

**EVALUATION OF THE MEDICAL SCHOOL
AT THE HEBREW UNIVERSITY
FACULTY OF MEDICINE**

**INTERNATIONAL QUALITY ASSURANCE REVIEW
COMMITTEE ON HIGHER EDUCATION**

NOVEMBER 2021

Background and Procedures

1.1 In the academic year 2020-2021, the Council for Higher Education [CHE] put in place arrangements for the evaluation of study programs in the field of Medicine in Israel.

1.2 The Higher Education Institutions [HEIs] participating in the evaluation process were:

Azrieli Faculty of Medicine at Bar Ilan University
Ben Gurion University, Faculty of Medicine
Hebrew University Faculty of Medicine
Technion Faculty of Medicine
Sackler Faculty of Medicine at Tel Aviv University

1.3 To undertake the evaluation, the Vice Chair of the CHE appointed an International Quality Assurance Review Committee (IQARC; 'the evaluation committee'), under the auspices of the CHE's Committee for the Evaluation of Medical Education in Israel¹, consisting of:

- Prof. Mark Tykocinski (Chair)
- Prof. Haim Bitterman
- Prof. Adina Kalet
- Prof. Orit Karnieli-Miller
- Prof. Cees van der Vleuten

Ms. Pe'er Baris-Barnea served as the Coordinator of the IQARC evaluation committee on behalf of the CHE.

1.4 The first review took place from 7 to 14 June 2021, and it dealt with two of the five medical schools: Technion Faculty of Medicine and Azrieli Faculty of Medicine at Bar Ilan University. The second review took place from 2 to 11 November 2021, and it dealt with the remaining three medical schools: Sackler Faculty of Medicine at Tel Aviv University, Ben Gurion University Faculty of Medicine, and Hebrew University Faculty of Medicine.

1.5 The evaluation process was conducted in accordance with the CHE's *Standards for Medical Education (2021)*. Within this framework the evaluation committee was required to:

- examine the self-evaluation reports submitted by the medical schools in Israel
- conduct on-site visits (physical and/or virtual) at those institutions participating in the evaluation process
- draw conclusions vis-à-vis each of the 11 standards
- submit to the CHE an individual report on each of the medical schools participating in the evaluation
- set forth the committee's findings and recommendations for each school
- submit to the CHE a general report regarding the evaluated field of study within the Israeli system of higher education including recommendations for changes to the standards for Medical Education

1.6 The IQARC evaluation committee examined only the evidence provided by each participating institution — considering this alongside the distinctive mission set out by each institution in terms of its own aims and objectives. This material was further elaborated

¹ The committee's letter of appointment is attached as **Appendix 1**.

and explained in discussions with senior management, lecturers, students, and alumni during the visits to each of the institutions.

- 1.7** This report deals with the Hebrew University Faculty of Medicine. Notwithstanding travel challenges associated with the coronavirus pandemic, the evaluation committee's site visit and associated deliberations were conducted in-person. All committee members visited the medical school on November 7. The schedule of the visit is attached as **Appendix 2**.
- 1.8** The IQARC evaluation committee would like to thank the management of the Hebrew University Faculty of Medicine for their self-evaluation report, supportive interactions with the evaluation committee during the evaluation process, and hospitality towards the committee members who visited the institution.

Key findings

Executive Summary

Hebrew University Faculty of Medicine (HUFOM) has an illustrious history as Israel's first medical school and is notable for its location in the nation's capital and its geographic setting in the hills surrounding the historic city of Jerusalem. The medical school is distinguished by its association with two iconic academic institutions---Hebrew University and Hadassah Medical Center. These institutions instantiate a rich academic environment, brimming with history and culture, and infuse medical school's educational agenda with world-class research and cutting-edge clinical care. The learning environment is further enriched by the diverse populations the medical school's clinical training environments serve, deepening its tripartite mission.

The **International Quality Assurance Review Committee (IQARC)**, as charged by the **Council for Higher Education (CHE)**, met in November 2021 to assess HUFOM, as part of the CHE's quality assurance assessment of Israel's medical schools.

The IQARC framed its deliberations around several core elements:

- 1) **CHE's directive to focus the evaluation around '*fitness for purpose*' |**
In its quality assurance assessment, the IQARC looked to the medical school's own self-described *purpose*, as reflected in its mission and vision statements, along with its stated aspirations, as articulated in the self-study and IQARC interviews with university and medical school leadership.
- 2) **Evolving medical education models on the international scene |**
In addition to considering the medical school's self-described purpose and the medical education ecosystem in which it operates, the IQARC also viewed HUFOM through the lens of advances in medical education science and their translation across the world into medical school curricula and didactic modalities. This is relevant to the CHE's journey towards World Federation for Medical Education (WFME) accreditation status.
- 3) **Operating and budgetary constraints for Israel's medical schools |**
Evaluation of medical school performance must *per force* factor in the operational environment. HUFOM functions within a complex set of operating and budgetary constraints, including: a) national policies and practices vis-à-vis approval of, and budgetary allocations to, the medical school for educational programming, faculty staffing, new program development, and capital expenditures; b) tight university oversight of medical school educational curricula and programming, faculty appointments and promotions, and operating and capital allocations; and c) a complex interplay with its flagship hospital, Hadassah Medical Center, as well as its other clinical affiliates. Navigating this matrix of operating and budgetary relationships is demanding on leadership, constrains degrees of freedom, and in turn, must factor into recommendations.
- 4) **First evaluation against a new set of CHE standards |**
Subsequent to the 2014 medical school review cycle, the CHE, in its journey to WFME status,

set forth for the first time a structured set of standards for medical school quality assurance assessment in Israel. Further, there was a revision of these CHE standards within months of the June 2021 review cycle. Medical schools were given the option of revising their self-studies at this late stage, and HUFOM elected to do so, even as it faced the coronavirus pandemic.

5) HUFOM's performance since the last CHE-directed accreditation review in 2014 |

Notwithstanding a changing medical education landscape in Israel, accompanied by evolving educational evaluation perspectives and the introduction of formal accreditation standards since the last accreditation review, the IQARC nonetheless looked back to that 2014 review and evaluated HUFOM's progress in addressing the series of recommendations set forth in it, as well as in achieving internal objectives it has set forth for itself.

The IQARC evaluated HUFOM based upon 11 CHE-delineated standards for assessment of medical schools:

The CHE has modelled its standards after those of the United States Liaison Committee for Medical Education (LCME). The CHE adaptation encompasses assessment of:

- Goals, Planning, and Organization (Standard 1)
- Leadership and Management (Standard 2)
- Academic and Educational Environment (Standard 3)
- Teaching Staff (Standard 4)
- Educational Resources and Infrastructure (Standard 5)
- Skills, Learning Outcomes, and Curriculum Development (Standard 6)
- Curriculum (Standard 7)
- Curriculum Management and Evaluation (Standard 8)
- Teaching, Guidance, Assessment and Safety of Students and Patients (Standard 9)
- Admission Processes to the Program and Transition from Year to Year (Standard 10)
- Student Support and Services (Standard 11)

The IQARC evaluated HUFOM's compliance with these standards, and its top-level findings, commendations, and recommendations follow.

The IQARC's overarching findings are:

- 1) HUFOM has embraced the critique of the 2014 IQARC review committee and in the intervening years has set in motion an action plan to address significant deficiencies cited back then and elevate, even distinguish, its educational programs. The progress has been substantial, as reflected in the extensive set of commendations set forth within this report, and while there are still key next-stage milestones to be achieved in its journey, HUFOM is clearly well-positioned to go to the next level.
- 2) The diligent embrace of prior review committee recommendations, along with notable advances through programmatic innovation, started with the previous dean, and has since been driven by the current visionary dean, a motivated senior management team aligned with her vision, and tangible support from the larger university. The significant capital

projects now on the horizon for the medical school, as well as more modest ones that have already happened, are a testament to a reasonable degree of alignment between university and medical school on selected philanthropic and investment priorities. This is no small feat given the inherent complexities for HUFOM in bridging an array of constituencies, interests, and power structures—across the Ein Kerem/Givat Ram divide, and perhaps more so, the HUFOM/Hadassah Medical Center (HMC) divide. The latter is particularly notable given the well-publicized financial challenges, along with leadership transitions, that have confronted HMC in recent years.

- 3) HUFOM's responsiveness to the call for curricular transformation is reflected in substantial steps taken relating to articulation of competencies; introduction of a block system; more small group learning experiences; infusion of clinical into preclinical; early training in clinical skills; and training in preclinical-to-clinical and UME-to-GME transitions. There has also been an effort to address issues that span into the clinical years, by example, increasing the proportion of ambulatory medicine training in the clinical clerkships and in pre-clinical years. Yet, there is much more to be done. *While HUFOM's progress speaks to strategic thinking, it is incumbent on the medical school to now develop a structured, multi-year strategic plan that crisply sets forth action plans, milestones, and metrics, especially as they relate to further curricular reform.* Taking curricular transformation to the next level will call for making sharper decisions on overall pedagogy; articulating a stronger commitment to competency-based medical education with elaboration on the medical school's definition of competencies; mapping everything in the curriculum, along with assessment, to outcomes; addressing the misalignment between the curriculum and the assessment approach being applied to it; eliminating the cross-site variability in the quality of teaching, by ensuring all specialties coordinate competencies and learning objectives across institutions; using mentoring to monitor longitudinal competency development; developing more comprehensive syllabi for all courses which consolidate in one place information that locates the course within the competency framework and lists learning objectives, instructional offerings, and assessment criteria; and refining methodologies for assessment.
- 4) Strategic visioning would also address potential realignment of organizational structures. For example, consolidation of educational threads under the rubric of a formal *Department of Medical Education* would foster better alignment of the *Center for Medical Education* and the *Teaching & Learning Center*. Another major organizational move could be decoupling dental from medical education, especially as the curriculum shifts to more case-based learning. An alternative would be full alignment between the two programs in using the case-based learning format.
- 5) HUFOM now stands out amongst Israel's medical schools in recognizing education science as a respectable field and value proposition. The medical school has started to embrace faculty with expertise and focused interest in medical education, and there are signs that educational performance will be weighted in faculty promotion considerations. If this reified further in the coming years, HUFOM could assemble a cadre of medical education champions that would position this medical school to be a leader on the international scene in charting a new vision for medical student training. That said, getting there is still a

significant hurdle, as HUFOM must tackle challenges such as increasing protected time for administrators guiding UME; better preparing residents for tutoring roles; expanding longitudinal faculty development courses in pre-clinical and clinical teaching and assessment; providing more protected time to pre-clerkship course directors and clerkship directors; and addressing variability in medical education literacy of pre-clinical and clinical faculty across clinical affiliate sites and specialties. HUFOM is advised to introduce a systematic faculty development program for clinical instructors, and perhaps go as far as requiring all clinical faculty to engage in a longitudinal, rigorous faculty development process that leads to certification, and making this a criterion for promotion.

- 6) In addition to first-stage transformation of the core curriculum, HUFOM's substantial progress is showcased by an array of co-curricular innovations, some of which could be credibly characterized as *pioneering* for the broader medical school landscape. These initiatives reflect, and have been powered by, effective leverage of university-wide strengths in computer and data sciences, along with exceptional strengths in biomedical research. A focused track blending medicine and computer sciences for selected students (the *SAGOL* track), as well as other didactic content that infuses computer sciences into the broader curriculum for all students, are paving the way for training a new generation of physicians who will someday be at the digital medicine frontier. This forefront initiative has even included the addition of a core course on math and python programming for medical students, and it has been powered by the recruitment of nine computational biologists. The dramatic growth of the MD-PhD program demonstrates an effective push to leverage the medical school's outstanding research faculty and frames a path forward for other dual degree training opportunities that bridge knowledge domains, by example, with an MBA/Biomed M.Sc. as an *Innovation + Entrepreneurship* track. HUFOM is home to the *Tzameret* program that operates in conjunction with the Israel Defense Forces, which incorporates international clinical elective experiences for the exceptional students in this track and represents yet another example of HUFOM's openness to deep cross-disciplinary bridging. Together, these and other initiatives evince a commendable willingness to explore state-of-the-art innovations in medical education and foster physicians of the future who are facile in traversing distinct knowledge domains.
- 7) HUFOM now has an opportunity to take its co-curricular innovation even further. This could include more intentional leverage of other university assets that go beyond hard-core biomedical, physical and data sciences, encompassing a broad range of humanities and social sciences that could lend themselves to creative co-curricular offerings and transdisciplinary student research projects.
- 8) Beyond core curriculum transformation and co-curricular innovation, HUFOM has positioned itself for several new initiatives related to didactics and pathways. Poised for its major new education building with a state-of-the-art simulation facility, the medical school will now be able to expand simulation offerings and even innovate in this arena. The same holds for building on its investment to-date in virtual reality and other interactive screen-based technology learning tools. There is significant room for growing programming in interprofessional education (IPE), where it must next address the issue of clinical

placements. For its IPE journey, the medical school would be advised to draw upon know-how from worldwide medical education where hardy examples are already implemented. HUFOM introduced an integrative medicine course—the first in Israel—so it is now positioned to build on this program, perhaps emphasizing nutritional sciences. HUFOM should also explore paths for integrating basic science into the clinical years, for example, by capstone experiences.

- 9) As to training pathways, HUFOM should proceed with its planned implementation of a *longitudinally integrated curriculum (LIC)* as an option for its students. An LIC would offer advantages with respect to clinical learning at clinical affiliates where there is currently uneven teaching quality within and across clinical units.
- 10) While not explicitly set forth in the DCI self-study, HUFOM implicitly aspires to a mixed mission. While the medical school showcases innovative educational programming related to computational and biomedical sciences, there is also a parallel agenda directed towards cultivating humanism and social responsibility in its medical students. The latter is reflected in its steps to focus some curricular content on societal problems; infuse humanism longitudinally via directed programming (*Adam Refuah*); support a student-inspired community outreach initiative to aid the homeless, foreign workers, and asylum-seekers, and so promote health in Jerusalem (*SHLAVIM*); introduce a new curricular structure dealing with the healthy individual and the patient; develop a special program in end-of-life palliative medicine; promote a student-initiated elective course in learning Arabic; and emphasize the cultivation of communication skills.
- 11) HUFOM has demonstrated a tangible commitment to the wellbeing of its students, in terms of resource commitments (library, study spaces, rooftop retreat), social programming, funding for electives abroad, and psychological support services. Robust student feedback and input demonstrate the administration's intent to be responsive and iterate solutions. Students feel supported by administration, as evidenced by a comment by one of them at the site visit: *'You can always knock on the door'*. Yet, notwithstanding a tangible commitment to student support in the preclinical phase, there is a drop-off in student satisfaction when they transition into their clinical training years, with dissatisfiers related to space, food, and storage. This sits atop a larger student-related concern vis-à-vis the availability of clinical training spots, with the problem of already high student-to-clinical unit ratios likely to get worse as Israel's medical schools are pressured to grow student numbers in the coming years.
- 12) Yet another overarching concern relates to time pressures on students—a concern that applies more generally across all of Israel's medical schools. Most students, being post-IDF service, are burdened by financial imperatives that obligate them to work during their studies, making time management a critical issue. Given the richness of the co-curricular opportunities being developed by HUFOM, the question becomes how to carve out the time for students to amply take advantage of these offerings and training pathways. There is also the need for dedicated time for medical students to meet their research thesis requirement, including free time to explore ideas and seek out connections is but one example. More

endowed scholarships would mitigate the need for students to juggle work and studies, and HUFOM's first steps to augment scholarship step are commendable and distinguish it on the Israel medical school landscape. Further, reduction of financial stress could well help address the concerning drop-out rate.

- 13) HUFOM should look to diversify admitted student demographics, including minority groups, including Ethiopian immigrants, Druze, and Arabs, as well as others from underprivileged backgrounds. This would fit well with the intention expressed by the university rector to increase the proportion of Arab students from 12% to 18% over a 10-year period. Further, this could be part of broader reforms to the medical school's admission processes, such as incorporating creative assessment of non-cognitive skills into the admissions process that go beyond personality assessments *per se*, for example, written situational judgement tests; and replacing the current interview format with multiple mini-interviews. Further, when it comes to special opportunities, such as international electives, student motivation could be factored in as an admission criterion rather than grades alone.

- 14) HUFOM should develop bridges to other Israeli medical schools and work collaboratively with them to innovate in the medical education space. For example, it could lead a nationwide internship curriculum which paves the transition to residency and practice. Another joint initiative could relate to leveraging Israel's robust start-up ecosystem for training purposes, for instance, cultivating entrepreneurship in medical students. The possibilities for inter-institutional collaboration are considerable.

The IQARC's more specific findings related to the CHE standards are embodied within the series of commendations/good practices and 44 recommendations set forth in detail in the following section. This includes recent major changes and key challenges faced by HUFOM, as well as the medical school's performance during the pandemic.

Each of the CHE standards was assessed on a scale of 1 to 6, wherein a score of 6 was deemed *Good Practice*; a score of 5 was deemed *Needs Minor Improvement*; scores of 3 and 4 were deemed *Needs Major Improvement*; and scores of 1 and 2 were deemed *Standard Not Met*. Based on this scoring system, the IQARC came to the overall conclusion that the Hebrew University Faculty of Medicine meets all 11 standards set forth by the Committee on Higher Education. That said, 5 of the 11 standards are categorized as *Needs Major Improvement* (1 'Score 3'; 4 'Score 4'), 5 of the 11 standards as *Needs Minor Improvement* (5 'Score 5'), and 1 of the 11 standards as *Good Practice* (1 'Score 6').

Conclusions about the Hebrew University Faculty of Medicine

The IQARC evaluation committee reached the following conclusions about the higher education provision at the medical school at the Hebrew University Faculty of Medicine.

Israeli Standards for Medical Education

The Hebrew University Faculty of Medicine meets 11 of the 11 Israeli Standards for Medical Education, with needs for improvement on each standard detailed below.

Commendations and Good Practice

The IQARC evaluation committee identified the following areas for commendation and features of good practice at the Hebrew University Faculty of Medicine:

- 1) There has been remarkable progress since the 2014 IQARC review. It is clear from both the DCI self-study and the site visit that HUFOM leaders, starting with the dean, took the report to heart. There was a willingness to learn from international and national peers, coupled to diligence in implementation of improvements and new initiatives. This culture of receptiveness to change extended to faculty and staff, yielding compelling new programs and initiatives, especially in pre-clinical years, some ground-breaking.
- 2) University leaders (President/Rector/Vice-Rector) echo the dean's commitment to the educational mission and her embrace of curricular innovation. While the university president stated at one point that he sees *"no clear separation between research and teaching"*, his larger message conveyed a deep commitment to active learning, teaching quality, and education as a discipline in its own right, reflected in creation of a *"20-member division"* of educators at the university. It was also clear, and affirming, that the 2014 IQARC review had impacted the highest levels of the organization, with the university president stating, *"I can't overemphasize the importance of the previous report ... it came as a shock"*.
- 3) In essence, HUFOM has a *mixed mission*, aspiring to mint physicians versed in the sciences and digital medicine, and at once, hard-core clinicians imbued with a humanistic spirit and prepared to care for diverse populations. The medical school has been demonstrating an ability to instantiate these two contrasting and challenging goals.
- 4) The DCI self-study is well-crafted, with clear points of evidence, accessible appendices, and balanced reflections on the medical school's current strengths and weaknesses.
- 5) University bylaws and medical school-level policies are in place, and they are aligned with objectives set forth.
- 6) All clinical affiliation agreements are up-to-date, and there is an educational oversight system in place for the various clinical affiliates.
- 7) HUFOM's dean is highly qualified, recognized as a scholar-leader in her field, and the first at her institution in recent years to be re-elected to a second term. The dean is admired by

faculty, students, and alumni alike, who talk of her ‘open door’, ‘listening’, and ‘willingness to take suggestion and implement change’.

- 8) HUFOM’s dean is supported by a solid cadre of senior academic leaders who resonate with her vision and objectives. This leadership team features hands-on management, with a regular cadence of meetings and planning sessions. Further, they actively engage students and invite them into curricular change processes.
- 9) Notwithstanding a challenging operating environment, in which the HUFOM must navigate the complexities inherent in its relationships with Hadassah Medical Center and Hebrew University, the medical school has managed to garner the financial and other resources to move forward on significant capital projects in support of both its education and research missions.
- 10) HUFOM has demonstrated a tangible commitment to take advantage of its thought leaders in cutting-edge areas such as computer sciences, data sciences, entrepreneurship, and population health for new and creative offerings. Various new HUFOM programs are *de facto* leveraging these thought leaders, which includes faculty at both the Ein Kerem Hadassah Medical Center campus and the main Givat Ram university campus, creating interdisciplinary bridges among several disciplines and showcasing focused excellence. This reflects, and is buoyed by, an exceptional innovative spirit that is evident across HUFOM, as it has been effectively devising unique educational offerings and pathways, with a material number of students engaging in them.
- 11) The highly innovative *SAGOL* track is pioneering inter-disciplinary training in computer sciences and medicine. Among the positives, this track will develop future physicians who are expert in conducting research using big data.
- 12) The introduction of computer sciences across the standard curricular track is impressive.
- 13) HUFOM has an exceptionally strong research community, which is being effectively leveraged for its substantial and growing number of MD-PhD students, as well as for various other compelling dual degree and co-curricular pathways.
- 14) The medical school’s community of scholars is being expanded to encompass experts in medical education, albeit modestly and incrementally.
- 15) Leadership has expressed a willingness to value educational performance in the faculty promotion process.
- 16) There is a mentoring system in place—the *PI Mentorship Program*—geared to incoming faculty, with sufficient funding.
- 17) A significant number of medical students gain relevant work experience via teaching assistant and physician assistant roles.

- 18) HUFOM has in place a committed pre-clinical and clinical teaching staff, who are highly engaged with, and show significant caring for the professional and personal development of the medical students.
- 19) The institutional emphasis on the research mission is tangible, evidenced by concrete commitments to research infrastructure. There are many outstanding, world-class research faculty in place.
- 20) The IQARC review committee is optimistic about HUFOM's ongoing curriculum reform given alignment of the medical school dean with both her highly engaged leadership team and central university administration; the build to-date of a cadre of medical education experts, albeit still few; and perhaps most importantly, leadership's openness to critical feedback and demonstrated willingness to act on it.
- 21) There has been an outstanding transition from a traditional medical education curriculum toward a more student-centered curriculum in the preclinical years. This is now highly valued by students, as reflected in student satisfaction surveys.
- 22) The medical school's heavy lift since the 2014 report is manifest, relating to creation of a block system; infusion of clinical into preclinical; early training in clinical skills; articulation of competencies; more small group learning experiences; training in transitions from 3rd to 4th year, as well as from 6th year to residency. The addition of clinical exposure in the pre-clinical years represents a significant step in the right direction.
- 23) There has been significant progress towards the goal of increasing the proportion of ambulatory medicine training in the clinical clerkships and in pre-clinical years.
- 24) Planning is ongoing for a longitudinally integrated curriculum (LIC) option for medical students, which would be especially well-suited for primary care career trajectories. A further dividend is that it would help address the national healthcare imperative for more primary care providers.
- 25) HUFOM has implemented a sophisticated approach to identify societal problems on which to focus curricular content. Curricular revisions reflect a tangible commitment by HUFOM to foster social accountability among its medical students.
- 26) Humanism has been extensively infused into medical student training in a longitudinal fashion. This is exemplified by the *Adam and Refuah* program, featuring small groups of 12 students that stay together over several years. Students were especially appreciative of this program during the pandemic because of the social support it provided.
- 27) The new curricular structure for 2nd and 3rd year medical students dealing with the healthy individual and the patient, respectively, is commendable and well-understood.

- 28) Use of the highly validated Calgary-Cambridge model as a framework for teaching communication skills ensures that an evidence-based approach is being invoked to address this core competency longitudinally.
- 29) The syllabus developed by Internal Medicine can serve as a model for others, although other competencies should be integrated into it.
- 30) There is a solid committee structure in place across the medical school, with clear distinction of responsibilities and ways to integrate and communicate among them.
- 31) A comprehensive system of admission to both programs of the medical school is in place, consisting of cognitive and humanistic/relational elements.
- 32) HUFOM has adequate, well-appointed student resources in every category, including excellent library facilities, a rooftop retreat, and other resources to care for personal and study needs of its medical students on the Ein Keren campus.
- 33) There are many social activities for students, e.g., concerts during lunch breaks.
- 34) The ratio between lecture and small group learning spaces is appropriate for the new preclinical curriculum.
- 35) Data from the student survey is compiled in a meaningful and actionable way that enables curriculum leaders to quickly understand student perspectives, as well as to monitor trends across the years and so target areas that need improvement.
- 36) Attrition is minimal through good support of the students, including *Leave-of-Absence* regulations.
- 37) There is a large admissions committee with community member representatives.
- 38) Students have access to their course and clerkship data for the review of exams.
- 39) Funding is available for student electives abroad.
- 40) Psychological services are available for those students needing it.

Recommendations

The IQARC evaluation committee makes the following recommendations to the Hebrew University Faculty of Medicine.

Essential:

- 1) Develop a structured, multi-year strategic plan for the medical school that builds on clearly articulated mission, vision, values, and strategic goals, along with associated action plans, milestones, and metrics. While the medical school's progress implicitly speaks to its strategic thinking, a formal plan will ensure that all stakeholders are aligned, as well as further assure continuity when deans transition.
- 2) Devise a more structured and intentional approach towards more extensively leveraging the parent university's significant and wide-ranging academic strengths. The opportunities for such leverage at Hebrew University go well beyond hard-core biomedical, physical and data sciences, encompassing a broad range of humanities and social sciences that could lend themselves to creative co-curricular offerings and transdisciplinary student research projects.
- 3) Consider consolidating the various committees and centers dealing with education matters into a single *Department of Medical Education*. Streamlining the medical school's academic affairs in this way would help pave the way for the significant work yet to be done in implementing the next phase of curricular transformation that will be required. Such a department would provide a natural home for a nucleus of faculty operating at the frontier of medical education science, as well as allow for efficient coordination of the medical school's growing set of co-curricular, discipline-spanning offerings.
- 4) Align the capabilities and processes of the *Center for Medical Education* and the *Teaching & Learning Center*, to synergistically address the educational needs of the medical school and to train-the-trainers.
- 5) Longitudinally track educational outcomes through a formal, structured process, and embrace this initiative as a priority. Given Israel's pressing need to grow its physician workforce, the medical school can do its part by collecting medical school-specific data related to clinical paths and outcomes. Cumulative data pertaining to numbers of graduates practicing in Israel, types of medicine practiced, and destination clinical venues are crucial for proper planning and assessment the nation's future medical education landscape.
- 6) Take curricular reform to the next level, by making sharper decisions on overall pedagogy:
 - Significantly reduce contact hours, given that it is still predominantly lecture-based (74%) and contact hour-intensive
 - Monitor self-directed learning time of the students
 - Conduct deeper competency mapping
 - Elevate assessment to contemporary best practices
 - Introduce advanced simulation
 - Enhance student portfolios

- Ensure consistency and '*equivalency of training*' for all disciplines at all sites
 - Deal with the especially high student-to-faculty ratios for certain clinical rotations
 - Promote more horizontal and vertical integration
 - Develop programming directed towards clinical reasoning
- 7) Articulate a stronger commitment to competency-based medical education by elaborating on the medical school's definition of competencies, and mapping everything in the curriculum, along with assessment, to outcomes.
- 8) Elevate assessment through a series of action steps:
- Augment assessment via more emphasis on formative and narrative assessment, to complement summative assessment
 - Introduce a system of workplace-based assessment
 - Embrace newer forms of clinical assessment, with explicit assessment of competencies such as professionalism, and introduce measures to evaluate them longitudinally
 - Perform quality-assurance of exam questions and post-test psychometric analysis
 - Track academic performance indicators across clerkships, and feed-forward that information between clerkships
- 9) Address cross-site variability in the quality of teaching, by ensuring all specialties coordinate competencies and learning objectives across institutions, including:
- Conduct on-site visits with some frequency
 - introduce *train-the-trainers* faculty development at all sites
 - Systematically analyze program evaluation data and then follow-up with clear remediation plans where appropriate
- 10) Develop more comprehensive syllabi for all courses which consolidate in one place information that locates the course within the competency framework and lists learning objectives, instructional offerings, and assessment criteria. At present, this is being provided for only a small subset of courses.
- 11) Use a structured mentoring program to monitor longitudinal competency development.
- 12) Adopt a competency framework and map all assessment activities to these competencies.
- 13) Reposition the assessment *of* learning program into more of an assessment *for* learning program, with a greater focus on formative assessment and longitudinal, continuous assessment.
- 14) Create more integrated exams that fit to the block structure, and significantly reduce the number of summative exams.
- 15) Increase meaningful feedback to students for better assessment, recognizing that grades in-and-of themselves are a poor form of feedback. For example, provide sub-score

performance information on blueprint categories of individual tests where the individual performance is related to the performance of the cohort.

- 16) Use narrative data from documented feedback dialogues in the clinical years to inform complex skills development related to the competency framework, as opposed to checklists.
- 17) Implement a system for tracking and sharing academic performance across clinical rotations, including electronic learning dossiers.
- 18) Consider expanding the mentoring system to include a coaching component to monitor students' academic growth and enhance reflective and self-directed learning.
- 19) Replace some traditional methods of assessment with more modern ones, such as work-based assessment methods (Mini-CEX, Case-based discussions, multisource feedback, field notes).
- 20) Introduce pre-test quality control on item writing and post-test psychometric analysis and review.
- 21) Address variability in medical education literacy of pre-clinical and clinical faculty across clinical affiliate sites and specialties.
- 22) Introduce a systematic faculty development program for clinical instructors. Require all clinical faculty to engage in a longitudinal, rigorous faculty development process that leads to certification, and make this a criterion for promotion. This is part of an overall intent to strengthen the cadre of medical educators, with significant expansion of longitudinal faculty development courses in pre-clinical and clinical teaching and assessment. Over time, this will build clinical education capacity for the whole system. More structured *teaching-the-teachers* will foster equivalency of training across the various clinical affiliate sites. Mandatory faculty development of clinical instructors should focus on clerkship educational goals, bedside teaching, active learning, observation skills, work-based assessment, feedback, communication skills, and alignment of clinical instructors with what students were taught in their preclinical years.
- 23) Address growing pressures on clinical training spot availability, particularly pressing in some of the specialties such as pediatrics. This is especially concerning given that there are already high student-to-clinical unit ratios, which will only be exacerbated in the face of external pressures to grow student numbers in the coming years. A comprehensive assessment of the current situation, with detailed specialty-level clinical rotation capacity mapping, will set the stage for appropriate action.
- 24) Find ways to reduce the number of students per clinical unit.

- 25) Better coordinate among clinical sites to ensure equivalency of training and enhance overall quality of training.
- 26) Implement up-to-date standards for preparedness for/transition to residency and practice. Consider leading a nationwide internship curriculum which paves the continuum.
- 27) Clarify how the internal quality assurance system operates, and how the PDSA cycles (Plan, Do, Study, Act) are closed.
- 28) Create a programmatic approach to remediation that is state-of-the-art. Establish a best-practice program of remediation which identifies underlying causes and establishes individualized remediation with a timeline and accountability plans, rather than simply having students retake or repeat the same experiences.
- 29) Develop mandatory programs for students that are directed towards fostering their well-being and help them deal with the physical and emotional demands of medical school and medical careers.
- 30) Work with the CHE to develop paths for diversifying admitted student demographics, including minority groups and those from underprivileged backgrounds.

Important:

- 31) Create a dedicated committee within the medical school to establish and diligently monitor faculty conflict-of-interest and conflict-of-commitment policies, as well as handle matters that arise in these areas.
- 32) As the curriculum shifts to more case-based learning, decouple dental from medical education.
- 33) Provide more protected time to pre-clerkship course directors and clerkship directors.
- 34) Better prepare residents for tutoring roles.
- 35) Increase protected time for major administrative duties.
- 36) Address the drop-off in student satisfaction with facilities and resources when the students transition into their clinical training years. Areas of student dissatisfaction include space availability, subsidized food, and storage for personal belongings.
- 37) Structure dedicated time for medical students to meet their research thesis requirement, including free time to explore ideas and seek out connections. Further, to foster meaningful research projects, provide the students formal training in research methods and scientific writing.
- 38) Reconsider the decision to put a student in charge of anonymous complaints lodged against faculty and students.

- 39) Build capacity and infrastructure to support expanded simulation offerings, with a new facility in the making. Establish a working group to carefully assess the high-level staffing that will be needed for proper supervision of medical student simulation training. This analysis will set the stage for building the depth of expertise which will be required to support the ambitious set of programs set forth in the DCI self-study.
- 40) Expand on HUFOM's early investment in virtual reality and other interactive screen-based technology learning tools. By example, embed advanced imaging in anatomy teaching.
- 41) Expand the interprofessional collaborative skills curriculum to prepare medical students to practice effectively within the interprofessional healthcare teams of the future. To this end, draw upon best practices at institutions internationally with well-established interprofessional education (IPE) programs and perhaps look to innovate IPE in new directions.
- 42) Proceed with implementation of the longitudinally integrated curriculum (LIC) framework, propelled by the opportunity it provides to improve the quality of clinical learning at clinical affiliates where there is currently uneven teaching quality within and across clinical units.
- 43) Permit students to review their narrative assessments.

Desirable:

- 44) Engage university level development officers to advocate for and create a meaningful number of endowed scholarships.

Explanation of the findings about the Hebrew University Faculty of Medicine, according to individual standards

This section sets forth key review findings, for each of the 11 standards, with commendations and recommendations.

Standard 1: Mission, Planning, Organization, and Integrity

A medical school has a written statement of mission and goals for the medical education program, conducts ongoing planning, and has written bylaws that describe an effective organizational structure and governance process. In the conduct of all internal and external activities, the medical school demonstrates integrity through its consistent and documented adherence to fair, impartial, and effective processes, policies, and practices.

Provide summary of the commendations and good practices relevant to this standard

- There has been remarkable progress since the 2014 IQARC review. It is clear from both the DCI self-study and the site visit that HUFOM leaders, starting with the dean, took the report to heart. There was a willingness to learn from international and national peers, coupled to diligence in implementation of improvements and new initiatives. This culture of receptiveness to change extended to faculty and staff, yielding compelling new programs and initiatives, some ground-breaking.
- University leaders (President/Rector/Vice-Rector) echo the dean's commitment to the educational mission and her embrace of curricular innovation. While the university president stated at one point that he sees *"no clear separation between research and teaching"*, his larger message conveyed a deep commitment to active learning, teaching quality, and education as a discipline in its own right, reflected in creation of a *"20-member division"* of educators at the university. It was also clear, and affirming, that the 2014 IQARC review had impacted the highest levels of the organization, with the university president stating, *"I can't overemphasize the importance of the previous report ... it came as a shock"*.
- The DCI self-study is well-crafted, with clear points of evidence, accessible appendices, and balanced reflections on the medical school's current strengths and weaknesses.
- In essence, HUFOM has a *mixed mission*, aspiring to mint physicians versed in the sciences and digital medicine, and at once, hard-core clinicians imbued with a humanistic spirit and prepared to care for diverse populations. The medical school has been demonstrating an ability to instantiate these two contrasting and challenging goals.
- University bylaws and medical school-level policies are in place, and they are aligned with objectives set forth.
- All clinical affiliation agreements are up-to-date, with an educational oversight system in place for the various clinical affiliates.

Provide summary of the recommendations relevant to this standard

- Develop a structured, multi-year strategic plan for the medical school that builds on clearly articulated mission, vision, values, and strategic goals, along with associated action plans, milestones, and metrics. While the medical school's progress implicitly speaks to its strategic thinking, a formal plan will ensure that all stakeholders are aligned, as well as further assure continuity when deans transition.
- Devise a more structured and intentional approach towards more extensively leveraging the parent university's significant and wide-ranging academic strengths. The opportunities for such leverage at Hebrew University go well beyond hard-core biomedical, physical and data sciences, encompassing a broad range of humanities and social sciences that could lend themselves to creative co-curricular offerings and transdisciplinary student research projects.
- Create a dedicated committee within the medical school to establish and diligently monitor conflict-of-interest and conflict-of-commitment policies, as well as handle matters that arise in these areas.
- Longitudinally track educational outcomes through a formal, structured process, and embrace this initiative as a priority. Given Israel's pressing need to grow its physician workforce, the medical school can do its part by collecting medical school-specific data related to clinical paths and outcomes. Cumulative data pertaining to numbers of graduates practicing in Israel, types of medicine practiced, and destination clinical venues are crucial for proper planning and assessment the nation's future medical education landscape.

Conclude whether the standard is 'met' or 'not met', and if met, briefly explain reason for score

Standard 1 is met, albeit *needs minor improvement* (Score 5).

- ❖ The score that the institution gave itself in this standard:

Unsatisfactory			Satisfactory		
1	2	3	4	<u>5</u>	6

- ❖ The score that the committee gives the institution in this standard:

Unsatisfactory			Satisfactory		
1	2	3	4	<u>5</u>	6

Standard 2: Leadership and Administration

A medical school has a sufficient number of faculty in leadership roles and of senior administrative staff with the skills, time, and administrative support necessary to achieve the goals of the medical education program and to ensure the functional integration of all programmatic components.

Provide summary of the commendations and good practices relevant to this standard

- HUFOM's dean is highly qualified, recognized as a scholar-leader in her field, and the first at her institution in recent years to be re-elected to a second term. The dean is admired by faculty, students, and alumni alike, who talk of her 'open door', 'listening', and 'willingness to take suggestion and implement change'.
- HUFOM's dean is supported by a solid cadre of senior academic leaders who resonate with her vision and objectives. This leadership team features hands-on management, with a regular cadence of meetings and planning sessions. Further, they actively engage students and invite them into curricular change processes.
- Notwithstanding a challenging operating environment, in which the HUFOM must navigate the complexities inherent in its relationships with Hadassah Medical Center and Hebrew University, the medical school has managed to garner the financial and other resources to move forward on significant capital projects in support of both its education and research missions.

Provide summary of the recommendations relevant to this standard

- Consider consolidating the various committees and centers dealing with education matters into a single *Department of Medical Education*. Streamlining the medical school's academic affairs in this way would help pave the way for the significant work yet to be done in implementing the next phase of curricular transformation that will be required. Such a department would provide a natural home for a nucleus of faculty operating at the frontier of medical education science, as well as allow for efficient coordination of the medical school's growing set of co-curricular, discipline-spanning offerings.
- Increase protected time for major administrative duties.

Conclude whether the standard is 'met' or 'not met', and if met, briefly explain reason for score

Standard 1 is met and achieves the designation of *Good Practice* (Score 6).

❖ The score that the institution gave itself in this standard:

Unsatisfactory

Satisfactory

1 2 3 4 5 6

❖ The score that the committee gives the institution in this standard:

Unsatisfactory

Satisfactory

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Standard 3: Academic and Learning Environments

A medical school ensures that its medical education program occurs in professional, respectful, and intellectually stimulating academic and clinical environments, recognizes the benefits of diversity, and promotes students' attainment of competencies required of future physicians.

Provide summary of the commendations and good practices relevant to this standard

- HUFOM has demonstrated a tangible commitment to take advantage of its thought leaders in cutting-edge areas such as computer sciences, data sciences, entrepreneurship, and population health for new and creative offerings.
- HUFOM has an exceptionally strong research community, which is being effectively leveraged for its substantial and growing number of MD-PhD students, as well as for various other compelling dual degree and co-curricular pathways.
- The medical school's community of scholars is being expanded to encompass experts in medical education, albeit modestly and incrementally.
- There is a mentoring system in place—the *PI Mentorship Program*—geared to incoming faculty, with sufficient funding.
- A significant number of medical students gain relevant work experience via teaching assistant and physician assistant roles.

Provide summary of the recommendations relevant to this standard

- Better prepare residents for tutoring roles.

Conclude whether the standard is 'met' or 'not met', and if met, briefly explain reason for score

Standard 3 is met, albeit *needs minor improvement* (Score 5).

- ❖ The score that the institution gave itself in this standard:

Unsatisfactory					Satisfactory	
	1	2	3	4	<u>5</u>	6

- ❖ The score that the committee gives the institution in this standard:

Unsatisfactory					Satisfactory	
	1	2	3	4	<u>5</u>	6

Standard 4: Faculty Preparation, Productivity, Participation, and Policies

The faculty members of a medical school are qualified through their education, training, experience, and continuing professional development, to provide the leadership and support necessary to attain the institutions educational, research, and service goals.

Provide summary of the commendations and good practices relevant to this standard

- HUFOM has in place a committed pre-clinical and clinical teaching staff, who are highly engaged with, and show significant caring for the professional and personal development of the medical students.
- The institutional emphasis on the research mission is tangible, evidenced by concrete commitments to research infrastructure. There are many outstanding, world-class research faculty in place.
- Various new HUFOM programs are *de facto* leveraging faculty at the main Givat Ram university campus, creating interdisciplinary bridges among several disciplines and showcasing focused excellence.
- Leadership has expressed a willingness to value educational performance in the faculty promotion process.

Provide summary of the recommendations relevant to this standard

- Address variability in medical education literacy of pre-clinical and clinical faculty across clinical affiliate sites and specialties.
- Strengthen the cadre of medical educators, with significant expansion of longitudinal faculty development courses in pre-clinical and clinical teaching and assessment.
- Provide more protected time to pre-clerkship course directors and clerkship directors.
- Align the capabilities and processes of the *Center for Medical Education* and the *Teaching & Learning Center*, to synergistically address the educational needs of the medical school and to train-the-trainers.

Conclude whether the standard is 'met' or 'not met', and if met, briefly explain reason for score

Standard 4 is met, albeit *needs minor improvement* (Score 5).

❖ The score that the institution gave itself in this standard:

Unsatisfactory

Satisfactory

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❖ The score that the committee gives the institution in this standard:

Unsatisfactory

Satisfactory

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Standard 5: Educational Resources and Infrastructure

A medical school has sufficient personnel, financial resources, physical facilities, equipment, and clinical, instructional, informational, technological, and other resources readily available and accessible across all locations to meet its needs and to achieve its goals.

Provide summary of the commendations and good practices relevant to this standard

- HUFOM has adequate, well-appointed student resources in every category, including excellent library facilities, a rooftop retreat, and other resources to care for personal and study needs of its medical students on the Ein Keren campus.
- There are many social activities for students, e.g., concerts during lunch breaks.
- The ratio between lecture and small group learning spaces is appropriate for the new preclinical curriculum.
- Data from the student survey is compiled in a meaningful and actionable way that enables curriculum leaders to quickly understand student perspectives, as well as to monitor trends across the years and so target areas that need improvement.

Provide summary of the recommendations relevant to this standard

- Address the drop-off in student satisfaction with facilities and resources when the students transition into their clinical training years. Areas of student dissatisfaction include space availability, subsidized food, and storage for personal belongings.
- Address growing pressures on clinical training spot availability, particularly pressing in some of the specialties such as pediatrics. This is especially concerning given that there are already high student-to-clinical unit ratios, which will only be exacerbated in the face of external pressures to grow student numbers in the coming years. A comprehensive assessment of the current situation, with detailed specialty-level clinical rotation capacity mapping, will set the stage for appropriate action.
- Build capacity and infrastructure to support expanded simulation offerings, with a new facility in the making. Establish a working group to carefully assess the high-level staffing that will be needed for proper supervision of medical student simulation training. This analysis will set the stage for building the depth of expertise which will be required to support the ambitious set of programs set forth in the DCI self-study.
- Expand on HUFOM's early investment in virtual reality and other interactive screen-based technology learning tools. By example, embed advanced imaging in anatomy teaching.

Conclude whether the standard is 'met' or 'not met', and if met, briefly explain reason for score

Standard 5 is met, albeit *needs major improvement* (Score 4).

- ❖ The score that the institution gave itself in this standard:

Unsatisfactory

Satisfactory

1 2 3 4 5 6

- ❖ The score that the committee gives the institution in this standard:

Unsatisfactory

Satisfactory

1 2 3 4 5 6

Standard 6: Competencies, Curricular Objectives, and Curricular Design

The faculty of a medical school define the competencies to be achieved by its medical students through medical education program objectives and is responsible for the detailed design and implementation of the components of a medical curriculum that enable its medical students to achieve those competencies and objectives. Medical education program objectives are statements of the knowledge, skills, behaviours, and attitudes that medical students are expected to exhibit as evidence of their achievement by completion of the program.

Provide summary of the commendations and good practices relevant to this standard

- There has been an outstanding transition from a traditional medical education curriculum toward a more student-centered curriculum in the preclinical years. This is now highly valued by students, as reflected in student satisfaction surveys.
- The IQARC review committee is optimistic about HUFOM's ongoing curriculum reform given alignment of the medical school dean with both her highly engaged leadership team and central university administration; the build to-date of a cadre of medical education experts, albeit still few; and perhaps most importantly, leadership's openness to critical feedback and demonstrated willingness to act on it.
- The medical school's heavy lift since the 2014 report is manifest, relating to creation of a block system; infusion of clinical into preclinical; early training in clinical skills; articulation of competencies; more small group learning experiences; training in transitions from 3rd to 4th year, as well as from 6th year to residency.
- There has been significant progress towards the goal of increasing the proportion of ambulatory medicine training in the clinical clerkships and in pre-clinical years.
- An exceptional innovative spirit has been evident as HUFOM has devised unique educational offerings and pathways, with a material number of students engaging in them.

Provide summary of the recommendations relevant to this standard

- Take curricular reform to the next level, by making sharper decisions on overall pedagogy:
 - Significantly reduce contact hours, given that it is still predominantly lecture-based (74%) and contact hour-intensive
 - Monitor self-directed learning time of the students
 - Conduct deeper competency mapping
 - Elevate assessment to contemporary best practices
 - Introduce advanced simulation
 - Enhance student portfolios
 - Ensure consistency and '*equivalency of training*' for all disciplines at all sites
 - Deal with the especially high student-to-faculty ratios for certain clinical rotations

- Promote more horizontal and vertical integration
- Develop programming directed towards clinical reasoning
- Articulate a stronger commitment to competency-based medical education by elaborating on the medical school's definition of competencies, and mapping everything in the curriculum, along with assessment, to outcomes.
- Address the misalignment between the curriculum and the assessment approach being applied to it, through a series of action steps:
 - Augment assessment via more emphasis on formative and narrative assessment, to complement summative assessment
 - Introduce a system of workplace-based assessment
 - Embrace newer forms of clinical assessment, with explicit assessment of competencies such as professionalism, and introduce measures to evaluate them longitudinally
 - Perform quality-assurance of exam questions and post-test psychometric analysis
 - Track academic performance indicators across clerkships, and feed-forward that information between clerkships
- Address cross-site variability in the quality of teaching, by ensuring all specialties coordinate competencies and learning objectives across institutions, including:
 - Conduct on-site visits with some frequency
 - introduce *train-the-trainers* faculty development at all sites
 - Systematically analyze program evaluation data and then follow-up with clear remediation plans where appropriate
- Use mentoring and coaching to monitor longitudinal competency development.
- Reconsider the decision to put a student in charge of anonymous complaints lodged against faculty and students.
- As the curriculum shifts to more case-based learning, decouple dental from medical education.

Conclude whether the standard is 'met' or 'not met', and if met, briefly explain reason for score

Standard 6 is met, albeit *needs major improvement* (Score 4).

❖ The score that the institution gave itself in this standard:

Unsatisfactory

Satisfactory

1 2 3 4 5 6

❖ The score that the committee gives the institution in this standard:

Unsatisfactory

Satisfactory

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Standard 7: Curricular Content

The faculty of a medical school ensures that the medical curriculum provides content of sufficient breadth and depth to prepare medical students for entry into any residency program and for the subsequent contemporary practice of medicine.

Provide summary of the commendations and good practices relevant to this standard

- The highly innovative *SAGOL* track is pioneering inter-disciplinary training in computer sciences and medicine. Among the positives, this track will develop future physicians who are expert in conducting research using big data.
- The introduction of computer sciences across the standard curricular track is impressive.
- There has been significant expansion of the MD-PhD program in recent years.
- Planning is ongoing for a longitudinally integrated curriculum (LIC) option for medical students, which would be especially well-suited for primary care career trajectories. A further dividend is that it would help address the national healthcare imperative for more primary care providers.
- HUFOM has implemented a sophisticated approach to identify societal problems on which to focus curricular content.
- Humanism has been extensively infused into medical student training in a longitudinal fashion. This is exemplified by the *Adam and Refuah* program, featuring small groups of 12 students that stay together over several years. Students were especially appreciative of this program during the pandemic because of the social support it provided.
- Use of the highly validated Calgary-Cambridge model as a framework for teaching communication skills ensures that an evidence-based approach is being invoked to address this core competency longitudinally.

Provide summary of the recommendations relevant to this standard

- Structure dedicated time for medical students to meet their research thesis requirement, including free time to explore ideas and seek out connections. Further, to foster meaningful research projects, provide the students formal training in research methods and scientific writing.
- Develop more comprehensive syllabi for all courses which consolidate in one place information that locates the course within the competency framework and lists learning objectives, instructional offerings, and assessment criteria. At present, this is being provided for only a small subset of courses.

- Proceed with implementation of the longitudinally integrated curriculum (LIC) framework, propelled by the opportunity it provides to improve the quality of clinical learning at clinical affiliates where there is currently uneven teaching quality within and across clinical units.
- Expand the interprofessional collaborative skills curriculum to prepare medical students to practice effectively within the interprofessional healthcare teams of the future. To this end, draw upon best practices at institutions internationally with well-established interprofessional education (IPE) programs and perhaps look to innovate IPE in new directions.
- Implement up-to-date standards for preparedness for/transition to residency and practice. Consider leading a nationwide internship curriculum which paves the continuum from undergraduate to graduate medical education.

Conclude whether the standard is 'met' or 'not met', and if met, briefly explain reason for score

Standard 7 is met, albeit *needs minor improvement* (Score 5).

- ❖ The score that the institution gave itself in this standard:

Unsatisfactory				Satisfactory		
1	2	3	4	5	<u>6</u>	

- ❖ The score that the committee gives the institution in this standard:

Unsatisfactory				Satisfactory		
1	2	3	4	<u>5</u>	6	

Standard 8: Curricular Management, Evaluation, and Enhancement

The faculty of a medical school engages in curricular revision and program evaluation activities to ensure that the medical education program quality is maintained and enhanced and that medical students achieve all medical education program objectives and participate in required clinical experiences and settings.

Provide summary of the commendations and good practices relevant to this standard

- Curricular revisions reflect a tangible commitment by HUFOM to foster social accountability among its medical students.
- The new curricular structure for 2nd and 3rd year medical students dealing with the healthy individual and the patient, respectively, is commendable and well-understood.
- The addition of clinical exposure in the pre-clinical years represents a significant step in the right direction.
- HUFOM is exploring state-of-the-art innovations in medical education.
- The syllabus developed by Internal Medicine can serve as a model for others, although other competencies should be integrated into it.
- There is a solid committee structure in place across the medical school, with clear distinction of responsibilities and ways to integrate and communicate among them.

Provide summary of the recommendations relevant to this standard

- Introduce a systematic faculty development program for clinical instructors. Require all clinical faculty to engage in a longitudinal, rigorous faculty development process that leads to certification, and make this a criterion for promotion. Over time, this will build clinical education capacity for the whole system. More structured *teaching-the-teachers* will foster equivalency of training across the various clinical affiliate sites. Mandatory faculty development of clinical instructors should focus on clerkship educational goals, bedside teaching, active learning, observation skills, work-based assessment, feedback, communication skills, and alignment of clinical instructors with what students were taught in their preclinical years.
- Better coordinate among clinical sites to ensure equivalency of training and enhance overall quality of training.

- Clarify how the internal quality assurance system operates, and how the PDSA cycles (Plan, Do, Study, Act) are closed.
- Create a programmatic approach to remediation that is state-of-the-art.
- Establish a best-practice program of remediation which identifies underlying causes and establishes individualized remediation with a timeline and accountability plans, rather than simply having the students retake or repeat the same experiences.
- Find ways to reduce the number of students per clinical unit.

Conclude whether the standard is 'met' or 'not met', and if met, briefly explain reason for score

Standard 8 is met, albeit *needs major improvement* (Score 4).

The score that the institution gave itself in this standard:

Unsatisfactory					Satisfactory
1	2	3	4	<u>5</u>	6

❖ The score that the committee gives the institution in this standard:

Unsatisfactory					Satisfactory
1	2	3	<u>4</u>	5	6

Standard 9: Teaching, Supervision, Assessment, and Student and Patient Safety

A medical school ensures that its medical education program includes a comprehensive, fair, and uniform system of formative and summative medical student assessment and protects medical students' and patients' safety by ensuring that all persons who teach, supervise, and/or assess medical students are adequately prepared for those responsibilities.

Provide summary of the commendations and good practices relevant to this standard

- Assessment is comprehensive and deals with all aspects of curricular content.

Provide summary of the recommendations relevant to this standard

- Adopt a competency framework and map all assessment activities to these competencies.
- Reposition the assessment *of* learning program into more of an assessment *for* learning program, with a greater focus on formative assessment and longitudinal, continuous assessment.
- Create more integrated exams that fit to the block structure, and significantly reduce the number of summative exams.
- Increase meaningful feedback to students for better assessment, recognizing that grades in-and-of themselves are a poor form of feedback. For example, provide sub-score performance information on blueprint categories of individual tests where the individual performance is related to the performance of the cohort.
- Use narrative data from documented feedback dialogues in the clinical years to inform complex skills development related to the competency framework, as opposed to checklists.
- Implement a system for tracking and sharing academic performance across clinical rotations, including electronic learning dossiers.
- Consider introducing a mentoring system to monitor students' academic growth and enhance reflective and self-directed learning.
- Replace some traditional methods of assessment with more modern ones, such as work-based assessment methods (Mini-CEX, Case-based discussions, multisource feedback, field notes).
- Introduce pre-test quality control on item writing and post-test psychometric analysis and review.

Conclude whether the standard is 'met' or 'not met', and if met, briefly explain reason for score

Standard 9 is met, albeit *needs major improvement* (Score 3).

❖ The score that the institution gave itself in this standard:

Unsatisfactory

Satisfactory

1 2 3 4 5 6

❖ The score that the committee gives the institution in this standard:

Unsatisfactory

Satisfactory

1 2 3 4 5 6

Standard 10: Medical Student Selection, Assignment, and Progress

A medical school establishes and publishes admission requirements for potential applicants to the medical education program and uses effective policies and procedures for medical student selection, enrolment, and assignment.

Provide summary of the commendations and good practices relevant to this standard

- A comprehensive system of admission to both programs of the medical school is in place, consisting of cognitive and non-cognitive elements.
- Attrition is minimal through good support of the students, including *Leave-of-Absence* regulations.
- There is a large admissions committee with community representatives.

Provide summary of the recommendations relevant to this standard

- Work with the CHE to develop paths for diversifying admitted student demographics, including minority groups and those from underprivileged backgrounds.
- Engage university level development officers to advocate for and create a meaningful number of endowed scholarships.

Conclude whether the standard is 'met' or 'not met', and if met, briefly explain reason for score

Standard 10 is met, albeit *needs minor improvement* (Score 5).

❖ The score that the institution gave itself in this standard:

Unsatisfactory			Satisfactory		
1	2	3	4	<u>5</u>	6

❖ The score that the committee gives the institution in this standard:

Unsatisfactory			Satisfactory		
1	2	3	4	<u>5</u>	6

Standard 11: Medical Student Academic Support, Career Advising, Educational Records, Financial Aid, and Access to Personal Counselling

A medical school provides effective academic support, student services, financial aid counselling, and career advising to all medical students to assist them in achieving their career goals and the school's medical education program objectives. All medical students have the same rights and receive comparable services.

Provide summary of the commendations and good practices relevant to this standard

- Students have access to their course and clerkship data for the review of exams.
- Funding is available for student electives abroad.
- Psychological services are available for those students needing it.

Provide summary of the recommendations relevant to this standard

- Permit students to review their narrative assessments.
- Develop mandatory programs for students that are directed towards fostering their well-being and help them deal with the physical and emotional demands of medical school and medical careers.

Conclude whether the standard is 'met' or 'not met', and if met, briefly explain reason for score

Standard 11 is met, albeit *needs major improvement* (Score 4).

❖ The score that the institution gave itself in this standard:

Unsatisfactory			Satisfactory		
1	2	3	4	<u>5</u>	6

❖ The score that the committee gives the institution in this standard:

Unsatisfactory			Satisfactory		
1	2	3	<u>4</u>	5	6

Signed by:

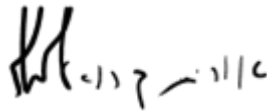
Prof. Haim Bitterman:



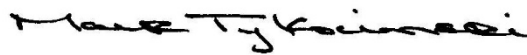
Prof. Adina Kalet:



Prof. Orit Karnieli-Miller:



Prof. Mark Tykocinski:



Prof. Cees Van der Vleuten:



Appendix 1 – the Committee’s Letter of Appointment

Prof. Mark Tykocinski
Provost and Executive Vice President for Academic Affairs
Thomas Jefferson University
USA

Dear Professor,

The Israeli Council for Higher Education (CHE) strives to ensure the continuing excellence and quality of Israeli higher education through a systematic evaluation process. By engaging upon this mission, the CHE seeks: to enhance and ensure the quality of academic studies, to provide the public with information regarding the quality of study programs in institutions of higher education throughout Israel, and to ensure the continued integration of the Israeli system of higher education in the international academic arena.

As part of this important endeavor, we reach out to world renowned academicians to help us meet the challenges that confront the Israeli higher education by accepting our invitation to participate in our international evaluation committees. This process establishes a structure for an ongoing consultative process around the globe on common academic dilemmas and prospects.

I therefore deeply appreciate your willingness to join us in this crucial enterprise.

It is with great pleasure that I hereby appoint you to serve as chair of the Council for Higher Education's Committee for the Evaluation of **Faculties of Medicine and Medical Schools in Israel**. In addition to yourself, the composition of the Committee will be as follows: Prof. Haim Bitterman, Prof. Adina Kalet, Prof. Orit Karnieli-Miller and Prof. Cees van der Vlueten.

Ms. Pe'er Baris-Barnea will be the coordinator of the Committee.

Details regarding the operation of the committee and its mandate are provided in the enclosed appendix.

I wish you much success in your role as a member of this most important committee.

Sincerely,



Prof. Ido Perlman
Vice Chair,
The Council for Higher Education (CHE)

Appendix 2 – Visit Schedule

HU Schedule of site visit

Sunday, November 7th

09:00-09:30	Opening session with the head of the institution	<ul style="list-style-type: none"> • Prof. Asher Cohen, President • Prof. Barak Medina, Rector • Prof. Avi-hai Hovav, Vice-rector for Academic Assessment & Evaluation
09:30-10:45	Meeting with the Dean of the Faculty of Medicine	<ul style="list-style-type: none"> • Prof. Dina Ben Yehuda, Dean • Prof. Shulamit Katzav-Shapira, Vice Dean for Teaching Education • Prof. Dorith Shaham, Chair of Teaching & Education Committee
10:45-11:00	Break – at the meeting room	Closed-door meeting of the committee
11:00-11:45	Meeting with the QA Report Commissioner*	<ul style="list-style-type: none"> • Prof. Arye Ben Yehuda, Chair of Curriculum Committee • Prof. Colin Block, Centre for Medical Education • Prof. Shmuel Reis, Centre for Medical Education • Prof. Shulamit Katzav-Shapira, Vice Dean for Teaching Education • Prof. Dorith Shaham, Chair of Teaching & Education Committee
11:45-12:30	Meeting with senior academic staff *	<ul style="list-style-type: none"> • Prof. Arye Ben Yehuda • Dr. Yonatan Kupchik • Prof. Haggi Mazeh • Mordechai Muszkat • Prof. Eli Pikarsky • Prof. Shai Porath • Prof Shoshana Revel-Vilk • Prof. Jacob Strahilevitz
12:30-13:15	Meeting with Adjunct academic staff*	<ul style="list-style-type: none"> • Dr. Alex Gural • Dr. Yuval Or • Dr. Mici Phillips • Dr. Yaarit Ribak • Dr. Batsheva Ziff-Werman
13:15-13:45	Lunch	Closed-door meeting of the committee
13:45-15:30	Meeting with Clinical instructors*	<ul style="list-style-type: none"> • Dr. Jehad Adris • Dr. Ofra Carmel • Dr. Narmine Elkhateeb • Dr. Zlil Mordechai-Chen • Dr. Dean Nahman • Dr. Ntaniel Rein

		<ul style="list-style-type: none"> • Dr. Adar Zinger
15:30-16:00	Tour of the School –	<ul style="list-style-type: none"> • Prof. Dina Ben Yehuda, Dean • Dr. Ronit Harel, Deputy Dean
16:00-16:45	Meeting with pre-clinical students**	<ul style="list-style-type: none"> • Roey Ben Yosaf • Michael Bergel • Daniel Davis • Hadas Hershko • Tomer Kotler • Mor Oved • Noa Versanno • Noa Vilik
16:45-17:30	Meeting clinical students**	<ul style="list-style-type: none"> • Orilia Benyishay • Sivan Betzalel • Liam Gal • Gideon Leibner • Nasralla Nasrallah • Inbal Shapira • Ariel Wimpfheimer • Tamir Zelter
17:30-18:15	Meeting with Alumni**	<ul style="list-style-type: none"> • Roni Benami • Sergi Dorozhko • Liran Giladi • Roni Koren • Karney Lahad • Moshe Roseman
18:15-18:30	Break– at the meeting room	Closed-door meeting of the committee
18:30-19:00	Closing meeting with heads of institution	<ul style="list-style-type: none"> • Prof. Dina Ben Yehuda, Dean • Prof. Shulamit Katzav-Shapira, Vice Dean for Teaching Education • Prof. Dorith Shaham, Chair of Teaching & Education Committee