

## Japan Society for Medical English Education

# Medical English education guidelines corresponding to the Global Standards for Quality Improvement, Basic Medical Education: Japanese Specifications

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## Preamble

In recent years, the need for globalization has grown throughout society, and the field of medicine is no exception. In our current education, teachers tend to teach medical terminology only in Japanese, and medical students tend to study without ever opening English-language textbooks.<sup>1</sup> As a result, English proficiency has stagnated, and the national results of English proficiency tests such as the TOEFL-iBT<sup>2</sup> and IELTS<sup>3</sup> are generally lower than those of many other advanced countries. This will have negative effects on medical English proficiency.

Many medical schools provide programs teaching English for medical purposes, but their educational contents and objectives vary widely in Japan. Consequently, those who have not received sufficient instruction often lack adequate medical English proficiency in the clinical or research setting. The Japan Society for Medical English Education (JASMEE) therefore proposes guidelines for medical English education in Japan, with the aim to raise the medical English proficiency of Japanese medical students whose native language is not English, in the areas of reading, writing, listening and speaking in medicine and health care.

These guidelines were developed with reference to the “WFME Global Standards for Quality Improvement, Basic Medical Education: Japanese Specifications” published by the Japan Society for Medical Education in 2013, with a focus on achieving the English proficiency necessary for meeting the global standards of medical education. They also apply to the “WFME Global Standards for Quality Improvement, Basic Medical Education: Japanese Specifications Ver. 2.31” published in March 2019.

In accordance with these specifications, the outcomes of the present guidelines are “be able to read and understand textbooks and articles in English”, “be able to conduct medical interviews and medical examinations in English” and “be able to present and discuss at scientific meetings in English”. To achieve this, we advise that medical school teachers aim to use medical English in their regular lectures, and that students study medicine while constantly thinking about how to express the contents in English.

These guidelines present minimum objectives for learning medical English, and are in no way intended to limit or regulate the programs of individual educational institutions. Numerous medical schools already have original programs in place, and we encourage the further development of such programs. As medical English education in Japan advances, these guidelines themselves will need to be revised and updated.

It is our wish that these guidelines contribute to the development of medical English education, thus raising the international reputation of Japanese medicine and health care.

January, 2015

Japan Society for Medical English Education

Chairperson of the Executive Board

**Isao Date**

Guidelines Committee

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Notes: \* TOEFL-iBT score reports are available at <https://www.ets.org/>

\* IELTS score reports are available at <http://www.ielts.org/>

## Structure of these guidelines

In these guidelines, English language proficiency is divided into the following four areas.

- (1) Vocabulary
- (2) Reading
- (3) Writing
- (4) Communication

As learning outcomes, those competencies that must be achieved by all students by the time of graduation from medical school are referred to as “minimum requirements”, and those that do not need to be achieved by all students, but are recommended for further development of ability are referred to as “advanced requirements”. Concrete learning objectives are given for each of the above-mentioned four proficiencies.

## Relationship of the present “Medical English Education Guidelines” with the “WFME Global Standards for Quality Improvement, Basic Medical Education: Japanese Specifications”

The “WFME Global Standards for Quality Improvement, Basic Medical Education: Japanese Specifications” do not contain any explicit requirements for medical English education. A considerable number of items, however, imply the need for proficiency in medical English.

These items are listed below.

The aim of the present “Medical English Education Guidelines” is the acquisition of the abilities required to achieve these objectives.

<b>“Basic Medical Education: Japanese Specifications, WFME Global Standards for Quality Improvement” item</b>	<b>Required medical English proficiency</b>
<b>Aspects of global health (Q 1.1.2):</b> Aspects of global health would include awareness of major international health problems, also of health consequences of inequality and injustice.	<ul style="list-style-type: none"> <li>• The ability to read medical articles</li> <li>• The ability to communicate in the clinical setting</li> </ul>
<b>Lifelong learning (B 1.1.6):</b> Lifelong learning is the professional responsibility to keep up to date in knowledge and skills through appraisal, audit, reflection or recognised continuing professional development (CPD)/continuing medical education (CME) activities.	<ul style="list-style-type: none"> <li>• The ability to read English materials for information gathering as part of lifelong learning</li> </ul>
<b>Social accountability (B 1.1.7):</b> Social accountability would include willingness and ability to contribute to the national and international developments of medicine.	<ul style="list-style-type: none"> <li>• The ability to read and write medical articles</li> <li>• The ability to communicate both in the clinical and research setting</li> </ul>
<b>Evidence-based medicine (EBM) (B 2.2.3)</b>	<ul style="list-style-type: none"> <li>• The ability to read medical articles and other types of information and materials</li> </ul>
<b>National and international collaboration with other educational institutions (B 6.6.1):</b> Facilitate regional and international exchange of staff and students by providing appropriate resources (Q 6.6.1)	<ul style="list-style-type: none"> <li>• The ability to communicate with other experts</li> </ul>
<b>The overall outcomes (Q 7.1.3):</b> Overall outcomes would be measured e.g. by results at national license examinations, benchmarking procedures, international examinations, career choice and postgraduate performance.	<ul style="list-style-type: none"> <li>• The ability to read and write for an examination</li> </ul>

## (1) Vocabulary

### 1. Minimum requirements

- Understand and be able to use basic technical terms\* related to body parts and functions, and medicine and health care.
- Be able to search for information in English-language textbooks and on the web using medical English terms.

Note: Basic technical terms\*: The English equivalents of Japanese medical terms included in the Criteria for Questions on the Japanese National Medical Licensing Examination.

Specific aims

#### Vmin1 Basic English terms (general and technical vocabulary)

**Vmin1a** Understand and be able to use basic technical terms related to body parts and functions, signs and symptoms, medical examination, care and equipment, disease and diagnosis.

#### Vmin2 English expressions

**Vmin2a** Be able to use basic English expressions necessary for conducting medical interviews and physical examinations, giving explanations and instructions/advice to the patient, entering medical information (into medical records, electronic medical records), and giving case presentations.

**Vmin2b** Be able to search for information consisting of English terms and expressions necessary for research in medicine and health care.

### 2. Advanced requirements

- Have a thorough understanding of English terms and expressions necessary for medicine and health care.
- Be able to adequately use information consisting of English terms and expressions necessary for research in medicine and health care.

Specific aims

#### Vadv1 Medical English terminology

**Vadv1a** Understand the medical terminology necessary for clinical training and medical practice, and be able to practice health care in English.

**Vadv1b** Be able to give explanations to the patient appropriately distinguishing between general and technical vocabulary.

**Vadv1c** Have a sufficient command of medical English terminology to provide guidance on participatory clinical training while explaining the meaning of the terminology.

**Vadv1d** Have a sufficient command of medical English terminology to write research articles and give presentations and participate in discussions at scientific meetings.

**Vadv1e** Have a sufficient command of medical English terminology to give lectures and participate in discussions while explaining the meaning of the terminology.

#### Vadv2 Medical English expressions

**Vadv2a** Be able to use and learn from English-language publications and research articles without frequently consulting a dictionary.

## (2) Reading

### 1. Minimum requirements

- Understand basic medical English necessary for medicine and health care.
- Understand medical English necessary for the basics of research in medicine and health care.

Specific aims

#### **Rmin1 Medical care**

**Rmin1a** Understand the English referring to basic body functions and diseases.

**Rmin1b** Understand the English referring to basic signs and symptoms.

**Rmin1c** Understand the English referring to basic findings, medical care, and medical equipment.

**Rmin1d** Be able to read and understand English-language materials related to basic diseases (included in the Model Core Curriculum).

#### **Rmin2 Research**

**Rmin2a** Be able to do a literature search, and read and understand the abstracts of target English-language research articles.

**Rmin2b** Understand the basic structure of an English-language medical research article (abstract, introduction, methods, results, discussion, references).

### 2. Advanced requirements

- Have a thorough understanding of medical English necessary for medicine and health care.
- Have a thorough understanding of medical English materials necessary for research in medicine and health care.

Specific aims

#### **Radv1 Medicine and health care**

**Radv1a** Be able to use English-language materials for problem solving according to the symptoms and condition of the patient.

#### **Radv2 Research**

**Radv2a** Understand the general content of English-language case reports.

**Radv2b** Understand the latest medical knowledge in English. In other words, understand the general content of English-language materials related to medical care and research.

### (3) Writing

#### 1. Minimum requirements

- Be able to do technical writing.
- Be able to write in English for informal communication related to medicine and health care.
- Be able to write English-language abstracts of medical articles.

Specific aims

#### Wmin1 Technical writing

**Wmin1a** Have basic knowledge of technical writing and know that

**Wmin1a1** it is a special technique for accurately conveying information (rhetoric)

**Wmin1a2** it is not sufficient for grammar and spelling to be correct

**Wmin1a3** the technique also applies to writing in Japanese

**Wmin1b** Be able to do paragraph writing.

**Wmin1b1** Limit each paragraph to one topic/issue.

The sentence that states the topic is called the topic sentence and is usually placed at the beginning (or end) of the paragraph. The rest of the paragraph consists of evidence and illustrations that support/expand the topic.

**Wmin1c** Be able to write coherently.

**Wmin1c1** At the sentence level

**Wmin1c2** At the paragraph level

**Wmin1d** Be able to write clearly and concisely.

**Wmin1e** Be able to do self-editing.

#### Wmin2 English writing for general communication

**Wmin2a** Know basic grammar rules (including punctuation).

**Wmin2b** Know basic vocabulary (including medical terms).

**Wmin2c** Be able to look up and use applied grammar rules and vocabulary.

**Wmin2c1** Be able to perform searches in dictionaries and reference books, and on the Internet (Google phrase searches, wild card searches, corpus searches etc.)

**Wmin2d** Be able to write informal documents (e-mail etc.)

#### Wmin3 English-language medical articles (and equivalent reports)

**Wmin3a** Understand the elements necessary for a medical article.

**Wmin3a1** Know the two major elements: novelty and importance.

**Wmin3a2** Know how to refer to other research articles while avoiding ethical issues (plagiarism, fabrication etc.)

**Wmin3b** Be able to write an English-language abstract by oneself.

**Wmin3b1** Be able to search for an English-language abstract that can serve as a model.

**Wmin3b2** Be able to write according to the structure of an English-language abstract (introduction, body, conclusion).

## 2. Advanced requirements

- Be able to write in English for formal communication related to medicine and health care.
- Be able to write English-language medical articles.

Specific aims

### **Wadv1 English writing for general communication including medicine and health care**

**Wadv1a** Be able to write formal documents (curriculum vitae, cover letter, reference letter, etc.), by looking up the formats of these documents.

### **Wadv2 English-language medical articles (and equivalent reports)**

**Wadv2a** Be able to write English-language medical articles with guidance.

**Wadv2a1** Be able to search for an English-language medical article that can serve as a model.

**Wadv2a2** Be able to write according to the structure of an English-language research article (introduction, methods, results, discussion, references).

## (4) Communication

### 1. Minimum requirements

- Be able to give directions and establish good rapport with the patient, and conduct a basic medical interview in English.
- Be able to give a simple presentation on and answer questions about the results of research in medicine and health care in English.

Note: The minimum requirements apply to dealing with non-Japanese patients in Japan.

Specific aims

#### Cmin1 Medical care

##### Cmin1a Listening comprehension

- Cmin1a1** Recognize and understand general body expressions and symptoms.
- Cmin1a2** Be able to follow and understand technical conversations between medical professionals.

##### Cmin1b Speaking

- Cmin1b1** Be able to give new outpatients assistance at the reception or help them find their way around the hospital.
- Cmin1b2** Be able to greet and identify patients, and conduct a basic medical interview.
- Cmin1b3** Be able to give explanations necessary for examining a patient (instructions for changing position etc.)

#### Cmin2 Research

##### Cmin2a Listening comprehension

- Cmin2a1** Understand the general contents of oral presentations at international conferences (targeted at non-native English speakers).
- Cmin2a2** Understand the general contents of group discussions (targeted at non-native English speakers).
- Cmin2a3** Be able to follow and generally understand information in the English-language media related to medicine and health care.

##### Cmin2b Speaking ability

- Cmin2b1** Be able to give simple presentations.
- Cmin2b2** Be able to simply present one's opinion in group discussions.
- Cmin2b3** Be able to answer simple questions.



## 2. Advanced requirements

- Be able to explain examination results to the patient and report to the attending physician in English.
- Be able to present and discuss the results of research in medicine and health care, and network in English.

Note: The advanced requirements apply to the practice of medicine overseas.

Specific aims

### Cadv1 Medical care

#### Cadv1a Listening comprehension

- Cadv1a1** Recognize and understand the patient's social background and religious orientation.
- Cadv1a2** Be able to follow and understand telephone conversations, children's speech, and speech by speakers of different languages.

#### Cadv1b Speaking ability

- Cadv1b1** Be able to give easy-to-understand explanations of basic examination results, treatment plans etc. to the patient.
- Cadv1b2** Be able to report on the patient's condition and discuss with the attending physician.
- Cadv1b3** Be able to give case presentations and answer related questions.

### Cadv2 Research

#### Cadv2a Listening comprehension

- Cadv2a1** Understand the general content of oral presentations at international conferences.
- Cadv2a2** Be able to follow and use information in the English-language media related to medicine and health care.
- Cadv2a3** Understand the content of group discussions.

#### Cadv2b Speaking ability

- Cadv2b1** Be able to give presentations at congresses and research meetings.
- Cadv2b2** Be able to ask questions about other presentations.
- Cadv2b3** Be able to make statements and give explanations during group discussions.
- Cadv2b4** Be able to socialize and network with participants at congresses and research meetings.

## **Reference teaching materials**

### **Vocabulary**

#### General vocabulary

- Oku H, Asazawa K: Illustrated English Terms for Health Care Workers. Medical View Co., Ltd. 2013. [in Japanese; 病院で使えるイラスト英単語]
- Fujieda K, Tamamaki K, Mann R: Medical Terms and Expressions Everybody Uses, 3rd edition. Medical View Co., Ltd., 2013. [in Japanese; これだけは知っておきたい医学英語の基本用語と表現 第3版]

#### Technical terminology

- Takahashi R, Matsunaka M: Learning Medical English from Case Records of Top Journals. ALC Press, Inc., 2007. [in Japanese; トップジャーナルの症例集で学ぶ医学英語]
- The Japan Society for Medical English Education (ed): Official Guide to the Examination of Proficiency in EMP Levels 3 & 4, 3rd edition. Medical View Co., Ltd., 2015. [in Japanese; 日本医学英語検定試験 3・4 級教本 第3版]
- “Criteria for Questions on the Japanese National Medical Licensing Examination” required basic items (Major item 18 • General education subjects, Medium item C • General medical English necessary for medical care) [in Japanese; 「医師国家試験出題基準」必須の基本的事項（大項目 18 一般教養的事項、中項目 C 診療に必要な一般的な医学英語）]
- Terminology in the index and the 36 main symptoms and conditions included in the Model Core Curriculum

### **Reading**

- Nagita E, Sukegawa H, Waterbury D: 15 Points in Reading English for Medical Purposes. Medical View Co., Ltd., 2000. [in Japanese; 医学英語読解 15 のポイント]
- Oi S (ed): Smart Guide to Read Medical Papers. Medical View Co., Ltd., 2010. [in Japanese; すぐに役立つ！医学論文読み方のコツ]

### **Writing**

- Kennedy NL: Writing English Medical Papers that Get Accepted. Medical View Co., Ltd., 2001. [in Japanese; アクセプトされる英語医学論文を書こう！]
- Shinozuka T: How to Write Medical Certificates and Documents in English, 2nd edition. Medical View Co., Ltd., 2011. [in Japanese; 実例による英文診断書・医療書類の書き方 改訂2版]
- Date I: How to Write Polite and Effective E-mail in English. Medical View Co., Ltd., 2014. [in Japanese; 正しく効果的に伝える医師のための英文 Eメールの書き方]
- Friedbichler M, Friedbichler I: Fachwortschatz Medizin Englisch Sprachtrainer & Fachwörterbuch in einem KWic • Key Words in Context (Japanese edition). Medical View Co., Ltd., 2012. [in Japanese; 医学英語活用辞典]

### **Communication**

- Uemura K, Oi S, Hollister P: Vocabulary Building for Doctors: 500 Common Phrases at Outpatient Clinics. Medical View Co., Ltd., 2007. [in Japanese; 今日から役立つ！医師のための英会話フレーズ 500 外来診療編]
- Oi S, Uemura K, Hollister P: Vocabulary Building for Doctors: 500 Common Phrases at Scientific Meetings. Medical View Co., Ltd., 2007.

[in Japanese; 今日から役立つ！医師のための英会話フレーズ 500 学会発表編]

- Hitosugi M, Ando C, Igarashi H: *How to Talk About Common Diseases in English*. Medical View Co., Ltd., 2013. [in Japanese; 外国人患者さんが来ても困らない！英語で伝える病気のあらまし]
- Saji T (ed): *A Practical Guide to Clinical Communications in English*. Medical View Co., Ltd., 2012. [in Japanese; 診療現場のリアル英会話]
- Györfly M: *English for Doctors (Japanese edition)*. Medical View Co., Ltd., 2002. [in Japanese; 医師のための診療英会話]
- Date I: *English Phrasebook for Medical Presentations*. Medical View Co., Ltd., 2013. [in Japanese; もうプレゼンで困らない！和英で引ける医学英語フレーズ辞典]
- Langham CS: *English for International Conferences — Speeches, Oral Presentations, Other Presentations, Questions, Chairing*. Ishiyaku Publishers, Inc., 2007. [in Japanese; 国際学会 English—挨拶・口演・発表・質問・座長進行]

### Textbook

- Japan Society for Medical English Education (ed): *Textbook of English for Medical Purposes, Volumes 1–3*. Medical View Co., Ltd., 2005–06. [in Japanese; 講義録医学英語 I, II, III]

### Websites

- **UpToDate** (Wolters Kluwer) <<http://www.uptodate.com/ja/home>>
- **DynaMed** (EBSCO Publishing) <<http://www.ebsco.co.jp/medical/dynamed/>>
- **Ichushi-Web** (Japan Medical Abstracts Society) <<http://login.jamas.or.jp/>>
- **Ovid** (Wolters Kluwer) <<http://www.ovid.jp/site/index.html>>
- **Best Practice** (BMJ Publishing Group) <<http://clinicalevidence.bmj.com/x/index.html>>
- **STAT!Ref** (Teton Data Systems) <<http://www.statref.com/>>
- **Henry Stewart Talks** (Henry Stewart Talks Ltd.) <<http://hstalks.com/>>
- **Procedures Consult Japan** (Elsevier Japan) <<http://proceduresconsult.jp/>>
- **ClinicalKey** (Elsevier Japan) <<http://www.clinicalkey.jp/>>
- **Today's Clinical Support** (Elsevier Japan) <<http://clinicalsup.jp/>>

### References

- 1) Uemura K: Medical English Education in Japan: Past, Present & Future. *J Med Engl Educ* 8(1):12-16, 2009.
- 2) Test of English as a Foreign Language (TOEFL): TOEFL® Research Program <<http://www.ets.org/toefl/research/>>
- 3) International English Language Testing System (IELTS): Researchers - Test taker performance 2013 <[http://www.ielts.org/researchers/analysis\\_of\\_test\\_data/test\\_taker\\_performance\\_2013.aspx](http://www.ielts.org/researchers/analysis_of_test_data/test_taker_performance_2013.aspx)>
- 4) Japan Society for Medical Education: Basic Medical Education: Japanese Specifications WFME Global Standards for Quality Improvement <[http://jsme.umin.ac.jp/ann/jmse\\_an\\_130730\\_WFME.html](http://jsme.umin.ac.jp/ann/jmse_an_130730_WFME.html)>
- 5) World Federation for Medical Education: Quality Improvement in Basic Medical Education <<http://wfme.org/standards/bme>>