

DDFT 2023 Oral Health Workforce Assessment - Pohnpei, Yap, Kosrae

Introduction: In late 2023, a survey of the current oral health human resources in three of the states of the Federated States of Micronesia (FSM) (Pohnpei, Yap, and Kosrae) was undertaken by the Dentists and Doctors for Tomorrow (DDFT) program at the College of Micronesia-FSM (COM-FSM). One of the primary goals of this survey were to identify the number of oral health providers in these three states, including dentists, hygienists, therapists, and dental assistants with an eye towards assessing the current population of practitioners versus projected need, and thus identify where, and to what extent, shortages exist. This information is provided below as a brief, including data, results, and discussion, along with insight into how the DDFT program is working to address these issues.

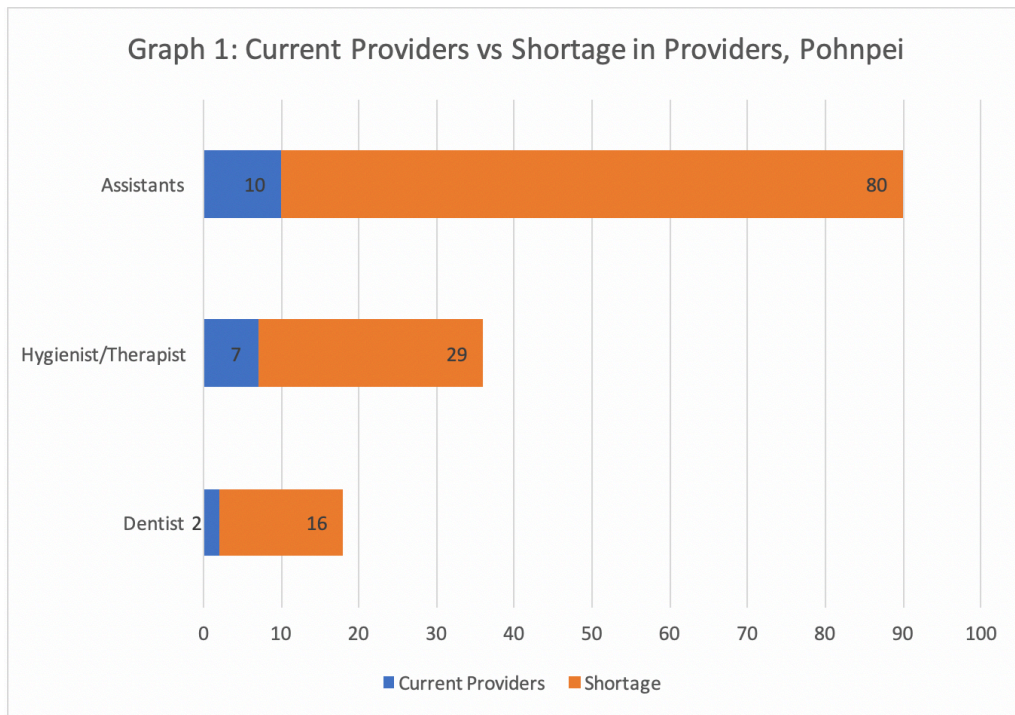
Table 1: Oral Health Providers Current vs. Projected Needs, Pohnpei, FSM

Pohnpei, FSM / Population (2010): 36,196				
ORAL HEALTH PROVIDER (public sector 2023)	# OF PROVIDERS		PROJECTED NEED	SHORTAGE
Dentists	2		18	16
Hygienists	4	Total 7	36	29
Therapists	3			
Dental Assistants	10		90	80

Results: Taking a standard rate (WHO) of 1 dentist per 2,000 persons, equates to 18 total dentists needed for Pohnpei, equating a shortage of 16 dentists (there are currently two dentists reported working in the public sector). Two dental hygienists or therapists should be allocated per dentist, equating to 36 total dental hygienists or therapists needed for Pohnpei, or a shortage of 29 (there are a total of four hygienists and three therapists reported working in the public sector). Five dental assistants are allocated per dentist, equating to 90 total dental assistants needed for Pohnpei, or a shortage of 80 dental assistants (there are a total of ten dental assistants reported working in the public sector).

Discussion: Currently, Pohnpei, which has the largest population of the three states of the Federated States of Micronesia (FSM) in which an assessment of the current oral health workforce was undertaken, with only Chuuk (population of 48,654 [2010] having a larger population among the states), has a significant shortfall of oral health providers in all categories, thus suggesting that there are significant shortfalls in meeting the oral health needs of the local population both in terms of direct oral health, as well as associated

physical health issues that arise with poor oral health, including cardiovascular disease; as well as those medical issues that are prevalent in the local population, and which may result in higher rates of both morbidity and mortality associated with poor oral hygiene, including diabetes, cardiovascular disease, rheumatoid arthritis, kidney disease, and obesity. Given this, increasing the number of oral health providers would not only have a direct impact on oral diseases, such as periodontitis, caries and associated edentulous states, and others.



With the difficulty in training and recruiting fully-qualified dentists, emphasis should be placed on a dual approach, including first a pipeline from high school through dental school and a return to Pohnpei, for local students who are willing to commit to a career in oral health, such as the Dentists and Doctors for Tomorrow (DDFT) program at COM-FSM; and second, short-term workforce development programs which will allow an immediate accession of dental assistants, such as the DDFT/Penn Foster dental assistant training program, who after a period of practice can enter either the DDFT program where they will earn an associate's degree and be prepared to compete for entry into dental, medical, and allied health training programs in partner universities in the South Pacific, such as Fiji National University (FNU); or compete for direct entry to the bachelor of oral health program at FNU, which prepares graduates to be both dental hygienists and dental therapists (advanced practice/midlevel oral health providers). Graduates of the BOH program are prepared for direct entry into the workforce following the three year BOH

program, and may return later in their careers to complete a full bachelor of dental surgery (BDS) (US equivalent to a DMD or DDS degree) to become fully qualified dentists.

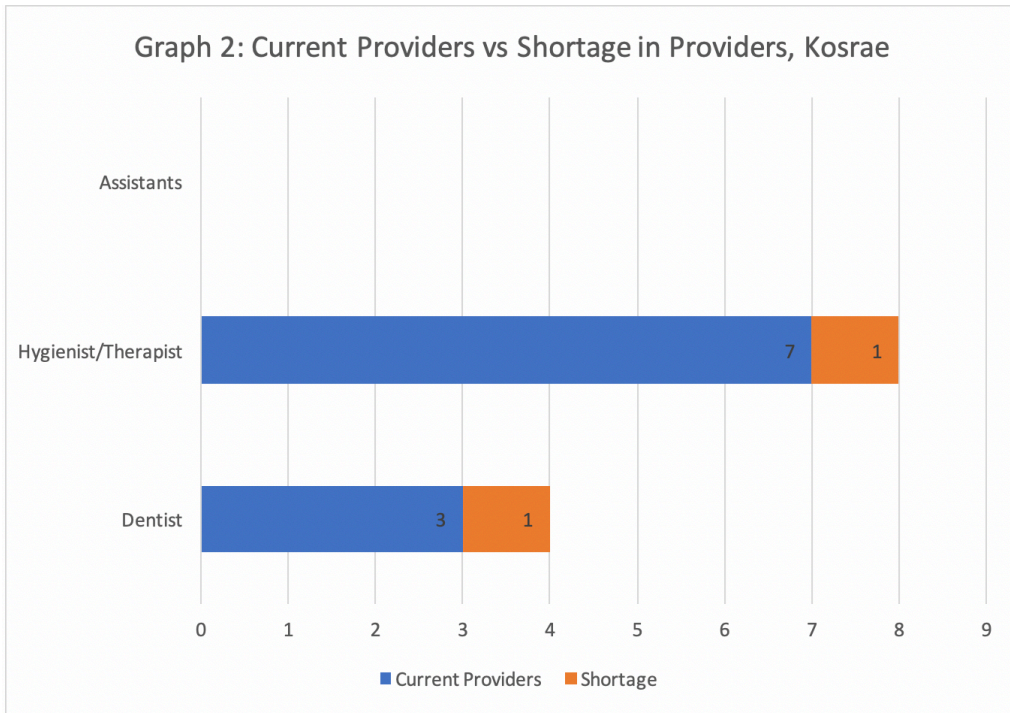
As such, the identification of the need for additional dentists in Pohnpei, as well as across the FSM, is being serviced both in the immediate need and the long-term need by the DDFT program at COM-FSM.

Table 2: Oral Health Providers Current vs. Projected Needs, Kosrae, FSM

Kosrae, FSM / Population (2010): 6,616				
ORAL HEALTH PROVIDER (public sector 2023)	# OF PROVIDERS		PROJECTED NEED	SHORTAGE
Dentists	3		4 (3.5)	1
Hygienists Therapists	7 unknown	Total 7	8	1
Dental Assistants	unknown		--	--

Results: Taking a standard rate (WHO) of 1 dentist per 2,000 persons, equates to 3.5 total dentists needed for Kosrae, equating a shortage of approximately 1 dentist (there are currently three dentists reported working in the public sector). Two dental hygienists or therapists should be allocated per dentist, equating to 8 total dental hygienists or therapists needed for Kosrae, or a shortage of 1 (there are a total of seven hygienists reported working in the public sector).

Discussion: Currently, Kosrae, which has the smallest population of the four states of the FSM, also has the smallest know gap in the number of providers versus the number of providers needed. It should be noted that the number of dental therapists, if any, and the number of dental assistants working in Kosrae is unknown. Additional data collection is needed to draw conclusions in the area of dental assistants, although it can be assumed that there are dental assistants currently working in Kosrae. It should also be noted that the DDFT Penn Foster dental assistant training program has not enrolled any students from Kosrae, suggesting that either Kosrae currently has no need of additional dental assistants, or that additional survey data is needed.



Otherwise, Kosrae finds itself in the best shape of the three states of the FSM that were surveyed (Pohnpei, Yap, and Kosrae) requiring only a single additional dentist, and a single additional therapist and/or hygienist. However, it should be noted that owing to the ageing of the current oral health workforce of the FSM, with one of the three dentists in Kosrae having been in practice more than thirty years, there is an ongoing need for the recruitment and training of future oral health providers, with an emphasis on a pipeline to create fully-qualified dentists.

Please see the discussion above from Pohnpei with particular emphasis on how oral health providers impact not only oral health issues but medical issues; and how the DDFT and DDFT Penn Foster programs are working to address the human resources for oral health shortage in Kosrae as well as across the region.

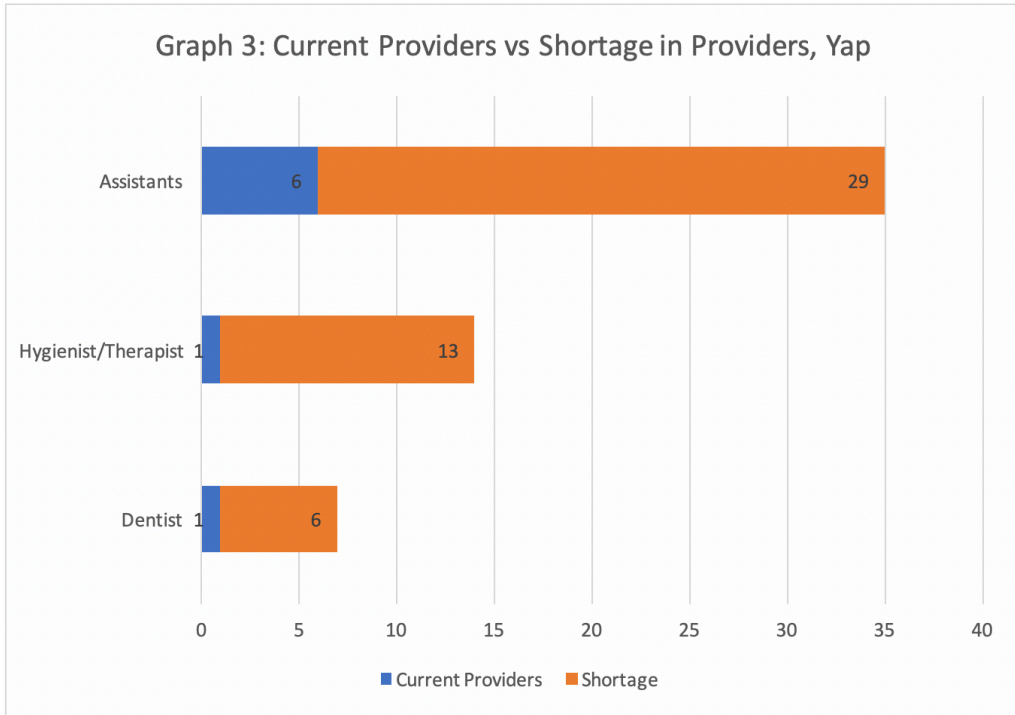
Table 3: Oral Health Providers Current vs. Projected Needs, Yap, FSM

Yap, FSM / Population (2010): 11,377				
ORAL HEALTH PROVIDER (public sector 2023)	# OF PROVIDERS		PROJECTED NEED	SHORTAGE
Dentists	1		7	6
Hygienists	1	1	14	13
Therapists	0			
Dental Assistants	6		35	29

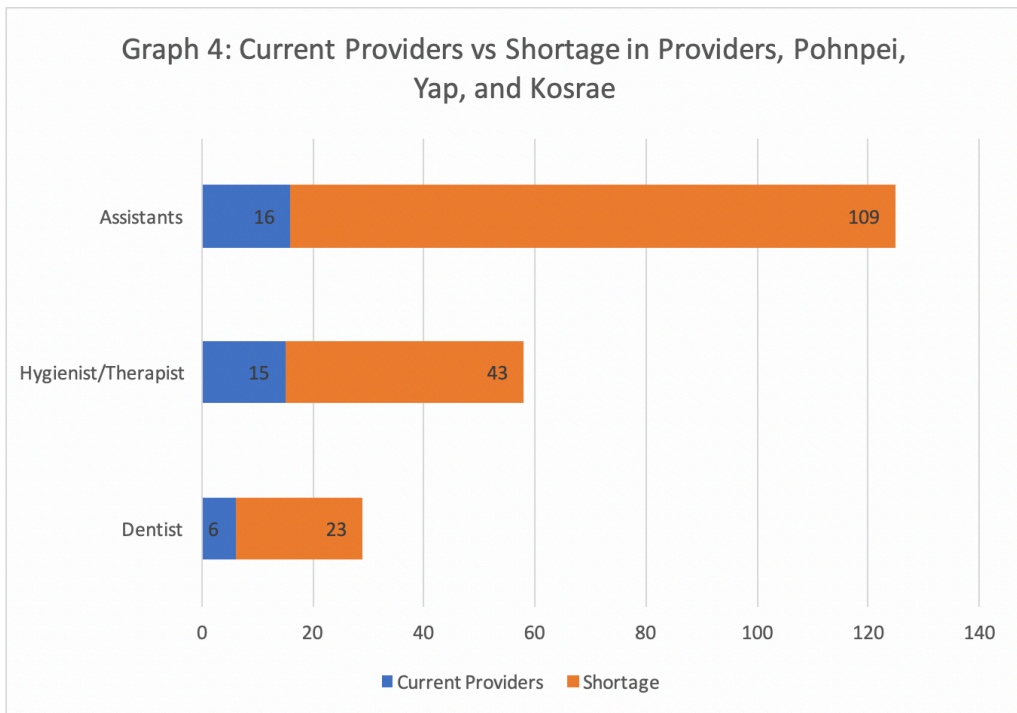
Results: Taking a standard rate (WHO) of 1 dentist per 2,000 persons, equates to 7 total dentists needed for Yap, equating a shortage of 6 dentists (there is currently one dentist reported working in the public sector). Two dental hygienists or therapists should be allocated per dentist, equating to 14 total dental hygienists or therapists needed for Yap, or a shortage of 13 (there are a total of one hygienist reported working in the public sector). Five dental assistants are allocated per dentist, equating to 35 total dental assistants needed for Yap, or a shortage of 29 dental assistants (there are a total of six dental assistants reported working in the public sector).

Discussion: Currently, Yap, which has the second smallest population of the four states of the FSM, has a significant shortfall of oral health providers in all categories. It is of particular note that Yap has the largest gap between dentists currently practicing in the public sector (1) and demand (7); and per capita the largest gap between the number of hygienists and/or dental therapists (1) and demand (14); and the largest per capita gap between the number of dental assistants (6) and demand (35). Furthermore, given that Yap has only a single dentist currently, and that dentist has been in practice nineteen years, Yap represents the most severe need for upskilling the current oral health workforce if a significant dental health workforce crisis is to be averted.

As part of the effort to address this, the DDFT Penn Foster dental assistant cooperative is enrolling (2024) twelve dental assistant students from Yap. The dental assistant program is a short-term workforce development programs which will allows a near immediate (approximately 9-12 months) accession of dental assistants, who after a period of practice can enter either the DDFT program where they will earn an associate's degree and be prepared to compete for entry into dental, medical, and allied health training programs in partner universities in the South Pacific, such as Fiji National University (FNU); or compete for direct entry to the bachelor of oral health program at FNU, which prepares graduates to be both dental hygienists and dental therapists (advanced practice/midlevel oral health providers). Graduates of the BOH program are prepared for direct entry into the workforce following the three year BOH program, and may return later in their careers to complete a full bachelor of dental surgery (BDS) (US equivalent to a DMD or DDS degree) to become fully qualified dentists.



Please see the discussion above from Pohnpei with particular emphasis on how oral health providers impact not only oral health issues but medical issues; and how the DDFT and DDFT Penn Foster programs are working to address the human resources for oral health shortage in Yap as well as across the region.



Conclusion: Whilst additional data collection is needed in some jurisdictions, as well as the need to undertake an assessment of the oral health workforce in Chuuk, the largest of the four states of the FSM, it is clear from the data collected in this survey that there is an insufficient number of oral health providers at all levels in the three states of the FSM assessed, and that this coupled with an ageing workforce, suggests the need for ongoing investment in programs like the DDFT to both upskill the existing and future oral health workforce, but also to provide multiple entry, multiple exit, opportunities for oral health workers to grow professionally across their careers as they seek to meet the oral health needs of their country.