



**ORAL HEALTH PROGRAMME
MINISTRY OF HEALTH
MALAYSIA**

**2018
ANNUAL
REPORT**

DECEMBER 2019

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**ORAL HEALTH PROGRAMME
MINISTRY OF HEALTH MALAYSIA**

DECEMBER 2019

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Foreword

PRINCIPAL DIRECTOR OF ORAL HEALTH
MINISTRY OF HEALTH MALAYSIA



Year 2018 was a year of change. Following the 14th General Elections in May 2018, we welcome the new line-up of top management, the Honourable Minister of Health YB Datuk Seri Dr Haji Dzulkefly bin Ahmad and the Honourable Deputy Minister of Health YB Dr Lee Boon Chye. Our continued support goes to the commitment of the new government emphasizing on good governance and transparency in ensuring greater wellbeing of the *rakyat*. On 31 May 2018 the Oral Health Programme bid a sad farewell to YBhg. Datuk Dr Noor Aliyah binti Ismail who left on retirement. We offer our most sincere appreciation and gratitude to YBhg. Datuk who has steered and guided the Programme for almost three years.

In year 2018, focus were given to promotive and preventive strategies in community programmes such as screening for risk habits for smoking among schoolchildren under the *Kesihatan Oral Tanpa Asap Rokok* (KOTAK) programme and empowering the community towards self-oral healthcare through the *Kesihatan Oral dan Badan Agama* (KOA) programme involving various agencies in campaigns and public oral health awareness. Public awareness on oral cancer and the importance of early detection through Mouth Self Examination (MSE) was also emphasized. Towards improving access to quality healthcare especially for adults, the Oral Health Programme had increased the number of dental clinics providing daily outpatient services to 553 as compared to 523 in 2017. With the concerns in high prevalence of periodontal conditions among Malaysian adults, the standard operating procedure for management of periodontal condition in primary oral healthcare clinic was developed and approved in November 2018. A structured programme on oral healthcare for young adults was also finalized and will be implemented nationwide in 2019.

With the theme “Improving Universal Access to Quality Healthcare”, good governance and organizational capacity was further emphasized. In 2018, the MS ISO 9001:2015 was in place and the additional feature of risk management will further improve the effectiveness in the provision of quality care. Finally, after much deliberation and multiple discussions the much-awaited Dental Act 2018 was consented by His Majesty the King on 26 June 2018. In preparation for the implementation of the New Dental Act 2018, roadshows were deliberated to inform stakeholders on the new act.

With limited posting opportunities in the government service, the approval for new dental officers UG41 appointed on contract basis to do Locum after the compulsory service was obtained. As of December 2018, 1,320 Dental Officers completed the New Dental Officer (NDO) programme. Ongoing opportunities in postgraduate and post-basic training were provided in 2018.

A notable collaborative effort in 2018 was the first Oral Healthcare Seminar 2018 conducted on 18-19 January 2018. It is jointly organized by the Malaysian Dental Public Health Association and the Malaysian Dental Therapists Association with the Embassy of Japan in Malaysia, Ministry of Economy, Trade and Industry Japan and the Association for Overseas Technical Cooperation and Sustainable Partnership. The programme provided its support by sending almost 200 participants attending the seminar. The event provided a good opportunity to understand better how Japan has obtained positive impact of their policies and campaign towards promoting oral health in Japan. On a similar note, the 5th Malaysian Dental Technologists' Conference and Trade Exhibition was successfully conducted on the 28-30 September 2018 at Hotel Berjaya Times Square with the theme "Forging towards Global Professional Excellence". A total of 400 participants from the Ministry of Health, Ministry of Defence and the public and private universities attended the event.

Malaysia participated in the 10th Asian Chief Dental Officers' Meeting (ACDOM) 2018 with the theme "Special Care Dentistry" conducted on the 29-31 August 2018 in Kathmandu, Nepal. The event was jointly organized by Malaysia, Nepal and Thailand where Malaysia is the permanent secretariat since the establishment of ACDOM. A total of 17 Chief Dental Officers from Asian countries participated in this event.

The Oral Health Research day 2018 with the theme "Today's vision: Tomorrows reality" was conducted on 3 October 2018 at the Putrajaya International Convention Centre. The event was officiated by the Director General of Health, YBhg. Datuk Dr Noor Hisham bin Abdullah. This event serves as a platform for members of the Malaysian dental profession to share research projects and findings. Many of the results presented were timely and invaluable in preparation for the next Malaysia Plan.

As we share common values and goals, I thank each and every member of the Oral Health family for their contributions in 2018. Never lose sight of the ultimate reason for our existence in MoH - serving the rakyat, and working towards fulfilling our Key Performance Indicators and the oral health goals of our National Oral Health Plan 2011-2020.



YBHG. DR NOMAH BINTI TAHARIM
PRINCIPAL DIRECTOR OF ORAL HEALTH
MINISTRY OF HEALTH
MALAYSIA

HIGHLIGHTS 2018

Oral Healthcare Seminar 2018, Official Residence of Ambassador of Japan 18 January 2018



The Oral Healthcare Seminar 2018 was the first collaborative efforts between the Japanese Government and the Malaysian counterpart in relation to Oral Healthcare to the public. The agencies involved were METI, AOTS, MADPHS and the Oral Health Programme, Ministry of Health Malaysia. The seminar was conducted on the 18 January 2018 at the official residence of the Japanese Ambassador to Malaysia. This platform was a good opportunity and a starting point of sharing of experience between Japan on their oral healthcare initiatives and Malaysia on the current oral healthcare programmes to foster further understanding and towards improving the oral health of the community. The Ambassador of Japan has graciously officiated this first Oral Healthcare Seminar 2018.

“Management of Periodontal Conditions in Primary Oral Healthcare Clinics” Workshop, 7-9 August 2018



The standard operating procedure (SOP) in managing periodontal conditions at primary oral healthcare clinic was developed in 2018. Following which a workshop was conducted on the 7-9 August 2018 to train state facilitators prior to the implementation of this initiative. The workshop was graced by YBhg. Dr Nomah binti Taharim, the Principal Director of Oral Health. The workshop is a collaborative effort between the primary oral healthcare and specialist oral healthcare in particular the periodontists who provides valuable guidance in conducting periodontal health screening, management of periodontal cases and referral of complex cases. A total of 40 Dental Officers participated in this workshop. The implementation of the SOP will begin in January 2019. Issues and matters arising will be monitored and corrective measures for improvement will be undertaken.

Ikon Gigi (iGG) Convention in Kota Bharu, Kelantan 12 August 2018



The first iGG Convention was held in August 2018 in Kota Bharu, Kelantan which was officiated by Principal Director of Oral Health, Ministry of Health Malaysia. It was estimated about 500 participants (which consists of *Ikon Gigi* and their facilitators) attended the convention. The *Ikon Gigi* Programme was implemented with the aim to empower volunteers from communities to act as facilitators in raising awareness of the members of their community on the importance of oral health. The activities during the convention include ‘iGG On the Go’ oral and poster competitions and a dialog session between iGG and the Principal Director of Oral Health.

Oral Health Research Day 2018, 3 October 2018



Oral Health Research Conference 2018 with the theme “Today’s Vision Tomorrow’s Reality” was successfully held at Putrajaya Convention Centre (PICC) on 3 October 2018, with the objectives of disseminating oral health research findings and exposing young researchers to presentation skills in research. The event was officiated by the Director General of Health, Ministry of Health Malaysia. A total of 14 oral presenters and 15 poster presenters had successfully participated in the event where the audience consists of experts in various areas. This conference will be a yearly event as disseminating of oral health research findings is crucial as it becomes evidence that may translate into actions.

Mouth Cancer Awareness Week, 11 – 17 November 2018



The Mouth Cancer Awareness Week was held from 11-17 November 2018. Many oral cancers related activities were held at the states during this week. At the national level, in collaboration with Oral Cancer Research & Coordinating Centre (OCRCC), Mouth Cancer Awareness Week was launched on the 11 November 2019 at Taman Botani Negara, Kuala Lumpur. The Principal Director of Oral Health, YBhg. Dr. Nomah binti Taharim officiated the launch. Activities include a 2.3 km walkathon, 5 km fun run, mouth cancer screening, health screening and instaVideo competition.

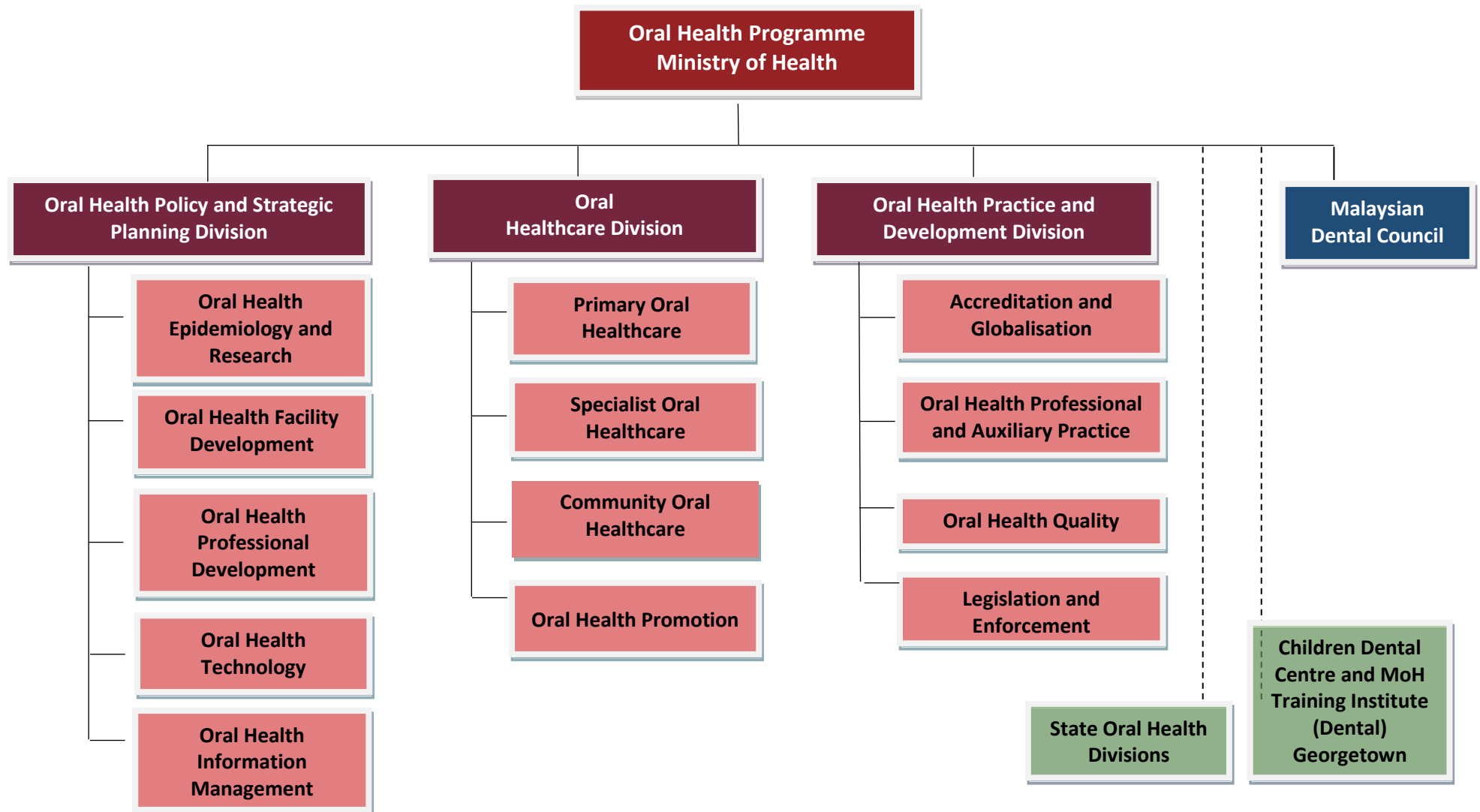
Launching of Commercialization of Stance Wheel Innovation Product, 19 December 2018



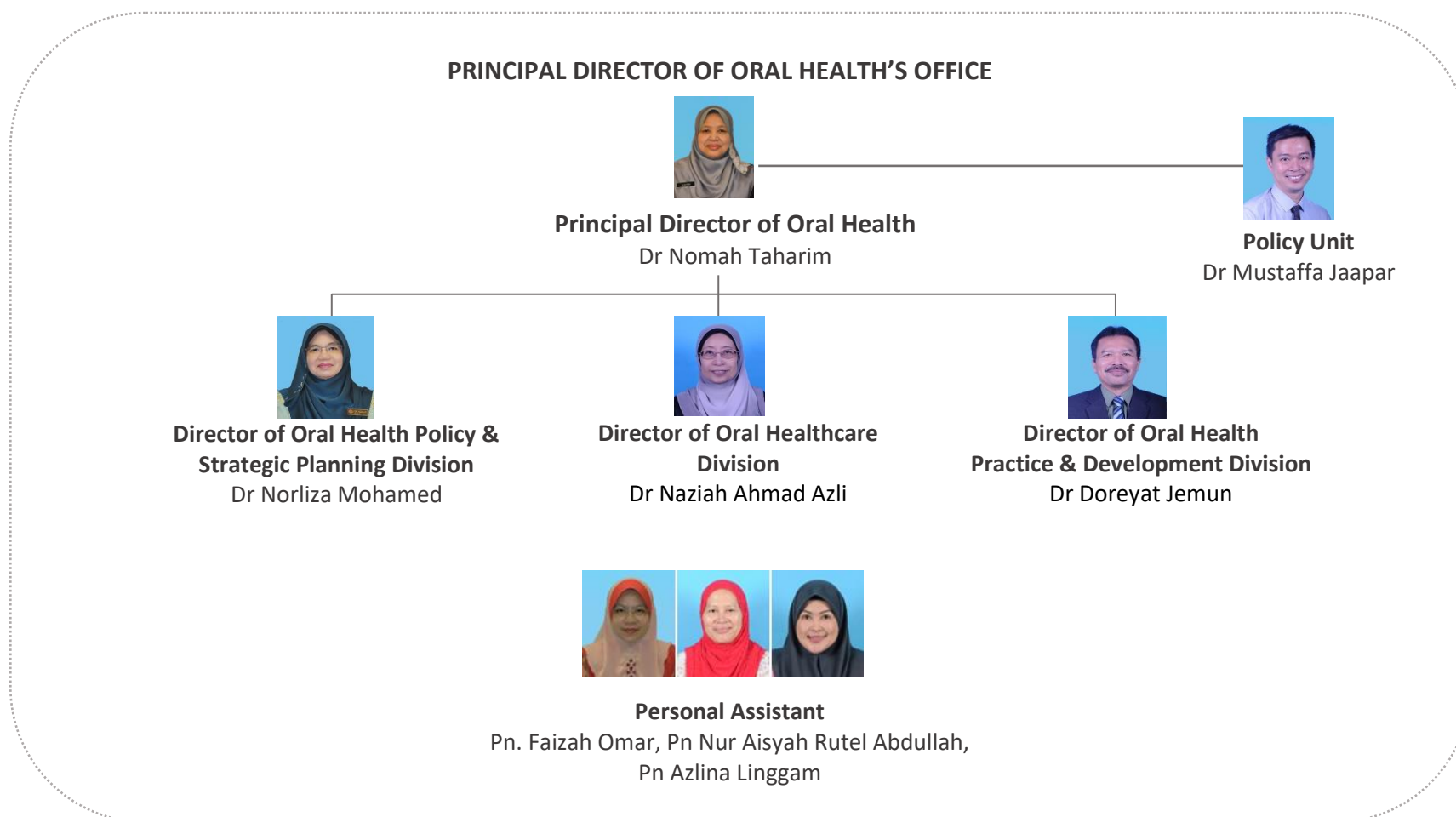
The ‘Stance Wheel’ is an innovative product designed to help and facilitate examination and simple treatment of disable patients in the dental clinics. The innovative product was also found to be suitable for use in physiotherapy units, senior care centers and the Community Rehabilitation Center (PDK) to assist during healthcare and personal hygiene of special needs patients.

The launching of commercialization of ‘Stance Wheel’ was officiated by the Honourable Deputy Minister of Health, YB Dr Lee Boon Chye on 19 December 2018 at Dewan Serbaguna, Block E7, MoH Malaysia, Putrajaya. The event aimed to introduce ‘Stance Wheel’ innovative product to the public prior entering the market for commercialization as well as for the recognition and appreciation to Perlis State Dental Health Division, Ministry of Health, Malaysian Design Council (MRM) and its commercial partner Medical Apparatus Supplies Sdn. Bhd. (MASSB) for the great collaboration and its innovative product.

ORGANISATION STRUCTURE ORAL HEALTH PROGRAMME, MINISTRY OF HEALTH MALAYSIA



MANAGEMENT AND PROFESSIONAL STAFF (as of 1st JULY 2018)



ORAL HEALTH POLICY & STRATEGIC PLANNING DIVISION



ORAL HEALTH EPIDEMIOLOGY AND RESEARCH

Dr Habibah Jacob @ Ya'akub, Dr Nurrul Ashikin Abdullah,
Dr Azura Abdullah, Dr Nurulasmak Mohamed, Pn Norazah Yusof



ORAL HEALTH INFORMATION & MANAGEMENT

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Cik Norjanah Mohd Nawi, En Gauthama Dasa a/l Edwin, Pn Julaiha Mohd Sarif



ORAL HEALTH PROFESSIONAL DEVELOPMENT

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Dr Azizi Ab Malek, Dr Nurul Salwa Che Abdul Rahim



ORAL HEALTH TECHNOLOGY

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ORAL HEALTH FACILITY DEVELOPMENT

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Pn Sulhana Ismail, En Zainudin Abdul Majid

ORAL HEALTHCARE DIVISION



PRIMARY ORAL HEALTHCARE

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Dr Susan Shalani a/p Gnanapragasam, Pn Zabedah Othman



COMMUNITY ORAL HEALTHCARE

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Pn Jeyandra Ghandi a/p Chelliah, Pn Norpahzila Wati Minhad



ORAL HEALTH PROMOTION

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Pn Haziah Hassan, Cik Umi Khairul Abdul Kadir, Pn Norliyan Mustaffa



SPECIALIST ORAL HEALTHCARE

Dr Mazlina Mat Desa, Dr Nazita Yaacob,
Dr Noor Svahidah Hisamuddin, Cik Azirah Muhammad

ORAL HEALTH PRACTICE & DEVELOPMENT DIVISION



PROFESSIONAL & AUXILIARY ORAL HEALTH PRACTICE

Dr Che Noor Aini Che Omar, Dr Rohayati Mohd Noor,
Pn Fatimah Rahman, En Abd Rahaman Jaafar, Pn Arbiah Basri, Pn Sarina Othman



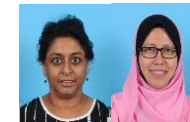
ORAL HEALTH QUALITY

Dr Leslie Sushilkumar a/I D. Geoffrey,
Dr Siti Nur Baiduri Mohd Jaini, Pn Norliza Jamalludin



ACCREDITATION & GLOBALIZATION

Dr Norashikin Mustapha Yahya, Dr Nur Diana Ab Latif



LEGISLATION & ENFORCEMENT

Dr Elise Monerasinghe, Dr Haznita Zainal Abidin

MANAGEMENT AND ADMINISTRATIVE



Pn Suzalina Mohd Rosly, En Norazlan Ithnin, Pn Jamillah Sha'ari, Pn Wan Ismawati Wan Yusof, En Mohd Razwin Safrudin, Pn Norulhuda Ghazali,
En Ahmad Razaidi Mohd Othman, Atika Wahit, En Mustafar An Nor Abdul Ghani, Pn Nurul Asyikin Muhamad, Pn Rahanah Mad Nor, Salasiya Ali,
Pn Maznah Sa'at, Salmah Liza Mohd Salleh, En Raymond Rengas, En Shahrul Naim Saad, Pn Dura Aziqa Mazlan, En Mohd Raszali Mahmud,
En Mohd Fairus Arshad, Zulhairi Abd Muhid, En Fadila Hashim, En Raimi A Razak

Vision of the Ministry of Health

A nation working together for better health

Mission of the Ministry of Health

To lead and work in partnership

To facilitate and support the people to:

- attain fully their potential in health
- appreciate health as a valuable asset
- take individual responsibility and positive action for their health

To ensure a high quality system that is:

- equitable
- affordable
- efficient
- technologically appropriate
- environmentally adaptable
- customer centred
- innovative

With emphasis on:

- professionalism, caring and teamwork value
- respect for human dignity
- community participation

Mission of the Oral Health Programme

To enhance the quality of life of the population through the
promotion of oral health
with emphasis on patient-centered care and
the building of partnerships for health

RESOURCE MANAGEMENT

FINANCIAL RESOURCE MANAGEMENT

FINANCIAL MANAGEMENT AT PROGRAMME LEVEL

The Oral Health Programme (OHP) received a reduction in allocation of operational budget in 2018 with a total adjusted operational allocation of RM910,058,185.00; (*Peruntukan Di Pinda*) -0.45 per cent less of 2017 and 5.16 per cent above that of 2016 (**Table 1**).

Table 1: Adjusted Operational Allocation, Oral Health Programme, 2010 to 2018

Year	Emolument (RM)	Services (RM)	Asset (RM)	Total (RM)
2010	365,771,400.00	72,337,947.00	1,649,159.00	439,758,506.00
2011	425,297,450.00	92,502,300.00	3,350,000.00	521,149,750.00
2012	433,309,400.00	92,914,975.00	5,952,027.00	532,176,402.00
2013	517,050,700.00	94,499,420.00	5,678,281.00	617,228,401.00
2014	591,410,587.00	99,517,656.00	40,868,344.00	731,796,587.00
2015	664,549,726.00	105,619,709.00	36,521,728.00	806,691,163.00
2016	764,288,702.00	101,138,772.00	-	865,427,474.00
2017	815,182,671.00	98,947,857.00	-	914,130,528.00
2018	808,421,900.00	101,636,285.00	-	910,058,185.00

Source: Account Division, MoH 2018

Expenditures covered activities under the following:

- Dasar Sedia Ada*;
- Dasar Baru*;
- One-off;
- Latihan Dalam Perkhidmatan* (In-service training) and
- MS ISO 9001 activities.

The final expenditure of RM910,056,966.00 showed spending of 100.00 per cent above the final adjusted allocation received for the year (**Table 2**). Expenditures under *Dasar Sedia Ada* included *Pengurusan Kesihatan Pergigian* (Administration - Financial Code 030100), *Kesihatan Pergigian Primer* (Primary Oral Healthcare - Financial Code 030200), *Kesihatan Pergigian Masyarakat* (Community Oral Healthcare - Financial Code 030300), and *Kesihatan Pergigian Kepakaran* (Specialist Care - Financial Code 030400).

Table 2: Adjusted Budget Allocation & Expenditures, Oral Health Programme MoH, 2018

Activity	Program Code	Final Adjusted Allocation (RM)	Final Expenditures (RM)	Percentage of Final Expenditures (%)
Dasar Sedia Ada	030000	910,058,185.00	910,056,966.00	100.00
Dasar Baru	100500	0.00	0.00	-
One-off (Assets)	110100	0.00	0.00	-
TOTAL	-	910,058,185.00	910,056,966.00	100.00

Source: Account Division, MoH 2018

FINANCIAL MANAGEMENT, ORAL HEALTH PROGRAMME

In 2018, the OHP received allocation of RM3,347,411.00 of which RM3,287,890.91 (98.22 per cent) was spent (**Table 3**). Allocations were for the following activities:

- Management of Oral Health Programme
- Primary Oral Healthcare
- MoH Management (Innovation Award)
- In-service training
- Research & Development
- ICT Facility

The operating budget under Financial Codes 030100 and 030200 included the operating costs for the Programme, the Malaysian Dental Council (MDC) and other activities at the Ministry level.

Table 3: Adjusted Budget Allocations and Expenditures, Oral Health Division, MoH, 2018

Activity	Activity Code	Adjusted Allocation (RM)	Final Expenditures (RM)	Percentage of Final Expenditures to Initial Allocations (%)
Management of Oral Health	030100	1,848,110.00	1,793,715.23	97.06
Primary Oral Healthcare	030200	220,900.00	220,662.11	99.89
Low Value Assets & Assets	070300	7,390.00	7,380.00	99.86
In-service Training	00105	535,011.00	534,115.81	99.83
Research & Development	00500	126,000.00	125,755.90	99.81
ICT Facility	00800	610,000.00	606,261.86	99.39
TOTAL	-	3,347,411.00	3,287,890.91	98.23

Source: OHP MoH 2018

FUNDS FOR LATIHAN DALAM PERKHIDMATAN (LDP)

The Programme also received funds worth RM535,011.00 for LDP of which 99.83 per cent (RM534,115.81) was spent.

MONITORING STATE FINANCES

The OHP also monitored allocation and expenditure received by the states. In 2018, under *Dasar Sedia Ada*, Sarawak received the highest allocation, followed by Selangor and Sabah. A total of 11 states or institutions spent more than their initial allocation due to the increase in emoluments (**Table 4**).

Table 4: Adjusted Budget Allocations and Expenditures under Existing Policies by State and Institution, 2018

State	Adjusted Allocation (RM)	Final Expenditure (RM)	Percentage of Final Expenditure to Initial Allocation (%)
Perlis	18,992,080.00	19,292,366.28	101.58
Kedah	58,671,020.00	62,325,773.00	106.23
Pulau Pinang	44,642,384.53	52,393,965.86	117.36
Perak	76,833,342.00	83,297,659.54	108.41
Selangor	83,374,829.92	91,553,036.58	109.81
Negeri Sembilan	50,957,799.00	54,530,991.00	107.01
Melaka	37,187,768.93	39,849,143.08	107.16
Johor	72,607,642.00	77,136,856.35	106.24
Pahang	65,909,892.58	69,582,727.38	105.57
Terengganu	71,174,859.65	62,786,092.07	88.21
Kelantan	65,954,150.00	70,404,808.78	106.75
Sabah	77,920,817.00	81,394,262.01	104.46
Sarawak	91,756,476.33	96,906,615.24	105.61
FT KL & Putrajaya	51,271,349.00	52,892,682.42	103.16
FT Labuan	3,873,200.00	3,951,488.85	102.02
OHP, MoH	2,069,010.00	2,014,377.34	97.36
PPKK* & ILKKM**	420,000.00	353,066.96	84.06
HKL	8,220,000.00	8,426,341.08	102.51
IMR	704,000.00	634,692.85	90.16
TOTAL	882,615,620.94	929,898,860.01	105.36

Source: Financial Unit, OHP MoH 2018

* PPKK: Pusat Pergigian Kanak-Kanak

**ILKKM: Institut Latihan Kementerian Kesihatan Malaysia

HUMAN RESOURCE MANAGEMENT

The oral health workforce in the MoH consists of dental officers (including dental specialists), dental auxiliaries (dental nurses, dental technologists and dental surgery assistants) as well as training (tutors) and support staff (attendants, administrative staff and drivers).

DISTRIBUTION OF THE ORAL HEALTH WORKFORCE

Dental Officers Posts

In 2018, there were a total of 3,839 permanent posts for dental officers of which 80 per cent were filled. The number remained status quo since no new posts were approved since 2016 (**Table 5**). Majority of the posts were located in Peninsular Malaysia (**Table 6**).

Table 5: Percentage of filled Dental Officer Posts, 2018

Year	P	F	% F
2015	3,448	3,277	95.0
2016	3,839	3,647	95.0
2017	3,839	3,418	89.0
2018	3,839	3,095	80.6

P = Posts F=Filled

Source: OHP MoH

Table 6: Distribution of Dental Officer Posts, 2018

State/ Hospital/ Institutions	P	F	% F
Perlis	80	60	75.0
Kedah	272	198	72.8
Pulau Pinang	197	184	93.4
KLPM	38	37	97.4
Perak	315	273	86.7
Selangor	371	353	95.1
FT Kuala Lumpur & Putrajaya	202	183	90.6
Negeri Sembilan	223	210	94.2
Melaka	162	139	85.8
Johor	376	286	76.1
Pahang	342	250	73.1
Terengganu	283	228	80.6
Kelantan	290	221	76.2
Hospital / Institutions	46	40	86.9
Peninsular Malaysia	3,218	2,682	83.3
Sabah	280	172	61.4
Sarawak	328	235	71.6
FT Labuan	13	6	46.2
East Malaysia	621	413	66.5

P = Posts F=Filled

Source: OHP MoH

Dental Specialist Posts

There were only 244 posts for clinical dental specialists in 2018 with 116 per cent filled. 90 per cent of Dental Public Health Specialist posts were filled in 2018 as compared to 2017 (**Table 7**). Majority of the posts were located in Peninsular Malaysia (**Table 8**). The posts for clinical dental specialists are flexible as the posts can be interchangeable between disciplines to cater for postgraduates re-joining the workforce.

Table 7: Percentage of filled Dental Specialist Posts, 2018

Year	Clinical Dental Specialist			DPH Specialist		
	P	F	% F	P	F	% F
2015	244	215	88.1	-	-	-
2016	244	229	93.8	94	70	74.4
2017	244	261	106.9	94	90	95.7
2018	244	284	116.4	94	85	90.4

P = Posts F=Filled

Source: OHP MoH

Table 8: Distribution of Dental Specialist Posts, 2018

State/ Hospital/ Institutions	Clinical Dental Specialist			DPH Specialist		
	P	F	% F	P	F	%F
Perlis	5	6	120	1	0	0
Kedah	15	18	120	4	3	75
Pulau Pinang	15	16	106.6	4	3	75
ILKKM	1	1	100	2	2	100
Perak	18	23	127.7	6	5	83.3
Selangor	35	40	114.2	7	7	100
FT Kuala Lumpur & Putrajaya	18	25	138.8	5	5	100
Negeri Sembilan	19	19	100	4	3	75
Melaka	12	10	83.3	4	4	100
Johor	20	28	140	6	5	83.3
Pahang	13	17	130.7	6	4	66.6
Terengganu	7	10	142.8	4	3	75
Kelantan	16	17	106.2	5	5	100
Hospital / Institutions	17	16	94.1	27	30	111.1
Peninsular Malaysia	211	246	116.5	85	79	92.9
Sabah	15	20	133.3	5	4	80
Sarawak	0	0	0	0	0	0
FT Labuan	18	18	100	4	2	50
East Malaysia	33	38	115.1	9	6	66.6

P = Posts F=Filled

Source: OHP MoH

There are nine (9) dental specialty disciplines recognized under the OHP. These include Oral and Maxillofacial Surgery, Orthodontic, Periodontology, Pediatric Dentistry, Oral Pathology & Oral Medicine, Restorative Dentistry, Special Needs Dentistry, Forensic Odontology and Dental Public Health.

The number of dental specialists in MoH has increased from 351 (2017) to 369 (2018) with majority were Dental Public Health Specialists. However, their number is declining since 2016 due to retirement and lack of new dental public health graduates entering the service (**Table 9**).

Table 9: Number of Dental Specialists in MoH, 2015 to 2018

Year	Discipline									
	Oral & Maxillofacial Surgery (OMFS)	Orthodontic	Periodontic	Pediatric Dentistry	Oral Pathology & Oral Medicine	Restorative Dentistry	Special Needs Dentistry	Forensic Odontology	Dental Public Health	Total
2015	60	47	34	39	11	20	3	1	109	324
2016	64	52	34	39	11	24	4	1	93	322
2017	75	64	36	38	15	28	4	1	90	351
2018	77	69	42	45	14	31	5	1	85	369

Source: OHP MoH (Exclude dental specialists undergoing gazettelement)

Dental Auxiliaries and Support Staff Posts

In 2018, 96.1 per cent of permanent posts for dental auxiliaries and 90.2 per cent of posts for support staff were filled except for dental tutors (**Table 10**). Majority of dental auxiliary posts were located in Peninsular Malaysia (**Table 11**).

Table 10: Percentage of Filled Post, 2017 to 2018

CATEGORY	2017			2018		
	P	F	% F	P	F	% F
Dental Therapist	2,951	2,836	96.1	2,952	2,859	96.8
D/Therapist (Tutor)	36	19	52.8	36	26	72.2
Dental Technologist	1,003	941	93.8	1,004	920	91.6
D/Technologist (Tutor)	18	9	50	18	10	55.6
Dental Surgery Assistant	3,978	3,842	96.6	4,101	3,983	97.1
Dental Auxiliaries	7,986	7,647	95.8	8,111	7,798	96.1
Support Staff	4,471	3,978	89.0	4,423	3,991	90.2
TOTAL *	12,457	11,625	93.3	12,534	11,789	94.0

P = Posts F=Filled (*Total number including "Jawatan Kumpulan")

Source: OHP MoH

Table 11: Distribution of filled post, 2018

State/ Hospitals/ Institutions	D/Therapist			D/Technologist			DSA		
	P	F	% F	P	F	% F	P	F	% F
Perlis	61	61	100.0	22	21	95.5	93	89	95.7
Kedah	184	183	99.5	73	66	90.4	258	252	97.7
Pulau Pinang	182	176	96.7	43	38	88.4	266	259	97.4
ILKKM	25	19	76.0	8	8	100.0	23	21	91.3
Perak	237	230	97.0	80	70	87.5	345	337	97.7
Selangor	244	240	98.4	98	97	99.0	408	390	95.6
FT Kuala Lumpur & Putrajaya	143	138	96.5	47	42	89.4	247	235	95.2
Negeri Sembilan	138	136	98.6	58	52	89.7	226	219	96.9
Melaka	103	102	99.0	34	31	91.2	180	176	97.8
Johor	190	184	96.8	74	66	89.2	353	340	96.3
Pahang	207	205	99.0	62	59	95.2	328	322	98.2
Terengganu	154	152	98.7	73	70	95.9	275	272	98.9
Kelantan	201	198	98.5	79	74	93.7	251	247	98.4
Hospitals/ Institutions	14	11	78.6	13	9	69.2	63	56	88.9
Peninsular Malaysia	2098	2050	97.7	764	703	92.0	3316	3215	97.0
Sabah	382	381	99.7	104	101	97.1	358	358	100.0
Sarawak	429	407	94.9	118	111	94.1	410	395	96.3
FT Labuan	15	14	93.3	3	3	100.0	14	14	100.0
East Malaysia	826	802	97.1	225	215	95.6	782	767	98.1

P = Posts F=Filled

Source: OHP MoH

DENTAL OFFICERS ON CONTRACT WITH THE MINISTRY

New dental officers in MoH were appointed on contract basis beginning 2017 for a period of three years with three (3) recruitment exercises conducted annually. A total of 2,453 new contract dental officers were appointed since 2017 (**Table 12**).

Table 12: Contract Dental Officers in MoH, 2017 to 2018

Number of Dental Officer on Contract		
Year	2017	2018
1 st cohort	526	708
2 nd cohort	441	286
3 rd cohort	362	130
Total	1,329	1,124

Source: OHP MoH

NEW PERMANENT POSTS APPROVED

None of new permanent post was approved in 2018. However, 1,124 posts have been allocated for recruitment of contract dental officers and 149 posts for dental auxiliaries (**Table 13**).

Table 13: New Posts Approved, 2018

Category of Personnel	No. of Post Approved
Dental Specialist	
• Grade UG41/44/48/52/54	0
Dental Officer (Contract)	
• Grade UG41	1,124
ICT Officer (<i>Pegawai Teknologi Maklumat</i>)	
• Grade F44	0
Dental Therapist	
• Grade U29/32	1
• Grade U32	0
• Grade U36	0
• Grade U38	0
• Grade U40	0
Dental Technologist	
• Grade U29/U32	1
• Grade U32	0
• Grade U36	0
• Grade U40	0
Dental Surgery Assistant	
• Grade U19	122
• Grade U22/U24	1
• Grade U26	23
Support Staff	
• Assistant Executive Officer (<i>Penolong Pegawai Tadbir</i>)	0
• Administrative Assistant (<i>Pembantu Tadbir N17/N22</i>)	0
• Attendant (<i>Pembantu Perawatan Kesihatan Grade U3/U12</i>)	0
• Driver (<i>Pemandu Kenderaan Bermotor R3/R6</i>)	0
TOTAL	1,273

Source: OHP MoH

PROMOTION EXERCISE

In 2018, a total of 1,069 dental officers from various grades received promotion of which 63 were dental specialist promoted to grade UG56 (**Table 14**).

Table 14: Promotion Exercise for Dental Specialist and Officer, 2018

Category	Grade											Total
	Khas A	Khas B	Khas C	Utama A	Utama B	Utama C	UG56	UG54	UG52	UG48	UG44	
Specialist	1	3	2	1	2	2	13	35	4	-	-	63
Officer	-	-	-	-	-	-	-	42	118	248	598	1,006
Total	1	3	2	1	2	2	13	77	122	248	598	1,069

Source: OHP MoH

For dental auxiliaries, 326 personnel from various schemes were also promoted in 2018 (**Table 15**).

Table 15: Promotion Exercise for Dental Auxiliaries, 2018

Category	Grade								Total
	U40	U38	U36	U32	KUP U32	U29	U26	U24/ U22	
Dental Therapist	1	13	59	32	59	81	0	0	245
Dental Technologist	1	1	4	7	14	0	0	0	33
Dental Surgery Assistant	0	0	0	0	0	0	20	34	56
Total	2	14	63	39	73	81	20	34	326

Source: OHP MoH

NETT GAIN/LOSS OF DENTAL OFFICERS

In 2018, a total of 1,124 contract dental officers joined the MoH to undergo the compulsory service while 443 left the service due to various reasons, hence a net gain of 681 officers. There was a steady net gain of dental officers from 2005 to 2014, however a decrease in net gain was recorded in 2015 as the compulsory period was further reduced to one (1) year (**Table 16**).

Table 16: Nett Gain/Loss of Dental Officers in MoH, 2011 to 2018

	2011	2012	2013	2014	2015	2016	2017	2018
Joined MoH	415	514	693	604	504	880	1,329	1,124
Left MoH	105	96	129	219	281	270	267	443
Retired (Compulsory)	13	3	1	16	12	7	16	13
Retired (Optional)	2	3	5	4	9	9	14	12
Resigned	82	89	122	198	260	252	237	414
Released with Permission	7	0	0	0	0	0	0	0
Other Reasons	1	1	1	1	0	2	0	4
Net Gain/Loss	310	418	564	385	223	610	1,062	681

Source: OHP MoH

ORAL HEALTH FACILITY DEVELOPMENT

ORAL HEALTH FACILITIES

The OHP has a comprehensive network of oral healthcare facilities located at health clinics, standalone clinics, hospitals, schools and institutions to ensure that services can be delivered to the communities.

Oral healthcare services are also provided at the Urban Transformation Centres (UTCs) and Rural Transformation Centres (RTCs) facilities which were established by the Ministry of Finance (MoF) and operationalised by the MoH. The UTCs provided daily outpatient dental care services while the RTCs provided dental care services via the outreach programme. The oral healthcare services were also delivered to the communities via Mobile Dental Clinics. There are various types of mobile dental clinics which include buses, trailers, lorries and caravans. In addition, the mobile dental teams (*Pasukan Pergigian Bergerak* (PPB)) provide outreach services to the schoolchildren and populations in sub-urban and remote areas.

In 2018, there were 1,726 dental facilities equipped with 3,282 dental units in the MoH (**Table 17**) and 602 mobile dental teams, with an estimated 2,235 mobile dental units (**Table 18**).

Table 17: Oral Health Facilities in MoH, 2018

Facility Type	Facilities
Stand-alone Dental Clinics*	56
Dental Clinics in Health Centres	570
Dental Clinics in MCH (KKIA)	16
Dental Clinics in Hospitals	70
School Dental Clinics	925
Urban Transformation Centres (UTC)	22
Rural Transformation Centres (RTC)	5
Others: IMR, Prisons, <i>Maktab Rendah Sains MARA (MRSM) Pusat Serenti</i>, Handicapped Children's Centres, Children Spastic Centres, Puspanita, Perbadanan	21
Total (Static facility)	1685
Mobile Dental Clinics	32
Mobile Dental Laboratories	4
1Malaysia Mobile Dental Clinics - Bus - Boat	1 2
Total (Mobile facility)	39
TOTAL	1685

Source: *Draf Taburan Fasilitas Kesehatan Pergigian, 2018*, Health Informatics Centre, MoH as of 31.12.2018

* Including Children Dental Centre & Malaysian MoH Training Institute (Dental), Penang

Table 18: Mobile Dental Teams in MoH, 2018

Facility Type	Facilities	Dental Chairs
Mobile Dental Team		
• School Mobile Dental Teams (Primary and Secondary Schools)	461	} 2,235 (portable)
• Pre-School Mobile Dental Teams	136	
• Elderly & Special Needs Mobile Dental Teams	5	
Total	602	2,235

Source: "Draf Taburan Fasilitas Kesehatan Pergigian, 2018"
Health Informatics Centre, MoH as of 31.12.2018

ORAL HEALTH DEVELOPMENT PROJECTS UNDER THE MALAYSIA PLAN (MP)

Development Projects under the 11th Malaysia Plan (11th MP)

The 11th Malaysia Plan (11th MP) is the five-year development plan for Malaysia which covers the year 2016-2020. The MoH as the lead agency for health will continue to improve people's oral health by providing universal access to quality oral health care through the development of oral health facilities. In 2018, there were five (5) dedicated oral health development projects as listed below:

- a) Standalone Dental Clinics:
 - Dental Clinic Daro, Mukah, Sarawak.
 - Dental Clinic Pasir Akar, Besut, Terengganu.
 - Upgrading of Dental Clinic Tronoh, Kinta Perak.
- b) Health Clinic Type 3 and Dental Specialist Clinic Precinct 6, Putrajaya.
- c) Quarters at Dental Clinic Chiku 3, Gua Musang.

In addition, there were seven (7) development projects brought forward from 10th MP as follows:

- a) Seven (7) projects which include Standalone Dental Clinic, Dental Specialist Centre and Upgrade facilities:
 - Dental Clinic Bukit Selambau, Kedah.
 - Dental Clinic Kluang, Johor.
 - Dental Clinic Tanjung Karang, Kuala Selangor.
 - Dental Specialist Clinic Kota Setar, Kedah.
 - Dental Specialist Centre Sabah.
 - Dental Block at Health Clinic Sungai Tekam Utara, Jerantut, Pahang.
 - Upgrading dental facilities in hospital – Pediatric Dental Department, Hospital Melaka.

Development Projects under Public-Private Initiatives (PPI)

Besides the MP projects, there were four (4) PPI project as follows: -

- Dental Clinic in Health Clinic, Dato' Keramat, FT Kuala Lumpur (under construction)
- Dental Specialist Clinics in Cyberjaya Hospital (under construction)
- Dental Clinic in Health Clinic, Jalan Cochrane, Kg Pandan, FT Kuala Lumpur (discussion phase)
- Dental Specialist Centre Cahaya Suria-Sinar Kota, FT Kuala Lumpur (discussion phase)

Development of Norms and Guidelines for New Facilities

The Policy of Operational and Oral Health Facility Planning, MoH (2019 to 2025) was drafted and distributed to the states as a guideline in planning dental facilities projects. Medical Brief of Requirements (MBoR), Standard Equipment List and Specifications of Equipment for new dental facilities were also reviewed and updated as below:

Medical Brief of Requirement for:

- Dental Clinic in KK Type 3 and Dental Specialist Clinic, Precinct 6, FT Kuala Lumpur & Putrajaya
- Dental Specialist Centre Cahaya Suria Sinar Kota, FT Kuala Lumpur & Putrajaya

Standard list of Equipments for:

- Mobile Dental Team
- Mobile Dental Clinic

Specifications of Equipments for;

- Specifications of Heavy Equipments (7 equipments)
- Specifications of Dental Laboratory Equipments (4 equipments)

PRIVATISATION OF CLINIC SUPPORT SERVICES

Privatisation of Clinic Support Services for Management of Biomedical Equipment Services under Medical Equipment Enhancement Tenure (MEET)

Continuous monitoring of MEET programme delivered by Quantum Medical Solutions (QMS) Company at *Klinik Kesihatan* and *Klinik Pergigian* were carried out by the Technical Audit organized by the Engineering Services Division, MoH. Clinics involved were:

1. *Klinik Kesihatan* and *Klinik Pergigian Kuala Lumpur, FT Kuala Lumpur & Putrajaya*
2. *Klinik Kesihatan* and *Klinik Pergigian Seri Kembangan, Selangor*
3. *Klinik Kesihatan* and *Klinik Pergigian Rembau, Negeri Sembilan*
4. *Klinik Kesihatan* and *Klinik Pergigian Sandakan, Sabah*

In addition, the Internal Audit Section, MoH also conducted an audit on the management of MEET programme at *Klinik Pergigian Miri, Sarawak* and *Klinik Pergigian Jalan Perak, Pulau Pinang*.

Privatisation of Clinic Support Services

Privatisation of Clinic Support Services for Facility and Engineering Management System (FEMS), Biomedical Equipment Management System (BEMS), Cleansing and Linen Services (CLS) and Clinical Waste Management System (CWMS) under Clinic Support Services or known as *Perkhidmatan Sokongan Klinik* (PSK).

Continuous monitoring of PSK project at the existing *Klinik Kesihatan* and *Klinik Pergigian* was conducted via Technical Audit. In 2018, the National Audit had audited the technical and document of PSK project at *Klinik Kesihatan* and *Klinik Pergigian Kepala Batas, Pulau Pinang*. This activity was coordinated by the Clinic Operation Section, Engineering Services Division MoH and involved the participation of clinic's representative from the state.

The OHP was involved as member in the Technical Specification Committee in preparing PSK tender document for the new contract (since the current contract will end in 2018), involving 11 states, including Pahang and Sabah.

In addition, the Clinic Operation Section, Engineering Services Division MoH also coordinated the development of Clinic Asset and Services Information System (CASIS) for PSK contract management in Sarawak under ADL System Sdn. Bhd. OHP was also a member of the Technical Specification Committee and Steering Committee.

Procurement of Medical and Non-Medical Equipment and Non-Ambulance Vehicles

The OHP received procurement budget under the Development Fund for year 2018 for purchasing of new, replacement, upgrading of non-ambulance vehicles, medical and non-medical equipment.

Training

The Oral Health Facility Development and Management Section collaborated with MoH Dental Technicians in conducting a course on managing dental health facilities and assets during natural disaster at Straits Hotel & Suites Melaka from 27 to 29 June 2018. The aim of the course was to develop the Standard Operation Procedure (SOP) for the management of assets during natural disasters such as floods.

ORAL HEALTH POLICY & STRATEGIC PLANNING

ORAL HEALTH PROFESSIONAL DEVELOPMENT

RECOGNITION AND ENDORSEMENT OF DENTAL POST-GRADUATE QUALIFICATIONS

Jabatan Perkhidmatan Awam (JPA) Recognition of Dental Post-graduate Qualifications

The following qualifications obtained full recognition by the Malaysian Qualifications Agency (MQA) at the meeting of the Medical Special Committee [*Jawatankuasa Khas Perubatan (JKP)*] in 2018:

- Doctor of Clinical Dentistry (Periodontology), Queen Mary University of London, United Kingdom
- Master of Clinical Dentistry (Restorative Dentistry), Newcastle University, United Kingdom
- Doctor of Clinical Dentistry (Oral Medicine and Oral Pathology), University of Western Australia, Australia
- Master in Forensic Odontology, University of Dundee, Scotland, United Kingdom

GAZETTEMENT OF DENTAL SPECIALISTS

There were four (4) meetings conducted by the Dental Specialist Gazettement and Evaluation Committee [*Jawatankuasa Penilaian Pewartaan Pakar Pergigian (JPPPP)*] in 2018 to assess and make recommendations to the Medical Special Committee (*JKP*) for gazettelement of Dental Specialists in the MoH.

Gazettelement of Dental Public Health Specialists

Six (6) Dental Public Health Specialists were gazetted in 2018 (**Table 19**).

Table 19: Dental Public Health Specialists Gazetted, 2018

No.	Name	Gazettelement Date
1.	Dr Abdull Sitar bin Abadan	23.3.2018
2.	Dr Aznilawati binti Abdul Aziz	20.3.2018
3.	Dr Haliza binti Tugeman	1.3.2018
4.	Dr Jamaliah binti Omar	23.9.2018
5.	Dr Nor Azlina binti Hashim	20.3.2018
6.	Dr Thaddius Herman Anak Maling	23.8.2018

Source: OHP MoH 2018

Gazettement of Clinical Dental Specialists

Thirty-seven (37) Clinical Dental Specialists were gazetted in 2018 (**Table 20**).

Table 20: Clinical Dental Specialists Gazetted, 2018

No.	Name	Specialty	Gazettement Date
1.	Dr Ainul Haliza binti Ab Malek	Periodontic	1.3.2018
2.	Dr Arilatha a/p Arimuthu	Restorative Dentistry	29.5.2018
3.	Dr Azizah binti Murtuzah Shekh	Restorative Dentistry	1.3.2018
4.	Dr Eizatul Aishah binti Berhan Nordin	Paediatric Dentistry	1.3.2018
5.	Dr Fauziah binti Asmail @ Ismail	Periodontic	6.12.2018
6.	Dr Halimah binti Mohamed Noor	Paediatric Dentistry	6.3.2018
7.	Dr Heng Wei Chei	Periodontic	1.3.2018
8.	Dr Jaclyn @ Marilyn George	Orthodontic	12.10.2018
9.	Dr Jessica a/p Francis	Special Needs Dentistry	23.6.2018
10.	Dr Lee Jin Han	Orthodontic	5.3.2018
11.	Dr Lyddia binti Saffai	Orthodontic	5.3.2018
12.	Dr Mior Azrizal bin M. Ibrahim	Periodontic	7.12.2018
13.	Dr Mohamad Adib bin Jaafar	Periodontic	22.3.2018
14.	Dr Mohd Fariq bin Usoff	Orthodontic	6.3.2018
15.	Dr Mohd Nazri bin Azmi	Oral & Maxillofacial Surgery	1.3.2018
16.	Dr Mohd Safwani Affan Alli bin Awang Talip	Pediatric Dentistry	1.3.2018
17.	Dr Muhaini binti Yakob @ Yaacob	Orthodontic	13.6.2018
18.	Dr Neo Yun Zi	Orthodontic	19.3.2018
19.	Dr Nes Anak Nawi	Orthodontic	5.3.2018
20.	Dr Nik Nurhannan binti Mohd Badarudin	Pediatric Dentistry	1.3.2018
21.	Dr Noorhayati binti Raja Mohd	Restorative Dentistry	20.7.2018
22.	Dr Nor Azyytie binti Ab Rahman	Periodontic	1.3.2018
23.	Dr Nur Azliana binti Zainal	Oral & Maxillofacial Surgery	1.3.2018
24.	Dr Nur'aini binti Pungut	Restorative Dentistry	6.12.2018
25.	Dr Nurul Zatil Amali binti Ibrahim	Periodontic	1.3.2018
26.	Dr Pappathy @ Sri Devi d/o Vairavan	Oral Pathology & Oral Medicine	7.9.2018
27.	Dr Poonitha a/p Gengatharan	Periodontic	1.3.2018
28.	Dr Shazreena binti Razak	Orthodontic	22.3.2018

29.	Dr Siti Norhaiza binti Ibrahim	Orthodontic	5.3.2018
30.	Dr Sri Kavi a/p Subramaniam	Pediatric Dentistry	16.4.2018
31.	Dr Ten Li Hua	Periodontic	30.3.2018
32.	Dr Wan Aini binti Wan Yahaya	Orthodontic	1.3.2018
33.	Dr Wan Salbiah binti Wan Abdul Razak	Orthodontic	23.3.2018
34.	Dr Yap Hsiao Fern	Periodontic	4.4.2018
35.	Dr Yap Wai Ying	Restorative Dentistry	1.3.2018
36.	Dr Yew Ching Ching	Oral & Maxillofacial Surgery	30.5.2018
37.	Dr Zubaidah binti Mohammad Zubir	Orthodontic	8.5.2018

Source: OHP MoH 2018

POST-GRADUATE TRAINING FOR DENTAL PROFESSIONALS

Out of 205 dental officers who applied and passed the screening selection, 45 (22 per cent) were offered Federal Scholarships for post-graduate training in 2018 and four (4) were offered study leave without Federal Scholarship. Out of those offered with Federal Scholarships, only 40 (89 per cent) were taken up due to limited training slots (**Figure 1**), particularly at local universities.

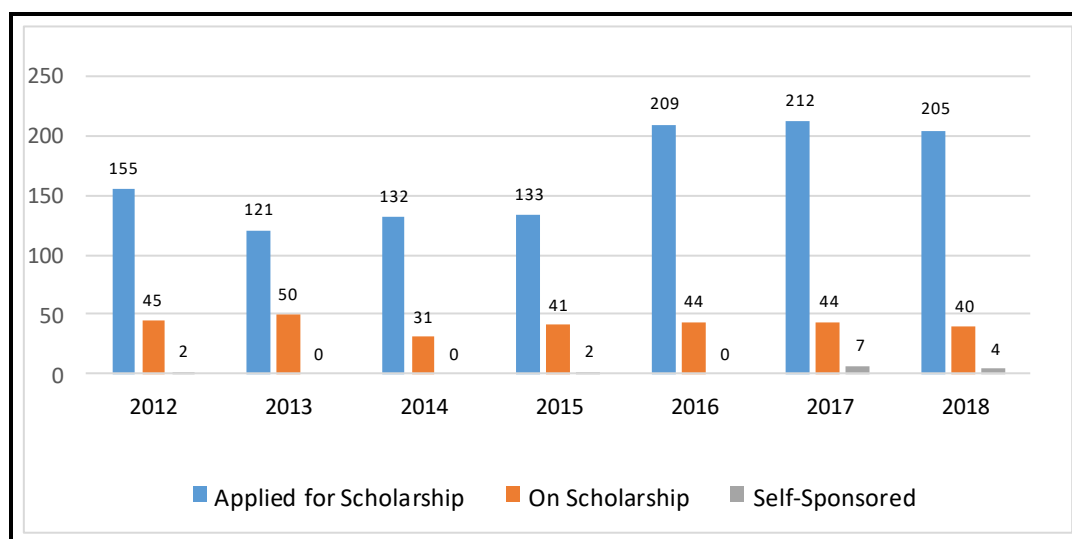


Figure 1: Dental Officers Pursuing Post-Graduate Training, 2012 to 2018

Source: OHP MoH 2018

39 dental officers pursued post-graduate training at local universities, while five (5) went abroad (Table 21).

Table 21: Dental Officers Pursuing Post-graduate Training by Discipline, 2018

Discipline	On Scholarship		Self-sponsored		Total
	Local	Abroad	Local	Abroad	
1. Oral & Maxillofacial Surgery	10	0	0	2	12
2. Orthodontics	5	0	0	0	5
3. Periodontics	7	0	0	0	7
4. Pediatric Dentistry	3	0	0	2	5
5. Restorative Dentistry	5	0	0	0	5
6. Oral Pathology & Oral Medicine	0	0	0	0	0
7. Special Needs Dentistry	0	0	0	0	0
8. Dental Public Health	9	0	0	0	9
9. Forensic Odontology	0	1	0	0	1
10. Area of Special Interest	0	0	0	0	0
TOTAL	39	1	0	4	44

Source: OHP MoH 2018

32 dental officers completed post-graduate training in 2018 (Table 22).

Table 22: Dental Officers who Completed Post-graduate Training, 2018

Discipline	Local Universities	Institutions Abroad
1. Oral & Maxillofacial Surgery	10	0
2. Orthodontics	1	5
3. Periodontic	4	3
4. Paediatric Dentistry	1	2
5. Restorative Dentistry	1	1
6. Oral Pathology & Oral Medicine	1	0
7. Special Needs Dentistry	0	1
8. Dental Public Health	2	0
TOTAL	20	12

Source: OHP MoH 2018

IN-SERVICE TRAINING FOR DENTAL PERSONNEL (LATIHAN DALAM PERKHIDMATAN)

Local In-Service Training

As of end of December 2018, 42 Consultancy Trainings and Courses were conducted and attended by Dental Specialists, Dental Officers, Dental Auxiliaries and Supporting Staff (Table 23).

Table 23: Consultancy Trainings and Courses for Specialties, 2018

No	Training Topic	Participants	Date	Expenses	Venue
1	25th MDA Scientific Convention & Trade Exhibition 2018 (SCATE)	59 Officers	26 to 28 January 2018	RM40,651.00	Putra World Trade Centre (PWTC) Kuala Lumpur
2	1 st Joint Specialist Conference 2018	186 Specialists	9 to 11 March 2018	RM120,900.00	Hotel Istana, Kuala Lumpur
3	<i>Kursus Anda Adalah Duta Pejabat Anda</i>	1 Officers 37 Support Staff	23 to 25 March 2018	RM15,990.00	Residence Inn, Cherating Pahang
4	<i>Kursus Pakar Pergigian Dalam Tempoh Pra-Pewartaan 2018</i>	30 Officers	17 to 19 April 2018	RM17,210.00	Hotel Premiere, Klang
5	14 th National Symposium on Adolescent Health (NSOAH)	5 Officers	20 to 21 April 2018	RM1,250.00	Institute of Leadership and Development, UiTM Bandar Enstek
6	24 th Malaysian Association of Orthodontists International Scientific Conference & Trade Exhibition (MAOISCTE) 2018	4 Specialists	21 to 23 April 2018	RM1,600.00	Hotel Park Royal, Pulau Pinang
7	24 th Malaysian Association of Orthodontists International Scientific Conference & Trade Exhibition (MAOISCTE) 2018 (Post Conference)	2 Specialists	24 April 2018	RM3,200.00	Hotel Park Royal, Pulau Pinang
8	MLSM Medico-Legal Conference 2018	3 Officers	25 to 26 April 2018	RM2,400.00	Sime Darby Convention Centre Kuala Lumpur
9	<i>Bengkel Pemantapan Program TW1ST</i>	20 Officers 20 Auxiliaries	25 to 27 April 2018	RM15,307.00	ILKAP
10	3 rd Malaysia International Dental Show 2018	27 Officers 15 Auxiliaries	4 to 6 May 2018	RM19,815.00	Sunway Pyramid Convention Centre
11	Advances in Surgical Management of Craniofacial Deformities	3 Specialists	9 to 11 May 2018	RM3,900.00	Pusat Perubatan Universiti Kebangsaan Malaysia (UKM)

No	Training Topic	Participants	Date	Expenses	Venue
12	Asian Conference on Tobacco Control 2018: Towards Healthy Cities	3 Officers	11 to 13 May 2018	RM1,350.00	Putra World Trade Centre (PWTC) Kuala Lumpur
13	Seminar Intelligence Gathering <i>untuk anggota penguatkuasaan</i>	55 Officers	2 to 4 July 2018	RM25,265.00	Palm Mall Hotel Seremban
14	Kuala Lumpur Nicotine Addiction International Conference 2018 (KLNAC 2018)	8 Officers	10 to 11 July 2018	RM5,384.00	Hilton Hotel Petaling Jaya
15	9 th National Public Health Conference - Translating Health Policies into Effective Action	2 Officers	15 to 18 July 2018	RM1,700.00	Royale Chulan Hotel Kuala Lumpur
16	Malaysian International Dental Exhibition and Conference 2018 (MIDEC 2018)	54 Officers 20 Auxiliaries	20 to 22 July 2018	RM44,500.00	Kuala Lumpur Convention Centre (KLCC)
17	<i>Kursus Pengurusan Fasilitas Kesihatan Pergigian Menghadapi Bencana Alam</i>	40 Officers 5 Auxiliaries	24 to 26 July 2018	RM11,780.00	Straight Hotel Melaka
18	4 th MPDPA Asean DSA Congress & Trade Exhibition 2018	22 Auxiliaries	29 July 2018	RM3,960.00	Royal Selangor Club Kuala Lumpur
19	Women in Dentistry	3 Officers	1 August 2018	RM750.00	Universiti Teknologi MARA (UiTM) Sungai Buloh
20	<i>Kursus Perkhidmatan Berhenti Merokok bagi Program KOTAK 2018</i>	36 Officers	1 to 3 August 2018	RM11,617.00	Avillion Port Dickson Hotel
21	Systemic Review in the Development & Implementation of Dental CPG <i>bagi Pakar dan Pegawai Pergigian 2018</i>	30 Officers	7 to 9 August 2018	RM4,000.00	Oral Health Programme, MOH
22	Management of Periodontal Conditions in Primary Oral Health Clinics	30 Officers 10 Auxiliaries	7 to 9 August 2018	RM14,600.00	Summit Hotel Subang USJ
23	Good Clinical Practice (GCP)	26 Officers	28 to 29 August 2018	RM6,500.00	Universiti Teknologi MARA (UiTM) Sungai Buloh

No	Training Topic	Participants	Date	Expenses	Venue
24	11th Biennial Congress of Asian Academy of Prosthodontics, Malaysian Association for Prosthodontics (MAP)	2 Specialists	21 to 23 September 2018	RM1,700.00	Hotel Istana Kuala Lumpur
25	CPG Workshop 2018: Behavioural Strategies for the Treatment of Tobacco Use Disorder	18 Officers	25 September 2018	RM4,500.00	Institut Latihan DBKL
26	20 th IMAM'S Scientific Conference	10 Officers	27 to 30 September 2018	RM6,050.00	Grand Blue Wave Hotel Shah Alam
27	5 th Malaysian Dental Technologists Conference & Trade Exhibition 2018	88 Auxiliaries	28 to 30 September 2018	RM35,200.00	Berjaya Times Square Hotel Kuala Lumpur
28	<i>Bengkel Pengurusan Perubahan Konsep & Business Reengineering Sistem TPC-OHCIS: Siri 1,2 dan 3</i>	500 officers and auxiliaries (for 8 sessions)	13 August, 3 September, 18 September 2018	RM18,390.00	Kuala Lumpur Muar Negeri Sembilan
29	12 th National Conference for Clinical Research (NCCR)	1 Officer	24 to 25 September 2018	RM800.00	Hotel Istana Kuala Lumpur
30	<i>Bengkel Membangunkan Prosedur Operasi Piawaian Penguatkuasaan di bawah Akta Pergigian 2018</i>	8 Officers	24 to 26 September 2018	RM4,000.00	Hotel Ancasa & Spa Kuala Lumpur
31	<i>Kursus untuk Inovator, What's Next After Innovation?</i>	31 Officers 5 Auxiliaries	25 to 26 September 2018	RM10,160.00	Hotel Premiere Klang
32	World Cancer Congress	2 Officers	1 to 4 October 2018	RM5,266.72	Kuala Lumpur Convention Centre
33	Hands on Surgical Skill Training 2016 Modul III	15 Officers 3 Auxiliaries	2 to 4 October 2018	RM5,010.80	Kuala Lumpur Hospital (HKL)
34	4 th Health Promotion Conference 2018	5 Officers	3 to 4 October 2018	RM2,000.00	Hotel Premiera Kuala Lumpur
35	17 th Penang Dental Congress	10 Officers	13 to 14 October 2018	RM4,200.00	Hotel Equatorial Penang
36	<i>Kursus Pembantu Pembedahan Pergigian 2018</i>	36 Auxiliaries	17 to 19 October 2018	RM10,160.00	Corus Paradise Resort Port Dickson

No	Training Topic	Participants	Date	Expenses	Venue
37	<i>Aset Alih (Honorarium)</i>	5 Officers	-	RM80.00	Oral Health Programme, MoH
38	2 nd Malaysian Conference in Clinical Hypnotherapy	4 Officers	2 to 3 November 2018	RM2,200.00	Universiti Teknologi MARA (UiTM) Sungai Buloh
39	<i>Kursus Peningkatan Profesionalisme Pegawai Pergigian Daerah 2018</i>	97 Officers	7 to 8 November 2018	RM21,090.00	Corus Paradise Resort Port Dickson
40	<i>Taklimat Akta Peranti Perubatan 2012 (Akta 737)</i>	70 Officers	8 November 2018	RM8,820.00	Putrajaya International Convention Centre (PICC)
41	<i>Kursus Pakar Pergigian Dalam Tempoh Pra-Pewartaan 2018 (2)</i>	35 Officers	12 to 14 November 2018	RM12,740.00	Summit Hotel Subang USJ
42	MES 11 th MES-SES Biannual Joint Conference and 30 th AGM 2018	9 Officers	24 to 25 November 2018	RM5,850.00	Pullman Kuala Lumpur City Centre

Source: OHP MoH 2018

Advanced Competency Programme (ACP)

In 2018, two (2) Dental Specialists received the offer to undergo training under the Advanced Competency Programme (ACP) (Table 24).

Table 24: Advanced Competency Programme 2018

No.	Name	Course	Expenses	Venue	Date
1	Dr Izrawatie Mardiana binti Shapeen	Clinical Attachment: Periodontal Regeneration and Surgical Periodontics	RM45,817.00	Faculty of Dentistry, University of Hong Kong	1 September to 31 October 2018
2	Dr S. Sathiadeva a/I Sathiadevan	Orthognathic Surgery	RM33,000.48	Annamalai University, Tamil Naidu, India	6 August to 6 October 2018

Source: OHP MoH 2018

Continuing Professional Development (CPD)

The following CPD sessions were held at the OHP 2018 (Table 25).

Table 25: List of CPD conducted at OHP, 2018

No.	CPD Courses	Date
1.	<i>Latihan Sistem e-Perolehan dan Peranan Peminta</i>	9 February 2018
2.	<i>Amalan Pemakanan Sihat</i>	22 February 2018
3.	<i>Rang Undang-Undang Pergigian (5 sessions)</i>	23 February, 16 March, 13 April, 24 April, 27 April
4.	Trim & Fit + Fix	2 March 2018
5.	Don't Give Fire A Chance	16 March 2018
6.	<i>Tips Pengurusan Berat Badan</i>	30 March 2018
7.	Training of Trainers (TOT) – <i>Penyediaan Deskripsi Tugas</i>	20 April 2018
8.	<i>Persekitaran Tempat Kerja</i>	20 April 2018
9.	<i>Pengenalan kepada Outcome Based Budgeting (OBB)</i>	3 May 2018
10.	Presentation & Demo on Ivoclar Cention N – An Alternative to Amalgam	4 May 2018
11.	<i>Pengenalan kepada e-Pembelajaran Sektor Awam (EPSA)</i>	21 September 2018
12.	myPortfolio: <i>Panduan Kerja Sektor Awam</i>	17 October 2018

Source: OHP MoH 2018

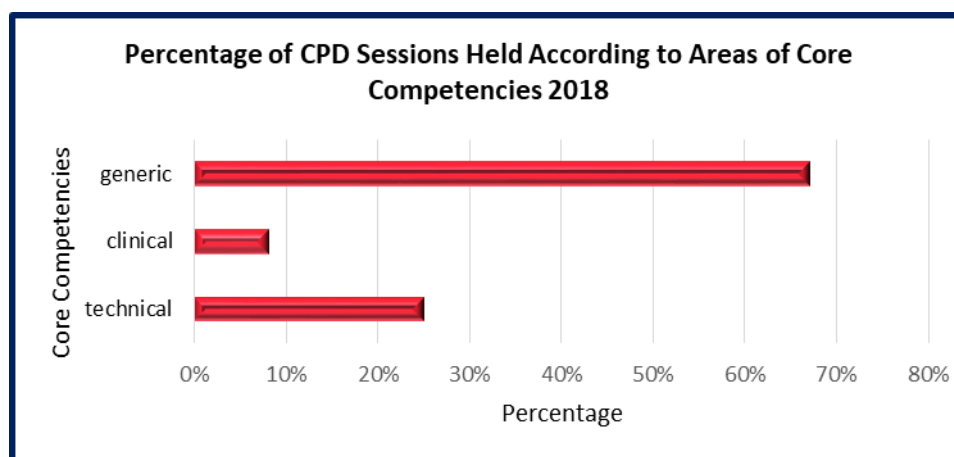


Figure 2: Number of CPD Sessions According to Areas of Core Competencies, 2018

Source: OHP MoH 2018

PROFESSIONAL DEVELOPMENT OF DENTAL AUXILIARIES

Post-Basic Training

A total 23 Dental Therapists have passed the post-basic training in Periodontics in February 2018. Following which, the post-basic training in Orthodontics for Dental Therapist was conducted from September 2018 until February 2019 at the Children Dental Centre & Malaysian Ministry of Health Training Institute (Dental), Georgetown, Penang (PPKK & ILKKMM) with intake of 23 Dental Therapists.

Overall, there were 184 Dental Therapists and 38 Dental Technologists with post basic training from 2009 until 2018 (**Table 26**). By speciality discipline, there were 71 Dental Therapists with post basic training in Orthodontics, 48 Dental Therapists with post basic training in Paediatric Dentistry, 88 Dental Therapists with post basic training in Periodontic, 24 Dental Technologists with post basic training in Orthodontics and 14 Dental Technologists with post basic training in Oral and Maxillofacial Surgery.

Table 26: Dental Auxiliaries trained in Post-basic Courses, 2009 to 2018

Year	Dental Therapist		Dental Technologist	
	Post basic	No.	Post basic	No.
2009	Periodontic	20	-	-
2010	Pediatric Dentistry	23	-	-
2011	-	-	Orthodontic	24
2012	Periodontic	24	-	-
2013	Periodontic	22	-	-
2014	-	-	Oral & Maxillofacial Surgery	14
2015	Orthodontic	25	-	-
2016	Pediatric Dentistry	25	-	-
2017	Periodontic	22	-	-
2018	Orthodontic	23	-	-

Source: OHP MoH 2018

ORAL HEALTH EPIDEMIOLOGY AND RESEARCH

Oral health research activities and the management of the oral health research agenda were carried out to support oral health evidence-based policy making. National research projects findings were disseminated through various platforms. Throughout 2018, the following activities were undertaken in collaboration with various agencies within and outside MoH and at National and Programme levels.

NATIONAL LEVEL RESEARCH PROJECTS AND INITIATIVES

National Health & Morbidity Survey 2018: Elderly Health

This is the first nationwide survey on health of elderly conducted by MoH, under the purview of the Institute for Public Health (IPH), MoH Malaysia. It covers the common scopes such as non-communicable diseases and also newer scopes such as dementia and abuse.

The aim of the oral health module was to investigate the oral health-related quality of life (OHRQoL) among elderly (aged 60 years and above), to explore their perceptions towards general health and oral health, their perceived need for dental treatment and also utilisation of oral healthcare services in the last three months. The OHRQoL were captured using the Geriatric Oral Health Assessment Index-Malay (GOHAI) questionnaire.

Results showed that more than half of the elderly reported that they had good [40.8 per cent (95 per cent CI: 36.72, 44.97)] or fair [25.2 per cent (95 per cent CI: 22.79, 27.72)] OHRQoL. Seven (7) out of ten (10) elderly claimed that they had good general health [67.4 per cent (95 per cent CI: 63.32, 71.170)] and healthy oral health [71.2 per cent (95 per cent CI: 67.18, 74.85)] and only 18.8 per cent perceived in need for dental treatment. Only one (1) in ten (10) elderly reported receiving any form of dental treatment within the last three months [9.4 per cent (95 per cent CI: 7.80, 11.26)].

National Health & Morbidity Survey 2019: Healthcare Demand

The preparation for scope of survey (inclusive of oral health module) was led by the Institute for Health Systems Research (IHSR), MoH. Questionnaire items for oral health module was prepared and finalized. The objective of the oral health module is to determine the prevalence of dental problems, health seeking behaviour and dental utilisation. Data collection will start in July until September 2019.

National Oral Health Research Initiatives

Updating of oral health research database at country level has been completed.

RESEARCH PROJECTS AT PROGRAMME LEVEL

National Health & Morbidity Survey 2020: National Oral Health Research of Adults 2020 (NHMS 2020: NOHSA 2020)

NHMS 2020: NOHSA 2020 is the 4th national oral health survey conducted among adults under the purview of IPH, MoH. Early preparation for the survey has been done and activities conducted in 2018 were:

- Preparation and presentation of scopes for oral health survey of adults with the Technical Advisory Team NHMS 2020: NOHSA 2020 on 23 July 2018 was approved.
- Appointment of the benchmark and gold standard examiners for each oral health condition has been identified by the Principal Director of Oral Health as follows:

Oral Health Condition	Name	Role
Oral lesion	Dr Ajura binti Abdul Jalil	Gold Standard Examiner
	• Dr Nor Nazaliza binti Basri	Benchmark Examiner
Dental caries status and treatment need	Dr Rohani binti Mahmood	Gold Standard Examiner
	• Dr Misah binti Md Ramli	Benchmark Examiner
	• Dr Suzana binti Sharif	
Periodontal condition	Dr Norhani binti Abdul Rani	Gold Standard Examiner
	• Dr Jessina Sharis binti Othman @ Osman	Benchmark Examiner
	• Dr Adibah binti Mohd Rahim	

- Discussion on criteria for oral health formats between the gold standard examiners and benchmark examiners were conducted and agreed upon.
- Identification and appointment of Core Team Analysis by the Principal Director of Oral Health and development of Syntax for data analysis was conducted.
- Proposal presentation of NHMS 2020: NOHSA 2020 to the *Jawatankuasa Penilaian Penyelidikan*-National Institute of Health (JPP-NIH) was conducted on 18 December 2018.

MONITORING AND EVALUATION OF ORAL HEALTH RESEARCH

Oral Health Research within Ministry of Health Malaysia

- Monitoring of Health System Research/projects (HSR) conducted by MoH oral health personnel at state level was undertaken by OHP, MoH in December 2018 (once a year) and the results will be presented at *Mesyuarat Kajisemula Sistem Pengurusan* in 2019.

- In 2018, a total of 215 projects were conducted throughout Malaysia, out of which 97 projects were presented at local and international level while 23 projects were published. All states except Melaka, Sabah, Terengganu, Perlis and PPKK & ILKMM had achieved their respective target (**Table 27**).
- Only 47 presentations (48.5 per cent) and 11 publications (47.8 per cent) were reviewed and submitted by OHP for approval from the Director General of Health.

Table 27: Status Report for HSR Projects by State/Institution for year 2018*

State/Institution	No. of Active Research Projects	No. of Presentation (oral/poster)	No. of Publication
	State target = 3	State target = 3	State target = 1
Johor	28	10	3
Kedah	15	3	1
Sabah	11	0	2
Sarawak	12	6	2
Pahang	22	7	2
Perak	14	10	2
Terengganu	6	2	2
Kelantan	12	4	0
*HKL/ OMFS	21	18	0
HKL/ Pediatric Dentistry	4	4	0
Melaka	6	1	0
N. Sembilan	14	8	5
P. Pinang	13	2	0
FT KL & Putrajaya	23	16	3
Selangor	5	5	1
Perlis	9	1	0
PPKK & ILKMM	0	0	0
ALL	215	97	23

Note: No. of Active Research Projects: refer to new/on-going/completed in current year

*HKL= Hospital Kuala Lumpur

Research outside Ministry of Health Malaysia

A total of 11 research proposals from non-MoH agencies were reviewed between January to November 2018 as follows:

1. Patients' Concern Inventory (PCI), Associate Prof. Dr Jennifer Geraldine Doss, University of Malaya (UM)
2. The Heritability of Palatal-arch Dimensions and Palatal Rugae Morphology in Full-siblings: 3-Dimensional Approach, Dr Alizae Marny Fadzlin binti Syed Mohamed, National University of Malaysia (UKM)

3. Comparison of Relapse Arch Width in Modified Vacuum Formed Retainers Covering the Palate Versus Hawley Retainer: A Prospective Randomized Control Trial, Dr Asma binti Ashari, National University of Malaysia (UKM)
4. Dentist's Knowledge on Management of First Permanent Molar with Poor Prognosis in Children, Associate Prof. Dr Nor Asilah binti Harun, International Islamic University of Malaysia (UIAM)
5. Association Between Kindergarten (TASKA) Teachers' Oral Health Literacy and Taska-Based Oral Health Activities and Facilities, Dr Muhammad Farid bin Nurdi, University of Malaya (UM)
6. Perceived Malocclusion and Oral Health Related Quality of Life (OHRQoL) Among Young Adults, Dr Nurul Izzati binti Mohamad Ali, University of Malaya (UM)
7. Awareness, Knowledge, Use and Perception of E-Cigarettes Among Students in University of Malaya, Dr Ameera Syafiqah binti Ali, University of Malaya (UM)
8. Assessment of Radiation Safety Awareness, Attitude, and Clinical Application among Dental Surgery Assistants in Sarawak Public Oral Health Service, Associate Prof. Dr. Jennifer Geraldine Doss, University of Malaya (UM)
9. The Effectiveness of Nutrition and Oral Health Empowerment Module for Parents/Guardians of Children with Learning Disabilities in *Pasir Puteh, Kelantan*, Dr Rosnani binti Ngah, Science University of Malaysia (USM)
10. Oral Health Literacy among Caregivers and Oral Health Status of Pediatric Cleft Patients in Klang Valley, Dr Isti Alfatimiah binti Darodji, National University of Malaysia (UKM)
11. Development and Validation of Questionnaire on Human Factors Influencing Quality of Routine Oral Healthcare Data, Dr. Syirahaniza binti Mohd Salleh, Science University of Malaysia (USM)

The OHP MoH is a permanent member of the Medical Ethics Committee in the Faculty of Dentistry, University of Malaya. The Head of the Epidemiology and Oral Health Research Section from OHP, MoH tasks are attending ethics research meetings convened by the Committee. In 2018, all meetings were attended. The undergraduate and postgraduate research projects from the University were reviewed during the meeting.

In addition, more than a dozen desktop reviews on research proposals which did not require the Committee to meet were also carried out by the Head of the Epidemiology and Oral Health Research Section from OHP MoH.

Compendium of Abstracts

The Compendium of Abstracts 2017/2018 was finalized in June 2018 comprises 155 abstracts from dental personnel in Malaysia which has been presented or published research projects or case reports. Two dental public health specialists were appointed to review the draft. The compendium will be printed and distributed to authors/co-authors and relevant agencies by mid 2019. The Compendium of Abstracts 2017/2018 covers various aspect of dentistry as follows:

- i) Program Evaluation
- ii) Research in Epidemiology
- iii) Research in Behavioural Aspects in Relation to Oral Health
- iv) Research in Oral & Maxillofacial Surgery
- v) Research in Oral Pathology & Oral Medicine
- vi) Research in Pediatric Dentistry
- vii) Research in Orthodontics
- viii) Research in Periodontology
- ix) Research in Restorative Dentistry
- x) Research in Special Needs Dentistry

OTHER ORAL HEALTH RESEARCH ACTIVITIES

Oral Health Research Day 2018

The event was successfully conducted on 3 October 2018 at Putrajaya Convention Centre (PICC), with the theme “Today’s Vision: Tomorrow’s Reality”. The Director General of Health, MoH delivered the keynote address and officiated the event.

The event provided a platform for dental officers to share and disseminate their research findings aside from providing exposure in presentation skills. The Oral Health Research Day 2018 gathered almost 200 dental personnel from all dental specialities in Malaysia. A total of 14 oral presenters and 15 poster presenters had participated in the event. Presenters were selected based on their thesis project during their postgraduate study (**Image 1,2 and 3**).



Image 1: Participants on Oral Health Research Day 2018



Image 2: Director General of Health delivering key note address



Image 3: Participants attending the event

ORAL HEALTH INFORMATION MANAGEMENT

TELEPRIMARY CARE AND ORAL HEALTH CLINICAL INFORMATION SYSTEM (TPC-OHCIS) PROJECT

TPC-OHCIS is a digital version of the traditional paper-based medical and dental record for an individual. The system went live at 13 pilot sites six (6) Health Clinics and seven (7) Dental Clinics) in Negeri Sembilan in June 2017. Between April and August 2018, the TPC-OHCIS Deployment System Team from MIMOS and MoH had successfully deployed the TPC-OHCIS system at three (3) dental clinics with ICT infra-ready in Negeri Sembilan, namely Klinik Pergigian Sendayan, Klinik Pergigian Rantau and Klinik Pergigian Kuarters KLIA (**Image 4 and 5**).



Image 4 and 5: Deployment of TPC-OHCIS System at Klinik Pergigian Sendayan and Klinik Pergigian Kuarters KLIA

Creating awareness among the TPC-OHCIS Facility Administrators on the use of “Offline Mode” during unfavorable event such as downtime of the TPC-OHCIS central server in the Public Sector Data Center (*Pusat Data Sektor Awam*) and unstable wide area network (WAN) is of utmost important. Thus, the TPC-OHCIS Facility Administrators were briefed on the TPC-OHCIS offline mode by the Information Technology Officer from the Family Health Development Division, MoH on 11 August 2018 at Health and Dental Clinic at *Klinik Kesihatan (KK) Sikamat, Seremban, Negeri Sembilan* (**Image 6 and 7**).



Image 6 and 7: TPC-OHCIS offline Mode Briefing and Simulation

The maintenance of TPC-OHCIS system deserves an equal attention should the TPC-OHCIS be deployed nationwide in the near future. In this endeavor, Proof of Concept (POC) of Cloud Computing Based was carried out in November 2018 at *KK Sikamat, Negeri Sembilan* whereby the existing TPC-OHCIS cloud architecture with localised Facility Agent at sites, will be changed into full cloud-based architecture. Generally, the POC of Cloud Computing Based was successfully tested and the new cloud architecture functioned smoothly during the POC testing period (between 12 to 16 November 2018). On 13 November 2018, the Honourable Minister of Health, YB Datuk Seri Dr Haji Dzulkefly bin Ahmad had visited the Health and Dental Clinic at *KK Sikamat, Seremban, Negeri Sembilan* to witness the use of the TPC-OHCIS and Proof of Concept (POC) of Cloud Computing Based (Image 8 & 9).



Image 8 and 9: Proof of Concept (POC) of Cloud Computing Based at KK Sikamat, Negeri Sembilan

ORAL HEALTH CLINICAL INFORMATION SYSTEM (OHCIS) ROLL-OUT

A funding of RM13.3 million was provided by the Economic Planning Unit (EPU) in 2015 to prepare for TPC-OHCIS implementation at identified dental facilities in the states of Johor, Selangor, Negeri Sembilan and Federal Territories (FT) of Kuala Lumpur and Putrajaya. It involves upgrading of ICT infrastructure at 20 facilities with OHCIS and installation of ICT infrastructure and hardware at 54 dental clinics without OHCIS and was completed in January 2018. However, scarce resources contributed to the delay of TPC-OHCIS deployment at the identified dental facilities. Efforts shall continue in year 2019 under TPC-OHCIS roll-out project plan in the 11th Malaysia Plan-4th Rolling Plan through continuous collaborative effort between the OHP, Family Health Development Division and Information Management Division, MoH.

ORAL HEALTH CLINICAL INFORMATION SYSTEM (OHCIS) AND eKL (DENTAL)

The support and maintenance service for OHCIS) which ended in June 2018 was extended for another six (6) months. The six (6) months contract covers two (2) applications i.e OHCIS and the eKL (Dental). OHCIS is an effort by MoH to improve and modernise the government oral healthcare services. OHCIS is a client-based and patient centric integrated software solution which covers primary oral healthcare, secondary oral healthcare and school oral healthcare services. OHCIS was piloted in ten (10) clinics in Johor and one (1) clinic in Selangor and expanded to Putrajaya Precinct 18 Dental Clinic on 1 Mac 2015 for Primary Oral Healthcare, Orthodontic and Periodontic services. The eKL (Dental) project was implemented in 2009 as part of the e-Government project to provide reminder via Short Messaging Services (SMS) to patients in Klang Valley three (3) days before their appointments at the clinics.

DEVELOPMENT OF DENTAL CHARTING MODULE IN CLINICAL DOCUMENTATION *SISTEM PENGURUSAN PESAKIT* (CD SPP) PROJECT AND OPERATING THEATRE MANAGEMENT SYSTEM (OTMS)

MoH has developed the strategic ICT core support towards the establishment of Lifetime Health Record (LHR) in line with the mission and vision of ICT Strategic Plan, MoH (ISPMOH) 2016-2020. The OHP supports these efforts by ensuring the use of standard Dental Charting Module in different systems developed by the MoH.

Dental Charting Module in TPC-OHCIS was used as a prototype in CD for SPP and OTMS for Hospital Information System (HIS) @KKM Phase 1 System. The CD SPP and OTMS teams collaborated with TPC-OHCIS team towards development of the Module which consist of Dental Charting, Intraoral Examination and Lesion sub-module.

For CD Project, the development of Dental Charting Module is ongoing based on the information gathered since year 2017. Overall, the project is in the development phase and will be piloted in Hospital Raja Permaisuri Bainun (HRPB), Ipoh in 2019.

Development of Dental Charting Module by OTMS is also ongoing. The project will be implemented in Hospital Tuanku Ja'afar, Seremban (HTJS) and is expected to start operating in 2019 (**Image 10 & 11**).

The image shows two side-by-side screenshots of dental software modules. The left module, titled 'Intraoral Examination', contains various input fields for oral hygiene scores, plaque levels, gingivitis status, and dental health status. It includes radio buttons for 'Present' and 'Not Present' for lesions. The right module, titled 'Lesion', displays two dental arch diagrams (maxilla and mandible) with numbered teeth. Below the diagrams are fields for 'Lesion Sites' and 'Remarks'.

Image 10 and 11: Dental Charting Modules

PROJECT HIS @ KKM

The OHP MoH was involved in the (HIS)@KKM Phase 1 Project, led by the Medical Development Division, MoH. This system consists of three (3) systems i.e Laboratory Information System (LIS), Central Sterile Supply Services Information System (CenSSIS) and OTMS and was piloted in Hospital Tunku Ja'afar, Seremban (HTJS), Negeri Sembilan. Total duration for completion of this project by the contractor is four (4) years, starting from 27 June 2016 to 26 June 2020. The Subject Matter Expert (SME) involving all disciplines at HTJS was appointed to provide user requirement to develop this system. However, OHP is not involved in LIS as there are no dental laboratory devices that require integration. This project is planned to 'Go Live' in 2019.

ORAL HEALTH TECHNOLOGY

There are 13 CPGs published by OHP. As of December 2018, ten (10) Clinical Practice Guidelines (CPGs) are current (less than five (5) years) and three (3) CPGs were being reviewed. The titles of the CPGs being reviewed are as listed in **Table 28**:

Table 28: Clinical Practice Guidelines (CPG) As Of 31 December 2018

Title of CPG	Publication (Year)	Edition	Status
Management of Condylar Fracture of the Mandible	2005	1 st edition	Review in Progress
Management of Unerupted and Impacted Third Molar	2005	1 st edition	Review in Progress
Management of Avulsed Permanent Anterior Teeth in Children	2010	2 nd edition	Review in Progress

Source: OHP MoH 2018

Approved Purchase Price List (APPL)

Activities in 2018 include attending meetings coordinated by the Procurement and Privatisation Division, MoH. This section provided input in finalising the companies, lists of products and price negotiations for APPL 2017 to 2019 with tendering companies. This section continues to monitor issues on APPL including penalty on late delivery and product complaints.

Managing Enquiries related to Dental Technology

Literature search on scientific papers was done for dental technology related topics as below:

- *Pandangan Berkenaan Penggunaan Racun Local Anaesthetics di bawah Akta Racun 1952*
- Nickel-chromium alloys for crown restoration
- *Pengambilan X-ray IOPA dan Oklusal oleh Pembantu Pembedahan Pergigian*
- Oral Dental Probiotics

Minamata Convention on Mercury

Relevant dental inputs were provided with regards to Minamata Convention on Mercury and monitoring on the use of amalgam fillings in MoH as well as the phasing out on the use of thermometers and sphygmomanometers in government dental facilities were continued.

ORAL HEALTHCARE

ORAL HEALTH PROMOTION

In 2018, strategic collaboration with various government and non-government agencies via the National Blue Ocean Strategy (NBOS) were conducted as below.

IKON GIGI (iGG) PROGRAMME

The 'iGG' Programme was implemented with the aim to empower volunteers from communities whom will act as facilitators towards raising awareness on the importance of oral health to members in their community and they are known as *Ikon Gigi*. In 2018, there was a total of 113 *Ikon Gigi*. The first iGG Convention was held on August 2018 in Kota Bharu, Kelantan and was officiated by the Principal Director of Oral Health, MoH. It was estimated nearly 500 participants comprised of *Ikon Gigi* and facilitators attended the convention.



Image 12: iGG Convention in Kota Bharu, Kelantan on 12 August 2018

KOLABORASI ORAL DAN AGAMA (KOA)

KOA is a collaborative effort between the OHP and major religious bodies in Malaysia. The objective is to increase awareness to practice good oral hygiene habits among this community as religion has great influence on every religious person. Oral health messages were also delivered in various religious activities. On 18 August 2018, a grand launching of KOA Christian was held in Klang, Selangor.



Image 13: Launching of KOA Christian at Klang, Selangor on 18 August 2018

KESIHATAN ORAL TANPA ASAP ROKOK (KOTAK)

The OHP collaborated with the Disease Control Division and School Education Division of the Ministry of Education Malaysia in the implementation of KOTAK. This programme is part of the School Dental Service programme where all primary and secondary students are screened for smoking. Identified smokers will undergo 'Advanced Intervention' to help them quit smoking. In 2018, a total of 2,598,428 primary schoolchildren and 1,897,577 secondary schoolchildren were screened through this programme.

From 1 to 3 August 2018, 'Certified Smoking Cessation for Service Provider (CSSP)' course was conducted at Port Dickson, Negeri Sembilan aimed to enhance the skill and knowledge of Dental Officers and Dental Therapists in the implementation of KOTAK at the state level.



Image 14: CSCSP Course at Port Dickson, Negeri Sembilan 1 to 3 August 2018

TRANSFORMATION WITH ONE SMILE TOGETHER (TWiST)

TwIST targets students and staff of Community Colleges and aims to enhance their knowledge and awareness on the importance of oral health. It is collaboration between the OHP and the Community College Education Department of the Ministry of Higher Education Malaysia. The identified community college students will become the role models for their peers. TwIST was launched on 16 September 2017 in Perak by YAB Dato' Seri Dr Ahmad Zahid bin Hamidi, Deputy Prime Minister of Malaysia and 'Memorandum of Understanding' was signed to symbolise the collaborative efforts between the two (2) ministries. In 2018, a total of 4,080 community college students were screened through this programme. Apart from screening, oral health activities held includes treatment, exhibition, *ikon gigi (iGG) remaja* and *Latihan Memberus Gigi (LMG)*.



Image 15: Launching of TWiST in *Bagan Datoh, Perak* on 16 September 2018

DENTISTRY GOING DIGITAL – MOBILE APPLICATION AND VIDEO

Dentistry Going Digital: Connecting the Community was launched by the Minister of Health Malaysia, YB Datuk Seri Dr Dzulkefly bin Ahmad. It was held during the Ministry of Health’s Monthly Assembly on 20 August 2018. A total of two (2) mobile applications and two videos were produced through this programme:

1. Mobile Apps – MyOrtho and MyGusi
2. Video entitled “*Topi Keledar, Penyelamat Anda*” and “*Selamatkan Gigi Anda*” that relates to Oral & Maxillofacial Surgery and Restorative Dentistry specialties were showcased.



Image 16: Launching of Dentistry Going Digital 20 August 2018

COLLABORATION WITH ELECTRONIC MEDIA

The OHP has established collaboration with several Electronic Media agencies for activities below:

- Three (3) *Jom Heboh* events with Media Prima Bhd. Network
- TV and radio talk shows on oral health related topics: “*Kesihatan Mulut dan Gigi*” on 19 April 2018 with Radio Televisyen Malaysia (RTM)



Image 17 and 18: Jom Heboh activities by Bahagian Kesihatan Pergigian, Pulau Pinang

COLLABORATION WITH KUALA LUMPUR CITY HALL (DBKL)

The OHP and DBKL collaborated for activities below:

- Launching of Oral Health Promotion Week on 2 September 2018
- KL Car Free Morning (KLCFM) –five (5) KLCFM events in 2018



Image 19: Dental Buskers team performing at KLCFM



Image 20: Dental exhibition by Melaka team at KLCFM

ORAL HEALTH PROMOTION WEEK

Oral Health Promotion Week is a new initiative by the OHP with the aim to increase public awareness on oral healthcare through promotional activities. The first Oral Health Promotion Week was officiated by the Honourable Minister of Health Malaysia on 2 September 2018 in conjunction with KL Car Free Morning programme. The theme was “*Kesihatan Gusi Tanggungjawab Bersama*”. Each year, oral health promotional activities will be conducted in all dental clinics throughout Malaysia for a week following the launching.



Image 21: Oral Health Promotion Week officiated by The Honourable Minister of Health Malaysia on 2 September 2018

COMMUNITY ORAL HEALTHCARE

FLUORIDATION OF PUBLIC WATER SUPPLY

Population Coverage

The fluoridation of public water supplies is a safe, effective, economical, practical and socially equitable public health measure for prevention and control of dental caries for people of all age groups, ethnicity and income or educational levels. However, the coverage and maintenance of optimum levels of fluoride at water treatment plants and reticulation points still remain a challenge for some states, in particular, Sabah, Sarawak, Kelantan and Pahang.

The trend on the estimated population receiving fluoridated water is generally on the increase from 2005 to 2013. However, there was a drop in coverage in 2014 (from 79.5 per cent to 76.2 per cent), 2016 (from 76.3 per cent to 75.7 per cent) and in 2018 (from 75.7 per cent to 74.1 per cent) (**Figure 3**).

The drop was due to a decline in population coverage for Pahang as a result of cessation of water fluoridation in majority of the water treatment plants in the state. The water authority in Pahang was corporatised in 2012. Since then, due to financial constraints, there has been no purchase of fluoride compounds.

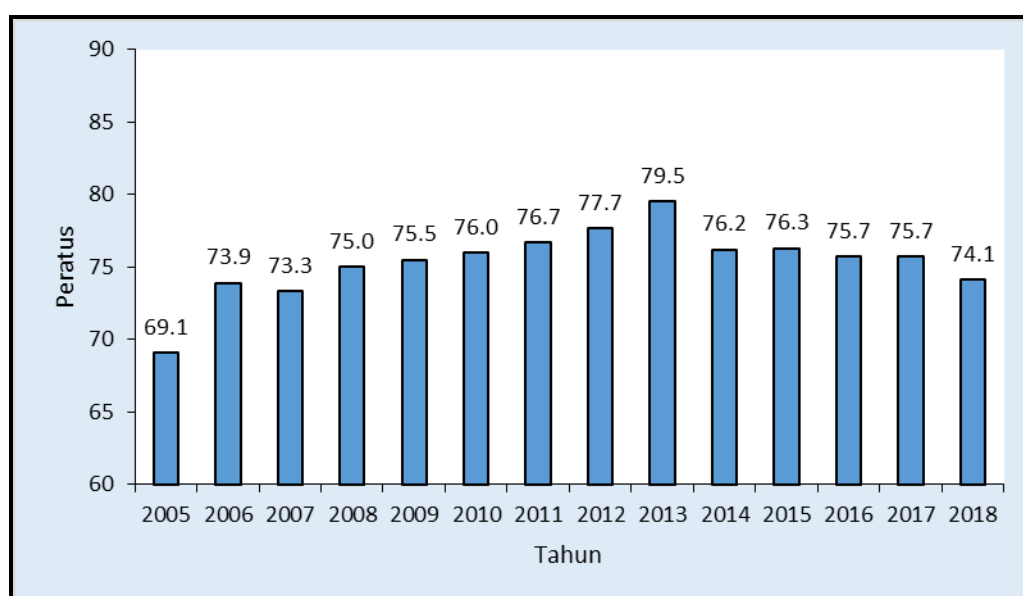


Figure 3: Population Coverage for Water Fluoridation Programme, 2005 to 2018

Source: State OHP 2018

Three (3) states achieved less than 15 per cent population coverage of fluoridated water – Kelantan, Sabah and Pahang, with Pahang being the lowest at 0.9 per cent (**Figure 4**). Kelantan and Sabah achieved population coverage of 12.9 per cent and 7.0 per cent respectively.

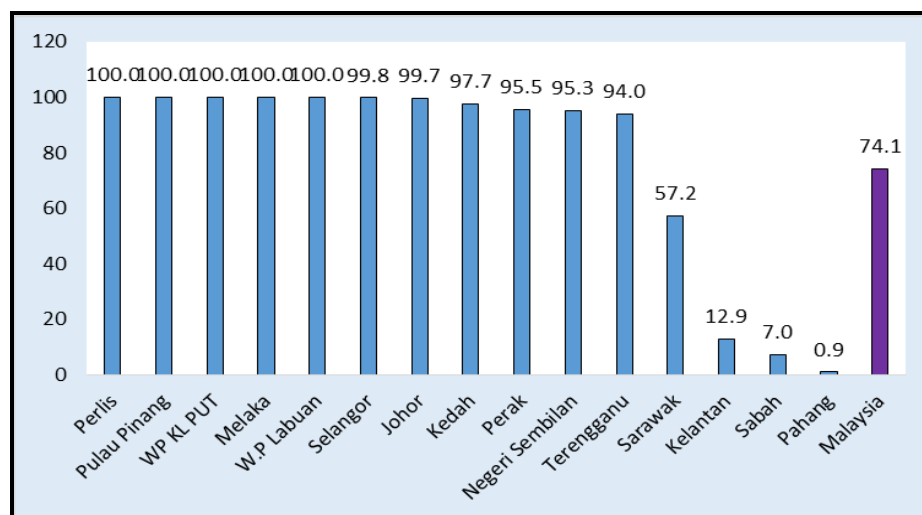


Figure 4: Population Receiving Fluoridated Water by State, 2018

Source: State OHP 2018

The Sabah State Cabinet Committee approved the re-activation of water fluoridation programme on 6 October 2010. However, the implementation of the programme remains a continuing challenge due to funding and technical issues in the state, rendering Sabah with the second lowest population coverage of 7.0 per cent (**Figure 4**).

Water Treatment Plants (WTP)

In 2018, there were 501 Water Treatment Plants (WTPs) in Malaysia (**Table 29**). Majority (301, 60.1 per cent) have been privatized.

Table 29: Water Treatment Plant by Sector, 2018

State	Government	Water Board	Private	Total
Perlis	0	0	3	3
Kedah	0	0	35	35
Penang	0	0	8	8
Perak	0	39	5	44
Selangor	0	0	28	28
FT KL/ FT Putrajaya	0	0	3	3
N. Sembilan	0	0	23	23
Melaka	0	0	9	9
Johor	0	0	44	44
Pahang	0	0	80	80
Terengganu	0	0	12	12
Kelantan	0	0	33	33
Sabah	69	0	13	82
Sarawak	78	10	4	92
FT Labuan	4	0	1	5
MALAYSIA	151 (30.1 per cent)	49 (9.8 per cent)	301 (60.1 per cent)	501 (100.0 per cent)

Source: State OHP 2018

A total of 309 (61.7 per cent) WTPs have had fluoride feeders installed (**Table 30**). Among those with feeders, 249 (80.6 per cent) were active while 60 (19.4 per cent) were inactive due to lack of resources to purchase fluoride compound or technical problems such as fluoride feeders that require repairs or replacement.

In 2018, all WTPs in Perlis, Penang, Selangor, Federal Territory (FT) Kuala Lumpur & Putrajaya, Melaka and Terengganu were producing fluoridated water. However, less than 50 per cent of water treatment plants in Sarawak, FT Labuan, Kelantan, Sabah and Pahang produce fluoridated water (**Table 30**).

Table 30: WTP with Fluoride Feeders by State, 2018

State	No. of WTP	WTP with Fluoride Feeder		WTP with Active Fluoride Feeder		WTP producing fluoridated water (%)
		No.	%	No.	%	
Perlis	3	3	100.0	3	100.0	100.0
Kedah	35	35	100.0	33	94.3	94.3
Penang	8	8	100.0	8	100.0	100.0
Perak	44	43	97.7	41	95.3	93.2
Selangor	28	28	100.0	28	100.0	100.0
FT KL & Putrajaya	3	3	100.0	3	100.0	100.0
N. Sembilan	23	21	91.3	21	100.0	91.3
Melaka	9	9	100.0	9	100.0	100.0
Johor	44	42	95.5	42	100.0	95.5
Pahang	80	49	61.3	2	4.1	2.5
Terengganu	12	12	100.0	12	100.0	100.0
Kelantan	33	3	9.1	3	100.0	9.1
Sabah	82	11	13.4	7	63.6	8.5
Sarawak	92	38	41.3	36	94.7	39.1
FT Labuan	5	4	80.0	1	25.0	20.0
MALAYSIA	501	309	61.7	249	80.6	49.7

Source: State OHP 2018

Maintaining Fluoride Levels in Public Water Supply

Maintenance of fluoride levels within the recommended range of 0.4 to 0.6 ppm is important to achieve maximum benefit for control and prevention of dental caries while ensuring health and safety. In general, there is an upward trend in conformance of readings to the recommended range for the years 2005 to 2018 (**Figure 5**). In 2018, 83.3 per cent of readings at reticulation points conformed to the recommended range.

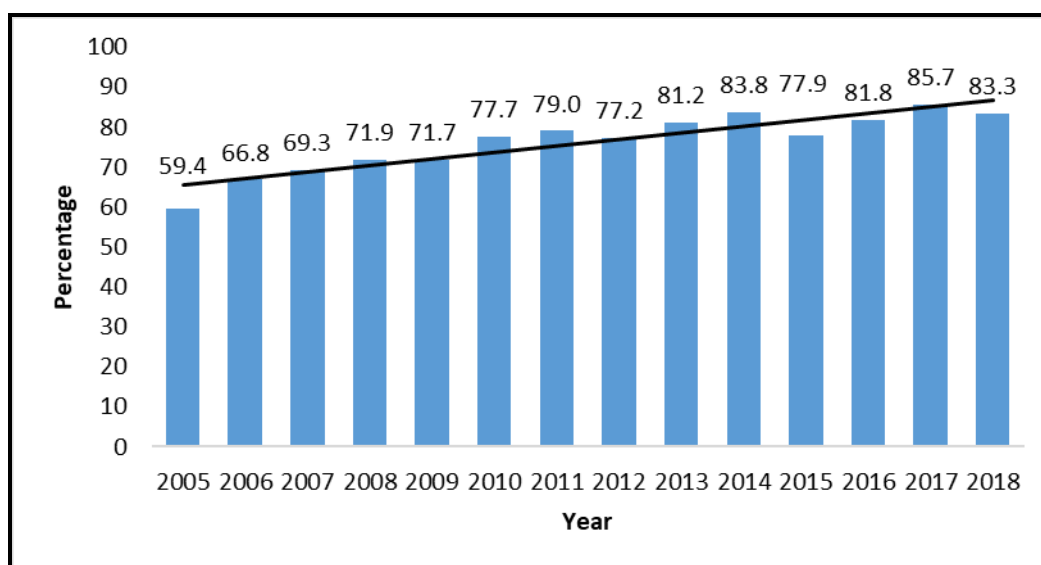


Figure 5: Conformance of Fluoride Level in Public Water Supplies to the Recommended Range (0.4 to 0.6ppm), 2005 to 2018

Source: State OHP 2018

Nine out of 15 states, namely Perlis, Kedah, Penang, Selangor, FT Kuala Lumpur & Putrajaya, Negeri Sembilan, Melaka, Johor and FT Labuan, complied with the National Indicator Approach (NIA) standards for the lower limit (not more than 25 per cent of the readings below 0.4 ppm) and the upper limit (not more than 7 per cent of readings exceeding 0.6 ppm) of fluoride level in public water supplies (**Table 31**).

Table 31: Fluoride Level at Reticulation Points by State, 2018

States	Total Readings	Fluoride Readings					
		0.4 - 0.6 ppm		< 0.4 ppm (Std. < 25%)		> 0.6 ppm (Std. < 7%)	
		No.	%	No.	%	No.	%
Perlis	144	121	84.0	23	16.0	0	0.0
Kedah	1,097	1,049	95.6	48	4.4	0	0.0
Penang	370	369	99.7	1	0.3	0	0.0
Perak	762	527	69.2	232	30.4	3	0.4
Selangor	1,228	1,209	98.5	11	0.9	8	0.7
FT KL & Putrajaya	144	144	100.0	0	0.0	0	0.0
N. Sembilan	1,008	990	98.2	18	1.8	0	0.0
Melaka	344	341	99.1	0	0.0	3	0.9
Johor	2,064	2,064	98.6	21	1.0	7	0.3
Pahang	299	23	7.7	276	92.3	0	0.0
Terengganu	566	366	64.7	194	34.3	6	1.1
Kelantan	109	1	0.9	105	96.3	3	2.8
Sabah	314	214	68.2	100	31.8	0	0.0
Sarawak	575	111	19.3	457	79.5	7	1.2
FT Labuan	92	92	100.0	0	0.0	0	0.0
MALAYSIA	9,116	7,593	83.3	1,486	16.3	37	0.4

Source: OHP (Quality Assurance Programme), MoH 2018

Six (6) states did not comply with the standard for the lower limit (not more than 25 per cent of the readings below 0.4ppm) of fluoride level, highest in Kelantan with 96.3 per cent non-compliance of reticulation readings.

Annual Operating Budget for the Fluoridation Programme

Government funds only the government-operated WTPs. In 2018, nearly RM1,144,504.90 was spent on three (3) states for this programme (**Table 32**). The states of Perak, Sabah and Sarawak allocated operating budget up to the sum of RM1,164,125.00 for water fluoridation. However, Perlis also received assistance of RM40,000.00 for the repairs of fluoride feeder. Budget was also set aside to strengthen Clinical Preventive Programmes such as Fluoride Mouth Rinse, Fissure Sealant and Fluoride Varnish. Some government funds were used for monitoring fluoride levels at reticulation points in all states.

Table 32: Government Funded Fluoridation Programme by State, 2018

State	Annual Operating Budget		Dasar Baru (New Policy/One Off		Development Fund (10MP)		Total Allocation (RM)	Total Expenditure (RM)
	Allocation (RM)	Expenditure (RM)	Allocation (RM)	Expenditure (RM)	Allocation (RM)	Expenditure (RM)		
Perlis	-	-	40,000.00	40,000.00	-	-	40,000.00	40,000.00
Perak	604,000.00	603,940.00	-	-	-	-	604,000.00	603,940.00
Sabah	200,000.00	180,458.58	-	-	-	-	200,000.00	180,458.58
Sarawak	360,125.00	360,106.32	-	-	-	-	360,125.00	360,106.32
MALAYSIA	1,164,125.00	1,144,504.90	40,000.00	40,000.00	-	-	1,204,125.00	1,184,504.90

Source: State OHP 2018

Interagency Collaboration for Water Fluoridation

The OHP continues to collaborate with various agencies to strengthen and expand community water fluoridation in the country. Visits to WTPs and meetings were conducted with relevant agencies at national and state level in 2018. Various implementation issues were discussed and these included fluoride levels in public water supplies, conformance of fluoride levels to the recommended range, and the supply and storage of fluoride compounds.

Training and Public Awareness

Recognizing that knowledge and understanding of water fluoridation is crucial, training is conducted each year for the health personnel as well as personnel from WTPs. Nationwide, 90 training sessions were conducted in 2018, including hands-on training on the use of colorimeters.

Research

Data collection for the study on 'Fluoride Enamel Opacities among 16-Year-Old Schoolchildren' was completed in November 2013 and the report was published in June 2018. The report can be cited as Oral Health Programme, Ministry of Health Malaysia. Fluoride Enamel Opacities in 16-year-old Schoolchildren 2013. Ministry of Health Malaysia 2018.

CLINICAL PREVENTION

Fissure Sealant Programme

A school-based fissure sealant programme started in 1999, is part of a comprehensive approach to caries prevention which focuses on primary schoolchildren.

A sealant is a professionally applied material to occlude the pits and fissures on occlusal, buccal and lingual surfaces of posterior teeth to prevent caries initiation and to arrest caries progression by providing a physical barrier that inhibits microorganisms and food particles from collecting in pits and fissures.

In 2018, about 96.0 per cent of schoolchildren needing fissure sealants (FS) were rendered fissure sealants under the School-based Fissure Sealant Programme (**Figure 6**). Overall, there is an increasing trend of subjects and teeth provided with fissure sealants from year 2006 to 2018 (**Figure 7**).

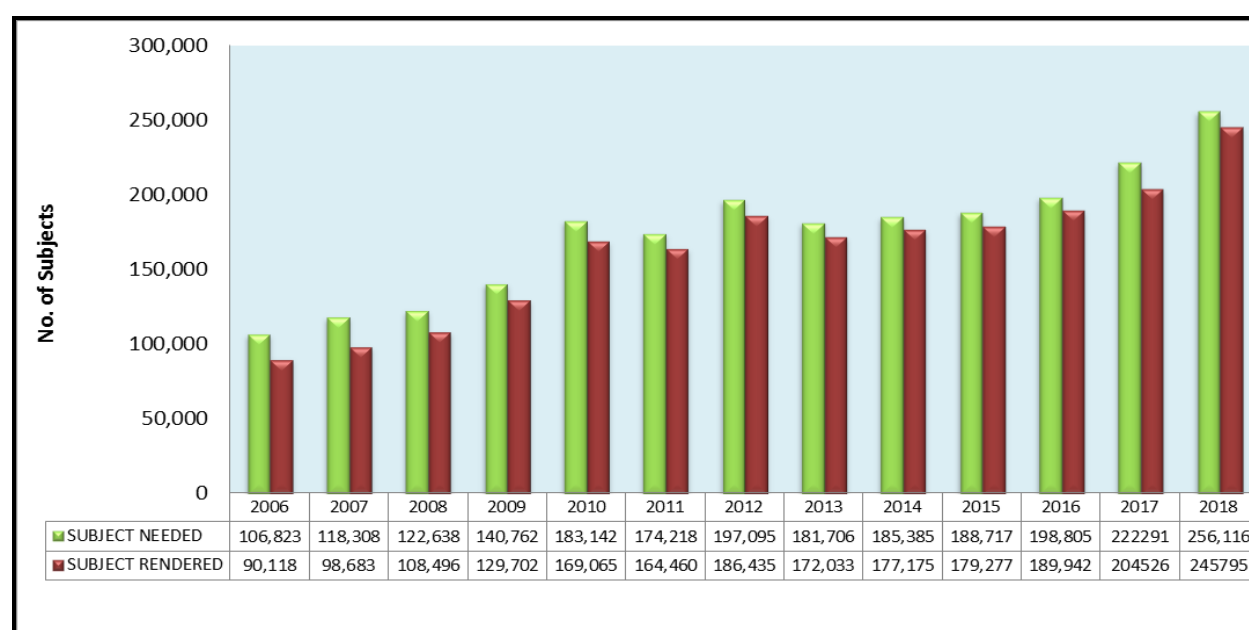


Figure 6: Treatment Need and Fissure Sealants Rendered, 2006 to 2018

Source: State OHP 2018

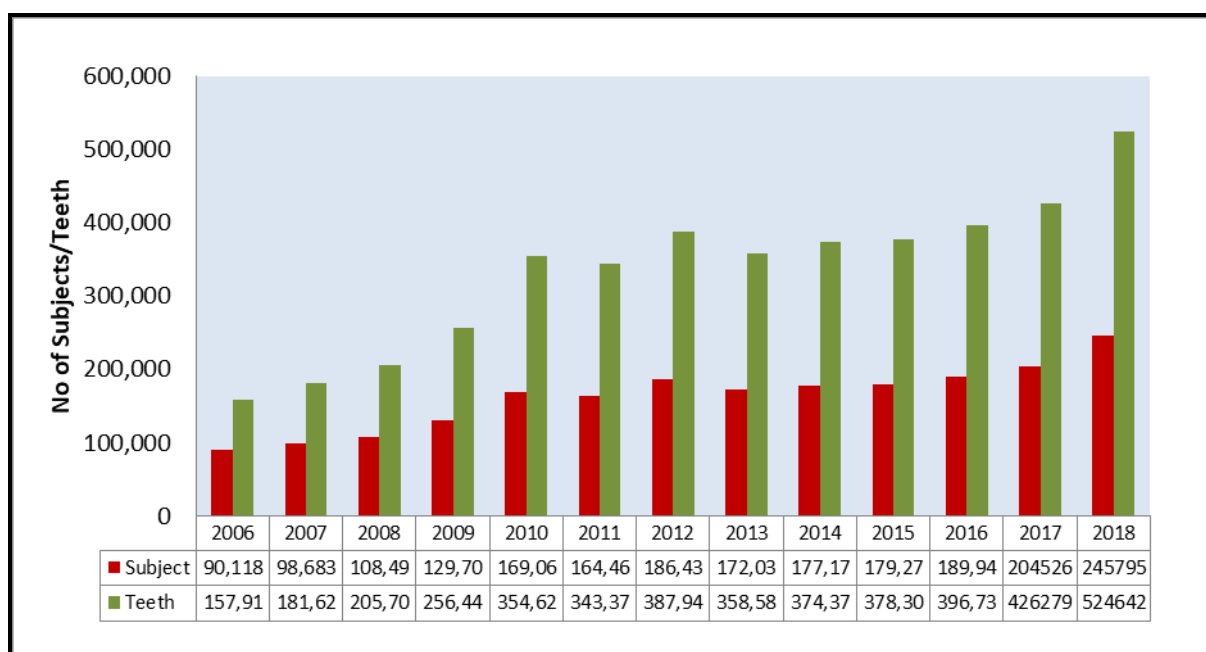


Figure 7: Subject/Teeth Rendered Fissure Sealants, 2006 to 2018

Source: State OHP 2018

A total number of 549,302 teeth examined required fissure sealants. Of these, 95.5 per cent were fissure-sealed and more than half were in year one (1) and year two (2) primary schoolchildren (Figure 8).

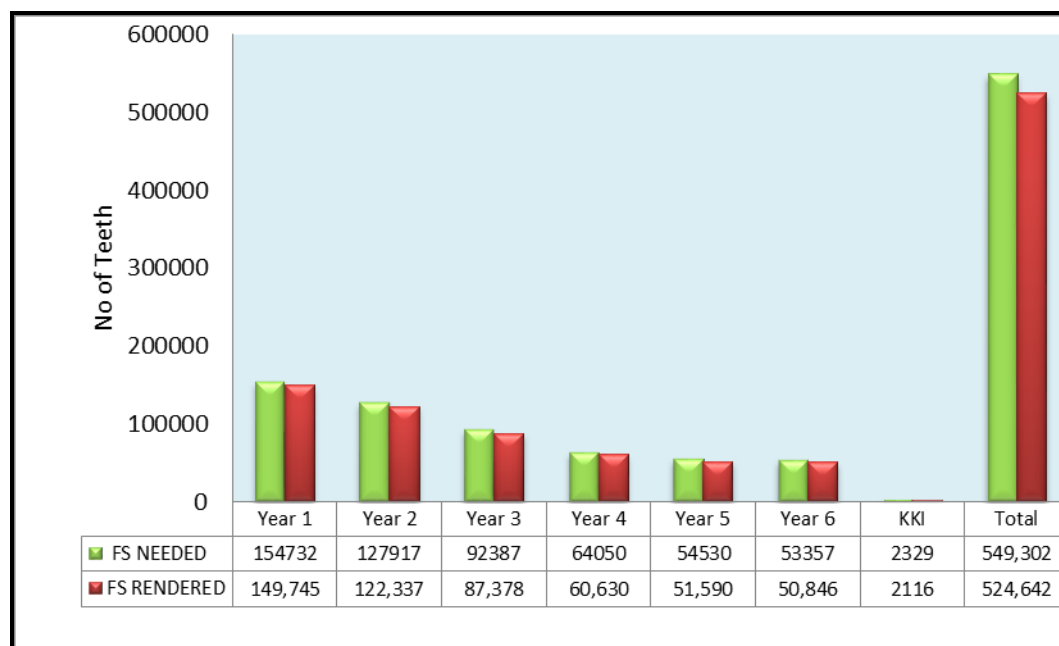


Figure 8: Teeth Needed and Rendered Fissure Sealants among Year 1 to Year 6 Primary Schoolchildren

Source: State OHP 2018

Over the last seven (7) years, the percentage of children in need of fissure sealant and those rendered fissure sealant have increased from 92.3 per cent in year 2010 to 96.0 per cent in 2018 (Table 33). The percentage of teeth in need of fissure sealant and rendered fissure sealant had increased from 90.7 per cent in 2010 to 95.5 per cent in 2018. This met the target set, i.e. 95 per cent of schoolchildren needing fissure sealants, received fissure sealants. Provision of fissure sealant by state is shown in Table 34.

Table 33: Provision of Fissure Sealants, 2010 to 2018

Year	No. of Children			No. of Teeth		
	Needed FS	Rendered FS		Needed FS	Rendered FS	
	n	N	%	n	n	%
2010	183,142	169,065	92.3	391,115	354,625	90.7
2011	174,218	164,460	94.4	363,861	343,378	94.4
2012	197,095	186,435	94.6	409,923	387,949	94.6
2013	181,706	172,033	94.7	379,401	358,589	94.5
2014	185,385	177,175	95.6	391,867	374,377	95.5
2015	188,717	179,277	95.0	398,633	378,306	94.9
2016	198,805	189,942	95.5	415,933	396,737	95.4
2017	222,291	204,526	92.0	470,692	426,279	90.6
2018	256,116	245,795	96.0	549,302	524,642	95.5

Source: State OHP 2018

Table 34: Provision of Fissure Sealants by States, 2018

State	No. of Children			No. of Teeth		
	Needed FS	Rendered FS		Needed FS	Rendered FS	
	n	n	%	n	n	%
Perlis	4,206	4,193	99.7	8,044	8,024	99.8
Kedah	10,001	9,980	99.8	18,271	18,236	99.8
Penang	10,706	10,448	97.6	21,889	21,256	97.1
Perak	19,469	19,465	99.98	39,905	39,896	99.98
Selangor	11,596	11,119	95.9	19,332	18,559	96.0
FT KL & Putrajaya	3,496	3,376	96.6	5,110	4,960	97.1
N. Sembilan	6,405	6,307	98.5	12,968	12,779	98.5
Melaka	12,539	12,260	97.8	26,080	25,721	98.6
Johor	9,388	9,291	98.97	17,338	17,169	99.0
Pahang	23,088	18,532	80.3	54,221	42,237	77.9
Terengganu	19,104	18,568	97.2	37,598	36,634	97.4
Kelantan	42,075	41,401	98.4	100,826	99,500	98.7
Pen. Malaysia	172,073	164,940	95.9	361,582	344,971	95.4
Sabah	52,046	50,035	96.1	125,469	119,686	95.4
Sarawak	31,308	30,183	96.4	61,219	59,021	96.4
FT Labuan	689	637	92.5	1,032	964	93.4
MALAYSIA	256,116	245,795	96.0	549,302	524,642	95.5

Source: State OHP 2018

The trend of decayed teeth among selected year 6 schoolchildren from 2004 until 2018 was also captured. The data shows that 66.0 per cent to 74.7 per cent caries experiences were in posterior teeth and between 58.4 per cent to 67.8 per cent involved only the occlusal surface (**Table 35**).

Table 35: Trend Data of Decayed Teeth among Year 6 Schoolchildren, 2004 to 2018

Year	No. of Teeth with Caries Experience (* D + F)	No. of Teeth with Occlusal Caries Experience (D + F)				Percentage of Caries in Anterior Teeth	
		All type (** Class I and II)		Class I only			
		N	n1	%	n2	%	N-n1
2004	436,840	288,382	66.0	255,270	58.4	148,458	34.0
2005	450,665	313,757	69.6	277,151	61.5	136,908	30.4
2006	455,964	323,174	70.9	291,583	63.9	132,790	29.1
2007	414,610	289,671	69.9	260,901	62.9	124,939	30.1
2008	430,798	292,397	67.9	256,954	59.6	138,401	32.1
2009	426,747	301,298	70.6	266,766	62.5	125,449	29.4
2010	409,324	287,626	70.3	258,963	63.3	121,698	29.7
2011	409,162	291,587	71.3	262,771	64.2	117,575	28.7
2012	441,440	297,460	67.4	284,107	64.4	143,980	32.6
2013	409,858	293,282	71.6	265,716	64.8	116,576	28.4
2014	362,116	265,286	73.3	234,934	64.8	96,830	26.7
2015	341,614	245,580	71.9	217,622	63.7	96,034	28.1
2016	326,614	238,989	73.2	216,141	66.2	87,625	26.8
2017	303,320	221,302	73.0	197,512	65.1	82,018	27.0
2018	286,324	213,979	74.7	194,234	67.8	72,345	25.3

Source: State OHP 2018

* D: Carious tooth; F: Filled tooth

** Class I: Caries involves only the occlusal surface of the posterior tooth

Class II: Caries involves other surfaces and/or occlusal of the posterior tooth

Evaluation on trend of occlusal caries further justifies the need for fissure sealants. Thus, it is recommended that fissure sealant provision continues as an integral part of incremental care in primary schoolchildren aimed to prevent pit and fissure caries. With limited resources, priority should be given to high risk individuals and teeth.

Fluoride Varnish Programme

In order to further strengthen the Early Childhood Oral Healthcare programme, fluoride varnish (FV) programme was introduced for toddlers and piloted in Sabah, Kelantan, and Terengganu in 2011. Additional funds were allocated for the purchase of fluoride varnish for the pilot project. Data collection forms were further improved based on feedbacks from state coordinators. In 2018, a total of 42,766 (79.3 per cent) high risk toddlers were rendered fluoride varnish in Kelantan, Terengganu and Sabah (**Table 36**).

Table 36: Fluoride Varnish Application, 2011 to 2018

Year	Kelantan			Terengganu			Sabah			TOTAL		
	Need FV	FV Applied		Need FV	FV Applied		Need FV	FV Applied		Need FV	FV Applied	
	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%
2011	4,337	1,650	38.04	6,141	5,612	91.39	2,989	2,975	99.53	13,467	10,237	76.02
2012	5,530	2,616	47.31	7,742	7,004	90.47	6,408	6,232	97.25	19,680	15,852	80.55
2013	5,816	2,875	49.43	11,269	10,333	91.69	12,147	11,380	93.69	29,232	24,588	84.11
2014	8,037	3,656	45.49	14,720	13,659	92.79	11,018	10,245	92.98	33,775	27,560	81.60
2015	33,596	5,496	16.36	13,004	11,981	92.13	9,676	7,764	80.24	56,276	25,241	44.85
2016	9,506	7,032	73.97	16,704	15,662	93.76	10,101	9,509	94.13	36,311	32,203	88.69
2017	15,918	10,600	66.60	22,579	20,222	89.56	8,909	8,805	98.83	47,406	39,627	83.59
2018	18,652	12,976	69.6	26,545	21,133	79.6	8,757	8,656	98.8	53,954	42,766	79.3

Source: State OHP 2018

Compliance rates were low among children rendered FV in 2018, with only 23.6 per cent, 24.4 per cent and 10.9 per cent in Sabah, Kelantan and Terengganu respectively completed two (2) times application (**Table 37**). None of the children completed the recommended four (4) times application in two (2) years.

Table 37: Compliance Rate for Fluoride Varnish Application Done for Cohort 2016 to 2018

State	Need FV	Rendered FV	With 2 times application		With 3 times application		With 4 times application		Compliance to six-monthly application (±1 month)	
	No.	No.	No.	%	No.	%	No.	%	No.	%
Terengganu	26,545	21,133	2,309	10.9	0	0	0	0	0	0
Kelantan	18,652	12,976	3,166	24.4	18	0.14	0	0	0	0
Sabah	8,757	8,656	2,041	23.6	0	0	0	0	0	0
TOTAL	53,954	42,765	7,516	17.6	18	0.04	0	0	0	0

Source: State OHP 2018

School-Based Fluoride Mouth Rinsing Programme

School-based Fluoride Mouth Rinsing (FMR) activities have been carried out in Sabah, Sarawak and Kelantan. In 2018, the programme was conducted for Year 1 to Year 6 children in selected schools in non-fluoridated areas in Kelantan, Sabah and Sarawak. In total, 64 schools and 18,640 students benefited from this programme (**Table 38**).

Table 38: Schools and Students Participating in FMR Programme, 2018

State	No. of Schools participated			Total	No. of student involved			Total
	Kelantan	Sabah	Sarawak		Kelantan	Sabah	Sarawak	
2010	7	44	25	76	1,204	21,641	5,585	28,430
2011	7	43	26	76	723	21,835	5,758	28,316
2012	7	46	30	83	765	23,835	5,077	29,677
2013	7	38	26	71	720	20,898	5,436	27,054
2014	7	47	24	78	557	27,579	4,076	32,212
2015	7	30	24	61	580	14,796	4,459	19,835
2016	6	54	23	83	673	18,029	4,173	22,875
2017	4	48	22	74	446	16,035	4,227	20,708
2018	4	37	23	64	415	14,386	3,839	18,640

Source: State OHP 2018

There was an increase in the number of schools and schoolchildren involved in FMR programme in 2016 but a slight decrease in 2017 and 2018. It is recommended that FMR programme be continued in communities with no water fluoridation programme with vigilant monitoring by the oral healthcare professionals.

COMMUNITY ORAL HEALTH SERVICES

Rural Transformation Centre (RTC)

RTC aims to serve as one-stop centre to facilitate access by the rural population to services provided by various government and non-governmental agencies. Dental Clinic is among the services available in RTC. It is implemented to deliver outpatient dental care and at the same time to develop optimum oral healthcare among the rural population. In 2018, there were eight (8) RTCs in the country, namely *RTC Gopeng (Perak)*, *RTC Wakaf Che Yeh (Kelantan)*, *RTC Sungai Rambai (Melaka)*, *RTC Kuala Pahang, Pekan (Pahang)*, *RTC Napoh, Jitra (Kedah)*, *RTC Kulaijaya (Johor)*, *RTC Sibuti (Sarawak)* and *RTC Mid Layar, Betong (Sarawak)*. Services provided at the RTCs are dental examination and basic dental treatment such as dental extraction, filling and scaling. A total of 13,059 patients visited dental clinics in RTCs in 2018 (Table 39).

Table 39: Oral health services in RTCs, year 2012-2018

Year	Dental clinics at RTCs		Patient Attendances
	No.	Location	
2012	3	Gopeng, Linggi, Wakaf Che Yeh	912
2013	4	Gopeng, Linggi, Wakaf Che Yeh, Pekan	1,621
2014	6	Gopeng, Linggi, Wakaf Che Yeh, Pekan, Jitra, Kulaijaya	2,519
2015	6	Gopeng, Wakaf Che Yeh, Pekan, Jitra, Kulaijaya, Sibuti	6,320
2016	8	Gopeng, Wakaf Che Yeh, Pekan, Jitra, Kulaijaya, Sibuti, Mid Layar, Sungai Rambai	9,577
2017	8	Gopeng, Wakaf Che Yeh, Pekan, Jitra, Kulaijaya, Sibuti, Mid Layar, Sungai Rambai	11,338
2018	8	Gopeng, Wakaf Che Yeh, Pekan, Jitra, Kulaijaya, Sibuti, Mid Layar, Sungai Rambai	13,059

Source: State OHP 2018

Urban Transformation Centre (UTC)

In 2018, there were 21 dental clinics operating at UTCs in the country namely *UTC Ayer Keroh Melaka*, *UTC Pudu Sentral* and *UTC Mini Sentul* in FT Kuala Lumpur, *UTC Ipoh Perak*, *UTC Kuantan Pahang*, *UTC Kompleks MBAS* and *UTC Sungai Petani* in Kedah, *UTC Kota Baharu Kelantan*, *UTC Galeria Johore*, *UTC Kuala Terengganu*, *UTC Labuan*, *UTC Kota Kinabalu*, *UTC Keningau* and *UTC Tawau* in Sabah, *UTC Kuching*, *UTC Sibu* and *UTC Miri* in Sarawak, *UTC Kangar Perlis*, *UTC Seremban*, *Negeri Sembilan*, *UTC Pasir Gudang*, *Johor* and *UTC Shah Alam, Selangor*. A total of 355,088 patients attended the dental clinics in UTCs in 2018 compared to 287,640 in 2017 and 219,934 in 2016 (Table 40).

Table 40: Oral health services in UTCs, year 2012 to 2018

Year	Dental clinics at UTCs		Patient Attendances
	No.	Location	
2012	2	Ayer Keroh Melaka, Pudu Sentral	3,983
2013	7	Ayer Keroh Melaka, Pudu Sentral, Kompleks MBAS, Ipoh, Mini Sentul, Kuantan	56,889
2014	8	Ayer Keroh Melaka, Pudu Sentral, Kompleks MBAS, Ipoh, Mini Sentul, Kuantan, Kota Kinabalu	128,179
2015	9	Ayer Keroh Melaka, Pudu Sentral, Kompleks MBAS, Ipoh, Mini Sentul, Kuantan, Kota Kinabalu, Galeria Johor	157,966
2016	17	Ayer Keroh Melaka, Pudu Sentral, Kompleks MBAS, Ipoh, Mini Sentul, Kuantan, Kota Kinabalu, Galeria Johor, Kuching Sarawak, Sungai Petani Kedah, Labuan, Sibu Sarawak, Miri Sarawak, Terengganu, Tawau Sabah, Kota Bharu Kelantan, Keningau Sabah	219,934
2017	20	Ayer Keroh Melaka, Pudu Sentral, Kompleks MBAS, Ipoh, Mini Sentul, Kuantan, Kota Kinabalu, Galeria Johor, Kuching Sarawak, Sungai Petani Kedah, Labuan, Sibu Sarawak, Miri Sarawak, Terengganu, Tawau Sabah, Kota Bharu Kelantan, Keningau Sabah, Kangar Perlis, Seremban Negeri Sembilan, Pasir Gudang Johor	287,640
2018	21	Ayer Keroh Melaka, Pudu Sentral, Kompleks MBAS, Ipoh, Mini Sentul, Kuantan, Kota Kinabalu, Galeria Johor, Kuching Sarawak, Sungai Petani Kedah, Labuan, Sibu Sarawak, Miri Sarawak, Terengganu, Tawau Sabah, Kota Bharu Kelantan, Keningau Sabah, Kangar Perlis, Seremban Negeri Sembilan, Pasir Gudang Johor, Shah Alam Selangor.	355,088

Source: State OHP 2018

The increasing trend of patients attending the UTCs was due to the increase in the number of UTCs and also due to awareness of the public about the existence of these UTCs.

Organize Health Fairs for Sabah and Sarawak

MoH is the lead agency for 'Organize Health Fairs for Sabah & Sarawak' an initiative together with Implementation Coordination Unit (ICU) of Prime Minister's Department, Ministry of Education (MoE), Ministry of Defense (MinDef), Ministry of Finance (MoF) and the state government of Sabah and Sarawak. This initiative aims at providing various services for the convenience of the people in Sabah and Sarawak. The oral health services delivered were oral health examination, screening for oral pre-cancer and cancer, filling, extraction, scaling and oral health promotion activities.

Table 41: Oral health activities conducted during Organise Health Fair in Sabah and Sarawak, 2012 to 2018

Year	Sabah			Sarawak		
	No. of Health Fair	No. of patient's attendance	No. of participants for Oral Health Talks	No. of Health Fair	No. of patient's attendance	No. of participants for Oral Health Talks
2012	7	1,529	-	35	3,495	-
2013	3	273	80	12	857	-
2014	34	1,332	1,429	75	3,009	2,127
2015	74	5,189	615	176	10,174	4,369
2016	190	22,258	2,402	331	21,332	5,392
2017	106	13,814	2,102	73	15,250	4,789
2018	167	12,317	2,573	107	8,538	2,650

Source: State OHP 2018

In 2018, a total of 274 health fairs were organised in Sabah and Sarawak with 20,855 patients seen; 12,317 in Sabah and 8,538 in Sarawak (**Table 41**).

Oral Health Services at Elderly and Special Needs Institutions

Outreach oral healthcare at elderly and special needs (*PDK, Pusat Pemulihan Dalam Komuniti*) institutions through mobile dental teams/clinics aims to provide holistic support in terms of health and social to these identified groups with collaboration between government and non-government agencies. A total of 338 institutions for the elderly were visited and 7,193 patients were seen in 2018. The highest number of patients seen was in Perak (1,672) and the highest number of institutions visited was in Johor (76) (**Table 42**). There were 575 institutions for the special needs visited in 2018, with highest coverage in Johor (88). A total of 13,826 patients were seen, highest was in Johor (2,166) (**Table 43**).

Table 42: Number of Elderly Patients Seen in Institution in 2018

State	Government Institution		Private Institution		Total Patients Seen
	No. of Institution	No. of Institution Visited	No. of Institution	No. of Institution Visited	
Perlis	1	1	3	3	128
Kedah	2	2	18	18	338
Penang	2	2	41	41	1,159
Perak	5	3	68	47	1,672
Selangor	5	5	54	41	1,072
FT KL & Putrajaya	2	1	7	6	130
N. Sembilan	0	0	22	22	302
Melaka	5	4	10	10	257
Johor	13	13	63	63	1,213
Pahang	6	6	18	18	374
Terengganu	5	5	1	1	154
Kelantan	6	5	1	1	71
Sabah	3	3	5	5	184
Sarawak	23	11	8	1	135
FT Labuan	0	0	0	0	4
MALAYSIA	78	61	319	277	7,193

Source: State OHP 2018

Table 43: Number of Special Need Patients Seen in Institution in 2018

State	PDK		Non PDK		Total Patients Seen
	No. of Institution	No. of Institution Visited	No. of Institution	No. of Institution Visited	
Perlis	8	8	1	1	233
Kedah	37	37	4	4	1,250
Penang	23	23	7	7	839
Perak	41	29	22	15	1,170
Selangor	49	47	4	33	1,424
FT KL & Putrajaya	13	12	2	2	317
N. Sembilan	44	44	2	2	874
Melaka	16	16	8	8	513
Johor	73	73	15	15	2,166
Pahang	49	30	3	3	540
Terengganu	46	46	1	1	885
Kelantan	42	42	1	1	747
Sabah	34	34	22	22	1,772
Sarawak	51	40	9	7	1,038
FT Labuan	2	2	1	1	58
MALAYSIA	528	483	102	92	13,826

Source: State OHP 2018

Mobile Community Services

Mobile Community Services was organized by the National Strategic Unit (NSU), Ministry of Finance. The aim of this initiative is to assemble main services of various government agencies according to local needs and at identified location based on the concept of UTC/RTC. OHP was involved in this initiative through invitation by NSU. There were 50 activities conducted in 2018 with 4,514 attendances (**Table 44**).

Table 44: Mobile Community Transformation Centre (MCTC) activities in 2018

Date	Location
23-25.03.2018	Pekarangan Kompleks DUN Kangar, Perlis
9-10.02.2018	Kompleks Sukan Komuniti Jerlun, Jitra, Kedah
1-3.03.2018	Dataran Amanjaya Mall, Sungai Petani, Kedah
03.02.2018	Sekolah Kebangsaan Balik Pulau, Balik Pulau, Pulau Pinang
15.03.2018	Dewan Millenium, Kepala Batas, Pulau Pinang
27.01.2018	Dewan Dato' Mohamed Jamrah, Sungai Sumun, Perak
31.03.2018	Dewan Dato' Zainal Abidin Zin, Bagan Serai, Perak
03.02.2018	Kawasan Perindustrian Jalan Ara, Batang Kali, Selangor
10.03.2018	SMK Sungai Pusu, Gombak, Selangor
25.03.2018	Kompleks LKIM Kuala Selangor, Pekan Pasir Penambang, Kuala Selangor
04.03.2018	Dataran Teluk Kemang, Port Dickson, Negeri Sembilan
27.01.2018	Dataran Masjid Jamek Kampung Tengah, Kluang, Johor
2-3.02.2018	Dataran Niaga MPBP Senggarang, Johor
9-10.02.2018	Dataran Segamat, Johor
11.02.2018	Padang Awam Paloh, Kluang, Johor
17-18.03.2018	Padang Awam Jementah, Segamat (Fiesta NBOS), Johor
23-24.03.2018	Dataran Dato Jalok, Benut Pontian, Johor
02.04.2018	Tapak Parkir Batu Pahat Mall, Johor
29-31.03.2018	Dataran Taman Perdagangan Parit Yaani, Batu Pahat, Johor
21.01.2018	Padang Awam, Felde Lurah Bilut, Bentong, Pahang
25.02.2018	Dataran Konvensyen Pekan, Pahang
24.03.2018	Dataran Bentong Kampung Chamang, Bentong, Pahang
31.03 - 01.04.2018	Bandar Dara Chini, Pekan, Pahang
11.02.2018	SMK Belimbing, Tanah Merah, Kelantan
24.02.2018	SK Seri Ketereh, Kampung Buloh Poh, Ketereh, Kelantan
03.03.2018	SK Tok Boh Machang, Kelantan
10.03.2018	Padang KRT Beris Kubur Besar, Tawang, Bachok, Kelantan
16.03.2018	SMK Tanah Merah 1, Tanah Merah, Kelantan
22-25.03.2018	RTC Tunjung, Kota Bharu, Kelantan
30.03.2018	IKBN Tanah Merah, Kelantan
07.04.2018	Kampung Kolam Melor, Bachok, Kelantan
26.02.2018	Stadium Sultan Mizan Zainal Abidin, Gong Badak, Kuala Nerus, Terengganu
21.01.2018	Dewan Suarah Sri Aman, Sarawak
26-27.01.2018	Dewan Tun Said Kota Belud, Sabah
10-11.02.2018	Padang Pekan Semporna, Sabah
11.03.2018	Dewan Komuniti Kota Marudu, Sabah
31.03.2018	Padang Pekan Semporna, Sabah
31.03.2018	Tapak Tamu Pekan Bongawan, Sabah
02.04.2018	Perkarangan Pejabat Pendidikan Daerah Sabak Bernam, Selangor
13-14.04.2018	Padang SK Tamu Darat, Kota Belud, Sabah
13-15.04.2018	Dewan Suarah Sarikei, Sarawak
15.04.2018	Sekolah Menengah Agama Persekutuan Bentong, Pahang
17-18.04.2018	Padang Pekan Semporna, Sabah
18.04.2018	Arena Rakyat, Tualang Sekah, Malim Nawar, Kampar, Perak
22.04.2018	Pasar Besar Dungun, Terengganu
25.04.2018	Taman Bawal, Jerlun, Kedah
27-29.04.2018	Bandar Lama Chenor, Maran, Pahang
04-05.05.2018	Dataran Lang Langkawi, Kedah
25.11.2018	Kompleks Sukan Pandamaran, Klang, Selangor
07-09.12.2018	Politeknik Balik Pulau, Pulau Pinang

Source: State OHP 2018

Outreach Services at People's Housing Project (PPR)

This initiative was started in 2018, targeting the marginalised population of the lower socio-economic status. Thus, outreach services providing promotive, preventive and curative care utilising mobile dental clinic/mobile dental lab/mobile dental team were held at PPRs for the B40 communities. In 2018, a total of 20 PPRs were visited and 1,414 residents received oral healthcare (**Table 45**).

Table 45: Outreach services at PPR in 2018

States	No. of PPRs visited	No. of Patients Seen
Perlis	1	34
Penang	1	48
Perak	1	68
Selangor	1	21
FT KL & Putrajaya	2	77
Negeri Sembilan	2	96
Johor	6	635
Pahang	2	162
Terengganu	1	99
Kelantan	1	80
Sabah	1	59
Sarawak	1	35
Total	20	1,414

Source: State OHP 2018

PRIMARY PREVENTION & EARLY DETECTION OF ORAL POTENTIALLY MALIGNANT DISORDERS (OPMD) & ORAL CANCERS

Oral cancer remains a major health concern in Malaysia. The OHP MoH Malaysia continues its emphasis on Primary Prevention and Early Detection of OPMDs and Oral Cancer Programme since 1997 in collaboration with relevant agencies.

In 2018, 269 high-risk *kampung*/estates/communities were visited and 2,972 residents aged 20 years and above were screened for oral lesions (**Table 46**).

Table 46: Oral Cancer and Pre-cancer Screening and Prevention Programme (Community Screening), 2018

No. of estates/ villages visited		No. of patients screened
New	Repeat	
197	72	2,972

Source: State OHP 2018

Among the screened patients, five (5) were seen with suspected lesion and three (3) were referred to oral surgeons for further investigation and management (Table 47 & 48). Of these, two (2) (66.7 per cent) complied with referral to oral surgeons (Table 47, 48 & 49). Of the malignant cases detected with TNM Classification of Malignant Tumors (TNM) staging reported from 2003 to 2018, 23.6 per cent were detected at stage 1 and 65.0 per cent were detected at later stages, stage 3 and 4 (Table 50). There is a need to improve patient's compliance for referral to prevent delayed treatment.

Table 47: Participants Screened and Referred by State (Community Screening), 2018

State	No. Examined		Total Attendance	No. With Lesion		No. Referred	No. Seen by Surgeons	
	New	Repeat		n	%		N	%
Perlis	0	0	0	0	0	0	0	0
Kedah	64	0	64	0	0	0	0	0
Penang	47	1	48	0	0	0	0	0
Perak	875	26	901	0	0	0	0	0
Selangor	166	0	166	1	0.6	1	0	0
FT KL & Putrajaya	0	0	0	0	0	0	0	0
N. Sembilan	405	0	405	1	0.2	0	0	0
Melaka	0	0	0	0	0	0	0	0
Johor	89	0	89	0	0	0	0	0
Pahang	231	0	231	1	0.4	1	1	100
Terengganu	6	0	6	0	0	0	0	0
Kelantan	51	0	51	0	0	0	0	0
Pen. Malaysia	1,934	27	1,961	3	0.15	2	1	50
Sabah	691	0	691	0	0	0	0	0
Sarawak	320	0	320	2	0.6	1	1	100
FT Labuan	0	0	0	0	0	0	0	0
MALAYSIA	2,945	27	2,972	5	0.2	3	2	66.7

Source: State OHP 2018

Table 48: Participants Screened and Referred (Community Screening), 2007 to 2018

Year	No. Examined		Total Attendance	No. With Lesion		No. Referred	No. Seen by Surgeons	
	New	Repeat		n	%		n	%
2007	3,606	111	3,717	88	2.4	76	50	65.8
2008	4,745	133	4,878	113	2.3	68	48	70.6
2009	7,131	102	7,233	128	1.8	105	47	44.8
2010	5,680	133	5,813	36	0.6	17	8	47.1
2011	7,036	19	7,055	55	0.8	16	5	31.3
2012	15,887	156	16,043	37	0.23	29	15	51.7
2013	10,542	39	10,581	51	0.5	33	2	6.1
2014	10,763	231	10,994	59	0.54	39	17	43.6
2015	13,587	314	13,901	46	0.33	31	8	25.8
2016	15,162	188	15,350	28	0.18	15	9	60.0
2017	14,095	198	14,293	12	0.08	4	0	0.00
2018	2,945	27	2,972	5	0.2	3	2	66.7
TOTAL	111,179	1,651	112,830	658	0.6	436	211	48.4

Source: State OHP 2018

Table 49: Clinical and Histological Diagnosis of Referred Cases (Community Screening), 2018

State	No. of Cases Seen by oral Surgeon	Clinical Diagnosis						TNM Staging				Histological diagnosis								Lesion Status		
		Leukoplakia	Erythroplakia	Lichen Planus	Oral Submucous Fibrosis	Suspicious of Oral Cancer	Other Pathology	Stage 1	Stage 2	Stage 3	Stage 4	Hyperkeratosis	Epithelial Dysplasia	Carcinoma In-situ	Invasive Squamous Cell Carcinoma	Oral Lichen Planus	Oral Submucous Fibrosis	Other Malignancy	Benign Pathologies	Benign	Pre malignant	Malignant
Pen. Malaysia	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sarawak	1	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
MALAYSIA	2	0	0	0	0	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1

Source: State OHP 2018

Table 50: Clinical and Histological Diagnosis of Referred Cases (Community Screening), 2003 to 2018

Year	No. of Cases Seen by Oral Surgeon	Clinical Diagnosis						Staging				Histological Diagnosis								Lesion Status		
		Leukoplakia	Erythroplakia	Lichen Planus	Oral Submucous Fibrosis	Suspicious of oral cancer	Other Pathology	Stage 1	Stage 2	Stage 3	Stage 4	Hyperkeratosis	Epithelial Dysplasia	Carcinoma In-situ	Invasive Squamous Cell Carcinoma	Oral Lichen Planus	Oral Submucous Fibrosis	Other Malignancy	Benign Pathologies	Benign	Pre malignant	Malignant
2003	26	6	1	8	4	2	6	1	0	0	0	1	4	0	0	2	1	0	4	5	6	0
2004	19	3	1	3	1	2	10	0	0	3	0	0	0	0	3	0	0	0	0	0	1	2
2005	25	9	1	3	2	9	6	5	2	3	1	0	1	0	10	0	0	2	0	1	6	10
2006	34	1	1	6	1	18	7	7	1	5	7	0	0	0	17	3	0	1	4	3	2	19
2007	50	6	1	4	3	27	13	4	5	6	8	0	6	1	22	3	3	2	5	5	11	26
2008	48	2	1	0	1	35	7	4	2	8	13	0	5	2	20	8	0	2	2	3	6	32
2009	47	4	0	4	2	30	5	3	3	5	16	2	2	0	20	1	0	5	1	0	1	28
2010	8	1	0	2	0	1	4	0	0	1	0	0	2	0	1	0	0	0	0	0	3	1
2011	5	1	0	0	1	3	0	0	1	0	1	1	0	0	2	0	0	0	0	0	2	2
2012	15	3	2	1	2	6	2	0	0	0	2	0	0	0	2	0	0	1	3	4	2	4
2013	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
2014	17	3	1	1	0	1	11	0	0	0	0	0	0	0	0	0	0	0	0	12	1	0
2015	8	0	4	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	1	7	0
2016	9	1	1	4	0	2	1	5	0	0	0	0	0	0	1	2	0	1	0	4	1	1
2017	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2018	2	0	0	0	0	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	1
Total	315	40	14	37	18	137	77	29	14	31	49	4	20	3	99	19	4	14	20	40	49	126

Source: State OHP 2018

*Histological diagnosis only available for cases with biopsy done

Opportunistic Screening for Walk-in Patients

In 2018, a total of 113,650 patients were screened in the dental clinics (**Table 51**), 969 patients were found with suspected lesion and 478 were referred to oral surgeons for further investigation and management (**Table 51 & 52**). Of these, 348 (72.8 per cent) complied with referral to oral surgeons (**Table 51, 52 & 53**). A higher number of malignant cases were detected among patients screened in the dental clinic compared to screening at high risk communities (**Table 49 & 53**).

Table 51: Walk-in Patients Screened and Referred by State, 2018

State	No. Examined		Total Attendances	No. With Lesion		No. Referred	No. Seen by Surgeons	
	New	Repeat		n	%		n	%
Perlis	17,944	71	18,015	18	0.10	7	7	100
Kedah	22,649	100	22,749	16	0.07	15	12	80
Penang	4,208	45	4,253	45	1.06	36	5	13.9
Perak	10,178	78	10,256	47	0.46	33	29	87.9
Selangor	5,025	0	5,025	129	2.57	84	66	78.6
FT KL/ FT Putrajaya	3,858	41	3,899	99	2.54	76	45	59.2
N. Sembilan	6,037	0	6,037	24	0.40	22	19	86.4
Melaka	4,832	69	4,901	68	1.39	46	32	69.6
Johor	10,911	61	10,972	122	1.11	34	22	64.7
Pahang	3,495	174	3,669	20	0.55	9	8	88.9
Terengganu	7,712	361	8,073	211	2.61	20	20	100.0
Kelantan	9,188	9	9,197	84	0.91	24	21	79.2
Pen. Malaysia	106,037	1,009	107,046	883	0.82	406	286	70.4
Sabah	3,261	0	3,261	31	0.95	31	25	80.6
Sarawak	3,090	162	3,252	53	1.63	39	35	89.7
FT Labuan	91	0	91	2	2.20	2	2	100.0
MALAYSIA	112,479	1,171	113,650	969	0.85	478	348	72.8

Source: State OHP 2018

Table 52: Walk-in Patients Screened and Referred, 2014 to 2018

Year	No. Examined		Total Attendance	No. With Lesion		No. Referred	No. Seen by Surgeons	
	New	Repeat		n	%		n	%
2014	55,812	59	55,871	349	0.6	189	93	49.2
2015	61,058	51	61,109	464	0.8	282	139	49.3
2016	88,941	6	88,947	309	0.35	214	129	60.3
2017	107,553	29	107,582	367	0.33	328	200	61
2018	112,479	1,171	113,650	969	0.85	478	348	72.8
TOTAL	425,843	1,316	427,159	2,458	0.57	1,491	909	61

Source: State OHP 2018

Table 53: Clinical and Histological Diagnosis of Referred Cases (Walk-in patients), 2018

State	No. of Cases Seen by Oral Surgeon	Clinical Diagnosis						Staging				Histological diagnosis*								Lesion Status		
		Leukoplakia	Erythroplakia	Lichen Planus	Submucous Fibrosis	Suspicious of oral cancer	Other Pathology	Stage 1	Stage 2	Stage 3	Stage 4	Hyperkeratosis	Epithelial Dysplasia	Carcinoma In-situ	Invasive Squamous Cell Carcinoma	Oral Lichen Planus	Oral Submucous Fibrosis	Other Malignancy	Benign Pathologies	Benign	Pre malignant	Malignant
Perlis	7	3	0	0		1	3		0		1				1				1	3	3	1
Kedah	12	0	0	2		2	6		1		1				1	1		1	3	4	2	2
Penang	5	3	0	0		2	0		1	1		2			2			1		2		3
Perak	29	3	0	5	1	6	12	1	0	2	3	3	1	1	4	2			5	15	2	5
Selangor	66	14	2	15		13	37	2	3	2	4	2	5	1	9	3			14	19	6	10
FT KL & Putrajaya	45	3	0	10		6	20	1			3	1	5		6	2			8	10	4	6
Negeri Sembilan	19	1	0	2	2	3	11	1				1	3	1	1				5	6		3
Melaka	32	1	0	2		4	25							1	1				6	26	3	3
Johor	22	1	0	5		6	11	1		5	2			4	2	2		3	4	1	2	9
Pahang	8	0	0	1		1	5				1				1						1	1
Terengganu	20	1	0	3		4	10				1			1					3	3	1	1
Kelantan	21	1	0	0		6	10			1	2				2			1	3	4		3
Pen. M'sia	286	31	2	45	3	54	150	6	5	11	18	9	14	9	30	10	0	6	52	93	24	47
Sabah	25	2	0	2	1	15	4	1		3	8		3	1	9	1		1	5	7	2	12
Sarawak	35	7	1	6		20	3	1	1	1	9	5	3	3	15	5				3	14	16
FT Labuan	2	0	0	0		1	1				1				1				1	1		1
Malaysia	348	40	3	53	4	90	158	8	6	15	36	14	20	13	55	16	0	7	58	104	40	76

Source: State OHP 2018

*Histological diagnosis only available for cases with biopsy done

Opportunistic screening data is available starting 2014. Of the malignant cases detected with TNM staging reported from 2014 to 2018, 21.0 per cent were detected at stage 1 and 61.0 per cent were detected at later stages, stage 3 and 4 (Table 54).

Table 54: Clinical and Histological Diagnosis of Referred Cases (Walk-in patients), 2014 to 2018

Year	No. of Cases Seen by Oral Surgeon	Clinical Diagnosis						Staging				Histological Diagnosis								Lesion Status		
		Leukoplakia	Erythroplakia	Lichen Planus	Submucous Fibrosis	Suspicious of oral cancer	Other Pathology	Stage 1	Stage 2	Stage 3	Stage 4	Hyperkeratosis	Epithelial Dysplasia	Carcinoma In-situ	Invasive Squamous Cell Carcinoma	Oral Lichen Planus	Oral Submucous Fibrosis	Other Malignancy	Benign Pathologies	Benign	Pre malignant	Malignant
2014	93	3	0	5	2	32	51	4	2	0	9	2	2	1	26	4	0	1	17	26	7	27
2015	139	4	0	14	5	45	74	6	9	7	6	0	0	4	33	7	3	13	7	16	8	56
2016	129	8	1	8	2	56	48	17	9	8	12	6	4	5	36	7	0	8	17	16	6	41
2017	200	13	3	22	5	67	71	7	10	6	23	4	4	3	51	8	1	3	18	10	11	56
2018	348	40	3	53	4	90	158	8	6	15	36	14	20	13	55	16	0	7	58	104	40	76
Total	909	68	7	102	18	290	402	42	36	36	86	26	30	26	201	42	4	32	117	172	72	256

Source: State OHP 2018

*Histological diagnosis only available for cases with biopsy done

Combined data of community and opportunistic screening from 2003 to 2018 showed 22.0 per cent were detected at stage 1 and 62.5 per cent were detected at later stages, stage 3 and 4 (**Table 55**). This achievement is still below the National Oral Health Plan for Malaysia 2011 to 2020 goal of '30 per cent of oral cancers detected at stage 1'.

Table 55: Clinical and Histological Diagnosis of Referred Cases (Community and Opportunistic Screening), 2003 to 2018

Year	No. of Cases Seen by Oral Surgeon	Clinical Diagnosis						Staging				Histological Diagnosis							Lesion Status			
		Leukoplakia	Erythroplakia	Lichen Planus	Submucous Fibrosis	Suspicious of oral cancer	Other Pathology	Stage 1	Stage 2	Stage 3	Stage 4	Hyperkeratosis	Epithelial Dysplasia	Carcinoma In-situ	Invasive Squamous Cell Carcinoma	Oral Lichen Planus	Oral Submucous Fibrosis	Other Malignancy	Benign Pathologies	Benign	Pre malignant	Malignant
2003	26	6	1	8	4	2	6	1	0	0	0	1	4	0	0	2	1	0	4	5	6	0
2004	19	3	1	3	1	2	10	0	0	3	0	0	0	0	3	0	0	0	0	0	1	2
2005	25	9	1	3	2	9	6	5	2	3	1	0	1	0	10	0	0	2	0	1	6	10
2006	34	1	1	6	1	18	7	7	1	5	7	0	0	0	17	3	0	1	4	3	2	19
2007	50	6	1	4	3	27	13	4	5	6	8	0	6	1	22	3	3	2	5	5	11	26
2008	48	2	1	0	1	35	7	4	2	8	13	0	5	2	20	8	0	2	2	3	6	32
2009	47	4	0	4	2	30	5	3	3	5	16	2	2	0	20	1	0	5	1	0	1	28
2010	8	1	0	2	0	1	4	0	0	1	0	0	2	0	1	0	0	0	0	0	3	1
2011	5	1	0	0	1	3	0	0	1	0	1	1	0	0	2	0	0	0	0	0	2	2
2012	15	3	2	1	2	6	2	0	0	0	2	0	0	0	2	0	0	1	3	4	2	4
2013	2	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
2014	110	6	1	6	2	33	62	4	2	0	9	2	2	1	26	4	0	1	17	38	8	27
2015	147	4	4	15	6	45	76	6	9	7	6	0	0	4	33	7	3	13	8	17	15	56
2016	138	9	2	12	2	58	49	22	9	8	12	6	4	5	37	9	0	9	17	20	7	42
2017	200	13	3	22	5	67	71	7	10	6	23	4	4	3	51	8	1	3	18	10	11	56
2018	350	40	3	53	4	91	159	8	6	15	37	14	20	13	56	16	0	7	58	104	40	77
Total	1,224	108	21	139	36	427	479	71	50	67	135	30	50	29	300	61	8	46	137	212	121	382

Source: State OHP 2018

*Histological diagnosis only available for cases with biopsy done

Mouth Cancer Awareness Week

Mouth Cancer Awareness Week was held from 11 to 17 November 2018 aimed to increase oral cancer awareness among health professionals and the public. Activities include screening of 30,005 people, 1,262 awareness campaigns and counselling to 12,071 individuals on risk habits (**Table 56**). At the national level, Mouth Cancer Awareness Week was launched by the Principal Director of Oral Health, MoH, Malaysia on 11 November 2018 at Taman Botani Negara, Kuala Lumpur. The event was conducted in collaboration with Oral Cancer Research & Coordinating Center, Dental Faculties of Public and Private Universities (UM, UKM, UiTM, MAHSA, SEGi University and IMU), Cancer Research Malaysia (CRM), Malaysia Association of Maxillofacial Surgeons (MAOMS), OHP and Ministry of Defense. A 2.3 km walkathon and 5 km run, aerobics and flash mob dance were among the highlights in conjunction with the launch.

Table 56: Activities during Mouth Cancer Awareness Week by State, 2018

State	Oral Screening	Oral Health Education			Oral Health promotion (No. of activities held)				*Advice/Counselling
		Talks			Radio Talk	Television Talk	Exhibition/Campaign	Others**	No. of Participants
		Group		Individual					
		No. Held	No. of Participants	No. Held					
Perlis	739	103	586	855	0	6	21	625	1,441
Kedah	3,605	352	5,034	958	0	0	104	54	2,429
Penang	1,553	173	2,581	560	0	5	41	11	252
Perak	1,466	164	2,905	703	0	0	80	6	201
Selangor	3,199	178	3,071	224	0	0	46	25	244
FT KL/ FT Putrajaya	4,194	120	3,165	1,254	0	11	58	78	1,089
N Sembilan	1,851	116	2,222	1,268	0	0	68	17	996
Melaka	938	92	1,521	716	0	10	44	12	122
Johor	2,398	271	3,038	561	0	1	395	103	2,421
Pahang	2,521	147	1,930	1,655	0	0	131	20	1,278
Terengganu	1,361	122	1,957	640	0	0	52	62	635
Kelantan	1,481	155	2,211	431	0	0	73	0	548
Sabah	1,453	96	3,863	535	1	0	76	0	89
Sarawak	2,911	155	2,836	188	3	3	71	0	326
FT Labuan	43	6	154	43	0	0	1	0	0
HKL	342	15	342	342	0	15	1	0	0
OHP, MoH	0	0	0	0	1	1	0	0	0
Total	30,055	2,265	37,416	10,933	5	52	1,262	1,013	12,071

Source: State OHP 2018

* Example: Stop smoking habits / chewing betel quid / drinking alcohol / others

** Example: MSE demonstration

Training

In 2018, there were 102 trainings on primary prevention and early detection of oral cancer conducted by the states involving 1,092 dental officers. The highest number of officers trained was in Perak (**Table 57**).

Table 57: Oral Cancer Related Courses Conducted by States, 2018

State	Oral Cancer Training	
	No. of courses conducted	No. of dental officers trained
Perlis	2	32
Kedah	2	76
Penang	1	34
Perak	10	228
Selangor	18	68
FT KL/ FT Putrajaya	1	35
N. Sembilan	7	54
Melaka	2	59
Johor	11	76
Pahang	2	99
Terengganu	2	36
Kelantan	2	50
Pen. Malaysia	60	847
Sabah	26	123
Sarawak	14	118
FT Labuan	2	4
Malaysia	102	1,092

Source: State OHP 2018

PRIMARY ORAL HEALTHCARE

The OHP, MoH Malaysia is the lead agency in the provision of oral healthcare to the population and continues to provide care to target groups which includes; toddlers (0 to 4 years), preschool children (5 to 6 years), schoolchildren (7 to 17 years), children with special needs, antenatal mothers, adults and the elderly. Overall, the utilisation of primary oral healthcare service in MoH increases from 25.2 per cent in 2017 to 25.8 per cent in 2018 (**Figure 9**).

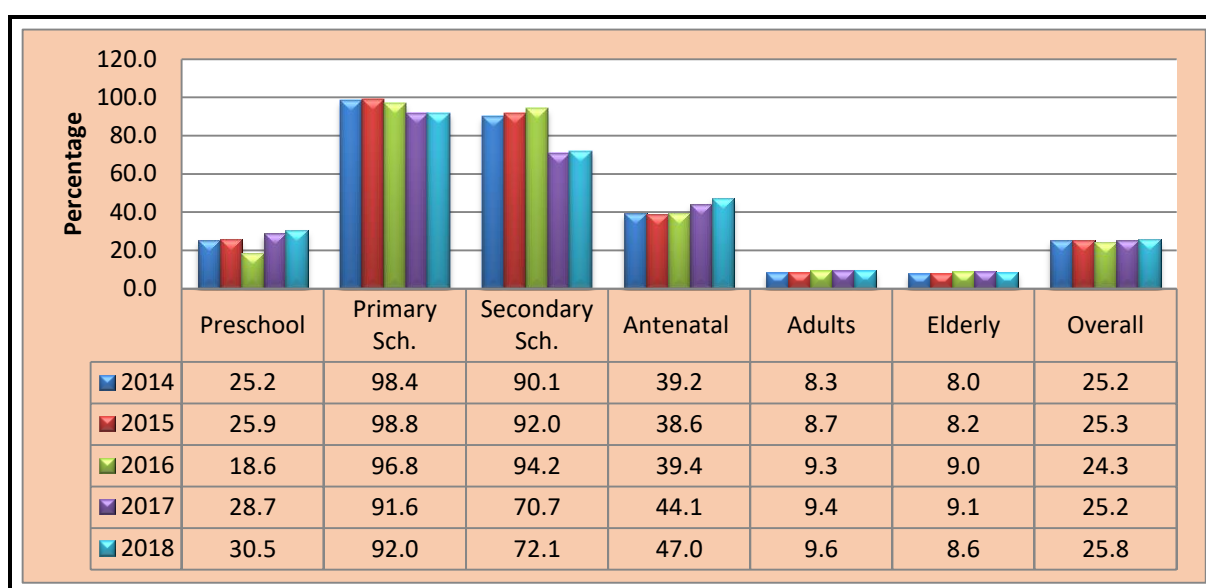


Figure 9: Percentage Utilisation, Primary Oral Healthcare Services, MoH 2014 to 2018

Source: Health Informatics Centre, MoH 2018

The actual numbers of utilizations of MoH primary oral healthcare services by target group over the years are as shown in **Table 58**. Overall, there is increasing trend for all target groups except for secondary schoolchildren, a slight reduction in numbers from the previous year.

Table 58: Utilisation of Primary Oral Healthcare by Category of Patients, 2014 to 2018

Year	Preschool	Primary School	Secondary School	Antenatal	Adults	Elderly	Special Children	Overall
2014	893,544	2,795,879	1,929,388	225,389	1,499,105	211,992	50,571	7,605,868
2015	924,920	2,757,792	1,934,031	221,444	1,588,623	226,039	54,686	7,707,535
2016	1,001,064	2,785,178	1,933,640	225,843	1,702,521	249,966	57,881	7,956,093
2017	1,047,391	2,809,766	1,964,105	245,018	1,810,480	269,500	62,114	8,208,374
2018	1,146,680	2,861,585	1,944,312	257,609	1,918,086	292,665	68,339	8,489,276

Source: Health Informatics Centre, MoH 2018

EARLY CHILDHOOD ORAL HEALTHCARE FOR TODDLERS

In 2018, a total of 425,887 (15.6 per cent) toddlers were seen under the primary oral healthcare services as in **Table 59**. Cursory examination of the oral health cavity for toddler through 'lift-the-lip' was done in settings such as child care centers or Maternal and Child Health (MCH) clinics.

Table 59: Coverage of Toddlers, 2014 to 2018

Year	Toddler Population (0 to 4 years old)	No. of Toddler seen	% of Toddler seen
2014	2,519,300	293,006	11.6
2015	2,577,500	300,517	11.7
2016	2,634,800	341,664	13.0
2017	2,720,900	379,335	13.9
2018	2,727,100	425,887	15.6

Source: OHP, MoH 2018

The state of Johor followed by Terengganu and Kedah recorded the highest number of toddlers seen in 2018 (**Figure 10**).

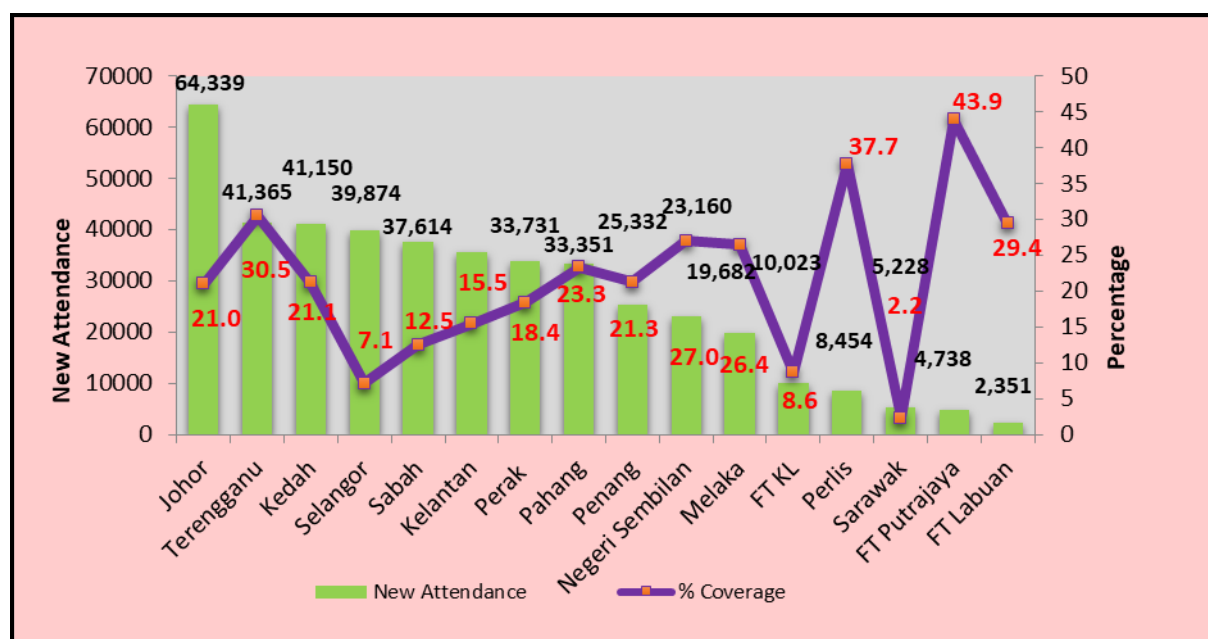


Figure 10: Toddlers Receiving Primary Oral Healthcare by State, 2018

Source: OHP, MoH 2018

Clinical preventive measures for toddlers such as fluoride varnish were instituted where required. In 2018, 50.1 per cent (213,212/425,887) of toddlers received topical fluoride varnish application.

ORAL HEALTHCARE FOR PRESCHOOL CHILDREN

In 2018, there were a total of 21,488 kindergartens/preschool institutions in Malaysia, 16,769 Government and 4,719 Private. The coverage of kindergartens nationwide from 2014 to 2018 are as tabulated in **Table 60**.

Table 60: Coverage of Kindergartens, 2014 to 2018

Year	Total Kindergartens	Government Kindergartens	Private Kindergartens	Percentage of Government Kindergartens Coverage (%)	Percentage of Private Kindergartens Coverage (%)
2014	20,473	16,232	4,241	95.5	95.3
2015	20,930	16,615	4,315	96.0	95.9
2016	21,272	16,807	4,465	97.0	95.6
2017	21,245	16,714	4,531	96.1	90.4
2018	21,488	16,769	4,719	97.0	92.1

Source: OHP, MoH 2018

A total of 1,146,680 (30.4 per cent) preschool children aged 0 to 6 years of age received primary oral healthcare services in 2018. **Table 61** shows a 2.5 per cent increase in coverage of toddlers from year 2017 (27.9 per cent) to 2018 (30.4 per cent).

Table 61: Coverage of preschool children, 2014 to 2018

Year	Estimated Preschool Pop. (0 to 6 years of age)	No. of Preschool Children Covered (0 to 6 years of age)	% Coverage
2014	3,543,000	893,544	25.2
2015	3,573,400	924,920	25.9
2016	3,637,700	1,001,064	27.5
2017	3,750,100	1,047,391	27.9
2018	3,755,300	1,146,680	30.4

Source: Health Informatics Centre, MoH 2018

In 2018, the state of Perlis (56.7 per cent) followed by Melaka (51.1 per cent) and FT Putrajaya (46.8 per cent) recorded the highest coverage of preschool children in their state (**Figure 11**).

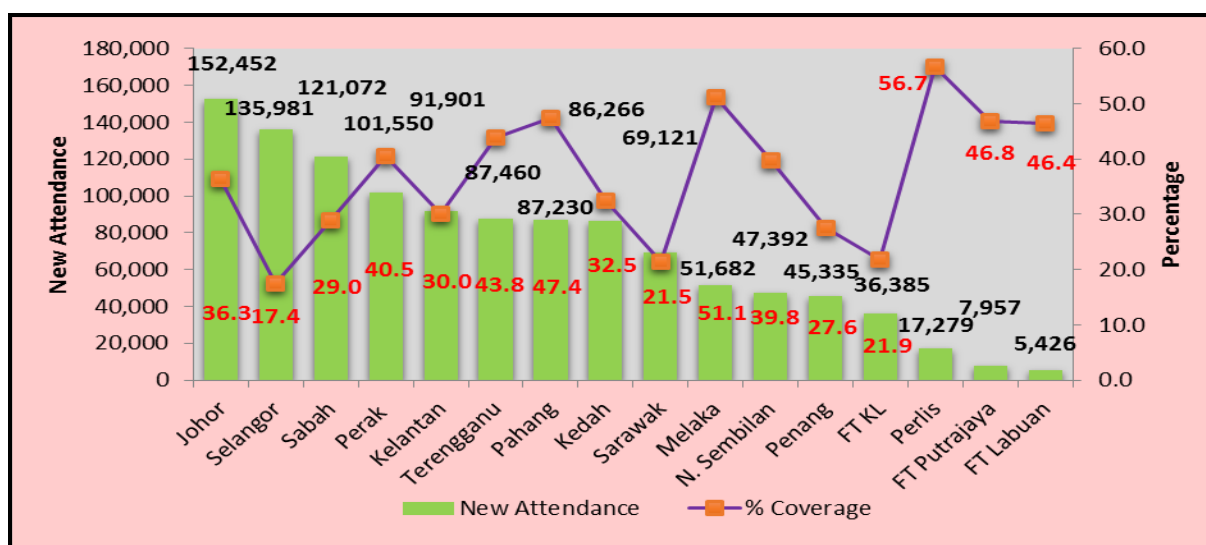


Figure 11: Preschool Children Receiving Primary Oral Healthcare by State, 2018

Source: Health Informatics Centre, MoH 2018

ORAL HEALTHCARE FOR SCHOOLCHILDREN

The 7-surfaces Gingival Index for Schoolchildren (GIS) was approved for use in 2013 and was implemented in 2014. GIS aim to evaluate the gingival status of schoolchildren based on scientific evidence.

The 7-surfaces GIS were found to be equally sensitive to the 12-surfaces of six (6) index teeth and can be done in less time. The index tooth is visually examined for obvious presence of gingivitis and or calculus and the GIS score categories are: GIS score 0= No gingivitis, No calculus; GIS score 1 = No gingivitis, With calculus; GIS score 2= With gingivitis, No calculus; GIS score 3= With gingivitis, With calculus. The GIS score for primary and secondary school children are as in **Table 62** and **Table 63**.

Table 62: GIS score for Primary Schoolchildren, 2018

Year	New attendances	GIS 0 (%)	GIS 1 (%)	GIS 2 (%)	GIS 3 (%)
2017	2,629,005	2,036,310 (77.5)	128,316 (4.9)	324,031 (12.3)	140,347 (5.3)
2018	2,665,769	2,129,361 (79.9)	148,326 (5.6)	262,569 (9.8)	125,513 (5.3)

Source: OHP, MoH 2018

Table 63: GIS score for Secondary Schoolchildren, 2018

Year	New attendances	GIS 0 (%)	GIS 1 (%)	GIS 2 (%)	GIS 3 (%)
2017	1,923,699	1,346,571 (70.0)	128,733 (6.7)	239,033 (12.4)	209,368 (10.9)
2018	1,923,072	1,365,278 (71.0)	165,474 (8.6)	204,602 (10.6)	187,718 (9.8)

Source: OHP, MoH 2018

It was observed that 79.9 per cent of primary schoolchildren and 71.0 per cent of secondary schoolchildren are having healthy gingiva (GIS score 0).

Primary schoolchildren

Dental nurses and supporting teams are entrusted with the oral healthcare for primary schoolchildren under the Incremental Dental Care Approach. Overall, the coverage of primary schools showed a slight improvement from 94.0 per cent in 2017 to 94.5 per cent in 2018 (**Table 64**).

Table 64: Coverage of Primary Schools, 2014 to 2018

Year	Total No. of Primary Schools	No. of Primary Schools Covered	% Coverage of Primary Schools
2014	7,816	7,472	95.6
2015	7,828	7,511	96.1
2016	7,847	7,606	96.9
2017	7,858	7,390	94.0
2018	7,851	7,420	94.5

Source: Health Informatics Centre, MoH 2018

In 2018, most states have achieved the targeted coverage of primary schools which is 98 per cent and above except for Sabah (89.5 per cent) and Sarawak (75.8 per cent) (**Table 65**).

Table 65: Coverage of Primary Schools by States, 2014 to 2018

State	Percentage of Coverage of Primary Schools				
	2014	2015	2016	2017	2018
Perlis	100	100	100	100	100
Kedah	100	100	100	99.6	99.8
Pulau Pinang	100	100	100	95.2	98.9
Perak	99.2	99.4	100	100	99.5
Selangor	98.8	99.5	99.4	94.2	99.8
FT KL	100	100	100	100	100
FT Putrajaya	100	100	100	100	100
N. Sembilan	100	100	100	100	100
Melaka	100	94.9	100	99.6	100
Johor	100	100	100	100	100
Pahang	100	100	99.8	98.6	100
Terengganu	99.5	99.5	100	100	100
Kelantan	98.8	98.1	99.8	98.6	99.3
FT Labuan	100	100	100	100	100
Sabah	79.6	88.2	90.1	88.4	89.5
Sarawak	91.7	88	91.7	78.2	75.8
MALAYSIA	95.6	96.1	96.9	94.0	94.5

Source: Health Informatics Centre, MoH 2018

The annual coverage of primary schoolchildren has exceeded 98 per cent over the past five (5) years, with 99.3 per cent of primary schoolchildren examined in 2018 (**Table 66**).

Table 66: Coverage of Primary Schoolchildren, 2014 to 2018

Year	Total Pop of Primary Schoolchildren	No of Primary Schoolchildren Covered	% Coverage
2014	2,707,876	2,664,738	98.4
2015	2,686,750	2,654,585	98.8
2016	2,677,950	2,649,420	98.9
2017	2,678,793	2,656,519	99.2
2018	3,112,000	2,861,585	99.3

Source: Health Informatics Centre, MoH 2018

All states have achieved 98 per cent and more coverage of primary schoolchildren (**Figure 12**).

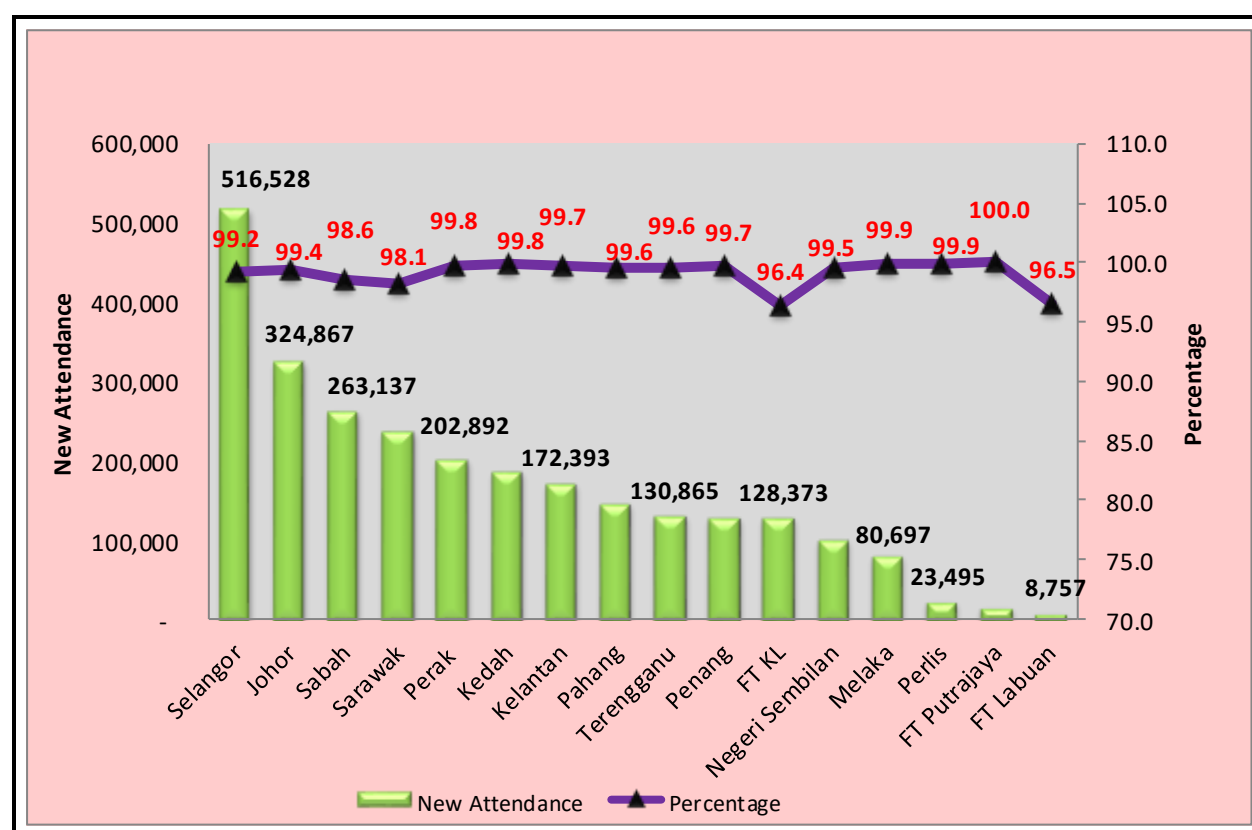


Figure 12: Number and Percentage of Primary Schoolchildren Receiving Primary Oral Healthcare by State, 2018

Source: Health Informatics Centre, MoH 2018

Over the years, the percentages of primary school children rendered orally-fit (Case Completion) and maintained caries-free have increased. However, the percentage of No Treatment Required (NTR) has decreased from year 2017. Out of those examined in 2018, 97.4 per cent were Case Completed, 67.4 per cent were NTR, and 38.2 per cent were Caries-free (**Table 67**).

Table 67: Percentage Primary Schoolchildren Orally-Fit, NTR and Caries-free, 2014 to 2018

Year	No of Primary Schoolchildren Covered	% Case Completion	% NTR	% Maintained Caries-free Mouth
2014	2,664,738	97.7	61.5	34.4
2015	2,654,585	96.4	64.0	35.4
2016	2,649,420	97.9	63.7	35.8
2017	2,656,519	97.0	63.4	37.1
2018	2,861,585	97.4	67.4	38.2

Source: Health Informatics Centre, MoH 2018

In 2018, all states achieved more than 95.0 per cent of Case Completion except Labuan (91.4 per cent). Whilst for NTR, Johor has achieved the highest percentage (81.5 per cent) followed by Perak (75.4 per cent) and Kedah (70.6 per cent). Overall, Caries-free was 38.2 per cent. FT Kuala Lumpur reported the highest achievement for Caries-free status (61.5 per cent) followed by Selangor (57.9 per cent) and Negeri Sembilan (51.9 per cent) (**Table 68**).

Table 68: Oral Health Status of Primary Schoolchildren by State, 2018

State	Percentage of Case Completion (%)	Percentage of No Treatment Required (NTR) (%)	Percentage of Maintained Caries-free (%)
Perlis	98.8	59.2	25.2
Kedah	98.4	70.6	32.8
Pulau Pinang	96.7	61.0	35.3
Perak	98.9	75.4	32.8
Selangor	98.2	65.2	57.9
FT Kuala Lumpur	96.8	70.1	61.5
FT Putrajaya	96.5	63.4	51.1
N. Sembilan	99.0	65.7	51.9
Melaka	98.7	49.2	38.2
Johor	98.0	81.5	51.0
Pahang	97.9	54.3	29.6
Terengganu	98.5	63.0	21.9
Kelantan	98.0	31.4	18.6
FT Labuan	91.4	40.9	25.6
Sabah	95.4	51.2	8.2
Sarawak	93.2	54.3	31.8
MALAYSIA	97.4	67.4	38.2

Source: Health Informatics Centre, MoH 2018

Over the years, the percentages of primary schoolchildren rendered orally-fit (Case Completion), No Treatment Required (NTR) and maintained caries-free have fluctuated slightly. Of those examined in 2018, 97.4 per cent were Case Completed, 67.4 per cent were NTR, and 38.2 per cent were Caries-free (**Table 68**). The common issues faced among others are consent and uncooperative schoolchildren.

Secondary Schoolchildren

With more dental officers coming into the service, they shoulder the responsibilities for the secondary school dental service. The coverage of secondary schools showed an increase from 2017 (83.6 per cent) to 87.5 per cent in 2018 (**Table 69**).

Table 69: Coverage of Secondary Schools, 2014 to 2018

Year	Total No. of Secondary Schools	No. of Secondary Schools Covered	% Coverage of Secondary Schools
2014	2,477	2,019	81.5
2015	2,508	2,096	84.0
2016	2,558	2,196	86.7
2017	2,563	2,142	83.6
2018	2,567	2,247	87.5

Source: Health Informatics Centre, MoH 2018

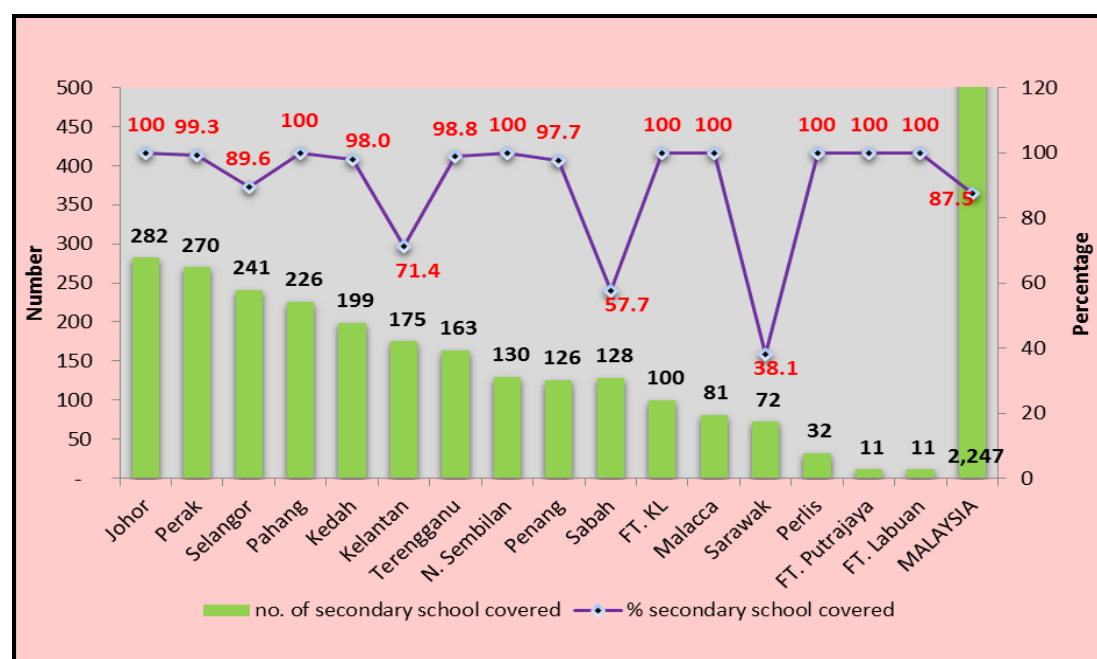


Figure 13: Coverage of Secondary Schools by State, 2018

Source: Health Informatics Centre, MoH 2018

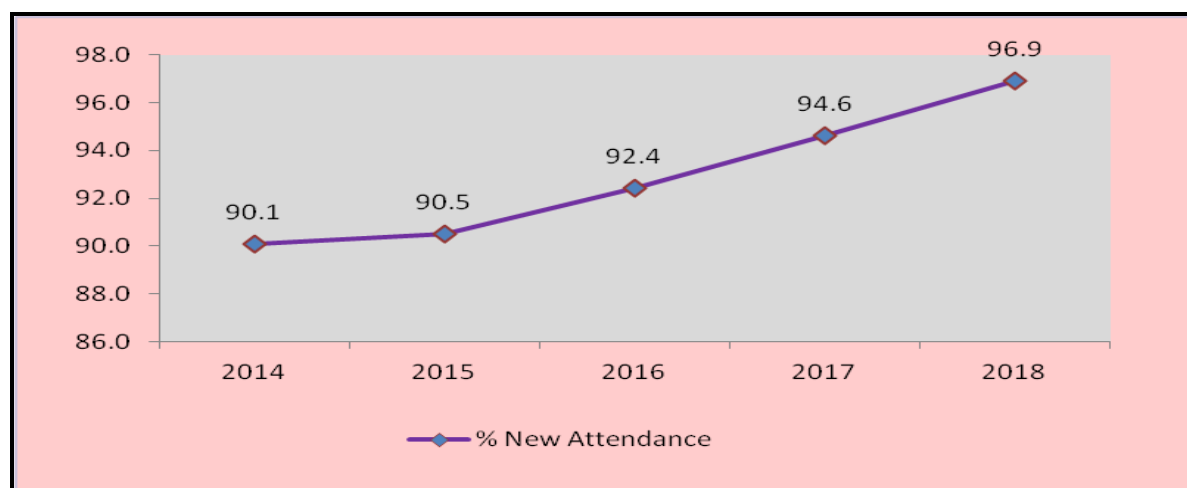
In 2018, majority of the states have achieved above 95 per cent of secondary school coverage except for Selangor (89.6 per cent), Kelantan (71.4 per cent), Sabah (57.7 per cent) and Sarawak (38.1 per cent) (**Figure 13**). There is increasing trends of coverage noted for Selangor, Kelantan, Sabah and Sarawak (**Table 70**).

Table 70: Percentage Secondary School Coverage under Incremental Dental Care by State, 2014 to 2018

State	Percentage of Secondary Schools Covered				
	2014	2015	2016	2017	2018
Perlis	100	100	100	100	99.7
Kedah	94.7	97.9	99.5	91.6	99.8
Pulau Pinang	99.2	97.6	100.0	94.4	99.7
Perak	97.3	98.9	100.0	100	99.8
Selangor	79.6	92.5	94.2	72.9	99.2
FT KL	100	100	100	100	99.9
FT Putrajaya	100	100	100	100	100
N. Sembilan	100	100	100	100	99.3
Melaka	100	92.6	100	100	99.9
Johor	100	100	100	100	99.4
Pahang	97.7	99.5	99.6	98.7	99.6
Terengganu	96.0	96.2	99.4	99.4	99.6
Kelantan	50.8	52.9	60.9	68.4	99.7
FT Labuan	100	100	100	100	99.3
Sabah	35.9	44.8	47.2	48.9	98.6
Sarawak	29.3	31.4	40.8	32.3	98.1
MALAYSIA	81.5	84.1	86.7	83.6	99.3

Source: Health Informatics Centre, MoH 2018

In the meantime, 96.9 per cent of secondary schoolchildren were seen in 2018, a 2.3 per cent improvement from year 2017 (**Figure 14**).

**Figure 14: Coverage of Secondary Schoolchildren, 2014-2018**

Source: Health Informatics Centre, MoH 2018

However, Sarawak recorded 88.2 per cent coverage of secondary schoolchildren which is below the targeted 90 per cent coverage of secondary schoolchildren (**Figure 15**).

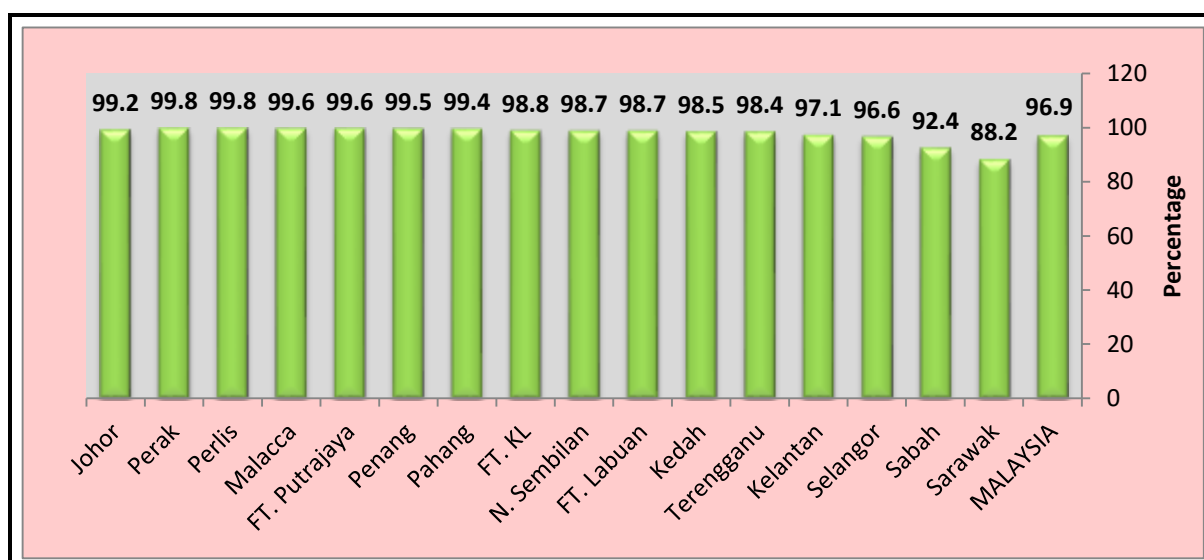


Figure 15: Secondary Schoolchildren Receiving Primary Oral Healthcare by State, 2018

Source: Health Informatics Centre, MoH 2018

Over the years there was an improvement in the percentage of Case Completion whilst a decrement was noted for percentage of NTR and maintained caries free among secondary schoolchildren (**Table 71**). In 2018, 93.6 per cent of secondary schoolchildren were rendered orally-fit while 67.7 per cent were NTR and 59.1 per cent were Caries-free.

Table 71: Percentage Secondary Schoolchildren Orally-Fit, NTR and Caries-free, 2014-2018

Year	No of Secondary Schoolchildren Covered	Percentage of Case Completion (%)	Percentage NTR (%)	Percentage of Maintained Caries-free (%)
2014	1,929,388	93.1	66.8	57.5
2015	1,802,582	94.1	68.2	56.0
2016	1,934,828	94.2	68.8	58.8
2017	1,936,477	92.5	68.3	59.2
2018	1,926,123	93.6	67.7	59.1

Source: Health Informatics Centre, MoH 2018

The state of Sarawak recorded the lowest percentage of case completion (82.0 per cent) whilst Sabah recorded the lowest percentage of NTR and percentage Maintained Caries-free among secondary schoolchildren in 2018 (**Table 72**).

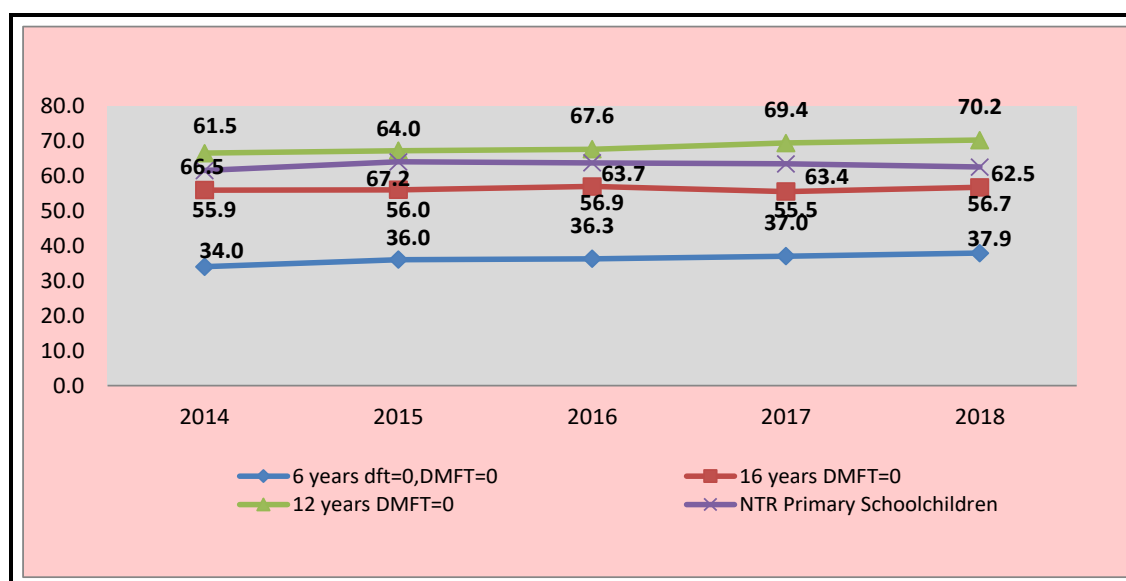
Table 72: Oral Health Status of Secondary Schoolchildren, 2018

State	Percentage of Case Completion (%)	Percentage NTR (%)	Percentage of Maintained Caries-free (%)
Perlis	94.1	65.5	56.0
Kedah	94.4	75.9	68.2
Pulau Pinang	97.3	75.6	64.9
Perak	97.4	78.0	67.1
Selangor	94.4	73.7	75.8
FT KL	96.3	84.8	77.9
FT Putrajaya	96.9	67.9	69.3
N. Sembilan	96.7	68.8	69.9
Melaka	96.9	58.2	61.4
Johor	96.1	77.6	71.7
Pahang	96.0	58.0	47.6
Terengganu	94.7	62.5	38.6
Kelantan	93.3	53.6	33.9
FT Labuan	95.5	57.7	47.0
Sabah	86.1	43.6	26.5
Sarawak	82.0	60.3	45.9
MALAYSIA	93.6	67.7	59.1

Source: Health Informatics Centre, MoH 2018

Impact Indicators - Caries-free 6, 12 and 16-year-old Schoolchildren

Overall, the percentage of caries-free among 6, 12 and 16 year-olds schoolchildren has shown a slight increase in 2018. However, there is a slight reduction of NTR among primary schoolchildren (Figure 16).

**Figure 16: Caries Free 6, 12 and 16-year-old Schoolchildren, NTR 2014 to 2018**

Source: Health Informatics Centre, MoH 2018

FT Kuala Lumpur showed the highest percentage of caries-free among 16-year-olds (75.7 per cent) while the state of Sabah (23.0 per cent) reported the lowest (**Table 73**).

Table 73: Percentage of Caries Free 16-year olds by State, 2014 to 2018

State	2014	2015	2016	2017	2018
Perlis	54.6	56.9	57.8	60.0	55.2
Kedah	66.3	66.4	67.3	65.4	66.0
Pulau Pinang	59.3	58.6	60.0	60.2	62.0
Perak	59.9	60.8	63.0	62.8	65.2
Selangor	73.3	72.6	75.7	72.7	74.9
FT Kuala Lumpur	74.8	74.8	75.8	76.1	75.7
FT Putrajaya	72.8	68.2	70.0	62.8	67.7
N Sembilan	66.0	69.4	68.6	67.4	67.7
Melaka	52.4	53.7	56.3	56.2	57.9
Johor	66.6	67.9	68.8	68.2	69.7
Pahang	46.6	46.5	47.2	44.0	45.6
Terengganu	33.9	32.5	33.1	32.4	34.4
Kelantan	25.7	25.4	26.6	29.0	31.1
FT Labuan	36.3	34.5	35.3	35.1	41.0
Sabah	18.4	21.0	21.7	22.9	23.0
Sarawak	40.1	42.5	42.7	41.0	42.6
MALAYSIA	55.9	56.0	56.9	55.5	56.7

Source: Health Informatics Centre, MoH 2018

In 2018, the mean DMFT scores for 12-year-olds and 16-year-olds have slightly reduced from year 2017 (**Table 74**).

Table 74: Mean DMFT Score for 12 and 16-year-olds, 2014 to 2018

Age Group	2014	2015	2016	2017	2018
12-year-olds	0.85	0.85	0.79	0.74	0.71
16-year-olds	1.35	1.35	1.34	1.40	1.35

Source: Health Informatics Centre, MoH 2018

ORAL HEALTHCARE FOR CHILDREN WITH SPECIAL NEEDS

The number of children with special needs utilising primary oral healthcare services has been increasing steadily over the years. This was mainly due to the initiatives under the previous National Blue Ocean Strategy 7 (NBOS 7) which prioritised healthcare to special needs children, the elderly and single mothers. In 2018, a total of 68,339 special needs children received primary oral healthcare (**Figure 17**).

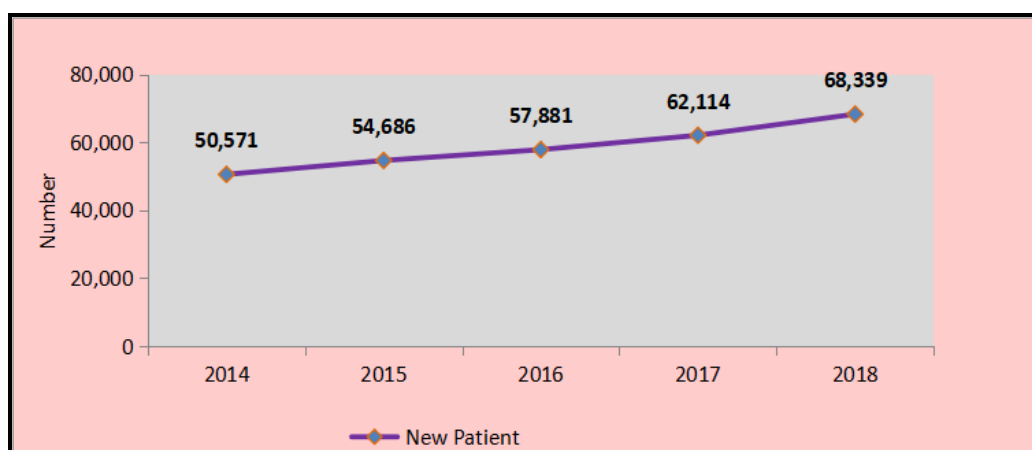


Figure 17: Children with Special Needs Receiving Primary Oral Healthcare, 2014-2018

Source: Health Informatics Centre, MoH 2018

The highest numbers of special needs children were seen in Selangor, Johor and Perak (**Figure 18**).

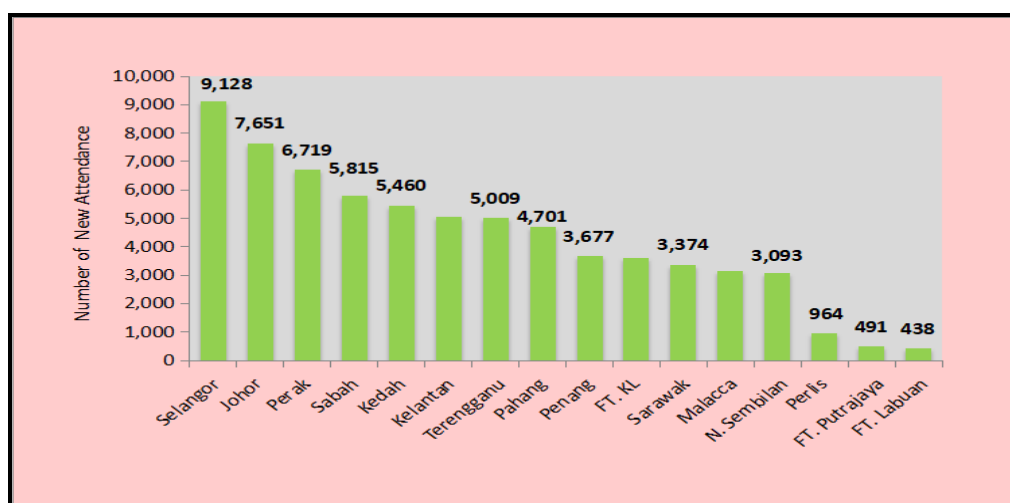


Figure 18: Children with Special Needs Receiving Primary Oral Healthcare by State, 2018

Source: Health Informatics Centre, MoH 2018

ORAL HEALTHCARE FOR ANTENATAL MOTHERS

More efforts were taken to increase the attendance of antenatal mothers at dental clinics by way of referrals from MCH clinics and health clinics so as to ensure antenatal mothers whom are considered as agents of change would get the essential oral health awareness as well as to render them orally-fit. In 2018, there was an increase in the number of antenatal mothers utilising the primary oral healthcare as compared to previous year (**Figure 19**).

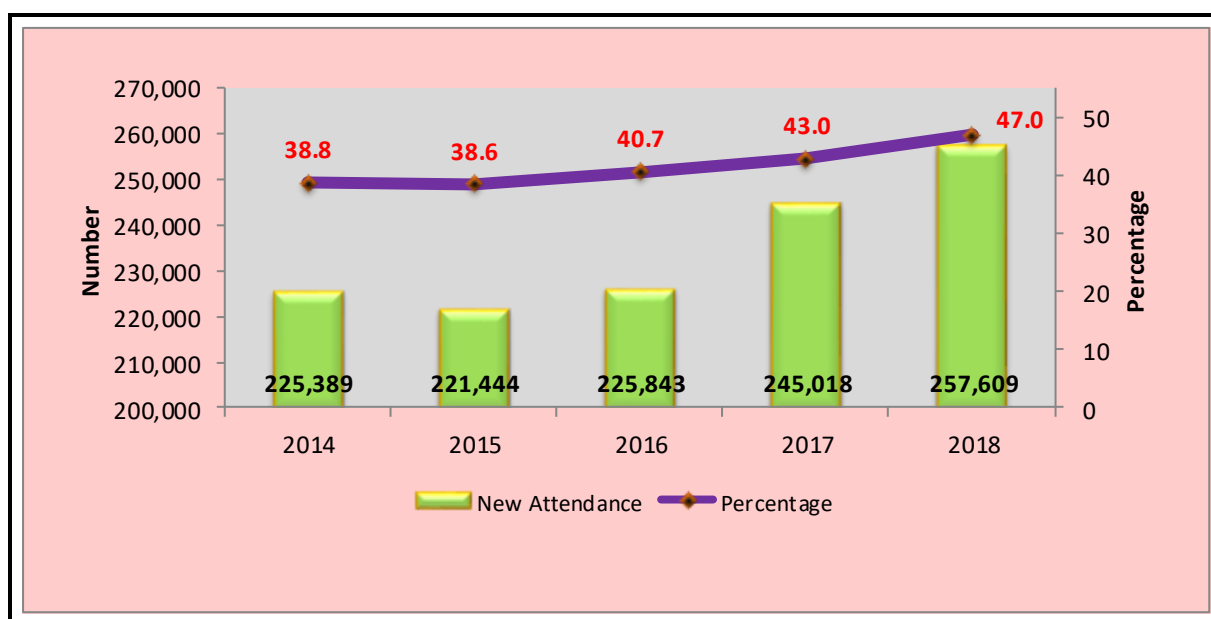


Figure 19: Coverage of Antenatal Mothers, 2014 to 2018

Source: Health Informatics Centre, MoH 2018

The highest coverage of antenatal mothers was Kedah (88.2 per cent) followed by Perlis (79.9 per cent) and FT Putrajaya (70.2 per cent) (Figure 20).

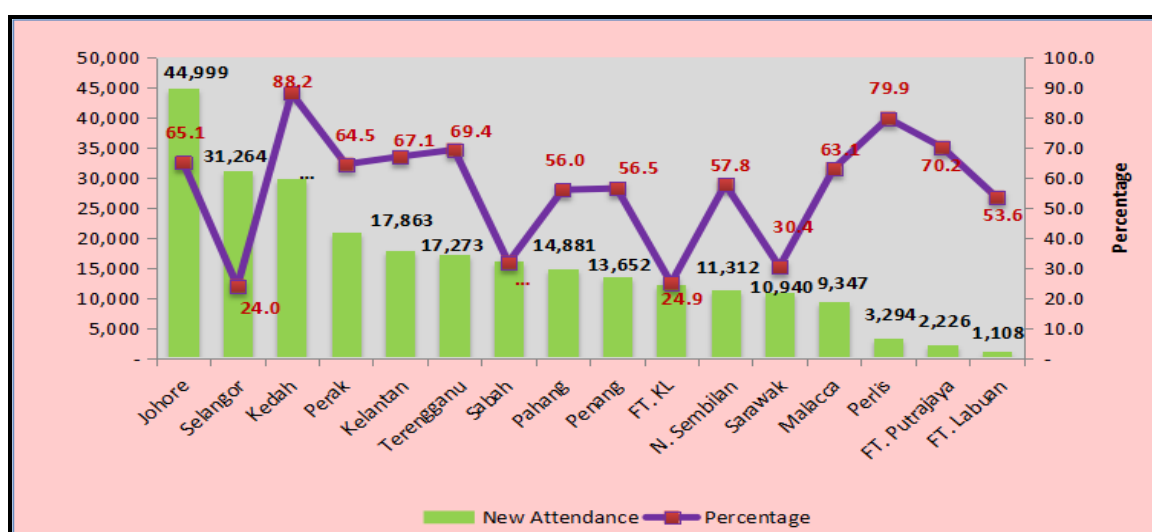


Figure 20: Antenatal Mothers Receiving Primary Oral Healthcare by State, 2018

Source: Health Informatics Centre, MoH 2018

ORAL HEALTHCARE FOR ADULTS

The demand for oral healthcare among adults is steadily increasing. Hence, the number of dental clinics providing daily outpatient services has been included as one of the Key Performance Indicators (KPI) for the OHP. Efforts was made to accommodate the treatment need for adults and to date there are 79.0 per cent of dental clinics with two (2) or more dental officers offer daily

outpatient services. In 2018, adult's utilisation of primary oral healthcare increased by 5.9 per cent from 2017 (**Figure 21**).

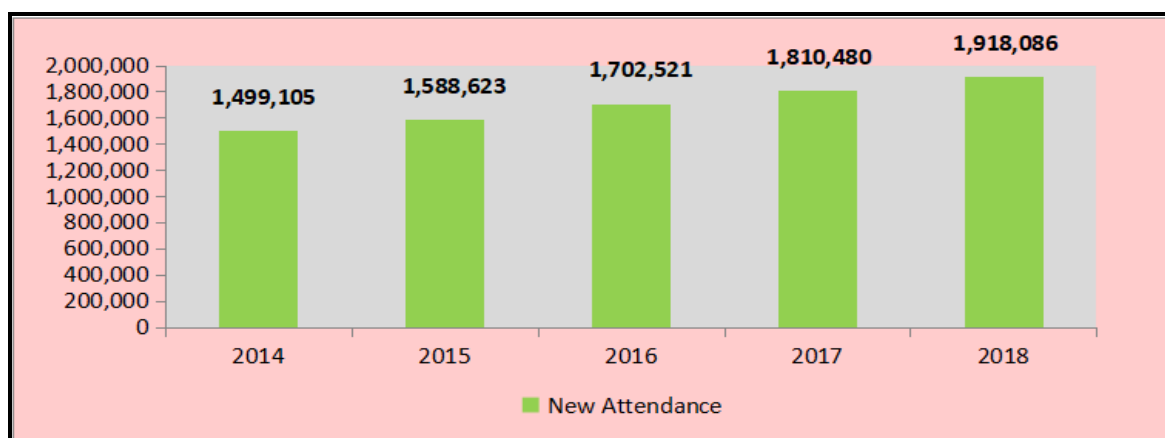


Figure 21: Adults Receiving Primary Oral Healthcare, 2014 to 2018

Source: Health Informatics Centre, MoH 2018

Overall, an increment of 0.2 per cent of the adult population aged 18 to 59 years received primary oral healthcare in 2018 (7.9 per cent) as compared to 2017 (7.7 per cent). FT Putrajaya (46.3 per cent) recorded the highest percentage followed by Perlis (19.1 per cent) and FT Labuan (17.6 per cent) (**Figure 22**).

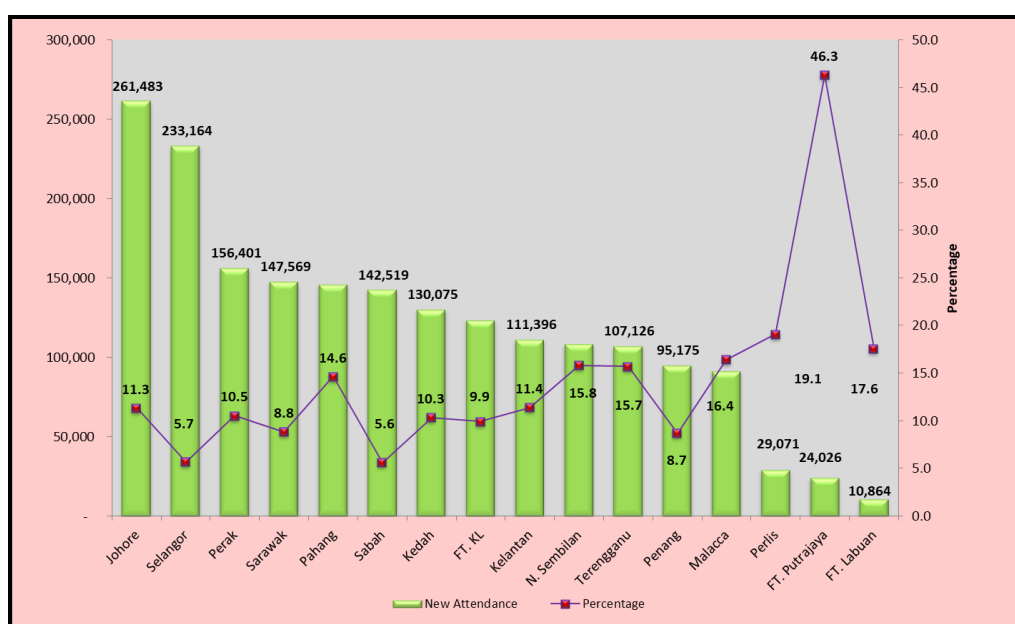


Figure 22: Adults Receiving Primary Oral Healthcare by State, 2018

Source: Health Informatics Centre, MoH 2018

The OHP has established 21 clinics for *Perkhidmatan Pergigian Endodontik Di Klinik Pergigian Primer* (KEPP) in 2013 which offer endodontic treatment and it has developed into 45 clinics in 2018. Identified dental officers were trained to undertake endodontics on anterior and posterior teeth using rotary instruments. A total of 2,137 endodontic cases were seen and completed in these KEPPs in 2018 (**Table 75**).

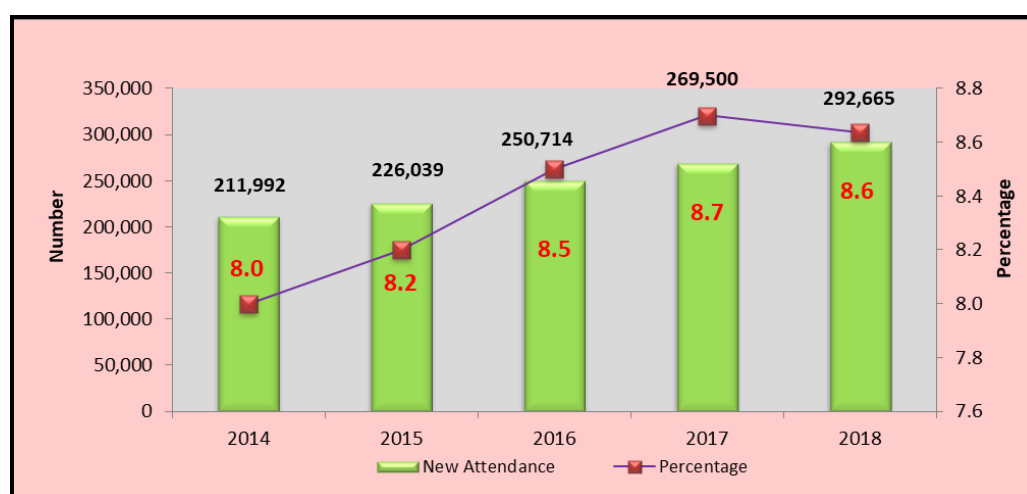
Table 75: Completed Endodontic Cases in KEPP, 2014 to 2018

Year	Number of Completed Endodontic Cases				Total
	Anterior	Premolar	Molar	Retreatment	
2014	582	278	403	16	1,279
2015	852	468	744	63	2,127
2016	899	543	1,170	99	2,711
2017	554	397	1,226	49	2,226
2018	464	393	1,233	47	2,137

Source: OHP, 2018

ORAL HEALTHCARE FOR THE ELDERLY

In 2018, 8.6 per cent (292,665) of the estimated elderly population received the MoH primary oral healthcare service (**Figure 23**). Of these, 7,370 were rendered dental care at 494 elderly institutions.

**Figure 23: Elderly Population Receiving Primary Oral Healthcare, 2014 to 2018**

Source: Health Informatics Centre, MoH 2018

The highest coverage of primary oral healthcare for the elderly was in FT Putrajaya (46.9 per cent) followed by Negeri Sembilan (13.3 per cent) and Melaka (12.4 per cent) (**Figure 24**).

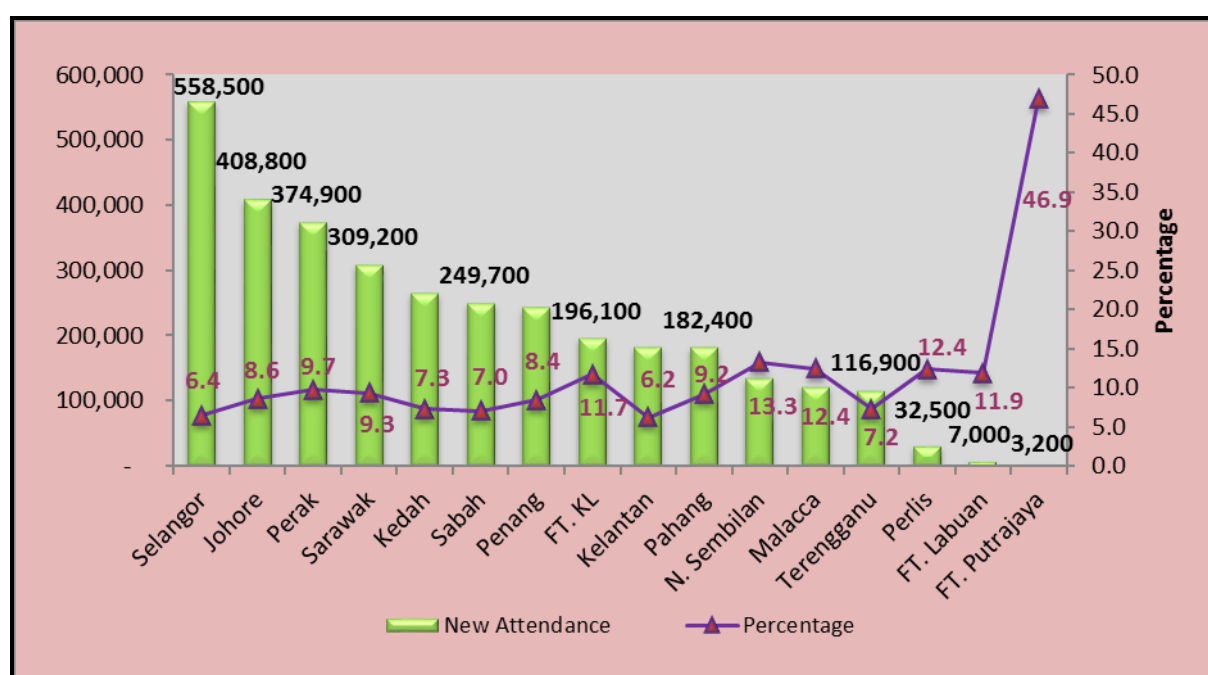


Figure 24: Elderly Population Receiving Primary Oral Healthcare by State, 2018

Source: Health Informatics Centre, MoH 2018

The oral health status of the elderly is still far from satisfactory. About 41.6 per cent of 60-year-olds had 20 or more teeth (**Table 76**). This is far from the targeted goal of National Oral Health Plan 2011-2020 which is 60 per cent by 2020.

Table 76: Oral Health Status of Elderly, 2018

Age group (years)	Average no. of teeth present		Edentulous (%)		With 20 or more teeth (%)	
	2017	2018	2017	2018	2017	2018
60	16.1	16.2	8.0	7.0	41.4	41.6
65	14.3	14.6	10.4	9.6	32.5	33.8
75 and above	10.5	10.7	20.6	19.8	19.8	19.9

Source: Health Informatics Centre, MoH 2018

WORKLOAD OF DENTAL PROVIDERS IN PRIMARY ORAL HEALTHCARE, 2018

The workload of the dental providers is collected and kept in the Health Information Management System (HIMS)-Oral Health Subsystem which started in 1981. These data serve as the basis for monitoring performance and as input for future planning towards improving the oral healthcare delivery system. Some of the basic dental procedures carried out by Dental Officers' and Dental Therapists' in year 2018 were as below (**Table 77**).

Table 77: Workload of Dental Officers' and Dental Therapists' by Dental Procedure, 2018

Dental Procedure	Dental Officer	Dental Therapist	Total
Restoration	1,669,692	1,483,643	3,153,335
Scaling	891,966	320,437	1,212,403
Periodontal cases	999	-	999
Fissure sealant	66,057	548,788	614,845
Tooth extraction	1,549,219	402,797	1,952,016
Surgical extraction	7,733	-	7,733
Abscess Management	169,312	-	169,312
Endodontic	20,922	-	20,922
Crown & Bridges	922	-	922
Partial Denture	73,941	-	73,941
Full Denture	59,411	-	59,411
Total	4,510,174	2,755,665	7,265,839

Source: Health Informatics Centre, MoH 2018

OTHER ACTIVITIES, 2018

- a. KEPP guideline was revised with the addition of referral criteria using Restorative Dentistry Index of Treatment Need Complexity Assessment (RDITN) and to give focus towards expansion of KEPP services. Budget allocation of RM30,500.00 was given to KEPP at states.
- b. Standard Operating Procedure (SOP) on Management of Periodontal Conditions at Primary Care Settings was approved by the Principal Director of Oral Health on 21 September 2018. Briefing was held on 24 September 2018 with the states facilitators towards implementation of the SOP at all dental clinics by January 2019. The procurement of periodontal probes amounting to RM50,000.00 was approved and the periodontal probes were distributed to the states.
- c. Under the Enhance Primary Healthcare (EnPHC) programme, the OHP is one of the entry points for screening of Non-Communicable Disease (NCD) risk factors. Dental patients at dental clinics were screened for blood pressure and those with risk are referred to the nearest health clinics for further investigation.
- d. *Komuniti Sihat Pembina Negara* (KOSPEN) Plus activities were undertaken at the OHP. It includes health and mental health screening using Depression Anxiety Stress Scales (DASS) questionnaire. Other activities conducted include continuous health education and physical activities.

SPECIALIST ORAL HEALTHCARE

1. DENTAL DISCIPLINES

There are nine (9) dental specialities recognised in the MoH. The specialties are organised into two (2) categories, hospital based and non-hospital based specialties. They are as listed in **Table 78**.

Table 78: Number of Dental Specialists in MoH, 2014 to 2018

Discipline \ Year	2014	2015	2016	2017	2018
Hospital Based					
Oral and Maxillofacial Surgery	56(*4)	60(*3)	64(*1)	75	77
Pediatric Dentistry	35	39	38	38	45
Oral Medicine & Pathology	10	11	11	15	15
Special Needs Dentistry	3	3	4	4	6
Forensic Odontology	1	1	1	1	1
Non-hospital Based					
Orthodontics	48(*3)	47(*1)	52(*1)	64	70
Periodontics	29	34	34	36	41
Restorative Dentistry	20	20	24	28	34
Dental Public Health Specialist	121	109	93(*1)	86(*2)	89
Total Number of Dental Specialists	323	324(*4)	321(*4)	347(*2)	378

Source: Facts That Figure, OHP MoH 2018
(Not inclusive of officers undergoing specialty gazettement)
*Contract Dental Specialists

In 2018, five (5) new specialist services were established in nine (9) facilities as listed in **Table 79**. The new specialist services were established either in a new MoH facility or by adding new specialty / specialist unit in an existing specialist facility.

Table 79: New Specialist Services Established in 2018

Specialty	Hospital / Dental Facility
Oral and Maxillofacial Surgery	Hospital Tuanku Fauziah, Hospital Tuanku Ja'afar, Hospital Sultan Abdul Halim
Pediatric Dentistry	Hospital Tengku Ampuan Rahimah, Hospital Raja Perempuan Zainab II
Orthodontics	Klinik Pergigian Sungai Chua, Selangor
Restorative Dentistry	Pusat Pakar Pergigian Jalan Zaaba, Seremban, Negeri Sembilan
Periodontics	Klinik Pergigian Cahaya Suria, FT Kuala Lumpur & Klinik Pergigian Presint 18, FT Putrajaya

Source: MoH Dental Specialists Database 2018

Dental Specialist Meetings

Dental Specialist Meetings are organized annually for each discipline to discuss annual Plans of Action and achievements, Key Performance Indicators, Patient Safety Indicators as well as other issues pertaining to each specialty. In 2018, ten (10) Dental Specialist Meeting were held inclusive of a Combined Dental Specialists Meeting (**Table 80**).

Table 80: Dental Specialist Meeting, 2018

Specialty	Date	Place
Combined Dental Specialist Meeting	21 to 22 February 2018	Concorde Hotel, Shah Alam
Dental Public Health	11to 12 May 2018	Concorde Hotel, Shah Alam
Orthodontics	11 to 12 April 2018	Grand Bluewave Hotel, Shah Alam
Oral Pathology Oral Medicine	5 July 2018	OHP, MoH
Oral and Maxillofacial Surgery	18 to 19 July 2018	Royal Chulan Hotel, Seremban
Forensic Odontology	18 to 19 July 2019	Royal Chulan Hotel, Seremban
Special Needs Dentistry	25 July 2018	OHP, MoH
Restorative Dentistry	9 to 10 August 2018	Geno Hotel, Subang Jaya
Periodontics	15 to 16 August 2018	Palm Garden Hotel, Seremban
Pediatric Dentistry	20 to 21 September 2018	Eastin Hotel, Kuala Lumpur



**Image 22: Combined Dental Specialist Meeting
Hotel Grand Blue Wave, Shah Alam, Selangor
20 to 21 February 2018**

2. HOSPITAL BASED DENTAL SPECIALTIES

2.1 ORAL AND MAXILLOFACIAL SURGERY

There was a gradual increase of total attendance for oral and maxillofacial surgery patients in the last five years. The average number of patients seen by an Oral and Maxillofacial Surgeon was 3,680 (Figure 25).

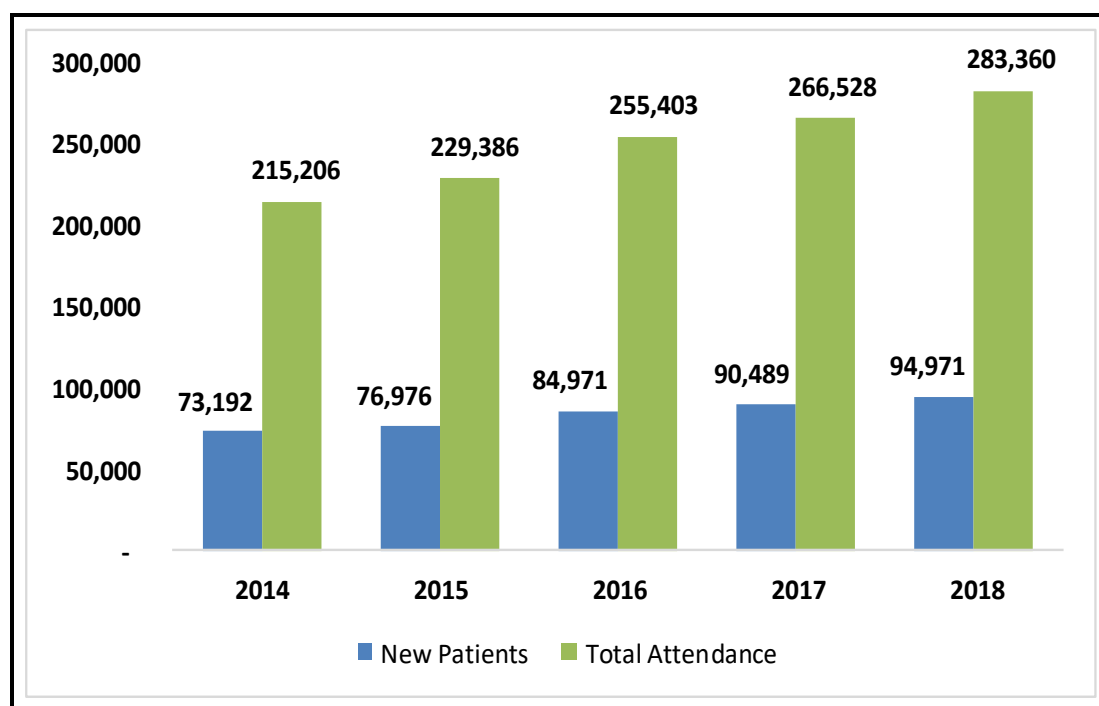


Figure 25: Number of Patients Seen by Oral and Maxillofacial Surgeon, 2014 to 2018

Source: Health Informatics Centre, MoH 2018

Of all oral surgeries performed in 2018, 73.7 per cent (6,972) were minor surgical cases. Majority of the minor surgeries were pre-prosthetic and pre-orthodontic procedures, removal of impacted teeth, biopsies, excision or ablative surgeries and removal of retained or displaced roots. Major surgery cases accounted for 26.3 per cent (2,492) which consist of surgical removal of malignant lesions, primary or secondary facial reconstruction, cleft lip and palate repair, orthognathic surgery and distraction osteogenesis (Table 81).

Table 81: Surgeries Performed by Oral and Maxillofacial Surgeons, 2018

Type of Cases	Number (n)	Percentage (%)
Minor Surgery	6972	73.7
Major Surgery	2492	26.3

Source: Health Informatics Centre, MoH 2018

2.2 PEDIATRIC DENTISTRY

The role of Pediatric Dental Specialists is to attend children below 17 years of age. There was an increase in the number of new patient and total attendances in 2018 as compared to 2017 (Figure 26).

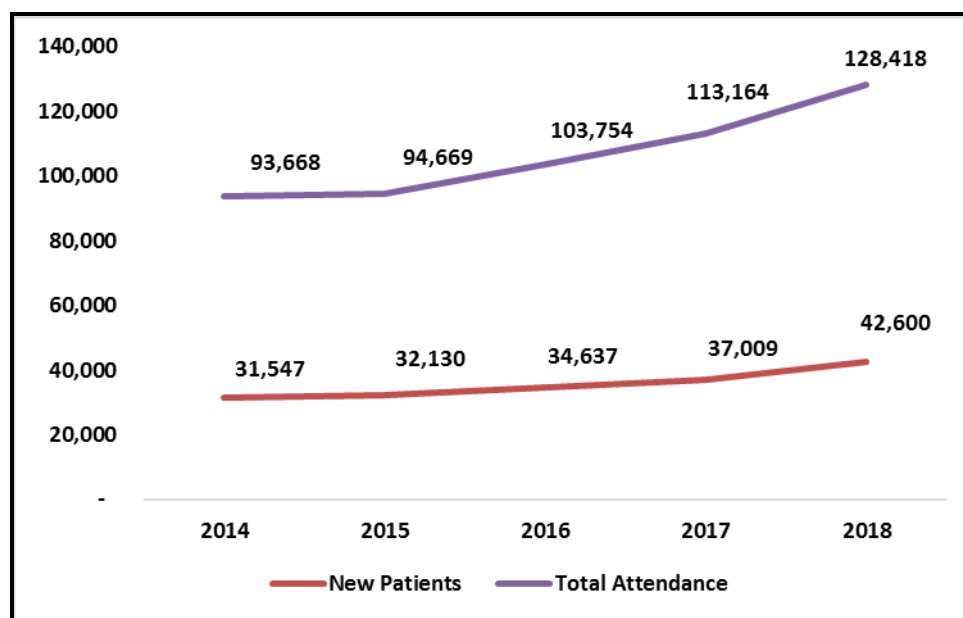


Figure 26: Number of New Patient and Total Attendance for Pediatric Dental Specialty, 2014 to 2018

Source: Health Informatics Centre, MoH 2018

Figure 27 shows the treatment rendered by Pediatric Dental Specialists in 2018; some was done under general anaesthesia or sedation. Majority of treatment rendered were restorations.

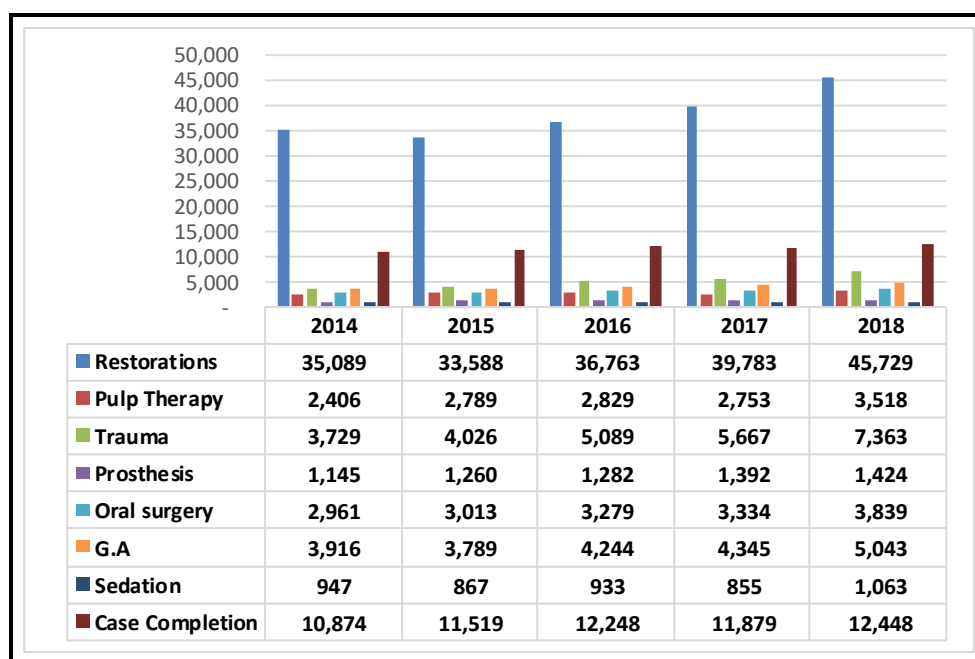


Figure 27: Treatment Rendered by Pediatric Dental Specialists, 2018

Source: Health Informatics Centre, MoH 2018

Pediatric Dental Specialist also manages children with special needs. These patients are categorised into children with physical abnormalities, mental retardation, multiple abnormalities and/or those who are medically-compromised. There was an overall increase in cases, especially children with multiple abnormalities and medically-compromised from 2014 until 2018 (**Figure 28**).

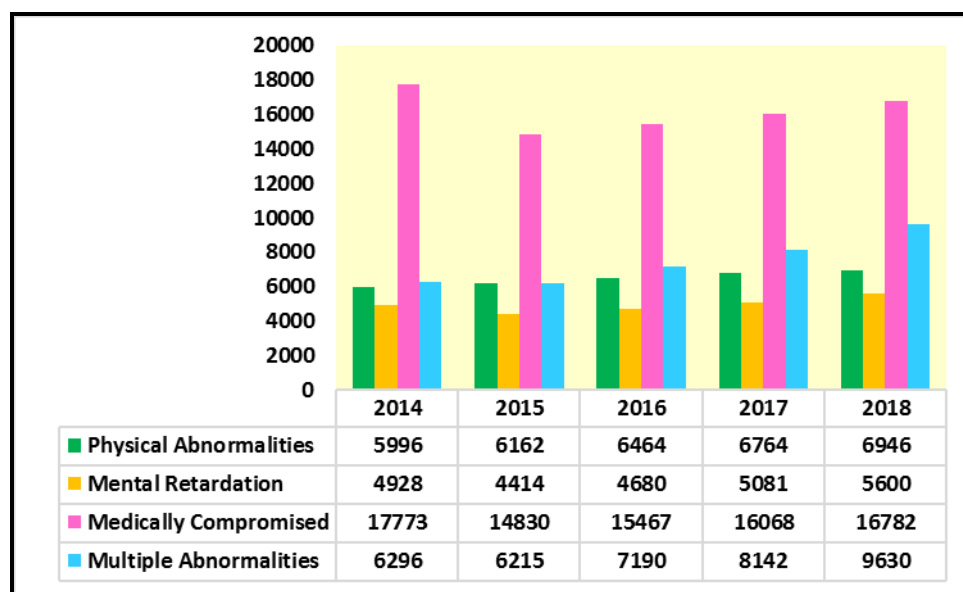


Figure 28: Number of Dental Pediatric Patients Based on Conditions, 2014 to 2018

Source: Health Informatics Centre, MoH 2018

2.3 ORAL PATHOLOGY AND ORAL MEDICINE (OPOM)

The number of new patient and total attendance has increased in 2018 as compared to 2017 (**Figure 29**). Hence, the number of reports issued and slides seen by the Oral Pathology and Oral Medicine specialists in year 2018 also increased (**Figure 30**).

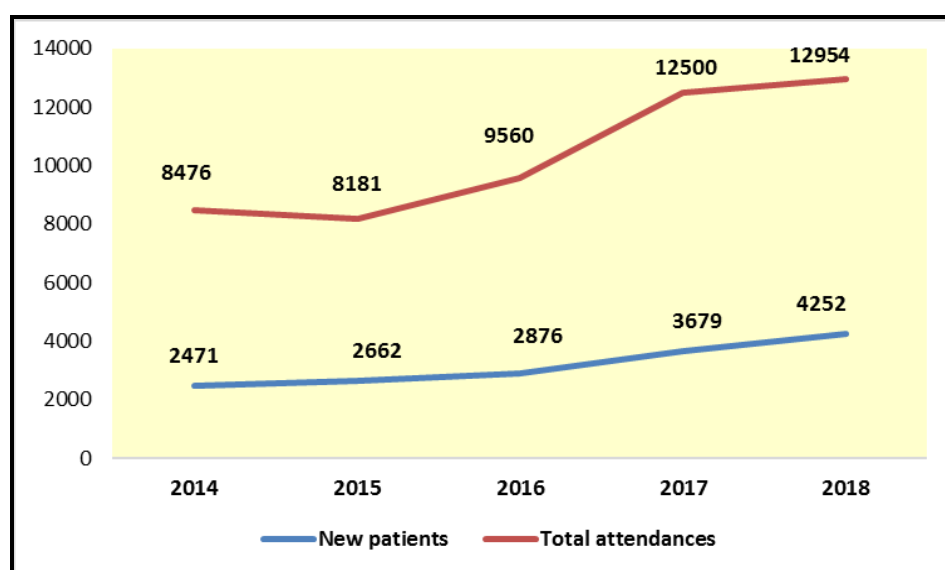


Figure 29: Number of New Patient and Total Attendance for Oral Pathology and Oral Medicine Specialty, 2014 to 2018

Source: Health Informatics Centre, MoH 2018

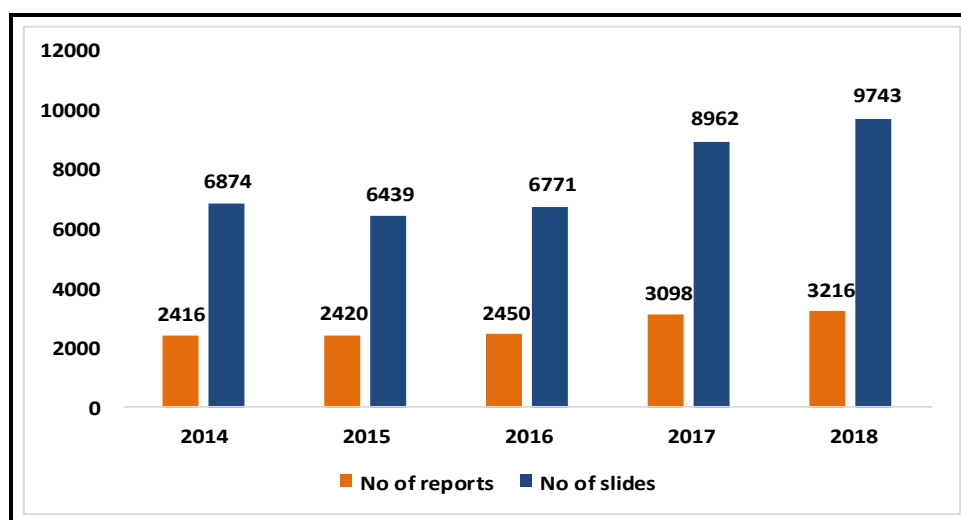


Figure 30: Number of Reports Issued and Slides Seen by OPOM Specialist, 2014 to 2018

Source: Health Informatics Centre, MoH 2018

2.4 SPECIAL NEEDS DENTISTRY

Special Needs Dentistry (SND) services started in the early 2011. In 2018, there were five (5) SND Specialists in MoH, based in Kuala Lumpur Hospital (HKL), Kajang Hospital, Seberang Jaya Hospital, Queen Elizabeth Hospital Kota Kinabalu and Hospital Raja Perempuan Zainab II Kota Bharu, Kelantan. The SND unit in Rehabilitative Hospital, Cheras (*Hospital Rehabilitasi Cheras*) operated on visiting basis. The number of new patients and total attendance has drastically increased in 2018 as compared to 2017 as shown in **Figure 31**.

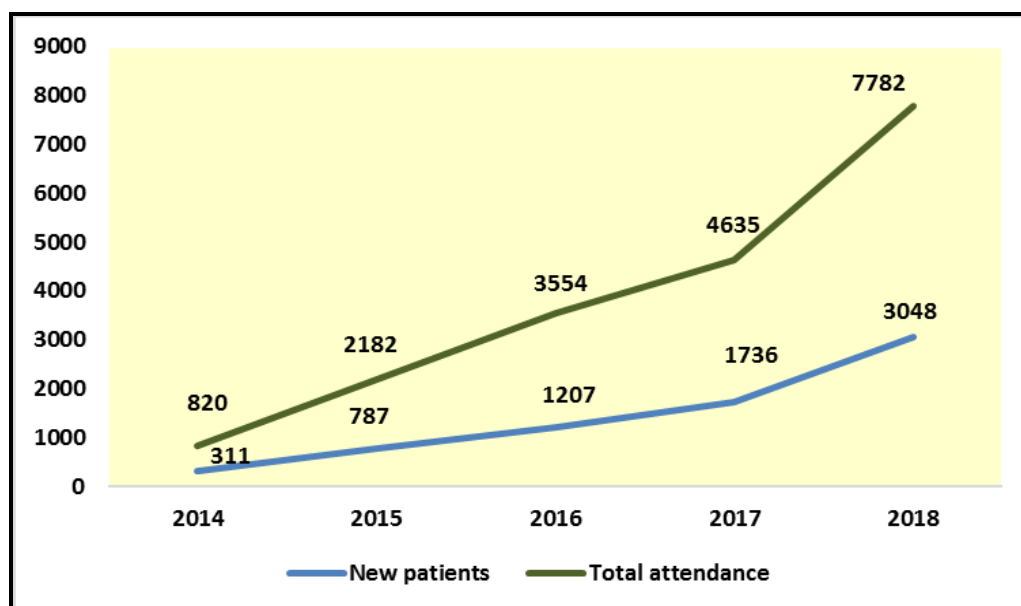


Figure 31: New Patients and Total Attendance for Special Needs Dentistry Specialty, 2014 to 2018

Source: OHP MoH, 2018

2.5 FORENSIC ODONTOLOGY

Forensic Odontology Unit was established in Hospital Kuala Lumpur (HKL) with one (1) specialist working closely with the General Forensic Department in HKL. Dental forensic cases include internal and external referred cases from HKL as well as Disaster Victim Investigation (DVI) cases.

In 2018, the DVI team was involved in *Op Te Auraki*. It was a bilateral collaboration between Malaysia and New Zealand in repatriating 27 New Zealand Armed Forces and citizens. MoH Forensic Odontology was involved in identifying the remains as follows:

- i. 5th July 2018; one (1) remains
- ii. 23th - 25th July 2018; four (4) remains
- iii. 29th July - 7th August 2018; 11 remains

Figure 32 shows the number of cases seen by forensic odontology specialist in the last five (5) years. The DVI cases depends on the number of victims involved in a disaster.

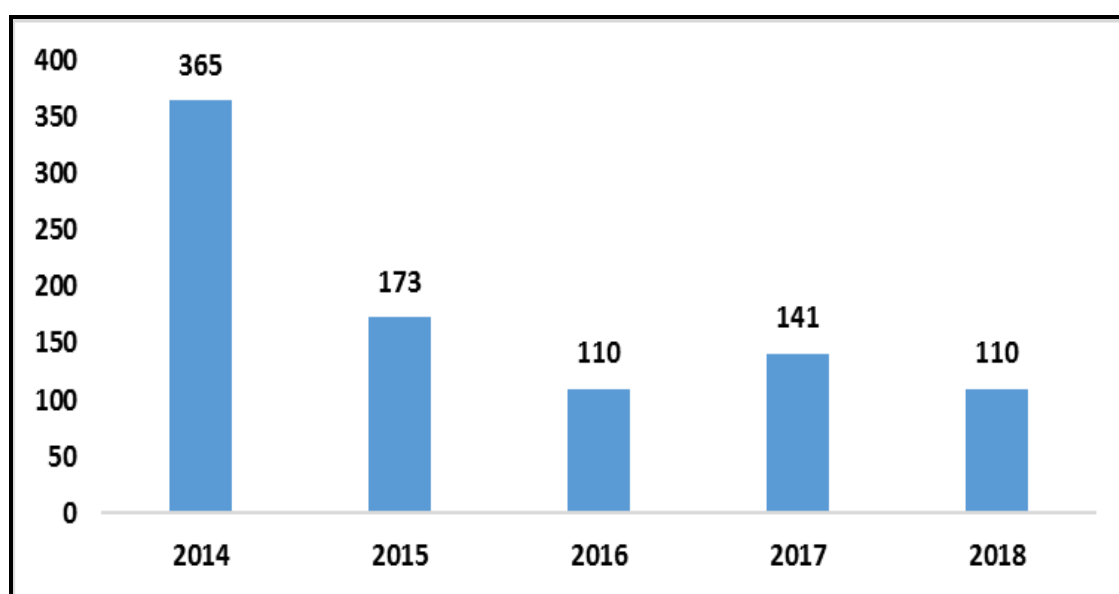


Figure 32: Number of cases seen by the specialist, 2014 to 2018

Source: OHP MoH, 2018

3. NON-HOSPITAL BASED DENTAL SPECIALTIES

3.1 ORTHODONTICS

The demand for orthodontics treatment has always been on the rise. The total attendance increased by 5.3 per cent in 2018 (**Figure 33**).

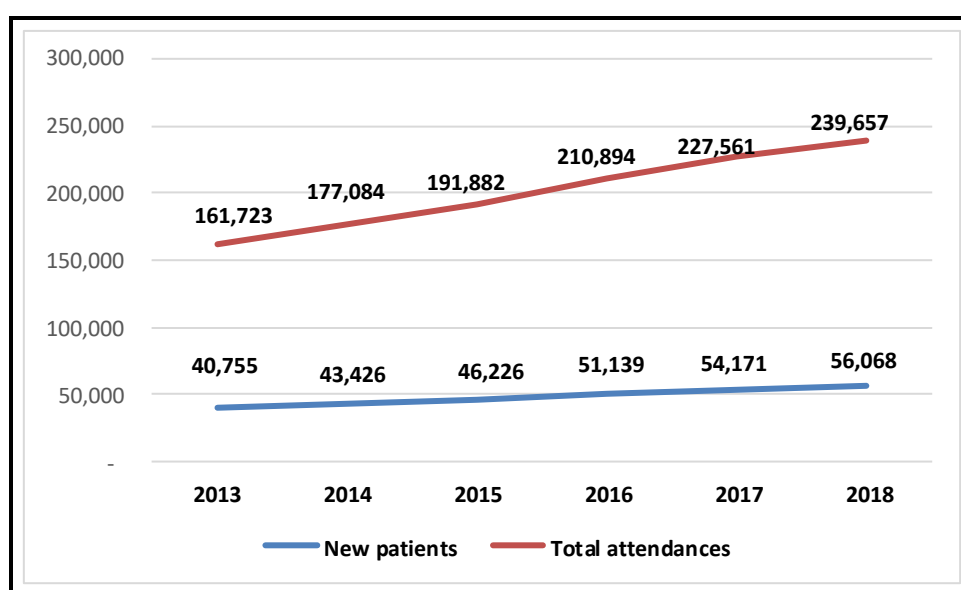


Figure 33: New Patients and Total Attendance for Orthodontics, 2014 to 2018

Source: Health Informatics Centre, MoH 2018

There was an increase in completion of active treatment cases and issuance of removable appliances in 2018 as compared to 2017 (**Table 82**).

Table 82: Items of Care for Orthodontic Cases, 2014 to 2018

Items of Care		2014	2015	2016	2017	2018
Consultation	I	12315	13643	13498	13498	13077
	II	7643	8207	9131	9131	8297
Removable Appliances	No. of Patients	6495	7159	7844	7844	8024
Fixed Appliances	No. of Patients	1014	9666	10333	10333	9684
No. of active treatment cases		24528	27358	31389	34868	35213
Active treatment completed		3971	4580	4665	5267	5293

Source: Health Informatics Centre, MoH 2018

Majority of the cases seen was malocclusion Class II Division I. The data showed a declining number of consultations II which leads to the decrease number of malocclusion cases in 2018 as compared to the previous year (**Figure 34**).

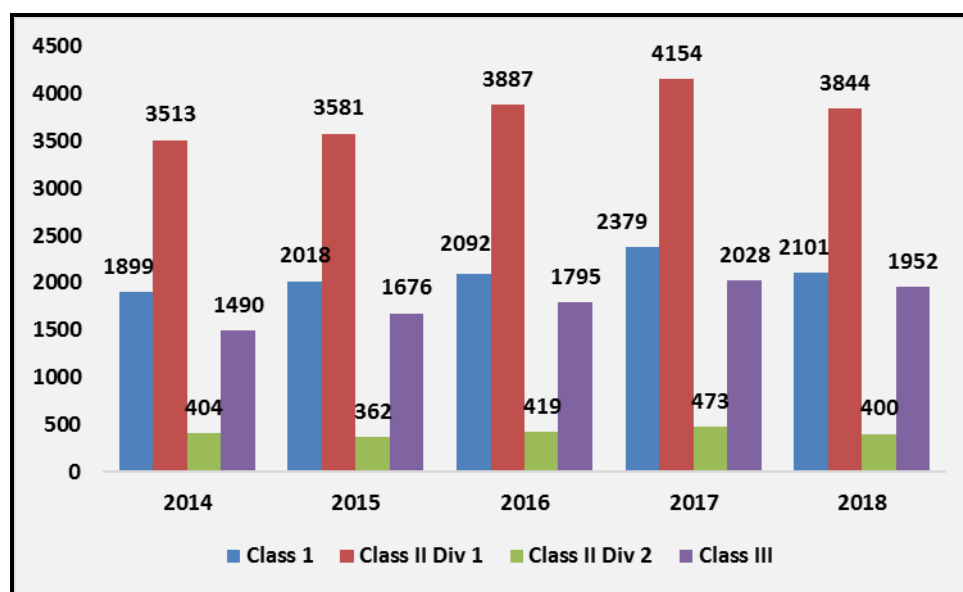


Figure 34: Types of Malocclusion Seen, 2014 to 2018

Source: Health Informatics Centre, MoH 2018

3.2 PERIODONTIC

The trend for new patients and total attendance showed a steady increase in the last five (5) years (Figure 35).

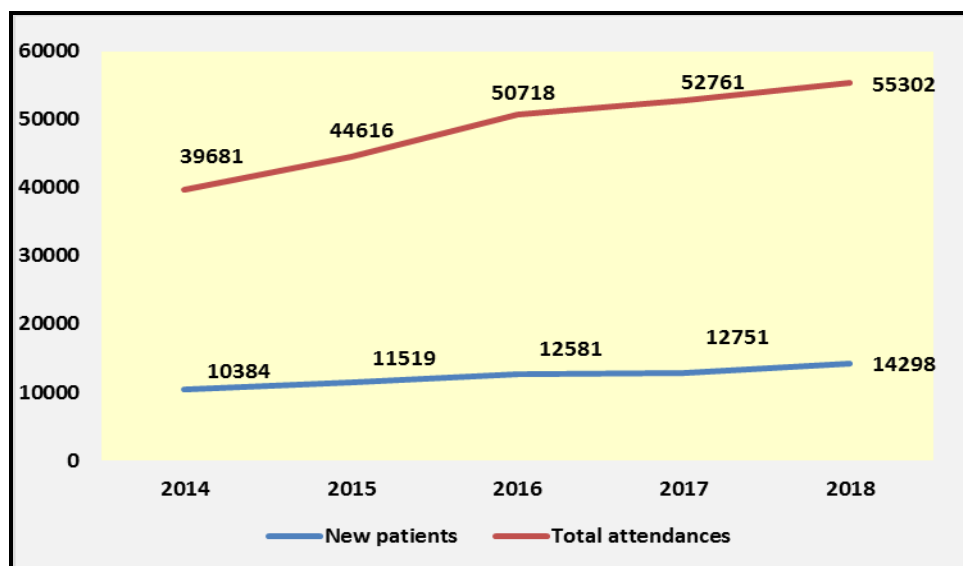


Figure 35: New Patients and Total Attendance for Periodontics Specialist Care, 2014 to 2018

Source: Health Informatics Centre, MoH 2018

The number of periodontics patients in maintenance phase has significantly increased in 2018 compared to the previous year (**Figure 36**).

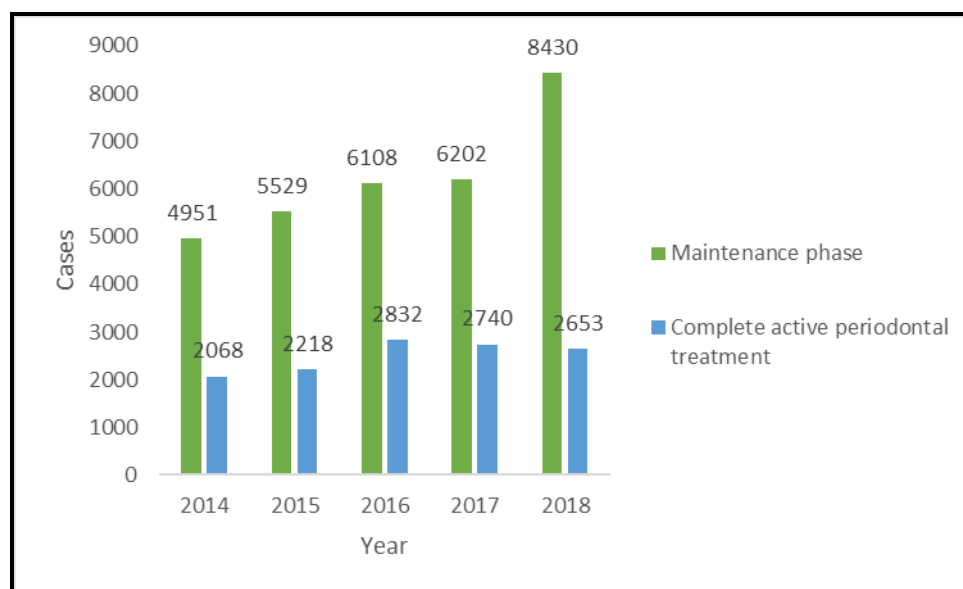


Figure 36: Cases in Maintenance Phase and Completed Cases, 2014 to 2018

Source: Health Informatics Centre, MoH 2018

3.3 RESTORATIVE DENTISTRY

The total attendance in Restorative Specialty Clinics has drastically increased in 2018 as compared to 2017 (**Figure 37**). The highest attendance was among those in the age group of 30 to 59 years old (**Table 83**).

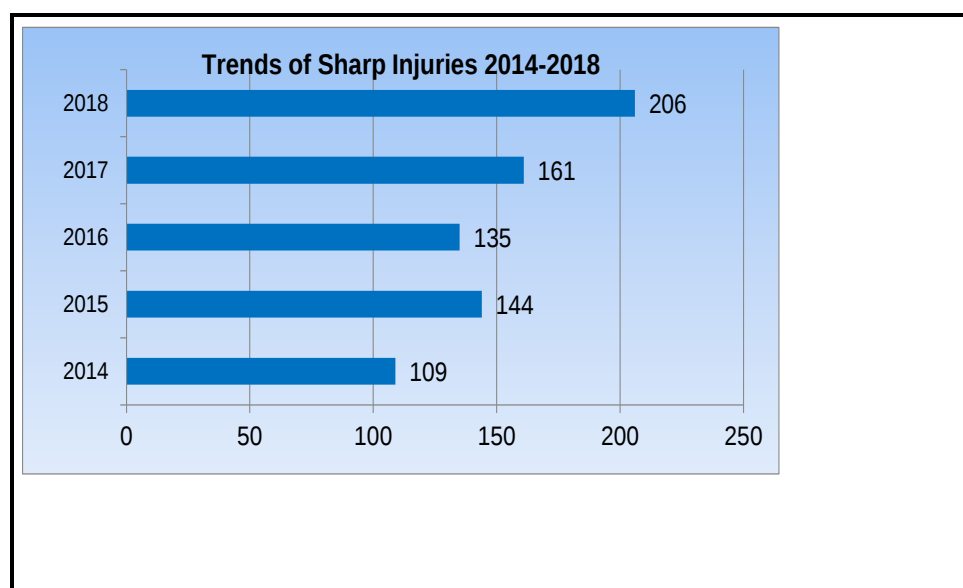


Figure 37: New Patients and Total Attendance for Restorative Dental Specialists, 2014 to 2018

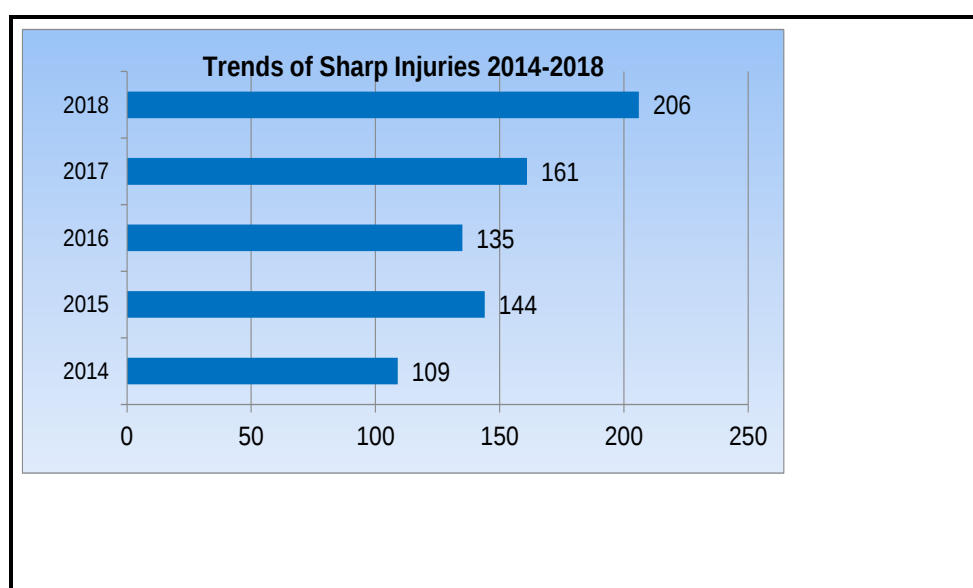
Source: Health Informatics Centre, MoH 2018

Table 83: New Patients and Total Attendance for Restorative Dentistry, 2014 to 2018

Age Group	New Patients					Total Attendance				
	2014	2015	2016	2017	2018	2014	2015	2016	2017	2018
7-12	96	79	73	112	175	147	136	123	158	288
13-17	723	785	686	755	879	1,536	1,591	1,474	1,714	2,162
18-29	2,634	2,820	2,553	2,462	3,018	6,178	6,828	6,478	6,407	8,274
30-59	6,892	7,249	6,651	6,456	7,340	19,229	19,738	19,449	20,149	23,736
≥60	1,932	2,003	2,186	2,182	2,517	6,078	6,345	7,008	7,810	10,019
TOTAL	12,277	12,936	12,149	11,967	13,929	33,168	34,638	34,532	36,238	44,479

Source: Health Informatics Centre, MOH 2018

There was an increase cases for endodontic, crown and bridge in 2018 as compared to 2017. Among those, endodontic cases contributed the highest number of cases (**Figure 38**).

**Figure 38: Type of Restorative Cases, 2014 to 2018**

Source: Health Informatics Centre, MoH 2018

3.4 DENTAL PUBLIC HEALTH

In the MoH Malaysia, the Dental Public Health Specialist (DPHS) takes on the administration of the whole MoH programme, from management of activities, managing issues of human resource and funding, regulation and enforcement, clinical affairs, research and epidemiology, inter-sectoral collaboration as well as managing a challenge that is facing by the dental profession, within and outside the country. DPHS also play a pivotal role in decisions making by the Malaysian Dental Council and matters pertaining to professional associations. Hence, this whole Annual Report covers almost all activities undertaken under the roles and functions of the DPHS.

ORAL HEALTH PRACTICE & DEVELOPMENT

ACCREDITATION AND GLOBALISATION

1. ACCREDITATION OF UNDERGRADUATE DENTAL DEGREE PROGRAMME

1.1. Revision of Guidelines for Accreditation of Undergraduate Dental Degree Programme

All accreditation guidelines have been fully revised and compiled with the Rating System into one document known as '*Code of Practice for Programme Accreditation – Undergraduate Dental Degree, 2019*' [COPPA (Dental), 2019]. During the 124th Meeting on 26 July 2018, the Malaysian Dental Council (MDC) agreed that the document will be used for accreditation of undergraduate dental degree programmes effective 1 January 2019.

1.2. Seminar on COPPA (Dental), 2019 and Rating System

Together with the Malaysian Qualifications Agency, an awareness seminar on COPPA (Dental) 2019 and Rating System was held at Mercu MQA, Cyberjaya on 20 August 2018. 34 participants consist of panel of assessors, deans and representatives of the dental faculties as well as representatives from the Higher Education Department attended the one-day seminar.

1.3. Moratorium on Undergraduate Dental Degree Programme

On June 2018, the Ministry of Education distributed the draft of the cabinet memorandum on Dental Moratorium to related ministries for their feedback. Subsequently, a meeting between the Health Minister and the Education Minister with all relevant stakeholders was arranged on 19 November 2018 at the Parliament building but due to unforeseen circumstances the meeting was cancelled.

1.4. Accreditation of Undergraduate Dental Degree Programmes

- International Islamic University Malaysia (IIUM)

Evaluation visit was conducted on 23 to 25 January 2018 to IIUM. Based on the panel's findings, its Bachelor of Dental Surgery (BDS) programme was given full accreditation for a period of 3 years from 16 April 2018 to 15 April 2021.

- Universiti Teknologi MARA (UiTM)

Evaluation visit was conducted on 25 to 27 July 2018 to UiTM. Based on the panel's findings, its BDS programme was given full accreditation for a period of 5 years from 1 November 2018 to 31 October 2023.

- Penang International Dental College (PIDC)

Evaluation visit was conducted on 19 to 20 April 2018 to PIDC Salem campus, India and 23 to 24 April 2018 to PIDC Butterworth campus, Penang. Based on the panel's findings, its BDS Vinayaka Missions Research Foundation (VMRF) programme was given full accreditation for a period of 3 years from 1 November 2018 to 31 October 2021.

- Melaka-Manipal Medical College (MMMC)

Evaluation visit was conducted on 4 September 2018 to MMMC Melaka campus. Based on the panel's findings, MMMC was required by MDC to comply with the standard on clinical academic staff to student ratio (taking into consideration the local) failing which their student intake quota will be reduced according to their existing staff capacity.

- Lincoln University College (LUC)

Evaluation visit was conducted on 21 to 22 May 2018 to LUC. Based on the panel's findings, LUC was required by MDC to take actions on the areas of concern raised in the panel's report as well as comply with the standard on clinical academic staff to student ratio failing which their students' intake can be suspended.

1.5. Evaluation for Increase Student Intake

- International Medical University (IMU)

Evaluation visit was conducted on 26 to 27 February 2018 to IMU. Based on the panel's finding and JTAC recommendation, MDC agreed that IMU has the capacity and can be allowed to take additional 25 international students per year for its BDS programme (Partner Dental School track).

- SEGi University & Colleges (SEGi)

Evaluation visit was conducted on 28 February and 1 March 2018 to SEGi University. Based on the panel's finding and JTAC recommendation, MDC agreed that SEGi has the capacity and can be allowed to take additional 15 international students per year for its BDS programme.

- University of Malaya (UM)

Evaluation visit was conducted on 5 November 2018 at UM. Based on the panel's finding and JTAC recommendation, MDC agreed that UM has the capacity and can be allowed to take additional six (6) international students per year for its BDS programme.

1.6. Malaysian Allied Health Science Academy (MAHSA) University – Penang International Dental College (PIDC) Collaboration

Subsequent to PIDC application to the Ministry of Higher Education to change its pre-clinical training location from Salem, India to MAHSA University, an evaluation visit was conducted on 4 to 5 January 2018 to MAHSA University. Based on the panel's finding and JTAC

recommendation, MDC agreed that MAHSA University has the capacity and can be allowed to undertake PIDC BDS pre-clinical training with one intake per year.

1.7. Joint Technical Accreditation Committee (JTAC) Meetings

A total of six (6) JTAC meetings were held in 2018 as follows:

JTAC meeting	Date
1/2018	8 January 2018
2/2018	6 March 2018
3/2018	8 May 2018
4/2018	12 July 2018
5/2018	27 September 2018
6/2018	12 November 2018

1.8. Reports/Documents for Presentation at the Joint Technical Accreditation Committee (JTAC) Meeting

In 2018, 12 panel assessment reports/documents were presented at the JTAC meetings as follows:

JTAC meeting	No. of Reports Presented
1/2018	1 - Evaluation report on capacity of MAHSA University to undertake PIDC BDS pre-clinical phase
2/2018	3 - IIUM Full Accreditation evaluation report; IMU increase student intake evaluation report; SEGi increase student intake evaluation report
3/2018	1 - PIDC Full Accreditation evaluation report
4/2018	4 - LUC monitoring compliance evaluation report; UiTM – Full Accreditation evaluation report; AIMST improved revised curriculum assessment report; COPPA (Dental) 2019 document
5/2018	2 - MMMC Monitoring Compliance Evaluation report; COPPA (Dental) 2019 Seminar Proceeding Report
6/2018	1 - UM increase student intake evaluation report

1.9. The Joint Technical Accreditation Committee Recommendations to the Malaysian Dental Council

In 2018, 14 JTAC recommendations on the accreditation of HEP undergraduate dental degree programmes / increase students intake were submitted to MDC for agreement and approval:

MDC meeting	No. of Proposal Papers submitted
121 st meeting	2 – Capacity of MAHSA University to undertake PIDC BDS pre-clinical phase; Section II – Accreditation Standard
122 nd meeting	4 – BDS IIUM Full accreditation; IMU increase student intake; SEGi increase student intake; IMU autonomy on distribution of student intake quota
123 th meeting	1 – PIDC BDS Full Accreditation
124 th meeting	4 - UiTM BDS Full accreditation; LUC accreditation monitoring compliance; AIMST improved revised curriculum; COPPA (Dental) 2019 document
126 th meeting	3 – MMMC accreditation monitoring compliance; UM increase student intake; Deans Council proposal paper (SLT, MCE and calculation of part time academic staff)

1.10. Submissions of Decisions on Accreditation by the Malaysian Dental Council to the Malaysian Qualifications Agency

In 2018, nine (9) MDC / JTAC decisions on the accreditation of HEP undergraduate dental degree programmes / increase students intake were submitted to MQA:

HEP	Date of letter to MQA
PIDC-MAHSA collaboration	18 April 2018
IIUM Full Accreditation	21 April 2018
PIDC Full Accreditation	23 May 2018
LUC Accreditation Monitoring Compliance	27 September 2018
UiTM Full Accreditation	7 August 2018
IMU increase student intake	18 April 2018
IMU autonomy on distribution of student intake quota	18 April 2018
SEGi increase student intake	18 April 2018
UM increase student intake	6 December 2018

2. USE OF MOH FACILITIES FOR THE TRAINING OF DENTAL STUDENTS

2.1. Memorandum of Agreement (MoA) For the Use of MoH facilities

In 2018, a total of three (3) applications received from *Bahagian Hal Ehwal Pelajar* (HEP) for renewal of MoA for the use of MoH facilities for the training of dental students were processed:

- UiTM, PIDC, SEGi

2.2. Placements of Undergraduate Students for Field Training

In 2018, ten (10) applications received from HEPs for undergraduate posting at MOH dental facilities were processed:

- Clinical – 3 (USIM, MAHSA, IMU)
- Community – 7 (USIM, UM, SEGi, PIDC, MAHSA, IMU, AIMST)

2.3. Elective Postings by Undergraduate Students from Foreign Universities

In 2018, (15) applications received for elective posting at MoH dental facilities from overseas undergraduate students were processed.

3. GLOBALISATION AND LIBERALISATION OF HEALTHCARE SERVICES

3.1. The Association of Southeast Asian Nations (ASEAN)

(i) Joint Coordinating Committee on Dental Practitioners (AJCCD) Meetings

Two meeting were held in 2018:

- 21st AJCCD Meeting – 15 and 16 January 2018 in Bangkok, Thailand
- 22nd AJCCD Meeting – 6 November 2018 in Nay Pyi Taw, Myanmar

Technical inputs were given on the following matters:

- ASEAN Minimum Common Competency Standards for Dental Undergraduate Education and Scope of Performing Abilities
- ASEAN Dental Practice Standards
- Mechanism to enhance mobility of ASEAN dentists
- Country database on practitioners from ASEAN countries

(ii) ASEAN Framework Agreement on Services (AFAS) Package

Feedback was also given on Malaysia – Schedule of Specific Commitments for the 10th Package of Commitments under AFAS for dental services.

3.2. Other Bilateral / Multilateral Negotiations between Malaysia and Other Countries

In 2018, technical input/ feedback was given on:

- i. Regional Comprehensive Economic Partnership (RCEP) Agreement: Malaysia's Revised Reservation Lists for Investment and Trade in Services”
- ii. Proposed Offer List for Services Under Malaysia -Turkey Free Trade Agreement

LEGISLATION AND ENFORCEMENT

The Legislation and Enforcement Unit has the responsibility of all activities pertaining to legislation, enforcement and safety and health. Its main functions are:

LEGISLATION ACTIVITIES

- Drafting laws and regulations pertaining to the practice of dentistry and matters relating to the practice of dentistry
- Providing input related to the effect of other laws on the practice of dentistry
- Drafting and reviewing of guidelines for use of dental practitioners

ENFORCEMENT ACTIVITIES

- Ensuring compliance to Malaysian Dental Council guidelines for private dental clinics
- Facilitating registration and licensing of private healthcare facilities under the Private Healthcare Facilities and Services Act (PHFSA) 1998 (Act 586)
- Verifying applications and recommending private dental clinics for registration under the PHFSA 1998 (Act 586) together with the Control of Medical Practice Unit
- Ensuring that the post-registration inspection of private dental clinics is carried out
- Ensuring that the provisions of the various Acts under MoH Malaysia are adhered to by all dental practitioners in all dental clinics
- Carrying out enforcement activities under the PHFSA 1998 (Act 586)
- Carrying out investigations and others activities as required by the Malaysian Dental Council under the Dental Act 1971
- Investigating into complaints against private dental clinics
- Co-ordinating enforcement activities in the various states

SAFETY AND HEALTH ACTIVITIES

- Coordinating Health and Safety audits in the MoH dental clinics
- Monitoring achievement of the Patient Safety Goals in MoH facilities

LEGISLATION ACTIVITIES

Dental Act 2018 [Act 804]

The Dental Bill was tabled in Parliament (2nd and 3rd reading) on 2 April 2018 for debating and approval. It has been tabled in the House of Senate on 4 April 2018. On 26 June 2018, the bill was gazetted and named as Dental Act 2018 [Act 804].

Dental Regulations

The first meeting to draft the new Dental Regulations was held on 11 November 2013 and the draft was completed on 30 June 2014 and was further revised in accordance with the provisions of the Dental Act 2018. The draft was tabled and approved by the Dental Council of Malaysia on 29 November 2018. On 28 December 2018 the draft was submitted to the Legal Advisor MoH for revision purposes before sending to the Drafting Division, Attorney General's Chambers.

ENFORCEMENT ACTIVITIES

Registration of Dental Clinics

The registration of private dental clinics began on 1 May 2006, in which 809 clinics applied for registration and 131 (16.2 per cent) of the applications were approved for the year.

In 2009, the total number of registered private dental clinics was 1,537. Since then, the number of registered clinics has been steadily increasing and by 2018 a total of 2,474 clinics had been registered (**Figure 39**).

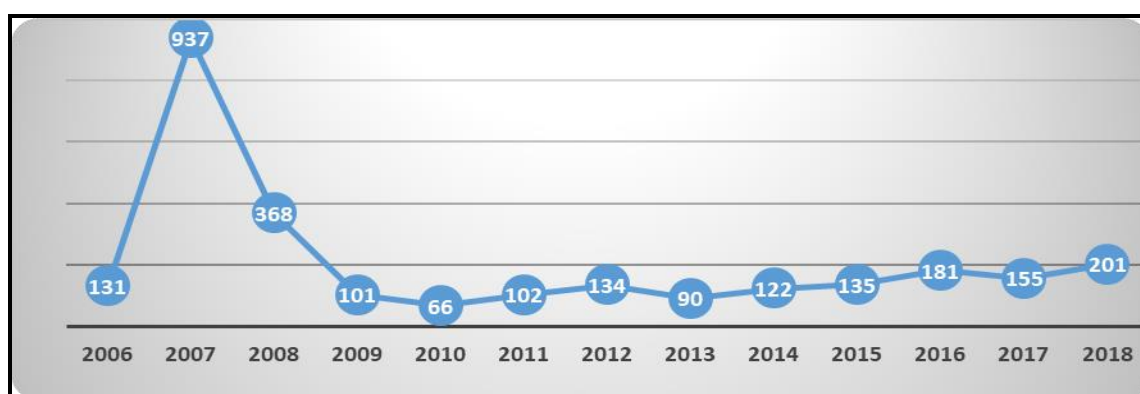


Figure 39: Number of Applications for Registration of Private Dental Clinics Approved, 2006 to 2018

Source: State Oral Health Division, 2018

A total of 214 applications for registration of private dental clinic was received and 201 complied with the PHFSA 1998 requirements. Recommendations for registration of these dental clinics were made to the Evaluation of Applications for Licensing and Registration of Private Healthcare Facilities and Services Committee. By the end of 2018, there were 2231 operating dental clinics. This represents a 5.79 per cent increase in the number of operating dental clinics in the past year and a 26.24 per cent increase in the last four (4) years (**Figure 40**).

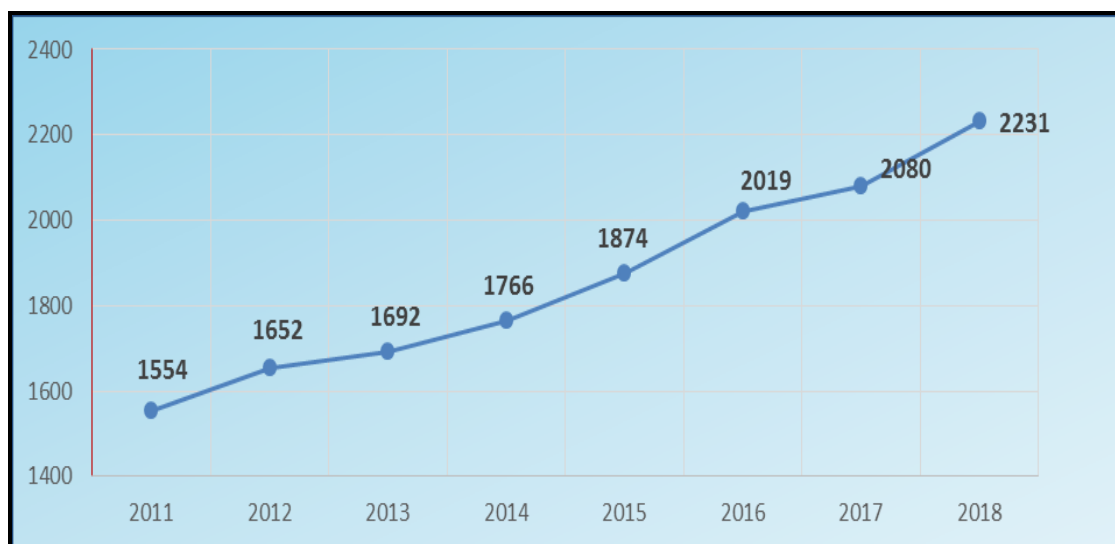


Figure 40: Total Number of Operating Dental Clinics, 2011 to 2018

Source: State Oral Health Division, 2018

The number of operating private dental clinics by state is shown below (**Figure 41**), with Selangor having the highest number of clinics (721) and a steady rate of growth, while the growth in FT Kuala Lumpur, Johor and Perak has increased significantly in the last year.

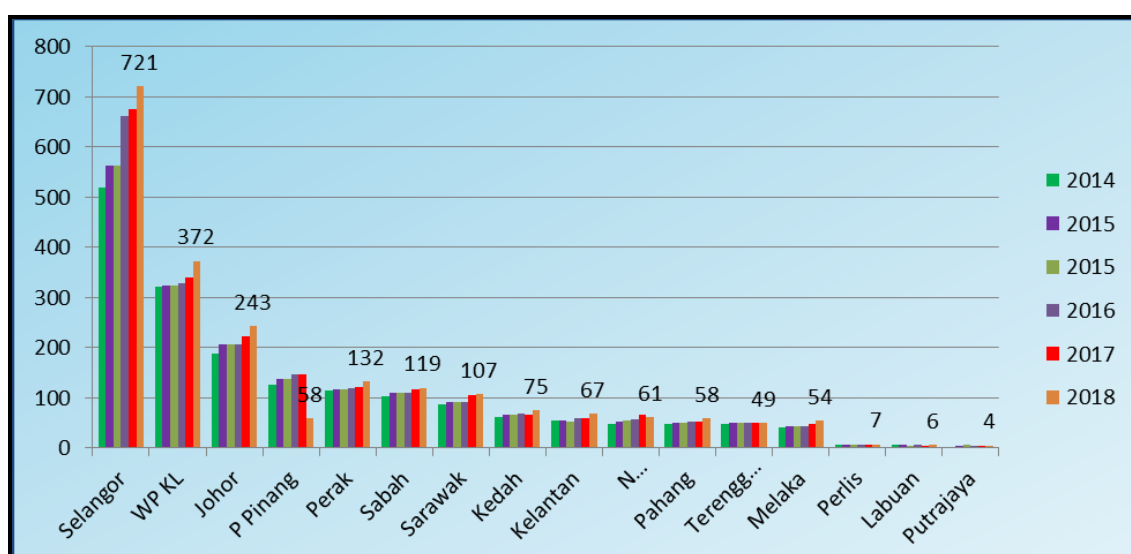


Figure 41: Number of Operating Dental Clinics by State, 2014 to 2018

Source: State Oral Health Division, 2018

This year, 201 applications for registration were approved and 14 registrations were withdrawn or cancelled. This resulted in an overall increase of 155 clinics, compared to 76 in 2017 (**Figure 42 and 43**).

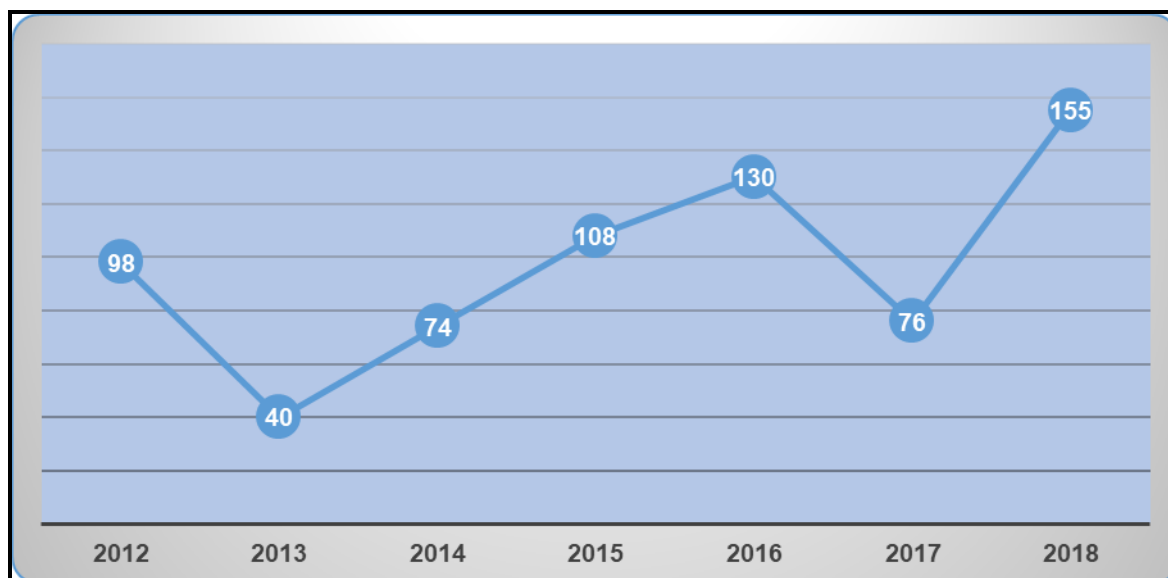


Figure 42: Increase in Number of Private Dental Clinics, 2012 to 2018

Source: State Oral Health Division, 2018

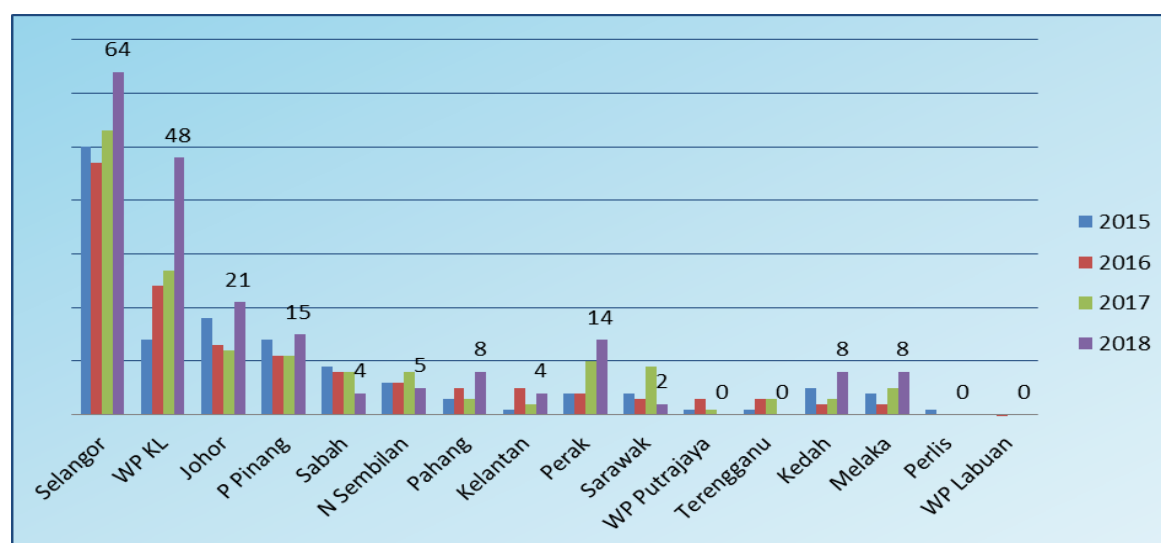


Figure 43: Number of Private Dental Clinics registered by State, 2015 to 2018

Source: State Oral Health Division, 2018

There was a sudden increase in the number of clinics registered in Selangor, FT Kuala Lumpur and Johor and slight increase in other states. For Sabah, Negeri Sembilan and Sarawak, there were a decrease in the number of clinics registered while there was no new clinic registered in Terengganu, FT Putrajaya, Perlis and FT Labuan. The number of applications which have been approved and the number of registrations which had been cancelled during the year in each state are shown below (**Table 84**).

Table 84: Number of private Dental Clinics registered or closed in each State

No.	State	Number of Dental Clinics					
		Operating on 01 Jan	Approved	Cancelled	Increase		Operating on 31 Dec
					No	%	
1.	Selangor	674	64	0	53	7.86	727
2.	FT Kuala Lumpur & Putrajaya	343	48	13	32	9.33	375
3.	Johor	222	21	0	39	17.57	261
4.	Pulau Pinang	146	15	1	14	9.59	160
5.	Sabah	117	4	2	2	1.71	119
6.	Negeri Sembilan	64	5	1	3	4.69	67
7.	Sarawak	105	2	0	2	1.90	107
8.	Pahang	52	8	2	6	11.54	58
9.	Kelantan	59	4	2	2	3.39	61
10.	Perak	121	14	3	11	9.09	132
11.	Kedah	68	8	0	7	10.29	75
12.	Terengganu	50	0	1	-1	0	49
13.	Melaka	47	8	1	7	14.89	54
14.	Perlis	7	0	0	0	0	7
15.	FT Labuan	4	0	0	0	0	4
Total		2079	201	28	178	8.56	2259

Source: State Oral Health Division, 2018

Overall there was 8.56 per cent increase in the number of registered active dental clinics which is more than the 4.91 per cent increased in 2017. Selangor with 32.18 per cent of the registered clinics, had also the highest number of new clinics (53), followed by Johor (39). Johor with an increase of 39 clinics had the highest growth rate (17.57 per cent), followed by Melaka (14.89 per cent), Pahang (11.54 per cent) and Kedah (10.29 per cent). Selangor and FT Kuala Lumpur & Putrajaya account for almost half (47.75 per cent) of the private dental clinics, and together have a growth rate of 8.35 per cent, which is an increased from the growth rate in 2017(4.10 per cent).

Inspection of Dental Clinics

By the end of 2018, 361 pre- and post-registration inspections had been carried out and 93 clinics with non-compliance had been revisited. The number of pre- and post- registration visits and the number of surveillance visits over the past nine (9) years are shown below (**Figure 44**).

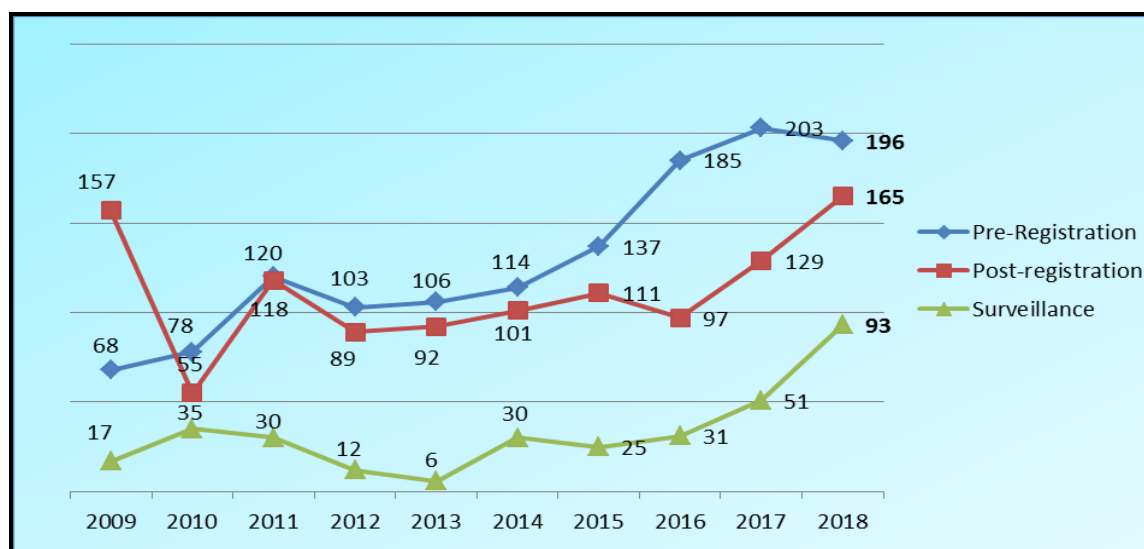


Figure 44: Number of pre-registrations, post-registration and surveillance inspections, 2009 to 2018

Source: State Oral Health Division, 2018

Every year identified registered private dental clinics by state are monitored based on the number of clinics in the state and the size of the state. Clinics which had complied for the past two (2) consecutive years will not be inspected the following year. The monitoring inspections carried out over the past nine (9) years are shown in **Figure 45**. In 2018, a total of 1006 of registered clinics was re-visited for routine inspection (**Table 85**).

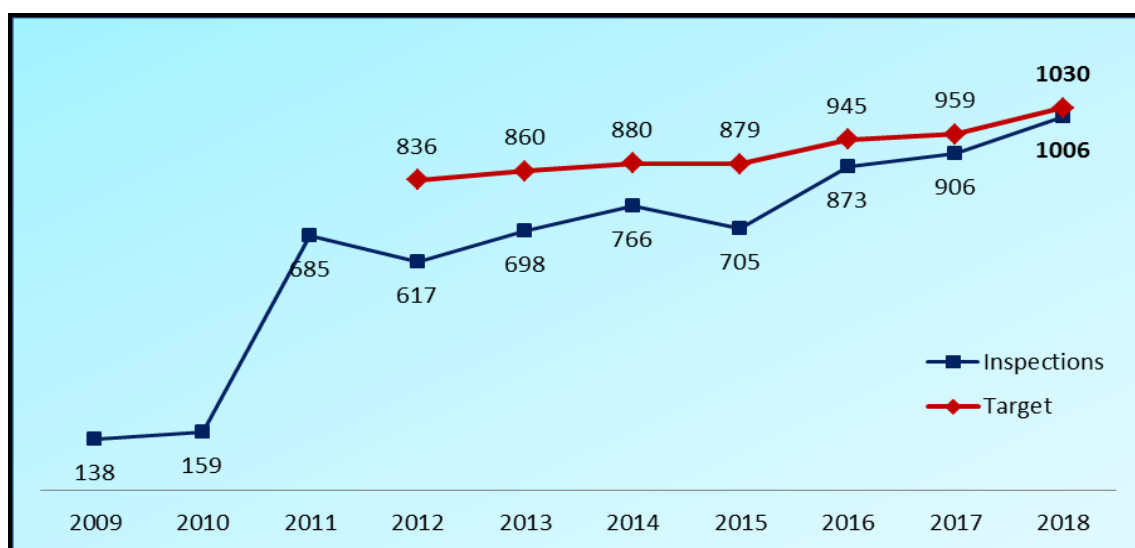


Figure 45: Number of monitoring inspections, 2009 to 2018

Table 85: Number of Routines Inspection and Achievement of each State, 2018

No.	State	Number of Dental Clinics				
		No. on 1 Jan 2017	Percentage (%)	Target	Achievement	Percentage Achievement (%)
1.	Selangor	674	33.3	220	160	72.7
2.	FT Kuala Lumpur & Putrajaya	343	40	165	165	100
3.	Johor	222	50	110	110	100
4.	Pulau Pinang	146	50	73	74	101.4
5.	Perak	121	50	61	61	100
6.	Sabah	117	50	58	60	103.5
7.	Sarawak	105	50	49	56	114.3
8.	Kedah	67	100	68	68	100
9.	Kelantan	59	100	56	55	98.2
10.	Negeri Sembilan	64	100	46	46	100
11.	Pahang	52	100	47	55	100
12.	Terengganu	50	100	37	38	102.7
13.	Melaka	47	100	47	47	100
14.	Perlis	7	100	7	7	100
15.	FT Labuan	4	100	4	4	100
Total		2079	-	1030	1006	97.7

Source: State Oral Health Division, 2018

Overall, the percentage achievement in 2018 was 97.7 per cent, with an increase of 5.3 per cent as compared to 2017 which was 92.4 per cent. Majority of the states showed achieving or exceeding the target except Selangor achieving 72.7 per cent.

Complaints against Dental Clinics

The number of complaints received by state in 2018 as listed in **Table 86**.

Table 86: Complaints Received and Enforcement Activities, 2018

No.	State	No. of Clinics	No. of Complaints Received	No. of Enforcement Activities	No. of Complaints Settled
1.	Perlis	7	5	1	2
2.	Kedah	75	11	-	1
3.	Pulau Pinang	160	18	2	2
4.	Perak	132	7	2	2
5.	Selangor	721	20	6	8
6.	FT Kuala Lumpur & Putrajaya	378	21	9	5
7.	Negeri Sembilan	67	6	6	6
8.	Melaka	54	12	1	8
9.	Johor	243	13	6	5
10.	Pahang	58	4	0	1
11.	Terengganu	49	3	3	1
12.	Kelantan	61	12	3	2
13.	Sabah	119	5	2	-
14.	Sarawak	107	1	1	1
15.	FT Labuan	4	0	-	-
Total for 2018		2235	138	42	44
Total for 2017		2091	71	44	41
Total for 2016		1983	61	35	31
Total for 2015		1874	31	35	20
Total for 2014		1766	24	41	16
Total for 2013		1692	28	48	13
Total for 2012		1652	40	58	11
Total for 2011		1547	86	64	34
Total for 2010		1505	23	36	15
Total for 2009		1179	29	27	29

Source: State Oral Health Division, 2018

FT Kuala Lumpur & Putrajaya had the highest number of complaints (21), followed by Selangor (20). Various enforcement activities were carried out in relation to the complaints so as to ensure compliance to legislation and guidelines and against illegal practice. The highest number of enforcement activities was carried out in FT Kuala Lumpur, followed by Selangor, Negeri Sembilan and Johor.

Although Selangor has the largest number of clinics (721) in 2018, FT Kuala Lumpur had the highest number of complaints against registered clinics (21) and also the highest number of enforcement activities (9).

The total number of registered dental clinics had increased by 10.9 per cent from the previous year, but the number of complaints had increased by 51.5 per cent. There were 42 enforcement activities and 31.9 per cent of the complaints were settled as shown in **Figure 46**.

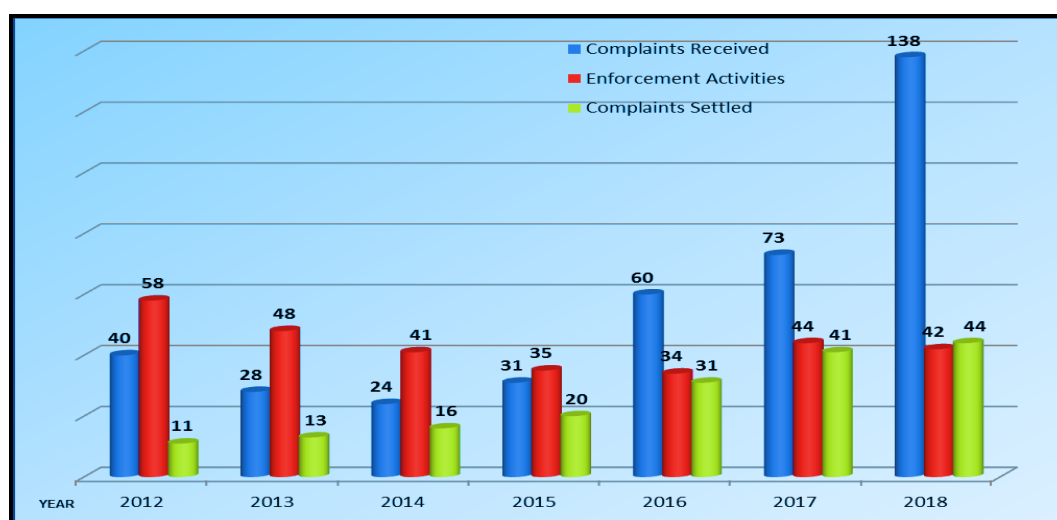


Figure 46: Record of Complaints and Enforcement Activities 2012 to 2018

Illegal Dentistry

Other than the complaints against registered dental clinics, complaints and information were also received on unregistered clinics and ‘practitioners’ offering braces. These cases were handled as unregistered clinics and were prosecuted under the PHFSA 1998.

In 2018, a total of 14 cases were heard in court for the state of Terengganu, Kelantan, Johor, Melaka, Penang, Perlis, FT Kuala Lumpur, Perlis and Kelantan. All cases were prosecuted under Section 4(1) of the PHFSA and majority of the cases involved ‘fake braces’ whilst others were due to unregistered practitioner. A summary of the cases was as below (**Table 87**).

Table 87: Summary of Prosecutions, 2009 to 2018

Year	No of Cases	State	Offence	Punishment
2009	1	Perak	Unregistered clinic	Fined RM9,000.00
2012	1	Johor	Unregistered practitioner	Fined RM20,000.00
2013	1	Johor	Unregistered practitioner	Fined RM20,000.00
2013	4	FT KL & Putrajaya	Unregistered practitioner	NFA*
2014	2	Johor	Unregistered practitioner	Fined RM10,000.00
		Pulau Pinang	Unregistered practitioner	Fined RM120,000.00
2015	6	FT KL & Putrajaya (3)	Unregistered practitioner	DNAA

		FT KL & Putrajaya	Fake Braces	Fined RM30,000.00
		Melaka	Fake Braces	DNAA
		Terengganu	Fake Braces	Fined RM20,000.00
2016	8	Kedah	Fake Braces	Fined RM25,000.00
		Perak	Unregistered clinic	Fined RM30,000.00
		Perak	Unregistered practitioner	Fined RM25,000.00
		FT KL & Putrajaya	Fake Braces	Jailed 2 months
		Melaka	Fake Braces	Fined RM30,000.00
		Johor	Unregistered practitioner	Fined RM20,000.00
		Terengganu	Fake Braces	Fined RM25,000.00
		Sarawak	Fake Braces	Fined RM15,000.00
2017	14	Pahang (4)	Fake Braces	Fined RM100,000.00 DNNA
		FT KL & Putrajaya	Fake Braces	DNNA
		FT KL & Putrajaya (2)	Unregistered practitioner	Fined RM100,000.00
		Selangor (2)	Fake Braces	Fined RM30,200.00
		Melaka	Fake Braces	Fined RM70,000.00
		Terengganu	Fake Braces	Fined RM40,000.00
		Perak	Fake Braces	Jailed 6 months
		Kedah	Fake Braces	Jailed 12 months
2018	14	Johor (2)	Fake Braces Unregistered practitioner	Fined RM30,000.00
		Melaka (3)	Unregistered practitioner	Not settle (will proceed to next year)
		Terengganu	Fake Braces	
		Kelantan (2)	Fake Braces	
		Penang	Fake Braces	
		Johor	Fake Braces	
		Sarawak	Fake Braces	
		Perlis	Fake Braces	
		Penang	Fake Braces	
		FT Kuala Lumpur	Unregistered practitioner Fake Braces	

*NFA = No further action

**DNAA = Discharge not amounting to acquittal

Enforcement Officers

In 2018, there were 40 enforcement officers in the states and two (2) at the OHP MoH. These 40 officers carried out all duties and functions of the national and state legislation and enforcement units, the registration and inspection of clinics under the Private Healthcare Facilities and Services Act as well as coordinating the Safety and Health audits and activities. The list of enforcement officers was as follows (**Table 88**):

Table 88: List of Enforcement Officers 2018

Perlis	1.	Dr Rohana binti Mat Arip
	2.	Dr Izwan bin Abd Hamid
Kedah	3.	Dr Hjh. Farehah binti Othman
	4.	Dr Ahmad Fadhil bin Mohamad Shahidi
	5.	Dr Mohd Syaril bin Mohd Tahir
Pulau Pinang	6.	Dr Asnil bin Md Zain
	7.	Dr Muhammad Azhan bin Jamail
Perak	8.	Dr Faryna binti Md. Yaakub
	9.	Dr Nur Azlina binti Omar
Selangor	10.	Dr Suhaila binti Mat Said
	11.	Dr Nurul Asniza binti Abas
	12.	Dr Rosmaria binti Deraman
	13.	Dr Nursharhani binti Shariff
	14.	Dr Hanif bin Mohd Suffian
	15.	Dr Musfirah binti Musa
	16.	Dr Nor'Adlin binti Abdullah
FT Kuala Lumpur & Putrajaya	17.	Dr Noor Asilati binti Abdul Raob
	18.	Dr Arfah Syaziyyah binti Mohd Yasin
Negeri Sembilan	19.	Dr Rosnah binti Atan
	20.	Dr Nora binti Nasir
Melaka	21.	Dr Khadijah binti Wahab
	22.	Dr Muhammad Iqbal bin Arifin
Johor	23.	Dr Sheila Rani a/p Ramalingam
	24.	Dr Sabarina binti Omar
	25.	Dr Ah Khaliluddin bin Husain
Pahang	26.	Dr Noor Ismazura binti Ismail
	27.	Dr Mai Rozyhasniza binti Rosli
Terengganu	28.	Dr Nor Azura binti Juhari
	29.	Dr Norul Qurratu 'Aini binti Razali
	30.	Dr Ili Norfatma binti Mohd
Kelantan	31.	Dr Azuar Zuriati binti Ab Aziz
	32.	Dr Rosasliza binti Ahmad
Sabah	33.	Dr Norinah binti Mustapha
	34.	Dr Chung Ken Tet
	35.	Dr Rokiah binti Aziz
Sarawak	36.	Dr Ignatius Niap Tat Yuen
	37.	Dr Mohd Asyraf bin Iskak
	38.	Dr Zarith Sophia binti Mod Nor

FT Labuan	39.	Dr Chung Ken Tet
	40.	Dr Darren L Ng Wei Keat
Oral Health Division	41.	Dr Elise Monerasinghe
	42.	Dr Haznita binti Zainal Abidin

Source: State Oral Health Division, 2018

Enforcement Courses

Enforcement officers attended various courses organised by OHP, the Private Medical Practice Control Division (CKAPS) and by State Private Medical Practice Control Units (UKAPS) and other Divisions. These courses aimed on updating knowledge, reinforcing procedures and guidelines and improving skills of the enforcement officers to carry out their surveillance and enforcement activities efficiently and effectively. The list of courses conducted in 2018 as shown in **Table 89** for courses at National level and **Table 90** for State level.

Table 89: Courses at National level

No.	Title of Course	Date	Duration	Organizer	No of Officers
1.	<i>Bengkel Intelligence Gathering utk Pegawai Pergigian (Penguatkuasa)</i>	2 to 4 July	4 days	OHP, MoH	8
2.	<i>Kursus Pemantapan Kertas Siasatan</i>	3 to 6 Sept	3 days	UKAPS, WPKL	7
3.	<i>Bengkel Membangunkan Prosedur Operasi Piawaian Penguatkuasaan di bawah Akta Pergigian 2018</i>	24 to 26 Sept	3 days	OHP, MoH	5
4.	<i>Bengkel Pengendalian Isu-isu Pendaftaran dan Perlesenan Kemudahan dan Perkhidmatan Jagaan Kesihatan Swasta</i>	3 to 5 Oct	3 days	CKAPS, MoH	16
5.	<i>Jelajah Akta Pergigian</i>	Aug to Oct	1 day / session	OHP, MoH & MDA	42
6.	MLMS Medico Legal Conference	25 to 26 April	2 days	Medico Legal Society Malaysia	3
7.	<i>Bengkel Pengaduan KPIKS</i>	16 to 18 April	2 days	CKAPS, MoH	8

Source: State Oral Health Division, 2018

Table 90: Courses at State / Zone Level

No.	Title of Course	Date	Duration	Organiser	No of Officers
1.	<i>Program Taklimat Kesedaran Akta Peranti Perubatan 2012</i>	11 Feb	1 day	JKN Perak	1
2.	<i>Bengkel Audit Keselamatan dan Kesihatan</i>	25 to 26 May	2 days	JKN WPKL	1

3.	<i>Mesyuarat Pengenalan Aktiviti Penguatkuasaan Pergigian Tahun 2016</i>	19 Apr	1 day	JKN Sarawak	3
4.	<i>Mesyuarat Pengenalan kepada Microsoft Access OSHA Pergigian 2016</i>	25 Apr	1 day	JKN Sarawak	3
5.	<i>Kursus Pengendalian Kes-Kes Perundangan</i>	25 to 29 Apr	4 days	JKN P Pinang	4
6.	<i>Kursus Kesedaran Dasar Keselamatan dan Kesihatan Pekerjaan</i>	24 May	1	JKN WPKL	4
7.	<i>Bengkel Audit Keselamatan dan Kesihatan</i>	25 to 26 May	2 days	JKN WPKL	4
8.	<i>Seminar Penguatkuasaan Akta 586 Bagi Anggota Penguatkuasaan CKAPS & UKAPS</i>	16 to 19 Aug	4 days	JKN WPKL	2
9.	<i>Kursus Pemantapan Penguatkuasaan Pergigian Bagi Kemudahan dan Perkhidmatan Jagaan Kesihatan Swasta</i>	26 to 27 Oct	2 days	JKN Selangor	6
10.	<i>Mesyuarat Microsoft Access OSHA Pergigian 2016 Bil. 1/2016</i>	14 to 16 Nov	3 days	JKN Sarawak	3
11.	<i>Taklimat Isu Rasuah & Integriti Kepada Pegawai Yang Melaksanakan Tugas Penguatkuasaan Di JKNM</i>	24 Nov	1 day	JKN, Melaka	1

Source: State Oral Health Division, 2018

SAFETY AND HEALTH ACTIVITIES

Safety and Health Audit

Clinical Governance is a concept which brings together all the activities that demonstrate to our patients, the community, the management and our peers that we hold ourselves responsible for providing a safe and high-quality healthcare.

Clinical Governance has been defined as the systems by which the governing body, managers and clinicians share responsibility, and are held accountable for patient or client care, minimising risks to consumers, and continuously monitoring and improving the quality of clinical care.

Australian Council on Healthcare Standard¹

¹The Australian Council on Healthcare Standards (ACHS) -<http://www.achs.org.au> accessed 8 March 2010

The effective governance of clinical services involves the participation from all categories of personnel in a range of activities to ensure the quality and safety of clinical services. As **Safety of Health Care** is one of the dimensions of quality in the provision of healthcare, thus, the major aim of any healthcare system should be the safe movement of patients through all parts of the system. Harm arising from care must be avoided and risks minimised in care delivery processes². The safety of the patients in healthcare delivery is achieved through:

- Accreditation audits
- Audits – for example on Infection control, Dental Radiation Safety, Mercury Hygiene and Safety in the Dental Laboratory
- Setting of Safety Goals
- Incident reviews
- Complaints reviews

Auditing clinical practice against health and safety standards is a well-established process to identify risk, improve practice and gain assurance. The audit will demonstrate key quality factors and compliance with policy guidelines and procedures.

To this end, the OHP MoH has published various guidelines relating to health and safety in dental practice, namely

- a) Guidelines on **Infection Control** in Dental Practice (1st edition 1996, 2nd edition 2007, 3rd edition 2017);
- b) Guidelines on Maintaining Quality of the **Dental Unit Water System** (2010);
- c) Guidelines on **Radiation Safety** in Dentistry (1st edition 2006, 2nd edition 2010);
- d) Guidelines for Occupational Safety and Health in the **Dental Laboratory** (1st edition 2002, 2nd edition 2011);
- e) Methods of **Disposal of Hypodermic Needles** (2013); and
- f) Position Statement on **Use of Dental Amalgam** (1st edition 2002, 2nd edition 2013).

The OHP has also formulated compliance checklists, with a total of 118 items, to be used in inspection audits to track compliance in five (5) areas pertaining to:

- Management;
- Infection control and disposal of hypodermic needles;
- Use of dental amalgam and compliance to dental mercury hygiene;
- Dental radiation safety and
- Safety and health in dental laboratories.

²Better Quality, Better Health Care: A Safety and Quality Improvement Framework for Victorian Health Services (2005)

Objectives of the Inspection

General Objective

- To ensure that dental facilities and the staff comply with health and safety standards contained in the various guidelines produced by the OHP, MoH in government dental facilities.

Specific Objectives

- To assess compliance to specific checklists relates to infrastructure, materials, appliances and practices in the context of safety and health.
- To identify areas for improvement in terms of financial support, infrastructure, equipment and materials, as well as training needs that will enhance health and safety practices in the dental environment.

Status Report for Safety and Health Audit, 2018

A total of 1,173 out of 2,343 facilities (50.1 per cent) in 13 states and two (2) federal territories were audited in 2018. This is above the target of 33.3 per cent or one-third of the facilities. The highest percentage of facilities visited was 99.2 per cent in Kelantan and the lowest was in Sarawak (29.3 per cent) as shown in **Table 91**. Perlis and Pahang did not achieve the target of 33.3 per cent.

Table 91: Facilities Audited by State, 2018

No	State	No of Districts	No of Dental Facilities		
			Total	No. Audited	% Audited
1	Kelantan	10	251	249	99.2
2	FT Labuan	1	8	6	75.0
3	Perak	10	199	131	65.8
4	Johor	10	223	91	40.8
5	Sabah	9	197	100	50.8
6	Sarawak	11	287	84	29.3
7	Kedah	11	175	111	63.4
8	Terengganu	8	119	73	61.3
9	Selangor	9	163	71	43.6
10	FT KL & Putrajaya	5	139	61	43.9

No	State	No of Districts	No of Dental Facilities		
			Total	No. Audited	% Audited
11	Perlis	2	55	18	32.7
12	Pahang	11	177	58	32.8
13	Pulau Pinang	5	144	50	34.7
14	Negeri Sembilan	7	120	40	33.3
15	Melaka	3	120	40	33.3
	Total	112	2,343	1,173	50.1

Source: State Oral Health Division, 2018

Of the 1,173 facilities audited, 1,072 were audited in the area of Management (Mobile Dental teams and Mobile Dental Clinics are not audited in this area), 1,178 were audited for Infection Control procedures and 1,110 were audited for Amalgam Usage. A total of 673 facilities with x-ray services and 657 had laboratories were also audited (**Table 92**).

Table 92: Type of Facilities Audited by State, 2018

State	No. of Facilities		No. of Facilities Audited by Areas				
	Total	Audited	Management	Infection Control	Amalgam Usage	Radiation Safety	Laboratory Safety
Perlis	55	18	18	18	18	2	2
Kedah	175	111	111	111	111	111	111
P Pinang	144	50	50	50	50	50	50
Perak	199	131	131	131	119	56	58
Selangor	163	71	71	71	71	71	71
FT KL	139	61	26	61	48	23	18
N Sembilan	120	40	24	38	38	9	7
Melaka	120	40	13	23	23	3	3
Johor	223	91	53	91	58	50	43
Pahang	177	58	58	58	58	58	58
Terengganu	119	73	73	73	73	77	73

State	No. of Facilities		No. of Facilities Audited by Areas				
	Total	Audited	Management	Infection Control	Amalgam Usage	Radiation Safety	Laboratory Safety
Kelantan	251	249	249	249	249	40	40
Sabah	197	100	100	100	100	100	100
Sarawak	287	84	89	98	88	22	22
FT Labuan	8	6	6	6	6	1	1
Total	2343	1173	1072	1178	1110	673	657

Source: State Oral Health Division, 2018

Overall Compliance, 2018

The total number of non-compliance items was 5,117. The highest number of items which did not comply was Infection Control (2,429 items) and the lowest was laboratory safety (305 items) (Figure 47).

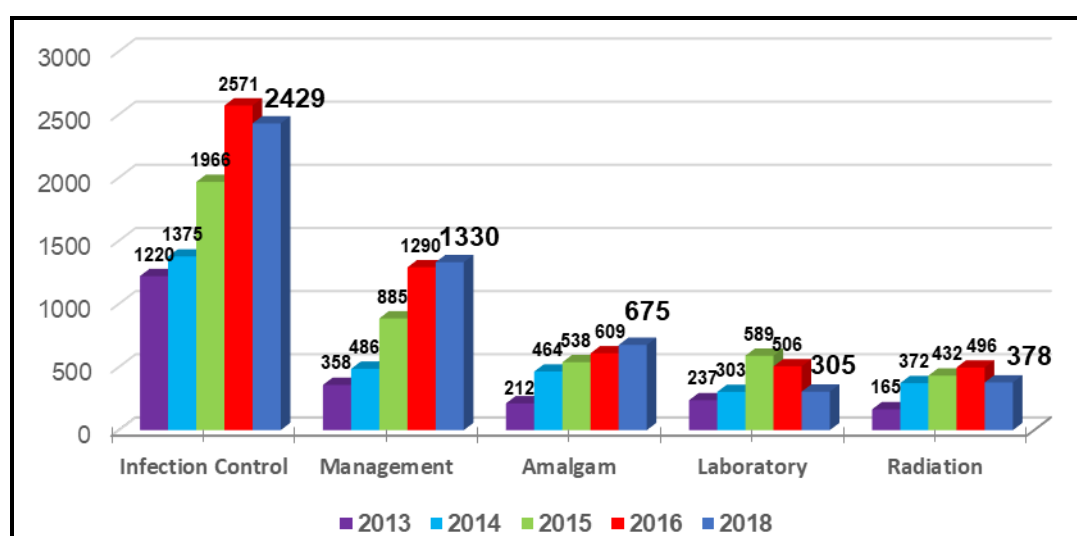


Figure 47: Comparison of Number of Items which did not comply, 2013 to 2018

Based on the overall number of clinics, (not taking into account the number of clinics audited in each area) the rate of compliance was high (96.3 per cent), with a slight increase of 0.2 per cent from 2016. The highest rate of compliance was recorded in the area of lab safety (97.7 per cent), followed by x-ray safety (97.4 per cent). However, management (94.1 per cent) and Infection control (94.6 per cent) showed the lowest compliance rate (Figure 48).

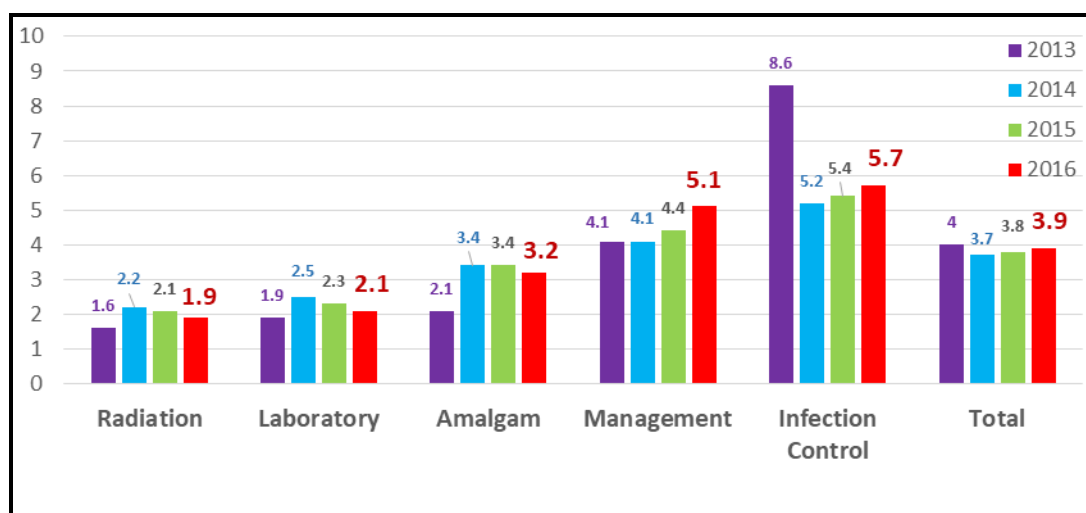


Figure 48: Overall Percentage Non-Compliance by Area

Overall there was a decrease in non-compliance in all states except Pulau Pinang, Terengganu and Sabah which had a slight increase. In most states the percentage of non-compliance was less than 5 per cent, and while in FT Labuan the non-compliance was less than 1.0 per cent (Figure 49).

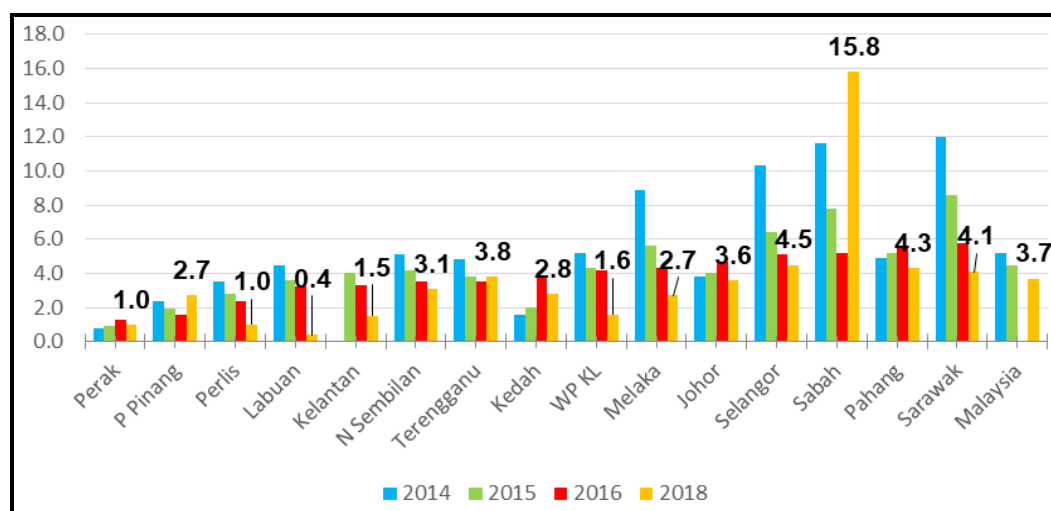


Figure 49: Overall Percentage Non-Compliance by state

When taking into account the types of facility and the areas audited, comparisons can only be made for the last two years. The overall percentage compliance was 96.3 per cent. The highest compliance was in the area of Lab safety usage (97.7 per cent), followed by x-ray safety (97.4 per cent) and amalgam safety (96.2 per cent). The lowest compliance was in the area of management with a compliance of 94.1 per cent (Figure 50).

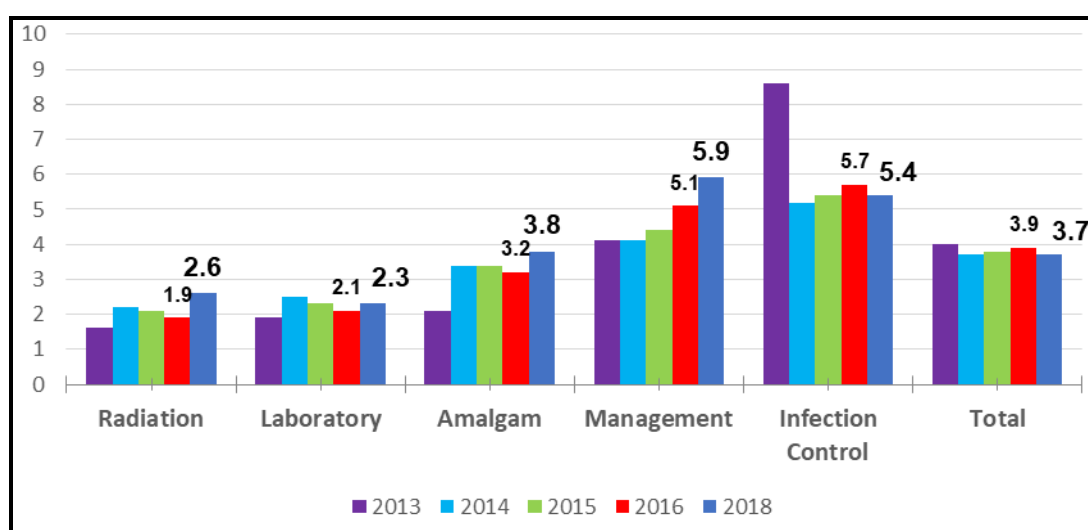


Figure 50: Percentage Non-Compliance by Area and Type of Facility

Overall there was an improvement in all areas. Labuan has recorded the highest compliance in three areas; x-ray safety (100 per cent), lab safety (100 per cent) and infection control (99.6 per cent). Perlis recorded the highest compliance in two areas; x-ray safety (100 per cent) and management (99.5 per cent) while Perak recorded the highest compliance in amalgam safety (99.5 per cent).

At the national level, the compliance was highest in the area of lab safety (97.7 per cent) and Labuan, Kedah and Pahang scored 99 per cent and more. Overall, all states comply in all areas with achievements of more than 95 per cent except Sabah 84.2 per cent compliance rate as shown in **Table 93**.

For achievement by areas, Perak and Perlis had the highest overall compliance in three areas (management, infection control and amalgam usage). Perlis and FT Labuan in Radiation safety area, FT Labuan in safety in the laboratory area, Perak in amalgam usage area and FT Labuan in one infection control area.

In two states the non-compliance in certain areas was above 10 per cent and Sabah had an overall non-compliance of more than 10 per cent. For the area of safety in the laboratory, only Sarawak had more than 10 per cent non-compliance, followed by Sabah on management, infection control and radiation safety. Other states have less than 10 per cent non-compliance (**Table 93**).

Table 93: Percentage Non-Compliance by State 2018

States	Management	Infection Control	Amalgam Usage	Radiation Safety	Dental Lab	Overall
Perak	0.9	1.4	0.5	2.2	2.2	1.0
Pulau Pinang	4.0	4.1	1.9	1.0	1.3	2.8
Perlis	0.5	1.3	2.8	0.0	5.0	1.0
FT Labuan	0.8	0.4	1.0	0.0	0.0	0.4
Kelantan	2.8	1.9	1.4	1.7	3.3	1.5
N. Sembilan	5.4	4.6	5.8	4.0	6.4	3.1

Terengganu	4.8	5.4	1.9	2.2	2.9	3.8
Kedah	7.7	2.3	2.1	1.5	0.6	2.8
FT Kuala Lumpur	3.8	3.0	1.7	1.6	1.4	1.6
Melaka	7.3	4.8	7.1	1.5	8.3	2.7
Johor	2.9	5.8	1.6	9.2	3.6	3.6
Selangor	2.3	8.6	5.2	1.2	2.4	4.5
Sabah	24.0	22.9	18.9	4.2	3.8	15.8
Pahang	8.0	6.3	3.8	0.9	1.0	5.6
Sarawak	6.5	5.9	2.9	2.1	2.7	5.8
Malaysia	5.9	5.4	3.8	2.6	2.3	3.7

Most states had less than 5 per cent non-compliance in five (5) aspects. Sabah showed more than 10 per cent non-compliance in three (3) aspects.

SHARPS INJURIES

Sharps injuries constitute a portion of occupational safety and health which cannot be ignored, and in 2018 there were 206 sharps injuries recorded (injuries from sterile instruments are not included in this report). Sharps injuries are monitored through a feedback mechanism and the total number of sharps injuries recorded in the states are shown below (Figure 51 and 52).

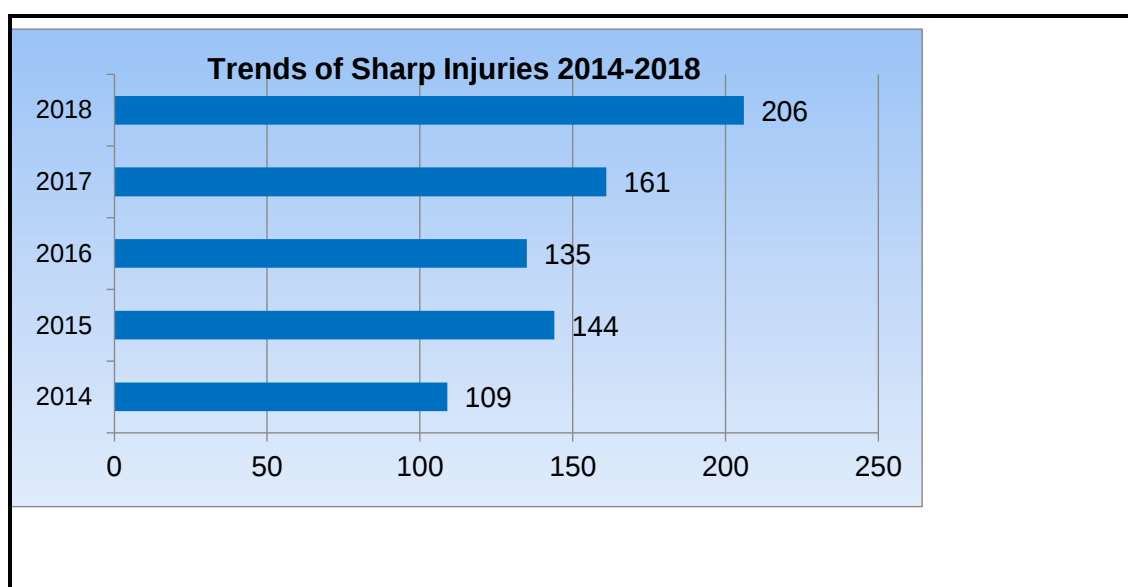


Figure 51: Trend of sharps injuries from 2014 to 2018

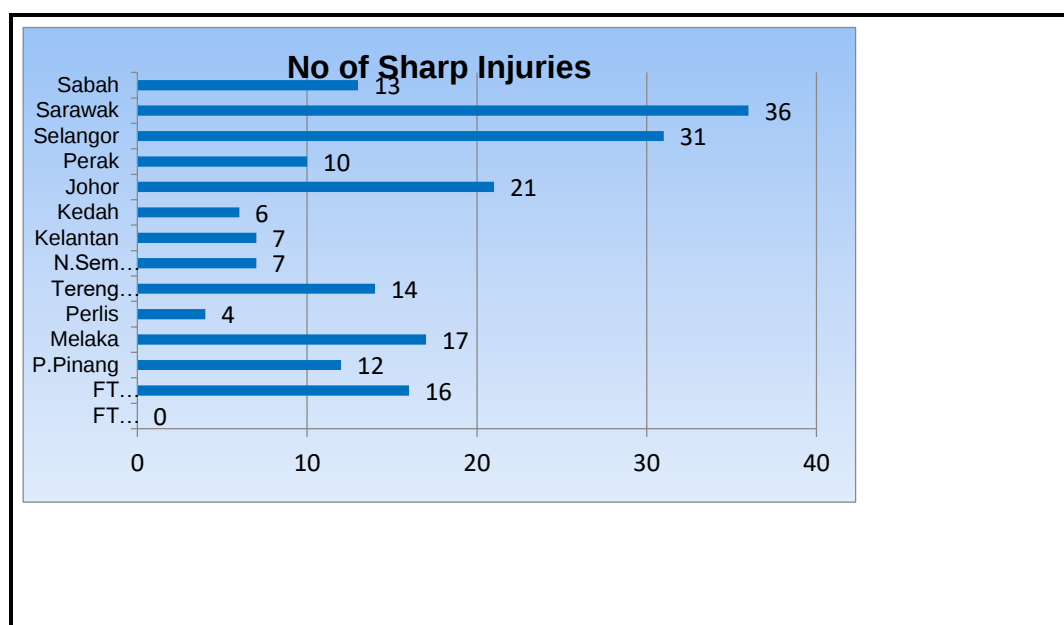


Figure 52: Number of sharps injuries by State, 2018

From the total of 206 sharps injuries, 18.93 per cent were recorded in Sarawak, followed by Selangor (15.05 per cent) and Johor (10.19 per cent). No case of sharps injury was recorded in FT Labuan (Figure 52).

The types of injuries are shown below (Table 94):

Table 94: Sharps injuries, 2018

		State															
		Perlis	Kedah	P Pinang	Perak	Selangor	FT KL	N Sembilan	Melaka	Johor	Pahang	Terengganu	Kelantan	Sabah	Sarawak	FT Labuan	Total
1	Hypodermic Needle																
1a	During Treatment	2	-	4	1	3	2	2	6	7	2	3	1	4	13	-	50
1b	After treatment	-	-	-	-	4	1	-	2	3	1	3	-	1	-	-	15
1c	During recapping	-	-	-	1	1	4	-	1	2	3	2	-	2	1	-	17
1d	Other: removal of cartridge, pre-sterilisation	1	-	1	-	2	2	2	-	1	2	-	1	1	3	-	16
2	Scaler Tips																
2a	During treatment	-	-	-	1	1	1	-	-	-	-	-	-	1	2	-	6
2b	During removal	-	-	-	1	-	-	-	-	-	-	-	1	-	-	-	2

		State															
		Perlis	Kedah	P Pinang	Perak	Selangor	FT KL	N Sembilan	Melaka	Johor	Pahang	Terengganu	Kelantan	Sabah	Sarawak	FT Labuan	Total
2c	During cleaning	-	-	-	1	-	1	-	-	-	-	-	-	-	1	-	3
2d	After treatment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3	Dental Burs																
3a	During treatment	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	2
3b	During removal	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	2
3c	During cleaning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
3d	Others: (denture trimming in lab)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
4	Endodontic Files																
4a	During treatment	-	-	-	-	-	1	-	-	1	-	1	-	-	1		4
4b	During removal	-	-	-	-	-	-	-	-	-	-	-	-	-	-		0
4c	During cleaning	-	-	-	-	-	-	-	-	-	-	-	-	-	-		0
		State															
		Perlis	Kedah	P Pinang	Perak	Selangor	FT KL	N Sembilan	Melaka	Johor	Pahang	Terengganu	Kelantan	Sabah	Sarawak	FT Labuan	Total
5	Suture Needle																
5a	During treatment	-	3	2	-	1	-	1	-						2		9
5b	During cleaning	-	-	-	-	-	-	-	-		1						1
6	Elevators																
6a	During treatment		1	3	3	11	2		6	5	2	1	1	2	5		42
6b	During cleaning					1											1
7	Others																

		State															
		Perlis	Kedah	P Pinang	Perak	Selangor	FT KL	N Sembilan	Melaka	Johor	Pahang	Terengganu	Kelantan	Sabah	Sarawak	FT Labuan	Total
7a	Surgical blade	1													1		2
7b	Probe				2	4	1	1	1		1	1	3	1	3		18
7c	Forcep claw horn								1	1							2
7d	Dental wire		1														1
7e	Tweezer			1													1
7f	Dental forceps			1		1				0			0	1	3		6
7g	Coupland					1											1
7h	Denture clasp							1									1
7i	Disposable needle									1							1
7j	Scissor											1					1
7k	Glass container														1		1
7l	Unknown											1					1
Total		4	6	12	10	31	16	7	17	21	12	14	7	13	36	0	206

Most of these injuries occurred during the handling of hypodermic needles (47.57 per cent). Overall, incident of sharp injuries in 2018 increased about 28.57 per cent compared to 2017.

QUALITY IMPROVEMENT INITIATIVES

QUALITY ASSURANCE PROGRAMME (QAP)

The Quality Assurance Programme (QAP) is intended to improve the quality, efficiency and effectiveness of health services delivery including oral health. The QAP also facilitates the planned and systematic evaluation of the quality of services delivered. The goal of the QAP is to ensure that within the constraints of resources the 'optimum achievable benefit' is delivered.

The National Indicator Approach (NIA) with the District/Hospital Specific Approach (DSA/HSA) have been used under the QAP of the MoH. At national level, the achievements of these indicators are monitored twice a year. The indicators are periodically reviewed to ensure relevance and appropriateness.

National Indicator Approach (NIA)

In 2018, four indicators under the NIA were monitored to measure the performance of primary and community oral healthcare (**Table 95**).

Table 95: Oral Health Indicators under NIA, January to December (2017 and 2018)

No.	Indicator	Standard (%)	Achievement (%)	Achievement (%)	SIQ Yes/No
			2017	2018	
1	Percentage of primary schoolchildren maintaining orally-fit status	≥ 65	63.5	62.6	Yes
2	Percentage of secondary schoolchildren maintaining orally-fit status	≥ 80	68.3	67.7	Yes
3	Percentage of non-conformance of fluoride level at reticulation points (Level < 0.4ppm)	≤ 25	13.2	16.3	No
4	Percentage of non-conformance of fluoride level at reticulation points (Level > 0.6ppm)	≤ 7	0.7	0.4	No

In 2018, two of the four indicators achieved their targets. Indicators on 'Percentage of non-conformance of fluoride levels at reticulation points (Level > 0.6ppm)' showed improvements compared with results in 2017. Over the years there has been gradual drop performance at state and national levels for 'Percentage of primary schoolchildren maintaining orally-fit status' (**Figure 53**) and 'Percentage of secondary schoolchildren maintaining orally-fit status' following the introduction of the new Gingival Index for Schoolchildren (GIS) which started in 2014. However, both indicators show gradual improvement in 2015 and 2016.

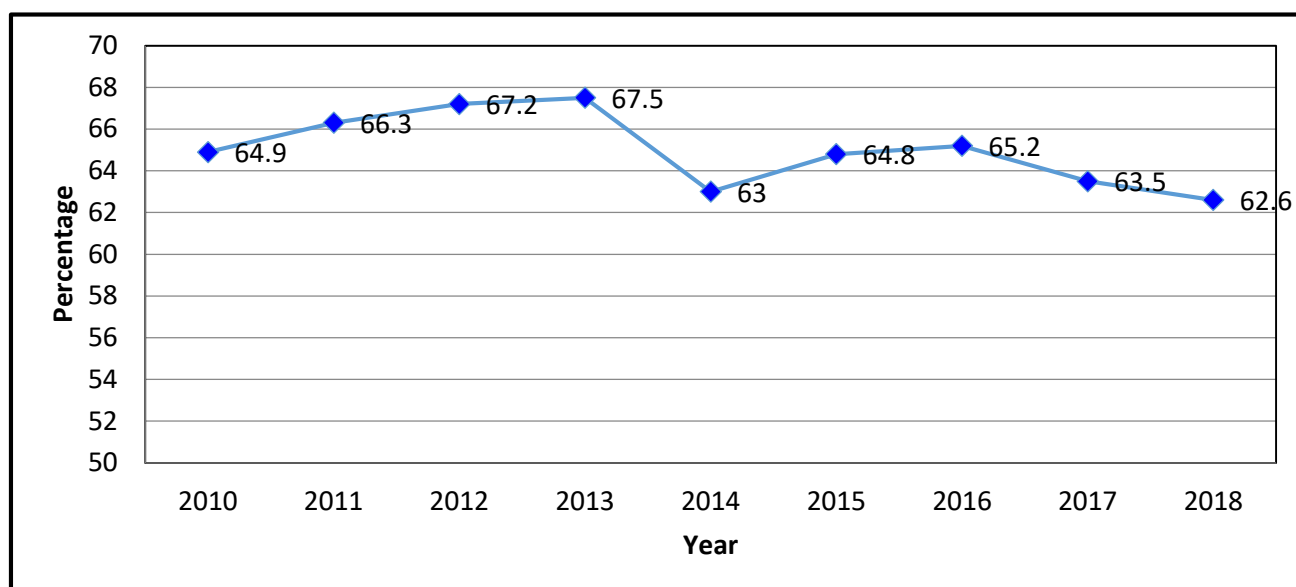


Figure 53: Percentage of Primary Schoolchildren Maintaining Orally Fit Status (Standard $\geq$ 65%), 2010 to 2018

Source: OHP MoH 2018

* 2014 – Introduction of GIS

However, there is not much change in performance of ‘Secondary Schoolchildren Maintaining Orally-fit Status’ from 68.3 per cent in 2017 to 67.7 per cent in 2018 (**Figure 54**). The 2014 data for GIS will also serve as baseline henceforth.

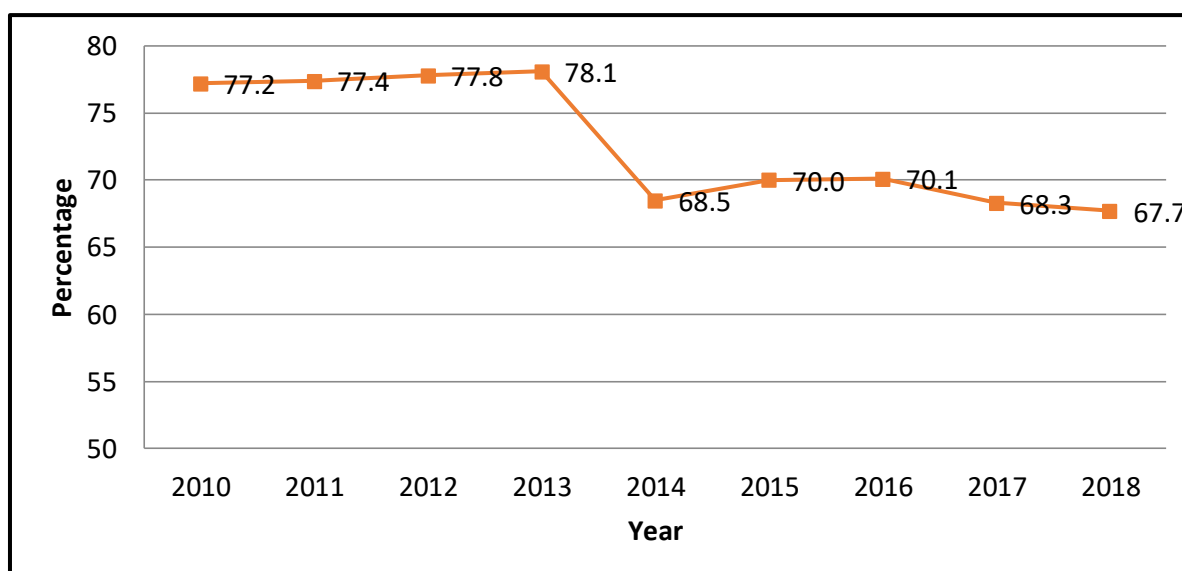


Figure 54: Percentage of Secondary Schoolchildren Maintaining Orally-fit Status (Standard $\geq$ 80%), 2010 to 2018

Source: OHP MoH 2018

* 2014 – Introduction of GIS

Achievements for non-conformance of fluoride levels <0.4 ppm have been fluctuating from 19.6 per cent (2010) to 16.3 per cent in 2018. The year 2017 has recorded the best achievement (13.2 per cent) from 2010 to the present (**Figure 55**).

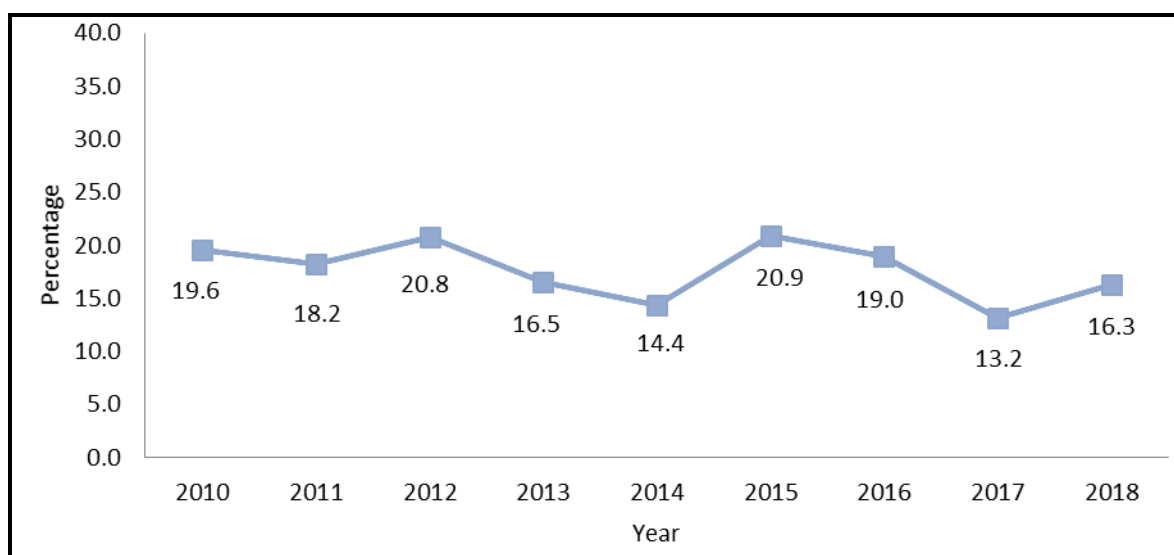


Figure 55: Percentage of Non-conformance of Optimal Fluoride Level at Reticulation Points, Level < 0.4ppm (Std.≤ 25%), 2010 to 2018

Source: OHP MoH 2018

The percentage of non-conformance of optimal fluoride levels for > 0.6 ppm in 2018 at 0.4 per cent was also the best achievement so far (**Figure 56**).

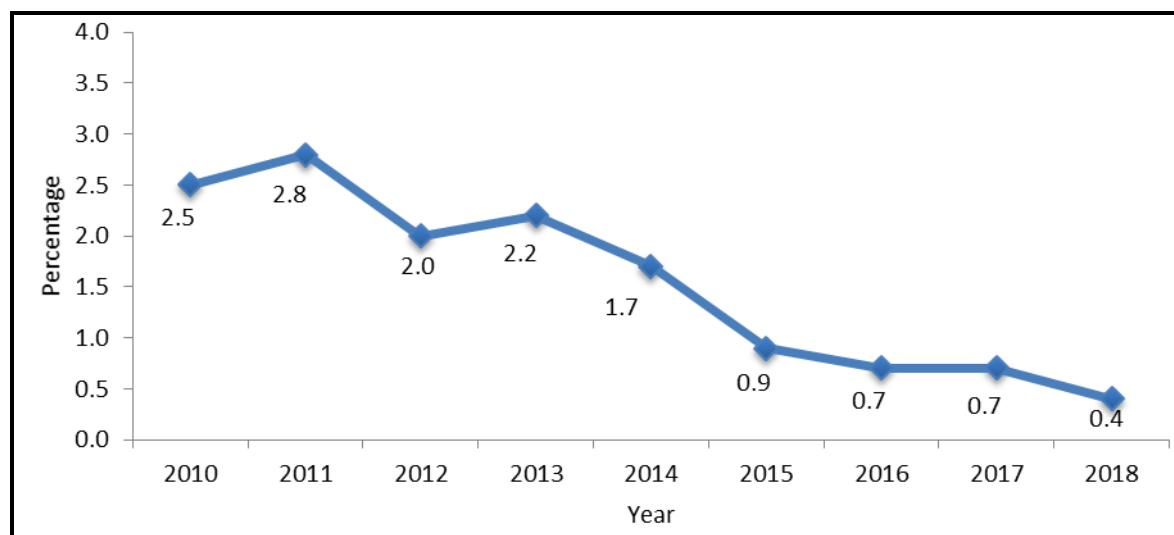


Figure 56: Percentage of Non-conformance of Optimal Fluoride Level at Reticulation Points, Level > 0.6ppm (Std.≤ 7%), 2010 to 2018

Source: OHP MoH 2018

In spite of these achievements, fluoride levels still need vigilant monitoring to ensure maximum effectiveness.

District Specific Approach (DSA)

DSA indicators are developed by the states and districts pertaining to their specific issues. As in previous years, DSA indicators pertaining to monitoring and measuring performance of the ante-natal service are the most commonly adopted by all states.

Specific related indicators include rates of attendance, treatment and oral health education given to ante-natal mothers. Other DSA indicators commonly used relate to oral health services for toddler, pre-school, primary and secondary schoolchildren. The overall performance of DSA indicators related to primary care has improved based on the improved (higher) standard set by the districts and states.

Some states have DSA indicators that are not common in other states. Some of the unique indicators are related to:

- toddlers given fluoride varnish
- toddlers given fissure sealant
- private kindergarten preschool children treated
- loss of teeth due to caries in every 100 children
- incidence of sharps injury (all healthcare workers)
- failed fissure sealant
- new attendance of toddlers at MCH Clinic, *Klinik Desa* and Dental Clinic [Klinik Pergigian (KP)]
- full dentures issued within two months

All states have specific DSA indicators for each district. However, Perlis, Kedah, FT Kuala Lumpur, Selangor, Negeri Sembilan, Melaka, Pahang, Kelantan, Terengganu and Sarawak have the same indicators for the whole state (State Specific Approach).

MALAYSIAN STANDARD INTERNATIONAL ORGANIZATION FOR STANDARDIZATION (MS ISO) 9001: 2015

Certification Status

Nationwide, out of 681 dental clinics with primary oral healthcare, 543 dental clinics (79.7 per cent) are ISO-certified (**Table 96**).

Table 96: MS ISO 9001:2008 Certification Status by State, District and Facility, 2018

MULTI-SITE CERTIFICATION								
States	District			Dental Clinic			Certification Period	Registration Number
	No. with certification	Total	%	No. with certification	Total	%		
Perlis	2	2	100.0	8	8	100.0	20.07.18 – 19.07.21	QMS 03272
Kedah	11	11	100.0	60	60	100.0	14.09.18 - 13.09.2021	QMS 03288
P Pinang	0	5	0	0	28	0	-	-
Perak	10	10	100.0	57	73	78.1	10.10.16 - 9.10.19	QMS 01777
Selangor	9	9	100.0	62	64	96.9	6.12.18 – 5.12.21	QMS 03334
FT KL	5	5	100.0	20	20	100.0	21.02.18 – 20.01.20	QMS 01378
N. Sembilan	7	7	100.0	40	41	97.5	17.01.18 – 16.01.21	QMS 01521
Melaka	3	3	100.0	27	28	96.4	25.02.17 - 24.02.20	AR 3569
Johor	10	10	100	96	97	98.9	21.01.17 – 20.01.20	QMS 02321
Pahang	11	11	100.0	39	73	53.4	21.03.15 - 20.03.18	AR 3949
Kelantan	10	10	100.0	64	64	100.0	08.06.15 -11.04.18	QMS 01552
Terengganu	7	7	100.0	44	45	97.8	03.02.15- 02.02.18	MY-QMS 02436
Sabah	9	9	100.0	23	38	60.5	21.03.18 – 20.03.21	QMS 01543 & MY-QMS 01543
FT Labuan	1	1	100.0	2	2	100.0	13.06.18 – 12.06.20	MY-QMS 01440
Total Multi-site Certification	100	100	100.0	543	641	84.7	-	-
DISTRICT CERTIFICATION								
Sarawak	0	11	0	0	40	0	Refer Table 3	
Malaysia	100	111	90.1	543	681	79.7	-	-

Source: OHP MoH 2018

Sarawak (with 11 Divisions) is the only state that still has the original district certification approach (Table 97).

Table 97: MS ISO 9001:2008 District Certification Status for Sarawak, 2018

District/ Division	Location	Certification Period	Registration No.
Kuching	KP Jln Masjid KP Tanah Puteh KP Kota Sentosa KP Lundu KP Batu Kawa KP Petrajaya KP Bau KP UTC Sarawak KP Pakar Hospital Umum Sarawak	-	-
Sri Aman	KP Sri Aman	-	-
Samarahan	KP Samarahan KP Serian KP Simunjan	-	-
Miri	KP Pakar Hospital Miri KP Tudan KP Bandar Miri KP RTC Sibuti KP UTC Miri KP Marudi	-	-
Sibu	KP Pakar Hospital Sibu KP Lanang KP Kanowit KP Jalan Oya KP Selangau KP UTC Sibu KP Sibu Jaya	-	-
Sarikei	KP Sarikei KP Bintangor KP Pakar Hospital Sarikei	-	-
Bintulu	KP Bintulu	-	-
Limbang	KP Limbang KP Lawas	-	-
Mukah	KP Mukah KP Dalat	-	-
Kapit	KP Kapit KP Song KP Belaga	-	-
Betong	KP Betong KP Saratok KP RTC Mid Layar	-	-

Quality Management System

The OHP was unable to secure funds for the expansion of the electronic Quality Management System (eQMS). The number of states using the system remains at nine. States with the eQMS are Perlis, Kedah, Pulau Pinang, Perak, Selangor, Federal Territory Kuala Lumpur, Negeri Sembilan, Melaka and Johor. The OHP MoH and PPKK & ILKKMM also utilize the eQMS. The system is supported by a central server at the Health Informatics Centre, MoH.

Improvements have been made to the eQMS at the OHP in terms of function and user-friendliness. The following improvements have been made:

- Rectify and training on how to 'upload Manual Kualiti'
- Training on how to configure and add *Sejarah Pindaan*
- Review System Menu
- Update user manual
- Upload gallery

In 2018, the eQMS web page content was updated as follows:

- February - Audit Schedule and Objective Quality 2018
- February - update marquee on first internal audit
- August – update marquee on second internal audit

Technical Advisor for Certification Body

In 2018, the OHP arranged for senior dental officers to act as Technical Advisors to assist Certification Bodies to audit sites undergoing surveillance or recertification audits. Two states underwent recertification audits, six states surveillance audits, four states including OHP for stage 2 surveillance audits and the rest postpone audit to 2019 (**Table 98**).

Table 98: List of MS ISO Audit by Certification Body, 2018

Place of Audit	Date		Type of Audit	Certification Body
Recertification				
Terengganu	22 to 24 Jan 2019		Recertification	SIRIM
Sabah	7 to 9 March 2018		Recertification	SIRIM
Surveillance				
Kelantan	7 to 9 Oct 2018		Surveillance	SIRIM
FT Labuan	25 to 26 April 2018		Surveillance	SIRIM
Melaka	5 to 7 March 2018		Surveillance	SIRIM
Negeri Sembilan	7 to 9 Nov 2018		Surveillance	SIRIM
Perak	21 to 23 Feb 2018		Surveillance	SIRIM
FT KL & Putrajaya	24 to 26 Sept 2018		Surveillance	SIRIM
Surveillance Stage 2				
Kedah	9 to 11 July 2018		Surveillance 2	SIRIM
Perlis	28 to 29 June 2018		Surveillance 2	SIRIM
Selangor	18 to 21 Sept 2018		Surveillance 2	SIRIM
OHP, MoH	23 to 24 Jan 2018		Surveillance 2	CI Certification
Postpone Audit to 2019				
Pulau Pinang	-	-	-	-
Johor	-	-	-	-
Pahang	-	-	-	-
Sarawak	-	-	-	-

Source: OHP MoH 2018

OTHER QUALITY IMPROVEMENT ACTIVITIES

Innovation

Innovation is one of the quality initiative activities actively being carried out by oral health personnel throughout the country. Several dental projects received awards at state, regional and national levels.

- Suction Tube Soaker from *Jabatan Bedah Mulut & Maksilofasial, Hospital Taiping, Perak* has been awarded as winner in Innovation Awards, MoH 2018 for Process category.
- Stance Wheel innovation project of the *Bahagian Kesihatan Pergigian Perlis* has been the Technical Category Champion in the MoH National KKM Convention on 24 to 27 August 2015 and has represented the MoH to the National Public Service Innovation Council on 24 to 26 November 2015.

This project also has been selected for KPI Malaysia Commercialisation Year (MCY) 2016. The Stance Wheel project has been reviewed by the Majlis Rekabentuk Malaysia (MRM) which has the potential to be commercialized and capable of giving a big impact to the society, especially those who are wheelchair-bound. Taking into account the impact of service delivery on the community, the Stance Wheel was selected to receive grants under the MOSTI Social Innovation (MSI) program and to be conducted by the MRM. Launching ceremony of commercialization was held in 19 December 2018 between Medical Apparatus Supplies Sdn. Bhd. (MASSB), MRM and MoH.

Innovation Awards, MOH

Innovation Awards, MoH 2018 was held at Summit Hotel, USJ Subang Jaya from 23 October 2018. The objectives of the Convention were to:

- give recognition to innovations by MoH personnel
- inspire creativity and innovation in their daily work
- share the application of useful innovations
- improve services through adoption of innovations

The event was officiated by YBrs. Dr Nomah binti Taharim, the Principle Director of Oral Health Programme, Ministry of Health. The awards were classified into four categories - Product, Process, Service and Technology. A total of 42 teams (20 Product, eight (8) Process, eight (8) Service and seven (7) Technology) competed for the awards. Judges constituted a good mix of eminent personalities from the public and private sectors.

Winners received a certificate and cash prize of RM5,000.00, RM3,000.00 and RM2,000.00 for 1st, 2nd and 3rd places respectively (**Table 99**).

Table 99: Winners of National Innovation Awards, 2018

Position	Project	Organisation	State
Product			
1st	Smart Magic Pen	Unit Kawalan Penyakit TB/ Kusta	Selangor
2nd	EO2	Pejabat Kesihatan Daerah Kemaman	Terengganu
3rd	Carta Saringan Penglihatan Kanak-Kanak	Klinik Oftalmologi, Hospital Tuanku Jaafar, Seremban	Negeri Sembilan
Process			
1st	Suction Tube Soaker	Jabatan Bedah Mulut & Maksilofasial, Hospital Taiping	Perak
2nd	Multi –Tasking Easy Box 1.0 (M-TEB 1.0)	Hospital Sik	Kedah
3rd	Cakera Jaundis Bersepadu (CPFJU)	PKD Pontian	Johor
Service			
1st	Blind and Visually Impaired Registry (BVIR) and Support Group (BVISG)	Klinik Oftalmologi, Hospital Miri	Sarawak
2nd	Skuad Cakna Ubat	Unit Farmasi, PKD Kuala Nerus	Terengganu
3rd	Perusahaan Sosial Kiosk Mentari	Jabatan Psikiatrik & Kesihatan Mental Hospital Miri	Sarawak
Technology			
1st	Sistem Laporan Insiden	Hospital Sibu	Sarawak
2nd	Intelligent Tracking & Recording Exhibit System (I-TRES)	Cawangan Penguatkuasaan Farmasi, JKN Pulau Pinang	Pulau Pinang
3rd	Antimicrobial Stewardship Database (AMD)	Jabatan Farmasi, Hospital Seberang Jaya, Pulau Pinang	Pulau Pinang

Other than the three top places, the panel of judges also awarded 'Jury's Award' for outstanding innovation (**Table 100**).

Table 100: Recipients of Jury's Awards at National Innovation Awards, 2018

Project	Organisation/State
Product Category	
MAD SHUKV (Ways Reduction Tools)	Jabatan Ortopedik, Hospital Queen Elizabeth, Sabah
Process Category	
PIAST	KK Ayer Hitam, Kedah
Foot Assessment Smart Tool	Hospital Dungun, Terengganu
Service Category	
Physio Go Go Challenge	Unit Fisioterapi, Hospital Sultanah Aminah, Johor Bahru, Johor
Technology Category	
i-Meth	Unit Farmasi PKD Kuala Langat, Selangor

Among the competing innovation projects, five (5) were dental projects:

Product Category

- Stainless Steel Crown Holder (SCC Holder) - *Jabatan Pergigian Pediatrik, Hospital Kajang, Selangor*
- Magic Amalgam Trap in Portable Spittoon - *Pejabat Pergigian Daerah Machang, Kelantan*
- Innovation Recycle Needle Removal (RNR) - *Pejabat Pergigian Daerah Miri, Sarawak*

Service Category

- *Program Sihat, Cergas, Cerdas - Pejabat Pergigian Bahagian Miri, Sarawak*

Process Category

- Suction Tube Soaker - *Jabatan Bedah Mulut & Maksilofasial Hospital Taiping, Perak*

Technology Category

- New Smart D - *Pejabat Pergigian Daerah Johor Bahru, Johor*

Key Performance Indicators (KPI) 2018

Forty KPIs were monitored by the OHP in 2018. 26 KPIs are monitored three (3) monthly, nine (9) KPIs are monitored six (6) monthly and five (5) KPIs are monitored on a yearly basis. Overall, 27 KPIs have achieved targets, 12 KPIs are below target and one (1) KPI has no achievements.

The number of dental clinics with two (2) or more fulltime dental officers providing daily outpatient service contributed towards one KPI for the Health Minister (KPI 3, **Table 101**). Three (3) of the KPIs i.e. KPI 8, 16 and KPI 19 (**Table 101**) were also chosen as KPIs for the Director-General of Health monitored by the Public Services Department.

Table 101: Key Performance Indicators, Oral Health Programme, MoH 2018

KPI Domain	Monitoring Indicator	Target 2018	Achievement 2018
Accessibility to MoH oral healthcare services	1. Percentage of dental clinics with fulltime dental officer	80.0%	85.8%
	2. Percentage of dental clinics with fulltime dental officer providing daily outpatient service	74.0%	82.7%
	3. Percentage of dental clinics with 2 or more fulltime dental officers providing daily outpatient service	529 clinics	529 clinics
	4. Percentage of Health Clinics with dental facility component	75.0%	64.3%
	5. Number of dental facilities implementing shift system	16	20
	6. Percentage of antenatal patient coverage	41.0%	57.6%

KPI Domain	Monitoring Indicator	Target 2018	Achievement 2018
Comprehensive oral healthcare for schoolchildren	7. Percentage of primary schools treated under incremental dental care	99.5%	99.9%
	8. Percentage of primary schoolchildren treated	98.5%	99.3%
	9. Percentage of secondary schools treated under incremental dental care	93.0%	99.9%
	10. Percentage of secondary schoolchildren treated	90.0%	96.9%
Oral health status of schoolchildren	11. Percentage of primary schoolchildren rendered orally-fit (over new attendances)	98.0%	97.6%
	12. Percentage of primary schoolchildren rendered orally-fit (over enrolment)	96.5%	96.8%
	13. Percentage of secondary schoolchildren rendered orally-fit (over new attendances)	94.0%	93.7%
	14. Percentage of secondary schoolchildren rendered orally-fit (over enrolment)	85.0%	90.8%
	15. Percentage of secondary schoolchildren with maintaining orally-fit status	70.0%	67.8%
	16. Percentage of 12 years old schoolchildren free dental caries	68.0%	70.2%
	17. Percentage of schoolchildren identified smoking (through a KOTAK program) has undergone 3 interventions	51.0%	55.5%
Population receiving fluoridated water supply	18. Percentage of population receiving fluoridated water supply	75.0%	74.0%
Client Charter Compliance Index	19. Percentage of outpatients seen within 30 minutes by dental officer (DO)	≥ 86.0%	83.0%
	20. Percentage of appointments seen within 30 minutes by dental officer (DO)	≥ 92.0%	94.1%
Delivery of denture services	21. Percentage of dental clinics with waiting list for dentures exceeding 3 months	≤ 8.0%	2.9%
	22. Percentage of patients received dentures within 3 months	64.0%	85.2%
	23. Percentage of patients aged 60 years and above received dentures within 8 weeks	50.0%	67.3%
Customer satisfaction Index	24. Percentage of customers satisfied with services received	95.0%	97.1%
MS ISO certification of dental clinics	25. Percentage of dental clinics with MS ISO certification	85.0%	74.0%
Monitoring of Private Dental Clinics	26. Percentage of monitoring inspection conducted on identified private dental clinics	100.0%	95.9%
Training policy compliance index	27. Percentage of dental staff with 7 days training per year	100%	84.7%
Index of Innovation Culture	28. Innovation Culture Replication - all Dental Clinics replicating / practicing innovation (innovation refers to the replication of innovation and innovation developed	80.0%	86.5%

KPI Domain	Monitoring Indicator	Target 2018	Achievement 2018
	within 2 (two) years.		
Complaints Index	29. Percentage of complaints in the simple & moderate category received via System Public Complaints Management (SisPAA) completed within the prescribed period	80.0%	97.9%
Efficiency and Effectiveness of Service Delivery	30. Percentage of primary schoolchildren who need to be treated with fissure sealant are treated with fissure sealant	96.0%	96.0%
	31. Percentage of 60 years old with 20 teeth or more	40.5%	32.3%
	32. Percentage of ikon gigi (iGG) with activity at least 2 times a month	61.0%	14.6%
	33. Expansion of expertise services during the year	4	13
	34. Percentage of MoH dental facilities that achieve at least 80% compliance during Safety and Health audits	95.0%	98.6%
	35. Percentage of Health Clinic (KK) with visiting dental services approved to be upgraded to have dental clinic component	100%	NO DATA
	36. The percentage of equipment under the acquisition of MEET (PBE) is enrolled in the Sistem Pengurusan Aset (SPA)	100%	100%
	37. The percentage of budget on Latihan Dalam Perkhidmatan (LDP) in the Country organized by the Oral Health Programme, Ministry of Health Malaysia was completed in the first week of December of the current year	100%	99.9%
	38. Percentage feedback about dental technology are answered within 30 working days from the date of receipt of the inquiry	90%	100%
	39. Percentage of research questionnaire application form is processed and sent to National Institute of Health (NIH) within 7 working days	90%	100%
	40. The Dental Health Program Website (CPP) is updated monthly	100%	100%

Source: OHP MoH 2018

Client Satisfaction Survey

Client Satisfaction Surveys were carried out by dental clinics using a self-administered questionnaire from the OHP MoH that measures patients' satisfaction. For 2018, more than 90 per cent of patients expressed satisfaction except for the states of FT of Kuala Lumpur & Putrajaya, Selangor and Perak. The highest score was in Perlis and Melaka (99.2 per cent). Overall, an average of 93.6 per cent of patients involved expressed satisfaction with MoH dental clinics.

Clients' Charter

There are two (2) main areas for the OHP Clients' Charter.

1. Core Clients' Charter of the MoH, forms part of the KPI indicators of the Secretary General of Health and is uploaded onto the MoH web site (**Table 102**).

Table 102: Clients' Charter of the Ministry of Health

Core Clients' Charter	Indicator	Target	Achievement
<i>Taraf Perkhidmatan</i>	<i>Pesakit luar dipanggil untuk rawatan oleh pegawai pergigian dalam tempoh 30 minit</i>	70%	86.5%
<i>Maklumat Perkhidmatan</i>	<i>Pesakit berpuas hati dengan perkhidmatan pergigian yang diberikan</i>	90%	93.6%
	<i>Pendaftaran Klinik Pergigian Swasta ditentusahkan dalam tempoh 7 hari (dari tarikh fail permohonan diterima oleh Unit Kawalan Amalan Perubatan Swasta (UKAPS))</i>	90%	96.5%

Source: OHP MoH 2018

2. Clients' Charter for the OHP MoH (**Table 103**).

Table 103: Clients' Charter of Oral Health Programme

No.	Clients' Charter Indicator	Target	Achievement
1	<i>Semua pelanggan dilayan oleh petugas kaunter dengan mesra</i>	100%	100%
2	<i>Semua pelanggan dilayan oleh petugas kaunter dengan cekap</i>	100%	100%
3	<i>Semua pelanggan diberi maklumat mengenai perkhidmatan yang disediakan</i>	100%	100%
4	<i>Semua pelanggan yang ada temujanji akan dapat berjumpa dengan pegawai berkenaan dalam 15 minit</i>	100%	100%
5	<i>Semua permohonan Klinik Pergigian Swasta ditentusahkan dalam tempoh 7 hari (dari tarikh fail permohonan diterima oleh Unit Kawalan Amalan Perubatan Swasta (UKAPS))</i>	90%	96.5%

Source: OHP MoH 2018

Quarterly, six-monthly and yearly reports are submitted to the Clients' Charter Secretariat, Pharmaceutical Services Division MoH.

Star Rating System (SRS)

The Star Rating System (SRS) introduced in 2008 to assess the performance of Ministries, has been expanded to other public sector agencies, frontline agencies and state governments. The objectives are:

- to evaluate and measure the performance of government agencies
- to give formal recognition to outstanding agencies
- to give wide publicity to the policies, strategies and practices implemented
- to promote healthy competition among public sector agencies.

In 2016, the SRS assessment was not carried out as Malaysian Administrative Modernisation and Management Planning Unit (MAMPU) under the Prime Minister Department was in the midst of developing new assessment criteria for SRS Do-It-Yourself (DIY).

Amalan Ekosistem Kondusif Sektor Awam (EKSA)

MAMPU has taken initiatives to improve the implementation of *Amalan 5S* which has been rebranded as EKSA. The move is in line with efforts to strengthen the organizational culture of high performance and innovation among public sector agencies through the provision of environmental, positive workplace culture and values. At OHP MoH, the implementation of *Amalan* EKSA continued to be strengthened and improved. New staffs reporting to the Programme were briefed on the implementation of EKSA and attended training organized by the *Jawatankuasa Latihan EKSA* MoH.

To ensure the assessment criteria was adhered to, audits were carried out at regular interval by EKSA internal auditors and also by MoH EKSA Auditors. Audit findings were shared to all staff and actions taken for continual improvement. In 2018, the *EKSA Audit Ibu Pejabat Kementerian Kesihatan Malaysia (IPKKM)* was carried out by Ministry on 14 August 2018 with achievement of OHP (*Zon Pergigian*) at 95.6 per cent compared to 92.9 per cent in 2017.

TRAINING

To continuously update the knowledge and skills of oral health personnel and for new personnel as well, states conducted courses on ISO awareness and internal audit.

MS ISO

Training in MS ISO is done to continually update the knowledge and skills of personnel and also to train new personnel. The majority of states conducted courses on ISO awareness and training in internal audits. Many of the training sessions were 'in-house' due to limited funds for ISO training. In 2018, most states focused on training related to the preparation of the conversion to ISO 9001:2015 version.

Quality Assurance (QA)

Oral health personnel are actively involved in QA projects/studies. In 2018, a total of 38 courses/workshops related to Quality Assurance were conducted by IHSR where 666 oral health personnel were involved. The courses / workshops were on concept and principles of QA and QA study. A few of these studies were presented at various conventions at state and regional levels.

Corporate Culture

Activities and courses related to Corporate Culture were carried out in all states either by the OHP or in collaboration with the Health Departments or hospitals. In 2018, a total of 217 courses related to Corporate Culture were conducted involving 5,544 oral personnel at state level.

CHALLENGES AND FUTURE DIRECTIONS

The SOP in conducting periodontal health screening was developed this year and screening will be conducted at primary oral healthcare clinics next year. However, noting that the public knowledge on periodontal health is limited, it will affect the implementation process in terms of their readiness to be screened. Thus, the need to spread more information on periodontal health and be made more available using commonly used media. Continuous efforts towards strengthening the capacity and capability of personnel to deliver periodontal health messages are much needed.

In 2018, a revised guideline on Primary Prevention and Early Detection of Oral Potentially Malignant Disorders and Oral Cancers was developed with two new SOPs on Management of Patients with high risk habits and with oral lesions to strengthen the Oral Cancer Programme. Over the years, issues such as low compliance of referred patients to seek specialist care and need for intervention for patients with risk factors were highlighted. Through the implementation of these guidelines and SOPs, efforts are being taken to strengthen the referral mechanism for patients with risk factors and patients with oral potentially malignant disorders.

With the move towards Electronic Medical Record (EMR) system, focus is needed in developing subject matter experts in health IT and more allocation is needed to enhance the readiness of dental facilities in the use of OHCIS and TPC-OHCIS. Currently dental clinics in the state of Selangor, Johor, Negeri Sembilan and FT Kuala Lumpur & Putrajaya are using this system. EMR will be an effective data collection tool and data are more readily available.

Innovation and creativity are gaining momentum in today's health care organisations and the MoH is no exception to this. Every year we see more projects being developed and presented at competitions at various levels in the MoH such as state and national levels. The support and leadership from the managers and heads of department is also increasing and this augurs well for the innovators. There is an Innovation Unit under *Bahagian Khidmat Pengurusan* which coordinates innovation activities and acts as secretariat for innovation. Thus, it would be desirable if there is a clear policy on innovation coupled with the upgrading of the Innovation Unit to Division status. An Innovation Division would be able to plan, manage, monitor and evaluate all matters pertaining to creativity and innovation for the MoH in a more effective way.

EVENTS 2018

Date	Events
9-10 Jan 2018	<i>Bengkel Kaji Semula Garis Panduan Program Kesihatan Pergigian Untuk Guru Pelatih</i>
12 Jan 2018	<i>Jemputan Menghadiri Bengkel Pengisian Templat Dan Pengumpulan Data Untuk Modified Workload Indicator of Staffing Needs (m-WISN)</i>
15-22 Jan 2018	<i>Temuduga Permohonan Cuti Belajar Bergaji Penuh Dengan/Tanpa Hadiah Latihan Persekutuan (CBBP Dengan/ Tanpa HLP) Sesi 2018/2019 Bagi Program Pergigian</i>
16 Jan 2018	<i>Mesyuarat Jawatankuasa Teknikal dan Pelaksanaan Projek Peluasan Oral Health Clinical Information System (OHCIS) Bil. 1/2018 (6)</i>
17 Jan 2018	<i>Mesyuarat Pegawai Penyelaras Negeri Program Ikon Gigi (iGG) 2018</i>
18 Jan 2018	<i>Mesyuarat Kajian Semula CPG: Management of Condylar Fracture of the Mandible Bil. 1/2018</i>
23 Jan 2018	<i>Perbincangan Data Micro-Costing Bagi Aplikasi Teleprimary Care- Oral Health Information Clinical System (TPC-OHCIS)</i>
23 Jan 2018	<i>Mesyuarat Jawatankuasa Pro-Tem Lembaga Juruterapi Pergigian Malaysia Bil. 1/2018</i>
23-24 Jan 2018	<i>Audit Survelan Ke -2</i>
24 Jan 2018	<i>Mesyuarat Jawatankuasa Peringkat BKP, KKM Bagi Program ACOHPS KE-19 (2019)</i>
25 Jan 2018	<i>Mesyuarat Pegawai Penyelaras Negeri Program Pencegahan Dan Intervensi Merokok Dalam Kalangan Murid Sekolah Menerusi Perkhidmatan Sekolah (KOTAK) 2018</i>
25 Jan 2018	<i>Mesyuarat JKPAK dan Mesyuarat Kewangan Bil 1/2018</i>
25 Jan 2018	<i>Jemputan ke sesi Perbincangan Procedure List Dan Mapping Fixed Format Report (FFR) Bagi Projek Pembangunan Malaysia Health Data Warehouse (MyHDW)</i>
29 Jan 2018	<i>Mesyuarat Khas JKTAP Pertimbangan Kemasukan Pelajar Pelajar Tajaan Jabatan Perkhidmatan Awam (JPA) dan MARA Di India Ke Tahun 2 Bagi Program Ijazah Pergigian Di Institut Pengajian Tinggi Tempatan</i>
29 Jan 2018	<i>Mesyuarat Kajian Semula CPG: Management of Avulsed Permanent Anterior Teeth in Children (2nd Edition) Bil. 1/2018</i>
29 Jan 2018	<i>Mesyuarat Pemantauan Perkhidmatan Sokongan Operasi dan Penyelenggaraan Sistem OHCIS Perbincangan Pelan Retirement Oral Health Clinical Information System & eKL (Pergigian)</i>
29 Jan 2018	<i>Mesyuarat Khas JKTAP Pertimbangan Kemasukan Pelajar-Pelajar Tajaan Jabatan Perkhidmatan Awam (JPA) dan MARA Di India Ke Tahun 2 Bagi Program Ijazah Pergigian Di Institut Pengajian Tinggi Tempatan</i>
29 Jan- 1 Feb 2018	<i>Mesyuarat Penghasilan Bahan Promosi Berkaitan Kesihatan Pergigian Bil 1/2018</i>
30 Jan 2018	<i>Mesyuarat Teknikal Program Kesihatan Pergigian, KKM Bil. 1/2018</i>
5 Feb 2018	<i>Mesyuarat Desktop Assessment Permohonan Meningkatkan Kuota Pengambilan Pelajar Dari 50 Ke 65 Pelajar Setahun Program BDS Universiti SEGi</i>
5-6 Feb 2018	<i>Mesyuarat Jawatankuasa Dasar Dan Perancangan Kesihatan Pergigian (JDPKP), KKM Bil 1 Tahun 2018</i>

5-6 Feb 2018	<i>Perbincangan Mewujudkan Garis Panduan Ikon Gigi (iGG) Bil. 1/2018</i>
6 Feb 2018	<i>Mesyuarat CPG: Management of Unerupted & Impacted Third Molar Teeth (2nd Edition) Bil 1/2018</i>
7 Feb 2018	<i>Mesyuarat Jawatankuasa Pemandu Projek Peluasan OHCIS Bil. 1/2018</i>
8 Feb 2018	<i>Mesyuarat Desktop Assessment Program BDS IMU</i>
8 Feb 2018	<i>Perbincangan Mewujudkan Garis Panduan Health Promoting Clinic (HPC) Di Klinik Pergigian</i>
14 Feb 2018	<i>Jemputan Mesyuarat Jawatankuasa Penyediaan Laman Sesawang Program Ikon Gigi</i>
19 Feb 2018	<i>Mesyuarat Penyelarasan Program Kembara Kebajikan 1 Malaysia</i>
19-20 Feb 2018	<i>Perbincangan Jawatankuasa Kerja Guidelines A School-Based Fissure Sealant Programme</i>
20 Feb 2018	<i>Perbincangan Perancangan Latihan Kepakaran Secara Alternative Pathway Dan Hibrid</i>
21 Feb 2018	<i>Perbincangan Jawatankuasa Kerja Standard Operating Procedure (SOP) Management of Periodontal Conditions in Primary Care Settings</i>
21 Feb 2018	<i>Mesyuarat Jawatankuasa Peringkat Program Kesihatan Pergigian, KKM Bagi Penganjuran Asian Conference of Oral Health Promotion for School Children (ACOHPS) Ke-10 Bil 2/2018</i>
22 Feb 2018	<i>Jemputan Ke Ceramah Program KOSPEN PLUS bertajuk Amalan Pemakanan Sihat</i>
23 Feb 2018	<i>Perbincangan Isu-Isu Berkaitan Pelaksanaan Diploma Pembantu Pembedahan Pergigian</i>
23 Feb 2018	<i>Mesyuarat Jawatankuasa Penyelaras KOSPEN PLUS Program Kesihatan Pergigian KKM Bil 1/2018</i>
26 Feb 2018	<i>Mesyuarat Melaksanakan Buku Kompilasi Lagu dan Album Dental Buskers Malaysia Bil 1/2018</i>
26 Feb 2018	<i>Perbincangan Jawatankuasa Kerja Manual School Based Fluoride Mouth Rinsing Programme</i>
26 Feb 2018	<i>Mesyuarat Program Kesihatan Pergigian KKM Bil 2/2018</i>
26 Feb 2018	<i>Perbincangan Mengenai Isu Dan Rang Undang-Undang Pergigian 2017</i>
28 Feb 2018	<i>Sesi Semakan Medical Brief of Requirement (MBOR) Bagi Pusat Pakar Pergigian WPKL (Cahaya Suria)</i>
1 March 2018	<i>Sesi Pertemuan Berikutan Projek Rintis Saringan Kanser Mulut Menggunakan Aplikasi Memosa</i>
1 March 2018	<i>Mesyuarat Membincangkan Isu Penyeragaman Perolehan Ubat (27401) oleh Program Perkhidmatan Farmasi</i>
6 March 2018	<i>Mesyuarat JKTAP Bil.2/2018</i>
6 March 2018	<i>Lawatan Pelajar Tahun 3 Program Bachelor of Dental Surgery (BDS) Universiti SEGi membuat Lawatan Ke Cawangan Promosi Kesihatan Pergigian</i>
7 March 2018	<i>Perbincangan Sistem Pengesanan Duplikasi Permintaan Dentur (False Demand of Denture Waiting List)</i>
8 March 2018	<i>Perbincangan Halatuju Klinik Endodontik Pergigian Primer (KEPP) dan Penggabungan dengan Konsep Restorative Dentistry Index of Treatment Need (RDITN)</i>
13 March 2018	<i>Lawatan Pelajar Tahun 3 Program Bachelor of Dental Surgery (BDS) Universiti SEGi membuat Lawatan Ke Cawangan Promosi Kesihatan Pergigian</i>

14-15 March 2018	<i>Mesyuarat Penghasilan Bahan Promosi Berkaitan Kesihatan Pergigian Bil. 2/2018</i>
15 March 2018	<i>Perbincangan Garispanduan Oral HealthCare for Young Adults</i>
15 March 2018	<i>Mesyuarat Pemurnian Garis Panduan Akreditasi Program Ijazah Sarjana Muda Pergigian</i>
19 March 2018	<i>Mesyuarat Penyediaan Standard Program Bagi Ijazah Lanjutan Kepakaran Dalam Bidang Dental Public Health Bil 1/2018</i>
21 March 2018	<i>Mesyuarat & Perbincangan Kaji Semula Petunjuk Prestasi Utama (KPI) Program Kesihatan Pergigian, Kementerian Kesihatan Malaysia</i>
22 March 2018	<i>Mesyuarat Jawatankuasa Pain As 5th Sign (P5VS) & Program Bebas Kesakitan Peringkat Program Kesihatan Pergigian, KKM</i>
22 March 2018	<i>Mesyuarat Kajian Semula Clinical Practice Guidelines (CPG): Management of Condylar Fracture of The Mandible Bil. 2/2018</i>
23 March 2018	<i>Taklimat Saringan NCD (KOSPEN PLUS) di Program Kesihatan Pergigian KKM</i>
28 March 2018	<i>CDE: Tips Pengurusan Berat Badan (KOSPEN PLUS)</i>
30 March 2018	<i>Mesyuarat Program Kesihatan Pergigian, KKM Bil 3/2018</i>
2 Apr 2018	<i>Mesyuarat Penyelarasan Data Program Kesihatan Pergigian bagi Program KOTAK</i>
4-6 Apr 2018	<i>Kajiselidik National Health and Morbidity Survey 2020: National Oral Health Survey of Adults 2020 (NHMS 2020: NOHSA 2020) - Sesi Perbincangan Dummy Table & Syntax Development</i>
5 Apr 2018	<i>Mesyuarat Teknikal Program Kesihatan Pergigian KKM</i>
6 Apr 2018	<i>Mesyuarat Pemurnian Garis Panduan Akreditasi Program Ijazah Sarjana Muda Pergigian Bil 2/2018</i>
6 Apr 2018	<i>Perbincangan Bagi Persediaan Mesyuarat Kepakaran Ortodontik KKM 2018</i>
6 Apr 2018	<i>Mesyuarat Pemurnian Garis Panduan Akreditasi Program Ijazah Sarjana Muda Pergigian Bil 2/2018</i>
9 Apr 2018	<i>Mesyuarat Penyediaan Standard Program Bagi Ijazah Lanjutan Kepakaran Dalam Bidang Dental Public Health Bil 2 Tahun 2018</i>
10 Apr 2018	<i>Mesyuarat Kajian Semula CPG: Management of Unerupted & Impacted Third Molar Teeth (2nd Edition) Bil. 2/2018</i>
11 Apr 2018	<i>Mesyuarat Jawatankuasa Peringkat Program kesihatan Pergigian, KKM Bagi Program Asian Conference of Oral Health Promotion for School Children (ACOHPS) Ke-10 (2019) Bil 3/2018</i>
11 Apr 2018	<i>Mesyuarat Kajian Semula Clinical Practice Guidelines (CPG): Management of Avulsed Permanent Anterior Teeth in Children (2nd Edition) Bil 2/2018</i>
12 Apr 2018	<i>Mesyuarat Penyelarasan Konvensyen Ikon Gigi (iGG) Bil. 1/2018</i>
16 Apr 2018	<i>Mesyuarat Bagi Membincangkan Draf Domiciliary Guidelines</i>
16 Apr 2018	<i>Mesyuarat Jawatankuasa Anugerah Inovasi Peringkat Kebangsaan KKM Bil 1/2018</i>
16 Apr 2018	<i>Perbincangan Pelan Pelaksanaan Pemasangan Sistem Teleprimary Care - Oral Health Clinical Information System (TPC-OHCIS) di Tiga Buah Klinik Di Seremban</i>

17 Apr 2018	<i>Kursus Training of Trainers for Primary Prevention and Early Detection of Oral Potentially Malignant Disorders and Oral Cancers Programme</i>
18 Apr 2018	<i>Perbincangan Jawatankuasa Kerja Guidelines on Oral Healthcare for Preschool Children</i>
20 Apr 2018	<i>Mesyuarat Jawatankuasa Penilaian Pewartaan Pakar Pergigian (JPPPP) Program Kesihatan Pergigian KKM Bil 1 Tahun 2018</i>
23 Apr 2018	<i>Mesyuarat Jawatankuasa Kerja Teknikal Bagi Early Caries Detection Using Modified MOH ICDAS (MMI) 2018</i>
24 Apr 2018	<i>Jemputan Ke Perbincangan Jawatankuasa Kerja Anugerah Inovasi Peringkat Kebangsaan KKM Bil 1/2018</i>
24 Apr 2018	<i>Perbincangan Perancangan Latihan Kepakaran Secara Alternative Pathway & Hibrid</i>
26 Apr 2018	<i>Mesyuarat Kajian Semula Clinical Practice Guidelines (CPG): Management of Condylar Fracture of The Mandible Bil 3/2018</i>
26 Apr 2018	<i>Perbincangan Jadual Implimentasi Akta Pergigian 2017</i>
26 Apr 2018	<i>Mesyuarat Jawatankuasa Pengurusan Aset Kerajaan (JKPAK) Program Kesihatan Pergigian KKM Bil 2/2018</i>
26 Apr 2018	<i>Mesyuarat Pengurusan Kewangan dan Akaun Program Kesihatan Pergigian KKM Bil. 2/2018</i>
2 May 2018	<i>Mesyuarat Pemurnian Garis Panduan Akreditasi Program Ijazah Sarjana Muda Pergigian Bil 3/2018</i>
7 May 2018	<i>Mesyuarat Penyediaan Standard Program Bagi Ijazah Lanjutan Kepakaran Dalam Bidang Dental Public Health Bil 3 Tahun 2018</i>
8 May 2018	<i>Mesyuarat Jawatankuasa Teknikal Akreditasi Pergigian (JKTAP) Bil 3/2018</i>
14 May 2018	<i>Mesyuarat Cadangan Kajian Semula Spesifikasi Bilik X-Ray Intra Oral Di Fasiliti-Fasiliti Pergigian Mengikut Akta Perlesenan Tenaga Atom 1984 (Akta 304)</i>
14-16 May 2018	<i>Sesi Perbincangan Dummy Table & Syntax Development for Data Analysis Kajiselidik National Health and Morbidity Survey 2020: National Oral Health Survey of Adults 2020 (NHMS 2020: NOHSA 2020)</i>
15 May 2018	<i>Sesi Perbincangan Kriteria Community Periodontal Index Gold Standard Examier/Benchmark Examiner Kajiselidik National Health and Morbidity Survey 2020: National Oral Health Survey of Adults 2020 (NHMS 2020: NOHSA 2020)</i>
16 May 2018	<i>Mesyuarat Program Kesihatan Pergigian KKM Bil 4/2018</i>
25 June 2018	<i>Mesyuarat Jawatankuasa Penyelaras Negeri Program Pemfluoridaan Bekalan Air Awam Program Kesihatan Pergigian KKM Bil 1/2018</i>
26 June 2018	<i>Taklimat Penggunaan Borang Reten Easy Report Information Format (EZ-RIF) Untuk Pelaporan Early Caries Detection Using Modified MOH ICDAS (MMI)</i>
28 June 2018	<i>Mesyuarat Technical Working Group (TWG) Bagi Pain As 5th Vital Sign (P5VS) & Program Bebas Kesakitan Peringkat Program Kesihatan Pergigian, KKM</i>
28 June 2018	<i>Perbincangan Deraf Perintah Fi (Perubatan) Pesakit Bayar Penuh 2007 Program Kesihatan Pergigian</i>
29 June 2018	<i>Mesyuarat Program Kesihatan Pergigian KKM Bil. 5/2018</i>

29 June 2018	<i>Kunjungan Hormat Presiden Dan Ahli Exco MPDPA</i>
2-4 July 2018	<i>Bengkel Intelligence Gathering Untuk Pegawai Pergigian (Penguatkuasa)</i>
3 July 2018	<i>Mesyuarat Jawatankuasa Penilaian Pewartaan Pakar Pergigian (JPPPP) Program Kesihatan Pergigian KKM, Bil. 2 Tahun 2018</i>
3 July 2018	<i>Pemurnian Deraf Garis Panduan Unit Pakar Pergigian Kesihatan Awam (UPPKA)</i>
4 July 2018	<i>Mesyuarat Pemurnian Garis Panduan Akreditasi Program Ijazah Sarjana Muda Pergigian Bil. 4/2018</i>
4 July 2018	<i>Bengkel Verifikasi Data Untuk Modified Workload Indicator of Staffing Needs (m-WISN)</i>
4-5 July 2018	<i>Mesyuarat Kaji Semula CPG: Management of Unerupted & Impacted Third Molar Teeth (2nd Edition) Bil. 4/2018</i>
4-5 July 2018	<i>Mesyuarat Pegawai-Pegawai Penguatkuasaan Pergigian Bil 1 Tahun 2018</i>
5 July 2018	<i>Mesyuarat Kepakaran Patologi Mulut Dan Perubatan Mulut KKM Tahun 2018</i>
5 July 2018	<i>Mesyuarat Kaji Semula CPG: Management of Condylar Fracture of The Mandible Bil. 5/2018</i>
6 July 2018	<i>Mesyuarat Bagi Membincangkan Kaji Semula Program Dental Officer with Special Interest in Orthodontics (DOSIO)</i>
6 July 2018	<i>Mesyuarat Jawatankuasa Minggu Promosi Kesihatan Pergigian Kebangsaan Tahun 2018 (Minggu PKPK)</i>
6 July 2018	<i>Mesyuarat Sekretariat Asian Conference of Oral Health Promotion for School Children (ACOHPS) Ke-10 (2019)</i>
9 July 2018	<i>Mesyuarat Penutup Perkhidmatan O&M Bagi Aplikasi (OHCIS) & eKL (Pergigian) KKM</i>
9-11 July 2018	<i>Bengkel Penulisan Untuk Penerbitan Hasil Penemuan Kaji selidik National Health and Morbidity Survey 2017: National Oral Health Survey of Schoolchildren (NHMS2017: NOHSS 2017)</i>
10 July 2018	<i>Mesyuarat Penyelarasan Perasmian Program Kesihatan Oral Dan Agama (KOA) Kristian Peringkat Kebangsaan</i>
12 July 2018	<i>Mesyuarat Jawatankuasa Teknikal Akreditasi Pergigian (JKTAP) Bil. 4/2018</i>
13 July 2018	<i>Mesyuarat Jawatankuasa Peringkat Program Kesihatan Pergigian (ACOHPS) ke 10 (2019) Bil 4/2018)</i>
17 July 2018	<i>Perbincangan di antara Mr. Minako Sakurai (AOTS) bersama Pengarah Kanan (Kesihatan Pergigian)</i>
18 July 2018	<i>Perbincangan Jawatankuasa Kerja Guidelines on Oral Healthcare for Preschool Children</i>
19 July 2018	<i>Mesyuarat JKPAK Bil. 3/2018</i>
20 July 2018	<i>Perjumpaan MDA-SCODOS Bersama Pengarah Kanan (Kesihatan Pergigian) Tahun 2018</i>
20 July 2018	<i>Perbincangan Cadangan Pemanjangan Pelaksanaan Waktu Kerja Fleksi Bagi Pakar Perubatan Gred UD54 Dan Ke Atas di KKM Kepada Pakar Pergigian</i>
23 July 2018	<i>Mesyuarat National Technical Advisory Committee Kaji selidik National Health and Morbidity Survey: National Oral Health Survey of Adults 2020 (NHMS: 2020) Bil. 1/2018</i>
23 July 2018	<i>Mesyuarat Penyelarasan Perasmian Program Kesihatan Oral Dan Agama (KOA) Kristian Peringkat Kebangsaan</i>

23 July 2018	<i>Perbincangan Serah Urus Perkhidmatan Dentur Di Makmal Kepada Makmal Pergigian Swasta</i>
24 July 2018	<i>Mesyuarat Jawatankuasa Penggunaan Fasiliti KKM Untuk Tujuan Latihan Pelajar IPT Bil. 2/2018</i>
24 July 2018	<i>Perbincangan Technical Working Group (TWG) (Siri Kedua) Bagi Pain As 5th Vital Sign (P5VS) & Program Bebas Kesakitan Peringkat Program Kesihatan Pergigian, KKM</i>
25 July 2018	<i>Mesyuarat Technical Working Group (TWG) Bagi Penyediaan Deskripsi Tugas (Job Description) Bagi Semua Jawatan Untuk Skim-Skim Perkhidmatan Di Pusat Tanggungjawab (PTJ) Rintis Peringkat Program Kesihatan Pergigian, KKM</i>
25 July 2018	<i>Mesyuarat Kepakaran Pergigian Keperluan Khas KKM Tahun 2018</i>
26 July 2018	<i>Mesyuarat Bagi Membincangkan Deraf Domiciliary Guidelines Dan Conscious Sedation for Dental Facilities</i>
31 July 2018	<i>Perbincangan Jawatankuasa Kerja Kaji Semula Kad Rawatan Pesakit Am/ Sekolah L.P.8-1 PIN.7/97 dan L.P.8-2 PIN.7/97</i>
1-2 Aug 2018	<i>Mesyuarat Kajian Semula Clinical Practice Guidelines (CPG): Management of Unerrupted & Impacted Third Molar Teeth (2nd Edition) Bil 5/2018</i>
1 Aug – 31 Oct 2018	<i>Jelajah Akta Pergigian 2018 [Akta 804]</i>
2 Aug 2018	<i>Mesyuarat Teknikal Program Kesihatan Pergigian KKM Bil. 4/2018</i>
6 Aug 2018	<i>Perbincangan Memuktamadkan Key Performance Indicator (KPI) Dan Patient Safety Indicator (PSI) Bagi Kepakaran Bedah Mulut & Maksilofasial KKM</i>
6 Aug 2018	<i>Perbincangan Pelaksanaan Konsep Kluster Bagi Perkhidmatan Bedah Mulut & Maksilofasial KKM</i>
7 Aug 2018	<i>Mesyuarat Mapping Pakar Pergigian KKM</i>
7 Aug 2018	<i>Perbincangan Ahli Jawatankuasa Kerja AIKKM 2018 Bil. 2/2018</i>
7-9 Aug 2018	<i>Kursus Systematic Review in The Development & Implementation of Dental CPG Bagi Pakar & Pegawai Pergigian 2018</i>
8 Aug 2018	<i>Pemurnian Medical Brief of Requirement (MBOR) Bagi Pusat Pakar Pergigian WPKL (Cahaya Suria)</i>
9 Aug 2018	<i>Perbincangan Jawatankuasa Kerja Latihan Memberus Gigi (LMG) Tanpa Kumuran</i>
10 Aug 2018	<i>Mesyuarat Juruaudit Semakan Pencapaian KPI Pengarah Kesihatan Negeri (PKN) Tahun 2018 Bagi Program Kesihatan Pergigian, KKM</i>
10 Aug 2018	<i>Mesyuarat Kaji Semula CPG: Management of Condylar Fracture of The Mandible Bil. 6/2018</i>
10 Aug 2018	<i>Perbincangan Pelaksanaan Latihan Kepakaran Melalui Sistem Hibrid Bagi Bidang Ortodontik</i>
13 Aug 2018	<i>Perbincangan Jawatankuasa Kerja Guidelines on Oral Healthcare for Preschool Children</i>
14 Aug 2018	<i>Mesyuarat Pembukaan Dan Penutup Audit EKSA IPKKM 2018</i>
14 Aug 2018	<i>Mesyuarat CPG APAT</i>
15 Aug 2018	<i>Mesyuarat Jawatankuasa Minggu Promosi Kesihatan Pergigian Kebangsaan Tahun 2018 Bil. 2/2018</i>
17 Aug 2018	<i>Perbincangan Majlis Pelancaran Produk 'Stance Wheel' Pembedahan Pergigian Bersama Pengarah Kanan (Kesihatan Pergigian) KKM</i>

20 Aug 2018	Seminar 'Code of Practice for Programme Accreditation - Undergraduate Dental Degree (Version 2) 2018'
28 Aug 2018	<i>Mesyuarat Pelaksanaan Health System Research (HSR) Di Negeri /Institusi</i>
29 Aug 2018	<i>Taklimat Kepada Calon Kursus Pengkhususan Pergigian Ortodontik Juruterapi Pergigian Pengambilan September 2018</i>
29 Aug 2018	<i>Sesi Perbincangan Kerjasama International Medical University (IMU) Dengan Program Kesihatan Pergigian Bagi Perolehan Aset Pergigian</i>
3 Sept 2018	<i>Mesyuarat Jawatankuasa Majlis Pelancaran Inovasi Produk 'Stance Wheel' Peringkat Kementerian Kesihatan Malaysia</i>
4 Sept 2018	<i>Jemputan Mesyuarat Jawatankuasa Inisiatif Kanser Mulut Kebangsaan Bil. 1/2018</i>
4 Sept 2018	<i>Perbincangan Medical Brief of Requirement (MBOR) Bagi Pusat Pakar Pergigian WPKL (Cahaya Suria) - Perbincangan Pelan Lantai Sesi 1</i>
4 Sept 2018	<i>Sesi Perbincangan Persiapan Bagi Training Programme on Oral Healthcare Related Activities in Japan</i>
5 Sept 2018	<i>Perbincangan Justifikasi Penetapan Struktur Pusat Pergigian Kanak-Kanak & Institut Latihan KKM (ILKKM) Georgetown (Pergigian)</i>
5-7 Sept 2018	<i>Program Saringan Bagi Anugerah Inovasi KKM 2018 (Kategori Produk)</i>
6 Sept 2018	<i>Mesyuarat Program Kesihatan Pergigian KKM Bil 6/2018</i>
7 Sept 2018	<i>Sesi Perbincangan Bersama Pihak Malaysian Society of Periodontology dan Southern Lion</i>
13 Sept 2018	<i>Sesi Perbincangan Bersama Pihak Malaysian Society of Periodontology dan Syarikat Sun Star Southern Lion</i>
14 Sept 2018	<i>Mesyuarat Jawatankuasa Majlis Pelancaran Inovasi Produk 'Stance Wheel' Peringkat Kementerian Kesihatan Malaysia</i>
18 Sept 2018	<i>Sesi Perbincangan Persiapan Bagi Training Programme on Oral Healthcare Related Activities in Japan</i>
18 Sept 2018	<i>Bengkel Pengurusan Perubahan Konsep dan Business Re-Engineering Aplikasi TPC-OHCIS</i>
18-19 Sept 2018	<i>Jemputan Bagi Pembentangan Projek Anugerah Inovasi Kementerian Kesihatan Malaysia 2018 Bagi (Kategori Inovasi Proses)</i>
20 Sept 2018	<i>Bengkel Pengurusan Perubahan untuk Teleprimary Care-Oral Health Clinical Information System (TPC-OHCIS) User Awareness 2018</i>
20 Sept 2018	<i>Mesyuarat Jawatankuasa Pro-Tem Lembaga Juruterapi Pergigian Malaysia Bil. 2/2018</i>
20 Sept 2018	<i>Mesyuarat Kajian Semula Clinical Practice Guidelines (CPG): Management of Mandibular Condylar Fracture Bil. 7/2018</i>
21 Sept 2018	<i>Dental Amalgam: Perbincangan Bersama Syarikat Silverfidental Products Sdn. Bhd.</i>
24 Sept 2018	<i>Perbincangan Memuktamadkan Key Performance Indicator (KPI) dan Cluster Concept bagi Kepakaran Pergigian Restoratif KKM</i>
24 Sept 2018	<i>Perbincangan SOP Management of Periodontal Conditions at Primary Oral Healthcare Clinics</i>
24-25 Sept 2018	<i>Anugerah Inovasi KKM 2018- Sesi Penilaian Projek Inovasi Teknologi</i>

24-26 Sept 2018	<i>Bengkel Membangunkan Prosedur Operasi Piawaian Penguatkuasaan Di Bawah Akta Pergigian 2018</i>
26 Sept 2018	<i>Sesi Taklimat Kepada Preseptor Tempatan Pengkhususan Pergigian Ortodontik Juruterapi Pergigian Pengambilan September 2018</i>
27 Sept 2018	<i>Mesyuarat Garis Panduan Fasiliti Kesihatan Pergigian Menghadapi Bencana Alam</i>
27 Sept 2018	<i>Perbincangan Kebenaran Rawatan Kepakaran Pergigian</i>
27 Sept 2018	<i>Perbincangan Bersama College of Dental Specialists</i>
27 Sept 2018	<i>Mesyuarat Jawatankuasa Teknikal Akreditasi Pergigian (JKTAP) Bil. 5/2018</i>
28 Sept 2018	<i>Mesyuarat Pelaksanaan Pelantikan Tetap Bagi Pegawai Pergigian Yang Menjalani Khidmat Wajib Secara Kontrak Di KKM</i>
28 Sept 2018	<i>Perbincangan Bersama Johnson & Johnson Product Sdn. Bhd.</i>
1 Oct 2018	<i>Memuktamadkan Deraf Garis Panduan Unit Pakar Pergigian Kesihatan Awam (UPPKA)</i>
4 Oct 2018	<i>Perbincangan Bersama 3M Products Sdn. Bhd.</i>
4 Oct 2018	<i>Mesyuarat Kaji Semula Clinical Practice Guidelines (CPG): Management of Mandibular Condylar Fracture Bil. 8/2018</i>
8 Oct 2018	<i>Mesyuarat Penyelaras Pembangunan Fasiliti Program Kesihatan Pergigian KKM</i>
8 Oct 2018	<i>Mesyuarat Jawatankuasa Penilaian Pewartaan Pakar Pergigian (JPPPP) Program Kesihatan Pergigian Bil. 3 Tahun 2018</i>
10 Oct 2018	<i>Perbincangan Jawatankuasa Kerja Kaji Semula Kad Rawatan Pesakit Am/Sekolah L.P.8-1 PIN.7/97 dan L.P.8-2 PIN.7/97</i>
11 Oct 2018	<i>Pemurnian Medical Brief of Requirement (MBOR) Bagi Pusat Pakar Pergigian WPKL (Cahaya Suria) - Perbincangan Pelan Lantai Sesi 2</i>
11 Oct 2018	<i>Perbincangan Bersama Malaysian Dental Dealers Association (MDDA) Products Sdn. Bhd.</i>
12 Oct 2018	<i>Perbincangan Bersama Persatuan Juruteknologi Pergigian Malaysia</i>
12 Oct 2018	<i>Perbincangan Ahli Jawatankuasa Kerja Anugerah Inovasi KKM 2018 Bil. 3 Tahun 2018</i>
15 Oct 2018	<i>Mesyuarat JKPAK Bil. 3/2018</i>
15 Oct 2018	<i>Mesyuarat Kewangan Program Kesihatan Pergigian Bil. 4/2018</i>
16 Oct 2018	<i>Mesyuarat Teknikal Program Kesihatan Pergigian KKM Bil. 5/2018</i>
16-17 Oct 2018	<i>Sesi Latihan Pengguna "Core User" Bagi Aplikasi Teleprimary Care - Oral Health Clinical Information System (TPC-OHCIS)</i>
18 Oct 2018	<i>Mesyuarat Jawatankuasa Kerja Latihan Memberus Gigi (LMG) Tanpa Kumuran</i>
18 Oct 2018	<i>Lawatan Sambil Belajar Mahasiswa UKM Tahun 4 Sesi 2018/2019</i>
22-25 Oct 2018	<i>Sesi Latihan Pengguna "Core User" Bagi Aplikasi Teleprimary Care - Oral Health Clinical Information System (TPC-OHCIS)</i>
22-31 Oct 2018	<i>Temuduga Hadiah Latihan Persekutuan 2019/2020</i>

24 Oct 2018	<i>Perbincangan Format Baharu Medical Brief of Requirement (MBOR)</i>
25 Oct 2018	<i>Mesyuarat Jawatankuasa Penambahbaikan Panduan Pelaksanaan Laporan Nilain Prestasi Tahunan (LNPT), Program Kesihatan Pergigian</i>
25 Oct 2018	<i>Lawatan Sambil Belajar Mahasiswa UKM Tahun 4 Sesi 2018/2019</i>
26 Oct 2018	<i>Perbincangan Sistem Pengesahan Duplikasi Permintaan Dentur oleh Pesakit</i>
26 Oct 2018	<i>Mesyuarat Penyediaan Standard Program Bagi Ijazah Lanjutan Kepakaran Dalam Bidang Dental Public Health Bil. 5 Tahun 2018</i>
31 Oct-1 Nov 2018	<i>Mesyuarat Penyelarasan Pengurusan Aset Dibawah Program Medical Equipment Enhancement Tenure (MEET) QMS Bagi Program Kesihatan Pergigian Bil. 01/2018</i>
1 Nov 2018	<i>Perbincangan Jawatankuasa Kerja Guidelines on Oral Healthcare for Antenatal Mothers</i>
1-2 Nov 2018	<i>Sesi Perbincangan Pemarkahan Dan Slot Cuti Belajar Bergaji Penuh Dengan/Tanpa Hadiah Latihan Persekutuan (HLP) Sesi 2019/2020 Bagi Calon-Calon Program Kesihatan Pergigian</i>
2 Nov 2018	<i>Perbincangan Kaji Semula Garis Panduan Perkhidmatan Pergigian Endodontik di Klinik Pergigian Primer (KEPP) Bil. 1/2018</i>
2 Nov 2018	<i>Sesi Perbincangan Penulisan Laporan Bagi Training Programme on Oral Healthcare Related Activities in Japan (ENQQ)</i>
7 Nov 2018	<i>Mesyuarat Pemantapan Data Penjagaan Kesihatan Pergigian Primer</i>
7-16 Nov 2018	<i>Pengauditan Pengurusan Kewangan Di Pusat Pusat Tanggunjawab KKM - Program Kesihatan Pergigian</i>
8 Nov 2018	<i>Perbincangan Memuktamadkan KPI Bagi Kepakaran Pergigian Restoratif KKM</i>
12 Nov 2018	<i>Mesyuarat Jawatankuasa Teknikal Akreditasi Pergigian (JKTAP) Bil. 6/2018</i>
12 Nov 2018	<i>Perbincangan Memuktamadkan KPI Dan Penyelarasan Data Collection Kepakaran Pergigian Pediatrik KKM</i>
12-13 Nov 2018	<i>Mesyuarat Perancangan Pelan Tindakan Aktiviti Promosi Kesihatan Pergigian 2019</i>
13 Nov 2018	<i>Dental Amalgam - Perbincangan Bersama Persatuan Pengguna Pulau Pinang</i>
13 Nov 2018	<i>Jemputan Ke Sesi Latihan Penggunaan Patient Registry Information System (PRIS) Bagi Registri Kanser</i>
14 Nov 2018	<i>Perbincangan Kaji Semula Petunjuk Prestasi Utama (KPI) Program Kesihatan Pergigian, KKM</i>
19 Nov 2018	<i>Mesyuarat Kaji Semula Clinical Practice Guidelines (CPG): Management of Avulsed Permanent Anterior Teeth in Children (2nd Edition) Bil 6/2018</i>
21 Nov 2018	<i>Jemputan Ke Program Facebook Live Program Kesihatan Pergigian KKM Siri 4/2018</i>
21 Nov 2018	<i>Perbincangan Peluasan Sistem TPC-OHCIS Di 28 Klinik Pergigian di Negeri Sembilan</i>
22 Nov 2018	<i>Mesyuarat Pengarah Kanan (Kesihatan Pergigian) Bersama Majlis Dekan-Dekan Fakulti Pergigian Malaysia Bil 2 Tahun 2018</i>
22-23 Nov 2018	<i>Cadangan Pembinaan Hospital Cyberjaya Di atas Lot 47686 Dan PT 41461, Persiaran Multimedia, Cyberjaya, Selangor</i>
23 Nov 2018	<i>Mesyuarat Kaji Semula Clinical Practice Guidelines (CPG): Management of Mandibular Fracture Bil. 9/2018</i>

26 Nov 2018	<i>Mesyuarat Jawatankuasa Majlis Pelancaran Pengkomersialan Produk Inovasi Stance Wheel Peringkat KKM Bil. 3/2018</i>
27 Nov 2018	<i>Mesyuarat Teknikal Program Kesihatan Pergigian, KKM Bil. 6/2018</i>
30 Nov 2018	<i>Mesyuarat Program Kesihatan Pergigian Bil 7/2018</i>
13 Dec 2018	<i>Perbincangan Pelan Tindakan 2019</i>
18-20 Dec 2018	<i>Mesyuarat Jawatankuasa Dasar Dan Perancangan Kesihatan Pergigian (JDPKP)</i>
21 Dec 2018	<i>Sesi Perbincangan dan Demonstrasi Produk Berus Gigi Biodegradasi oleh Smile Malaysia</i>

EDITORIAL COMMITTEE 2018

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