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นิพนธ์ต้นฉบับ

# 25 ปี วิวัฒนาการหลักสูตรการฝึกอบรมแพทย์ประจำบ้านสาขาเวชศาสตร์ครอบครัว ประเทศไทย : การศึกษาเชิงคุณภาพ

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**บทคัดย่อ**

**ที่มา:** หลักสูตรฝึกอบรมแพทย์ประจำบ้านสาขาเวชศาสตร์ครอบครัวในประเทศไทยก่อตั้งขึ้นใน พ.ศ. 2541 เริ่มต้นจากที่มีผู้เข้ารับการฝึกอบรมและสถาบันฝึกอบรมจำนวนไม่มาก จนกระทั่งปัจจุบันมีการขยายวงกว้างไปทั่วประเทศ มีผู้เข้ารับการฝึกและสถาบันการฝึกอบรมเพิ่มขึ้น การศึกษานี้มีวัตถุประสงค์เพื่อศึกษาวิวัฒนาการของหลักสูตรฝึกอบรมแพทย์ประจำบ้านสาขาเวชศาสตร์ครอบครัวในประเทศไทยตั้งแต่เริ่มก่อตั้งจนถึงปัจจุบัน

**วัสดุและวิธีการ:** การวิจัยเชิงคุณภาพดำเนินการโดยใช้การสัมภาษณ์เชิงลึก การสนทนากลุ่ม และแบบสอบถามกึ่งโครงสร้างออนไลน์ ผู้เข้าร่วมเป็นบุคคลที่มีประสบการณ์อยู่ในแวดวงเวชศาสตร์ครอบครัวจำนวน 31 คน โมเดลการพัฒนาหลักสูตรของ Kern ถูกใช้เพื่อวิเคราะห์และทบทวนวิวัฒนาการ มีทั้งหมด 6 ขั้นตอน ได้แก่ 1) ระบุปัญหาและประเมินความต้องการทั่วไป 2) ประเมินความต้องการของกลุ่มผู้เรียน 3) เป้าหมายและวัตถุประสงค์จำเพาะ 4) กลยุทธ์ในการจัดการศึกษา 5) การนำหลักสูตรไปใช้ 6) ประเมินผลและฟีดแบ็ก ข้อมูลเชิงคุณภาพถูกรวบรวมและวิเคราะห์โดยการวิเคราะห์เนื้อหา

**ผลการศึกษา:** วิวัฒนาการของหลักสูตรฝึกอบรมแพทย์ประจำบ้านเวชศาสตร์ครอบครัวในประเทศไทยตลอด 25 ปีที่ผ่านมา สามารถแบ่งออกได้เป็น 3 ยุคดังนี้ 1) ยุคการก่อตั้ง 2) ยุคการขยายจำนวน และ 3) ยุคการรับรองคุณภาพ ยุคที่ 1 (พ.ศ. 2541 - 2551) เป็นยุคเริ่มต้นและมีการเติบโตอย่างรวดเร็วของจำนวนผู้เข้ารับการฝึกอบรม ยุคที่ 2 (พ.ศ. 2552-2561) เป็นยุคแห่งการเพิ่มจำนวนสถาบันฝึกอบรมและศักยภาพในการฝึกอบรม ยุคที่ 3 (พ.ศ. 2562-ปัจจุบัน) เป็นยุคที่มีการนำเกณฑ์ของสหพันธ์การแพทย์โลกมาใช้ในการประกันคุณภาพ ปัจจัยที่มีอิทธิพลต่อวิวัฒนาการของการพัฒนาหลักสูตร ได้แก่ นโยบายการปฏิรูประบบสุขภาพ ความต้องการด้านสุขภาพขั้นพื้นฐานของประชากร แนวโน้มแพทยศาสตรศึกษาทั่วโลก ระบบประกันคุณภาพการศึกษา และความต่อเนื่องของการพัฒนาอาจารย์ ส่วนอุปสรรคของการพัฒนา ได้แก่ การประเมินความต้องการของผู้เรียนเป้าหมายอาจยังมีไม่เพียงพอ อัตลักษณ์วิชาชีพยังไม่ชัดเจนในภาพสาธารณะ และระบบสนับสนุนการฝึกอบรมไม่เพียงพอ

**สรุป:** เพื่อให้บรรลุศักยภาพสูงสุดในการผลิตแพทย์เวชศาสตร์ครอบครัว เป้าหมายการฝึกอบรมและวัตถุประสงค์จำเพาะในการฝึกอบรมควรตั้งให้สอดคล้องตามความต้องการของกลุ่มผู้เรียนเป้าหมาย โดยเป้าหมายควรเชื่อมโยงกับความต้องการของสังคม รวมถึงมีระบบสนับสนุนการฝึกอบรมที่เพียงพอ คำนึงถึงศักยภาพการฝึกอบรมในระบบสุขภาพของประเทศ

**คำสำคัญ:** การศึกษาเชิงคุณภาพ การพัฒนาหลักสูตร การฝึกอบรมแพทย์ประจำบ้านเวชศาสตร์ครอบครัว ประเทศไทย

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ORIGINAL ARTICLE

# Twenty-Five-Year Evolution of Family Medicine Residency Training Program in Thailand: A Qualitative Study

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## ABSTRACT

**Background:** The family medicine residency training program in Thailand was established in 1998. Two decades ago the program was developed from a small number of trainees and training institutes to the current expansion of this postgraduate education across the country. This qualitative study aims to identify the evaluation of the curriculum development of family medicine residency training programs in Thailand from its inception to the present.

**Methods:** Qualitative research was conducted using in-depth, focus group interviews, and online semi-structured questionnaire with 31 participants experienced in family medicine. Kern's curriculum development model was utilized to review the evolution. Kern's model is composed of six steps including 1) problem identification and general needs assessment, 2) needs assessment of the targeted learner, 3) goals and specific objectives, 4) educational strategies, 5) implementation, and 6) evaluation and feedback. The qualitative data were collected and analyzed by content analysis, and described in narrative.

**Results:** The 25-year evolution of the family medicine residency training program in Thailand can be explained in three eras: 1) foundation, 2) expansion, and 3) accreditation. Era I (1998 - 2008) is defined as the program initiation and fast growth with several family medicine trainees. Era II (2009 - 2018) is a period of a rising number of training institutes and training potentials. Era III (2019 - present) is the era of implementing the World Federation of Medical Education criteria for quality assurance. The main factors that influenced the evolution of curriculum development were health system reform policies, basic health needs of the population, global trends in medical education, educational quality assurance system, and continuity of faculty development. The obstacles to development were inadequate needs assessments of targeted learners, ambiguous professional identity in the public, and inadequate training support system.

**Conclusion:** To achieve the best potential in the production of family physicians, training goals and specific objectives should be set based on the needs of targeted learners and linked to the needs of society, adequate support system, and training capacity in Thailand's health system.

**Keywords:** qualitative study, curriculum development, residency training, family medicine, Thailand

## Introduction

Family medicine (FM) is well-known and plays an important role in the healthcare system, especially at the level of primary care. Countries providing training in this field for decades include Canada, the United Kingdom (UK), Australia, South Africa, and the United Arab Emirates (UAE), among others, including Thailand. FM residency training program in Thailand was established in 1998. Twenty-five years ago the program was developed from a small number of trainees and training institutes to the current expansive FM postgraduate education across the country.

Nowadays, there are 8,157 family physicians (FP), with 53.6% of them working in family practice, and approximately 15% of verified FP completed full-time resident training curriculum.[1] The main roles of Thai FP involve providing primary healthcare services, healthcare management, and some also taking responsibility as family medicine faculty. The duration of development of the FM resident training program in Thailand was similar to the duration in Dubai, which was around two decades. The review of FM training in Dubai showed multiple challenges, especially a small number of national trainees and practiced FP, a training support system such as high staff workload, and the plan for quality improvement to achieve international education accreditation.[2] These findings were interesting and benefit the future development plan of FM training systems. When looking back at the Thai FM training, although the number of verified FPs was high, data from the Royal College of Family Physicians of Thailand (RCFPT) showed obvious problems encountered including resident dropouts, with the latest number of dropouts from years 2020 to 2023 was almost 50 trainees. In addition, several FPs leave the FM field for another specialty training after completing their FM education, which consequently results in low retention of the FP in the primary healthcare system. Thereby, studies regarding the training impact on the professional identity formation of FP, how the training curriculum has been developed, and proper solutions in the future could help close the gaps.

In this study, the authors studied the evolvement of the residency training program of FM in Thailand since its inception 25 years ago. Therefore, we aimed to identify the evolution of the curriculum development of the FM residency training program in Thailand from its establishment to the present.

## Methodology

### Study design

Qualitative research was introduced to this study. The qualitative data were collected and analyzed by content analysis and described in narrative.

### Participants

The participants of the study were purposive samplings and data was collected using in-depth, focus group interviews and online responses to a semi-structured questionnaire. The participants were informed and consented. The participants were the persons from across the country regions who have experience in FM particularly ones who have been involved in the training process of the FM residents and ones who have experienced the long evolving periods of the curricula. We also included the persons who initiated the changes in Thai health policy which affected the demand and quality of a FM health workforce in the country. The total numbers of participants were 31 persons. The participants included representatives from the RCFPT, family medicine faculties from medical schools and residency training institutes, consultants of the Ministry of Public Health (MOPH), program directors of the residency training program, and representatives from the Residency Training and Board Examination Subcommittee of postgraduate family medicine training. (Table 1)

**Table 1.** Demographic characteristics of the study participants (N = 31)

| Characteristics | n (%) |
|---|---|
| Gender (n, %) | |
| Male | 12 (38.7) |
| Female | 19 (61.3) |
| Current positions (n, %) | |
| Family medicine faculty | 16 (51.6) |
| President/ex-president of the RCFPT | 2 (6.5) |
| Committee and subcommittee of the RCFPT | 10 (32.2) |
| Government officer of the MOPH | 2 (6.5) |
| Senior executive of the MOPH | 1 (3.2) |

### Data collection

Data collection was from multiple sources, including in-depth interviews, focus group interviews, online semi-structured written questions, family medicine residency program curriculum books reviews, and narrative reviewing of related documents and publications. The interviews were conducted between February 2024 to May 2024. The conversations were recorded for the analysis. Interviews were performed until data saturation was reached. The Research Ethics Committee reviewed and approved this study.

Semi-structured questions were used in the interviews and online self-administered questionnaires.

Kern's six-step curriculum development[3] was used to frame the questions for the interviews and the online written respondents. Kern's curriculum development model consists of 1) problem identification and general needs assessment, 2) needs assessment of the targeted learner, 3) goals and specific objectives, 4) educational strategies, 5) implementation, and 6) evaluation and feedback. Following through these six steps could elaborate on the changes and progression in the past two decades of FM residency training programs. We also explored more questions in the educational strategies and implementation of the specific objectives. A system-based approach and research have been emphasized recently in the postgraduate FM curriculum.

### Data extraction and analysis

The researchers reviewed the literature and related documents and were scheduled to discuss and conceptualize the initial idea of three phases of FM curriculum development in Thailand. Interview transcripts and online written responses were analyzed using the content analysis method.

## Results

The twenty-five-year evolution of the FM training program in Thailand can be explained in three eras of development as shown in Figure 1. The model is based on the type of curriculum used within each era and the enrollment criteria of FM residents. The overall changes within the evolution can be illustrated in the infographic of flow and connectedness in Figure 2.

### Era I - The Foundation

*Program Initiation and Fast Growth in the Number of FM Trainees (1998 - 2008)*

Twenty-six years before FM training began (1977), the public health problems were quality of services and service accessibility, especially in remote areas. These issues led to the initiation and increase production of "General Practitioners" to serve the health service system in the country. Later, in 1989, the Health Care Reform Project (HCRP), which was a working collaboration of the European Union's agencies and the MOPH of Thailand, initiated a model concept of primary healthcare delivery and promoted first-line health service delivery. This began in Ayutthaya then expanded to four more provinces.[4] The family practice model in Ayutthaya emphasized patient care with a holistic, integrative, and continuity approach. During the same time, there was a shortage of doctors in primary care services, most junior doctors preferred further studies to become specialized doctors rather than becoming general practitioners in community hospitals. Thus, the postgraduate curriculum in FM training was officially introduced and first established in 1998, with approval by the Thai Medical Council (TMC), to serve the needs of the health workforce in the Thai primary care system. In 1999, the College of Family Physicians of Thailand was founded.

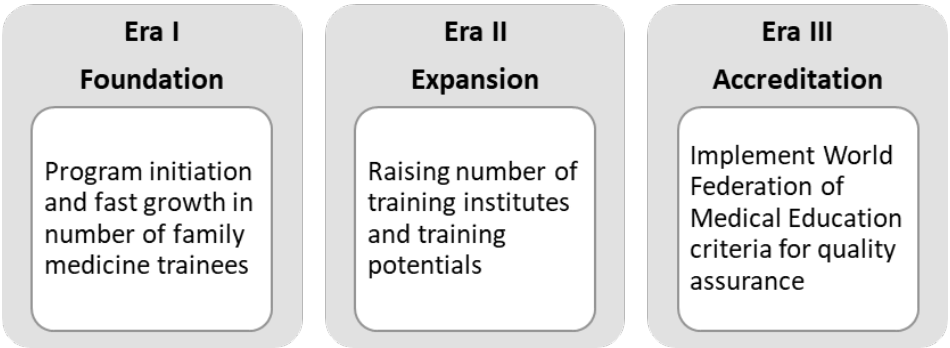


**Figure 1.** The eras of family medicine residency training in Thailand

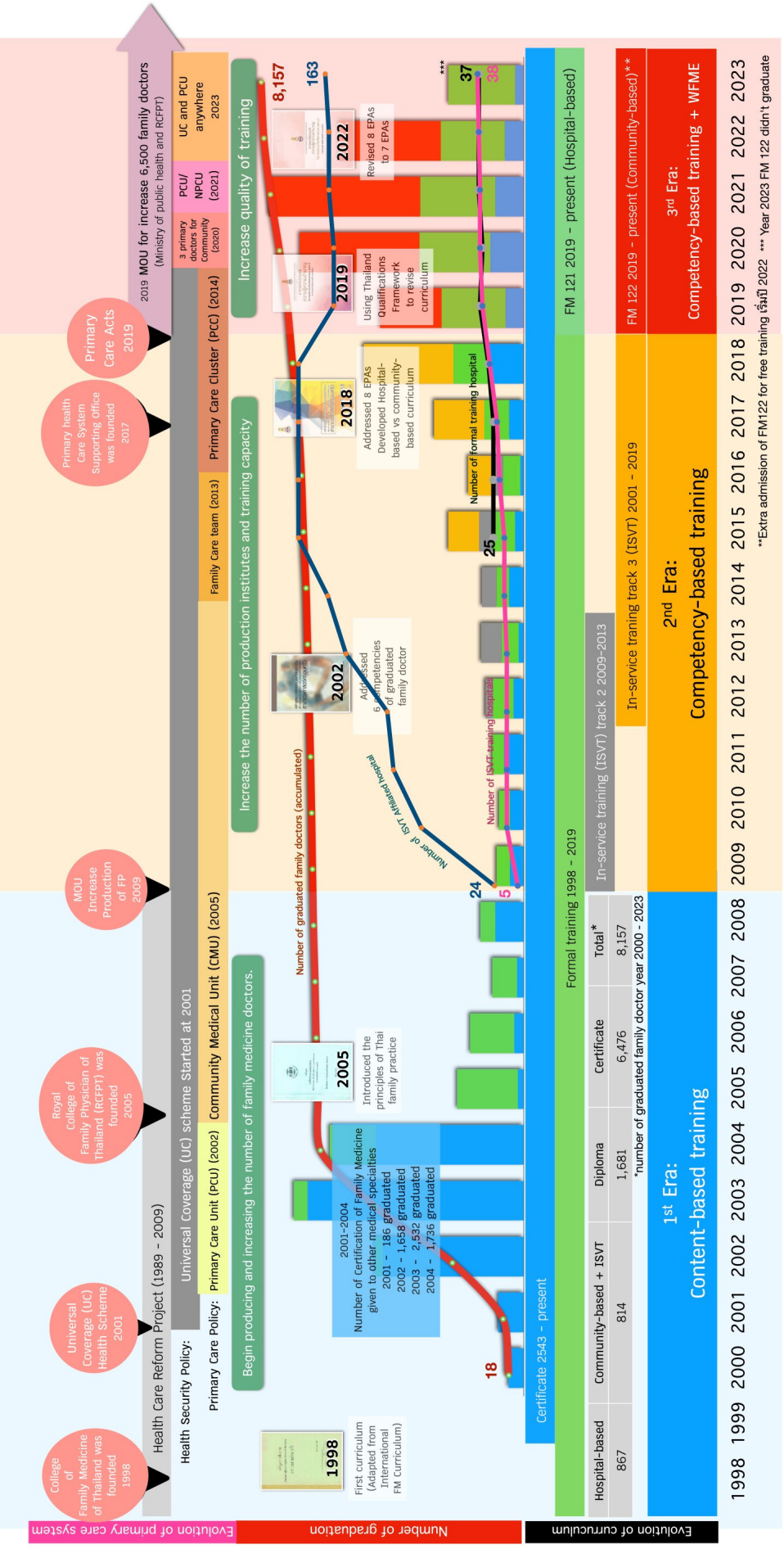


**Figure 2.** An illustration of the connection of flows within 25-year evolution of postgraduate FM training in Thailand 7-12

In 2001, Thailand underwent a major change in the structure of its health care system; the Universal Health Coverage Policy (UHC) was implemented which helped develop a quality primary care health service system of the country. The influence of UHC has driven the demand for a larger number of qualified FPs. As a result, other doctors with role responsibilities in primary care - including general doctors, and specialist doctors who also worked in primary care practice such as in a private clinic - applied for the program for the FM certification. This event increased the number of qualified FPs and helped raise the college's status to the "Royal College of Family Physicians of Thailand" in the year 2005. The main goals of the initial development phase were to create a space for family physicians in the system and formulate a professional identity and value of practicing family medicine, particularly in primary care settings. Moreover, faculty and primary care team development were promoted to serve the increase of FM education and training centers.

In this phase of development, the FM resident training program required 1) two to three years of training depending on institutions and source of funding, 2) completion of three mandatory workshops provided by the RCFPT, 3) compulsory requirement of learning experiences provided within the institutions such as continuity of community-based practice, home visit, family practice, and half-day conference, and 4) summative board examination in the last year of training. However, there were still some differences in the training formats of each institution. The obvious obstacles during the first phase were a lack of teaching staff, a lack of clear communication and cooperation among institutes, and a lack of funding support for new institutes. Accordingly, the number of graduated doctors with diplomas in FM fell behind the number of doctors from certified FM programs, which impacted the outcome variety and social strength of FM in that period.

Therefore, this first era would have represented the pioneer phase of evolution whereas the foundation of the FM discipline and family practice in the Thai health service system were incepted and began the growth.

**Era II - The Expansion**

*Raising the Number of Training Institutes and Training Potentials (2009 - 2018)*

The early development of the curricula, goals, and objectives were set based on theoretical knowledge of FM discipline and adapted the FM residency training curricula of South Africa and the United Kingdom. Later a competency-based curricula was developed, which correlated with the principles of FM of Thailand. In 2009, as a result of the stillness of the number of FP, a five-year project new training strategy was implemented under cooperative support from the MOPH, the National Health Security Office (NHSO), and the RCFPT. This pilot project, so-called "in-service training (IST)," was created to persuade and help community physicians who were interested in FM training but had limitations in time and accessibility to the existing training institutes. This training strategy was implemented in community hospitals that were approved as training sites by the RCFPT committees and co-training with nearby main academic institutes. The trainees in this program received a system of financial support while being in the training from the NHSO and were waived off the MOPH salary payment criteria for postgraduate training unlike training for other specialties. The project was created to motivate doctors to choose to study FM and to allow the trainees to spend most of their time in the community training setting under the supervision of local FM preceptors without taking study leave.

Later, in 2010, the scholarship program supported by Lady Tasanawalai Sornsongkram named the "rural doctor scholarship," or the so-called "rural doctor returning to the homeland" was founded to serve medical doctors in Thai remote areas. This scholarship program had a project duration of five years (December 2009-May 2015). Accordingly, scholarships were also provided to support FM trainees who enrolled in the IST program and returned to work in remote areas. During this era, resulting from the IST project, there was an increase in the number of main and auxiliary institutes. However, the trainees who participated in this project perceived insufficient knowledge gained compared to those who trained in large institutes like universities and provincial teaching hospitals.

In 2012, the second revision of the postgraduate FM curriculum was concluded focusing on creating essential core competencies and adjusting necessary contents in the program. During this

era, Dr. Yongyut Phongsuphap under the NHSO developed a project to increase FM knowledge and skills for doctors who had not yet completed FM training and were interested in knowledge application in the community. The project was called "Family Practice Learning or FPL," which was operated through local FM learning centers. Besides, the Office of the Collaborative Project to Increase Rural Doctors (CPIRD), MOPH, sighted the importance of having FP in the rural health system which correlated to the main objective of the project, so that linked to the support of the FM track-3 IST program. The Track-3 IST program allowed final year medical students to apply early for the residency program. This campaign was created to increase the number of FPs in the system. This education was one of the strategies to readily serve the health policy in the Thai primary care system that in the year 2014 established the "Family Care Team: FCT," and afterward developed into "Primary Care Cluster: PCC." In these service settings, family practices across the country were promoted. Subsequently, in 2017 the Constitution of the Kingdom of Thailand stipulates that all Thai people should have the right to have primary care service as a basic health welfare. The declaration raised the importance of the roles and responsibilities of FP in the primary care system.

**Era III - The Accreditation**

*Implement World Federation of Medical Education (WFME) Criteria for Quality Assurance (2019-present)*

In 2019, after the declaration of the Primary Health System Act B.E. 2562, a strong collaboration developed between the MOPH through the Primary Health Service System Support Division (previously established as an office in MOPH in 2017) and the RCFPT. This collaboration was to develop strategies for producing 6,500 FP to serve the primary care service system in the country. This number was calculated regarding the expected ratio of about one FP per 10,000 Thai people. According to the fast expansion in training needs and high demand for FP to serve the system, an imbalance of resource allocation for the support training system was noted. The issue affected in particular community-based training settings (aka in-service training) where they had limited academic facilities; as a result, many trainees in this setting resigned from the training system.

The RCFPT raised concerns about the problem and initiated quality assurance into curriculum revision in 2018 using the WFME as a reference standard.[5,6] The curriculum had changed from "formal training and in-service training" to "hospital-based and community-based training." This new approach divided the curriculum into two training systems: the hospital-based curriculum which refers to the training provided at major academic institutes such as provincial hospitals and medical schools, and the community-based curriculum which is the training provided at community hospitals.

The 2019 curriculum required all institutes to develop their program specifications (Thailand Qualification Framework for higher education (TQF 1, 2, 3). The 2022 curriculum introduced seven Entrustable Professional Activities (EPAs): 1) home care for patients and families, 2) palliative care, 3) care for a patient with chronic disease, 4) health promotion and disease prevention for individual, family and community, 5) comprehensive care: treatment in all age groups, health promotion, disease prevention, rehabilitation, 6) system and community-based practice, and 7) research in FM.

The accreditation helps regulate the training quality which encourages trainees to be more interested in FM. Moreover, the RCFPT has expanded further training options in the palliative and geriatric family medicine subspecialty to advance family practices, which draws more trainees into the training system.

The increasing number of faculties as sequentially correlated the educational assurance by WFME criteria made most of the educational management more practical implication. Although there is still a shortage in faculties teaching research in FM and system-based approach, the RCFPT supports institutes to share educational resources and arrange workshops among regional institutes for these two EPA domains.

To date, the production of FP has been progressing in both quantity and quality. Further development should focus on embedding the professional identity of Thai FP into the public recognition to sustain the need for a primary care health service system for the Thai population, as well as to ensure professional fulfillment of Thai FP.

According to Kern's curriculum development model, the 25-year evolution of the FM residency curriculum can be coded as a thematic explanation in each step (Table 2). The flow of curriculum development progression is demonstrated in Figure 3.

**Table 2.** Exploration and linkage among three eras regarding Kern's six steps curriculum development model.

| Kern's six steps | Era I Foundation | Era II Expansion | Era III Accreditation | Notable landmarks in evolution |
|---|---|---|---|---|
| | **Curriculum Volume I-II (1998-2008)** | **Curriculum Volume III-IV (2009-2018)** | **Curriculum Volume V-VI (2019-Present)** | |
| Problem identification and general needs assessment | Health system reform and UHC policy implementation | - Decline interest in family medicine training<br>- The need in numbers of family practice by health policy | - Inconsistency in educational strategies and training program implementation<br>- Declaration of the Primary Health System Act B.E. 2562<br>- Policy announcement to produce family doctors to 6500 persons by 10 years | Driven by policies in every era |
| Needs assessment of targeted learner | Initial inquiry from some pioneer learners but have no systematically data records | - Financial support<br>- Promote the professional identity of family medicine in Thailand | Clarify job descriptions of family practice in Thailand | Perplexity of job descriptions and social recognition |
| Goals & specific objectives | Enhancing medical knowledge and skills in family practice to serve primary care service system | Raising number of training institutes and training potentials | Qualified family physician in the Thai context | Discrepancy between goals and reality |
| Educational strategies | - Diversity in educational strategies among institutes<br>- Requisite learning experiences including home visit, patient-centered practice, community-based practice, and weekly half-day academic conference | - Competency-based educational strategies and in-service training<br>- Add on community project in requisite learning experiences | - Adopt the WFME criteria to standardized educational strategies e.g., learning experiences, EPAs<br>- Create a set of online modular learnings starting during the pandemics<br>- Initiated online/hybrid compulsory workshops | Quality improvement in educational strategies |
| Implementation | - Endeavor to achieve the goals<br>- Promoting early access to the training after either medical school graduation or internship<br>- Lack of faculty staffs, training resources, financial support | - Expanding educational settings by decentralizing to community-based training curriculum<br>- Five-year project of financial support for community-based trainees<br>- Recruitment criteria changed to start early enrollment in CPIRD/ODOD students | -Strengthening training networks and substantial system-based learning<br>-Promote academic works of trainees; family medicine research publication and academic presentation of the community project | Continuing supports by the MOPH, NHSO, ICHR and RCFPT |
| Evaluation & feedback | Student evaluation:<br>- One summative board examination<br>- A report of 3 home care cases<br>- One medical research<br><br>Program evaluation:<br>- Increase numbers of faculty staffs led to curriculum revision | Student evaluation:<br>- One summative board examination<br>- A report of 2 home care cases and 1 community project<br><br>Program evaluation:<br>- Set the standard criteria of the training hospitals and networks<br>- Initiate the WFME into the curriculum revision Vol.2018 | Student evaluation:<br>- Collective summative board examination<br>- A report of 2 home care cases and 1 community project<br>Program evaluation:<br>- Accredit and reaccredit the institutes followed by the WFME criteria | Provide regularly faculty development program<br>- training of the trainers - in medical education for faculty staffs |

Note: CPIRD: the Collaborative Project to Increase Rural Doctor, ODOD: One Doctor One District, WFME: World Federation of Medical Education, EPAs: Entrustable Professional Activities, NHSO: National Health Security Office, ICHR: Office of community-based health care research and development, RCFPT: Royal College of Family Physician of Thailand

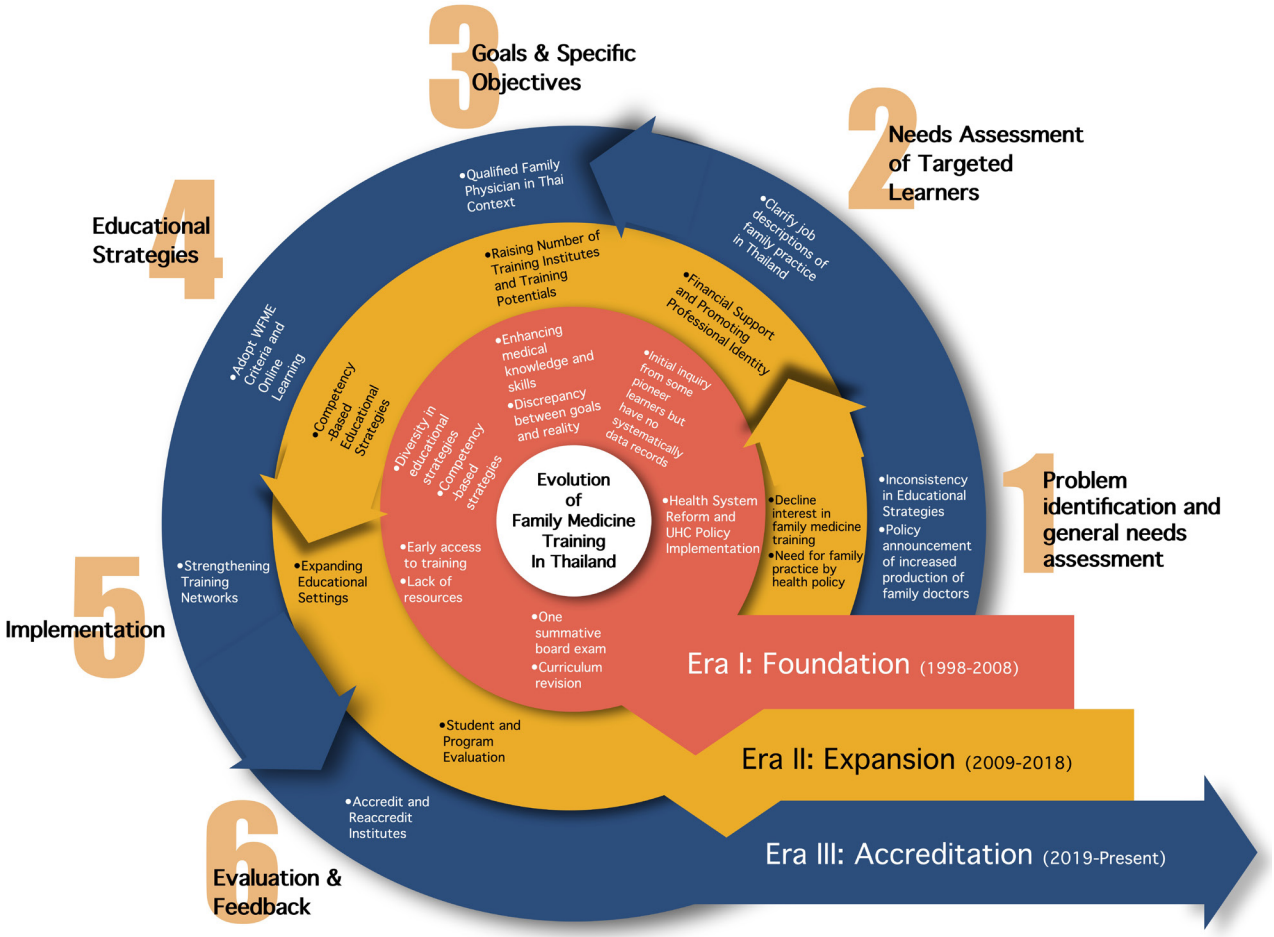


**Figure 3.** The flow of curriculum development progression based on Kern's curriculum development model

National health policies and acts have driven the three eras of FM training the most in the step of problem identification and general need assessment. In Eras I and II, the MOPH launched the support systems for the trainees in their early access to the training programs after finishing their internship and provided support funding for the five-year project of in-service training. In Era III, the declaration of the Primary Health System Act B.E. 2562 forced the training system to rapidly produce the number of FP to reach 6,500 persons in ten years. Nevertheless, the perplexity of job descriptions and social recognition in family medicine remained to the targeted learners, due to the lack of need assessment at the early curriculum development. The training goals that were likely based on high expectations from the policymakers rather than the feasibility of training's stakeholders and training capacity linked to the wide discrepancy between goals and reality. The evolution of educational strategies continuously improved and standardized to reach the international educational standard using a competency-based curriculum. For instance, modular learning and EPAs were distributed to all institutes to achieve WFME criteria. The key success of curricula implementation in all eras was the support from many non-profit organizations, the MOPH, and the RCFPT. Evaluation and feedback of the curricula of each era depended upon the teaching ability of FM faculties and local preceptors who continuing improved their skills from the faculty development program regularly provided by the Society of Teachers of Family Medicine of Thailand (STFMT), which later changed and expanded to the Society of Family Physicians of Thailand (SFPTH).

## Discussion

The transformation of our curricula structure over three eras is based on global medical education trends, shifting from content-based education to competency-based education according to WFME standards to achieve international quality.[5,13] However, regardless of the era, it remains time-based learning and has not yet developed into

proficiency-based learning or modular learning, which is time-variable on individualized pathways across the continuum. This flexibility in training is needed for residents in primary care units as it refers to more context-specific and aligns with the WFME Standard area of learner-centered and continuous renewal.

The development across each era can be summarized by defining each period: the first era as Foundation, the second as Expansion, and the third as Accreditation. When comparing the development timelines with Canada[14], the country of origin for FM, it's evident that the rate of development of the FM curriculum in Thailand has a much faster acceleration of curriculum development. The main catalyst for this has been policymakers who have aimed to address issues such as overcrowding of patient services, significantly increasing healthcare costs, overwhelming workload for medical personnel, and the shortage of doctors in the primary care system. Thus, the evolution of the FM training curriculum in Thailand has been consistently influenced by health systems and health policies, this can be explained by the linkage with the needs of the primary care workforce, which aligns with the framework of the system concept; the interrelation between education system and health system.[15] The enactment of legislation requiring an appropriate ratio of FP to the population has necessitated the ongoing support and development of FP production. However, changes in leadership and political policies could extremely affect the health system and the training.[15,16]

The insufficient assessment of learners' needs can result in teaching strategies that may not align with learners' requirements and can lead to training dropouts. Consequently, it may also affect young doctors' interest in entering FM training programs. The challenge with the domain of learners is different from the study in Dubai where the majority of family physicians were imported from outside the country; nevertheless, more national FM trainees are needed to sustainably serve the primary care system.[2]

Incorporating authentic data on driving the national strategy for primary care physician production will help set training goals and objectives better relevant to actual health service system situations.[17,18] This will reduce the likelihood of burden on FM instructors, residents, and other personnel who are involved in the training system. It will also help manage learning resources and training processes more efficiently.

Faculty development (FD) is a crucial factor in enhancing training standards. Therefore, strengthening the FD system and creating an FD network that covers all institutions, especially new ones, will further help maintain the quality and sustainability of training standards.[19-23] Instilling the concept of a system-based approach[24,25], workplace-based assessment and leadership competency in faculties and trainess may help them better understand the context of their future work and enable them to thrive in Thailand's primary health care system.

### Limitations and suggestions

Our study might limit the variety and coverage of participants enrolled in the interviews. Further research may include FM trainees and other stakeholders to widen more perspectives of the FM training curriculum. Moreover, implementation research on a modular learning like system-based approach could have revealed some solutions for maintaining FP retention in the Thai health system.

## Conclusions

The 25-year evolution of the FM residency training program in Thailand was divided into three eras: 1) foundation, 2) expansion, and 3) accreditation. The main factors that influenced evolution were health policies, the basic health needs of the population, global trends in medical education, educational quality assurance systems, and continuity of faculty development. Thereby, to achieve the best potential in the production of FP, the training goals and specific objectives should be set based on the need assessment of targeted learners, comprehensive assessment, adequate support system, and training capacity in Thailand's health system.

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