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IUHW School of Medicine: overview of the six-year journey of an innovative, international new medical school in Japan

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Abstract

International University of Health and Welfare (IUHW) School of Medicine opened in April 2017, 38 years after the government ban on the establishment of new medical schools in Japan. This new medical school was founded in order to educate the next generation of physicians who can contribute to the improvement of the health and welfare of the global community. Six years later, IUHW School of Medicine just graduated its first class in March 2023.

IUHW School of Medicine distinguished itself from the other 81 medical schools in Japan in many aspects: teaching medicine in English for the first time in Japan, creating an international learning environment by actively welcoming international students and offering rich English and Japanese language programs, providing ample opportunities for students to learn and practice advanced communication skills in both English and in Japanese from the very beginning of medical school, and providing a curriculum that encourages students to become active learners which is a necessary attitude for lifelong learning.

This new medical school and its curriculum will not truly bear fruit for another 10, maybe 20 years. However, at the time of the graduation of its first class, there are at least 3 objective outcomes for evaluation: the percentage of students passing the Japanese National Medical Licensure Exam, including for the international students most of whom arrived in Japan six years ago with no Japanese language ability; post-Clinical Clerkship OSCE (Objective Structured Clinical Examination) English medical interview exam results evaluated only by external evaluators from the US, Canada, and the UK; and the number of students who passed the USMLE (United States Medical Licensing Examination) board exams.

These results indicate that this innovative and ambitious medical education did accomplish its intended results so far. IUHW School of Medicine was able to achieve 99.2% passing rate for the Japanese National Medical Licensure Exam, with a 100% passing rate among international students. Senior students received excellent external evaluations by US, Canadian, and UK clinical educators for their medical interviewing skills in English, which includes not only clinical knowledge and reasoning abilities but also English language and communication skills to build good rapport with patients. So far, 20 students passed the USMLE Step 1 and four students also passed Step 2 (as of June, 2023). The passing rate for both Step 1 and 2 was 100%.

Looking at the trajectory of this new school so far, including the fact that the graduates seem to be equipped with active learning skills gained through many small groups and team-based learning during their medical education, we believe that the graduates of IUHW School of Medicine will indeed improve the health and welfare of the global community, especially that of Asia, in the decades to come.

Keywords: Japanese medical school, new medical school, curriculum, life-long learning, Medical Licensure Exam, international students

I. Introduction

International University of Health and Welfare (IUHW) School of Medicine opened in April 2017, 38 years after the government ban on the establishment of new medical schools in Japan. This school is vastly different from any other Japanese medical schools. It strives to train

internationally-minded, bilingual physicians who can contribute to the health and welfare of not only people in Japan but also people of the international community, especially those in Asia. At IUHW School of Medicine, where one in every seven students is international, there is a robust active learning environment and 90 weeks of clinical

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Table 1 IUHW School of Medicine Diploma Policies.

- 1. Students must be able to provide patient-centered medical care with medical professionalism with the highest of ethical standards.
- 2. Students must have a sufficient knowledge-base and advanced communication skills to stay current on the globalization of the field of medicine and to be able to perform in overseas medical facilities.
- 3. Students must be able to provide high-caliber medical care based on scientific thinking. Students must have also developed a spirit of tolerance and mastered the sciences and arts required of practitioners in the fields of medicine and healthcare.
- 4. Students must acquire the ability to cooperate and collaborate with people in a wide range of professions working at medical facilities, knowledge concerning accountability structures and the roles of each profession, as well as the ability to play core roles in medical teams in the future.

clerkship including $4\sim10$ weeks of international clinical rotation. This article describes the background of the establishment of this innovative medical school and its diploma policies, characteristics of its unique medical education, and its outcome as of spring of 2023, at the time of the graduation of its first class.

II. How this new medical school was established

Starting in 1979, no new medical schools were established in Japan due to a policy to limit the number of physicians. However, after the 2011 Fukushima earthquake and tsunami disaster, the Japanese government allowed a new medical school to open in the devastated Tohoku region to revitalize the affected community. As a result, Tohoku Medical and Pharmaceutical University opened its doors in 2016. Following this, the Japanese government allowed one more new medical school to be established through the "National Strategic Special Zones" program, with specific criteria. This new medical school had to be completely different from any other existing Japanese medical schools; it had to teach medicine in English, which never happened before in Japan; it had to recruit about 20 international students each year; and it had to educate the next generation of internationally-minded physicians who could improve the health and welfare of the global community.

IUHW is a health sciences university founded in 1995 in Otawara City, Tochigi, as the first comprehensive university of health and welfare in Japan. It has schools and departments such as pharmacy, nursing, physical therapy, occupational therapy, speech and hearing sciences, and orthoptics and visual sciences, but it did not have medicine, due to the above-mentioned 1979 ban in Japan. When this "National Strategic Special Zones" program was announced, IUHW was allowed to establish a new medical school in Narita City, Chiba, and this 82nd medical school, IUHW School of Medicine, welcomed its first class of students in April 2017.

III. Characteristics of IUHW School of Medicine

Table 1 is the Diploma Policies of IUHW School of Medicine. The uniqueness of IUHW School of Medicine can be summarized in the second Diploma Policy: Students must have a sufficient knowledge-base and advanced communication skills to stay current on the globalization of the field of medicine and to be able to perform in overseas medical facilities.

In order to assure that the graduating students meet this second Diploma Policy, IUHW School of Medicine has implemented the following: (1) create an international learning environment to train future leaders, particularly of Asian countries, by actively recruiting international students, (2) teach advanced international communication skills, (3) invite international faculty to teach global health, and (4) provide international clinical experiences to all students, not just to those who wish to do an away elective

overseas.

1. International students

From the beginning, IUHW School of Medicine has been offering a full IUHW scholarship to medical students from Asia. This is a private scholarship fully funded by IUHW with no government or public financial support. It is called "IUHW Medial Scholarship Program for International Students (Gold Scholarship)". The objective of this scholarship is to recruit the very top students from Asian countries (as of 2023, from Vietnam, Cambodia, Laos, Indonesia, Myanmar, and Mongolia), provide them with an undergraduate medical education in Japan, and send them back to their country of origin to become future clinical leaders in their respective home countries. This full scholarship covers the admission fee, academic fee, room and board, living expenses, textbooks and overseas training fees, in total 30,000,000 Japanese yen over 6 years, which is approximately US\$230,000 (at 130 Japanese yen per USD). IUHW privately funds these students with the hope that this generous scholarship will assist in the improvement of the health and welfare of the above-mentioned Asian countries. While many governmental and private projects have been in place over decades to build clinics and hospitals, provide advanced medical technology and equipment, or providing graduate-level training and research assistance in developing countries, this IUHW Medical Scholarship Program is the first to invest in future clinical leaders at the undergraduate medical school training level.

In order to recruit high caliber students from each country, IUHW has signed MOUs (Memorandums Of Understanding) with top medical schools in each country, such as with Hanoi Medical University, Hanoi, Vietnam; University of Medicine and Pharmacy, Ho Chi Minh City, Vietnam; Hue University of Medicine and Pharmacy, Hue, Vietnam; University of Health Sciences, Phnom, Penh, Cambodia; University of Health Sciences, Vientiane, Laos; University of Medicine 1, Yangon, Myanmar; University of

Medicine 2, Yangon, Myanmar; University of Medicine, Mandalay, Myanmar; Udayana University, Bali, Indonesia; Mongolia National University of Medical Sciences, Ulaanbaatar, Mongolia. Through these MOUs, each medical school initially selects around ten students already enrolled in their school as first or second year students. These are local medical students who have not only passed the entrance examination to enroll in these prestigious schools but have also distinguished themselves by ranking top in each class and expressing their interest in both studying medicine in Japan and serving their own country after completing these studies abroad. Subsequently, an IUHW recruiting team usually consisting of the IUHW Chairman, President, Vice president, and Dean visits each country, administers IUHW's written entrance examinations (mathematics, two science subjects from biology, chemistry, and physics, and English) and conducts the admission interview.

Table 2 shows the breakdown per country of the number of scholarship students for classes entering 2017 through 2022. Table 2 also lists privately funded international students.

Each year, approximately 20 out of the 140 students are born abroad, including both scholarship students through the aforementioned Gold Scholarship and self-funded international students. This amounts to 14% of the IUHW School of Medicine student body. This is the same as the percentage of foreign-born residents in the US and the UK, according to OECD data¹⁾. Thus, even though foreign-born residents of Japan make up only about 2% of its population²⁾, IUHW School of Medicine has created a uniquely international environment similar to that of the US and the UK. By spending their medical school years in this international environment, all IUHW School of Medicine students consciously and unconsciously became comfortable navigating this diversity created by the international student body.

Table 2 International students enrolled as of March 2023.

Nationality	Scholarship international students	Privately funded international students
Vietnam	31	0
Myanmar	19	2
Mongolia	14	0
Cambodia	12	0
Indonesia	7	0
Laos	2	0
Korea	0	13
China	0	10
Taiwan	0	3
Malaysia	0	2
USA	0	1
Canada	0	1
Total	85	32

2. Advanced communication skills

1) Improving English

Creating an international environment by recruiting many international students does not automatically create an international community if international and Japanese students simply coexist on campus. In order to build a true international community, all students need to be able to communicate comfortably with each other using a common international language, English. Furthermore, in order to fulfill the second Diploma Policy which is to be able to practice medicine abroad, more than simple conversational English is required; physicians need to build good rapport with each patient through both verbal and non-verbal advanced communication skills. Of note, English language skills alone may not be enough to practice medicine abroad; however, good command of English is a minimum requirement.

So that all students feel comfortable with English, IUHW School of Medicine implemented intensive English language courses in addition to implementing a curriculum in which both basic and clinical medicine classes during the first two years are taught in English. Nearly all of our students' native tongue is not English, but this intensive English curriculum compelled all students to be immersed in an English-speaking environment while at school. This

English language immersion is nothing new in many countries including Asian countries, but medical education in English had never happened in Japan until IUHW School of Medicine implemented it for the first time in 2017.

For our international students, a good command of English was one of the requirements to enter IUHW School of Medicine. However, even though all of the incoming Japanese freshmen passed the difficult written entrance examinations which included English, an average Japanese student's English speaking and listening abilities lagged behind those of the international students at the time of entering medical school. This may be due to the fact that English education in Japanese grade school typically does not emphasize conversational English, partially due to the fact that these abilities are currently not being evaluated by typical Japanese college entrance examinations. To develop English listening and speaking abilities after entering medical school, IUHW School of Medicine offered intensive English language education as shown in Table 3.

Japanese students have 240 hours of required English and an additional 180 hours of elective English during their first year. During their second year, Japanese students have 120 hours of required English and 180 hours of elective English. This adds up to 720 hours of English classes being offered during the first two years of IUHW School of

Table 3 English and Japanese language instruction at IUHW School of Medicine.

	Japanese students	International students
Required English	240 hours	180 hours
Elective English	180 hours	
Required Japanese		240 hours
Required English	120 hours	120 hours
Elective English	180 hours	
Required Japanese		180 hours
English	720 hours	300 hours
Japanese		420 hours
	Elective English Required Japanese Required English Elective English Required Japanese English	Required English 240 hours Elective English 180 hours Required Japanese Required English 120 hours Elective English 180 hours Required Japanese English 720 hours

Medicine. For comparison, students take 45 hours of biochemistry during their first year and 75 hours of gastroenterology during their second year. International students have 300 hours of required English and 420 hours of required Japanese during their first two years. According to the data provided by a private educational research and development institute, on average, Japanese elementary school teaches 18 hours, middle school 270 hours, high school 360 hours, and college 90 hours of English, which adds up to 736 hours of English language instruction from elementary school through college³⁾. This is nearly equivalent to what IUHW School of Medicine provides during the first two years of medical school.

Since the English listening and speaking abilities for the Japanese students differ greatly at the time of entering medical school, at IUHW School of Medicine, students are stratified so that they take English classes with their classmates who have similar English language abilities. This is achieved by asking all freshmen to take the TOEFL ITP test at the time of entering medical school. Based on this TOEFL ITP listening score, students are divided into four levels/groups of 35 students each for their English classes. This means that the faculty teaches the same content four times to four groups, adjusting the difficulty based on each group's level.

The contents of English classes are divided into General English and Medical English. During General English, students essentially learn liberal arts in English. The topics covered are a) culture, especially Japanese culture, b) current international affairs, c) medicine and science focusing on topics typically not covered by medical school classes, and d) patient encounter which is an introduction to clinical medicine. Medical English classes are structured around common chief complaints patients present to the hospital, such as chest pain, headache, abdominal pain, diarrhea, fever, fatigue, jaundice, menstrual abnormalities, etc. Using these chief complaints, students learn how to approach a patient starting from the medical interview, forming a differential diagnosis, oral case presentation to the attending physician, and chart writing, all in English.

2) Japanese language acquisition for international students

For the international students undergoing six years of medical education in Japan, a good command of the Japanese language is a necessity since nearly all patients in Japan speak only Japanese. Most of the scholarship students do not speak a word of Japanese when they arrive in Japan three to six months prior to the start of the Japanese academic calendar in April. To support our international students' need to master Japanese quickly, IUHW established an intensive Japanese language program on campus. In addition to intensive Japanese classes prior to entering medical school, these international students continue their Japanese language classes for a total of 420 hours during the first two years, as mentioned earlier (Table 3).

3) Advanced communication skills

Being a native speaker of a language and being a great communicator in that language are two distinct skills. Medical students or junior physicians need to practice advanced communication skills to be able to build good rapport with different patients from different walks of life. This is true even using one's native tongue, but more so when using a foreign language. At IUHW School of Medicine, our Freshman Orientation especially focusses on building communication skills by holding many small group sessions to first encourage each student to speak with each other face-to-face. The 140 incoming freshmen are typically divided into 20 groups of seven students, of which one is always an international student. The small group members are shuffled almost every hour, so that the firstyear students are given an opportunity to talk with most of their classmates, which helps to build a learning community early.

After the Freshman Orientation, one of the first classes students take is "Medical Interview and Physical Examination I (Basic)." In fact, at IUHW School of Medicine, students learn bilingual medical interview skills from the very beginning of medical school⁴. In this course, students have ample opportunities to practice medical interview and advanced communication skills through role playing and sessions with faculty members. This medical interview and physical examination course continues during the second year as "Medical Interview and Physical Examination II (Advanced)."

To continuously encourage students to develop their communication and public speaking skills, students also have many opportunities to engage in discussions, debates, and public speaking, especially through English language classes and small group sessions in different courses. Through these small group sessions, students also learn how to be active and effective listeners from the early stage of their medical school training, with special emphasis on respecting different viewpoints and perspectives. This

exercise is particularly emphasized in the Medical Professionalism I, II, and III courses, which are the required courses for first, second-, and third-year students, respectively.

4) Global health

IUHW School of Medicine offers Global Health I, II, III for first, second-, and third-year students respectively. During Global Health I, students learn an overview of the main health challenges the world faces such as maternal and child health and infectious and non-infectious diseases. Students also learn the basics of global health such as epidemiology, the roles of international organizations, and the need for international cooperation. During Global Health II, students learn specific health issues unique to different countries focusing on Asian countries such as Vietnam, Myanmar, Indonesia, Mongolia, but also European and North American countries. In Global Health III, students research global health topics in a small group and share their research results. Although global health courses are commonplace in many medical schools, the IUHW School of Medicine's Global Health courses are taught by practicing physicians and public health specialists from different countries who teach the most current and important health issues based on their own experiences. This helps students to be more interested and engaged, compared to global health classes taught by faculty members who rely on literature to teach rather than firsthand experience with the topic being covered.

5) Mandatory international clinical rotation

Many medical students around the world participate in international clinical rotations. However, few medical schools mandate at least four weeks of international clinical rotation to all students as part of their required curriculum. Since one of IUHW School of Medicine's Diploma Policies is to be able to practice medicine overseas as mentioned earlier, an international clinical rotation is an essential, required part of the curriculum for all students at IUHW.

The first class who graduated in March 2023 underwent

their international rotation in June 2022. While this international clinical rotation schedule was being finalized, Japan's Ministry of Foreign Affairs travel advice unfortunately rated all countries IUHW was planning to send students to through MOUs as Level 3 (avoid all travel), with only Vietnam being Level 2 (avoid nonessential travel) (www.mofa.go.jp/anzen/). After much discussion and detailed information sessions with the students and their guardians regarding the risks of traveling abroad during COVID-19 pandemic and the Ukraine crisis which started in February 2022, 65% students decided to travel abroad for an overseas clinical rotation and the remaining 35% chose not to travel internationally. The majority of students who went abroad went to Vietnam, but non-Vietnamese scholarship students went back to their home countries such as Cambodia, Myanmar, Mongolia, and Indonesia. Those who stayed on campus underwent Virtual International Clinical Rotations.

Fortunately, the COVID-19 situation improved in 2023, allowing all students from the second class to experience an international clinical rotation in April 2023 (Figure 1). 82% of the students went to hospitals in nine countries (Vietnam, Laos, Cambodia, Indonesia, Myanmar, Mongolia, Poland, Hungary, Lithuania) through MOUs. Due to the political climate in Myanmar, only international students from Myanmar went on rotation there. 18% of the students went to other institutions outside MOUs in the UK, the US, France, Italy, Spain, Malaysia, Taiwan and Korea, which they arranged themselves.

In the post international rotation survey of the first class, the overseas clinical rotation received very high, positive feedback from the students (response rate 84%): 92% answered "I learned a lot during international clinical rotation," 93% answered "International clinical rotation was very interesting," 95% answered "I am very satisfied with the international clinical rotation." On the other hand, students felt that the timing of the international clinical rotation was not ideal since traveling overseas in June

interfered with the Japanese residency matching process and was too close to the National Licensure Examination. Students felt that the ideal timing to go abroad was sometime between January and April, which corresponds to the third trimester of the fifth year or the very beginning of the sixth year. As a result, the second class left for their clinical rotation in April 2023. At the time of writing this article, the second-class students are still abroad and the post international rotation survey has not happened yet.

W. Outcome of the IUHW School of Medicine education at the time of graduating its first class

1. Language proficiency

1) English

As mentioned earlier, all incoming freshmen take the TOEFL ITP test during Freshman Orientation, then about 10 months after entering Medical School. Figure 2 shows the TOEFL ITP class average score at the beginning of the first year and after about 10 months of intensive English classes. On average, students' TOELF ITP scores improved by 30 points. This was true for all classes who entered school between 2017 and 2022 regardless of the class average score at the time of starting medical school. As a result, by the end of first year, all class averages reached B2 level using CEFR (The Common European Framework of Reference for Languages). B2 level is considered a level where "one can understand the main points of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialization⁵⁾." At most overseas universities, B2 level or above is considered necessary to study the same courses as native speakers and IUHW School of Medicine students, on average, were able to accomplish this level by the end of their first year of medical school. Of note, 10 months after entering IUHW School of Medicine, a total of 174 students from the first through sixth classes improved their TOELF ITP scores by more than 50 points. Amazingly, out of those, five students improved their scores by more than 100 points.

International Clinical Clerkship 2nd class: April 2023 Without MOU Institutions with MOU UK **France** Vietnam Italy Lithuania Spain Malaysia Poland Taiwan 18% Laos Korea Myanmar USA Cambodia 56% Indonesia 3% Mongolia 6% Hungary Others

Figure 1 International Clinical Clerkship: second class, April 2023.

Freshmen TOEFL ITP Score Average

~30 points Improvement over 10 months 580 10 months later 570 Start of TOEFL ITP points medical Number of 560 school Students 550 >50 points 174 >100 points 540 530 520 mon Europea ance for La **CEFR** 510 *In 2020, due to COVID-19, freshmen took the 1st TOEFL 5 months after entering IUHW 500 B2 (Upper-intermediate) 543 490 B1 (Intermediate) 460 480 TOEFL ITP -2017 -2018 -2019 A2 Pre-intermediate 337

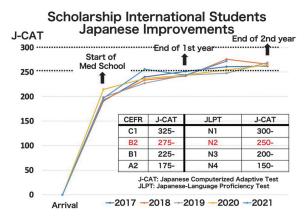
Figure 2 Improvement of the Freshmen TOEFL ITP score comparing at the beginning of the 1st year and 10 months later.

--2022

--2021

-2020

A1 (Beginner)



Improvement of the scholarship international Figure 3 students' Japanese score.

2) Japanese

Figure 3 shows the improvement of the international students' Japanese language ability assessed by the J-CAT (Japanese Computerized Adaptive Test). Most of these students arrived with no Japanese knowledge and underwent an intensive, three-to-six-month long IUHW Japanese language program prior to starting medical school, depending on when each student was able to arrive in Japan. As a result, by the time these students began medical school, their Japanese level was about B1 by CEFR which is considered a level where "one can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc5)." Using JLPT (Japanese-Language Proficiency Test) this is about equivalent to N3. International students continued to improve their Japanese language ability close to B2 (CEFR) and N2 level (JLPT) by the end of their first year of medical school, and certainly by the end of their second year. There are many students who achieved N1 level (JLPT) during their first three years of medical school, which is considered the highest Japanese language level.

2. Post-CC OSCE evaluation

In all Japanese medical schools, a nationallystandardized pre-clinical clerkship (CC) OSCE (Objective Structured Clinical Examination) is conducted after medical students finish their pre-clinical courses. A post-CC OSCE has been also recently introduced in Japan. Post-CC OSCE questions consist of those made and distributed to all Japanese medical schools by CATO (Common Achievement Tests Organization), as well as questions made by each medical school for its own students. At IUHW School of Medicine, three OSCE questions provided by CATO and three IUHW-provided questions were used for this examination. The three IUHW original questions were made to assess (1) medical interviewing skills in English, (2) case presentation skills in English, and (3) chart writing skills in English. These three OSCE questions evaluated not only English language abilities, but also clinical reasoning skills. For medical interview station, it also evaluated advanced communication skills. To provide an objective

Table 4 Post-CC OSCE 14 external evaluators.

USA	Stanford Univ.	Endocrinology, Clinical Professor
	Stanford Univ.	Endocrinology, Clinical Associate Professor
	Univ. of Pittsburgh	General Internal Medicine, Associate Professor
	Boston Univ.	General Internal Medicine, Associate Professor
	Oregon Univ.	Endocrinology, Professor
	Univ. of North Carolina	Infectious Disease, Professor
	Univ. of Hawaii	Internal Medicine, Associate Professor
	Jichi Medical College/USA	Surgery, Professor
Canada	McGill Univ.	General Internal Medicine, Professor
	Univ. of Toronto	Gastroenterology, Clinical Fellow
UK	Univ. of Oxford	General Internal Medicine, Fellow
	Univ. of Oxford	Neurology, Senior Fellow
	Univ. of Oxford	Neurology, Senior Fellow
	East Kent Deanery	Geriatric Medicine, Senior House Officer

evaluation to determine if the senior students at IUHW School of Medicine have gained necessary skills to practice medicine abroad, IUHW asked only external evaluators from the US, Canada, and the UK to grade the video recordings of the English medical interview post-CC OSCE station. Table 4 is the list of our external evaluators.

Each student interviewed an English-speaking non-Japanese simulated patient for 12 minutes in a simulated clinic room at the Simulation Center on campus. Each interview was recorded using two cameras from different angles. Each student's performance was evaluated by two external evaluators. The evaluation consisted of English language skills, communication skills, and medical interviewing skills which indirectly assessed students' medical knowledge and clinical reasoning skills. At the end, evaluators were asked to give a global rating. The evaluation sheets are not shared with the students; therefore, only a small portion of the evaluation sheet is shown in Figures 4 and 5 as a sample.

The evaluation criteria for English language skills were based on the English language test for healthcare professionals, OET (Occupational English Test). Global ratings as shown in Figure 5 were used to determine the final Pass/Fail of this station. Of note, all post-CC OSCE

stations/examination questions are evaluated as Pass/Fail and no scores are given.

In analyzing external evaluator global rating results, 100 students received either the same score from both evaluators, or had a one-point score difference between evaluators. Of these 100 students, 80% received the score "At the level of an excellent student in my institution who has finished the core clinical clerkships" (the highest global rating) or "At the level of an average student in my institution who has finished the core clinical clerkships" at least by one evaluator. Seven students received the highest global rating from both of their evaluators (Figure 6).

3. National Licensure Exam and USMLE

The first class took the National Medical Licensure Exam in February 2023 and the passing rate was 99.2%, the second-highest passing rate in the nation among the 82 medical schools in Japan. All 15 international students who took this exam passed. As of June 2023, 20 students passed USMLE (United States Medical Licensing Examination) Step 1, and four students also passed Step 2. USMLE passing rate for IUHW School of Medicine students has been 100%.

Medial Interview Criteria 3: Comprehensiveness of History of Present Illness (HPI) * Choose the most appropriate one. Mark only one oval. Obtained comprehensive information about HPI to make adequate differential diagnosis Obtained sufficient information about HPI but not enough to make adequate differential Obtained minimally required information about HPI but not enough to make differential diagnosis Failed to obtain minimally required information about HPI Figure 4 Medical interview criteria 3. Medial Interview Criteria 5: Global Rating 2 * Choose the most appropriate one. Mark only one oval. At the level of an excellent student in my institution who has finished the core clinical clerkships (5) At the level of an average student in my institution who has finished the core clinical clerkships (4) At the level of an average student in my institution who is midway through the core clinical clerkship (3) At the level of an average student in my institution who has just started the core clinical clerkship (2) At the level of an average student in my institution who has not started the core clinical clerkship (1)

17. The reason for selecting the above "Global Rating 2" \star

Figure 5 Medical interview criteria 5: global rating 2.

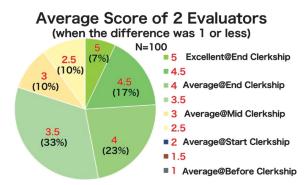


Figure 6 Average score of 2 evaluators for post-CC OSCE English medical interview exam.

V. Discussion

IUHW School of Medicine distinguished itself from the other 81 Japanese medical schools in many aspects: teaching medicine in English; creating an international learning environment by actively welcoming international students and offering unique and rich English and Japanese language programs; providing ample opportunities for

students to practice advanced communication skills in both English and in Japanese; and encouraging students to become active learners, which is a necessary skill for lifelong learning. The full results of this unique and innovative medical education will not be known for at least several more years, if not for decades when we have reached a critical mass of graduates from IUHW School of Medicine. However, at this early stage, at the time of the first class' graduation, there are at least three objective outcomes that can be evaluated: the percentage of students passing the Japanese National Medical Licensure Exam, including international students most of whom arrived in Japan with no Japanese language ability; post-CC OSCE English medical interview exam results evaluated by external evaluators from the US, Canada, and the UK; and the number of students who passed the USMLE exams. All of these results indicate that this innovative and ambitious

medical education did achieve its intended result. The fact that the National Medical Licensure Exam passing rate was 99.2%, the second highest passing rate in the nation, proved that it is possible for students to first learn medicine in English, then bilingually, and still pass the Japanese medical licensing examination in Japanese. Our international students, many of whom could not speak any Japanese just six years prior, also passed this difficult Japanese medical licensure exam at a rate of 100%.

Although this high national medical licensure passing rate is indeed important, that in itself would not distinguish IUHW School of Medicine from other Japanese medical schools. After all, IUHW School of Medicine intended to be completely different from other medical schools and its mission from the very beginning was to train the next generation of bilingual physicians who can serve the international community. Since all students in the first class that graduated in March 2023 are currently enrolled in the mandatory two-year of post-graduate residency training in Japan, it is not possible at this time to determine whether this primary objective has been met. However, using a surrogate outcome, namely the very favorable evaluations given by external evaluators from the US, Canada, and the UK for the post-CC OSCE performance by the senior students, it is possible to conclude that the senior students of IUHW School of Medicine indeed gained adequate skills to provide care to English-speaking patients. This is not only a language issue. To perform an excellent medical interview, solid medical knowledge and good communication skills are crucial. Learners must effectively ask both open- and close-ended questions to obtain pertinent positives and negatives and come up with a differential diagnosis. Furthermore, this needs to be done while building a good rapport with the patient.

Another surrogate outcome was the 100% passing rate of USMLE Step 1 and Step 2 exams by IUHW medical students. Although there are no published data available, based on informal conversations from several Japanese

medical school faculty members who are familiar with Japanese medical students' USMLE passing rate results, it has been said that no other medical school in Japan has ever experienced this many students passing the USMLE at once

Last but not least, what is most notable about the outcome of IUHW School of Medicine is the fact that a private University funded this many international students to becoming leaders in their home countries, without relying on any public or governmental support. There is no published data, but to the best of our knowledge, there have been very few students, if at all, from Cambodia, Indonesia, Myanmar, Vietnam, or Mongolia who came to Japan as a foreign student at the time of starting medical school, underwent six-year medical education in Japan, and obtained a Japanese medical license without requiring extra years in school prior to graduation. This was possible due to a clear vision, careful discussion with Medical Schools and the Ministries of Education and/or Health in each country prior to starting this scholarship program, a robust selection process, the expertise of the fantastic and experienced medical school faculty members including the Japanese and English language teachers, truly caring and individualized support from all faculty and staff, and the amazing effort, determination, talent, and resilience of these high caliber international students. Indeed, this great outcome was a result of a true teamwork. Hats off to them all.

VI. Conclusion

Six years after the start of this innovative new medical school where medicine is taught in English for the first time in Japanese medical school history, where 14% of the student population is foreign-born, where active learning and bed-side learning are cornerstones of its medical education, IUHW School of Medicine graduated its first class in March 2023. IUHW School of Medicine was able to achieve not only the second-highest passing rate for the

Japanese National Medical Licensure Exam among 82 Japanese medical schools, but also excellent external evaluations by clinical educators from the US, Canada, and the UK for medical interviewing skills in English which encompass not only clinical knowledge and reasoning abilities but also English language and communication skills. A true, full evaluation of this new medical school and its curriculum will not come for another 10, maybe 20 years. However, looking at the trajectory of this new school so far and the fact that the graduates are equipped with the active learning skills required for life-long learning, we believe that the graduates of IUHW School of Medicine will indeed improve the health and welfare of the global community, especially that of Asia, in the decades to come.

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References

- 1) OECD Data Foreign-born population, latest data available. https://data.oecd.org/migration/foreign-born-population. htm#indicator-chart 2023.4.10
- OECD iLibrary, International Migration Outlook 2020 Japan. https://www.oecd-ilibrary.org/sites/b140958b-en/index. html?itemId=/content/component/b140958b-en 2023.4.10
- 3) Benesse Educational Research and Development Institute. https://berd.benesse.jp/berd/data/dataclip/clip0014/#:~:text 2023.4.10
- Akatsu H, Shiima Y, Gomi H, et al. Teaching "medical interview and physical examination" from the very beginning of medical school and using "escape rooms" during the final assessment: achievements and educational impact in Japan. BMC Medical Education 2022; 22: 67. doi: doi.org/10.1186/ s12909-022-03130-2
- 5) Common European Framework of References for Languages CEFR) Global Scale-Table 1 (CEFR3.3): Common Reference Levels. https://www.coe.int/en/web/common-europeanframework-reference-languages/table-1-cefr-3.3-commonreference-levels-global-scale 2023.4.10