

Position Paper Regarding High-quality Medical Education

*accepted by the Delegates' Assembly of the swimsa on Date in City.
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1. Introduction

International rankings show that medical care in Switzerland is of the highest quality.¹ To maintain this quality, education must be designed so that tomorrow's physicians are equipped with the necessary abilities and skills. This can only be achieved if teaching is held to a high standard, adapts to technological and social progress while also aligning with the principle of Social Responsibility.² A medical degree should train physicians that meet the needs of society and add value to it,² as it is important that interprofessionality is already focused on in their studies. From the point of view of medical students however, medical education is lagging behind. Only 32.1% of students³ are of the opinion that the current study program requires no changes or adjustments. The remaining $\frac{2}{3}$ view the curriculum and its didactic design as capable of improvement.³

The following position paper takes into account what Swiss medical students expect from the decision-makers in medical education regarding high-quality medical teaching, and offers recommendations for action.

2. Starting Position

The **swimsa** acknowledges that the quality of both medical education and further training have a direct impact on the quality of medical care. However, the quality of education leaves something to be desired. The course contents do not sufficiently correspond to the situations encountered daily in the medical field and although PROFILES has been introduced de jure, a de facto implementation is still far from being successfully achieved. Although it is leading to considerable changes in healthcare and requires new skills of prospective healthcare professionals, digitalization is not covered sufficiently. Further aspects are inadequately implemented, such as didactic design, the concept of research as a central tenet of medical education and training, and the orientation of the curriculum towards the principle of Social Responsibility. National and international mobility, as well as interprofessionality are not

promoted sufficiently, even though they are central to skill development and reaching a better social understanding. In addition, the way medical education is currently being taught does not adequately prepare prospective physicians to serve the needs of the society of tomorrow. For this reason, **swimsa** makes the following demands.

The swimsa demands, that

1. PROFILES is implemented in the courses in a meaningful way throughout Switzerland. That way, course contents from different universities are harmonized and there are further opportunities for national and international mobility.
2. ... the didactic design of the studies is adjusted in a way that allows the evaluation and implementation of practical and innovative methods of teaching, and that promotes interprofessional collaboration.
3. ... the flexibility of the curriculum within the framework of Social Responsibility is ensured, so that a continuous adaptation of medical education to changes in society and medicine is possible and necessary.
4. ... the quality of teaching is safeguarded by independent, internal as well as external quality assurance programs. It is essential that student representatives are also represented in all aspects and steps of quality assurance.
5. ... that Swiss medical care is ensured in the long term through sustainable planning, the evaluation of admission criteria and by guaranteeing enough high-quality university places.

3. Call to Action

Die swimsa demands...

...of universities, especially medical faculties, that....

1.the teaching contents are adjusted in various points:
 - a. The implementation of PROFILES should be furthered throughout Switzerland. All three main PROFILES categories should be represented accordingly in the curriculum.
 - b. The study of medicine should impart to the students the meaning of a lifelong education and critical thinking. They should be empowered to autonomously contribute to education and research and to critically reflect innovation.
 - c. The analysis of one's own professional behavior, limitations, one's demeanor as a physician as well as the ethical principles regarding patient care should be promoted and put to the test while taking into account the respective educational situation.
 - d. Students should receive the necessary training to understand and represent the health needs of different population groups. This in order to act in the interest of the respective groups and to take appropriate preventive measures.
 - e. In general, the curriculum should be oriented towards the principle of social responsibility in order to educate students according to the needs of society. This requires an in-depth examination of the current problems of society, the significance of various social determinants, such as gender, ethnicity and social class, as well as a critical reflection of a topic's relevance as early as during their studies.⁴
 - f. The focus of the curriculum should be on skills-based learning objectives. Teaching should be based more on fundamental concepts and work-relevant content and less on mere and monotonous memorization.
 - g. Students must be properly prepared for everyday clinical work (reports, ward work, etc...) so that independent work as a doctor is possible after graduating.
 - h. Practical training should be further promoted in the context of courses and internships and should take place earlier in the studies.

- i. The curriculum should promote the flexibility of students and thus provide the optimal basis for lifelong learning.⁵ This also includes sensitizing the students to future-oriented working methods such as e-health and digitalization. .
- j. This also includes sensitising the students to future-oriented working methods such as e-health and digitalisation.
- k. There should be more opportunities to supplement the compulsory curriculum with voluntary courses that can be credited as a resident physician (e.g. Basic Sono, ACLS, ATLS ...).

2. *the didactic design of the courses is adjusted:*

- a. The adaptation of current learning concepts and the integration of further learning concepts (training in small groups, case presentations, flipped-classroom lectures¹, etc.) should be promoted.
- b. The coherence of the study programme and the individual lectures is to be improved by means of a publicly visible curriculum mapping, so that different lectures and courses can be carried out according to known objectives and with coordination of content.
- c. Interprofessional learning in education and training is to be practiced by increasing cooperation between students and trainees of other health professions.⁵
- d. A personalized, appreciative and open feedback culture should be established both in practical training (internships, courses, OSCEs) and in studies in general.

¹**Flipped Classroom** refers to a teaching method of integrated learning where the homework and the teaching of the material are switched, in that the learning content is worked out by the students at home and the application takes place in class.

3. ... *the quality of teaching is ensured:*

- a. The state examination should be based on PROFILES and correspond to the studied content. In addition, efforts should be made to ensure that the state examination is internationally recognised. (cf. **swimsa** statement on the topic, April 2020)
- b. The medical faculties should have independent internal and external quality assurance programmes based on global WFME standards.⁶ It is essential that student representatives are also involved in all aspects and steps of quality assurance.
 - i. As part of quality assurance, the competence and quality of teachers should be evaluated periodically. In case of inadequate performance, appropriate measures should be taken (e.g. compulsory didactic training).
 - ii. The results of the quality assurance programmes should be publicly accessible.
 - iii. The adaptability of the curriculum must be improved. In terms of social responsibility, it must be ensured that the implementation and modification of the curriculum is kept as flexible as possible. This process must not be slowed down or even prevented by particular interests (namely on the part of the professors).
 - iv. The feedback process should be made more efficient and effective through reviews, analyses and appropriate corrections.
- c. The assessment and systematic recording of clinical skills should be carried out formally and in terms of content in a digital logbook (portfolio).

4. ... *national and international mobility is promoted:*

- a. Higher education institutions shall ensure conditions that facilitate mobility between different higher education institutions both nationally and internationally.
- b. Mobility is to be actively promoted nationally and internationally through designated exchange programmes and made accessible to all interested parties.

...from the hospitals and the service providers that they take their responsibility in education by...

1. ... supporting the practical training of students early in their studies through courses and internships.
2. ... giving doctors more time to engage with student education and motivating them to provide serious, qualitative education so that clinical courses can be delivered with added value for all.
3. ... creating more opportunities to teach and learn under supervision at the patient's bedside.
4. ... making the PROFILES implementation in pre graduate training and the concept of longitudinal assessment of clinical skills known to the doctors who are active in training and explicitly promote this.

... from the federal government that...

1. ... medical care in Switzerland is ensured in the long term through sustainable planning and the securing of sufficient high-quality university places.
2. ... international mobility is improved, specifically through Switzerland's full association with the EU's Erasmus+ education program.
3. ... the way in which students are selected in German-speaking Switzerland (namely the aptitude test for medical studies and the selection after the first year in French-speaking Switzerland) should be reconsidered. In particular regarding whether these two procedures select the right people for the medical profession.
4. ... access to medical studies is possible for all students, regardless of socio-economic and cultural background.
5. ... passing the federal state examination as a federal diploma also offers the opportunity for further training without bureaucratic hurdles internationally, especially in the USA.

swimsa is committed to ensuring that...:

1. ... the teaching content and learning objectives are adapted to the real-life work situation, which includes both the teaching of practical skills and a focus on practically-relevant theoretical content.
2. ... PROFILES is implemented in teaching in a meaningful way throughout Switzerland. That way, course contents from different universities are harmonized and there are further opportunities for national and international mobility.
3. ... the didactics are implemented in a way that is appropriate to the situation and student-friendly.
4. ... a continuous adaptation of medical education to changes in society and medicine is possible and necessary.

4. Main Text

The Healthcare Access and Quality (HAQ) Index ranks the Swiss healthcare system as third in the world.¹ In order to be able to guarantee high-quality patient care in the future, it is essential that the training of young doctors is of the highest quality. But not only the quality of teaching is crucial; the curriculum itself should also be in line with the principle of Social Responsibility in order to train doctors whose knowledge and skills are tailored to the needs of society. This can be achieved by ensuring that teaching is accessible to all, is of the highest quality in terms of content and didactics, and is efficient and relevant in terms of content.²

This is also in the interest of the future medical profession. In December 2019, **swimsa** conducted a survey on the quality of medical studies among students of all medical faculties in Switzerland.³ The high level of interest was already reflected in the response rate: approximately 1,100 students, i.e. more than one in eight, took part in the survey. The survey revealed dissatisfaction with regard to the course structure. Approximately two out of three students would like to see changes and adaptations in the curriculum.³

With the implementation of PROFILES, a relevant change in the curriculum of the Swiss human medicine degree programs is also pending. The **swimsa** demands that students be involved in this process, as they are directly affected by any changes in the curriculum and are in the best position to judge the direct impact on the student body.

4.1. Content

4.1.1. PROFILES Implementation

The implementation of PROFILES strongly affects the content of the study programme. Instead of learning objectives, PROFILES consists of medical competences to be independently mastered by prospective physicians, starting from the first day as a resident.⁴ Given that the medical degree prepares students for their profession as a physician, its content should represent the future working world. Through the implementation of PROFILES, there is a shift in the teaching focus towards more competence-based learning. This is a step in the right direction, as clinical competence consists of more than just learned, specific skills.⁶ The study program should be structured holistically in order to serve as a basis for lifelong learning. Students should gain the ability to acquire knowledge and adapt to new situations instead of memorizing rigid facts. This is particularly necessary with regard to the digital transformation and the impact of technological change on the economy, society and health.⁷ Complementary

competences regarding (intelligent) digital systems, such as critical thinking, inventiveness, communication skills or empathy, will become more important and are also required by PROFILES.^{4,7} In order to prepare students for their future working environment, it is essential that the teaching fields of "social competence" and "digitalization" are more strongly integrated into the study programme and that critical questioning and independent thinking are generally promoted.

4.1.2. Preparation for everyday work

Medical studies should enable future doctors to work independently under indirect supervision after they graduate.^{4,8} It is therefore important that these skills are not only taught and applied in the protected world of the university, but also in the real working world.⁹ In order to enable a smooth transition into professional life, concrete preparation for everyday working life is central. Particularly skills such as the correct handling of pharmacology, dealing with emergency situations, working out therapy concepts and preparation for everyday ward life are still underrepresented in today's curriculum from the students' point of view.³ Since "learning by doing" has been proven to achieve the best learning effect,⁹ this deficit can be at least partially remedied by increasing courses with patient contact. Patient contact from the very early stages of the study program is also important to the students: 71.2% still see potential for improvement in this regard.³ This problem could be addressed by supplementing theoretical teaching from the beginning of the study program with supervised internships in hospitals and practical courses. However, the best learning outcome is only achieved if there is an interplay of courses where medical skills such as blood sampling, infusions and wound care are taught and practical courses in which the acquired knowledge is applied in reality.¹⁰ The learning outcome is independent of whether a course was taught by a student or an instructor.¹⁰ It would therefore be conceivable to incorporate these aspects as peer teaching in the study program - ideally this could even be done interprofessionally.

4.1.3. Social Responsibility

In addition to a greater emphasis on practical skills, a change of focus in theoretical education is also desired.³ The theoretical content should both be socially relevant and clearly structured.^{2,9} In order to train future doctors according to the needs of society, the principle of "what is common is common" should be applied. This involves moving away from the detailed memorization of facts towards more of a conceptual understanding. For example, it is questionable whether the doctors of tomorrow really need to know the exact number of amino acids of a transport channel in the kidney, or whether an understanding of its function would

not suffice. The teaching content should enable students to understand and represent the health needs of different population groups.^{2,4} This is only possible if the different social determinants of health are integrated into both teaching and research. Thus, in addition to traditional, theoretical factual knowledge, there needs to be a focus on other skills. The topics of research, professional behavior and health advocacy must be an integral part of medical education in order to prepare future doctors adequately for their everyday work.⁴

4.1.4. Understanding of roles

At the end of their studies, students should be able to critically question resources, study results and research findings.⁴ This requires a comprehensive approach to the subject and can only be achieved if independent, out-of-the-box thinking is encouraged. A way to tangibly promote this ability would be to introduce courses in theoretical and practical research methodology as well as compulsory research projects with clearly defined supervision by didactically trained mentors.⁵ This would furthermore sensitize students to research.

Another important point that should be addressed and discussed in medical studies is the behavior of students in the professional environment. Students should be given the tools to perceive their future roles as supervisors, professional experts and collaborators.⁴ Here again, "learning by doing" is the most effective learning method.⁹ In addition to internships where students are already perceiving these roles to a certain extent, there should be specific training, concrete feedback and support from the university sector. Especially in this area, it would be interesting to employ a mentoring program led by older students or doctors.

In summary, the content of the curriculum should provide a basis of relevant knowledge and social skills that will enable students as prospective doctors to act in a socially responsible way and to be lifelong learners.

4.2. Didactics

4.2.1. Coherence and diversity of methods

In addition to the work provided by the students, maximizing the learning effect in the study program requires good didactics with clearly defined, realistic learning objectives.^{9,11} It is precisely this didactic design of the study programme that was most frequently noted as in need of improvement.³ In a survey,³ students criticized a few aspects in particular: the lack of focus on what is important, a one-sided way of teaching without integration of other learning concepts, as well as the lack of coordination among different lecturers. It is well known that

learning outcomes depend on good teaching. But what makes good teaching? According to a study, qualitative education depends on clarity of content, clear structuring and variety of methods.⁹ To achieve this, the didactic design at Swiss medical faculties must be adapted.

Students criticize above all the lack of coherence concerning the content of the lectures and the lack of coordination between theoretical and practical training.³ Curriculum mapping¹² is suitable for coherent structuring of the study program: it leads to a more transparent curriculum, which promotes and facilitates interdisciplinary communication for the alignment of learning content.¹² In addition, this makes the implementation of PROFILES more visible and promotes the transparency of learning objectives for individual topics. One way of tracking the learning objectives, especially in practical teaching and in the elective year, would be to introduce an eLog book for students, similar to the PJ log books of the Charité Berlin.¹³ A digital e-logbook offers the opportunity to create a comparable basis for the practical skills of students throughout Switzerland, to structure practical training and to promote feedback culture¹³

In addition to a clear structure, a variety of methods also leads to better teaching and learning outcomes.⁹ By supplementing traditional frontal teaching with other teaching methods, an interplay occurs that increases the learning effect.¹⁴ In this context, students expressed a desire for additional teaching methods such as case discussions in small groups with discussion of differential diagnoses and therapy options, peer-to-peer teaching, podcasts, e-learning platforms and alternative methods in frontal teaching.³

4.2.2. Digital teaching

The advance of digitalization should be seen as an opportunity in the field of teaching. Studies have shown that multimedia instructions, when used in the right setting, can have a positive effect on learning outcomes.¹⁰ During the COVID-pandemic, it became apparent that the digital transformation of teaching can also find its way into medicine. This process is far from complete and should absolutely include room for evaluation in order to be able to meet the high quality standards in the medium and long term. Podcasts of lectures should continue to exist throughout Switzerland. However, it is important that digital teaching is used as a supplement and does not replace important analogue areas, such as dissection courses and clinical internships. The goal would be to embed all these teaching methods in a personalized, open and honest feedback culture. Direct feedback has a particularly positive influence on learning progress and should therefore be introduced, especially in practical teaching and OSCEs.⁹

4.2.3. Interprofessionalism

There is no question that in an increasingly complex healthcare system, interprofessionalism must be lived, taught and learned. This is the only way to do justice to today's increasingly polymorbid patients and to ensure high-quality and comprehensive care. In interprofessional teams, it is particularly important that the people involved know and understand the skills of the other team members. This allows them to use their skills to manage the patient's case together, resulting in fewer errors.^{5,15} Interprofessionalism thus ensures better health care for patients and society as a whole.^{5,15} Interprofessional learning must already take place in education and training between students and trainees of other health professions. This is the only way to enable students to enter the working world as capable interprofessional collaborators and to promote optimal collaboration.^{4,15} This wish also exists among Swiss medical students: 62.7% are of the opinion that interprofessionalism should be promoted more prominently during studies.³ SYHA (Swiss Youth Health Alliance, an association of various Swiss student and learner organizations from the healthcare sector, founded in 2019) proposes not to introduce interprofessionalism as a new subject, but to teach previously taught competencies in an interprofessional setting where meaningful. This would allow not further burdening already well-filled curricula in terms of time and content and would also further expand teaching methods.¹⁶

4.3. Quality assurance

The medical faculties in Switzerland should have internal and external quality assurance programs in accordance with the standards of the WFME (World Federal Medical Education). Medical education in Switzerland (including the state examination) should be internationally recognized and enable Swiss physicians to further their education and work around the globe - especially in the USA. Therefore, **swimsa** supports the efforts of the SMIFK/CIMS to promote the accreditation of the AAQ by the WFME. Students should be included in these quality assurance programs as experts in the conception of education. This includes not only participation in data collection, but also active participation in the analysis, interpretation and implementation of the collected suggestions for improvement. This requires the acknowledgment of student delegates as experts and full members of the quality assurance committees. In order to allow for an effective implementation of this idea, it is crucial that the student delegates receive training on the topic of sustainable accreditation (such as that offered by the VSS/UNES (Verband der Schweizer Studierendenschaften/Union des Etudiant-e-s de Suisse)), which enables them to fulfill their task effectively.

4.4. National mobility

Student mobility was described by the Principal's Conference in its University Strategy 2017-2020¹⁷ as follows: "Promoting student mobility is one of the main objectives of the Bologna reform. At the 2009 Ministerial Conference, it was determined that at least 20% of students should become mobile by 2020."

The following goals were further defined:

- Opportunity for mobility regardless of social background
- Increase in the number of mobile students

To this end, Measure 15 planned to *"Systematically promote mobility. Universities shall endeavor to promote horizontal and vertical mobility. All students should have the possibility to be mobile, regardless of their social background or choice of host country or Swiss (host) university. Comprehensive information about national and international mobility is provided. Mobility is an important element of personal development and fosters respect for diversity and the ability to deal with other cultures. It can also promote multilingualism. These skills are a great advantage for later professional life, especially for academic careers. In addition, mobility intensifies cooperation among universities."*¹⁷

Unfortunately, as of 2020, the goal of increased mobility is far from having been achieved in medical studies. With the restriction on admission (enforced in the German-speaking part of Switzerland by the aptitude test for medical studies), the capacities of the universities and the ETH are clearly defined, limiting the choice of the place of study as it is directly correlated with the test result and the tax domicile of the parents. Unfortunately, however, changing the place of study at a later stage in the studies, if at all, is only possible after overcoming major hurdles.

The **swimsa** recognizes the problem of limited places in medical education and the need for planning, but demands in return that a solution be found, working with student representatives, that would allow for better horizontal mobility. For example, the introduction of an exchange platform to improve mobility for postgraduates could be evaluated.

4.5. International mobility

Especially in dynamic disciplines such as medicine, knowledge is always changing - an exchange beyond university borders therefore seems indispensable. Today, physicians need to

know the global significance and epidemiology of diseases as well as the differences between different health care systems - intercultural sensitivity is crucial.¹⁸

In 1969, the JAMA (Journal of the American Medical Association) wrote: *"If, as a routine, young American doctors were encouraged to spend some months working in a developing country before they became tied to the responsibilities of practice, the result could only be better medicine at home and abroad."*¹⁸ Caring for patients who were born in another country or have recently visited another country requires physicians to be knowledgeable about treating diseases that are not endemic to their familiar environment. Students and young physicians are well aware of this, and there is a clear desire for more exchange and mobility.³

Switzerland is a multicultural country in which more than 1/3 of the permanent resident population over the age of 15¹⁹ has a migration background. In this context, global health training and international exchange opportunities are indispensable to ensure adequate and high-quality care for all.

Medical students who complemented their studies with an international exchange program found their confidence in dealing with patients, their clinical and communication skills, and their participation in the team clearly improved as a result of this experience. In addition, they felt that such a program had a positive impact on their clinical knowledge, their university grades as well as their future career plans.²⁰ Similar effects were also found with regard to international exchange programs of other health students, such as in nursing²¹ or in physiotherapy²¹. The findings of increased competence in relation to the doctor-patient relationship and communication are supported by other studies²².

These positive effects can be explained, for example, by Vygotsky's sociocultural learning theory. When interacting with the local population, the awareness of differences between one's own attitude and that of the local population is increased. This awareness of differences triggers learning. Students are confronted with challenges and crisis situations in their exchange, which result in a learning process. An example of such a "crisis situation" could be the questioning of one's own position while reflecting the point of view of the local population by a student. This change in perspective plays an important role in successful learning - especially in a socio-cultural context.²²

Despite all the advantages, however, such international exchange programs are only useful if they comply with ethical principles and if possible dilemmas are discussed in advance and

addressed preventively. Here, we would like to refer to the position paper of the IFMSA "Ethical Medical Placements Abroad"²³, which shows possibilities for this.

Given the known added value of international exchange programs, it is desirable that these be increasingly promoted and facilitated. In particular, Switzerland's full association with Erasmus+ and its successor program from 2021 on should be sought, as is also explicitly demanded by the VSS/UNES (for the last time in the media release of 08.07.2020 when this position paper was prepared).²⁴

4.6. Hospitals and care providers

In addition to sound, theoretical knowledge, practical skills and concrete application of knowledge are needed to succeed in the world of work. It is in the interest of hospitals and health care providers that young residents are able to work independently at the beginning of their careers. Hospitals should therefore support the practical training of students early in their studies through courses and internships. They should give the doctors more time to deal with student education and motivate them to impart serious, qualitative education. This includes adherence to basic didactic principles in practical training, such as clear structuring and goal setting.⁵ This would increase the value of clinical courses for everyone.

For the longitudinal measurement of clinical skills⁴, hospitals should work with universities and the ETH to advance the implementation of e-logbooks. It is the hospitals' responsibility to ensure that the instructing physicians are aware of these e-logbooks and that they are encouraged to train according to their objectives.

4.7. Admission restrictions

4.7.1. Political basis

In 1998, an admission restriction in the form of the Federal Medical Test (in German Eidgenössischen Medizinertest, EMS for short) was carried out for the first time for the study of medical education at the universities of Basel, Bern, Fribourg and Zurich. The EMS was to be carried out each time the number of applications exceeded the study places by more than 20%. This has always been the case since 1998.²⁵ Currently, the numerus clausus also applies to the Lucerne, Ticino and St. Gallen tracks as well as to the bachelor's program at the ETH. For the universities of Geneva, Lausanne and Neuchâtel, intra-university selection is still carried out after the first year of study.

The reason for this selection, whether by numerus clausus before the start of studies or intra-university after one year, is the limited number of training places in medicine, especially in the clinical part of the degree program. This is justified on the one hand by the limited teaching capacity at the hospitals, and on the other hand by the high cost of a study place. The argument that the abolition of the numerus clausus would lead to an increased number of graduates cannot, in the current socio-political situation and with the current type of studies, be seen as correct. A further increase in the number of study places is only possible with an expansion of clinic capacity, otherwise there is a risk of a loss of quality in clinical training.

4.7.2. Actual and target status

The aptitude test for medical studies, which enforces the numerus clausus, is an aptitude test that evaluates only the study aptitude and not the later professional performance of the candidates. It seems to be able to predict very accurately a person's aptitude to study, i.e. the probability of successfully passing the first exams on the first attempt.²⁶ Thus, the available places are allocated in such a way that the highest possible number of graduates is achieved. However, due to the introduction of PROFILES, the study program will undergo several changes in the coming years, and it should be reviewed whether the selection procedures are still appropriate at Swiss universities and the ETH. Ideally, an admission procedure should be fair and allow equal opportunities; due to the limited resources in the health care system, it should be inexpensive and any increase in costs should not be passed on to the aspiring physicians. It should select for skills that a future health professional should possess and at the same time lead to a high rate of graduates.

4.7.3. Alternative possibilities

There is no such thing as "one" good physician. Therefore, it is advantageous to educate students who represent a broad spectrum of personality types, sociocultural backgrounds and personal experiences. Especially according to the principle of social responsibility, the cohort of medical students should ideally represent the Swiss population and an admission to study medicine should be possible regardless of socioeconomic position². With the increase of study places as well as the introduction of new Master faculties and especially with regard to the focus on "medical research", further admission possibilities should be examined. For example, "sur dossier" applications for candidates with exceptional experience and competences or a premed year for lateral entrants into the Master of Human Medicine with all advantages and disadvantages should be examined and standardized nationally to ensure equal opportunities.

Furthermore, it should be carefully analyzed whether the number of study places corresponds to the needs of the Swiss population and whether a structural problem would not lead to a shortage of certain specialists. An increase in the number of study places should under no circumstances be accompanied by a decrease in the quality of studies, as the population would suffer and higher costs would be generated. Moreover, it should be ensured that graduates do not leave the medical field after only a few years. To this end, the reasons for leaving medicine should be investigated and remedied in a next step.

5. Conclusion

Swiss medical students greatly appreciate the resources provided by society for medical education as well as the tireless commitment of individual teachers.

With the introduction of PROFILES as well as the constant digitalization, changes in medical education become inevitable. These should always be implemented with consideration for social responsibility, interprofessional collaboration and resource efficiency. In addition to new teaching methods (such as peer teaching) and a shift towards everyday learning content, a critical examination of the selection criteria for access to medical studies is essential.

Furthermore, in a constantly networked and globalized world, national (master's) mobility and international exchange opportunities should be actively promoted in order to do justice to the CanMEDs roles of tomorrow's physicians and to strengthen intercultural and social understanding.

6. Works Cited

1. Barber RM, Fullman N, Sorensen RJD, et al. Healthcare Access and Quality Index based on mortality from causes amenable to personal health care in 195 countries and territories, 1990–2015: a novel analysis from the Global Burden of Disease Study 2015. *The Lancet*. 2017
2. Social Accountability [Internet]. The World Federation for Medical Education.
3. swimsa. Die Umfrage wurde im Zeitraum vom 02.12.-14.12.2019 durchgeführt. 1'137 Medizinstudierende aus allen medizinischen Fakultäten der Schweiz und allen Jahrgängen nahmen daran teil.
4. SMIFK/CIMS. PROFILES. 2017
5. IFSMA. IFMSA Policy Statement Global Policy on Medical Education. 2016
6. WFME. WFME Global Standards for Quality Improvement. 2015

7. Prof. Dr. Sabine Seufert. Flexibilisierung der Berufsbildung im Kontext fortschreitender Digitalisierung. 2018
8. IFSMA. postgraduate medical education - WFME global standards for quality improvement. 2015
9. Meyer H. Was ist guter Unterricht? 2004
10. Vogel D, Harendza S. Basic practical skills teaching and learning in undergraduate medical education – a review on methodological evidence. *GMS Journal for Medical Education*. 2016
11. Lumb A, Murdoch-Eaton D. Electives in undergraduate medical education: AMEE Guide No. 88. *Medical Teacher*. 2014
12. Fritze O, Boeker M, Durante S, et al. Kompetenzorientiertes Curriculummapping im MERLIN-Projekt: eine Online-Datenbank als Tool zur gezielten curricularen Weiterentwicklung. German Medical Science *GMS Publishing House*. 2014
13. Berlin C-U. *PJ-Logbücher*
14. Huber SG, Hader-Popp S. Unterrichtsentwicklung durch Methodenvielfalt im Unterricht fördern: das Methodenatelier als schulinterne Fortbildung.
15. WHO. Framework for Action on Interprofessional Education; Collaborative Practice.
16. SYHA. Positionspapier zu Interprofessionalität in der Aus- und Weiterbildung von Gesundheitsberufen. 2020
17. CRUS. Strategische Planung 2017-2020 der Schweizer Universitäten. 2014
18. Drain PK, Holmes KK, Skeff KM, Hall TL, Gardner P. Global Health Training and International Clinical Rotations During Residency: Current Status, Needs, and Opportunities: *Academic Medicine*. 2009
19. BFS. Statistik B für. Bevölkerung nach Migrationsstatus. 2018
20. Alshardan MM, Sabbagh AJ. The Impact of a Medical Student Exchange Program on Students' Clinical and Research Performance: A Subjective Evaluation Study. *MedSciEduc*. 2013
21. Tjoflåt I, Razaonandrianina J, Karlsen B, Hansen BS. Complementary knowledge sharing: Experiences of nursing students participating in an educational exchange program between Madagascar and Norway. *Nurse Education Today*. 2017
22. Jacobs F, Stegmann K, Siebeck M. Promoting medical competencies through international exchange programs: benefits on communication and effective doctor-patient relationships. *BMC Med Educ*. 2014
23. IFSMA. Ethical Medical Placements Abroad. 2018
24. VSS/UNES. Die Schweiz muss Erasmus+ jetzt beitreten. 2020
25. Spicher B. EMS 2019 - Bericht 26. 2019

26. Hänsgen K-D. Zwischenbericht - Evaluation des Eignungstests für das Medizin-studium
in der Schweiz: Zuverlässigkeit der Vorhersage von Studienerfolg. 2000