

Table 1: Preconception Care Interventions

Services	Intervention
Folic acid supplementation	Advise 0.4 mg of folic acid daily (4 mg if previous pregnancy with neural tube defect) three months prior to conception.
Smoking cessation	Educate about the risks of smoking during pregnancy and counsel about smoking cessation.
Anemia screen	Check hematocrit/CBC and recommend iron supplement if anemia is detected.
Testing for rubella antibody	Check IgG rubella antibody before conception. If the test is negative, vaccinate and avoid conception for three months.
Alcohol restriction	Screen for alcoholism by using a validated questionnaire, and counsel or refer if positive screen.
Restricting caffeine	Restrict caffeine intake to less than 250 mg a day.
Exercise	Advise regular to moderate exercise before and during pregnancy.
Calcium supplementation	Assess calcium intake and as needed supplement for a target of 1200 mg daily.
Use of basal body temperature*	Conduct basal body temperature every morning to identify the day of ovulation.
Timing of intercourse*	Advise intercourse every other day around time of ovulation to maximize chances of conception.

*For couples having difficulty conceiving

Table 2: Participant Demographics (n = 268)

	n	(%)
Gender		
Male	230	(85.8)
Age		
Mean (range)	40.1 (25–73)	
Period after graduating from med school (yrs)		
Mean (range)	14.4 (1–26)	
Specialty (total response = 308)*		
General Internal Medicine	140	(45.5)
Family Medicine	102	(33.1)
Specialty in Internal Medicine	19	(6.2)
General Medicine	10	(3.2)
Surgery	8	(2.6)
Pediatrics	8	(2.6)
Psychiatry	6	(1.9)
Orthopedics	5	(1.6)
Others	10	(3.2)
Experiences of out-patient training in		
Pediatrics	160	(59.7)
OB/GYN	99	(36.9)
Average number of patients per week		
All	142 /wk	
Reproductive women	11 /wk	
Average number of patients by age		
Child (0–15)	15.3	(8.9)
Adolescence (16–19)	9.5	(7.0)
Adult (20–64)	43.9	(35.0)
Elderly (65 and more)	69.5	(49.4)

*multiple responses were possible

listed in Table 2. Most were men (86%) and the mean age was almost 40 years. Most physicians reported seeing reproductive-aged women in their offices.

With regard to educational experiences in preconception counseling during medical school and residency training (Table 3), most participants reported they had received little. The most common relevant training they reported receiving included: smoking cessation (71%), screening for anemia (64%), and blood testing for rubella antibody (58%). Few reported training experiences in providing folic acid supplementation (12%), timing of intercourse to maximize chances of conception (14%), or exercise during pregnancy (18%).

Preconception care practices of the respondents are depicted in Table 4. Many participants reported often or always addressing smoking cessation with reproductive-aged women (60%). Some reported they provide screening for anemia (35%) and counseling about restricting alcohol intake (27%). Few reported they addressed either calcium intake through foods/supplements (10%), or folic acid supplementation (4%).

Their attitudes about providing preconception care are depicted in Table 5. About two thirds of participants reported their willingness to provide preconception care about such topics as calcium intake (70%), blood testing for rubella antibody (69%), and restricting caffeine intake (64%). On the other hand, some expressed dissatisfaction with counseling about timing of intercourse to maximize chances of conception (46%), and use of basal body temperature monitoring (22%). More than 60% reported their willingness to provide folic acid supplementation, though one in four stated they would not provide it. Almost all participants think medical students (95%), and residents (91%), should have education in preconception care.

Though the instrument did not have open-ended questions, a number of respondents (n = 69, 26%) provided

Table 3: Japanese family physicians' experiences in preconception education during medical school and residency training (n = 268)

	n	(%)
Smoking cessation	191	(71.3)
Testing for anemia	172	(64.2)
Blood testing for rubella antibody	156	(58.2)
Use of basal body temperature monitoring	125	(46.6)
Restricting alcohol intake	120	(44.8)
Increasing calcium intake	86	(32.1)
Restricting caffeine intake	52	(19.4)
Exercise during pregnancy	48	(17.9)
Timing of intercourse to maximize chances of conception	38	(14.2)
Folic acid supplementation	31	(11.6)

Table 4: Japanese family physicians' self-reports of preconception care in their clinical practice (n = 268)

	Never/Almost Never		Sometimes		Often/Always		No Response	
	n	(%)	n	(%)	n	(%)	n	(%)
Timing of intercourse to maximize chances of conception	222	(82.8)	20	(7.5)	9	(3.6)	17	(6.3)
Folic acid supplementation	217	(81.0)	24	(9.0)	11	(4.1)	16	(6.0)
Exercise during pregnancy	198	(73.9)	32	(11.9)	20	(7.5)	18	(6.7)
Testing for rubella antibody	180	(67.2)	55	(20.5)	21	(7.8)	12	(4.5)
Increasing calcium intake	168	(62.7)	61	(22.7)	27	(10.1)	12	(4.5)
Restricting caffeine intake	166	(61.9)	55	(20.5)	31	(11.6)	16	(6.0)
Use of basal body temperature monitoring	157	(58.6)	60	(22.4)	38	(14.2)	13	(4.9)
Restricting alcohol intake	107	(39.9)	74	(27.6)	72	(26.9)	15	(5.6)
Testing for anemia	56	(20.9)	112	(41.8)	94	(35.1)	6	(2.2)
Smoking cessation	37	(13.8)	63	(23.5)	162	(60.4)	6	(2.2)

Table 5: Japanese family physicians' willingness to provide preconception care in their practice (n = 268)

	Currently Provide		Willing to Provide		Would Not Provide		No Response	
	n	(%)	n	(%)	n	(%)	n	(%)
Smoking cessation	154	(57.5)	103	(38.4)	5	(1.9)	6	(2.2)
Screening for anemia	103	(38.4)	145	(54.1)	11	(4.1)	9	(3.4)
Restricting alcohol intake	90	(33.6)	143	(53.4)	26	(9.7)	9	(3.4)
Use of basal body temperature monitoring	61	(22.8)	137	(51.1)	59	(22.0)	9	(4.1)
Restricting caffeine intake	42	(15.7)	171	(63.8)	42	(15.7)	13	(3.8)
Blood testing for rubella antibody	41	(15.3)	186	(69.4)	30	(11.2)	11	(4.1)
Increasing calcium intake	37	(13.8)	18	(7.0)	34	(12.7)	9	(3.4)
Exercise during pregnancy	30	(11.2)	165	(61.6)	57	(21.3)	16	(6.0)
Folic acid supplementation	14	(5.2)	170	(64.1)	68	(25.4)	16	(6.0)
Timing of intercourse to maximize chances of conception	14	(5.2)	114	(42.5)	122	(45.5)	18	(6.7)

comments indicating they had been unaware of the recommendation for women to take folic acid supplementation and they were pleased to learn from the survey about

this important issue. In contrast, a few (n = 11, 4%) stated they did not understand why FP/GPs should provide preconception care.

There were no statistical or clinically meaningful differences between the reports of physicians who reported their specialty as family medicine and physicians who reported their specialty as general internal medicine.

Discussion

The movement to establish family medicine in Japan started at least 20 years ago.[7] There has been much debate about whether Japanese family physicians should provide obstetric and other women's health care. There are few FP/GPs who provide OB care in Japan.[22] Our study reveals that few FP/GPs have educational experiences in the provision of preconception care, and few actually provide this care in their practices. However, it also reveals their willingness to provide preconception care in the future after appropriate educational experiences.

Japanese FP/GPs seem reluctant to inquire about human sexuality issues.[23] In the current study, some reported they could not ask patients about future pregnancy plans during a routine acute visit. Our results show FP/GPs in Japan are not accustomed to addressing preconception-related topics (timing of intercourse, folic acid supplementation, exercise during pregnancy), while they are familiar with more general topics (smoking cessation, screening for anemia, calcium intake). FP/GPs are in the unique position to provide health care services to male and female patients of all ages,[24,25] and they have many opportunities to discuss patients' concerns. For example, young parents do not often visit family physicians for their own health problems, but do come for their children. At these visits, family physicians can also discuss family planning. For this reason, FP/GPs in Japan need training in women's health care, even if they will not provide deliveries in the future. We hope these data will provide a catalyst for dialogue among Japan's FP/GPs about regular provision of preconception counseling.

Remarkably, only 10 % of participants reported knowledge of folic acid supplementation and few reported providing this care. Yamanaka surveyed pregnant women about the importance of folic acid.[26] This research revealed that only 8% reported they knew well about its importance, and 46% stated they did not know at all. Furthermore, the small percentage of participants who knew well about the importance of folic acid reported that they learned it from a newspaper, TV, or magazine, while only 16% learned it from medical professionals. Based on these data, Yamanaka emphasized that medical professionals should provide correct and concise information about folic acid.

As the MHLW only recently recommended folic acid supplementation to reproductive-aged women,[15] it is not

too surprising that many FP/GPs do not know the importance of folic acid and few provide this care. The JAFM was not included in the list of organizations notified of the MHLW policy change. Based on these data it is clear that its membership is interested in women's health issues and should be included in notifications about women's health policy changes formulated at the government level.

About 70% of participants reported they are willing to screen women for rubella antibody, though almost 70% reported not providing this care in their practice. Given the historic mistrust of the rubella vaccine and the low rate of vaccination in Japan,[16] Japanese family doctors need to proactively address the topic. The lack of mandatory vaccination is a loophole in public health policy[16] and highlights why screening women of childbearing potential for rubella antibody is especially important. Delay in testing, and hence immunization, leads to an increased risk for congenital rubella, a highly serious disease. Non-immune pregnant women should post-pone rubella vaccination until after delivery.

Japan's FP/GPs must learn to provide preconception counseling in order to close this important gap in women's health. Fortunately, many of these respondents are willing to provide some level of preconception care even though they currently are not – presumably due in part to a lack of educational experience. Japan's FP/GPs need educational materials and clinical tools to encourage women to make an office visit and receive preconception care. Family medicine training in Japan heavily emphasizes adult and geriatric medicine with little emphasis on prenatal, newborn, children, adolescent, or women's health.[7,21,27] Initial efforts to disseminate information about preconception care are underway through the medical literature,[25] though other educational efforts will no doubt be needed. Data from Japanese women from Japan who are on temporary assignment in the United States, illustrate low levels of knowledge about prenatal folic acid supplementation and resistance to take supplements.[28]

A potential limitation of this study is selection bias. The participants are limited to physician members of the JAFM and the data might not reflect the current situation of all FP/GPs in Japan. This bias would likely favor the most motivated physicians and the estimates herein probably represent the upper limits of willingness to provide preconception care by the population of primary care providers in Japan. If this interpretation is correct, the need for public campaigns about the importance of preconception care and training of Japan's family physicians are even more imperative.

Despite compelling evidence of the effectiveness of folic acid supplementation and other preconception care for the reduction of serious birth defects at a very low cost, these data provide evidence that the WHO's message about the importance has not filtered down to the clinical level even in a developed country like Japan. Continued efforts to spread and diffuse the WHO's message are desperately needed for the advancement of maternal-child health.

Conclusion

Our study reveals that many Japan's FP/GPs have limited training in preconception care and few currently provide it. Most participants report their willingness to provide preconception care themselves and educational campaigns are needed to enhance preventive care provided by FP/GPs in Japan.

List of abbreviations used

CBC – complete blood count

FP/GPs – family physicians and general practitioners

IgG – immunoglobulin G

JAFM – Japanese Academy of Family Medicine

mg – milligrams

MHLW – Ministry of Health, Labour and Welfare

OB/GYN – obstetrics and gynecology

RCT – randomized controlled trial

SPSS – Statistical Package for the Social Sciences

WHO – World Health Organization

wk – week

Competing interests

The author(s) declare that they have no competing interests.

Authors' contributions

KK contributed to the conception and study design, performed data analysis, interpretation, and draft the manuscript. MDF contributed to the conception and study design and critical revision of the manuscript. NB participated in the study design and critical revision of the manuscript. All authors read and approved the final manuscript.

Acknowledgements

We gratefully acknowledge all responding physician members of the Japanese Academy of Family Medicine.

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Pre-publication history

The pre-publication history for this paper can be accessed here:

<http://www.biomedcentral.com/1471-2296/6/31/prepub>

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Continuing care of chronic illness: Evidence-based medicine and narrative-based medicine as competencies for patient-centered care

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Abstract: The longitudinal care of patients with chronic illnesses is one of the most central responsibilities of a family physician's practice. To the patient-physician relationship, the patient brings his needs – arising from his prior life experiences, current life situation, resources, and explanatory models of illness. The physician brings expertise and evidence about the best care for the disease. The bridge connecting these two worlds is narrative-based medicine (NBM). An essential competency for the best care of patients with chronic illness is an amalgamation of evidence-based medicine (EBM) and NBM, based upon an underlying infrastructure of behavioral science. Although such knowledge, skills, and attitudes are essential, the very best longitudinal care develops over time and requires careful observation by physicians.

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Key words: chronic illness, continuing care, evidence-based medicine, narrative-based medicine.

Introduction

In Japan family medicine is not yet recognized as a specialty. Therefore, a certification system for family physicians has not been developed. Until recently, there were few academic departments focusing on general medical practice. However, in recent years the Ministry of Education, Culture, Sports, Science and Technology, which is responsible for undergraduate medical education, has supported the establishment of departments focusing on general medical practice, usually called Department of General Medicine. Currently, approximately half of the 80 medical schools in Japan have Departments of General Medicine. These departments serve as an academic base for physicians who teach and conduct research in family medicine.

During this initial period of the founding of these departments of general medicine, there has been considerable confusion about the role of generalist physi-

cians. Popular conceptions of generalist physicians encompass family physicians, general internists, and emergency medicine specialists. While it may seem strange to those from countries where primary care is well-developed, few people in Japan, even within medicine, understand that these three specialties require different clinical competencies. This has been a source of confusion; family physicians are not clearly differentiated from other specialists.

Continuity of care is the one ideal that perhaps most distinctively differentiates family physicians from emergency medicine specialists. Other fundamental characteristics of primary care, such as accessibility, comprehensiveness, coordination, and accountability can be characterized as shared ideals. Thus, here I would like to focus on continuity of care for patients with chronic illness and the attendant required clinical competencies.

Competencies required for care of chronic illness

Evidence-based medicine

What might the clinical competencies required for care of chronic illness be? To take the best care of the

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Accepted for publication 15 April 2003.

patients with chronic illness, we must practice evidence-based medicine (EBM), defined as 'the conscientious, judicious and explicit use of current best evidence in making decisions about the care of individual patients.'¹ For example, tight control of glucose should be encouraged for patients with diabetes, even if it is cumbersome or inconvenient because the evidence clearly shows that they will thereby have a better quality of life in the long run. To stay abreast of the current evidence, we must be familiar with how to access the relevant evidence and stay attuned to current guidelines for various commonly encountered chronic illnesses.

One aspect of EBM that receives comparatively little attention is that genuine evidence-based practice presuppose an *interpretive paradigm*, within which the patient experiences illness and the clinician-patient encounter is enacted.² Compared with other types of medical care, in the continuing care of chronic illness, a mutually respectful and intimate clinician-patient relationship, within which illness is understood as a unique human experience, is of paramount importance. The knowledge, skills, and attitude necessary for understanding illness as a unique human experience are characterized by Greenhalgh and Hurwitz as narrative-based medicine (NBM).²

Narrative-based medicine

Illness is the realm inhabited by the sick person, whereas disease categories are often quite crude maps that health professionals use to interpret the sick person's experience, from the other side of the wellness-illness divide.² As Ian McWhinney writes,³

'It is not easy for us to attend to our patients' experience. To do so requires us to step out of our usual way of attending to a person's illness. We are trained to see illness as a set of signs and symptoms defining a disease state – as a case of diabetes or peptic ulcer or schizophrenia. The patient, on the other hand, sees illness in terms of its effects on his or her life. The physician therefore must learn to see illness as it is lived through, before it has been categorized and interpreted in scientific terms.'

To account for each patient's story as an individual one is an extremely important clinical competence in the care of patients with chronic illness. If the clinician does not possess this competency, the most up-to-date, evidence-based knowledge of the clinician cannot be put to good use, for it is often compromised by poor adherence on the part of patients. Studies show that only 50% of patients being treated for chronic conditions are taking their medications as prescribed at any given time; and only 10 to 35% of patients follow through with recommended lifestyle changes.⁴

Nonadherence is often a reflection of inadequate attention to making care patient-centered.

For example, a diabetic patient may have sufficient knowledge about the diet and exercise recommended for her, but feels unable to adhere to them because of the stress that she feels from her mother-in-law living with her family. This patient sees eating as the only outlet for her stress. Typically, a clinician might urge better adherence to the diet and exercise regimen, drawing upon the evidence that this will improve her glucose control. However, without an understanding of the patient's lifeworld, including her social situation and her core values, the clinician might find that all his blandishments are useless. To elicit the reasons for her nonadherence and understand the sources of her stress, the clinician must be receptive, empathic, and attentive in listening to her story.

Further, this entails a relationship-centered (in contrast to a physician-centered or patient-dominated) approach.⁵ Such an approach integrates the perspectives of both patient and physician and acknowledges that both have unique interests and contributions to make to the care process. The patient brings his needs based on his experience, situation, resources, and explanatory model. The physician brings expertise and evidence about the best care of the disease. In a relationship-centered approach, power is shared. The encounter is negotiated to reflect the interests, concerns, and needs of each participant; physician and patient collaborate in defining the goals and methods of treatment. Thus, an attentive and relationship-centered approach is an important aspect of NBM.

Behavioral sciences – the intellectual infrastructure for the care of chronic illness

In addition to the competencies of EBM and NBM, I would like to emphasize a third competency essential for the successful care of patients with chronic illnesses. This is the ability to provide care for the psychological aspects of patient's illnesses. This competency consists of knowledge of behavioral science and skills in communication. Chronic illnesses can affect people's lives tremendously, often entailing significant changes in areas such as daily activities, sexuality, emotional responses, and relationships.⁶ Chronic illnesses can cause a variety of emotions such as denial, anger, depression, and anxiety, though not all people experience such emotions, and not always in a particular sequence. For example, we often encounter patients whose depression needs to be alleviated first in order to make possible proper control of chronic illness. Practitioners caring for patients with chronic illness need to be attuned to such commonly encountered emotions and equipped with effective intervention skills.

Conclusion

In summary, to care for patients with chronic illnesses, physicians must have competence in EBM and NBM as well as competence in behavioral medicine. Acquiring such competencies can be said to be the learners-centered task necessary for a biopsychosocial approach to medicine. However, the very best care for patients with chronic illness goes even further, beyond such cognitive (knowledge), psychomotor (skill), and affective (attitudinal) competencies. Indeed, understanding of a patient's existential situation – deriving from longitudinal interaction between the physician and the patient and his family – is perhaps what is needed to

truly respond to the patient's needs and truly satisfy both parties. It is difficult, however, to turn such a goal into a learning objective for trainees, for such relationships can only be developed over time and requires careful observation on the part of the physician.

Acknowledgments

I would like to thank Seiji Yamada, MD, MPH, Hawaii/Pacific Basin AHEC Program and the Office of Medical Education, University of Hawaii at Manoa, John A. Burns School of Medicine, for his editorial and writing assistance.

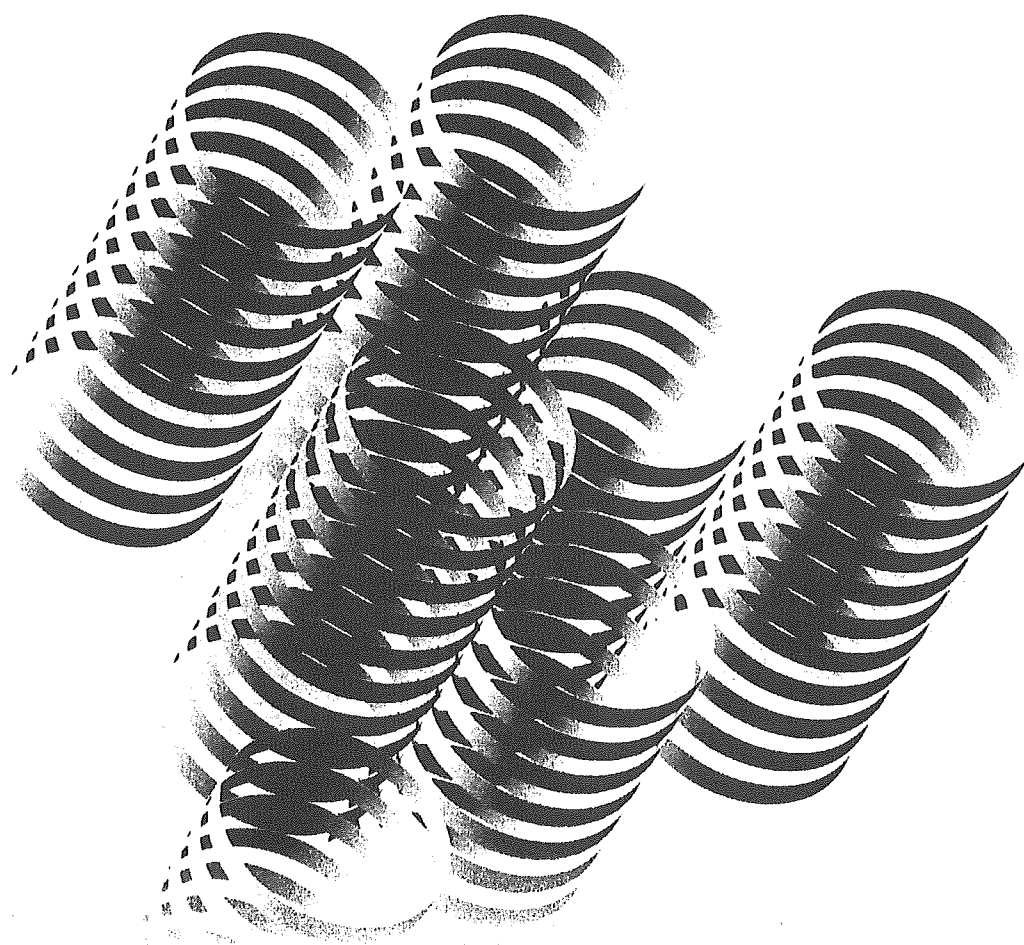
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X 内分泌・代謝・栄養疾患	100
XI アレルギー性疾患、膠原病、免疫病	104
XII 感染性疾患	106
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医師国家試験設計表（ブループリント）の平成13年版と平成17年版との対比	

医師国家試験改善検討委員会報告書（概要）

I. 趣 旨

臨床研修の必修化など医師の資質の向上に向けた取り組みが行われている中、改めて現状の医師国家試験を評価し、医師国家試験の改善を行うため、平成14年7月に「医師国家試験改善検討委員会」を再開し、ワーキンググループでの審議を含め、計7回の審議を行い、今般改善事項を取りまとめた。なお、これらの改善事項は平成17年（第99回）の試験から適用することが望ましい。

II. 医師国家試験改善検討委員会報告書の概要

1. 平成17年（第99回）の試験からの改善事項

(1) 出題数・出題内容

出題数は引き続き500題とし、出題内容としては基本的な診療能力に関する出題の充実を図りつつ、医の倫理・患者の人権、医療面接等にも配慮した出題にも考慮する。

臨床実地問題は臨床実習の成果が反映される問題を出題する。

試験設計表（ブループリント）により各項目ごとの規定数を引き続き規定する。

(2) 合否基準

合否基準は引き続き現行の合否基準を踏襲する。具体的には、必修問題に対しては絶対基準、一般問題・臨床実地問題に対しては各々平均点と標準偏差を用いる相対基準を用いる。また、禁忌肢を選択した場合はこれまでどおり合否の判断に採用する。

(3) 試験問題の公募、プール制の導入、試験問題の回収

公募問題は採点対象として出題することは十分可能であると評価されることから、試験問題や視覚素材の公募範囲を臨床研修病院や日本医師会等に適宜拡大するとともに、ブラッシュアップ体制を強化・効率化を行い、当面、約1万題程度（将来的には数万題）の試験問題を蓄積し、プール制へ移行する。

また、良質な試験問題を繰り返し出題するために引き続き試験問題の回収を行う。

(4) 試験の早期化

臨床研修の必修化を踏まえ、医師国家試験を2月第3週頃に実施し、合格発表を3月中に行う。

2. 改善する方向性が定まった事項

受験回数制限は将来的な導入に向けて具体的な方策を検討する。

実技試験（OSCE）は卒前教育における普及等を踏まえて導入する。

3. 関係機関への要請事項

全国の大学医学部・医科大学に対して、試験問題の公募への協力を依頼するとともに、臨床実習等の評価法として実技試験（OSCE）の実施の拡充や臨床実習前の共用試験の充実を要請する。また、試験の早期化に対する協力を要請する。

医師国家試験出題基準改定部会

	氏名	所属
部会長	相川直樹	慶應義塾大学医学部
参与	齊藤英彦 柳澤正義 兼松隆之 松枝啓志 吉本高光源 佐藤中平三 田本庶佑也 櫻井秀也	国立病院機構名古屋医療センター 国立成育医療センター 長崎大学医学部 国立精神・神経センター 東北大学医学部 東北福祉大学 国立健康・栄養研究所 京都大学医学部 日本医師会
専門委員		
第98回国家試験		
委員長	池ノ上克博	宮崎大学医学部
副委員長	小峰光博	宮昭和大学医学部
必修・保健医療論	◎伴信太郎 ◎松村理司 ◎鳥崎修次 ◎伊藤澄信 ◎北村聖隆 ◎中原俊隆 ◎佐藤洋勝 ◎那須勝武 ◎加藤尚武 ◎石川雄一子 ◎齋藤慶一子 澄川耕二 千野直一 高津光洋 根本則道 鏡山博行 清田正夫	名古屋大学医学部 洛和会音羽病院 杏林大学医学部 順天堂大学医学部 東京大学医学教育国際協力研究センター 京都大学医学部 東北大学医学部 大分大学医学部 鳥取環境大学 日本ヘルスサイエンスセンター 高仁会戸田病院 長崎大学医学部 慶應義塾大学医学部 東京慈恵会医科大学 日本大学医学部 大阪医科大学 東京医科歯科大学医学部
周産期	◎石川睦男 村田雄二	旭川医科大学 大阪大学医学部
皮膚・頭頸部	◎飯塚一 橋本公二 ◎北原健二 小口芳久	旭川医科大学 愛媛大学医学部 東京慈恵会医科大学 慶應義塾大学医学部

	◎森古熊	山川谷憲	寛俣夫	東京慈恵会医科大学 聖マリアンナ医科大学	
呼吸器・循環器	◎松黒清	崎澤藤水	益博翔信	徳身二義	山口女子医科大学 日本医科大学
消化管・肝・膵	◎清川	澤崎場山	研誠忠勝	道治雄義	信州大学医学部 天竺堂大学医学部 滋賀大学医学部
腎・泌尿器・性器	◎伊榎	藤野村場	貞博唯志	嘉史一郎朗敬	東北大学医学部 山崎大学医学部 東京里塾大学医学部 東北慶群馬大学医学部
精神・神経・運動器	◎神庭	藤須賀	重達研英	信雄二洋夫	九州大学医学部 東京女子医科大学 産業医科大学 東京医科歯科大学医学部
血液・内分泌・アレルギー	◎原堀	田田原坂	実知和信	根光夫之	九州大学医学部 東海大学医学部 神戸大学医学部 東京医科歯科大学医学部
生活環境	◎稲相多	葉澤田羅	裕好浩	裕治三	順天堂大学医学部 天里大学医学部 大阪大学医学部
小児	◎青鈴	木沼宮水	継一晃祥	稔仁宇一郎代	東邦大学医学部 福島県立医科大学 東北大学医学部 天会鹿児島こども病院 九州大学医学部
放射線	◎福松	田井	国彦修		東京慈恵会医科大学 聖マリアンナ医科大学

(注) ◎は幹事委員を示す。

医師国家試験出題基準の利用法

{はじめに}

医師国家試験は、医師法第9条に基づき「臨床上必要な医学及び公衆衛生に関して、医師として具有すべき知識及び技能について」行われる。また、医師法の一部改正により、平成16年4月1日から臨床研修が必修化され、同法第16条の2において、診療に従事しようとする医師は、2年以上、臨床研修を受けなければならないとされていることから、第9条にいう「知識と技能」とは、医療に第一歩を踏み出し、指導医の下でその任務を果たすのに必要な基本的知識及び技能であると考えられる。

その内容を具体的な項目によって示したのが、医師国家試験出題基準である。医師試験委員会は、医師国家試験の妥当な内容、範囲及び適切なレベル等を確保するため、この基準に拠って出題する。

従って、医師国家試験出題基準は医科大学（医学部）の卒前の教育で扱われている内容の全てを網羅するのではなく、また、これらの教育のあり方を拘束するものではない。

{利用方法}

利用者は以下の各項に従う。

なお、各項目は、医師国家試験問題の出題範囲という観点から配列されているため、必ずしも学問的な分類体系と一致しない点がある。

1. 大・中・小項目、備考欄

- (1) 大項目は、中項目を束ねる見出しである。
- (2) 中項目には、医師国家試験の出題範囲となる事項名・疾病・障害名を示している。
- (3) 小項目の取扱は、次の通りである。

- ① 中項目に関する内容のうち、さらに出題範囲を限定する場合。

例： 〈中項目〉 〈小項目〉
 F 心臓腫瘍 粘液腫、転移性腫瘍

* 「心臓腫瘍」では、「粘液腫、転移性腫瘍」に関する問題しか出題できない。

- ② 小項目が空欄の場合には、中項目に関し、標準的な学生用教科書に記載されている程度の内容が出題範囲となる。

なお、医学総論と医学各論で小項目の記載量が大きく異なるが、これは、医学総論においては中項目に示す内容が幅広く出題範囲をさらに限定することが必要と考えられた項目が多数あるためである。

医学各論においては、中項目に掲げられた疾病・障害名に関する定義、病因、疫学、病理、病態生理、分類、症候、検査、診断、合併症、治療、予後、予防、社会的事項等について、標準的な学生用教科書に記載されている程度の知識を要求することとする。また、医学各論の小項目については、原則として範囲の限定を行わないこととしたが、疾病・障害によっては、専門レベルの疾患・障害を除外し、学生として当然知識を有しておくべき疾患のみに限定したものもある。

- (4) 備考欄は、次のいずれかにあたる内容を示している。但し、出題範囲を限定するものではない。

- ① 人名等固有名詞を冠した症候名等が出題範囲となる場合。
- ② 中項目に関する内容のうち、特に重要な項目である場合。

2. 医師国家試験設計表（ブループリント）について

各項目・評価領域ごとに出題割合を規定したものである。

利用者は、以下の各項に従う。

(1) 必修の基本的事項

「必修の基本的事項」では、各大項目に出題割合を記載している。

これは、「必修の基本的事項」における問題全体のうち、当該大項目に関する問題の出題割合を示している。

(2) 医学総論及び医学各論

「医学総論」及び「医学各論」では、各章と各大項目に出題割合を記載している。

各章に記載されている出題割合は、当該章に関する問題の医学総論（又は医学各論）全体に対する割合を示しており、また、大項目に記載されている出題割合は、当該大項目のその章全体に対する割合を示している。

(例) [医学総論] I 保健医療論 約10%

3 地域保健、地域医療（約15%）

※ [医学総論] において、「I 保健医療論」に関する問題が全問題の約10%出題し、さらに「I 保健医療論」の問題のうち、「3 地域保健、地域医療」に関する問題が約15%（[医学総論] 全体からみると約1.5%）出題する。

3. その他

- (1) 専門領域等により同一事象に対し異なる表現がある場合には、カッコ書き等によりどちらも使用可能とした。

また、カッコは以下のルールにより使用した。試験委員会の判断により、カッコ内、外の語を適宜使用できる。

() : 省略しても意味または分類の変わらない語 例 蛋白(質)

< > : 直前の語の言い換えまたは説明

例: 世界保健機構 <WHO>、外耳 <耳介、外耳道、鼓膜>

[] : < > の中に < > がある場合の大きい括り

{ } : 「主な検査項目の表記」における、表記の例示

- (2) 疾病名・障害名等は、一部で各論の章に重複して記載されている。重複していない項目についても、章または大項目の標題である臓器・病態に限定されず出題することができる。また、年齢・性による違いに注目して出題することができる。
- (3) 必修の基本的事項の「11 主要疾患・外傷・症候群」で、「A 基本的疾患・症候群」にあげられている疾患等については、その疾患等の基本的事項について出題し、「B その他の疾患・症候群の主要徴候とプライマリ・ケア」にあげられている疾患等については、文字どおり主要徴候とプライマリ・ケアに限定した問題を出題する。
- (4) 医学総論の「Ⅲ 人体の正常構造と機能」に関しては、臨床的事項を理解するのに必要な内容に限って出題する。

平成17年医師国家試験出題基準・ブループリントの趣旨

1 医師国家試験出題基準とは

(1) 定義

医師国家試験出題基準（ガイドライン）は、医師国家試験の「妥当な範囲」と「適切なレベル」とを項目によって整理したもので、試験委員が出題に際して準拠する基準である。

(2) 基本的考え方

- ① 「必修の基本的事項」は、プライマリ・ケアを主題とする出題であり、利用できる機器は聴診器、血圧計等簡単な機器のみであって、口頭や通常の身体診察で行える内容（面接、診察のみ）とする。また、多科にまたがるような基本的な問題を出題する。
- ② 「医学総論」、「医学各論」では、原則、我が国のどの医療機関であっても対応できるような内容に限定する。

(3) 卒前教育との関係

大学医学部・医科大学における医学教育は、大学の自主性に基づいて実施されているが、大学医学部・医科大学卒業後、医師国家試験に合格し、登録されると医師となるのであるから、医師の任務を果たすのに必要な内容は一連の医学教育に含まれるべきものである。一方、試験委員が準拠する出題基準は、医師が医療の場に第一歩を踏み出す際に少なくとも具有すべき基本的知識・技能を項目により具体的に示したものである。これは、卒前教育の全てを網羅するものではなく、また、卒前教育のあり方及び内容を拘束するものではないが、医師の任務を果たすのに必要な事項を示すものである。

2 ブループリントとは

ブループリント（医師国家試験設計表）は、出題基準の各項目（章、大項目等）ごとの出題割合を示したものである。これにより、重視すべき領域（患者の人権・医の倫理、医療面接、行動科学等）や高頻度で重要な疾患を相当数出題することになる。

医師国家試験設計表（ブループリント）

〔出題割合は概数なので、必ずしも合計が100％にならない場合もある。〕

【必修の基本的事項】

1	患者の人権、医の倫理	約 4%
2	社会と医療	約 2%
3	診療情報と諸証明書	約 2%
4	人体の構造と機能	約 3%
5	医療面接	約 6%
6	主要症候	約15%
7	一般的な身体診察	約13%
8	検査の基本	約 5%
9	臨床判断の基本	約 4%
10	初期救急	約 9%
11	主要疾患・外傷・症候群	約10%
12	治療の基礎と基本手技	約 8%
13	チーム医療	約 3%
14	生活習慣とリスク	約 6%
15	心理・社会的側面についての配慮	約 5%
16	医療の質と安全の確保	約 3%
17	一般教養的事項	約 2%

【医学総論】

I	保健医療論	約10%
1	健康・疾病・障害の概念と社会環境	(約20%)
2	保健・医療・福祉・介護の仕組み	(約15%)
3	地域保健、地域医療	(約15%)
4	保健・医療・福祉・介護の資源	(約15%)
5	社会保障制度と医療経済	(約10%)
6	国際保健	(約10%)
7	保健・医療・福祉・介護関係法規	(約15%)
II	予防と健康管理・増進	約13%
1	予防医学と健康保持増進	(約12%)
2	人口統計と保健統計	(約 8%)
3	疫学とその応用	(約 8%)
4	母子保健	(約12%)
5	成人保健と高齢者保健	(約 8%)
6	精神保健福祉	(約 8%)
7	感染症対策	(約16%)
8	国民栄養と食品保健	(約 4%)
9	学校保健	(約 4%)
10	産業保健	(約 8%)
11	環境保健	(約12%)
III	人体の正常構造と機能	約10%
1	個体の構造	(約10%)
2	皮膚、頭頸部、感覚器、発声器	(約10%)
3	呼吸器、胸郭、胸壁	(約10%)
4	心臓、脈管	(約10%)
5	消化器、腹壁、腹膜	(約10%)
6	血液、造血器	(約10%)
7	腎、泌尿器、生殖器	(約10%)
8	心理、精神、神経、運動器	(約10%)
9	内分泌、代謝、栄養	(約10%)
10	免疫	(約10%)

IV 生殖、発生、成長・発達、加齢	約10%	4 胎児・新生児の診察	(約13%)
1 妊娠	(約15%)	5 妊・産・褥婦と胎児の診察	(約13%)
2 分娩	(約15%)		
3 産褥	(約10%)	VIII 検査	約10%
4 胎児	(約10%)	1 検体検査	(約25%)
5 新生児、乳児期	(約15%)	2 生体機能検査	(約15%)
6 小児期	(約15%)	3 皮膚・感覚器・発声機能検査	(約10%)
7 思春期、青年期	(約10%)	4 心理・精神機能検査	(約10%)
8 加齢、老化	(約10%)	5 妊娠・分娩・胎児・新生児の検査	(約10%)
		6 画像検査と内視鏡検査	(約30%)
V 病因、病態生理	約13%		
1 疾病と影響因子	(約 8%)	IX 治療	約15%
2 先天性異常	(約 8%)	1 食事・栄養療法	(約10%)
3 損傷、炎症	(約 8%)	2 薬物療法	(約13%)
4 感染	(約 8%)	3 輸液、輸血、血液浄化	(約10%)
5 アレルギー、免疫異常	(約 8%)	4 手術、周術期の管理、麻酔	(約10%)
6 腫瘍	(約 8%)	5 臓器・組織移植、人工臓器	(約 7%)
7 循環障害、臓器不全	(約 8%)	6 放射線治療	(約 7%)
8 内分泌・代謝・栄養の異常	(約 8%)	7 インターベンショナルラジオロジー (interventional radiology)	(約 7%)
9 中毒、放射線障害	(約 8%)	8 内視鏡治療	(約 7%)
10 医原病	(約 8%)	9 リハビリテーション	(約10%)
11 死	(約20%)	10 2次・3次救急患者の治療	(約13%)
		11 その他の治療方法	(約 7%)
VI 症候	約13%		
1 全身症候	(約16%)		
2 皮膚、外表	(約 8%)		
3 頭頸部、感覚器	(約12%)		
4 呼吸器、心臓、血管	(約12%)		
5 消化器	(約 8%)		
6 血液、造血器、免疫	(約12%)		
7 腎、泌尿器、生殖器	(約 8%)		
8 心理、精神機能	(約 8%)		
9 神経、運動器	(約 8%)		
10 内分泌、代謝、栄養	(約 8%)		
VII 診察	約 8%		
1 2次・3次救急患者の診察	(約27%)		
2 高齢者の診察と評価	(約27%)		
3 小児の診察	(約20%)		