Národní akreditační úřad
pro vysoké školství

Závěry Rady NAÚ k vnějšímu hodnocení Lékařské fakulty Univerzity Palackého v Olomouci

Na základě rozhodnutí Rady Národního akreditačního úřadu pro vysoké školství (NAÚ) bylo dne 20. dubna 2023 zahájeno vnější hodnocení vzdělávací, tvůrčí a s nimi souvisejících činností Lékařské fakulty Univerzity Palackého v Olomouci (LF UPOL). Hodnocení bylo zaměřeno na uskutečňování magisterských studijních programů *Všeobecné lékařství* a *General Medicine*.

Vnější hodnocení bylo provedeno v souladu s příslušnými ustanoveními Statutu NAÚ a Metodickým pokynem pro vnější hodnocení vysokých škol a rovněž se řídilo metodickými materiály NAÚ pro implementaci požadavků Světové federace pro lékařské vzdělávání (WFME) v České republice.

K provedení vnějšího hodnocení byla v souladu se Statutem NAÚ dne 28. dubna 2023 jmenována následující hodnoticí komise:

- prof. MUDr. Otomar Kittnar, CSc. - předseda
- prof. MUDr. Vladimír Palička, CSc., Dr.h.c. - místopředseda
- prof. MVDr. RNDr. Petr Hořín, CSc.
- MUDr. Josef Fontana, Ph.D.
- doc. MVDr. Aleš Hampl, CSc.
- prof. MUDr. Jana Skřičková, CSc.
- prof. MUDr. Ivo Šlapák, CSc.
- prof. MUDr. Hana Malíková, Ph.D.
- prof. MUDr. Josef Sýkora, Ph.D.
- prof. MUDr. Michal Bar, Ph.D., FESO
- prof. MUDr. Hana Matějovská Kubešová, CSc.
- prof. MUDr. Jindřich Vomela, CSc., LL.M.
- prof. MUDr. Radim Jančálek, Ph.D., MBA
- MUDr. Valeria Skopelidou
- David Kverka

Hlavním cílem tohoto hodnocení bylo provést externí posouzení studijních programů *Všeobecné lékařství* a *General Medicine* na LF UPOL. Úkolem hodnoticí komise bylo zhodnotit soulad studijních programů s akreditačními standardy a kritérii WFME a identifikovat silné a slabé stránky obou studijních programů, jakož i potenciální oblasti k jejich zlepšení. Hodnoticí komise provedla důkladné hodnocení činnosti LF UPOL, přičemž vycházela zejména z podkladů v rozsahu žádosti o akreditaci k oběma studijním programům, sebehodnotící zprávy s přílohami, jakož i z rozhovorů a informací poskytnutých v rámci návštěvy na místě a přímé observace v rámci výuky.

Návštěva na místě na LF UPOL se uskutečnila v průběhu tří dnů, a to od 18. března do 20. března 2024. Během této návštěvy na místě komise vedla podrobné diskuse zaměřené na

různé aspekty vzdělávacích programů, vykonala prohlídky klíčových pracovišť a pozorovala výuku ve vybraných předmětech.

Hodnoticí komise vypracovala soubornou zprávu o vnějším hodnocení Lékařské fakulty Univerzity Palackého v Olomouci (dále jen „zpráva o vnějším hodnocení“), která sestává ze tří samostatných zpráv: pro teoretická pracoviště, pro klinická pracoviště a komplexní zprávu zahrnující obecné podmínky realizace dotčených studijních programů (viz přílohy). V červnu 2024 předložila LF UPOL svou reakci na tuto zprávu o vnějším hodnocení, v níž popsala kroky již přijaté či plánované k zapracování zpětné vazby obsažené ve zprávě o vnějším hodnocení.

Rada NAÚ projednala výsledky vnějšího hodnocení na svém zasedání č. 5/2024 konaném dne 27. června 2024 za účasti předsedy hodnoticí komise prof. Kittnara.

Rada NAÚ podle § 83c odst. 2 písm. f) zákona č. 111/1998 Sb., o vysokých školách a o změně a doplnění dalších zákonů (zákon o vysokých školách), ve znění pozdějších předpisů, schválila zprávu o vnějším hodnocení LF UPOL.

Rada NAÚ se ztotožnila se zjištěními uvedenými ve zprávě o vnějším hodnocení a na jejím základě formulovala Rada NAÚ soubor doporučení pro UPOL.

Rada NAÚ ověří naplnění doporučení po vnitřním schválení magisterských studijních programů *Všeobecné lékařství* a *General Medicine* Lékařské fakulty Radou pro vnitřní hodnocení UPOL. Rada NAÚ žádá UPOL, aby v rámci informace o vnitřním schválení těchto studijních programů předložila i kompletní akreditační spis, na jehož základě Rada pro vnitřní hodnocení přijala usnesení o vnitřním schválení těchto studijních programů. Dále žádá UPOL, aby se vyjádřila k naplnění jednotlivých doporučení formulovaných Radou NAÚ. O předložení výše uvedených informací a podkladů Rada NAÚ žádá **do 30. června 2025**.

Doporučení pro UPOL:

Vnitřní systém zajišťování kvality:

- Upravit fakultní systém vnitřního zajišťování kvality, aby lépe odpovídal specifickým požadavkům lékařského vzdělávání.
- Zlepšit komunikaci se studujícími ohledně reflexe jejich zpětné vazby ze strany vedení LF UPOL a opatřeních přijatých v reakci na zpětnou vazbu od studujících.
- Rozšířit procesy zpětné vazby tak, aby zahrnovaly jak akademické, tak administrativní pracovníky LF UPOL. Tyto procesy náležitě institucionalizovat a ošetřit v rámci vnitřních předpisů LF UPOL.
- Implementovat pravidelné a formální hodnocení kvality klinické praxe v regionálních a zahraničních nemocnicích, aby byla zajištěna shoda s kurikulárními standardy studijních programů *Všeobecné lékařství* a *General Medicine*.
- Klást důraz na sběr zpětné vazby od všech relevantních zainteresovaných stran, včetně absolventů a zaměstnavatelů. Zpětnou vazbu náležitě vyhodnocovat a na jejím základě

přijímat opatření ke zlepšení kvality studijních programů *Všeobecné lékařství* a *General Medicine*

- Zajistit pravidelný kontakt se zástupci nemocnic, ve kterých studující uskutečňují klinickou praxi, institucionalizovat přítomnost těchto zástupců v rámci procesů vnitřního zajišťování kvality na LF UPOL.

Podpora a zpětná vazba studujících:

- Zajistit, aby fakulta přijala interaktivnější přístup při řešení zpětné vazby studujících prostřednictvím pravidelných fór, setkání s garanty studijních programů, jakož i garanty vyučovaných předmětů. Rozšířit platformy pro získání zpětné vazby o moderní komunikační kanály (sociální sítě).
- Uzpůsobit načasování sběru zpětné vazby s ohledem na průběh akademického roku a specifika kurikula v rámci LF UPOL.
- Implementovat pobídky a motivovat studující k vyšší míře odezvy v rámci hodnocení kvality vzdělávací činnosti na LF UPOL.

Finanční podpora a zdroje:

- Identifikovat rozdíly ve finanční podpoře jednotlivých ústavů a kateder s ohledem na reálné náklady na výuku v různých disciplínách a implementovat finanční mechanismy k řešení případných nedostatků ve financování ústavů či kateder (blíže identifikovaných ve zprávě o vnějším hodnocení). Efektivně alokovat zdroje na podporu jak vzdělávacích, tak výzkumných aktivit, aby každé pracoviště disponovalo potřebnými nástroji a infrastrukturou ke svému rozvoji a zlepšování kvality vzdělávací a tvůrčí činnosti.
- Podpořit translační oblast výzkumu a propojit personálně poddimenzovaná teoretická pracoviště s klinickými odděleními v oblasti výzkumu s cílem zvýšit atraktivitu těchto pracovišť pro mladé výzkumníky i z nelékařských oblastí a jiných fakult LF UPOL.
- Alokovat zdroje k další podpoře a rozšíření výuky v rámci simulačních center (jako je např. CENTESIMO). Zajistit odpovídající personální zabezpečení a potřebné finanční zdroje pro rozšíření simulační výuky.
- Pokračovat v úsilí o nábor mladých akademických pracovníků s cílem posílení stabilního personálního rozvoje jednotlivých pracovišť. Implementovat motivační plán kariérního rozvoje akademických pracovníků.

Kurikulum a výukové metody:

- Posílit praktické složky v kurikulu a zkušební metody, aby byla zajištěna dostatečná praktická zkušenost a příležitosti k praktickému výcviku studujících.
- Rozšířit příležitosti k přímému kontaktu s pacienty prostřednictvím navýšení klinických praxí a rozšířením partnerství s místními nemocnicemi a supervizovaných interakcí s pacienty.

- Zajistit harmonizaci kurikula studijních programů prostřednictvím synchronizace obsahu příbuzných předmětů. Zlepšit spolupráci a sdílení znalostí napříč jednotlivými katedrami a ústavy, aby se harmonizovaly souběžné kurzy a zlepšila se tak vzdělávací zkušenost studujících.
- Rozšířit používání simulační výuky napříč všemi disciplínami, aby se maximalizovaly výhody Simulačního centra CENTESIMO.
- Harmonizovat literaturu pro české a anglické studující, zajistit, aby veškerá požadovaná literatura byla dostupná v knihovně či v online repositářích.
- Neustále inovovat a zlepšovat kurikulum, aby bylo aktuální s nejnovějšími vědeckými pokroky a vývojem. Uzpůsobit objem požadovaných znalostí daných studijních programů, aby odpovídal profilu absolventa v pregraduálním studiu a přizpůsobit tomu náročnost a obsah studijní literatury.
- Posílit kurikulum a obsah kurzu Etika. Rozšířit rozsah tohoto kurzu o klíčové otázky lékařské etiky, jak jsou podrobněji formulovány ve zprávě o vnějším hodnocení. Začlenit do výuky případové studie a scénáře etického rozhodování, aby se teoretické znalosti aplikovaly v reálných kontextech.

Metody hodnocení a ověřování výsledků učení studujících:

- Přezkoumat metody hodnocení a ověřování výsledků učení v předmětech s vysokou mírou neúspěšnosti. Vytvořit komplexní systém dodatečné podpory studujících při studiu a v průběhu semestru.
- Implementovat systém, který zajistí jednotnost a konzistenci hodnocení mezi různými zkoušejícími v témže kurzu. Harmonizovat obsah a metody hodnocení napříč jednotlivými kurzy a katedrami, čímž se standardizuje proces hodnocení.
- Synchronizovat úroveň náročnosti výuky a následného ověřování výsledků učení, aby odpovídalo požadavkům kurikula.

Integrace a adaptace studujících ze zahraničí:

- Zavést kombinované lekce pro české a anglicky vyučované programy s cílem využít různé kulturní perspektivy studujících a vytvořit tak platformu pro lepší integraci a adaptaci studujících ze zahraničí.
- Zavést adaptační kurzy zaměřené na pomoc nově přijatým mezinárodním studujících při adaptaci na nové kulturní prostředí a metody výuky na univerzitě s cílem minimalizovat kulturní překážky, které mohou mít negativní vliv na jejich akademickou úspěšnost.
- Vyvinout iniciativu na podporu mezinárodních studujících při zlepšování jejich znalostí českého jazyka, aby se usnadnila jejich lepší integrace do akademického a sociálního prostředí a zlepšila jejich celková vzdělávací a sociální zkušenost na LF UPOL.

Národní akreditační úřad
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Přílohy:

Zpráva o vnějším hodnocení Lékařské fakulty Univerzity Palackého v Olomouci

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Report of the Evaluation Committee	
Name of HEI and faculty	Palacký University Olomouc, Medical Faculty
Names of degree programmes	Všeobecné lékařství, General Medicine
Type of evaluation	External evaluation during accreditation

Basic information on the activities of the Evaluation Committee

Composition of the Evaluation Committee:

prof. MUDr. Otomar Kittnar, CSc. - chair
prof. MUDr. Vladimír Palička, CSc., Dr.h.c. – vice-chair
prof. MVDr. RNDr. Petr Hořín, CSc.
MUDr. Josef Fontana, Ph.D.
doc. MVDr. Aleš Hampl, CSc.
prof. MUDr. Jana Skřičková, CSc.
prof. MUDr. Ivo Šlapák, CSc.
prof. MUDr. Hana Malíková, Ph.D.
prof. MUDr. Josef Sýkora, Ph.D.
prof. MUDr. Michal Bar, Ph.D., FESO
prof. MUDr. Hana Matějovská Kubešová, CSc.
prof. MUDr. Jindřich Vomela, CSc., LL.M.
prof. MUDr. Radim Jančálek, Ph.D., MBA
Bc. Valeria Skopelidou
David Kverka

Documents and sources of information
Self-evaluation report with annexes
On-site visit interviews
Tour of premises
Direct observation

Date of the on-site visit
18th – 20th March 2024

Arrangement and scope of the visit
The schedule of the on-site visit is attached to the report (attachment 1)

Summary of the conclusions and resolutions of the Committee
Major strengths of the MF PUO (the HEI):

- Robust financial resource structure
- Excellent cooperation with teaching hospital
- Strong support from the University

- Quality scientific performance in clinical research

Major weaknesses of the HEI:

- Insufficient financial support of some understaffed theoretical institutes
- The Quality assurance (QA) system does not adequately address the specific needs of medical education and feedback processes do not involve either academic or administrative staff.
- High drop-out rate in English taught degree programme partly due to insufficient support for the adaptation process

Recommendations:

- Increase financial support for some understaffed theoretical departments, particularly to boost research activities that could attract young talent.
- Revise the University QA system to better meet the specific requirements of medical education.
- The feedback processes should be extended to include both academic and administrative staff of the HEI.
- Introduce a course or process aimed at helping newly admitted international students adapt to the new cultural environment and university teaching methods.

After reviewing all relevant documents in the matter of the external evaluation of degree programmes Všeobecné lékařství and General Medicine at the Medical Faculty of Palacký University Olomouc, the Evaluation Committee voted and by 12 affirmative votes (with 0 negative votes, 3 abstentions) adopted this set of evaluation reports.

Institutional environment

Competence of the HEI bodies:

The HEI has specified statutory bodies: Dean´s Board, the Scientific Board and the Academic Senate. The scope, competences and responsibilities of these constituent bodies are adequately defined according to the Higher Education Act of the Czech Republic. Thus, the bodies form a functional whole, for activities and actions relating to the design and delivery of the degree programme.

Internal quality assurance (QA) system:

Formally, QA procedures have been defined in the HEI. However, they rely mostly on general university-defined rules, with little reflection of specificities of the HEI as a medical education institution. Notably, there is an absence of SWOT analysis available at any organizational level. The feedback mechanisms predominantly involve polls and quantitative and qualitative surveys involving students. The feedback procedure utilizes both an electronic evaluation form and paper forms distributed by some theoretical and clinical departments of the school. Students are currently suggesting some minor changes of evaluation questionnaire. Typical complaint of students concerns the poor timing of the electronic survey and lack of information about its results (no information about students´ comments and resulting reaction of the guarantor). The response rate is rather low.

The QA mechanisms operate at the level of the faculty with not so well-defined impact at the departmental level.

Quality of the teaching process at foreign hospital relies on agreements assuring a compliance with the degree programme curriculum. There is no formal evaluation of the quality and

competencies in students´ education. Furthermore, there is a lack of stakeholder input concerning the quality of graduates. It would be beneficial to strengthen existing relationships with healthcare providers and actively seek feedback from alumni to address this issue.

Recommendation:

Put emphasis on collecting feedback not only from students, but at all relevant stakeholders such as graduates and employers, to better benefit of the advantages of the QA system. Enhance the feedback process by promptly addressing student suggestions and clearly communicating the actions taken in response.

Implement regular and formal evaluations of the teaching quality at overseas hospitals to ensure it aligns with the curriculum standards and fulfills the educational competencies required for student success.

The international dimension and cooperation with the professional sphere:
As part of its educational opportunities, the degree program annually promotes international collaboration and agreements that allow undergraduates and graduates to participate in components of degree programs abroad. This includes taking exams, engaging in company internships, or joining research programs at various European and select non-European medical schools. Students may take part in international exchange programmes and spend a period studying or researching abroad. International students have the opportunity of enrolling and graduating on one of the degree programmes offered by the HEI or may take advantage of studying or conducting research on one of the many international exchange programmes (currently 16 % of students use the exchange programme Erasmus or Erasmus +).
The HEI actively fosters partnerships, considering the types and possible profiles of degree programmes. This also includes the involvement of professional experts in the educational process. Moreover, the HEI communicates with professional chambers, industry associations, employers' organisations, or other professional experts to ascertain their expectations and requirements for graduates of the degree programme.

Supporting resources and administration:
The HEI has built a functional information system and means of communication that ensure access to accurate and comprehensible information about degree programmes, study rules and requirements related to study, information and advisory services related to study and the possibility of graduates of degree programmes to find employment. The HEI also provides students with accessible academic, social, and psychological support services including accessible services, scholarships and other supportive measures to equalize the opportunities for students with special needs. Library services and electronic resources for teaching are sufficient and accessible to students and academic staff in accordance with a profile of the degree programme.
The HEI has adequate and sufficient administrative support that effectively aids to achieve its teaching, learning, and research objectives.

Content of the degree programme

Consistency with the mission of the HEI and the international dimension:
In terms of type, form and profile, the degree programme is in line with the mission statement, mission and strategic plan of the HEI and other strategic documents of the HEI. The HEI considers the international dimension of the evaluated degree program, taking into account its specific type and profile.

Profile of the graduate and study content:
HEI is dedicated to training competent physicians who meet the health care needs of society. The profile of the graduate is generally defined by the Higher Education Act including the list of competences that each graduate should acquire. The theoretical knowledge, professional skills, communication skills and general competences acquired by graduates of the degree programme are in accordance with the type and profile of the degree programme. The profile of the HEI graduate corresponds to the direction of the student's training throughout the course, adapting the profile of the trained professional to keep pace with the current state of scientific knowledge and to the standards proposed by the Czech Medical Council. It also allows incorporating feedback from graduates regarding the need for improvements in the course pedagogical project. Regarding the structure of the study programme, it is a traditional type of curriculum of standard quality, reviewed on a cyclic basis.

To this end, it is recommended to focus more thoroughly on feedback from graduates that should be systematically collected and used to refine and enhance the educational programs and practices. This approach will ensure that the education provided aligns closely with the evolving needs of the healthcare industry.

HEI should implement a structured approach to synchronize the content of related subjects to ensure uniformity and systematic integration within the curriculum, thereby improving the overall consistency of educational quality for students.

Teaching methods and student assessment:
The HEI employs a range of educational methods to ensure that students achieve the intended outcomes of the curriculum to the extent of the specified profile of graduate. The choice of a specific method is influenced by different variables. Among these are the type of content to be taught and how it can be tailored to each methodology, the student's level of prior knowledge, time constraints imposed by study plans, the number of students per class, the physical layout of the classroom, the availability of material resources, etc. All these elements must be considered in order to consistently select a specific teaching method from among the wide array of options. Lectures and seminars are the fundamental pillar upon which most of the theoretical training of students is based. Practical lessons in theoretical and preclinical courses are aimed to teach students basic diagnostic procedures. Clinical courses feature bed-side lessons organized around problem-based learning and are combined with simulations on computer-controlled figurines (patient simulators). Currently almost one third of clinical teaching is realized at the simulation centre.
The degree program offers a broad selection of elective subjects, constituting 15% of the total educational capacity.
In contrast to some theoretical disciplines, there is no shortage of teaching staff in clinical disciplines, however students report a lack of emphasis on acquiring clinical skills, partly due to overly large group sizes in some disciplines..
The HEI has policies that describe in details its assessment practices that are aligned with its curriculum outcomes. Two basic forms of students´ assessment are MCQ tests and oral

examinations including commission oral examinations at final state exams. Only professors and associated professors are allowed to perform an oral examination. Both forms of assessment regularly offer students actionable feedback that identifies their strengths and weaknesses, and helps them to consolidate their learning.

Admission procedure, admission rate and drop-out rate, students´ well-being:
Admission procedure is identical for both Czech and international students and it is based on a set of three tests (Biology, Chemistry and Physics). The admission rate in the Czech taught degree programme is 10 %, approximately 60 % of admitted students are women.

The drop-out rate in the Czech degree programme is 20 %, in the English degree programme it is 30-40 %. The majority of these numbers is already during the first year of the study programme.

Students can use a help of psychologist in order to reduce this drop-out rate and moreover, students of the first year are creating so called self-help group. The university's perceived "family-like atmosphere" is highly appreciated by students. Students also appreciate that all classes are conveniently located in the same place, facilitating ease of access and navigation. Overall, students expressed satisfaction with the university's efforts to promote student well-being.

Material resources for the degree programme

Financial, material and other resources:
The HEI has assessed the expected financial costs of delivering the degree programme, in particular the costs of instruments and their operation, the costs of material and technical equipment and its modernisation, staff costs, the costs of further training of academic staff and the costs of innovation, and has secured adequate resources to cover these costs. Additionally, the HEI has also secured the infrastructure for teaching in the degree programme, in particular adequate material and technical resources, sufficient and operational teaching and study facilities, equipment of classrooms and laboratories with aids and laboratory and teaching equipment that correspond to the type and profile of the degree programme and the number of students.
A significant portion of the financial resources is derived from research activities with funding composed of 40 % from government sources, 40 % from research activities, and 20 % from tuition fees of English-taught degree programs. This fact is partially enabled by very good cooperation between the teaching hospital and the medical school in the field of research. On the other hand, the level of financial support of individual institutes and departments is based just on an average cost per teaching lesson and does not reflect the differences of real costs of teaching lessons in different disciplines. The Dean´s office should explore financial mechanisms to address this discrepancy (as discussed in the following section).

Resources for clinical training:
The HEI has appropriate and sufficient resources to ensure that students receive the required clinical training. Clinical training is also financially supported by the teaching hospital. Both Hospital and Faculty representatives acknowledge and appreciate the existing cooperation between both institutions. Proactive steps are also taken to ensure the availability of all necessary clinical competencies including a recent opening of two new departments (Epidemiology and infectious Diseases, and Psychosomatic Medicine). However, greater emphasis needs to be

placed on the teaching of medical ethics, as the current approach is lacking in both depth and focus on contemporary ethical issues.

Personnel resources for the degree programme

Guarantor of the degree programme:
The HEI has sufficiently defined the roles and responsibilities of the degree programme guarantor to ensure the quality of the degree programme. The guarantor of both programmes Všeobecné lékařství and General Medicine is Professor Milan Kolář. He is a Professor in the field of Medical Microbiology with H-index of 32 and extensive publication activity in the last 5 years. He has an indefinite full-time employment contract at MF UPO.

Personnel resources for teaching at the faculty:
The HEI has in most institutes and clinical departments the number and range of qualified academic staff required to put the school's curriculum into practice, given the number of students and style of teaching and learning. On the other hand, personnel resources are critically understaffed in some theoretical fields. While current personnel resources meet the accreditation standards for the type of degree program being assessed, the lack of development in these theoretical institutes poses a risk for the future. The Dean's office should consider establishing a central financial fund to strategically support underdeveloped departments, based on thorough analysis, to facilitate their growth.

Generally, there is a need of ensuring a steady influx of young staff HEI members. This goal could be achieved through a combination of several measures: a strong support of research what can attract high quality teachers; offering part-time jobs to the hospital staff; supporting educational procedures through guidance from more experienced teachers.

Personnel resources for clinical training at clinical departments:
The clinical training at the HEI is delivered by adequate personnel resources by its academic staff and, where appropriate, by other experts from the teaching hospitals with the appropriate qualifications to implement the individual courses. The overall structure of the academic staff providing the clinical training corresponds, in terms of qualifications, age, amount of weekly working hours and experience of working abroad or in the professional sphere, to the structure of the clinical part of the curriculum, the objectives and profile of the degree programme.

Creative activity

Scientific activities related to the degree programme:
Over the past several years, the HEI is or has been the beneficiary of research projects pertinent to its educational fields. In doing so, the HEI allows students to engage in s scientific activities including activities with an international character, which correspond to the fields of education and to the type of the assessed degree programme. Regular evaluation of the scientific activity is an important criterion for financial support of theoretical and preclinical institutes and clinical departments. On the other hand, financial support from grants and projects is provided to the researcher and his/her collaborators and no money are allocated to the department itself. Moreover, the faculty does not claim any overhead costs and resulting in a lack of financial resources to support institutes that do not receive grant funding.

Implementation of the degree programme in a foreign language
Conditions and resources for the implementation of the degree programme in a foreign language: Study supports including a translation of the relevant internal regulations for studies in a foreign language are available in the respective foreign language. Information on the admission procedure and on the course of study in a degree programme conducted in a foreign language is available for applicants and students in the relevant foreign language on the HEI's website. In the degree programme conducted in a foreign language, information and communication is provided on the study schedule, on the obligations arising from study in the degree programme, on study documents and on other information related to learning in the relevant foreign language. The HEI also ensures that professional guidance and the necessary conditions for practical training are provided in the appropriate foreign language. Students have highlighted the absence of a programme offering Czech language courses, identifying a potential shortfall in language integration initiatives. This lack may create obstacles for international students who are eager to improve their Czech language skills. To this end, HEI should develop an initiative to support international students in enhancing their Czech language proficiency in order to facilitate better integration and improvement of their educational and social experience.
Other
Students of both Czech and English taught programmes are feeling separation of these two courses negatively. Introducing combined lessons could be particularly beneficial from a cultural perspective. The feedback evaluation of educational activities has little participation due to its inappropriate timing (only on the end of a course) and insufficient response from the evaluated institutes and clinical departments. A limited capacity of the teaching hospital has been effectively compensated by establishing partnerships with other hospitals in nearby cities.

Signature of the Chair	prof. MUDr. Otomar Kittnar, CSc.	**Date, place and form of the meeting**	Per rollam, 30 May 2024

Národní akreditační úřad
pro vysoké školství

Report from the Clinical Department Evaluation Visit	
Name of the medical facility and clinical department	Departments of Pediatrics, Neurology, General Surgery and Internal Medicine
Name of the HEI and its units	Palacký University Olomouc, Medical Faculty
Name of degree programmes	Všeobecné lékařství, General Medicine
Basic information about the visit to the clinical department	

Composition of the evaluation group
prof. MUDr. Vladimír Palička, CSc., dr. h. c.
prof. MUDr. Michal Bar, Ph.D., FESO
prof. MUDr. Ivo Šlapák, CSc.
prof. MUDr. Radim Jančálek, Ph.D., MBA
prof. MUDr. Josef Sýkora, Ph.D.
David Kverka

Documents used as a basis for the evaluation
Self-Evaluation Report
Annexes in the extent of application for accreditation of Všeobecné lékařství, General Medicine
Departmental webpages

Date of the visit
19 March, 2024

Arrangement and scope of the visit
Face-to-face discussions were held with representatives of the clinical department, usually the Department Head, Vice-Head for Education, and other staff members. Visits primarily took place in dedicated clinics except for Internal Medicine, where meetings with representatives of three internal medicine departments were held in a seminar room.

Main activities undertaken during the visit
The discussion focused on the teaching program, its organisation, the number of teaching hours (lectures, seminars, bedside teaching, use of the simulation center, etc.), and personal adequacy (numbers and qualifications).
Due to the time constraints and according to the procedure, direct observation of the teaching process was conducted in select clinics, only (Professor Bar at the English study program in Neurology, Professors Šlapák and Sykora at the pediatric out-patient clinic, the whole Committee at the Simulation Center CENTESIMO).
Discussion with current and former students, which was chaired by the student members of the Committee.

No additional specific documents were required for the visit.

Personnel resources and capacity for clinical teaching

In the clinics visited by the Committee members, the qualifications and range of the faculty members were appropriate. Some differences exist, of course.
Pediatrics has the highest number of teaching hours (about 5000) in the clinical part of the teaching process, but with adequate staff (3 professors, 5 associate professors, 62 physicians who are available to teach if necessary). However, Pediatrics should focus on recruiting more junior faculty members to ensure stable personnel development and continuity in career progression. Practical training is well-organised (small groups of 4 students per teacher at wards, and just one student per teacher in the outpatient clinic).
Neurology: 5 full professors, 1 associate professor, and 12 assistant professors. 90 hours in the curriculum, and 80% in practical education with patients.
General Surgery: 2 professors, 3 associate professors, and 35 physicians involved in the teaching.
Internal Medicine: in the curriculum for the 5th and 6th years of the study program, HEI has three Clinics of Internal Medicine, which cover the whole program, and students rotate to see all internal disciplines. However, the number of students per group for practical teaching is rather high (7 students per group), which should be reevaluated to ensure a more effective learning environment and to provide more individualized attention to each student.
Nearly all clinical teachers have combined contracts with the School and University Hospital, the most typical case is a full-time job at the University Hospital plus 0.1-0.3 appointment at the School of Medicine. The system is well-balanced.

Clinical disciplines visited by the Evaluation Committee are taught in the 4th, 5th, and 6th years of the curriculum. Neurology is taught in the 4th year, and the others in the 5th and 6th year.
The education procedure is well-organised, focused mostly on practical knowledge, and the use of Simulation center is highly appreciated (and better than in most Schools of Medicine in the Czech Republic).
The number of students is high (nearly 200 students), and the capacity of the University Hospital is sufficient during the school year. However, practical training during the summer months must be supported by regional hospitals.
Some difficulties with language differences arise (some students in the English study program, despite lectures in the Czech language, have difficulties and are unable to collect patient history). These problems are addressed by the active participation of teachers.

The Evaluation Committee recognizes several strengths within the program. These include personal capacity, excellent cooperation between the school and the university hospital, and the development of new buildings. Additionally, there is a close connection between the school and the university hospital, and an adequate spectrum of teachers, including professors and associate professors. In most clinics, the practical part of the education is conducted in small groups of students, which enhances the learning experience.

However, the Evaluation Committee also identifies some weaknesses. Part of the clinical teaching process must be conducted in regional hospitals. While this could be both a weakness and an advantage, the quality assessment of these regional hospitals is not strong enough. Furthermore, Erasmus students often arrive without knowledge of Czech, and some students in

the English program struggle to collect patient histories, requiring the teacher to translate and assist.

The Evaluation Committee recommends improving the quality assessment and considering personal capacity in regional hospitals involved in the education program, particularly for the practical parts of the curriculum.

Methodological support of teaching

As commented above, the teaching processes are well-structured, and covered by qualified teachers. Students have a sufficient number of textbooks, and extracts of most lectures are available in electronic form. During clinical education, students have the opportunity to work with Hospital information system, which is uncommon in other Czech medical schools.

Education is grounded in the latest information and up-to date research, which are integrated into contemporary teaching methods. Good access to the Simulation Center CENTESIMO reflects the modern style of medical education. The assessment methods and testing system predominantly employ a multifaceted approach. This includes various components such as multiple-choice written examinations, complemented by personal, face-to-face evaluations. In certain clinical departments, such as Neurology, the testing system is exceedingly rigorous. It is concerning that approximately 50% of students fail on their initial attempt, although nearly all manage to pass upon their second attempt. This discrepancy highlights potential issues with the assessment process. This issue should be carefully examined by the Dean's Office and the Vice-Dean for Education, who should take proactive measures to address it, such as revising testing protocols and offering additional student support. In addition, the management of the School of Medicine should map whether this finding made by the Evaluation Committee at one department is also present at other departments. In the case, measures should be taken to harmonize the methods of student assessment across all departments.

Additionally, there are many rooms available for individual study with very open access, facilitating effective learning environments.

However, the test results in some disciplines are not satisfactory, with failure rates as high as 50% in certain cases. To address these issues, the Evaluation Committee recommends harmonizing the literature for Czech and English students, ensuring that all required books are available in the library, and providing literature that is appropriate for pregraduate study.

Additionally, the Committee suggests reviewing the testing protocols in disciplines with high failure rates to ensure they are fair and effective in evaluating student knowledge and skills. This may involve refining the difficulty level of initial assessments, providing additional preparatory resources, or implementing more comprehensive feedback mechanisms to help students succeed on their first try.

Organisation of theoretical and simulation teaching

The Evaluation Committee commends several strengths of the program. The teaching approach is unified, and students are provided with a logbook containing a checklist of practical procedures. During practical teaching, students have access to the hospital information system, which significantly enhances their ability to obtain necessary information.

Mainly, department literature is recommended, but the library is well organised, with enough educational materials. However, there is a discrepancy in the literature provided for Czech and English students, and a general lack of available literature, with some books not being accessible in the library. The level of required literature is sometimes inappropriate, with certain disciplines lacking adequate textbooks for pregraduate study. The educational textbooks for Neurology are too specialised and adequate for postgraduate specialization in the discipline and not adequate for the pregraduate study.
It is recommended that the selection of educational textbooks be reviewed to ensure they are appropriately tailored for pregraduate study. Textbooks should be chosen or developed to match the level of knowledge and skills required for pregraduate students, rather than focusing on content suited for postgraduate specialization. This will enhance the learning experience and better prepare students for their future professional practice.

The Evaluation Committee recognizes that the department demonstrates strong personal capacity, ensuring that there are enough qualified staff members to support the educational program. The scope of practical teaching is extensive, providing students with ample hands-on experience. The Simulation Center CENTESIMO is particularly noteworthy, equipped with excellent facilities and staffed by enthusiastic personnel who contribute significantly to the learning environment.

Despite its strengths, the Evaluation Committee identifies areas for improvement. The use of simulation is not integrated across all disciplines, limiting the potential benefits of this teaching method. Expanding the use of simulation in all areas of study could enhance the overall educational experience and better prepare students for real-world clinical scenarios.

To this end, the Evaluation Committee recommends further development of the department by expanding the use of simulation-based teaching across all disciplines. This approach would maximize the benefits of the Simulation Center CENTESIMO and provide a more comprehensive, hands-on learning experience for students. Additionally, the Committee suggests continued support for maintaining and enhancing the department's personal capacity and practical teaching scope to ensure ongoing success.

The process of bedside teaching

Practical teaching is at the center of all clinical disciplines with teachers placing a strong emphasis on this aspect of education. However, there are differences in the study groups during the While some groups maintain an adequate ratio of 4 students per teacher, others have as many as 7-8 students per teacher, which the Evaluation Committee recognizes as a weakness that needs to be addressed.

In all cases, informed consent is signed by the patient, and examinations are conducted in separate rooms, tailored to the specific requirements of the clinic. This arrangement is generally adequate and appropriate for most situations.

The Evaluation Committee recognizes several strengths in the program. One notable strength is the small group sizes for students, which allows for more individualized attention and a focused approach to practical teaching. Additionally, during practical teaching sessions, students have access to the hospital information system. This access significantly enhances their ability to

retrieve and utilize relevant information, thereby improving the overall quality of their education.

Assessment of students' knowledge

In most cases, the verification of students' knowledge is conducted in a combined form, including both oral examinations and written questionnaires. There are also a few tests administered throughout the semester.
Student evaluations are conducted anonymously after the exam. However, the response rate for these evaluations is very low, typically below 10 percent. As a result, students often feel that their feedback is not taken seriously, rendering the activity ineffective.

In most clinical disciplines, multiple examiners are involved in the assessment process, rather than a single examiner. Despite this arrangement, students did not report any significant differences in the assessment process or content.

The Evaluation Committee recognizes that in most disciplines, the exams include both practical and theoretical components, which provides a well-rounded assessment of students' knowledge and skills. This comprehensive approach is highly beneficial for ensuring students are adequately prepared for clinical practice.

Nonetheless, the Committee also identified several weaknesses. There is no measurement of the uniformity of testing by different examiners, leading to potential inconsistencies in student assessments. Additionally, in some cases, the textbooks used are inadequate, failing to provide the necessary depth and breadth of knowledge required for pregraduate study. Furthermore, some disciplines have an excessively high failure rate, which may be attributed to overly demanding examination standards.

Given the above mentioned, the Evaluation Committee recommends that the Dean's Office take proactive measures to address these issues. First, it should implement a system to ensure uniformity in testing across different examiners, thereby standardizing the assessment process. Second, the Dean's Office should review and update the textbooks used in all disciplines to ensure they are appropriate for pregraduate students. Third, the Dean´s Office should pay greater and systematic attention to student feedback on the matters related to assessment and assure that feedback is acted on (and that situations when student suggestions cannot be accommodated are well-communicated). Finally, the Committee suggests that the Dean's Office work with all disciplines to balance the level of teaching and testing, making sure it is rigorous yet achievable, to reduce the high failure rates observed in some areas.

The view and experience of the student representatives

No discrepancies were found in student awareness regarding the importance of the courses and curriculum structure in clinical disciplines.
However, the evaluation of teaching procedures by students should be improved, and the response rate should be significantly higher. The reaction of the Department and Dean’s Office should adopt a more interactive approach to engage with the student community.

In general students complained about the lack of practical knowledge and practical teaching. Despite the excellent Simulation Center CENTESIMO, direct contact with a patient is indispensable.

The Evaluation Committee identifies that the organization of teaching is at a corresponding and appropriate level. This indicates that the structural and administrative aspects of the teaching process are well-managed and effectively implemented.
Despite the strengths in teaching organization, the Committee identifies several weaknesses based on student feedback:

Lack of Practical Knowledge: Students generally complained about a lack of practical knowledge and the examination methods lacking a practical component. This suggests that the current curriculum may not provide enough hands-on experience or practical training opportunities.

Literature Availability: Students also reported complaints regarding the lack of availability of literature and educational materials. Additionally, in some disciplines, the provided literature was considered excessive in content, making it challenging for students to effectively utilize these resources.

To address above-mentioned issues the Evaluation Committee recommends the following actions to address these weaknesses:

First, to enhance practical components by integrating more practical components into the curriculum and examination methods. This could involve increasing the number of practical sessions, hands-on training opportunities, and practical assessments to ensure that students gain sufficient practical knowledge and skills.

Second, to improve literature accessibility and ensure that essential textbooks and resources are readily accessible in the library and in digital formats. Additionally, streamline the content of literature to make it more manageable and relevant for students, focusing on core concepts and practical applications.

Conclusions

The curriculum in clinical disciplines is well structured but needs permanent innovation and improvement according to scientific news and developments and current medical practice in health care system. Stress on practical knowledge is necessary.

The faculty staff is highly qualified, mostly well structured, and the attraction of younger professors is the endless activity.

Discrepancies in the test results in different disciplines should be controlled by the Dean's Office and the right resolution accepted.

The education materials are modern, with good access and permanent innovations.

The evaluation procedures must be improved (proper timing, and adequate reaction to students´ comments The curriculum in clinical disciplines is well-structured, but it requires continuous innovation and improvement to stay current with scientific advancements and developments. Emphasizing practical knowledge is essential to ensure that students are well-prepared for clinical practice.

The faculty staff is highly qualified and generally well-organized. Efforts to attract younger professors are ongoing and crucial for the department's continued growth and dynamism.

The discrepancies in test results across different disciplines need to be monitored and addressed by the Dean's Office, with appropriate resolutions implemented to ensure consistency and fairness in student evaluations.

The educational materials are modern, easily accessible, and subject to ongoing updates to reflect the latest advancements in medical education.

The evaluation procedures must be improved, with proper timing and an adequate response to students' feedback to enhance the overall educational experience.

Summary of Recommendations:

1. Increase Practical Training Opportunities:

Integrate more practical components into the curriculum and examination methods, ensuring students gain sufficient hands-on experience.

Expand direct patient contact opportunities through increased clinical rotations, partnerships with local hospitals, and supervised patient interactions.

2. Enhance Evaluation and Feedback Processes:

Improve the response rate for student evaluations of teaching procedures by implementing strategies such as frequent reminders and incentives.

Ensure the Department and Dean's Office adopt a more interactive approach in addressing student feedback through regular forums, feedback sessions, and transparent communication channels.

3. Standardize Testing and Assessment Methods:

Implement a system to ensure uniformity in testing across different examiners, standardizing the assessment process to maintain consistency and fairness.

Monitor discrepancies in test results across different disciplines and address them with appropriate resolutions from the Dean's Office.

4. Improve Accessibility and Appropriateness of Educational Materials:

Review and update the selection of textbooks and educational resources to ensure they are appropriate for pregraduate study.

Ensure essential textbooks and resources are readily accessible in the library and in digital formats.

Streamline the content of literature to focus on core concepts and practical applications, making it more manageable and relevant for students.

5. Attract and Develop Faculty:

Continue efforts to recruit younger professors to ensure stable personnel development and continuity in career progression.

6. Stay Current with Scientific Advancements:

Continuously innovate and improve the curriculum to stay up-to-date with the latest scientific developments and advancements.

7. Enhance Practical Teaching and Resources:

Maintain the high standard of practical teaching through small group sizes and access to modern resources like the Simulation Center CENTESIMO.

Signatures of the participating members of the Committee	prof. MUDr. Vladimír Palička, CSc., dr. h. c. prof. MUDr. Michal Bar, Ph.D., FESO prof. MUDr. Ivo Šlapák, CSc. prof. MUDr. Radim Jančálek, Ph.D., MBA prof. MUDr. Josef Sýkora, Ph.D. David Kverka	**Date**	30 May 2024

Národní akreditační úřad
pro vysoké školství

Report from the Theoretical Departments Evaluation Visit	
Name of the theoretical department	Institutes of Physiology, Pathological Physiology, Histology and Embryology, Medical Chemistry and Biochemistry, Basic Communication Ethics for Praxis
Name of the HEI and its units	Palacký University Olomouc, Medical Faculty
Name of degree programmes	Všeobecné lékařství, General Medicine
Basic information about the visit to the theoretical department	

Composition of the evaluation group

MUDr. Josef Fontana, Ph.D.
prof. MUDr. Otomar Kittnar, CSc.
prof. MVDr. RNDr. Petr Hořín, CSc.
Bc. Valeria Skopelidou
doc. MVDr. Aleš Hampl, CSc.
prof. MUDr. Jindřich Vomela, CSc., LL.M.

Documents used as a basis for the evaluation

Self-Evaluation Report
Annexes in the extent of application for accreditation of Všeobecné lékařství, General Medicine
Departmental webpages

Date of the visits: 19th March 2024

Arrangement and scope of the visit

Face-to-face discussions were held with representatives of the theoretical institutes, usually with the Department Head, Vice-Head for Education, other teachers and staff members, and with representatives of students of the HEI. Visits followed these discussions and primarily took place in dedicated institutes and included a tour of the teaching facilities of the institutes.

Main activities undertaken during the visit

The discussions focused on the teaching program, its organisation, the number of teaching hours (lectures, seminars, bedside teaching, use of the simulation centre, etc.), organization and methodological support of practical lessons, experience of students with the educational processes, and personal adequacy (numbers and qualifications).

Institute of Histology and Embryology:

The visit was composed of two separate parts. First, evaluation committee engaged in a profound discussion with the Head of the Department, a teacher, and a representative of the research staff. This discussion covered critical aspects of the educational activities, including the qualifications and teaching load of the staff, teaching methods, the availability of study resources, and educational activities offered to students beyond the standard curriculum.

The second part of the visit involved attending a practical lesson. Evaluation committee was given an unlimited timeframe to participate in a practical teaching session focused on the topic of connective tissues, specifically bone and cartilage. The practical session took place in a modern room equipped with 30 study stations, each featuring a binocular microscope and a monitor connected to a PC. This setup allowed for individual observation of classical glass slides, sharing histology images, and interactive online testing.

There were 30 students in the practical session, divided into two groups of 15. The teacher used a board and slides to carefully explain the critical structures of the tissues being studied. The teacher was expressive and passionate, making the information easy to understand and memorize. One teacher led the lecture, while another assisted students at their workstations. Together, they adequately supported the two groups of students, even during individual microscopic observations. The students were encouraged to ask questions at any time, making the teaching highly interactive.

No additional specific documents were required for the visit.

Basic Communication Ethics for Praxis:

The visit was composed of two distinct parts. First, evaluation committee was introduced to the purpose and objectives of the course through a commented PowerPoint presentation. This presentation covered the course structure, teaching methods, expected outcomes, and other relevant aspects. Evaluation committee also had the opportunity to meet the teaching staff and discuss their qualifications and contributions to the individual components of the course.

The second part of the visit involved attending a practical lesson. The practical lesson observed by the evaluation committee was focused on aspects of interpersonal communication. Since the visit occurred in March, the practice lesson was for Czech students, as the English program version of the course is taught in the first semester (autumn semester) of academic year. The Czech and English versions of the course are equivalent, making the committee's judgment valid also for the English version of the course.

All lessons, including seminars and practical sessions, take place in standard teaching rooms. There were 13 students in the practical session, typical group sizes ranging from 15 to 18 students. The teacher's performance was expressive, frequently asking questions to keep students involved and active. Overall, the lesson was highly interactive and appeared enjoyable for the students.

However, upon review, it has become evident that the current ethics course lacks sufficient depth and breadth in its conceptual framework and content. The course is predominantly centered

around communication skills, which, while important, do not adequately address the critical ethical issues pertinent to the field.

No additional specific documents were required for the visit.

Institute of Physiology:

During the visit, a practical lesson on blood physiology was observed. Additionally, interviews were conducted with both teaching staff and students. The interviews with teaching staff were focused on the structure of the teaching, personnel, and material resources. Interviews with students concentrated on the practical skills acquired during the physiology course, the relevance of study resources, and their feedback on the course.

The evaluation visit targeted the physiology course, a one-year course in the second year of the General Medicine degree program and included assessments of both its theoretical and practical components. The practical course observed during the visit involved students collecting venous blood and determining the value of haematocrit and erythrocyte sedimentation rate.

The evaluation group focused on instructions for the students' practical activities and the resulting protocols prepared by the students. The primary aim of these procedures was to consolidate the theoretical knowledge acquired in lectures while simultaneously developing essential practical skills.

No additional documents were required.

Institute of Medical Chemistry and Biochemistry:

During a site visit evaluation committee conducted a 30-minute interview with Prof. Modriansky who clarified several key aspects, including the content of teaching, personnel and material resources, the medical orientation of basic subjects, coordination of teaching between Medical Chemistry, Biochemistry 1, and Biochemistry 2, harmonization with other related basic and clinical subjects, student assessment methods (such as practical exams), and research activities.

Interviews with students focused on the practical skills acquired during the courses, the quality of learning resources, and their feedback on the course.

The evaluation committee visited Biochemistry 1 lab practical lessons that focused on the instructions for students' practical activities and the resulting protocols prepared by students. Practical sessions included seminars and experiments such as photometry and body fat estimations. Students studied amino acids both theoretically and practically, including forensic sample analysis. The seminar part of the practical session encouraged group presentations among students.

No additional documents were required.

Institute of Pathological Physiology:

During the site visit evaluation committee participated in the discussions focused on learning requirements, recent changes in the perception of pathological physiology, and the structure and provision of teaching, as well as the institute's needs for further development and improvement of quality of teaching. Both teachers and students participated in these discussions. Further clarification of certain aspects of the institute's activities continued through subsequent bilateral communications when more information was required.

The primary objective of basic undergraduate clinical studies is to shape the understanding of pathological changes in individuals, their development, and changes in physiological functions. Pathological physiology is crucial in this context. Consequently, the vision for the development of learning in pathological physiology is shared by both the Institute of Pathological Physiology and the Faculty of Medicine. The evaluation included a discussion on this vision.

The department integrates current medical research with practical application. A significant part of the course is the practical learning of pathophysiological mechanisms using simulators. Students highly appreciate this form of learning, which involves discussing and analysing simulated situations in small groups with their teacher. The background documentation and discussions indicate that the institute provides excellent learning experiences and actively supports students interested in research (Student Scientific and Professional Activities) and postgraduate studies.

The allocation of learning time—45 hours of exercises and 30 hours of lectures in the fifth semester, and 60 hours of exercises and 30 hours of lectures in the sixth semester—is appropriate given the fundamental importance of pathological physiology.

Although the institute previously offered high-quality teaching materials on the web (e-learning), some formats are currently unavailable. To address this, the institute's staff has begun publishing electronic scripts in e-pdf format.

Personnel resources and capacity for teaching

Institute of Histology and Embryology:

The staff at the Department of Histology and Embryology is well-qualified for teaching the courses that are part of the curriculum (2 associate professors, 2 assistant professors). However, an increase in the number of educators would be beneficial given the total number of students in the Czech and English medical programs. This expansion would also support the advancement of academic careers by enhancing involvement in research and development activities, which is currently suboptimal.

Practical lessons are conducted with two groups of 15 students each, supervised by two teachers, a setup that has proven to be fully functional and effective. The institute is housed in a modern building that hosts various theoretical departments. The practical lesson room accommodates 30 students, each with a microscope and a PC with a monitor. Additionally, each student has their

own set of histological slides. This setup is fully adequate for an interactive form of practical teaching and examination.

Basic Communication Ethics for Praxis:

The teaching staff consists of four properly qualified academics (1 full professor and 3 assistant professors). This staffing level is fully adequate given the total number of students and the volume and content of the taught material.

The technical requirements for the course are minimal (room, board, PC) and are readily available.

The time allocated to the "Basic Communication Ethics for Praxis" course totals 15 hours (5 hours of theoretical seminars and 10 hours of practical lessons), which is fully consistent with the expected knowledge outcomes (that however concerns primarily communication skills concerning medical praxis – not the topic of medical ethics as such, which is not covered within this course)

Institute of Physiology:

The teaching staff is currently on the borderline of sufficiency, consisting of one professor, one associate professor, and two assistant professors. The efficiency of practical lessons relies on training practical skills in small groups of students. Typically, there are 15 to 18 students per group, which is further divided into two to three smaller groups to ensure effective learning. This approach was fully appreciated by the committee members. However, it is very demanding in terms of teaching staff, which limits the time available for the teaching staff to engage in research activities.

The spatial and equipment resources for teaching are at a very good level and correspond well to the number of students in each practical group.

Institute of Medical Chemistry and Biochemistry:

The teaching staff for Medicinal Chemistry consists of one professor (0.4 FTE) and two associate professors (each 0.3 FTE). For Biochemistry 1 and 2, there is one professor (0.3 FTE) and two associate professors (0.4 and 0.3 FTE). One assistant professor is not assigned to a specific course. Students are taught in relatively small groups, typically 15 to 18 students per group. The spatial and equipment resources for teaching are adequate and correspond to the number of students.

Institute of Pathological Physiology:

The qualification structure of the teaching staff is appropriate in terms of both academic and pedagogical qualifications as well as age distribution. The staffing capacity of the institute is sufficient to meet current teaching requirements.

The teaching conditions are currently satisfactory; however, there will be a need for greater emphasis on simulation techniques in the near future. Therefore, it is necessary to focus on further retrofitting the institute, which currently has limited quantities of simulation technology.

The tuition system is standard regarding the system and content of lectures and practical exercises. The student-to-teacher ratio, processing of protocols, and other aspects are appropriately managed.

Conclusions:

Regarding Personnel Resources and Capacity for Teaching The evaluation committee formulated the following observations:

Strengths: Departments and institutes responsible for theoretical education have years of expertise in teaching the courses, with teaching methods refined to a high quality. Students can benefit from a highly qualified and experienced teaching staff, supported by high-quality technical resources and strong cooperation between the institutes and students.

Weaknesses: Some of the institutes are at the borderline of sufficiency in terms of teaching staff, some are even critically understaffed. Additionally, the evaluation committee observed that the research and development activities of the academic staff are suboptimal or, in some cases, minimal.

Recommendations: The institutes need more financial support, particularly for the development of research that could attract prospective young teachers preferably with medical education. There should also be support for modern simulation teaching in all appropriate courses.

Methodological support of teaching

Institute of Histology and Embryology:

The contents of the curriculum and the form of education are fully adequate. Resources and technical support for teaching are state-of-the-art in all aspects. Beyond standard lectures and practical lessons, students are offered consultations, which are extensively utilized.

Complete information for students is available in a structured manner on the faculty/department intranet (Moodle). Recommended literature is specified and is also available in the faculty library, albeit in limited numbers. The department offers a vast spectrum of online educational materials, including videos and atlases, via its website.

Only experienced educators are fully responsible for teaching, with some technical assistance provided by younger fellows as needed.

Basic Communication Ethics for Praxis:

Regarding the Communication Ethics, the contents of the curriculum and the form of education are fully adequate.

Complete information for students is available in a structured manner on the faculty/department intranet (Moodle). Recommended literature is specified and available in the faculty library, although in limited numbers. The department also provides a wide range of online educational materials, including videos and atlases, via its website. Only experienced educators are fully responsible for teaching.

However, given the fact the fact that the course is centered around communication skills, which, while important, do not adequately address the critical ethical issues pertinent to the field, it is recommended to include (or establish parallel course) that would address topics that are in the center of medical ethics. To better prepare students for the ethical dilemmas they may face in their professional careers, it is recommended that the course be restructured to include comprehensive coverage of significant ethical issues such (but not exclusively) as: Genetic Engineering and CRISPR, Abortion and Reproductive Rights, Euthanasia and Assisted Suicide, End-of-Life Care and Decision Making, Medical Consent and Patient Autonomy, Biomedical Research Ethics, AI and Technology in Medicine, Public Health Ethics, Organ Donation and Transplantation, Mental Health Ethics, Pharmaceutical Ethics or Gender aspects in medical research. These topics (in broader perspective) are essential for a robust understanding of contemporary ethical challenges and should be integrated into the curriculum to provide a more holistic and rigorous ethical education for a future medical professional and their responsibilities towards the patients. Expanding the course content to encompass these areas will not only enhance the students' analytical and decision-making skills but also ensure that they are well-equipped to navigate the complex moral landscapes of their respective fields.

Institute of Physiology:
The content and structure of the physiology course are standard and fully adequate. Learning conditions are good, and information and technical resources are sufficient. Communication with students is effective, with frequent opportunities for consultations, utilized by approximately 30% of students.

Study resources are available on STAG and Moodle. While the range of recommended study literature is sufficient, students find it excessive and would appreciate a more curated selection.

Typically, there are 15 to 18 students per practical group, which is divided into two to three smaller groups. Each group is taught by two teachers – one experienced and one younger, with the latter supervised by the more experienced colleague.

Institute of Medical Chemistry and Biochemistry:

The contents and organization of the courses are standard and adequate, with all three courses well harmonized with each other. However, there is little coordination with other related courses, such as Physiology. Learning resources are sufficient and available on STAG and Moodle. The recommended literature is also adequate.

Each practical group consists of 15 to 18 students (one standard study group). Typically, the entire group is taught by one or two teachers, depending on the difficulty of the task being addressed.

Institute of Pathological Physiology:

According to the committee's evaluation, the methodical aspect of teaching is one of the strengths of the Institute of Pathological Physiology. The institute regularly updates study materials, especially in e-learning and the publication of electronic study texts.

The availability of study materials is adequate, and there is clear information regarding student requirements, including opportunities for consultation. Teaching aligns with standardized study plans and features a comprehensive program of seminars and exercises. The lecture system is well-staffed.

Conclusions:

Strengths: The courses are of exceptionally high quality, a testament to their long history of continuous development. This excellence is underpinned by relevant and modern study resources, innovative forms of study materials, and a strategically sound approach to teaching.

Weaknesses: There is a notable deficiency in knowledge sharing with other departments, which leads to poor harmonization of concurrent courses. Furthermore, in some cases students lack sufficient guidance on the selection of appropriate literature, this lack of direction can create significant challenges in their learning process, potentially leading to a fragmented understanding of the material. Without clear guidance, students may struggle to discern which sources are most pertinent, thereby impeding their ability to build a cohesive and comprehensive knowledge base. This can ultimately affect their academic performance and preparedness for practical applications in their field, and subsequently also result in an undesirable drop-out rate.

Recommendations: To address these issues, it is recommended to enhance cooperation with other institutes to achieve better coordination of individual teaching topics, especially within the majority of theoretical departments. Additionally, a greater emphasis on the simulation medicine program is necessary to enrich practical learning experiences and better align with contemporary educational standards. Furthermore, providing more structured guidance on literature selection will help students navigate their study resources more effectively, ensuring they can fully comprehend and integrate the material into their broader learning objectives. This approach will foster a more coherent understanding of the subject matter and improve academic outcomes.

Assessment of students' knowledge

Institute of Histology and Embryology:

Students take three interim tests each semester, administered in an interactive digital format on PCs. These tests primarily focus on the students' ability to identify and describe histological structures and are clearly scheduled in the semester syllabus. The final exam, consisting of a written test with 90 multiple-choice questions and two textual tasks, is offered for the first and second attempts, while the resit (third attempt) is oral. Written testing ensures maximal objectivity, and the comprehensive final test minimizes the risk of undesired selection effects. Students have the opportunity to discuss their test outcomes with the teacher, with immediate feedback provided during oral exams.

Basic Communication Ethics for Praxis:

This course does not include a defined interim evaluation during the semester. However, the practical lessons are conducted in a way that provides formative feedback on students' performance. The course concludes with an oral colloquium, a conversation between the teacher and student on a selected theme, where other students may be included if beneficial. The focus is on engaging students in the educational process through interactive and practical tasks, rather than on rigorous knowledge verification. The course's highly interactive nature allows for immediate discussion of performance outcomes, aligning with the course's formative assessment objectives.

Institute of Physiology:

Interim assessment involves discussions with students during practical lessons about the underlying principles of the practicing topic. The final assessment, in line with current accreditation standards, includes a multiple-choice test and an oral examination. Only two teachers conduct the oral exams, adhering to well-defined basic requirements. To limit cheating, correct answers to tests are not made available to students, but answers are immediately discussed during the oral exam, with additional consultations available later.

Institute of Medical Chemistry and Biochemistry:

The Chemistry exam, the first university exam for students, has a 5% failure rate with limited repeat opportunities, as first-year subjects cannot be repeated in the second year. Interim assessment includes a written chemical calculation credit test, while final assessment involves practical credit tests preceding the written final exam.

Institute of Pathological Physiology:

The institute employs a standard system for teaching and assessing student knowledge, with interviews indicating extremely good student knowledge levels. The testing system ensures continuous, standardized, and objective evaluation. All information on student evaluation is readily available on student evaluation pages and complies with published study regulations, promoting a continuous study system. The institute operates at an extremely high standard, with standardized processes and a highly qualified academic staff, indicating no need for changes.

Conclusions:

Strengths: The methods of student knowledge assessment are both standard and fully compliant with accreditation requirements. The evaluation committee acknowledges a maximal effort toward a formative approach to the continuous evaluation of student knowledge, supported by a robust technical infrastructure. This ensures that students receive ongoing, constructive feedback, facilitating their learning and comprehension.

Weaknesses: While the system is effective, there is a limitation in the diversity of discussions during practical lessons due to the current number of instructors. Additionally, the lack of coordination with other departments could hinder the integration of related topics.

Recommendations: It is recommended to integrate new teachers and student lecturers, peer-led sessions into practical lessons. This addition would enrich the discussions during practical sessions, offering diverse perspectives and enhancing the overall learning experience for students. Improving coordination with other departments will help harmonize concurrent courses and provide a more comprehensive educational experience.

The view and experience of the student representatives

Institute of Histology and Embryology:

Students are well informed in advance about the course content, study methods, and requirements for passing, including attendance and knowledge verification. All this information is detailed in a document available to students before the course begins. There have been no complaints from students regarding the overall organization of teaching. Instead, they appreciate the extensive selection of study materials provided by the department. The overall judgment of this course is highly positive. Although the discipline is demanding, this is understood and accepted by the students. Some students feel that the amount of detailed knowledge required is excessive, but this opinion is highly individual.

Basic Communication Ethics for Praxis:

Students are well informed in advance about the course content, study methods, and requirements for passing, all of which are detailed in a document available before the course starts. There have been no complaints from students regarding the overall organization of teaching. The interactive nature of the course is particularly appreciated. While verification of knowledge is not the primary focus, students understand that their performance is evaluated during interactive sessions, and they adapt accordingly. The overall judgment of this course is highly positive.

Institute of Physiology:

Students are informed in advance about the course structure and requirements for successful completion. They particularly praise the quality of practical lessons and the step-by-step instructions presented on the screen during practical work. The organization of teaching is well-regarded, with study resources available from the beginning of the course on the Moodle system. The objectives of the course are positively evaluated, although some students find the overlap

with other theoretical courses unnecessary. The system for evaluating student knowledge aligns with general standards, with no complaints reported, except that some students find the scope of required theoretical knowledge excessive.

Institute of Medical Chemistry and Biochemistry:

Students are informed in advance about the course structure and requirements for successful completion. Study resources are available from the beginning of the course on the Moodle system. The objectives of both Biochemistry courses are positively evaluated. There are some rare complaints about the difficulty of the Chemistry course.

Institute of Pathological Physiology:

Students regard pathological physiology as essential preparation for clinical medicine. This view is reinforced by the available knowledge in simulation-based medical training. The provision and organization of lectures, seminars, and practical exercises are of a high standard, which is a strength of the institute. There is a clear effort to transfer theoretical teaching to the simulation environment, as seen in the study programs and confirmed by interviews with students and academics. The system for evaluating student knowledge involves regular dialogues during exercises and seminars, assessed tests, knowledge testing during credits, and a final examination. This system is fully functional, clear, and controllable.

Conclusions:

Strengths: The organization of the visited courses has garnered general satisfaction among the students. They particularly appreciate the clarity and accessibility of course content, the structured delivery of lectures and practical lessons, and the availability of comprehensive study materials.

Weaknesses: There is insufficient dissemination of information regarding the results of the feedback evaluations provided by students. Additionally, in some instances, the curriculum requires students to memorize an excessive amount of detailed information, which can be overwhelming and may hinder the overall learning experience.

Recommendations: To enhance the educational experience, it is recommended that students be made more aware of how their feedback is addressed and implemented. This can be achieved by regularly updating them on the outcomes of their evaluations and the subsequent actions taken by the faculty. Moreover, the curriculum should be reviewed to ensure that the emphasis on memorization is balanced with the development of critical thinking and practical skills, thereby fostering a more holistic and effective learning environment.

Conclusions

Institute of Histology and Embryology:

The course of Histology and Embryology builds on a long history of development and mastery. As a result, the course is well-organized, and its contents are relevant and up-to-date, ensuring that students acquire critical knowledge necessary for learning other preclinical and clinical disciplines. In terms of educational activities, the Department is well-positioned among similar units in the Czech Republic. However, the number of qualified teachers is suboptimal, which hinders further qualitative improvement. This limitation negatively impacts the ability of

academics to develop their careers in research and development and to attract young thinkers to the Department. Focused support from the Faculty is highly needed to address this issue.

Basic Communication Ethics for Praxis:

This course, implemented in the first year of study, provides students with essential information on different types of communication. It also helps international students acclimate to their new environment and culture. This is a crucial aspect, as good behavior, an assertive approach, appropriate responsiveness, and other communication skills are of paramount importance for every medical professional.

After careful evaluation, it is clear that the current ethics course needs to be expanded in both depth and scope. The existing curriculum focuses primarily on communication skills, which, while valuable, do not sufficiently address the critical ethical issues relevant to the field. To better equip students for the ethical challenges they will encounter in their professional careers, it is recommended that the course be redesigned (or expanded) to include a comprehensive overview of significant ethical issues (as mentioned above in the reported) relevant for the medical ethics. These subjects are crucial for a thorough understanding of contemporary ethical debates and should be incorporated into the curriculum to offer a more well-rounded and rigorous ethical education.

Institute of Physiology:

The physiology course is well-designed and adequately organized. However, a significant challenge for the Institute of Physiology is the very high number of teaching hours (over 900 per year) coupled with a limited number of teachers. This heavy teaching load results in almost no research activity among the staff, posing a severe risk to the institute's future development. To address this issue, the institute requires increased financial support, particularly to enhance research activities that could attract prospective young employees and address the borderline sufficiency of the current teaching staff.

Institute of Medical Chemistry and Biochemistry:

The courses in Medicinal Chemistry and Biochemistry 1/2 are well-structured and organized, maintaining a standard quality of teaching across all aspects. The department's research activity is commendable. Given the number of students, the use of written exams, despite their limitations, represents a reasonable compromise for assessing students' knowledge in the Medical Chemistry course.

Institute of Pathological Physiology:

The comprehensive evaluation of the Institute of Pathological Physiology reveals it as a pivotal unit in transitioning students from theoretical knowledge to clinical practice. The evaluation committee concludes, based on the materials presented, interviews conducted, and the institute's vision, that it exhibits predominant strengths. These include excellent staffing, effective teaching methodologies, well-prepared study materials, and a robust system of organization and tuition implementation.

Summary of Recommendations:

Based on the above mentioned, evaluation committee formulated set of recommendations for the HEI and faculty management:

1. Interdepartmental Coordination and Harmonization of Curiculum:

Improve cooperation and knowledge sharing between departments to harmonize concurrent courses and provide a more integrated educational experience.

2. Student Feedback Utilization:

Ensure that students are well-informed about how their feedback is addressed and implemented. Regular updates on actions taken in response to their comments will enhance transparency and trust.

3. Balance Teaching and Research:

Strive to balance teaching responsibilities with research activities across all institutes to ensure sustainable academic growth and development.

4. Resource Allocation:

Allocate resources efficiently to support both educational and research activities, ensuring that each institute has the necessary tools and infrastructure to succeed.

5. Enhance Interactive and Simulation Learning:

Continue emphasizing interactive and practical tasks to maintain high student engagement and practical application of communication skills. Enhance the use of simulation technology in teaching to further strengthen practical skills and clinical readiness among students. Develop structured peer-led sessions within practical lessons and tutorials. These sessions can be supervised by faculty to ensure accuracy and quality while allowing students to benefit from peer perspectives and explanations.

6. Appropriate Literature Selection and Teaching Materials:

Improve the precision and availability of relevant literature and teaching materials, it is recommended to develop a centralized, regularly updated digital repository that provides curated and essential reading lists, multimedia resources, and comprehensive study guides. Continuously monitor student satisfaction with the teaching materials through regular feedback mechanisms.

7. Integrate course on Medical Ethics:

Expand the course content to cover significant issues concernig medical Ethics to provide a more comprehensive ethical education.

Signatures of the participating	MUDr. Josef Fontana, Ph.D. prof. MUDr. Otomar Kittnar, CSc.	**Date**	30 May 2024

members of the Committee	prof. MVDr. RNDr. Petr Hořín, CSc. Bc. Valeria Skopelidou doc. MVDr. Aleš Hampl, CSc. prof. MUDr. Jindřich Vomela, CSc., LL.M.		