau Pinang and Terengganu. (Table 6.1)

Electrocardiography (ECG) machines were analysed due to its importance in detecting cardiac conditions. There was an average of 1 machine per public clinic with some larger clinics having more than one and some small clinics with none. Assuming each private clinic had not more than 1 machine, around a third of the clinics were equipped with ECG machines. Only Pahang, Sabah & WP Labuan and Sarawak recorded a ratio for an ECG machine to total number of public clinics of less than 1. As in the situation with PFMs and nebulisers this could be due to the higher percentage of smaller clinics in these states. (Table 6.2)

The distribution of general radiography units (X-ray machines) and ultrasound machines were also analysed and it was noted that, in general, public clinics were better equipped than the private. Although the total number of machines in the private exceeded the public, the number of private clinics far exceeded the public clinics; thus resulting in lower device to clinic ratios. Maternal health is a large component of the primary care services in public clinics and this is reflected in the number of ultrasound machines available. The ratio for the number of ultrasound machines to number of clinics was 0.56 in the public sector compared with 0.17 in the private sector. Selangor had the highest ratio of ultrasound machines in the public sector and Kelantan had the highest in the private sector. Overall, the density of ultrasound machines per million population was highest in Perak whereby the availability in public and private clinics were similar to the national averages. Availability of X-ray machines by population on the other hand was highest in Pulau Pinang followed by Melaka. (Table 6.2 and 6.3)

From this data, it is estimated that around 5% of private clinics had X-ray machines, 30% had ECG machines, 20% had peak flow meters, 38% had nebuliser machines and 17% had ultrasound machines. These figures are much lower than previous estimates thus strengthening the need and urgency for increased efforts in medical device research in Malaysia⁷.

Table 6.1 Number and Density of Peak Flow Meters and Nebulisers in Malaysia by State and Sector, 2009

STATE	SECTOR	PEAK FLOW METER			NEBULISER		
		NUMBER	PER MILLION POPULATION	PER CLINIC	NUMBER	PER MILLION POPULATION	PER CLINIC
Malaysia	Public	2001		2.48	1223		1.52
Malaysia	Private	1010		0.2	1959		0.38
Malaysia	Total	3011	107.94		3182	114.07	
Perlis	Public	30		3.33	14		1.56
Perlis	Private	2		0.07	9		0.31
Perlis	Total	32	135.02		23	97.05	
Kedah	Public	157		3.02	72		1.38
Kedah	Private	34		0.12	84		0.29
Kedah	Total	191	98.32		156	80.3	
Kedah & Perlis	Public	187		3.07	86		1.41
Kedah & Perlis	Private	36		0.11	93		0.29
Kedah & Perlis	Total	223	102.31		179	82.13	
Pulau Pinang	Public	67		2.58	51		1.96
Pulau Pinang	Private	53		0.13	117		0.28
Pulau Pinang	Total	120	75.95		168	106.33	
Perak	Public	146		2	115		1.58
Perak	Private	121		0.24	178		0.36
Perak	Total	267	109.99		293	120.7	
Selangor & WP Putrajaya	Public	190		3.39	90		1.61
Selangor & WP Putrajaya	Private	103		0.08	202		0.16
Selangor & WP Putrajaya	Total	293	58.21		292	58.01	
WP Kuala Lumpur	Public	69		4.93	32		2.29
WP Kuala Lumpur	Private	106		0.17	155		0.25
WP Kuala Lumpur	Total	175	102.75		187	109.8	
Selangor & WP Putrajaya & WP Kuala Lumpur	Public	259		3.7	122		1.74
Selangor & WP Putrajaya & WP Kuala Lumpur	Private	209		0.11	357		0.19
Selangor & WP Putrajaya & WP Kuala Lumpur	Total	468	69.47		479	71.1	
Negeri Sembilan	Public	83		2.18	54		1.42
Negeri Sembilan	Private	27		0.12	71		0.31
Negeri Sembilan	Total	110	109.97		125	124.96	
Melaka	Public	72		2.77	38		1.46
Melaka	Private	28		0.16	72		0.42
Melaka	Total	100	131.3		110	144.43	
Johor	Public	182		2.07	121		1.38
Johor	Private	124		0.19	292		0.44
Johor	Total	306	93.6		413	126.33	
Pahang	Public	102		1.62	76		1.21
Pahang	Private	32		0.15	73		0.35
Pahang	Total	134	88.35		149	98.24	
Terengganu	Public	109		2.87	70		1.84
Terengganu	Private	14		0.1	36		0.26
Terengganu	Total	123	118.75		106	102.34	
Kelantan	Public	158		2.98	77		1.45
Kelantan	Private	25		0.15	71		0.42
Kelantan	Total	183	111.65		148	90.3	
Sabah & WP Labuan	Public	65		0.83	62		0.79
Sabah & WP Labuan	Private	51		0.2	81		0.32
Sabah & WP Labuan	Total	116	35.39		143	43.62	
Sarawak	Public	125		0.65	143		0.74
Sarawak	Private	45		0.31	68		0.46
Sarawak	Total	170	68.8		211	85.4	

Table 6.2 Number and Density of Electrocardiogram and Ultrasound Machines in Malaysia by State and Sector, 2009

STATE	SECTOR	ELECTROCARDIOGRAM MACHINE			ULTRASOUND		
		NUMBER	PER MILLION POPULATION	PER CLINIC	NUMBER	PER MILLION POPULATION	PER CLINIC
Malaysia	Public	798		0.99	451		0.56
Malaysia	Private	1571		0.31	884		0.17
Malaysia	Total	2369	84.92		1335	47.86	
Perlis	Public	10		1.11	6		0.67
Perlis	Private	9		0.31	4		0.14
Perlis	Total	19	80.17		10	42.19	
Kedah	Public	56		1.08	26		0.5
Kedah	Private	70		0.24	39		0.13
Kedah	Total	126	64.86		65	33.46	
Kedah & Perlis	Public	66		1.08	32		0.52
Kedah & Perlis	Private	79		0.25	43		0.13
Kedah & Perlis	Total	145	66.53		75	34.41	
Pulau Pinang	Public	31		1.19	17		0.65
Pulau Pinang	Private	104		0.25	39		0.09
Pulau Pinang	Total	135	85.44		56	35.44	
Perak	Public	78		1.07	45		0.62
Perak	Private	162		0.33	102		0.21
Perak	Total	240	98.86		147	60.55	
Selangor & WP Putrajaya	Public	63		1.13	59		1.05
Selangor & WP Putrajaya	Private	157		0.13	91		0.07
Selangor & WP Putrajaya	Total	220	43.71		150	29.8	
WP Kuala Lumpur	Public	21		1.5	3		0.21
WP Kuala Lumpur	Private	135		0.22	46		0.07
WP Kuala Lumpur	Total	156	91.6		49	28.77	
Selangor & WP Putrajaya & WP Kuala Lumpur	Public	84		1.2	62		0.89
Selangor & WP Putrajaya & WP Kuala Lumpur	Private	292		0.16	137		0.07
Selangor & WP Putrajaya & WP Kuala Lumpur	Total	376	55.81		199	29.54	
Negeri Sembilan	Public	41		1.08	25		0.66
Negeri Sembilan	Private	62		0.27	27		0.12
Negeri Sembilan	Total	103	102.97		52	51.98	
Melaka	Public	29		1.12	15		0.58
Melaka	Private	55		0.32	28		0.16
Melaka	Total	84	110.29		43	56.46	
Johor	Public	91		1.03	47		0.53
Johor	Private	205		0.31	131		0.2
Johor	Total	296	90.54		178	54.45	
Pahang	Public	59		0.94	21		0.33
Pahang	Private	52		0.25	32		0.15
Pahang	Total	111	73.19		53	34.94	
Terengganu	Public	48		1.26	32		0.84
Terengganu	Private	29		0.21	24		0.18
Terengganu	Total	77	74.34		56	54.06	
Kelantan	Public	62		1.17	38		0.72
Kelantan	Private	48		0.28	53		0.31
Kelantan	Total	110	67.11		91	55.52	
Sabah & WP Labuan	Public	34		0.44	13		0.17
Sabah & WP Labuan	Private	64		0.25	52		0.2
Sabah & WP Labuan	Total	98	29.9		65	19.83	
Sarawak	Public	25		0.13	10		0.05
Sarawak	Private	48		0.33	36		0.24
Sarawak	Total	73	29.55		46	18.62	

Table 6.3 Number and Density of General Radiography Units in Malaysia by State and Sector, 2009

STATE	SECTOR	GENERAL RADIOGRAPHY UNIT		
		NUMBER	PER MILLION POPULATION	PER CLINIC
Malaysia	Public	113		0.14
Malaysia	Private	252		0.05
Malaysia	Total	365	13.08	
Perlis	Public	1		0.11
Perlis	Private	2		0.07
Perlis	Total	3	12.66	
Kedah	Public	5		0.1
Kedah	Private	16		0.05
Kedah	Total	21	10.81	
Kedah & Perlis	Public	6		0.1
Kedah & Perlis	Private	18		0.06
Kedah & Perlis	Total	24	11.01	
Pulau Pinang	Public	6		0.23
Pulau Pinang	Private	27		0.06
Pulau Pinang	Total	33	20.89	
Perak	Public	13		0.18
Perak	Private	11		0.02
Perak	Total	24	9.89	
Selangor & WP Putrajaya	Public	9		0.16
Selangor & WP Putrajaya	Private	24		0.02
Selangor & WP Putrajaya	Total	33	6.56	
WP Kuala Lumpur	Public	2		0.14
WP Kuala Lumpur	Private	17		0.03
WP Kuala Lumpur	Total	19	11.16	
Selangor & WP Putrajaya & WP Kuala Lumpur	Public	11		0.16
Selangor & WP Putrajaya & WP Kuala Lumpur	Private	41		0.02
Selangor & WP Putrajaya & WP Kuala Lumpur	Total	52	7.72	
Negeri Sembilan	Public	7		0.18
Negeri Sembilan	Private	7		0.03
Negeri Sembilan	Total	14	14	
Melaka	Public	6		0.23
Melaka	Private	8		0.05
Melaka	Total	14	18.38	
Johor	Public	14		0.16
Johor	Private	32		0.05
Johor	Total	46	14.07	
Pahang	Public	6		0.1
Pahang	Private	13		0.06
Pahang	Total	19	12.53	
Terengganu	Public	2		0.05
Terengganu	Private	8		0.06
Terengganu	Total	10	9.65	
Kelantan	Public	9		0.17
Kelantan	Private	7		0.04
Kelantan	Total	16	9.76	
Sabah & WP Labuan	Public	3		0.04
Sabah & WP Labuan	Private	17		0.07
Sabah & WP Labuan	Total	20	6.1	
Sarawak	Public	13		0.07
Sarawak	Private	4		0.03
Sarawak	Total	17	6.88	

Limitations

1. The overall response for the device section was 27% for private general practice clinics and 73% for public clinics. Clinics that did not report any devices were called to verify the devices available at their clinics. For clinics that reported having one or more device, devices that were not ticked in the form were considered absent.
2. As it was a voluntary survey, underreporting of devices is a possibility.

References:

1. Hansen J, Kaplan W, Klint K, et al. A stepwise approach to identify gaps in medical devices (Availability matrix and survey methodology) [Background Paper 1 of the Priority Medical Devices project]. Geneva, World Health Organization (http://whqlibdoc.who.int/hq/2010/WHO_HSS_EHT_DIM_10.1_eng.pdf). [Accessed on 14 January 2011]
2. Teng CL, Syed Aljunid SM, Cheah M, et al. Morbidity and process of care in urban Malaysian general practice: the impact of payment system. *Med J Malaysia*. 2003 Aug;58(3):365-74
3. Clinical practice guidelines for management of adult asthma. Malaysian Thoracic Society, Academy of Medicine of Malaysia, Ministry of Health Malaysia, 2nd ed. 2002. Available at <http://www.asthma-acm.com.my/pdf/boehring.pdf>. [Accessed on 17 January 2011]
4. Guidelines For the Management of Childhood Asthma-A consensus statement of the Malaysian Thoracic Society. Available at http://www.mts.org.my/resources/Guidelines_BronchialAsthma.html. [Accessed on 17 January 2011]
5. Garis panduan dan peraturan bagi perancangan bangunan oleh jawatankuasa standard dan kos. Unit Perancang Ekonomi Jabatan Perdana Menteri. 2008. Available at <http://www.scribd.com/doc/36278975/Garis-Panduan-Standard-and-Cost-2008> . [Accessed on 17 January 2011]
6. Clinical Practice Guidelines on the Management of Chronic Obstructive Pulmonary Disease. Malaysian Thoracic Society, Academy of Medicine of Malaysia, Ministry of Health Malaysia, 2nd ed Nov 2009. Available at <http://www.moh.gov.my/v/rm>. [Accessed on 17 January 2011]
7. Khoo EM, Tan CPL. Profile of general practices in Malaysia. *Asia Pac J Public Health*. 1998; 10(2):88-9

PARTICIPANTS OF THE NATIONAL HEALTHCARE ESTABLISHMENTS SURVEY 2008-2009

Participants comprised of primary care establishments in both the public and private sectors in Malaysia. There were 635 Klinik Kesihatan and 1452 private clinics.

PUBLIC CLINICS THAT PARTICIPATED IN NHEWS 2008/2009

Public Clinics (Perlis)			
1	Klinik Kesihatan Beseri	2	Klinik Kesihatan Kuala Perlis
3	Klinik Kesihatan Kaki Bukit	4	Klinik Kesihatan Kuala Sanglang
5	Klinik Kesihatan Kampung Gial	6	Klinik Kesihatan Padang Besar
7	Klinik Kesihatan Kangar	8	Klinik Kesihatan Simpang Empat

Public Clinics (Kedah)			
1	Klinik Kesihatan Bandar Alor Setar	2	Klinik Kesihatan Serdang
3	Klinik Kesihatan Bandar Baharu	4	Klinik Kesihatan Simpang Kuala
5	Klinik Kesihatan Bandar Sungai Petani	6	Klinik Kesihatan Sungai Lalang
7	Klinik Kesihatan Bedong	8	Klinik Kesihatan Sungai Limau Dalam
9	Klinik Kesihatan Bukit Selambau	10	Klinik Kesihatan Sungai Tiang
11	Klinik Kesihatan Guar Chempedak	12	Klinik Kesihatan Taman Selasih
13	Klinik Kesihatan Karangan	14	Poliklinik Komuniti Ayer Hitam
15	Klinik Kesihatan Kepala Batas	16	Poliklinik Komuniti Banai
17	Klinik Kesihatan Kota Kuala Muda	18	Poliklinik Komuniti Changloon
19	Klinik Kesihatan Kuala Ketil	20	Poliklinik Komuniti Kampung Lalang
21	Klinik Kesihatan Kubur Panjang	22	Poliklinik Komuniti Kodiang
23	Klinik Kesihatan Kulim	24	Poliklinik Komuniti Kota Sarang Semut
25	Klinik Kesihatan Lubuk Buntar	26	Poliklinik Komuniti Kuala Kedah
27	Klinik Kesihatan Lubuk Merbau	28	Poliklinik Komuniti Kupang
29	Klinik Kesihatan Mahang	30	Poliklinik Komuniti Laka Temin
31	Klinik Kesihatan Malau	32	Poliklinik Komuniti Parit Panjang
33	Klinik Kesihatan Merbau Pulas	34	Poliklinik Komuniti Pokok Sena
35	Klinik Kesihatan Merbok	36	Poliklinik Komuniti Simpang Empat
37	Klinik Kesihatan Naka	38	Poliklinik Komuniti Tawar
39	Klinik Kesihatan Padang Serai	40	Poliklinik Komuniti Tunjang
41	Klinik Kesihatan Pandang		

Public Clinics (Penang)			
1	Klinik Kesihatan Air Itam Pulau Pinang	2	Klinik Kesihatan Mak Mandin
3	Klinik Kesihatan Bayan Baru	4	Klinik Kesihatan Muntri Street
5	Klinik Kesihatan Bayan Lepas	6	Klinik Kesihatan Nibong Tebal
7	Klinik Kesihatan Berapit	8	Klinik Kesihatan Perai
9	Klinik Kesihatan Bukit Bendera	10	Klinik Kesihatan Seberang Jaya
11	Klinik Kesihatan Bukit Jambul	12	Klinik Kesihatan Simpang Ampat
13	Klinik Kesihatan Bukit Minyak	14	Klinik Kesihatan Sungai Acheh
15	Klinik Kesihatan Bukit Panchor	16	Klinik Kesihatan Sungai Dua Butterworth
17	Klinik Kesihatan Butterworth	18	Klinik Kesihatan Sungai Dua Pulau Pinang
19	Klinik Kesihatan Jalan Macalister	20	Klinik Kesihatan Tanjung Bungah
21	Klinik Kesihatan Jalan Perak Pulau Pinang	22	Klinik Kesihatan Tasek Gelugor
23	Klinik Kesihatan Kepala Batas	24	Klinik Kesihatan Teluk Bahang
25	Klinik Kesihatan Kubang Semang		

Public Clinics (Perak)			
1	Klinik Kesihatan Air Tawar	2	Klinik Kesihatan Langkap
3	Klinik Kesihatan Alor Pongsu	4	Klinik Kesihatan Lawin
5	Klinik Kesihatan Bagan Datoh	6	Klinik Kesihatan Lekir
7	Klinik Kesihatan Bagan Serai	8	Klinik Kesihatan Lintang
9	Klinik Kesihatan Batu Kurau	10	Klinik Kesihatan Malim Nawar
11	Klinik Kesihatan Bidor	12	Klinik Kesihatan Manjoi
13	Klinik Kesihatan Bijih Timah	14	Klinik Kesihatan Manong
15	Klinik Kesihatan Bota Kiri	16	Klinik Kesihatan Menglembu
17	Klinik Kesihatan Bruas	18	Klinik Kesihatan Padang Rengas
19	Klinik Kesihatan Buntong	20	Klinik Kesihatan Pantai Remis
21	Klinik Kesihatan Changkat Jering	22	Klinik Kesihatan Parit
23	Klinik Kesihatan Changkat Keruing	24	Klinik Kesihatan Pasir Pinji
25	Klinik Kesihatan Changkat Lada	26	Klinik Kesihatan Pengkalan Hulu
27	Klinik Kesihatan Chemor	28	Klinik Kesihatan Pokok Assam
29	Klinik Kesihatan Chenderong Balai	30	Klinik Kesihatan Pulau Pangkor
31	Klinik Kesihatan Gopeng	32	Klinik Kesihatan Redang Panjang
33	Klinik Kesihatan Greentown	34	Klinik Kesihatan Sauk
35	Klinik Kesihatan Gunung Rapat	36	Klinik Kesihatan Selekoh, Bagan Datoh
37	Klinik Kesihatan Gunung Semanggol	38	Klinik Kesihatan Sitiawan
39	Klinik Kesihatan Hutan Melintang	40	Klinik Kesihatan Slim River
41	Klinik Kesihatan Jalan Baru	42	Klinik Kesihatan Sungai Bayor
43	Klinik Kesihatan Jelapang	44	Klinik Kesihatan Sungai Kerang
45	Klinik Kesihatan Kampar	46	Klinik Kesihatan Sungai Sumun
47	Klinik Kesihatan Kampung Gajah	48	Klinik Kesihatan Tanjung Malim
49	Klinik Kesihatan Kampung Simee	50	Klinik Kesihatan Tanjung Piandang
51	Klinik Kesihatan Kamunting	52	Klinik Kesihatan Tanjung Rambutan
53	Klinik Kesihatan Karai	54	Klinik Kesihatan Tanjung Tualang
55	Klinik Kesihatan Kedai Empat	56	Klinik Kesihatan Tapah
57	Klinik Kesihatan Kota Baru	58	Klinik Kesihatan Teluk Medan
59	Klinik Kesihatan Kuala Gula	60	Klinik Kesihatan Trolak Selatan
61	Klinik Kesihatan Kuala Kurau	62	Klinik Kesihatan Trong
63	Klinik Kesihatan Kuala Sepetang	64	Klinik Kesihatan Tronoh
65	Klinik Kesihatan Lambor Kiri	66	Klinik Kesihatan Ulu Dedap

Public Clinics (Selangor)			
1	Klinik Kesihatan Bestari Jaya	2	Poliklinik Komuniti Kelana Jaya
3	Klinik Kesihatan Medan Maju Jaya	4	Poliklinik Komuniti Kg. Bandar
5	Poliklinik Komuniti Ampang	6	Poliklinik Komuniti Klang
7	Poliklinik Komuniti Bagan Terap	8	Poliklinik Komuniti Kuala Selangor
9	Poliklinik Komuniti Bandar Baru Bangi	10	Poliklinik Komuniti Meru
11	Poliklinik Komuniti Batu 9	12	Poliklinik Komuniti Parit Baru
13	Poliklinik Komuniti Beranang	14	Poliklinik Komuniti Pelabuhan Klang
15	Poliklinik Komuniti Bukit Changgang	16	Poliklinik Komuniti Pulau Indah
17	Poliklinik Komuniti Bukit Kuda	18	Poliklinik Komuniti Pulau Ketam
19	Poliklinik Komuniti Dengkil	20	Poliklinik Komuniti Rasa
21	Poliklinik Komuniti Hulu Langat (Batu 13 1/4)	22	Poliklinik Komuniti Rawang
23	Poliklinik Komuniti Ijok	24	Poliklinik Komuniti Salak
25	Poliklinik Komuniti Jenjarom	26	Poliklinik Komuniti Sekinchan
27	Poliklinik Komuniti Jeram	28	Poliklinik Komuniti Selayang Baru
29	Poliklinik Komuniti Kajang	30	Poliklinik Komuniti Semenyih
31	Poliklinik Komuniti Kalumpang	32	Poliklinik Komuniti Serendah

Public Clinics (Selangor)

33	Poliklinik Komuniti Kampung Soeharto	34	Poliklinik Komuniti Seri Kembangan
35	Poliklinik Komuniti Kanchong Darat	36	Poliklinik Komuniti Shah Alam
37	Poliklinik Komuniti Kapar	38	Poliklinik Komuniti Sijangkang
39	Poliklinik Komuniti Sungai Air Tawar	40	Poliklinik Komuniti Tanjung Karang
41	Poliklinik Komuniti Sungai Besar	42	Poliklinik Komuniti Tanjung Sepat
43	Poliklinik Komuniti Sungai Buloh	44	Poliklinik Komuniti Telok Datok
45	Poliklinik Komuniti Sungai Pelek	46	Poliklinik Komuniti Telok Panglima Garang
47	Poliklinik Komuniti Sungai Selisek	48	Poliklinik Komuniti Ulu Yam Bharu
49	Poliklinik Komuniti Taman Kenangan		

Public Clinics (WP Putrajaya)

1	Klinik Kesihatan Putrajaya		
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Public Clinics (WP Kuala Lumpur)

1	Klinik Kesihatan AU2	2	Klinik Kesihatan Kampung Pandan
3	Klinik Kesihatan Bandar Tun Razak	4	Klinik Kesihatan Pantai
5	Klinik Kesihatan Batu	6	Klinik Kesihatan Petaling Bahagia
7	Klinik Kesihatan Cheras	8	Klinik Kesihatan Sentul
9	Klinik Kesihatan Cheras Baru	10	Klinik Kesihatan Setapak
11	Klinik Kesihatan Dato Keramat	12	Klinik Kesihatan Sungai Besi
13	Klinik Kesihatan Jinjang	14	Poliklinik Komuniti Tanglin

Public Clinics (Negeri Sembilan)

1	Klinik Kesihatan Air Kuning	2	Klinik Kesihatan Gemas
3	Klinik Kesihatan Ampangan	4	Klinik Kesihatan Gemencheh
5	Klinik Kesihatan Bahau	6	Klinik Kesihatan Gunung Pasir
7	Klinik Kesihatan Bandar Seri Jempol	8	Klinik Kesihatan Jelai
9	Klinik Kesihatan Jelebu	10	Klinik Kesihatan Palong 9,10,11
11	Klinik Kesihatan Johol	12	Klinik Kesihatan Pedas
13	Klinik Kesihatan Juasseh	14	Klinik Kesihatan Pertang
15	Klinik Kesihatan Kuala Pilah	16	Klinik Kesihatan Rembau
17	Klinik Kesihatan Kuarters KLIA	18	Klinik Kesihatan Sendayan (Felda)
19	Klinik Kesihatan Lenggeng	20	Klinik Kesihatan Seremban
21	Klinik Kesihatan Lui Muda	22	Klinik Kesihatan Serting Hilir
23	Klinik Kesihatan Mantin	24	Klinik Kesihatan Sri Menanti
25	Klinik Kesihatan Nilai	26	Klinik Kesihatan Tampin (JPL)
27	Klinik Kesihatan Padang Lebar	28	Klinik Kesihatan Terachi
29	Klinik Kesihatan Palong 4,5,6	30	Klinik Kesihatan Titi
31	Klinik Kesihatan Palong 7&8 (Felda)		

Public Clinics (Melaka)

1	Klinik Kesihatan Ayer Keroh	2	Klinik Kesihatan Merlimau
3	Klinik Kesihatan Ayer Molek	4	Klinik Kesihatan Padang Sebang
5	Klinik Kesihatan Bukit Rambai	6	Klinik Kesihatan Peringgiti
7	Klinik Kesihatan Cheng	8	Klinik Kesihatan Selandar
9	Klinik Kesihatan Durian Tunggal	10	Klinik Kesihatan Simpang Ampat
11	Klinik Kesihatan Hutan Percha	12	Klinik Kesihatan Simpang Bekoh
13	Klinik Kesihatan Jasin	14	Klinik Kesihatan Sungai Rambai
15	Klinik Kesihatan Kemendor	16	Klinik Kesihatan Sungai Udang
17	Klinik Kesihatan Klebang Besar	18	Klinik Kesihatan Tanjung Kling

Public Clinics (Melaka)			
19	Klinik Kesihatan Kuala Sungai Baru	20	Klinik Kesihatan Tengker
21	Klinik Kesihatan Lubok China	22	Klinik Kesihatan Ujong Pasir
23	Klinik Kesihatan Macap Baru	24	Klinik Kesihatan Umbai
25	Klinik Kesihatan Masjid Tanah		

Public Clinics (Johor)			
1	Klinik Kesihatan Bandar Tenggara	2	Poliklinik Komuniti Batu Anam
3	Klinik Kesihatan Kg. Kenangan Dato Onn	4	Poliklinik Komuniti Bekok
5	Klinik Kesihatan Ayer Hitam	6	Poliklinik Komuniti Benut
7	Klinik Kesihatan Bagan	8	Poliklinik Komuniti Bukit Besar
9	Klinik Kesihatan Bakri	10	Poliklinik Komuniti Bukit Waha
11	Klinik Kesihatan Batu 15 Ayer Hitam	12	Poliklinik Komuniti Buloh Kasap
13	Klinik Kesihatan Batu Pahat	14	Poliklinik Komuniti Chaah
15	Klinik Kesihatan Bukit Gambir, Muar	16	Poliklinik Komuniti Endau
17	Klinik Kesihatan Bukit Pasir, Muar	18	Poliklinik Komuniti Gelang Patah
19	Klinik Kesihatan Bukit Serampang	20	Poliklinik Komuniti Gersik
21	Klinik Kesihatan Kempas	22	Poliklinik Komuniti Jalan Mengkibol
23	Klinik Kesihatan Kulai Besar	24	Poliklinik Komuniti Jemaluang
25	Klinik Kesihatan Lenga, Muar	26	Poliklinik Komuniti Jementah
27	Klinik Kesihatan Mahmoodiah	28	Poliklinik Komuniti Kahang Batu 22
29	Klinik Kesihatan Parit Raja	30	Poliklinik Komuniti Kahang Timur
31	Klinik Kesihatan Parit Sulong	32	Poliklinik Komuniti Kg Kenangan Tun Dr Ismail
33	Klinik Kesihatan Parit Yaani	34	Poliklinik Komuniti Kampung Majidee
35	Klinik Kesihatan Parit Yusof, Muar	36	Poliklinik Komuniti Kayu Ara Pasong
37	Klinik Kesihatan Payamas, Tangkak	38	Poliklinik Komuniti Kuala Sedili Besar
39	Klinik Kesihatan Penerok	40	Poliklinik Komuniti Labis
41	Klinik Kesihatan Semerah	42	Poliklinik Komuniti Larkin
43	Klinik Kesihatan Sri Gading	44	Poliklinik Komuniti Layang-Layang
45	Klinik Kesihatan Sri Medan	46	Poliklinik Komuniti Lok Heng
47	Klinik Kesihatan Sungai Mati	48	Poliklinik Komuniti Masai
49	Klinik Kesihatan Tebrau	50	Poliklinik Komuniti Pagoh
51	Klinik Kesihatan Tongkang Pecah	52	Poliklinik Komuniti Paloh, Kluang
53	Klinik Kesihatan Yong Peng	54	Poliklinik Komuniti Parit Bakar
55	Poliklinik Komuniti Air Tawar 2	56	Poliklinik Komuniti Parit Ismail
57	Poliklinik Komuniti Ayer Baloi	58	Poliklinik Komuniti Parit Jawa
59	Poliklinik Komuniti Bandar Mas	60	Poliklinik Komuniti Parit Sri Merlong
61	Poliklinik Komuniti Bandar Penawar	62	Poliklinik Komuniti Pasir Gudang
63	Poliklinik Komuniti Bandar Putra	64	Poliklinik Komuniti Pekan Air Panas
65	Poliklinik Komuniti Pekan Nanas	66	Poliklinik Komuniti Serkat
67	Poliklinik Komuniti Pemanis (Felda)	68	Poliklinik Komuniti Simpang Renggam
69	Poliklinik Komuniti Pengerang	70	Poliklinik Komuniti Sungai Rengit
71	Poliklinik Komuniti Pontian	72	Poliklinik Komuniti Taman Tun Aminah
73	Poliklinik Komuniti Renggam	74	Poliklinik Komuniti Tampoi
75	Poliklinik Komuniti Rengit	76	Poliklinik Komuniti Tanjong Sedili
77	Poliklinik Komuniti Sagil	78	Poliklinik Komuniti Tenggara II (Felda)
79	Poliklinik Komuniti Segamat	80	Poliklinik Komuniti Tenglu
81	Poliklinik Komuniti Senggarang	82	Poliklinik Komuniti Ulu Belitong
83	Poliklinik Komuniti Sening	84	Poliklinik Komuniti Ulu Tiram

Public Clinics (Pahang)			
1	Klinik Kesihatan Balok	2	Klinik Kesihatan Kuala Tahan
3	Klinik Kesihatan Bandar 32 Bera	4	Klinik Kesihatan Kuala Tembeling
5	Klinik Kesihatan Bandar Jengka	6	Klinik Kesihatan Lanchang
7	Klinik Kesihatan Bandar Kuantan	8	Klinik Kesihatan Lembah Klau
9	Klinik Kesihatan Bandar Mentakab	10	Klinik Kesihatan Lepar Utara 4
11	Klinik Kesihatan Bandar Tun Razak	12	Klinik Kesihatan Lurah Bilut (Felda)
13	Klinik Kesihatan Benta	14	Klinik Kesihatan Maran
15	Klinik Kesihatan Beserah	16	Klinik Kesihatan Mela Lipis
17	Klinik Kesihatan Bukit Betong	18	Klinik Kesihatan Mempaga
19	Klinik Kesihatan Bukit Goh (Felda)	20	Klinik Kesihatan Merapoh (Fasa 1)
21	Klinik Kesihatan Bukit Ibam	22	Klinik Kesihatan Nenasi
23	Klinik Kesihatan Bukit Mendi	24	Klinik Kesihatan Padang Luas
25	Klinik Kesihatan Chanis	26	Klinik Kesihatan Padang Rumbia
27	Klinik Kesihatan Chenor	28	Klinik Kesihatan Padang Tengku
29	Klinik Kesihatan Cheroh	30	Klinik Kesihatan Pekan Tajau
31	Klinik Kesihatan Chini	32	Klinik Kesihatan Peramu Jaya
33	Klinik Kesihatan Damak	34	Klinik Kesihatan Perantau Damai
35	Klinik Kesihatan Dong	36	Klinik Kesihatan Perwira Jaya
37	Klinik Kesihatan Gambang	38	Klinik Kesihatan Purun
39	Klinik Kesihatan Jaya Gading	40	Klinik Kesihatan Sanggang
41	Klinik Kesihatan Jengka 2	42	Klinik Kesihatan Simpang Pelangai
43	Klinik Kesihatan Jengka 22	44	Klinik Kesihatan Sungai Koyan
45	Klinik Kesihatan Jengka 8	46	Klinik Kesihatan Sungai Lembing
47	Klinik Kesihatan Jeruas	48	Klinik Kesihatan Sungai Tekam Utara
49	Klinik Kesihatan Kampung Awah	50	Klinik Kesihatan Tanjung Gemok
51	Klinik Kesihatan Kampung Bantal	52	Klinik Kesihatan Tekek, Pulau Tioman
53	Klinik Kesihatan Karak	54	Klinik Kesihatan Temerloh
55	Klinik Kesihatan Kemayan	56	Klinik Kesihatan Tersang
57	Klinik Kesihatan Kuala Krau	58	Klinik Kesihatan Triang
59	Klinik Kesihatan Kuala Rompin	60	Klinik Kesihatan Ulu Gali

Public Clinics (Terengganu)			
1	Klinik Kesihatan Bukit Tunggai	2	Poliklinik Komuniti Jerangau
3	Klinik Kesihatan Cheneh	4	Poliklinik Komuniti Kampong Raja
5	Klinik Kesihatan Chukai	6	Poliklinik Komuniti Kerteh
7	Klinik Kesihatan Hiliran	8	Poliklinik Komuniti Ketengah Jaya
9	Klinik Kesihatan Kemasik	10	Poliklinik Komuniti Kijal
11	Klinik Kesihatan Kuala Kemaman	12	Poliklinik Komuniti Kuala Abang
13	Klinik Kesihatan Marang	14	Poliklinik Komuniti Kuala Berang
15	Klinik Kesihatan Paka	16	Poliklinik Komuniti Kuala Besut
17	Klinik Kesihatan Pasir Akar	18	Poliklinik Komuniti Kuala Telemondong
19	Klinik Kesihatan Rahmat	20	Poliklinik Komuniti Manir
21	Klinik Kesihatan Sungai Tong	22	Poliklinik Komuniti Merchang
23	Poliklinik Komuniti Air Puteh	24	Poliklinik Komuniti Pengkalan Berangan
25	Poliklinik Komuniti Ajil	26	Poliklinik Komuniti Seberang Takir
27	Poliklinik Komuniti Al-Muktafi Billah Shah	28	Poliklinik Komuniti Seri Bandi
29	Poliklinik Komuniti Bandar Permaisuri	30	Poliklinik Komuniti Seri Langkap
31	Poliklinik Komuniti Batu Rakit	32	Poliklinik Komuniti Sri Medang
33	Poliklinik Komuniti Bukit Besi	34	Poliklinik Komuniti Tengawang
35	Poliklinik Komuniti Bukit Payong	36	Poliklinik Komuniti Wakaf Tapai
37	Poliklinik Komuniti Jabu		

Public Clinics (Kelantan)			
1	Klinik Kesihatan Cabang 3 Perol	2	Klinik Kesihatan Bandar Bachok
3	Klinik Kesihatan Aring	4	Klinik Kesihatan Bandar Gua Musang
5	Klinik Kesihatan Ayer Lanas	6	Klinik Kesihatan Bandar Kota Bharu
7	Klinik Kesihatan Badang	8	Klinik Kesihatan Bandar Kuala Krai
9	Klinik Kesihatan Balai	10	Klinik Kesihatan Bandar Pasir Mas
11	Klinik Kesihatan Batu 30	12	Klinik Kesihatan Kubang Kerian
13	Klinik Kesihatan Batu Gajah	14	Klinik Kesihatan Labok
15	Klinik Kesihatan Beris Kubor Besar	16	Klinik Kesihatan Lundang Paku
17	Klinik Kesihatan Beris Panchor	18	Klinik Kesihatan Mahligai
19	Klinik Kesihatan Bertam Baru	20	Klinik Kesihatan Manik Urai
21	Klinik Kesihatan Bunohan	22	Klinik Kesihatan Meranti
23	Klinik Kesihatan Chekok	24	Klinik Kesihatan Pahi
25	Klinik Kesihatan Cherang Ruku	26	Klinik Kesihatan Penambang
27	Klinik Kesihatan Chiku 3	28	Klinik Kesihatan Pengkalan Chepa
29	Klinik Kesihatan Dabong	30	Klinik Kesihatan Pengkalan Kubor
31	Klinik Kesihatan Gaal	32	Klinik Kesihatan Peringat
33	Klinik Kesihatan Gual Ipoh	34	Klinik Kesihatan Pulau Chondong
35	Klinik Kesihatan Gunong	36	Klinik Kesihatan Rantau Panjang
37	Klinik Kesihatan Jeli	38	Klinik Kesihatan Selising
39	Klinik Kesihatan Jeram	40	Klinik Kesihatan Sungai Pinang
41	Klinik Kesihatan Jeram Tekoh	42	Klinik Kesihatan Temangan
43	Klinik Kesihatan Kangkong	44	Klinik Kesihatan Tendong
45	Klinik Kesihatan Kedai Lalat	46	Klinik Kesihatan Tok Uban
47	Klinik Kesihatan Kemahang	48	Klinik Kesihatan Tumpat
49	Klinik Kesihatan Ketereh	50	Klinik Kesihatan Wakaf Bharu
51	Klinik Kesihatan Kuala Balah	52	Klinik Kesihatan Wakaf Che Yeh

Public Clinics (Sabah)			
1	Klinik Kesihatan Apin-Apin	2	Poliklinik Komuniti Inanam
3	Klinik Kesihatan Bingkor	4	Poliklinik Komuniti Kaingaran
5	Klinik Kesihatan Bongawan	6	Poliklinik Komuniti Karakit
7	Klinik Kesihatan Jawi-Jawi	8	Poliklinik Komuniti Kiulu
9	Klinik Kesihatan Kemabong	10	Poliklinik Komuniti Kuamut
11	Klinik Kesihatan Kinarut	12	Poliklinik Komuniti Kundasang
13	Klinik Kesihatan Kuala Tomani	14	Poliklinik Komuniti Menggatal
15	Klinik Kesihatan Lotong	16	Poliklinik Komuniti Nangoh / Rumidi
17	Klinik Kesihatan Mansiat	18	Poliklinik Komuniti Paginatan
19	Klinik Kesihatan Melalap	20	Poliklinik Komuniti Penampang
21	Klinik Kesihatan Nabawan	22	Poliklinik Komuniti Penangah
23	Klinik Kesihatan Pagalungan	24	Poliklinik Komuniti Sikuati
25	Klinik Kesihatan Putatan	26	Poliklinik Komuniti Suan Lamba
27	Klinik Kesihatan Sandakan	28	Poliklinik Komuniti Sungai Manila
29	Klinik Kesihatan Sepulut	30	Poliklinik Komuniti Tamparuli
31	Klinik Kesihatan Sook	32	Poliklinik Komuniti Tandek
33	Klinik Kesihatan Sukau	34	Poliklinik Komuniti Telaga
35	Klinik Kesihatan Sunsuron	36	Poliklinik Komuniti Telipok
37	Klinik Kesihatan Taginambur	38	Poliklinik Komuniti Tenghilan
39	Klinik Kesihatan Tulid	40	Poliklinik Komuniti Timbua
41	Poliklinik Komuniti Bongkol	42	Poliklinik Komuniti Tinangol
43	Poliklinik Komuniti Bukit Garam	44	Poliklinik Komuniti Tongod
45	Poliklinik Komuniti Bundu Tuhan	46	Poliklinik Komuniti Ulu Dusun
47	Poliklinik Komuniti Dandun		

Public Clinics (Sarawak)			
1	Klinik Kesihatan Asajaya	2	Klinik Kesihatan Kota Sentosa
3	Klinik Kesihatan Bako	4	Klinik Kesihatan Kuala Balingian
5	Klinik Kesihatan Balai	6	Klinik Kesihatan Kuala Igan
7	Klinik Kesihatan Balingian	8	Klinik Kesihatan Kuala Lawas
9	Klinik Kesihatan Batang Ai	10	Klinik Kesihatan Kuala Matu
11	Klinik Kesihatan Batu Danau	12	Klinik Kesihatan Kuala Medalam
13	Klinik Kesihatan Batu Lintang	14	Klinik Kesihatan Kuala Oya
15	Klinik Kesihatan Beladin	16	Klinik Kesihatan Kuala Tatau
17	Klinik Kesihatan Belawai	18	Klinik Kesihatan Ladang Sawit
19	Klinik Kesihatan Betanak	20	Klinik Kesihatan Lanang
21	Klinik Kesihatan Biawak	22	Klinik Kesihatan Lassi
23	Klinik Kesihatan Bintangor	24	Klinik Kesihatan Lawas
25	Klinik Kesihatan Bintulu	26	Klinik Kesihatan Lingga
27	Klinik Kesihatan Buit	28	Klinik Kesihatan Long Bemang
29	Klinik Kesihatan Buntal	30	Klinik Kesihatan Long Semadoh
31	Klinik Kesihatan Bunuk	32	Klinik Kesihatan Long Sukang
33	Klinik Kesihatan Daro	34	Klinik Kesihatan Long Teru
35	Klinik Kesihatan Engkilili	36	Klinik Kesihatan Lubok Antu
37	Klinik Kesihatan Jalan Masjid Kuching	38	Klinik Kesihatan Lubok Tapang
39	Klinik Kesihatan Julau	40	Klinik Kesihatan Machan
41	Klinik Kesihatan Kakus	42	Klinik Kesihatan Matu
43	Klinik Kesihatan Kota Samarahan	44	Klinik Kesihatan Merapok
45	Klinik Kesihatan Merindun	46	Klinik Kesihatan Sangan
47	Klinik Kesihatan Nanga Baoh	48	Klinik Kesihatan Sarikei
49	Klinik Kesihatan Nanga Ensiring	50	Klinik Kesihatan Sebauh
51	Klinik Kesihatan Nanga Entaih	52	Klinik Kesihatan Sekalong
53	Klinik Kesihatan Nanga Entalau	54	Klinik Kesihatan Sematan
55	Klinik Kesihatan Nanga Entawau	56	Klinik Kesihatan Serasot
57	Klinik Kesihatan Nanga Jagau	58	Klinik Kesihatan Siburan
59	Klinik Kesihatan Nanga Kesit	60	Klinik Kesihatan Singai
61	Klinik Kesihatan Nanga Maong, Julau	62	Klinik Kesihatan Skrang
63	Klinik Kesihatan Nanga Medamit	64	Klinik Kesihatan Sri Aman
65	Klinik Kesihatan Nanga Merit	66	Klinik Kesihatan Stoh Rambungan
67	Klinik Kesihatan Nanga Passin	68	Klinik Kesihatan Sundar
69	Klinik Kesihatan Nanga Patoh	70	Klinik Kesihatan Tanah Puteh
71	Klinik Kesihatan Nanga Semah	72	Klinik Kesihatan Tang Lapadan
73	Klinik Kesihatan Nanga Taroh	74	Klinik Kesihatan Tanjung Bijat
75	Klinik Kesihatan Nanga Tau	76	Klinik Kesihatan Tanjung Embang
77	Klinik Kesihatan Nanga Tiga	78	Klinik Kesihatan Tanjung Manis
79	Klinik Kesihatan Ngungan	80	Klinik Kesihatan Tatau
81	Klinik Kesihatan Nyalau	82	Klinik Kesihatan Tekajong
83	Klinik Kesihatan Pakan	84	Klinik Kesihatan Telaga Air
85	Klinik Kesihatan Paloh	86	Klinik Kesihatan Teng Bukap
87	Klinik Kesihatan Pantu	88	Klinik Kesihatan Tepus
89	Klinik Kesihatan Penganan	90	Klinik Kesihatan Tian
91	Klinik Kesihatan Poi/Menalun	92	Klinik Kesihatan Trusan
93	Klinik Kesihatan Rejang	94	Klinik Kesihatan Tubau
95	Klinik Kesihatan Sampadi		

PRIVATE CLINICS PARTICIPATING IN NHEWS 2008/2009**Private Medical Clinics (Perlis)**

1	Klinik Amer	2	Klinik KS Tan & PE Lee Sdn Bhd
3	Klinik Chiang Sdn Bhd	4	Klinik Menon Sdn Bhd
5	Klinik Dr. Hj. Othman	6	Klinik Tan & Lee (Kuala Perlis)
7	Klinik Hj. Adnan	8	Poliklinik Penawar

Private Medical Clinic (Kedah)

1	Ho Klinik	2	Klinik Dr Rosly
3	Klinik Berjaya	4	Klinik Dr Akbar
5	Klinik Dr. Ismail	6	Klinik Dr Hj. Othman
7	Klinik Gopi, Jln Market	8	Klinik Dr Rosly
9	Klinik Gopi, Tmn Desa Permai	10	Klinik Faisal Hamdi
11	Klinik Muhibbah Jitra	12	Klinik Fatimah
13	Klinik Setia	14	Klinik Fernandez Lunas
15	Klinik & Surgeri Delima	16	Klinik Foong
17	Klinik Alor Star	18	Klinik Geetha
19	Klinik Aman	20	Klinik Govin
21	Klinik Arun	22	Klinik Gurun
23	Klinik Astana	24	Klinik Lathika
25	Klinik Baling	26	Klinik Lim Chin Chong Sdn Bhd
27	Klinik Bersatu	28	Klinik Low
29	Klinik Bersatu (Tikam Batu)	30	Klinik Mathen
31	Klinik Bersatu Kulim	32	Klinik Ng
33	Klinik Budi	34	Klinik Ong
35	Klinik C. L. Quah	36	Klinik Ong Beng Liang
37	Klinik Ceria	38	Klinik Pillay
39	Klinik Cham	40	Klinik Rahmat
41	Klinik Cheng & Su, Tmn Sejati Indah	42	Klinik Rakyat Kulim
43	Klinik Cheng & Su, Wisma Bandaran	44	Klinik Ria
45	Klinik Cinta Sayang, Jln Ibrahim	46	Klinik Soma
47	Klinik Cinta Sayang, Tmn Ria jaya	48	Klinik Subramaniam
49	Klinik Darulaman	50	Klinik Tan, Sg Petani
51	Klinik Doreen Khoo	52	Klinik Tee Dan Ho
53	Klinik Dr Husna, Jln Ibrahim	54	Klinik Teoh Kim Yong
55	Klinik Dr Husna, Tmn Ria	56	Klinik Wan Zohdi Sdn Bhd
57	Klinik Dr Othman (Pendang)	58	Klinik Wawasan
59	Klinik Dr Robetah	60	Klinik Wira
61	Klinik Yahya	62	Poliklinik Dr Azhar & Rakan-rakan, Plaza Kuala Kedah
63	Klinik Yeoh & Ong	64	Poliklinik Dr Jalaludin
65	Mediklinik Ehsan Alor Setar	66	Poliklinik Famili
67	Petronas Fertilizer (Kedah) Sdn. Bhd. Industrial Clinic	68	Poliklinik Kenanga
69	Poliklinik Afiat	70	Poliklinik Koh
71	Poliklinik Berkat	72	Poliklinik Lim & Pusat Rawatan Intan
73	Poliklinik Dr Ng	74	Poliklinik Mutiara Cawangan Jitra
75	Poliklinik Dr Azhar & Rakan-rakan (Pekan Baru)	76	Poliklinik Mutiara Cawangan Simpang Kuala
77	Poliklinik Dr Azhar & Rakan-rakan (Sungai Emas)	78	Poliklinik Mutiara, Tmn Desa Aman
79	Poliklinik Dr Azhar & Rakan-rakan (Dataran UMNO)	80	Poliklinik Sandhu
81	Poliklinik Dr Azhar & Rakan-rakan (Taman Sri Tanjung)	82	Poliklinik Shuib
83	Poliklinik Dr Azhar & Rakan-rakan (Sik)	84	Poliklinik Syakirin
85	Poliklinik Dr Azhar & Rakan-rakan (Pokok Sena)	86	Poliklinik Tan
87	Poliklinik Dr Azhar & Rakan-rakan (Kulim)	88	Poliklinik Tanjung

Private Medical Clinics (Pulau Pinang)			
1	Burma Klinik	2	Klinik Inthira / Joe Fernandez
3	City Poliklinik	4	Klinik Jaya (Hala Kalui)
5	England Clinic	6	Klinik Jaya (Penaga)
7	Hiu dan Suan Klinik	8	Klinik Jaya (Jalan Besar)
9	Hyperbaric Oxygen Therapy Centre Sdn. Bhd.	10	Klinik Jen Jen
11	Island Medical Associates Sdn Bhd (Jalan Bagan Luar)	12	Klinik Joe Fernandez (Jalan Bagan Ajam)
13	Island Medical Associates Sdn Bhd (Beach Street)	14	Klinik Joe Fernandez (Jalan Sultan Azlan Shah)
15	Island Medical Associates Sdn Bhd (Dickens Street)	16	Klinik Joe Fernandez (Jalan Duku)
17	Island Medical Associates Sdn Bhd (Bayan Baru)	18	Klinik Joe Fernandez - Tmn Nagasari
19	Jelutong Poliklinik Khoo	20	Klinik K. H. Ong
21	Klinik Khoo	22	Klinik Kenari
23	Klinik Ratna	24	Klinik Koeh
25	Klinik Aman	26	Klinik Kok
27	Klinik Aman (Dr. Khalid)	28	Klinik Krystal
29	Klinik Aman, Georgetown	30	Klinik Lee
31	Klinik Amar	32	Klinik Lim Siew Kim
33	Klinik B S Tan	34	Klinik Malaysia
35	Klinik Bagan Ajam	36	Klinik Marik
37	Klinik Bala	38	Klinik Munnir
39	Klinik Balik Pulau 16 Jam	40	Klinik P.H Yew
41	Klinik Bersatu	42	Klinik Pertama (Bayan Lepas)
43	Klinik Bersatu 16	44	Klinik Pertama (Georgetown)
45	Klinik Bersatu 16 Jam	46	Klinik Pertama (Gelugor)
47	Klinik Bersatu 24 Jam Air Hitam	48	Klinik Pillai
49	Klinik Bersatu, Tmn Ratna	50	Klinik Public
51	Klinik Bertam	52	Klinik Putra
53	Klinik Brunei	54	Klinik Rakyat
55	Klinik Budi Sungai Ara	56	Klinik Sada
57	Klinik Bukit Jambul	58	Klinik Sein
59	Klinik Dr Rashidah	60	Klinik Seri Pulau (Georgetown)
61	Klinik Dr. Jammy Suzana	62	Klinik Seri Pulau (Taman Emas)
63	Klinik Dr. Ng S.G.	64	Klinik Seri Pulau (Balik Pulau)
65	Klinik Dr. Shobri	66	Klinik Shaik M. R.
67	Klinik Fettes Park	68	Klinik Shanthi
69	Klinik Glugor	70	Klinik Sidhu
71	Klinik Goh (Jalan Dato' Kramat)	72	Klinik Singapore (Georgetown)
73	Klinik Goh	74	Klinik Singapore (Ayer Itam)
75	Klinik Halbans	76	Klinik Singapore (Jalan Trengganu)
77	Klinik Hari	78	Klinik Singapore (Bayan Lepas)
79	Klinik Health Plus	80	Klinik Special
81	Klinik Impiana	82	Klinik Sri Pinang
83	Klinik Inn	84	Klinik Suan
85	Klinik Swaran	86	Poliklinik Dr Chan
87	Klinik Syed Alwi dan Chandran (Butterworth)	88	Poliklinik Dr Azhar & Rakan-Rakan (Balik Pulau)
89	Klinik Syed Alwi dan Chandran	90	Poliklinik Dr Azhar & Rakan-Rakan (Permatang Pauh)
91	Klinik Tan Dan Rakan-Rakan	92	Poliklinik Dr Azhar & Rakan-Rakan (Tasek Gelugor)
93	Klinik Team Medic (Pera)	94	Poliklinik Dr Azhar & Rakan-Rakan (Butterworth)
95	Klinik Team Medic	96	Poliklinik Dr Velu
97	Klinik Teong	98	Poliklinik I-Care
99	Klinik Topcare (ALMA) Sdn Bhd	100	Poliklinik Kuan
101	Klinik United	102	Poliklinik Mah
103	Klinik Utama	104	Poliklinik Mega

Private Medical Clinics (Pulau Pinang)			
105	Klinik Wawasan (Jalan Sungai Bakap)	106	Poliklinik Ng
107	Klinik Wawasan (Jalan Tasek SS1)	108	Poliklinik Ooi
109	Klinik Wawasan (Jalan Sutera 3)	110	Poliklinik Pan-Medic (Farlim)
111	Klinik Yeoh Oon Theam Sdn. Bhd	112	Poliklinik Reservoir Garden
113	Klinik Yong & Ng	114	Poliklinik See
115	Lim Dispensary	116	Poliklinik Sunway
117	Luke Klinik	118	Poliklinik Suri
119	Poliklinik Alex	120	Reddy Klinik Butterworth
121	Poliklinik Anda	122	Selva Klinik
123	Poliklinik Chiah	124	Sri Pelangi Medical Clinic
125	Poliklinik Chik	126	Union Clinic (S.A)
127	Poliklinik Desa Permai		

Private Medical Clinics (Perak)			
1	Anson Klinik	2	Klinik K L Tan
3	B. P. Diagnostic Centre	4	Klinik K. L. Lau
5	Berchaam Medical Centre	6	Klinik Khaw
7	BP Diagnostic Centre Sdn Bhd (Taiping)	8	Klinik Khong
9	Cheah & Lim Medical Associates	10	Klinik Kok
11	Cheng Health Consultancy	12	Klinik Kong
13	Clinik Kota Jaya	14	Klinik Kook
15	Dindings Poliklinik	16	Klinik Kuala Kangsar
17	Homedicare	18	Klinik Kwong Hann
19	Ipoh Skin Clinic & General	20	Klinik Lam
21	Klinik Chin	22	Klinik Lenggong
23	Klinik K.M. Chao	24	Klinik Leong
25	Klinik Leong	26	Klinik Liew Choo Sin
27	Klinik Leong Poh Nam	28	Klinik Lim (Pusing)
29	Klinik Ng	30	Klinik Lim (Tanjung Tualang)
31	Klinik Ong & Sieh	32	Klinik Lim (Bidor)
33	Klinik Poh Soon Sim Sdn. Bhd	34	Klinik Lim & Lau
35	Klinik Ranjit & Sidhu	36	Klinik Looi
37	Klinik Ranjit & Sidhu (Kampar)	38	Klinik M. Kumar
39	Klinik Tan	40	Klinik M.G. Lim
41	Kerian Klinik	42	Klinik Malaysia
43	Klinik & Dispensari Sharil	44	Klinik Marik
45	Klinik A. L. Chan	46	Klinik Medinosis
47	Klinik Abdullah	48	Klinik Medisense
49	Klinik Aman	50	Klinik Mok & Loh
51	Klinik Aman (Ipoh)	52	Klinik Muhibah Sungai Siput (U)
53	Klinik Anand & Viknesh	54	Klinik Nabilah
55	Klinik Ang	56	Klinik Naga
57	Klinik Bandar Baru	58	Klinik Nagoke Sdn Bhd
59	Klinik Bhajan	60	Klinik Ng
61	Klinik C K Chan	62	Klinik Ng (Kuala Kangsar)
63	Klinik Chai	64	Klinik Ng & Rakan Rakan
65	Klinik Chee	66	Klinik Nisha
67	Klinik Chin	68	Klinik Nurul Huda
69	Klinik Chong	70	Klinik Ong & Sieh
71	Klinik Choo	72	Klinik P.M.C. (Prime Medical Centre)
73	Klinik Dr Najiha	74	Klinik P.M.C. (Prime Medical Centre) (Kampar)
75	Klinik Dr Tan Thee Tong	76	Klinik Pakar Cheh
77	Klinik Dr. Zakaria & Rakan-Rakan	78	Klinik Pakar Perubatan Kuala Kangsar

Private Medical Clinics (Perak)			
79	Klinik Family Hill City	80	Klinik Palani
81	Klinik G.S	82	Klinik Parit Buntar
83	Klinik Greentown	84	Klinik Perdana
85	Klinik Gurdip	86	Klinik Phuah
87	Klinik Harbinder Kaur Sdn Bhd (Klinik Gill)	88	Klinik Prem, Pokok Assam
89	Klinik Harmoni	90	Klinik Raja & Malar
91	Klinik Hee	92	Klinik Rakyat
93	Klinik Ho	94	Klinik Rakyat, Ipoh
95	Klinik Jaya (Medical & Skin Clinic) (Tapah)	96	Klinik Rawatan Ahsan
97	Klinik Jaya (Medical & Skin Clinic)	98	Klinik Razak
99	Klinik Jyothi	100	Klinik Revin
101	Klinik K H Kek	102	Klinik Rusnah
103	Klinik Saw	104	Poliklinik Choong & Lim
105	Klinik Sekeluarga Ipoh	106	Poliklinik Dr Azhar & Rakan-Rakan (Ipoh)
107	Klinik Selama	108	Poliklinik Dr Azhar & Rakan-Rakan (Changkat Jering)
109	Klinik Sentosa	110	Poliklinik Dr Azhar & Rakan-Rakan (Semanggol)
111	Klinik Setia	112	Poliklinik Dr Azhar & Rakan-Rakan (Kamunting)
113	Klinik Shatin	114	Poliklinik Dr Azhar & Rakan-Rakan (Langkap)
115	Klinik Simee	116	Poliklinik Dr C.Y.Ong Sdn. Bhd.
117	Klinik Soong	118	Poliklinik Fair Park
119	Klinik Sri Melintang	120	Poliklinik Federal
121	Klinik Su	122	Poliklinik Fitrah
123	Klinik Suppayah	124	Poliklinik Hidayah
125	Klinik Syifaa	126	Poliklinik Hidayah, Kamunting
127	Klinik T F Leong	128	Poliklinik Johari
129	Klinik T L Lee	130	Poliklinik Kana
131	Klinik T. S. Lai	132	Poliklinik Keluarga & Surgeri
133	Klinik Tai	134	Poliklinik Kinta
135	Klinik Tan	136	Poliklinik Kinta Jaya
137	Klinik Tan Cheng Leng	138	Poliklinik Kumari
139	Klinik Teh	140	Poliklinik Lee & Lee
141	Klinik Thomas (Gopeng)	142	Poliklinik Leong
143	Klinik Thomas	144	Poliklinik Lim & Leong
145	Klinik Ting	146	Poliklinik Manjit
147	Klinik Tweedie	148	Poliklinik Maxwell
149	Klinik Utama Ipoh	150	Poliklinik Md. Top
151	Klinik Vignesh	152	Poliklinik Meor
153	Klinik Wong	154	Poliklinik Permai
155	Klinik Y. L. Khoo Sdn Bhd	156	Poliklinik Rajen
157	Klinik Yan Yan	158	Poliklinik Ravi
159	Klinik Yuen	160	Poliklinik Samudera
161	Klinik Yusof	162	Poliklinik Seri Iskandar
163	Klinik Zahra	164	Poliklinik Subra
165	Mediklinik Zulfi	166	Poliklinik Sunway
167	New Town Poliklinik	168	Poliklinik T M Chan
169	Optimax Eye Specialist Centre Sdn Bhd	170	Poliklinik Tan & Wong
171	Peng Mun Clinic	172	Poliklinik Tan, Lee & Cheong
173	Peoples kelinik	174	Poliklinik Tang
175	Perdana Medical Centre	176	Poliklinik Taqwa
177	Perdana Polyclinic Lumut	178	Poliklinik Taqwa Simpang Pulai
179	Polyclinic QuahliMedic Sdn Bhd	180	Poliklinik V-Care
181	Poliklinik Bakti, Parit Buntar	182	Public Poliklinik
183	Poliklinik Sumi	184	S. M. Leong Clinic (Kara Emas Sdn. Bhd)
185	Poliklinik & Surgeri Batu Gajah	186	Seeni Polyclinic

Private Medical Clinics (Perak)

187	Poliklinik & Surgeri Cheah	188	Somu Klinik
189	Poliklinik Ar-Ridzuan	190	Taiping Eye Specialist & Surgery
191	Poliklinik Bandar Baru Bercham	192	Tang Clinic
193	Poliklinik Chandran	194	The First Clinic Menglembu Sdn. Bhd
195	Poliklinik Chong	196	Thong Klinik
197	Poliklinik Choong & Lim		

Private Medical Clinics (Selangor)

1	Kelang Polyclinic	2	Klinik Indira
3	Klinik Bina	4	Klinik Jaya, Sg Buloh
5	Klinik Ho	6	Klinik Jaya, Subang Jaya
7	Klinik Kumar	8	Klinik K L Loh
9	Klinik Kumar (Rasah)	10	Klinik Kanak- kanak Khoo
11	Klinik Lim, Jln Berangan	12	Klinik Kelana Puteri
13	Klinik Sharil Sabak Bernam	14	Klinik Keluarga
15	Klinik & Surgeri Chuah	16	Klinik Keluarga Lee
17	Klinik & Surgeri Lee	18	Klinik Kita Poliklinik & Surgeri
19	Klinik & Surgeri Shah Alam	20	Klinik Kok
21	Klinik A. Mohan	22	Klinik Kok Dan Wendy
23	Klinik Alam Medic, Prima Saujana Kajang	24	Klinik Lee
25	Klinik Amardev & Surgery	26	Klinik Leong
27	Klinik Aminah	28	Klinik Leow
29	Klinik Antarabangsa	30	Klinik Lim, Jln Amarasegara
31	Klinik Azlina dan Sharifah	32	Klinik Ling
33	Klinik Bajan	34	Klinik Loga
35	Klinik Bandaran	36	Klinik Mahkota
37	Klinik Bandaran Sdn. Bhd, Jalan Raja Hassan	38	Klinik Medijaya, UEP Subang Jaya
39	Klinik Bandaran, Section 15	40	Klinik Medisafe
41	Klinik Bangi	42	Klinik Medisense Cheras
43	Klinik Berkat	44	Klinik Mediviron (Rawang)
45	Klinik C J Kwek	46	Klinik Mediviron (Petaling Jaya)
47	Klinik Cheras Jaya	48	Klinik Mediviron (Puchong)
49	Klinik Chin	50	Klinik Mediviron (Bandar Utama)
51	Klinik Chin, Cheras	52	Klinik Mediviron, Kota Damansara
53	Klinik Comfort	54	Klinik Mediviron, Puchong Prima
55	Klinik Cybermedik	56	Klinik Mein & Surgeri, Petaling Jaya
57	Klinik Dan Pusat Bersalin Nor	58	Klinik Melawati
59	Klinik Dan Surgeri Ampang	60	Klinik Mesra
61	Klinik Dan Surgeri Jaspal	62	Klinik Mesra Jaya
63	Klinik Dan Surgeri Lee	64	Klinik Mesra, Shah Alam
65	Klinik Dan Surgeri Sidhu	66	Klinik Metro
67	Klinik Dhaka	68	Klinik National
69	Klinik Doshi	70	Klinik Ng (Eng Ann)
71	Klinik Dr Lo	72	Klinik Ng Sendirian (Bangi)
73	Klinik Dr Nur Ainita, Subang Business Centre	74	Klinik Ng Sendirian (Semenyih)
75	Klinik Dr Rashid & Dr Saleha	76	Klinik Ng Sendirian (Kajang)
77	Klinik Dr Shamsuddin, Sg Buloh	78	Klinik Perwira
79	Klinik Dr Fauziah	80	Klinik Perwira (Feeder Clinic)
81	Klinik Dr I. Chin	82	Klinik Petaling
83	Klinik Dr Khafidz	84	Klinik Petaling Jaya
85	Klinik Dr Rosnah	86	Klinik Puteri Anwar
87	Klinik Drs Zainuddin & Partners	88	Klinik Rakan Medik, Bangi
89	Klinik Eirena	90	Klinik Reddy

Private Medical Clinics (Selangor)			
91	Klinik Famili Shah Alam	92	Klinik Reddy PJ
93	Klinik Faridah	94	Klinik Ros Dan Rakan-Rakan
95	Klinik Genting	96	Klinik Roshan
97	Klinik Grace Country Homes	98	Klinik Sabrina
99	Klinik Hasnida Dan Rakan-Rakan	100	Klinik Salleh
101	Klinik Hayati	102	Klinik Sathia
103	Klinik Hooi	104	Klinik Saujana (Batu Caves)
105	Klinik IHM	106	Klinik Saujana (Sungai Buloh)
107	Klinik Sekeluarga Ipoh	108	Poliklinik Dan Surgery Seapark
109	Klinik Sentosa (Jalan Besar)	110	Poliklinik Duta Jaya
111	Klinik Sentosa (Jalan Morib)	112	Poliklinik Family (Shah Alam)
113	Klinik Sentosa, Tmn Putra	114	Poliklinik Family (Kuala Langat)
115	Klinik Shan	116	Poliklinik Harmoni
117	Klinik Sharil	118	Poliklinik Hidayah
119	Klinik Sharon	120	Poliklinik Khor Dan Arun
121	Klinik Shifak	122	Poliklinik Kumpulan City - Bdr Bkt Puchong
123	Klinik Soma	124	Poliklinik Kumpulan City - Kota Kemuning
125	Klinik Soo (Kajang)	126	Poliklinik Kumpulan City, Klinik Medic Bistari
127	Klinik Soo (Subang Jaya)	128	Poliklinik Lau
129	Klinik Sri Penawar	130	Poliklinik Ludher Bhullar & Rakan-Rakan
131	Klinik Subang	132	Poliklinik Mohan
133	Klinik Subang Perdana	134	Poliklinik Murni & Surgeri
135	Klinik Suhaini	136	Poliklinik Negara
137	Klinik Sungai Besar	138	Poliklinik Ng
139	Klinik Teh	140	Poliklinik Noriha
141	Klinik Tune	142	Poliklinik Penawar
143	Klinik Ummu Ammar	144	Poliklinik Permai
145	Klinik Utama Kosas	146	Poliklinik Pusat Rawatan Islam (PCSB)
147	Klinik Veda (Ampang)	148	Poliklinik Rakyat
149	Klinik Veda (Shah Alam)	150	Poliklinik Salehudin
151	Klinik Wakaf An-Nur	152	Poliklinik Sg Jelok
153	Klinik Wong & Chye	154	Poliklinik Sunli
155	Klinik Wong Dan Singh.	156	Poliklinik Swesh
157	Klinik Zalfah	158	Poliklinik Taman Impiyan
159	Klinik Zubir Sdn. Bhd.	160	Poliklinik Yusoff
161	Klinik Zulkifli (Poliklinik & Surgeri)	162	Poliklinik Idaman
163	Koh Dispensary	164	Polykelinik Rawang
165	Kumpulan Medic	166	Pusat Perubatan Aniza
167	Kumpulan Perubatan SMP Sdn Bhd - Shah Alam	168	Pusat Perubatan Julia
169	Kumpulan Perubatan SMP Sdn. Bhd (Klinik Pertama)	170	Pusat Rawatan Islam (MAIS)
171	Mediklinik TTDI Jaya	172	Renu Kelinik
173	Poliklinik & Surgeri Lim	174	Sham Poliklinik Sdn Bhd (Bangi)
175	Poliklinik & Surgeri Serdang	176	Sham Poliklinik Sdn Bhd (Kajang)
177	Poliklinik An Nisa	178	Sunathrone Bio-Medical HQ Klinik
179	Poliklinik Dan Surgeri Jaswant	180	Yoong Clinic Sdn Bhd
181	Poliklinik dan Surgeri Shan		

Private Medical Clinics (WP Putrajaya)	
1	Klinik An-Nisa (Putrajaya)

Private Medical Clinics (WP Kuala Lumpur)			
1	ASP Medical Clinic Sdn Bhd	2	Klinik Chin Chee Yeong.
3	Chye Clinic	4	Klinik Chin, Jln Raja Laut
5	Dispensary Martin dan Lalita	6	Klinik Chin, Jln Sultan Sulaiman
7	Drs Tong, Leow, Chiam & Partners (Chong Dispensary) - Medan Pasar	8	Klinik Chong
9	Drs. Tong, Leow, Chiam & Partners- Jln Ampang	10	Klinik Chung & Hon
11	Horeb Services Sdn Bhd	12	Klinik City
13	Klinik & Surgeri Hon	14	Klinik dan Surgeri Loo
15	Klinik Aidura	16	Klinik dan Surgeri Mesra Sdn Bhd
17	Klinik Alam Medic.	18	Klinik Desa, Desa Petaling
19	Klinik Arun	20	Klinik Dr Fateh Mohd dan Rakan-Rakan
21	Klinik Ashvini	22	Klinik Dr Monty
23	Klinik Asia	24	Klinik Dr Oorloff & Rakan-Rakan
25	Klinik Aun	26	Klinik Dr Khalil.
27	Klinik Baba Sdn Bhd	28	Klinik Drs Abraham George & Partners
29	Klinik Bandar Raya	30	Klinik Everlasting Sdn Bhd
31	Klinik Britain	32	Klinik Famili Seri Petaling
33	Klinik Bukit Maluri & Surgeri	34	Klinik Famili TTDI
35	Klinik Catterall, Khoo and Raja Malek, Bangunan Ming	36	Klinik Famille OUG
37	Klinik Catterall, Khoo and Raja Malek, Great Eastern Mall	38	Klinik Fateh Mohd & Rakan-Rakan
39	Klinik Catterall, Khoo and Raja Malek, Plaza Sentral	40	Klinik Genting Unimed
41	Klinik Chang	42	Klinik Goh
43	Klinik Cheah, Brickfields	44	Klinik Goon
45	Klinik Cheah, Cheras	46	Klinik H.T. Lee
47	Klinik Chew	48	Klinik Healthcare & Surgeri
49	Klinik Heenie Lee	50	Klinik Sri Sentosa
51	Klinik Husin	52	Klinik Suria
53	Klinik Ian Ong	54	Klinik TA
55	Klinik Idzham Sdn Bhd, Danau Kota	56	Klinik Tan See Kin
57	Klinik Jameela Ali	58	Klinik Uni-Med, Jln Raja Chulan
59	Klinik Kaulsay	60	Klinik Wangsa Permai
61	Klinik Keluarga Dr Alwi Ahmad	62	Klinik Warda
63	Klinik Khor	64	Klinik We-Care
65	Klinik Kip	66	Klinik Wong
67	Klinik Kita, Pandan Indah	68	Klinik Yong & Ong
69	Klinik Leong	70	Klinik Yong, Jln Imbi
71	Klinik Lim (Jalan Kenanga)	72	Klinik Yong, Lebu Ampang
73	Klinik Lim	74	Klinik Zarif, Menara TM
75	Klinik Low & Surgeri Sdn Bhd	76	Kumpulan Medi-Systems Sdn Bhd
77	Klinik Low, Setapak	78	Kumpulan Medic
79	Klinik Ludher, Jln Kelang Lama	80	Kumpulan Medic, Bgn KWSP
81	Klinik Mano & Surgeri	82	Leng-s Clinic
83	Klinik Medi Pesona	84	Lian Klinik
85	Klinik Medi-Pro, Jln Tun Razak	86	Lian Norana Clinic
87	Klinik Medi-Pro, Tmn Miharja	88	MAA Clinic
89	Klinik Medic Bestari	90	Medic Damansara
91	Klinik Medic City, Brickfields	92	Poliklinik & Surgeri Di-G
93	Klinik Medicate Jln Raja Chulan	94	Poliklinik & Surgeri Jinjang
95	Klinik Medimetro	96	Poliklinik & Surgeri Ponniah
97	Klinik Medisense.	98	Poliklinik Aiman
99	Klinik Mediviron	100	Poliklinik Anand & Surgeri
101	Klinik Mediviron, Bangsar South	102	Poliklinik Annisa
103	Klinik Mediviron, Brickfields	104	Poliklinik Central & Surgeri, Jln Gombak
105	Klinik Mediviron, Sentul Raya	106	Poliklinik Chen

Private Medical Clinics (WP Kuala Lumpur)			
107	Klinik Menara	108	Poliklinik Chew & Rakan-Rakan
109	Klinik Ng dan Lee	110	Poliklinik dan Pembedahan Peters
111	Klinik Ng dan Lee (Cheras)	112	Poliklinik dan Surgeri Khor
113	Klinik Ong Yong & Rakan-Rakan - Kepong	114	Poliklinik dan Surgeri Ren Ai
115	Klinik Ong Yong dan Rakan-Rakan.	116	Poliklinik Hicks
117	Klinik Perkasa	118	Poliklinik Kong
119	Klinik Pertama, Sg Besi	120	Poliklinik Kumpulan City (Jalan Ampang)
121	Klinik Primecare (Lucky Garden)	122	Poliklinik Kumpulan City (Jalan Inai)
123	Klinik Primecare	124	Poliklinik Kumpulan City - Jln Genting Kelang
125	Klinik Pusrawi Sdn Bhd, Anjung Felda	126	Poliklinik Kumpulan City - Jln Pahang
127	Klinik Rahman	128	Poliklinik Kumpulan City - Setapak Jaya
129	Klinik Rakan Medik	130	Poliklinik Kumpulan City - Sri Damansara
131	Klinik S K Leong	132	Poliklinik Kumpulan City - Sri Petaling
133	Klinik Sannasees	134	Poliklinik Kumpulan City - Tmn Connaught
135	Klinik Saraya & Surgeri	136	Poliklinik Kumpulan City - Tmn Desa Petaling
137	Klinik Segara, Jln Bangsar	138	Poliklinik Kumpulan City - Tmn OUG
139	Klinik Setia	140	Poliklinik Kumpulan City - Wisma UOA
141	Klinik Setiajaya	142	Poliklinik Lai
143	Klinik Sri Permaisuri	144	Poliklinik Leong & Ho
145	Poliklinik Loh	146	Poliklinik Wanita Mathews
147	Poliklinik Ludher Bhuller dan Rakan-rakan	148	Poliklinik Yeow
149	Poliklinik Pudu dan Dr (Mrs) T. Chaudhray Specialist Clinic For Women	150	Polyclinic Foo Sdn Bhd Foo/ Poliklinik dan Surgeri Foo
151	Poliklinik Pusat Rawatan Islam (PCSB)	152	Qualitas Klinik Ng dan Lee
153	Poliklinik Salak Selatan	154	Reddy Clinic, Jln Ipoh

Private Medical Clinics (Negeri Sembilan)			
1	Chong Dispensary	2	Klinik Nirmala
3	Klinik Chong	4	Klinik Pantai
5	Klinik Jalan Templer Sdn Bhd	6	Klinik Pantai, Bukit Pelandok
7	Klinik Lung	8	Klinik Pantai, Rantau
9	Klinik & Surgeri Gill	10	Klinik Pantai, Tmn Mewah
11	Klinik Al'azhim Tampin	12	Klinik Penawar (NS) Sdn Bhd
13	Klinik Ammanpal	14	Klinik Penawar (NS) Sdn Bhd
15	Klinik An-Nur	16	Klinik Port Dickson
17	Klinik Ang & Ang Sdn Bhd	18	Klinik Puru
19	Klinik Bakti	20	Klinik Rahmat & Surgeri
21	Klinik Chin & Surgeri	22	Klinik Ramani
23	Klinik Chin, Seremban	24	Klinik Ravi & Surgeri
25	Klinik Chua	26	Klinik Rembau
27	Klinik Dan Surgeri Dr Hanafiah	28	Klinik Salak, Nilai
29	Klinik Dr Lian	30	Klinik Seremban
31	Klinik Dr Nasir	32	Klinik Shukran & Surgeri
33	Klinik Dr Kassim	34	Klinik Tan Dan Surgeri
35	Klinik Dr Norliazura	36	Klinik Waqaf An-Nur
37	Klinik Hee	38	Klinik Yong
39	Klinik Hee (Batang Melaka)	40	Klinik Zul
41	Klinik Hee Annandan & Siva	42	Poliklinik & Surgeri Gadong
43	Klinik Hee Annandan Sdn Bhd	44	Poliklinik & Surgeri Rahang
45	Klinik Hon	46	Poliklinik Dan Surgeri Rahang (Cawangan Rasah Jaya)
47	Klinik Insan	48	Poliklinik Eden
49	Klinik Isza	50	Poliklinik Hidayah Sdn Bhd
51	Klinik Jaya	52	Poliklinik Hidayah, Jln Tung Seng

Private Medical Clinics (Negeri Sembilan)

53	Klinik Jelevu	54	Poliklinik Ibnu Sina
55	Klinik Khoo	56	Poliklinik Ibnu Sina (Taman Rembau)
57	Poliklinik Jasa	58	Poliklinik Rama
59	Poliklinik Laksmana Dan Surgeri	60	Poliklinik Ria
61	Poliklinik Pakar Dan Surgeri	62	Poliklinik Ria (Cawangan Seremban Jaya)
63	Poliklinik Porkodi	64	Poliklinik Sentosa
65	Poliklinik Putra	66	Port Medical Centre
67	Poliklinik Raj	68	Seremban Specialist Centre
69	Simpang Klinik		

Private Medical Clinics (Melaka)

1	Bukit Rambai Health Farm	2	Klinik Chin
3	Goh Clinic	4	Klinik Chua
5	Klinik Ayer Keroh	6	Klinik Dr Halim Sdn Bhd
7	Klinik Malin	8	Klinik Dr Jamaludin Dan Surgeri
9	Klinik Malin (Batu Berendam)	10	Klinik Dr Jeggan
11	Klinik Malin Tengker Sdn. Bhd	12	Klinik Dr Elis
13	Klinik Panicker	14	Klinik Dr Jeggan
15	Klinik Poorni	16	Klinik Dr Norman & Surgeri
17	Klinik A Famosa	18	Klinik Dr Yee
19	Klinik Al Azhim, Klebang	20	Klinik Dr Zain
21	Klinik Al-Azhim, Telok Mas	22	Klinik Dr Zanawati
23	Klinik Al' Azhim	24	Klinik Fairlie
25	Klinik Ang	26	Klinik Keluarga
27	Klinik Bachang	28	Klinik Keluarga Dr Fauziah
29	Klinik Bukit Beruang	30	Klinik Khaw
31	Klinik Cheng	32	Klinik Kok Dan Surgeri
33	Klinik Masjid Tanah	34	Klinik Tampin
35	Klinik Mawar & Pembedahan (Melaka) Sdn Bhd	36	Klinik Tan & Lau
37	Klinik Mawar & Pembedahan (Melaka) Sdn Bhd, Tmn Cheng Baru	38	Klinik Ujong Pasir
39	Klinik Mawar Dan Pembedahan Jasin	40	Klinik Ummi
41	Klinik Melaka	42	Klinik Wong
43	Klinik Melaka Jaya	44	Merdeka Health Care Clinic
45	Klinik Melaka Raya	46	Poliklinik Azhali Medik Sdn Bhd
47	Klinik Mesra	48	Poliklinik Cheng Dan Surgeri
49	Klinik Muhibah	50	Poliklinik Goh
51	Klinik Naharajan & Imaging Centre	52	Poliklinik Hidayah
53	Klinik Neo & Surgeri	54	Poliklinik Lim
55	Klinik Noh	56	Poliklinik Medic
57	Klinik Noor Shila	58	Poliklinik Merdeka
59	Klinik Nurussyifa' Perubatan dan Surgeri	60	Poliklinik Mesra
61	Klinik Perubatan Chan	62	Poliklinik Nur
63	Klinik Redzwan	64	Poliklinik Rakyat
65	Klinik Rohani	66	The Merican Dispensary
67	Klinik Sohwindir		

Private Medical Clinics (Johor)			
1	24 Jam Poliklinik Yap	2	Klinik Chew Dan Surgeri
3	Chee Hwa Dispensary	4	Klinik Chezhlial
5	Dispensari Huang	6	Klinik Chng
7	Elizabeth Medical Centre Sdn Bhd	8	Klinik Dan Surgeri Soo
9	Federal Clinic (Century Garden)	10	Klinik Dan Surgeri Taman Daya
11	Klinik Australia	12	Klinik Darul Takzim (Sri Medan)
13	Klinik Jin Ai	14	Klinik Daya Singh Sdn Bhd
15	Klinik Lee	16	Klinik Dedap (Tmn Jhr Jaya)
17	Klinik Loke	18	Klinik Dhass (Permas Jaya)
19	Klinik Malaya	20	Klinik Dhass Sdn Bhd
21	Klinik Malaysia	22	Klinik Dr Tee
23	Klinik Malaysia Johor Bahru	24	Klinik Dr Wan
25	Klinik Mersing	26	Klinik Elizabeth
27	Klinik Ng	28	Klinik Elizabeth, Tmn Sri Jaya
29	Klinik Public (Jln Ali)	30	Klinik Faizal & Rakan-Rakan (Bandar Baru Uda)
31	Klinik Rajoo	32	Klinik Federal, Jementah
33	Klinik Sri Larkin (Tmn Perindustrian Tebrau)	34	Klinik Foo
35	Klinik Woo & Hong	36	Klinik Gan Surgery
37	Klinik YL Lim Sdn Bhd	38	Klinik Githa (Tmn Mesra, Saleng)
39	Klinik A'fiat	40	Klinik Githa, Kelapa Sawit
41	Klinik Australia	42	Klinik Githa, Tmn Kulai Utama
43	Klinik Achutha	44	Klinik Goh & Surgeri
45	Klinik Adham (Senai I)	46	Klinik Grace
47	Klinik Adham (Bandar Putra)	48	Klinik Halizah
49	Klinik Adham Cawangan Indahpura	50	Klinik Hijrah
51	Klinik Adham Kulai	52	Klinik Ho (Senai)
53	Klinik Aishah	54	Klinik Hooi
55	Klinik Ali	56	Klinik Hosanna
57	Klinik Al-Insaan	58	Klinik Hussien
59	Klinik Aliyah	60	Klinik Ibu & Kanak-kanak
61	Klinik Aliza Sdn Bhd	62	Klinik Insan Sdn Bhd (Tmn U)
63	Klinik Amar	64	Klinik Intan, Johor Bahru
65	Klinik Amerika Dan Surgeri Sdn Bhd	66	Klinik Ishi
67	Klinik As-Salam (Felda Pasak)	68	Klinik Jamaliah
69	Klinik Austin	70	Klinik Jamiah
71	Klinik Azlina & Surgeri	72	Klinik Jay
73	Klinik Bakti (Kluang)	74	Klinik Johor
75	Klinik Bakti (Kulai)	76	Klinik Johor (Permas Jaya)
77	Klinik Bakti (Batu Pahat)	78	Klinik Joseph Varghese
79	Klinik Batu Pahat	80	Klinik Kamal
81	Klinik Bukit Pasir	82	Klinik Kausar
83	Klinik C. K. Mak	84	Klinik Keluarga
85	Klinik Chan & Ng	86	Klinik Keluarga (Segamat)
87	Klinik Chen	88	Klinik Keluarga Kamalam
89	Klinik Cheong	90	Klinik Khor & Khor
91	Klinik King	92	Klinik Putra
93	Klinik K-K	94	Klinik Putri (Tongkang Pechah)
95	Klinik Kok	96	Klinik Rajoo Bekok
97	Klinik Kok Wah	98	Klinik Rajoo Chaah
99	Klinik Kota, Yong Peng	100	Klinik Rakyat Holistik
101	Klinik Krishna	102	Klinik Rasa Sayang
103	Klinik Kulit Pertama	104	Klinik Rashid dan Raudhah
105	Klinik Kwang	106	Klinik Razak (Segamat)
107	Klinik Lau	108	Klinik Razak (Kota Tinggi)

Private Medical Clinics (Johor)			
109	Klinik Liew	110	Klinik Redzuan
111	Klinik Lim & Neo	112	Klinik Ria
113	Klinik Lim, Tangkak	114	Klinik Rompin
115	Klinik Loh	116	Klinik Roshidi & Surgeri (Tjg. Agas)
117	Klinik London	118	Klinik S. T. Ng
119	Klinik Low Dan Surgeri	120	Klinik Sairam
121	Klinik M. Y. Wong	122	Klinik Segamat
123	Klinik Maharani	124	Klinik Sejahtera (Pt. Raja)
125	Klinik Makmur	126	Klinik Selesa Jaya
127	Klinik Malaysia	128	Klinik Seng Hwa Sdn Bhd
129	Klinik Mawar Dan Pembedahan (Melaka) Sdn Bhd	130	Klinik Senggarang (Klinik Teo & Tan Sdn Bhd)
131	Klinik Medic Care	132	Klinik Sentosa
133	Klinik Medic Dan Surgeri	134	Klinik Setia & Surgery
135	Klinik Medisense	136	Klinik Setia Indah
137	Klinik Mesra (Jln Nagasari)	138	Klinik Sia Dan Surgeri
139	Klinik Mesra, Jementah	140	Klinik Sinaran
141	Klinik Min	142	Klinik Skudai
143	Klinik Mohan	144	Klinik Soon
145	Klinik Mohan Dan Surgeri	146	Klinik Southern
147	Klinik Mohan dan Vasuki	148	Klinik Spring Hui Medical & Skin Clinic
149	Klinik Mulia Pasir Gudang	150	Klinik Sri Larkin
151	Klinik Mutalib	152	Klinik Sri Sulong
153	Klinik Naveen	154	Klinik Tan & Lum (Benut)
155	Klinik Ng	156	Klinik Tan & Lum (Pekan Nenas)
157	Klinik Nur	158	Klinik Tawakal, Rengit
159	Klinik Nurish Paloh	160	Klinik Tee
161	Klinik Ong (Tangkak)	162	Klinik Teo (Klinik Teo & Tan Sdn Bhd)
163	Klinik Ong (Muar)	164	Klinik Uma
165	Klinik Ong (TUTA)	166	Klinik Ungku Moshin Kita
167	Klinik P. N. Teoh	168	Klinik Wan Suhaimi
169	Klinik Palani	170	Klinik Wanita Wisma Maria
171	Klinik Pancasila Saleng	172	Klinik Wanlin H3 (Taman Kiara Mas)
173	Klinik Parit Raja (Batu Pahat)	174	Klinik Wira
175	Klinik Parit Yaani	176	Klinik Wong (Jln Senohong Dua)
177	Klinik Penawar & Surgeri, Kluang	178	Klinik Wong (Jln Temenggong)
179	Klinik People (Permas Jaya)	180	Klinik Yakin
181	Klinik Perintis Health Care	182	Klinik Yee
183	Klinik Pertama (Tmn Johor Jaya)	184	Klinik Yeo Sdn Bhd
185	Klinik Pontian	186	Klinik Yong Peng
187	Klinik Public	188	Klinik Zainab
189	Klinik Public, Kulai	190	Klinik Zainon
191	Klinik Zaiton	192	Poliklinik Penawar - Tmn Rinting
193	Klinik Zalina	194	Poliklinik Penawar - Tmn Sri Bahagia
195	Poliklinik Abreza	196	Poliklinik Penawar - Tmn Universiti
197	Poliklinik Amin	198	Poliklinik Penawar (Felda Kledang)
199	Poliklinik Anggerik	200	Poliklinik Penawar (Pasir Gudang)
201	Poliklinik Bintang	202	Poliklinik Penawar (Tmn Kota Masai)
203	Poliklinik Cempaka (Tmn Air Biru)	204	Poliklinik Penawar (Pusat Bandar, Bandar Penawar)
205	Poliklinik Dahlia	206	Poliklinik Penawar (Taman Sr Pulau)
207	Poliklinik Damai & Surgeri, Tmn Desa Jaya	208	Poliklinik Penawar (Tmn Johor Jaya)
209	Poliklinik Dan Surgeri Choong	210	Poliklinik Penawar (Jln Betik)
211	Poliklinik Harmoni & Surgeri	212	Poliklinik Penawar (Tmn Tun Sri Lanang)
213	Poliklinik Hidayah	214	Poliklinik Perdana (Jln S. Abong)
215	Poliklinik Hijrah (Tmn Puteri Wangsa)	216	Poliklinik Perdana (Pasir Gudang)

Private Medical Clinics (Johor)			
217	Poliklinik Hijrah Cahaya Masai	218	Poliklinik Perdana, Tmn Bakri Mulia
219	Poliklinik Ihsan (Tmn Kempas)	220	Poliklinik Pertama
221	Poliklinik Impian	222	Poliklinik Puteri Dan Surgeri (Jln Niaga, Kota Tinggi)
223	Poliklinik Inang (Gelang Patah)	224	Poliklinik Rozikin (Kg. Pasir Putih)
225	Poliklinik Inang (Tmn Skudai)	226	Poliklinik Rozikin (Masai)
227	Poliklinik Jaya Skudai	228	Poliklinik Rozikin (Taman Cahaya Masai)
229	Poliklinik John	230	Poliklinik Rozikin (Tmn Sri Bahagia)
231	Poliklinik Kathi Sdn Bhd	232	Poliklinik Sejahtera
233	Poliklinik Keluarga & Surgeri	234	Poliklinik Sejahtera (Pasir Gudang)
235	Poliklinik Khoo & Surgeri	236	Poliklinik Seri Alam
237	Poliklinik Koh	238	Poliklinik Seri Mutiara
239	Poliklinik Krishna	240	Poliklinik Sutera
241	Poliklinik Kuek	242	Poliklinik Taj 24 Jam, Taman Tampoi Utama
243	Poliklinik Medic	244	Poliklinik Tan
245	Poliklinik Mesra	246	Poliklinik Tey
247	Poliklinik Murni (Bandar Putra)	248	Poliklinik Universiti
249	Poliklinik Penawar	250	Poliklinik Zakariya
251	Poliklinik Penawar - Felda Tenggara 2	252	Pure Medical Clinic Sdn Bhd
253	Poliklinik Penawar - Gelang Patah	254	Pusat Perubatan Keluarga
255	Poliklinik Penawar - Kg Pasir, Tampoi	256	Pusat Perubatan Kota Masai
257	Poliklinik Penawar - Kulai	258	Tampoi Klinik
259	Poliklinik Penawar - Masai	260	Poliklinik Penawar - Tmn Perling
261	Poliklinik Penawar - Simpang Renggam	262	Tay & Tan Medicare Sdn Bhd (T & T Clinic)
263	Poliklinik Penawar - Tanjung Sedili	264	The People Dispensary Sdn Bhd (Jalan Ibrahim)
265	Poliklinik Penawar - Tmn Bintang, Senai	266	The People Dispensary Sdn Bhd (Klinik People Masai)
267	Poliklinik Penawar - Tmn Dahlia	268	Titan Implant Clinic Tanjung Langsat
269	Poliklinik Penawar - Tmn Daya	270	Titan Pasir Gudang Implant Clinic
271	Poliklinik Penawar - Tmn Istimewa Pandan		

Private Medical Clinics (Pahang)			
1	Klinik An' Nisa	2	Klinik Pang
3	Klinik Asniza	4	Klinik Param
5	Klinik Ban	6	Klinik Pekan
7	Klinik Benta	8	Klinik Perdana
9	Klinik Chow	10	Klinik Ragavan
11	Klinik Chung	12	Klinik Rama
13	Klinik Dr Halim & Nor	14	Klinik Ramachandran Sdn Bhd
15	Klinik Fa'iza Dan Rakan Rakan	16	Klinik Rawatan Keluarga
17	Klinik Feisal	18	Klinik Ridan
19	Klinik Genting Uni-Med, Gohtong Jaya	20	Klinik Rompin
21	Klinik Goh	22	Klinik Roslina
23	Klinik Hijrah (Kuala Lipis)	24	Klinik Seong
25	Klinik Hijrah	26	Klinik Sulaiman (Kuala Lipis)
27	Klinik Ikhwan & Surgeri (Bandar Tun Razak)	28	Klinik Sulaiman
29	Klinik Ikhwan & Surgeri	30	Klinik Sulaiman Jerantut
31	Klinik Iman	32	Klinik Sulaiman, Jengka
33	Klinik Jauhar	34	Klinik Syed Badaruddin
35	Klinik Jaya (Mentakab)	36	Klinik Teoh
37	Klinik Jaya	38	Klinik Ummu Roihan Sdn Bhd
39	Klinik Jeyaram (Mentakab)	40	Klinik Wong
41	Klinik Jeyaram	42	Kum Klinik
43	Klinik Kiru	44	Kumpulan Medic Kuantan
45	Klinik Lee (Kuantan)	46	Poliklinik Abdul Rahman

Private Medical Clinics (Pahang)

47	Klinik Lee	48	Poliklinik Kumpulan City, First World Clinic
49	Klinik Liew (Bentong)	50	Poliklinik Maran
51	Klinik Liew	52	Poliklinik Penawar Kuantan
53	Klinik Lim	54	Poliklinik Rajesh
55	Klinik Ling & Thoo	56	Poliklinik Raub & Surgery
57	Klinik Low	58	Ratnam Clinic
59	Klinik Nasha	60	Sentosa Klinik Kuantan
61	Klinik Ng	62	Sentosa Klinik Taman Tas

Private Medical Clinics (Terengganu)

1	Berjaya Redang Clinic	2	Klinik Penawar
3	Klinik An-Nisa'	4	Klinik Rahim Hamzah Halim & Razali Sdn Bhd (Batu 6)
5	Klinik An-Nur	6	Klinik Rahim Hamzah Halim & Razali Sdn Bhd (Jln Sultan Omar)
7	Klinik Azamli	8	Klinik Rakyat
9	Klinik Azmi Sdn Bhd	10	Klinik Ramli & Adibah (Bangunan Wisam Serangkai)
11	Klinik D	12	Klinik Ramli & Adibah
13	Klinik Darul Iman	14	Klinik Rantau Petronas
15	Klinik Hasbullah	16	Klinik Sentosa
17	Klinik Iddrus	18	Klinik Shukor Ajil
19	Klinik Jerteh	20	Klinik Sulaiman
21	Klinik Khuzaini & Raja Himah Sdn. Bhd.	22	Klinik Sulaiman (Cawangan Gong Kapas)
23	Klinik Kumpulan Muslimah	24	Klinik Syed Salleh Dan Rakan-Rakan Sdn Bhd
25	Klinik Maimon & Rushdi	26	Klinik Ummi Azizan
27	Klinik Mamad Sdn Bhd	28	Klinik Wan Saleha (Cawangan Wakaf Tembesu)
29	Klinik Mohd Ramly	30	Kumpulan Klinik Mir
31	Klinik Nabilah	32	Poliklinik Kemaman

Private Medical Clinics (Kelantan)

1	Aziz Clinic	2	Klinik Lua, Jln Sultan Yahya Petra
3	Klinik A Wahab	4	Klinik Mardhiah
5	Klinik An Nuur	6	Klinik Nawi
7	Klinik Ariffin	8	Klinik Nawi, Wakaf Siku
9	Klinik Arifin Dan Nazihah	10	Klinik Nik
11	Klinik Balkhis	12	Klinik Nik Amir -Azmi
13	Klinik Cabang Tiga	14	Klinik Nik Amir-Azmi, Kota Bharu
15	Klinik Darulnaim	16	Klinik Nik Azam
17	Klinik Dr Kamaludin	18	Klinik Nur Ain
19	Klinik Dr Nasir & Dr Wan Namaziah	20	Klinik Perdana - Bgn PKINK
21	Klinik Dr Nida	22	Klinik Perdana Beris Kubur Besar
23	Klinik Dr. Aminuddin	24	Klinik Perdana Cawangan Islah
25	Klinik Dr. Ramli	26	Klinik Perdana Kuala Krai
27	Klinik Dr. Wan Abdul Kadir	28	Klinik Perdana Melor
29	Klinik Dr. Yasiman Perdana	30	Klinik Prihatin
31	Klinik Dr.Zamilah	32	Klinik Rahimah
33	Klinik Ehsan	34	Klinik Raju
35	Klinik Faiza Woon	36	Klinik Ramli
37	Klinik Farisya	38	Klinik Saleha & Khairi
39	Klinik Fatah & Abdullah	40	Klinik Saleha & Khairi (Cawangan Tawang)
41	Klinik Goh	42	Klinik Sayyida Sdn Bhd
43	Klinik Hidayah	44	Klinik Shafee
45	Klinik Ho	46	Klinik Suhaila
47	Klinik Ibrahim Rantau Panjang	48	Klinik Tee

Private Medical Clinics (Kelantan)

49	Klinik Ikhlas	50	Klinik Wakaf Siku 6
51	Klinik Ikthiar Kota Jambal	52	Klinik Wan Fatimah
53	Klinik Insaf	54	Klinik Zahar
55	Klinik Jo	56	Klinik Zaitun
57	Klinik Keluarga	58	Klinik Ziad Azhari Sdn.Bhd
59	Klinik Khoo	60	Poliklinik Penawar, Lundang
61	Klinik Kota Bharu	62	Poliklinik Utama
63	Klinik Lee	64	Pusat Rawatan Al-Farhain (24 jam & X-ray)
65	Klinik Leong	66	Pusat Rawatan Komuniti
67	Klinik Lim	68	Pusat Rawatan Komuniti Machang

Private Medical Clinics (Sabah)

1	24 Jam Klinik & Surgeri Lau & Choong	2	Klinik Dr Lilian Hong
3	Clinic Chua	4	Klinik Dr Martati
5	Foh San Clinic	6	Klinik Dr Mohamad
7	Klinik Liu	8	Klinik Dr Ong
9	Klinik Segama	10	Klinik Dr Raj
11	Klinik Wah Hai Sit	12	Klinik Dr Selvam
13	Klinik & Surgeri Choong	14	Klinik Dr Shirley Lee
15	Klinik & Surgeri Dr Jingul	16	Klinik Dr Syed
17	Klinik & Surgeri Lau & Choong	18	Klinik Dr Elvin Chong & Surgeri
19	Klinik & Surgeri Sipitang	20	Klinik Dr Teh
21	Klinik Aslam	22	Klinik Dr Mohd Jeffri & Surgeri
23	Klinik Beaufort & Surgeri (Pusat X-Ray)	24	Klinik Elopura Sdn Bhd - Jalan Dua, Sandakan
25	Klinik Berkat Beluran	26	Klinik Famili Jalan Paya
27	Klinik Berkat Sdn. Bhd	28	Klinik Koidupan
29	Klinik C F Chong	30	Klinik Kwan Associates
31	Klinik Chaw	32	Klinik Kwan Associates Pusat X-Ray
33	Klinik Cheang Poh Kau	34	Klinik Lee
35	Klinik Dan Surgeri Dr Gan	36	Klinik Lo
37	Klinik Doktor Lee	38	Klinik Lu
39	Klinik Dr Gan & Surgeri	40	Klinik M. M. Liu
41	Klinik Dr Kheng	42	Klinik Malaysia (Cawangan Jalan Pantai)
43	Klinik Malaysia (Cawangan Sesb)	44	Klinik Y. M. Lo
45	Klinik Menggatal	46	Kota Kinabalu Clinic
47	Klinik Mohamad	48	Permai Poliklinik - Likas
49	Klinik Mutiara Inanam	50	Permai Polyclinics Sdn. Bhd
51	Klinik Nasir & Surgeri	52	Poliklinik Fajar, Felda Cenderawasih
53	Klinik Papar Medical Group	54	Poliklinik Fajar, Tmn Fajar
55	Klinik Perubatan & Surgeri Dr. Ahmad	56	Poliklinik Mesra & Surgeri
57	Klinik Ruslanamin	58	Poliklinik Prisma
59	Klinik S. K. Lo Sdn. Bhd.	60	Poliklinik Rakyat - Cawangan Kota Kinabalu
61	Klinik Siau	62	Poliklinik Rakyat - Cawangan Putatan
63	Klinik Sinar	64	Polyclinic Kingfisher
65	Klinik Subha	66	Pusat Klinik Bergerak (Dr. Adinin Hj. Bachu)
67	Klinik Teo	68	Sinsuran Clinic
69	Klinik Tokou & Surgeri		

Private Medical Clinics (WP Labuan)

1	Klinik Leong Hong Yuen (Labuan)	2	Klinik Ramlee & Partners (Labuan)
3	Permai Polyclinics Labuan	4	Permai Polyclinics Labuan

Private Medical Clinics (Sarawak)			
1	Asia Clinic	2	Klinik Kotaraya Muara Tabuan
3	B. Kong-s Clinic	4	Klinik KotVaraya Satok (24 Jam)
5	Care Medical Clinic	6	Klinik L.T. Wong
7	Chong's Clinic	8	Klinik Malaysia
9	Clinic Teo	10	Klinik Penawar
11	Hans Medical Clinic	12	Klinik Robert Wong
13	Healthcare Clinic Tabuan Jaya	14	Klinik Sibu
15	Kang's Clinic	16	Klinik Tang (Jalan Jee Foh)
17	Klinik Abdul Rahaman Pozan	18	Klinik Tang (Jalan Raja)
19	Klinik Bintulu	20	Klinik Tony Sim Tong Aik
21	Klinik Bong	22	Klinik Voon
23	Klinik Chai	24	Klinik Yui
25	Klinik Chiew	26	Lau Clinic
27	Klinik Cyril Songan	28	Lau-s Clinic (Jalan Bengkel)
29	Klinik Dr James	30	Lee Fui Jin Clinic
31	Klinik Dr Sim	32	Ling-s Medical Clinic
33	Klinik Dr Kon	34	Loh Medical Clinic
35	Klinik Dr Ngui	36	Miri Medical Clinic
37	Klinik Everbright	38	Poliklinik Limlee (formerly Poli Klinik)
39	Klinik Hasani	40	Siburan Union Clinic
41	Klinik Healthcare Petra Jaya	42	Sim Medical Clinic
43	Klinik Julian Wee	44	Sim-s Medical Clinic, Miri
45	Klinik Kesihatan Dr Chiam	46	Sulah Clinic
47	Klinik Khaira	48	The Key Clinic
49	Klinik Kiu	50	Union Clinic (Bau)
51	Klinik Kotaraya (Demak Laut)	52	Union Clinic
53	Klinik Kotaraya BDC	54	Wong's Clinic- Dr Wong Soon Ting

DEFINITIONS

Ambulance services	Emergency transport services that are run by staff that belong to the same management as the clinic.
Autoclaving facilities	Availability of the autoclave apparatus for the purpose of sterilisation of equipment used on patients. The apparatus may be in house or located away from the clinic premises
Diagnostic/Imaging room	Designated room for x-ray device(s)
Electrocardiogram machine (ECG)	An electrical device intended for studying the activity of the heart based on changes in the voltage between pairs of electrodes placed at certain points on the skin
General radiology unit (X-ray machine)	A device used to acquire an X-ray image to visualise structures within the body
Management of chronic diseases	Management of any condition that has a protracted (usually ≥ 6 months) clinical course
Nebuliser	A device used to reduce a liquid medication to extremely fine cloudlike particles; useful in delivering medication to deeper parts of the respiratory tract
Occupational health	Health services concerned with the physical, mental and social well-being of an individual in relation to his/her working environment and with the adjustment of individuals to their work.
Peak flow meter	A device used to measure air flow out of the lungs called the peak expiratory flow rate (PEFR) as a person forcefully blows into the device
Primary care	Basic or general healthcare focused on the point at which a patient ideally first seeks assistance from the medical care system
Primary care clinic	A clinic providing primary care services to the community. This service can be provided by a medical officer, medical assistant and/or a specialist in the field of family medicine
Public sector	Umbrella term for bodies which responsibilities are set out in law by the state. In the Malaysian healthcare system, this encompasses the Ministry of Health (MOH), armed forces and university hospitals. As the primary care facilities under the armed forces and universities were not involved in the survey, the public sector includes MOH <i>Klinik Kesihatan</i> only.
Secondary care	Specialist care provided on an ambulatory or inpatient basis, usually following a referral from primary care
Tertiary care	The provision of highly specialised services in ambulatory and hospital settings
Ultrasound machine	Imaging equipment which uses high-frequency sound waves to create images of internal structures.