Original article

Development of an appropriate medical certificate of employment for administrative purposes

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Objectives The study aimed to develop a 'fit to work' certificate written in a format appropriate for Thai culture and law and to canvas the opinions of stakeholders regarding a 'fit to work' certificate.

Methods The Modified Delphi technique was used to canvas the opinions of experts in 13 clinical disciplines and medical law specialties. The study was divided into two phases: Phase 1 was a questionnaire survey regarding 'fit to work' certificates around the world and the opinions of experts in the medical field about aspects of 'fit to work' certificates. Phase 2 was a study of the opinions of stakeholders working in the medical profession in different capacities.

Results Study results indicated that a medical certificate should include 14 elements. In round 1, the cohort of experts agreed on all existing components and recommended 5 additional elements. In round 2, the experts agreed (median 4 to 5), while in round 3, the experts agreed on all suggested components except component 19. In phase 2, each component was judged suitable for use in the Thai context.

Conclusions None of the components in the proposed certificate contravene Thai law, especially regarding the confidentiality of some information, and the certificate can be used to collect data regarding potential workplace-related health problems, thereby enabling employees who are fit to work and to return to their job. Training physicians on how to complete a 'fit to work' certificate may be necessary. **Chiang Mai Medical Journal 2021;60(4):449-62. doi: 10.12982/CMUMEDJ.2021.40**

Keywords: medical certificate, employment, communication, risk-free, fit to work

Introduction

Health is a balance between the well-being of an individual and that of other persons as well as between the individual's physical and social well-being (1). Factors involved in determining an individual's health status include the influences of genetics, lifestyle, environmental factors, cultural factors, socio-economic factors, and work-related influences. Having work to do can help protect an individual against the occurrence of mental health problems, especially depression and suicide. Work is also a factor in protecting against digestive diseases, diseases of the cardiovascular system, and diseases of the neurovascular system (2-4). By contrast, unemployment erodes income, quality of life, overall economic stability, finances, and societal interconnectedness (5).

In April 2010 in England, the existing 'medical sick note' was changed to a 'fit note', with the objective of reducing the cost to the company of sick leave. The benefit to the UK economy was expected to be approximately £240 million over ten years (6). Some form of medical certificate showing risk-free ability to work (fit note) can be found in many developed countries including New Zealand (7), Canada (8), Australia (9),

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United States (10), and Singapore (11). The certificate considers the quality or the nature of the work, with the key being a health assessment that allows a quick return to work and protects the individual's privacy regarding information about the illness. The assessment of the job role, any potential workplace modifications, and the individual's health condition in the fit to work certificate helps employees reduce their time away from work and also reduces the cost of sick leave to the employer, e.g., turnover costs and retraining costs (6). A fit to work certificate has been shown to reduce incidents of time off work of more than 12 weeks by around 35% and to help between 43-80% of employees to return to work (12).

Thailand affirms the confidentiality of medical information in laws and official notices, e.g., the 2007 National Health Act (13), the 1997 Official Information Act (14), the Criminal Code (15), the Declaration of Patient's Rights (16), the 2006 Regulations of the Medical Council on Medical Ethics (17), the 2008 Mental Health Act (18), and the 2019 Mental Health Act (19). In addition, the 1998 Labor Protection Act (20), Section 32, states that when a worker is injured or sick for 3 days or more, their employer may require the employee to present a medical certificate. The information requested must be consistent with the 2020 Ministerial Regulations Prescribing Health Examination Standards for Employees Working on Risk Factors (21). To ensure confidentiality of that information, the 2020 Ministerial Regulations Prescribing Health Examination Standards for Employees Working on Risk Factors states that recorded details of health examinations must be shown in comments indicating the employee's health condition and fitness for work (21). This is consistent with the 2019 Personal Data Protection Act that states that health information related to workers regarding functional capacity, diagnosis, health care services and treatment can be collected and disclosed (22). The current medical certificate system in Thailand sometimes identifies the disease, illness, or combination of treatments, which is a disclosure of personal information. In Thailand, default medical certificates, i.e., the certificate demonstrating the risk-free ability to work, do not always meet privacy standards in all forms. This oversight underscores weaknesses in the current employee medical certificate system.

To improve the array of elements included in the medical certificate, a consensus of expert opinions on the subject was deemed essential. The Modified Delphi technique was used with selected experts to develop a consensus. The Modified Delphi is like the traditional Delphi in terms of the cycle technique, but it differs in the initial process. Data in the initial process of the Modified Delphi may be drawn from many sources such as literature reviews, brainstorming, and interviews. An advantage of this method is that it improves the response rate and reduces bias (23).

Objectives

The aims of the present study included, first, developing a medical certificate indicating 'risk-free ability to work' (fit to work) written in a form suitable for the Thai culture and laws and, second, to canvas stakeholders working in the medical profession in different capacities regarding their opinion on the elements comprising a 'fit to work' certificate.

Methods

This study used the Modified Delphi technique and it was divided into two phases. Figure 1 shows phase 1, the process of expert selection, systematic literature review, questionnaire development, and obtaining opinions of experts in the field and, Phase 2, a study of the opinions of stakeholders, e.g., doctors, members of the Medical Council and Medical Association regarding the appropriate contents of a 'fit to work' certificate. Following a review by the researchers of the contents of medical certificates from many countries, a questionnaire was developed for canvassing expert opinion. The study protocol was reviewed and approved by the Institutional Review Board (IRB00001189) and the Khon Kaen University Research Committees (HE621523).

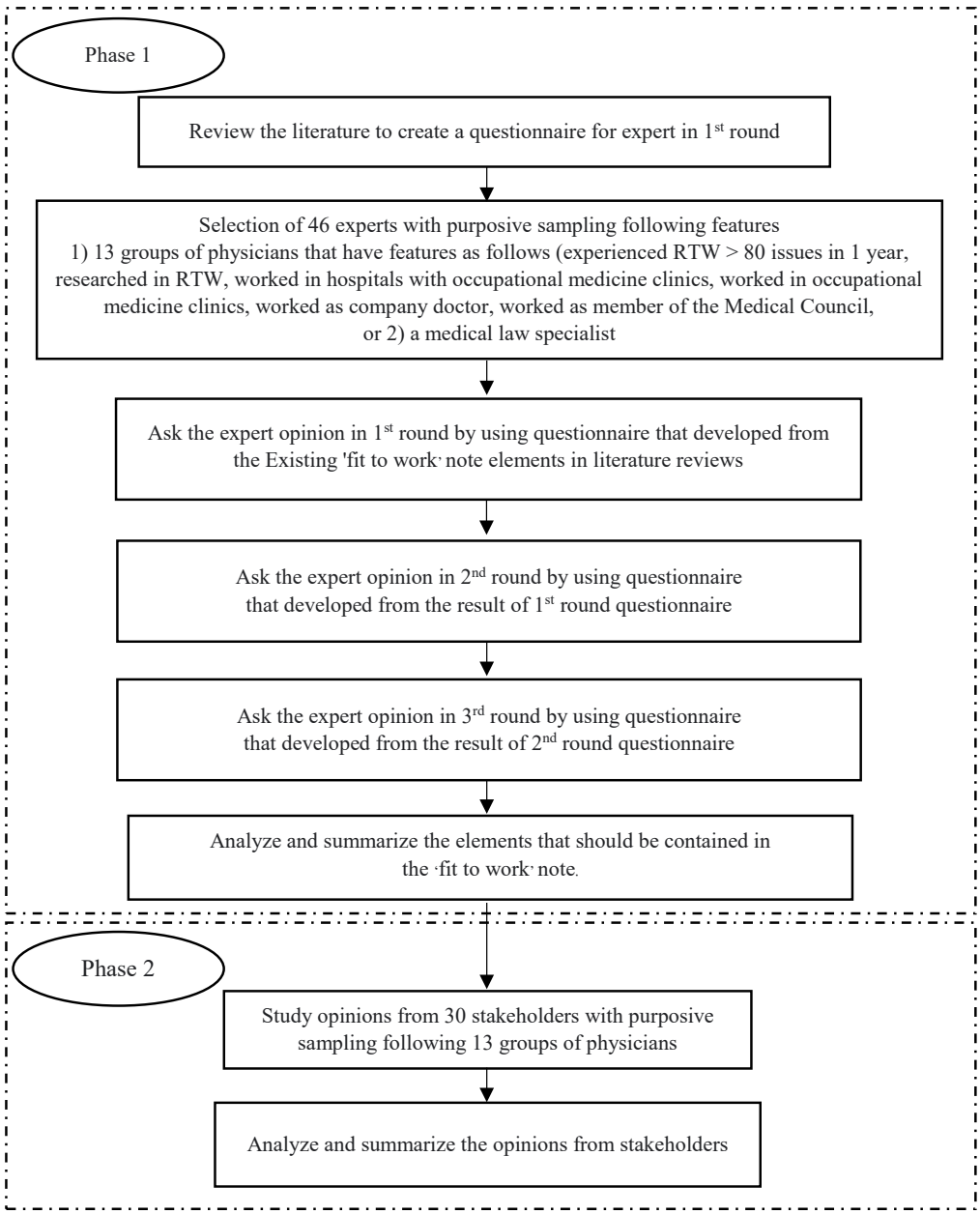

Figure 1. The research process

The phase 1 study population: experts in various fields of medicine

The study population of 46 experts in phase 1 was purposively sampled. The number of experts was calculated based on the minimum number participants the Modified Delphi technique required to achieve the slightest discrepancy of opinion (17 people) (24) and cross the response rate among doctors (37.3%) (25). Selected participants had qualifications as follows. The physicians had one or more of the following: (1) experience in preparing medical certificates (more than 80 in 1 year) providing an opinion on an employee's suitability for returning to work, (2) had researched issues related to return to work, (3) worked in hospitals with occupational medicine clinics, (4) worked in occupational medicine clinics, (5) worked as a company doctor, (6) worked as member of the Medical Council. In addition, medical law specialists were included. The group of 46 experts

included 3 obstetrician-gynecologists (OB-GYN), 3 surgeons, 3 internists, 3 orthopedists, 3 physiatrists, 3 psychiatrists, 3 ophthalmologists, 3 otolaryngologists, 4 forensic physicians, 4 emergency physicians, 4 family physicians, 4 occupation medicine (OCC-MED) physicians, 3 members of the Medical Council plus 3 medical law specialists. Phase 1 included three rounds of questionnaires.

The phase 2 study population: stakeholders

Phase 2 used purposive sampling to identify 30 stakeholders, i.e., individuals tasked with issuing 'fit to work' certificates. The number of stakeholders was calculated from decrease discrepancy to 0.55 (11 people) (24) cross the response rate among doctors (37.3%) (25). The 30 stakeholders were subdivided into 13 groups: obstetrician-gynecologists, surgeons, internists, orthopedists, physiatrists, psychiatrists, ophthalmologists, otolaryngologists, forensic physicians, emergency physicians, family physicians, occupation medicine physicians, medical councilors and Medical Association representatives. Each group consisted of two people with the exception of forensic physicians, emergency physicians, family physicians, and occupational medicine physicians which had three each.

Data collection and analysis in phase 1

In the first round of surveys, questions had been generated by a review of the literature and were closed-ended. The two options for each question were 'agree' and 'disagree'. The survey also included a section for experts to provide comments. The responses from the first round were analyzed and used to generate second-round questionnaire which included those questions where there was more than 70% agreement in the first round (26). The second round questionnaire for the experts was designed in the form of a Likert scale, with response options of: 1) strongly disagree, 2) disagree, 3) neither agree nor disagree, 4) agree, and 5) strongly agree. The second-round questionnaire was analyzed and a third-round questionnaire was generated based on the median (Mdn) and interquartile range (IQR) of responses to the second round. The third-round questionnaire for experts also employed a Likert scale. Responses of the experts were analyzed using the IQR and differences between the median (Mdn) and the mode (Mo). An the IQR $\leq$ 1.50 and a difference between the Mdn and Mo $\leq$ 1.00 indicated that each expert had a consistent opinion (27). After a consensus was determined, only consistent opinions were selected to create a 'fit to work' certificate.

Data collection and analysis in phase 2

The stakeholder questionnaire asked about the 'fit to work' certificate developed in phase 1. Response options were: 1) strongly disagree, 2) disagree, 3) neither agree nor disagree, 4) agree and 5) strongly agree. In addition, there was a section for the expression of individual opinions. The means were used to evaluate the overall opinion of the stakeholders (28). Analyses were performed using Microsoft Excel version 2016 (licensed to Khon Kaen University, Khon Kaen, Thailand) for both phases 1 and 2.

Results

The literature review found that the components of a medical certificate, whether from a developed or developing country, included the same elements: the name of the person receiving the medical service, the name and signature of the attending physician, the assessment date, and the doctor's opinion. Most of the developed countries' medical certificates involved assessments of health and relevant work conditions but did not name of the disease (Table 1).

Most of the expert participants worked in hospitals with an occupational disease medicine section and most had had experience with more than 80 issues in 1 year. Only a small proportion worked in occupational medicine clinics or as a company doctor, or were a medical law specialist (Table 2). In Phase 1, 76.1% of the expert participants (35/46) answered the questionnaires.

The top three elements in the first round that should be included in a fit to work certificate according to the experts were: 1) name of the person receiving service and name and signature of the

Table 1. Elements of the medical certificate

Country \ Element	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Thailand (29-33)	✓	✓				✓	✓		✓		✓	✓	✓	✓	✓
England (34)	✓		✓			✓		✓		✓	✓	✓	✓	✓	
New Zealand (7)	✓					✓	✓			✓	✓		✓	✓	
Canada (8)	✓					✓	✓			✓	✓		✓	✓	
Australia (9)	✓					✓	✓			✓	✓		✓	✓	
Japan (35)	✓					✓			✓				✓	✓	
United States (10)	✓			✓	✓	✓				✓	✓	✓	✓	✓	
Singapore (11)	✓					✓				✓	✓		✓	✓	
South Africa (36)	✓					✓	✓			✓	✓		✓	✓	✓
Bhutan (37)	✓					✓				✓	✓		✓	✓	

Annotations: A, name of person receiving service; B, symptoms, physical examination, laboratory results; C, problems encountered among service recipients; D, job title E = job task, F, the assessment date; G, consent; H, functional capacity evaluation (FCE); I, assessments of health and work conditions including name of disease; J, assessments of health and work conditions not including name of disease; K, length of time for absenteeism; L, details of appointments; M, doctor's opinion; N, name and signature of the physician; O, valid date

physician (100%), 2) assessment date and the doctor's opinion (97.1%), and 3) health condition, appropriate length of absence from work, and appointment (94.3%). Suggested additional information derived from the comments provided by the experts included: 1) adding the word "this is not a certificate of disability", 2) adding an expiration date of the certificate, 3) adding self-declaration; 4) adding numbered letter in parenthesis; and, 5) adding next appointment for conference between the doctor and company delegate.

In the second round, experts suggested five elements for inclusion in the certificate. Agreement on each of those elements was greater than 70%. All 19 elements in this round had a median Likert value of 5 with the exception of the last element, "date of appointment for conference between doctor and company delegate", which had a median value of 4.

In the third round, expert opinion median values were consistent with the second round. Differences in expert opinions from the second round can be divided into two groups: 1) opinions with a decreasing distribution (elements 8, 13, 15, 16, and 17) and 2) opinions with an increasing distribution (elements 3, 6, and 9) (Table 3). The final elements were aggregated based on a consensus of findings after the third round using the Modified Delphi. Figure 2 shows an example of a 'fit to work' certificate prepared in a format suitable for Thai culture and law.

In phase 2 of this study, 63.3% of the invited stakeholders (19/30) answered the questionnaires (Table 4). The average stakeholders' opinion level ranged between 3.53 and 4.58, with item 5 having the highest average score (Table 5). Opinions elicited by item 1 included: 1) training the physician on how to complete a 'fit to work' certificate might be necessary and 2) inappropriate time to issue the certificate in actual practice. Opinions elicited by item 2 included that in actual practice employees might be forced by the employer to consent to disclosure. Opinions elicited by item 3 included: 1) not practicable when there are many service recipients; 2) training of physicians might be necessary; and, 3) physicians might not

Table 2. Characteristics of the participating experts

Characteristics / Expertise	Experienced > 80 issues per year	Worked in hospitals with occupational medicine clinics	Worked in occupational medicine clinics	Worked as company doctor	Medical law specialist
OB-GYN	✓	✓			
Surgeons 1	✓	✓			
Surgeons 2	✓	✓			
Surgeons 3	✓	✓			
Internists 1	✓	✓			
Internists 2	✓	✓			
Internists 3	✓	✓	✓		
Orthopedists 1				✓	
Orthopedists 2	✓	✓			
Orthopedists 3	✓	✓			
Physiatrists 1	✓	✓			
Physiatrists 2	✓	✓			
Physiatrists 3		✓			
Psychiatrists 1		✓			
Psychiatrists 2	✓	✓			
Ophthalmologists		✓			
Otolaryngologists 1	✓	✓			
Otolaryngologists 2	✓	✓			
Otolaryngologists 3	✓	✓			
Forensic physicians 1		✓			
Forensic physicians 2		✓			
Forensic physicians 3		✓			
Forensic physicians 4		✓			
Emergency physicians 1	✓	✓			
Emergency physicians 2	✓	✓			
Family physicians 1	✓	✓			
Family physicians 2	✓	✓			
Family physicians 3	✓	✓			
OCC-MED physicians 1	✓	✓	✓		
OCC-MED physicians 2	✓	✓	✓		
OCC-MED physicians 3	✓	✓	✓		
OCC-MED physicians 4	✓	✓	✓		
Medical law specialists 1					✓
Medical law specialists 2					✓
Medical law specialists 3					✓

be able to identify every job site, so employers might need to re-evaluate. With respect to item 4, stakeholders felt that the content of the current medical certificate needed to be improved. Item 5 elicited two comments: 1) the company received information about the work practices of that employee; and, 2) the employee had adjusted the job task. Opinions elicited by item 6 included: 1) duration is dependent on the specific disease, and 2) it might be difficult to determine the time to return to work for some psychiatric diseases, particularly auditory hallucinations. The opinions of several employers elicited by item 7 cited economic factors that disrupted the return to work.

Table 3. Elements in the 'fit to work' note based on Thai expert opinions in phase 1

Element	Percentage that agreed in 1st round	Mdn 2nd round	IQR 2nd round	Mdn 3rd round	IQR 3rd round	Difference between Mdn and Mo in 3rd round	Consistency
1. Name of person receiving service	100.0	5	0	5	0	0	Yes
2. Job title	85.7	5	1	5	1	0	Yes
3. Job tasks	88.6	5	0	5	0.5	0	Yes
4. Assessment date	97.1	5	0	5	0	0	Yes
5. Health condition	94.3	5	0	5	0	0	Yes
6. Treatment condition	85.7	5	0.5	5	1	0	Yes
7. Consent	74.3	5	1	5	1	0	Yes
8. Functional capacity evaluation	82.9	5	1	5	0.5	0	Yes
9. Assessment: Fit/Fit with conditions/Unfit	82.9	5	0	5	0.5	0	Yes
10. Fit with conditions							
10.1 Phased return to work	80.0	5	1	5	1	0	Yes
10.2 Altered hours	74.3	5	1	5	1	0	Yes
10.3 Amended duties	85.7	5	1	5	1	0	Yes
10.4 Workplace adaptations	85.7	5	1	5	1	0	Yes
11. Doctor's opinion	97.1	5	1	5	1	0	Yes
12. Length of absence	94.3	5	1	5	1	0	Yes
13. Appointment	94.3	5	1	5	0	0	Yes
14. Name and signature of physician	100.0	5	0	5	0	0	Yes
Additional comments from round 1 (15.-19.)							
15. Wording "not a certificate of disability"	-	5	1	5	0	0	Yes
16. Expiration date of certificate	-	5	1	5	0.5	0	Yes
17. Self-declaration	-	5	1	5	0	0	Yes
18. Numbered letter in parenthesis	-	5	1	5	1	0	Yes
19. Add appointment for conference between doctors and company delegate	-	4	2	4	2	1	No

Table 4. Number of stakeholders participating

Stakeholders	Target	Participating
Obstetrician-gynecologists	2	1
Surgeons	2	2
Internists	2	2
Orthopedists	2	1
Physiatrists	2	1
Psychiatrists	2	2
Ophthalmologists	2	1
Otolaryngologists	2	2
Forensic physicians	3	1
Emergency physicians	3	1
Family physicians	3	2
Occupation medicine physicians	3	2
Medical Council and Medical Association	2	1

Table 5. Level of stakeholders' opinion

Question to elicit an opinion	Mean	Standard deviation
1. Each component in 'fit to work' note was suitable for the Thai context	3.59	1.02
2. Each component in 'fit to work' note did not contravene the law	4.05	1.03
3. 'Fit to work' note could be used in practice	3.53	1.17
4. 'Fit to work' note could convey problems between health problems and work.	4.11	0.88
5. A 'fit to work' certificate would benefit for society	4.58	0.61
6. A 'fit to work' certificate is a useful certificate that increases employees returning to work	3.68	1.00
7. A 'fit to work' certificate could increase the number of employees who are able to return to work	3.79	1.08

Discussion

The modified Delphi technique is recognized as the method of choice for developing guidelines or forms. The study design herein used this technique, which has three advantages. First, the diversity of representation of the expert group ensured a comprehensive range of opinions. Second, we designed an anonymous questionnaire for canvassing the experts' opinions. Third, the participants completed the entire Modified Delphi procedure without any dropouts after the first-round. Current medical certificates (29-33) include elements that contain the name of the disease, but elements derived from this research were different from them. The 'fit to work' certificate contains the element 'assessment of health and work conditions', but does not include the name of the disease. Health information is one of the types of confidential information in a 'fit to work' certificate that raises concerns about the privacy of personal information. The present form is the first medical certificate (risk-free ability to work certificate) in Thailand and South East Asia ever reported. It contains elements of health communication between physicians and stakeholders and can help stakeholders manage proper working under the health conditions and ethical issues.

Medical certificate for administrative purpose of employment

Part 1 for the patient who requests for the medical certificate

I, Mr./Mrs./Miss ....., Job title .....,
Job Task ..... would like to request for the medical certificate.

I (☐ agree / ☐ do not agree) to disclose personal information. Below is my health history.

1. chronic health condition/disease ☐ No ☐ Yes (please specify) .....

2. accident and operation ☐ No ☐ Yes (please specify) .....

3. hospital admission ☐ No ☐ Yes (please specify) .....

4. other important history (i.e., health condition, treatment condition)

.....

Signature ..... date ..... month ..... year .....

Part 2 for the physician

I, Dr. ....., medical license No. .....,

examined Mr./Mrs./Miss .....

on date ..... month..... year..... Details are as follows:

The functional capacity evaluation of him/her is (if relevant)

.....

I certify that the person is

☐ fit to work

☐ fit with condition as follows for ..... days

☐ phased return to work (please specify) .....

☐ altered hours (please specify) .....

☐ amended duties (please specify) .....

☐ workplace adaptations (please specify) .....

☐ other (if any) .....

☐ unfit for ..... days

Physician's opinion .....

I (☐ will / ☐ will not) need to reevaluate your fitness for work again.

This certificate will be valid for ..... month(s) ..... day(s) since the date of examination.

Signature .....Physician

Note: This certificate is not a certificate of disability.

Figure 2. Medical certificate

The medical certificates used in several countries include the same elements, e.g., the name of the person receiving the service plus the name and signature of the physician. These elements are found in all countries because they are used for basic identification (38). Health assessment results information can be divided into two forms: 1) assessments of health and work conditions including the name of the disease and 2) assessments of health and work conditions without the name of the disease. If the assessment includes the name of the disease, the form must include the consent of the patient. Example include the outpatient accident compensation form issued by the Medical Council of Thailand (31) and similar forms used in Canada (8), Australia (9), and South Africa

(36). The general medical certificate form issued by the Medical Council of Thailand (29) has a self-declaration section, but not a consent section. Although a review of the literature related to elements of medical certificates revealed that accessibility problems vary by country, the accessible elements are similar. The literature review thus constitutes part of the process of determining which elements should be contained in a 'Fit to work' certificate. The Modified Delphi technique can help reduce the problem of access to elements of the medical certificate in each country because the process allows experts to give additional comments in round 1 that ensure the comprehensiveness of elements in the 'fit to work' certificate.

All experts agreed that the identification elements, i.e., name of the person receiving the service and name and signature of the physician, should be included. Two elements, job title and job task, are needed because they describe the responsibilities and duties of the employee. Employees who have the same job title may, however, not have the same job task (39-40). Not all experts in Thailand agreed with these two elements because the medical record contains only an incomplete description of the job (41). Experts agree with the elements related to health conditions and treatment because these ensure employees are receiving benefits, and the information is needed for injury/illness statistics (42). Most experts also agree with the consent component because health information is personal. Currently, medical certificates in Thailand include the name of the disease, in contrast to the situation in other countries. In the current study, experts suggested that the name of the disease should not be included in the medical certificate. Disclosure of health information without consent is a legal offense, except in cases of prosecution (13-19,43). Experts agreed with the functional capacity evaluation (FCE) component because it is a tool for assessing the safety of returning to work (44). The current study addressed inclusion of elements in a format suitable for Thai culture and law, making adoption of our form generalizable to other nations with different cultures and mores. Similarly, the components in the current medical certificate do not conflict with international standards or laws.

Variations in expert opinion affected the IQR, but overall median values remained relatively constant for all components. According to the 2020 Thai Ministerial Regulations Prescribing Medical Examination Standards for employees Working on Risk Factors, a pre-placement medical examination is required examination by occupational medicine specialists or physicians must complete an occupational medicine training course (45). The lack of occupational medicine training leads to physicians in other fields disagreeing with elements about a job, thereby shifting the IQR. A return-to-work assessment requires the physician be treating the patient or to have qualifications in pre-placement examination (45). Physicians with experience in assessing patients before they return to work agree with including the foregoing, thereby shifting the IQR elements in the 'fit to work' certificate.

The experts' opinions in phase 1 of the current study confirmed which elements should be included in a 'fit to work' certificate and their opinions were consistent with the elements of medical certificates in other countries (7-10,34-37). Modifying elements of the medical certificate in Thailand would be beneficial for companies. Currently, Thailand does not have a law requiring the participation of occupational medicine physicians in companies, so inappropriate details in the medical certificate could result in cases of inappropriate return to work. Between 1964 and 2019, there were only 200 occupational medicine physicians in Thailand (46). Comparison of that number of occupational medicine physicians and the number of insured persons section 33 in 2019 (11,599,338) (47), indicates a shortage of occupational medicine physicians. Hence, including an agreed to set of elements in medical certificates would assist with proper management of sick or injured workers.

The stakeholders agreed with other research that a 'fit to work' certificate would reduce costs, depression, suicide, and economic problems. For example, Coombs (48) reported cost reductions, while Noordt et al. (2) reported a reduction in the

incidence of depression by 48.0% (95% CI: 33.0, 83.0). Zuelke et al. (3) found a 2.7-fold increase in depression among unemployed men (95% CI: 1.0, 4.6) vs. a 2.0-fold increase for unemployed women (95% CI: 1.2, 3.2). Training physicians on how to complete a 'fit to work' certificate might be required as suggested in a report by Chaiear et al. (49) who found medical students understood the role of occupational medicine and occupational health at only a medium level (85.7%) (95% CI: 79.0, 91.0). Stakeholders commented that increasing returning to work sooner or increasing the number of employees returning to work depended on many factors. Awang et al. (50) similarly found that factors affecting return to work included sex, employer interest, work motivation, age, duration of treatment, and the type of injury.

Organizations involved with medical certificates in Thailand include the Medical Council, the Medical Association of Thailand and the Ministry of Public Health. In some developed countries, the Ministry of Labor is involved in issuing medical certificates. The 2020 Ministerial Regulations Prescribing Health Examination Standards for Employees Working on Risk Factors issued by the Ministry of Labor prescribes health examinations in the following circumstances: preplacement, periodic, and return to work, while the 2019 Control of Occupational Diseases and Environmental Diseases Act issued by the Ministry of Public Health prescribes health examination for fit to work assessment, periodic, and return to work. The 'fit to work' certificate can be used to assess all health conditions. The study population-including physicians (issue certificated) and medical law specialists- together developed elements of a 'fit to work' certificate and ensured that the included elements did not contravene any existing legal statutes. We decided not to include the employee and workplace decision-makers in this study, which could be considered a limitation to phase 2, so further study which includes stakeholders from outside the medical profession could result in additional opportunities to use this new medical certificate in practice. The stakeholders' opinions of the medical certificate developed in phase 1 was based on a questionnaire-a preliminary development that still needs to be presented to the committee involved in certifying the certificate for general use. In order to validate the results in phase 2 of the current research, further comparisons are needed between the current medical certificate and the proposed replacement.

Conclusions

The study identified appropriate elements for a medical certificate for employment purposes in Thailand. The elements of the certificate are consistent with those of other developed and developing countries. The certificate should not reveal personal information about the individual because health information is confidential by law, e.g., the 2019 Personal Data Protection Act. Having a 'fit to work' certificate would help companies better assess employees' health status better than the current medical certificate, the use of which is constrained by the small number of occupational medicine physicians. Training general physicians on how to complete and issue a 'fit to work' certificate might be required.

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Conflict of interests

The authors declare no conflict of interest.

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การพัฒนาใบรับรองแพทย์ที่เหมาะสมในการให้ความเห็นในการทำงาน

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วัตถุประสงค์ เพื่อพัฒนาใบรับรองแพทย์ที่แสดงความสามารถในการทำงานโดยปราศจากความเสี่ยงให้มีรูปแบบที่เหมาะสมกับบริบทของประเทศไทย และ เพื่อศึกษาความคิดเห็นของผู้มีส่วนได้เสียกับใบรับรองแพทย์ที่แสดงความสามารถในการทำงานโดยปราศจากความเสี่ยง

วิธีการ เป็นการศึกษาแบบเทคนิคเดลฟายแบบปรับปรุง ศึกษาในกลุ่มผู้เชี่ยวชาญสาขาทางคลินิก 13 สาขาและ ผู้เชี่ยวชาญด้านกฎหมายทางการแพทย์ โดยการศึกษาแบ่งเป็น 2 ระยะได้แก่ ระยะที่ 1 ประกอบไปด้วยการเตรียมแบบสอบถามจากองค์ประกอบที่ได้จากการทบทวนใบรับรองแพทย์และศึกษาความเห็นผู้เชี่ยวชาญ และระยะที่ 2 ศึกษาความเห็นของผู้มีส่วนได้เสียซึ่งทำงานในวิชาชีพแพทย์แต่ละสาขาที่แตกต่างกัน

ผลการศึกษา ผลการทบทวนใบรับรองแพทย์ ควรมีทั้งสิ้น 14 องค์ประกอบ จากการศึกษาในรอบที่ 1 ในกลุ่มผู้เชี่ยวชาญพบว่าผู้เชี่ยวชาญเห็นด้วยในทุกองค์ประกอบและมีความเห็นเพิ่มเติมอีก 5 องค์ประกอบ ในรอบที่ 2 พบว่าผู้เชี่ยวชาญเห็นด้วย โดยมีค่ามัธยฐานอยู่ระหว่าง 4-5 ในขณะที่การสอบถามความเห็นรอบที่ 3 ผู้เชี่ยวชาญเห็นด้วยกับทุกองค์ประกอบยกเว้น องค์ประกอบที่ 19 การศึกษาระยะที่ 2 พบว่าองค์ประกอบเหล่านี้มีความเหมาะสมกับบริบทของประเทศไทย

สรุป ไม่มีองค์ประกอบใดที่ขัดต่อกฎหมายไทยโดยเฉพาะอย่างยิ่งการรักษาความลับของข้อมูล ดังนั้นจึงสามารถใช้ในการรวบรวมข้อมูลปัญหาสุขภาพที่เกี่ยวข้องกับสถานที่ทำงาน เพื่อที่จะทำให้ลูกจ้างพร้อมที่จะทำงานและสามารถกลับเข้าทำงานได้ การอบรมแพทย์ในการเขียนใบรับรองแพทย์ (หรือแบบรับรองสุขภาพ)ที่แสดงความสามารถในการทำงานโดยปราศจากความเสี่ยงอาจมีความจำเป็น **เชียงใหม่เวชสาร 2564;60(4):449-62. doi: 10.12982/CMUMEDJ.2021.40**

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