

**EUROPEAN COUNCIL ON CHIROPRACTIC EDUCATION  
QUALITY ASSURANCE AND ACCREDITATION COMMITTEE**

**EVALUATION TEAM REPORT**

**CLINICAL BIOMECHANICS – CHIROPRACTIC  
DEPARTMENT OF SPORTS SCIENCE AND CLINICAL BIOMECHANICS  
FACULTY OF HEALTH SCIENCE  
UNIVERSITY OF SOUTHERN DENMARK  
Odense, Denmark**

**22-23 February 2021**

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## EXECUTIVE SUMMARY

- 1.1 The Department of Sports Science and Clinical Biomechanics (henceforth referred to as the Department) is a part of the Faculty of Health Sciences at University of Southern Denmark (Syddansk Universitet, SDU) in Odense, Denmark.
- 1.2 The Department provides undergraduate chiropractic education and training for the BSc Clinical Biomechanics and MSc Chiropractic awards of the university. The MSc Chiropractic is the first level award that enables registration within Denmark.
- 1.3 The first students graduated from the programme in 1999. The programme was first accredited by the ECCE in 2002.
- 1.4 In February 2008, an Evaluation Team visit was undertaken by the ECCE as a part of the reaccreditation process. Following the visit, the Evaluation Team report was received by the Quality Assurance and Accreditation Committee (QAAC) in May 2008. The Commission recommended that SDU Institute of Sports Science and Clinical Biomechanics be accredited for a period of five years.
- 1.5 In September 2012, SDU submitted its Self-Study Report (SSR) for the continuation of full accredited status with the ECCE and in February 2013 an Evaluation Visit took place. Following the evaluation, the commission recommended a further accreditation for a period of five years.
- 1.6 A two-day On-Line Evaluation took place on 22-23 February 2021. This provided further documentary and oral evidence to the previously submitted documents. SDU was given feedback at the end of the visit and informed verbally of any strengths, weaknesses and/or concerns regarding its provision of chiropractic education and training.
- 1.7 Members of the Evaluation Team extend their thanks to SDU for the courtesy shown to them during the On-Line event and for conducting the event in an open and transparent manner, thereby affording the Team full on-line access to members of staff, students and documentation.
- 1.8 This document is the Evaluation Report (henceforth referred to as the Report, or Evaluation Report) compiled by the Evaluation Team based on the evidence provided beforehand and during the on-line visit to SDU. The Report was sent in draft format to SDU for factual verification on, and the final Report was submitted to QAAC on 06 April 2021.
- 1.9 The Chair of QAAC invited SDU's Principal to attend via Zoom to receive the decision of the QAAC on the accreditation of SDU on 13 May 2021.
- 1.10 This Report addresses the compliance of SDU with each of the ECCE Standards in the provision of chiropractic education and training through the MSc in Clinical Biomechanics award. The outcomes of the Report are as follows:

## **COMMENDATIONS**

- The supportive environment provided by the Head of Studies and Vice Head of Studies for both staff and students.
- General satisfaction and enthusiasm of students, for the course, the faculty and their studies.
- The programme benefits from an engaging and inclusive Health Sciences Faculty.
- Rapid response of the university in light of the Covid-19 pandemic, supported by both students and staff.
- Ability for part time faculty to progress in their career at the university.
- The quality of the research and the inclusion and stimulation of research in all aspects of the curriculum, supported by a motivated team.
- The introduction of the Mini-CEX to provide and receive feedback in a timely manner, keeping track of the students learning curve within the Spine Centre.

## **RECOMMENDATIONS**

- Formalise the relationship with the private clinics involved in the programme to provide equal and sufficient experience for students.
- Maximise the horizontal integration and minimize the overlap in order to overcome some of the existing curricular overload in the bachelor's programme.
- Enhance the current relation with the medical programme in order to expose students to interprofessional learning activities.
- Make use of the newly implemented, virtual platform and online delivery to enhance the international collaboration with both academic staff and students.
- Review the admissions/marketing process to recruit a broader spectrum of international learners.
- Ensure that patients are included as stakeholders and contribute to the reviewing and updating of the programme.

## **CONCERNS**

- There were none.

## INTRODUCTION

- 2.1 SDU delivers undergraduate chiropractic education and training leading to an MSc that has been validated by the university. The university was founded in 1966 as the University of Odense but in 1998 it merged with another institution to form Syddansk Universitet which is spread over six city campuses with a total of 30 000 students. The Clinical Biomechanics - Chiropractic programme is delivered on the Odense campus and has been accredited since 1999.
- 2.2 At the last evaluation visit in 2013, the ECCE team identified six **strengths**, four **weaknesses**, and one **concern**.

### **Strengths:**

- The excellent data support provided to the course by the faculty.
- The excellent IT and pedagogic support that underpins the teaching and learning on the programme.
- The very thorough programme of evaluation, quality assurance and programme development administered by the faculty.
- The dedicated leadership provided by the Director of Studies raising the profile of chiropractic within the university.
- The commitment to and emphasis of high-quality research continuous to underpin both teaching and learning and enhances the ambition of students.
- The links with medical sciences in both bachelor's and master's programmes.

### **Weaknesses:**

- The exclusion of patients as stakeholders in the evaluation of all aspects of clinical biomechanics education.
- The reliance on the post graduate internship to enhance practical therapeutic skills beyond the BSc/MSc framework.
- continuing administrative burden placed on a relatively small academic staff needing to fulfil their role as researchers.
- The exposure to students of mainly chronic conditions with multiple co-morbidities in the Spine Centre may not provide a representable sample of patient encounters in a normal primary contact chiropractic clinic.

### **Concern:**

- The extended use of part-time staff may make it difficult to ensure the quality of the student learning experience and may place an unnecessary administrative burden on the full-time staff.

- 2.3 Members of the Evaluation Team were appointed by the ECCE Executive and each member received the SSR, addendum and written comments from QAAC related to the documents prior to the visit. The members of the Evaluation Team were:

Dr Kenneth Vall, DC, MA(Ed), D(Ed)h.c.	President, ECCE
Priya Lutener MChiro LRCC MMCA	Chiropractor in private practice, member of the QAAC
Prof. Rui Amaral Mendes, DMD, PhD	Oral Surgeon and Educationalist, Member of the QAAC
Malene Harveland	Final Year Chiropractic Student at AECC UC, UK

Priya Lutener acted as Secretary to the team and as a member of the team. The members of the team were allocated specific sections of the report as their areas of responsibilities before arriving at Odense.

- 2.4 The purpose of the Evaluation Visit was to verify the SSR and other evidence presented by SDU, and to evaluate the institution in terms of its compliance with the ECCE Standards in Chiropractic Education and Training (hereafter referred to as the ECCE Standards, or Standards). Based on the SSR and its supporting documents, and on oral and other documentary evidence given and consulted during the on-site visit, an Evaluation Report compiled by the Team was submitted to SDU for correction of any factual errors, and thereafter to the QAAC for a decision on the accreditation of SDU.
- 2.5 All members of the team were presented by name beforehand to SDU and no objection to any member was received. All members of the team signed confidentiality and conflict of interest statements before the on-site visit. No conflicts of interest by any of the members were declared.
- 2.6 A draft timetable for the visit was sent to SDU on 20<sup>th</sup> November 2020, and the final schedule agreed with SDU on 8<sup>th</sup> February 2021. A copy of the schedule is appended to this Report (Appendix 1).
- 2.7 The draft report was finalised by the Chair of the team and sent to team members for comments. Based on these, the final draft report was sent to SDU for factual verification on ?. The response was received from SDU on ?. The Chair and Secretary finalised the report and this was submitted to the Chair of QAAC on 06 April 2021. A member of the Evaluation Team presented the report to QAAC members on 13 May 2021.
- 2.8 The report includes an Executive Summary, a description of SDU and the findings of the team regarding compliance of SDU with the ECCE Standards. The report ends with the conclusions of the team and any strengths, weaknesses and/or concerns the team wishes to draw to the attention of the QAAC. The Evaluation Report was based on the ENQA Guidelines for external reviews of quality assurance agencies in the European Higher Education Area ([www.engq.eu](http://www.engq.eu)).

## SYDDANSK UNIVERSITET, ODENSE, CLINICAL BIOMECHANICS

- 3.1 The Clinical Mechanics section of the Institute of Sports Science and Clinical Biomechanics within the Faculty of Health Sciences at the University of Southern Denmark (Syddansk Universitet) (henceforth referred to as the department) is within a recognised Danish University. Although Chiropractic is not the name of the programme, the programme in “clinical biomechanics – chiropractic” is the formal title of the course seeking accreditation of the ECCE. The University Prospectus in English uses the title “Clinical Biomechanics – Chiropractic”. Clinical Biomechanics is but one of a number of departments in the university. The programme has two components, the bachelor’s degree, *Bacheloruddannelsen i Klinisk Biomekanik* and a master’s programme, *Kandidatuddannelsen i Klinisk Biomechanik*.
- 3.2 The Advisory Board for Clinical Biomechanics is responsible for advising and making suggestions to the university on the development of the curriculum and the quality assurance of the programme. An Advisory Board is a Danish legal requirement whose 12-14 members are stakeholders who provide another avenue for the continued development of the programme.
- 3.3 Chiropractic education and training provided by SDU is regulated by the 2010 declaration on Higher Education “Uddannelsesbekendtgørelsen” since the profession was granted legal recognition in 1992.
- 3.4 The following section details the findings of the Evaluation Team with regard to the compliance of the college with ECCE Standards in the provision of chiropractic education and training through the awards of “Bacheloruddannelsen i Klinisk Biomechanik” (BSc Clinical Biomechanics) and “Kandidatuddannelsen i Klinisk Biomechanik” (MSc Clinical Biomechanics). The findings of the Team are based on documentation presented by SDU, Odense, prior to and during the on-site visit. In the conclusions, the abbreviation SDU is used for the Institute of Sports Science and Clinical Biomechanics of the University of Southern Denmark.
- 3.5 The colour-coded system outlined below was used by the evaluation team to indicate the level of compliance with each standard:



Green = Fully compliant/no risk (This is on track and good.)



Light Green = Substantially compliant/low risk. (Broadly on track with some areas which need to be addressed.)



Yellow = Partially compliant/medium risk. (Some significant areas, which could be detrimental if not, addressed.)



Red = does not comply/high risk. (Serious concerns threaten this area; high risk in the organisation’s overall performance.)

## ECCE STANDARDS COMPLIANCE

### 4.1 AIMS AND OBJECTIVES

#### 4.1.1 Statement of Aims and Objectives

**The institution/programme must define the overall aims and objectives of the first qualification chiropractic programme and make them known to its stakeholders. The statements must describe the aims and objectives resulting in a chiropractor that is competent and safe to enter practice as a primary contact practitioner in the current healthcare environment, with the appropriate foundation for postgraduate education and training, and a commitment to, and capacity for, life-long learning.**

##### *4.1.1a Description.*

The documentation provided by the SDU clearly portrays the aims and objectives of the school's BSc and MSc programmes.

The detailed competences for each of the constituent modules have been provided and the curriculum for both programmes is freely available for all stakeholders at the University's homepage.

A general concern over research and evidence-based care is embedded in the curriculum, providing the tools for students to engage in further life-long learning experiences.

Students are encouraged to consider subsequent Higher Education degrees, while participating in professional activities after graduation, a process enhanced by the postgraduate internship.

##### *4.1.1b Analysis*

The documentation regarding aims and objectives reflects the elements necessary for producing a safe and competent chiropractor.

##### *4.1.1c Conclusion*

SDU fully complies with Standard 1.1.



#### 4.1.2 Participation in formulation of aims and objectives

**The overall aims and objectives of the chiropractic programme must be defined by its principal stakeholders.**

##### *4.1.2a Description*

Stakeholders' participation in the aims and objectives is secured by the University's governance structure, by the "Study board for Clinical Biomechanics" and, ultimately, by the Advisory Board, which links Faculty of Health Sciences and the private chiropractic practices.

The Study Board is equally supported by academic staff and students, the former includes a majority of qualified chiropractors and a couple of members with a medical background. As for the Advisory Board, it recruits its 12-14 external members from a diversified set of stakeholders, ranging from national professional organisations to regional/Nordic associations of chiropractors.



#### 4.1.2b Analysis

The role played by the different stakeholders identified in the SSR is rather comprehensive and derives from the overall organisation of the B.Sc. and M.Sc. programmes within the broader academic context laid down by the University and by the Danish law.

Nonetheless, patients' involvement is suboptimal. The programme might benefit from a greater participation of both patients and representatives from the community.

#### 4.1.2 Conclusion

SDU substantially complies with Standard 1.2. 

#### 4.1.3 Academic autonomy

**The institution/programme must have sufficient autonomy to design and develop the curriculum.**

##### 4.1.3a Description

The Study Board has legally secured control of the curriculum, enabling the right to autonomously design and develop the detailed curriculum.

Furthermore, the annual meeting provides additional input, bringing together the views expressed in the student evaluations, the panel of external experts, the programme evaluation, the graduate evaluations and the advisory board.

##### 4.1.3b Analysis

As it stands, the diversity of inputs gathered by the leadership of both programmes at different stages and times allows it to consider the educational needs and challenges faced by chiropractic students.

##### 4.1.3c Conclusion

SDU fully complies with Standard 1.3. 

#### 4.1.4 Educational outcome

**The institution/programme must define the competencies (exit outcomes) that students will exhibit on graduation in relation to their subsequent training and future roles in the profession and the wider healthcare system.**

##### 4.1.4a Description

The complete set of competencies that the students are expected to gain upon conclusion of their Bsc and M.Sc. programmes has been made available.

Likewise, so have the didactic and pedagogical foundations of the education process.

##### 4.1.4b Analysis

Overall, the educational outcomes are handled in a transparent manner. Alignment between the learning outcomes and pedagogical tools are present and evidence of student-centred educational practices have been found and reported.

Nonetheless, such learning approaches are to be further developed throughout the curriculum.

Moreover, considering the existing relation between chiropractor and medical students, it might be beneficial to develop interprofessional educational settings, thus eliciting a more applied comprehension of the curricular contents.

Further horizontal and vertical integration of the curricular contents might help reducing the current workload.

#### 4.1.4c Conclusion

SDU substantially complies with Standard 1.4.



## 4.2 EDUCATIONAL PROGRAMME

### 4.2.1 Curriculum model and educational methods

**The institution/programme must define a curriculum model and educational (teaching and learning) methods consistent with the objectives of the curriculum.**

**The curriculum and educational methods must ensure the students have responsibility for their learning, and prepare them for lifelong, self-directed learning throughout professional life as well as preparing them for interdisciplinary practice.**

#### 4.2.1a Description

The bachelor's programme in Denmark is set by the Education Order. The training is divided into 12 modules, of which contact time is 8 weeks with an exam at the end. At the same time, the training is divided into three important areas, essential for University based health education: Biomedicine, Academia and Professionalisation. Each of the twelve modules consists of teaching elements within two or more of the same area, which run parallel throughout the course.

The biomedical topic makes up approximately two thirds of the bachelor programme, the academic topic makes up one sixth, and the professional topic makes up one sixth of the topic.

The master's programme also follows the Danish Education Order. Similarly, to the bachelor's programme, the curriculum is divided into 8 modules, that consist of teaching elements within Clinical training, Academia and Professionalisation. All of which are integrated, vertically and horizontally throughout the course.

The design and description of the bachelor's and master's curricula adheres to the European Qualification Framework for lifelong learning.

The programme is delivered in the university, the university hospital and at the Spine Centre, typically via lectures, seminars and small teaching classes.

#### 4.2.1b Analysis

The current curriculum model of the bachelor's in biomedical science is well integrated with the curriculum of the bachelor's in medicine, with students sharing lectures. The students on the biomedical science course also have additional lectures relevant to Chiropractic. The integration with the medical students results in qualified chiropractors being able to work within a multidisciplinary environment.

The amalgamation of students continues through to the master's programme where biomedical science students work and study alongside medical students and health care specialists in the Spine Centre. With the exception of the 4-week internship at a private chiropractic practice in the final year, the curriculum does not facilitate everyday Chiropractic encounters. Experience relevant to the Chiropractic setting, including business and administration is not obtained until the postgraduate

training year, which is a requirement of the Danish Chiropractic Association and separate to the programme. The current educational model does not take into account those graduates that may be planning to practice outside Denmark, where a post graduate training year may not be required.

The curriculum is in the process of introducing a new topic, geriatric care, within musculoskeletal medicine. There has been some delay due to the pandemic, but it is anticipated that this module will begin with the new cohort in September 2021.

The learning methods have been adapted and are online, using virtual platforms such as Zoom or Microsoft teams, in light of the Covid-19 pandemic. Practical sessions are being run in small groups to eliminate the amount of contact and therefore the risk of infection. SDU is monitoring the situation closely, practical sessions and face to face classes will resume as soon as it is safe to do so.

#### *4.2.1c Conclusion*

SDU substantially complies with Standard 2.1.



### **4.2.2 The Scientific Method**

**The institution/programme must teach the scientific method, other forms of research inquiry and evidence-based practice, including analytical and critical thinking.**

**The curriculum must include elements for training students in scientific thinking and research methods.**

#### *4.2.2a Description*

Students are introduced to the Scientific method and evidence-based practice from the outset. It is taught via the Academic track, which makes up 18% of the bachelor's programme and 17% of the master's programme. It is taught in the following modules: B1, Start of Study Assignment, B4, Scientific method I: Biostatistics & Epidemiology, B6, Scientific method II: Theory of Science, B7, Scientific methods III: Patient perspectives, B8, Manipulation - history, theory and evidence, B10, Methodological course in basic research, B11, bachelor project, K6-K8, master's dissertation.

The Faculty of Health offers a pre-graduate research degree, the purpose of which is to provide students with basic research skills through conducting a proper research project.


As of the autumn 2020, Clinical Biomechanics also offers a talent track to selected students. The talent track targets students with an ambition of becoming Ph.D. Students in the future.

On completion of the master's programme, the student has the opportunity to pursue a Ph.D. at any University, nationally or internationally. There is also the opportunity to obtain a Ph.D. scholarship at The Faculty of Health Science at the University of Southern Denmark.

#### *4.2.2b Analysis*

SDU's programme has a strong focus on the Scientific Method with the students being introduced to research and critical thinking from the very beginning of the course. SDU now also offers a pre-graduate research degree for students with an interest in research and pursuing a Ph.D., where the student takes 6 months out of their studies to work full time on a research project.

#### 4.2.2c Conclusion

SDU fully complies with Standard 2.2. 

### 4.2.3 Biomedical Sciences

**The institution/programme must identify and include in the curriculum those contributions of the basic biomedical sciences that enable a knowledge and understanding of the basic sciences applicable to the practice of chiropractic.**

#### 4.2.3a Description

The basic biomedical sciences are taught via the biomedical track of the bachelor's programme and are taught and assessed alongside students from the medicine programme.

The biomedical track comprises of 12 modules, composed of various parts of traditional biomedical subjects such as anatomy, physiology, biophysics, molecular biology, cell biology, genetics, microbiology, immunology, pharmacology and pathology.

The Head/Vice Head of Studies, in collaboration with The Danish Chiropractic Association, and the Students Union, have produced a folder (study handbook to the biomedical subjects) to explain the relevance of the biomedical subjects to the Chiropractic Students.

The learning objectives outlined in the biomedical track are integrated with clinically relevant situations using index clinical situations (ICS). The ICS's are divided into symptom-based cases (33 cases all together) and disease/syndrome/clinical problems (97 cases all together). These are scattered throughout the 12 modules and covers all important clinical symptoms and diseases.

#### 4.2.3b Analysis

SDU's programme has a very strong focus on biomedical science, which is integrated with the teachings of the medical programme. The workload in the first year is heavy, with little relevance to Chiropractic competencies, but this is outweighed by the skills and proficiencies that then allows the Chiropractor to work in a multidisciplinary setting alongside other healthcare professionals. As the student's progress through the programme, the emphasis on Chiropractic increases.

#### 4.2.3c Conclusion

SDU fully complies with Standard 2.3. 

### 4.2.4 Behavioural and Social Sciences, Ethics and Jurisprudence

**The institution/programme must identify and include in the curriculum those contributions of the behavioural sciences, social sciences, ethics, scope of practice and legal requirements that enable effective communication, clinical decision-making, ethical practice and ethical business standards.**

#### 4.2.4a Description

There are no specific courses in behavioural and social science, however, they are integrated throughout the biomedical track of the bachelor's course.

The biopsychosocial model is a core topic in the Musculoskeletal Management module of the master's programme, but also features as part of the bachelor's programme.

Communication skills are integrated into the curriculum via the professionalisation track, in both bachelor's and master's programmes.

Legal requirements for practicing as a Chiropractor are introduced in the master's programme, but the majority of requirements are taught as part of the post graduate internship programme.

#### *4.2.4b Analysis*

Behavioural and Social Sciences and Ethics are integrated within the programme, but not taught as standalone subjects. Business and administrative skills are not taught on the programme, but students cover these topics as part of the post graduate training year, which is separate to SDU.

#### *4.2.4c Conclusion*

SDU fully complies with Standard 2.4.



### **4.2.5 Clinical sciences and skills**

**The institution/programme must identify and include in the curriculum those contributions of the clinical sciences that ensure students have acquired sufficient clinical knowledge and skills to apply to chiropractic practice in a primary contact setting.**

#### *4.2.5a Description*

The competencies acquired in the bachelor's and master's programme are based on the Danish Qualifications Framework for Higher Education which follows the Framework of Qualifications for the European Higher Education. Clinical Sciences and Skills are integrated throughout the course in its entirety.

They are taught within the Biomedical and Professionalisation tracks of the bachelor's course, and the Clinical and Professionalisation tracks of the master's course. An outline of subjects taught was provided in a table on page 22 of the self-study report submitted to the ECCE's QAAC in 2020.

#### *4.2.5b Analysis*

There is a strong emphasis on the clinical sciences from the moment the students begin the course. Clinical skills are developed horizontally, vertically and comprehensively throughout the bachelor's and master's programmes, and are integrated with the teachings of the medical programme. Students report that the workload in the first two years is high, resulting in them questioning the necessity of some of the modules, however, they report that as they progress through the course, they understand the structure of the programme and are grateful for the knowledge they obtained earlier on in the programme.

Although the curriculum is diverse and covers a broad range of conditions, common in the everyday Chiropractic setting, there is little hands-on practical treatment experience for the students until they get to the post graduate training year, which is separate from SDU

#### 4.2.5c Conclusion

SDU substantially complies with Standard 2.5. 

#### 4.2.6 Chiropractic

**The institution/programme must foster the ability to participate in the scientific development of chiropractic.**


##### 4.2.6a Description

In Module B8 of the bachelor's programme the subject Manipulation-history, theory and evidence is delivered. This introduces students to central concepts and developments in chiropractic history. It also gives the students a broad knowledge about current evidence-based chiropractic practice, with the necessary knowledge, skills and competences to independently participate in the scientific development of chiropractic.

##### 4.2.6b Analysis

The Module B8 provides the grounding for the student to be able to participate in the scientific development of chiropractic this is further enhanced throughout the curriculum through continuous engagement with the research programme and research active staff. This culminates in the bachelor's and master's projects.

#### 4.2.6c Conclusion

SDU fully complies with Standard 2.6. 

#### 4.2.7 Clinical training

**The institution/programme must identify and include a period of supervised clinical training to ensure the clinical knowledge and skills, communication skills and ethical appreciation accrued by the student can be applied in practice, and so enable the student to assume appropriate clinical responsibility upon graduation.**

**Every student must have early patient contact leading to participation in patient care.**

##### 4.2.7a Description

The clinical training takes place in internship A, the pre-clinical and internship B-H and one elective clinic internship module B9 of the bachelor's degree. The internships are vertically integrated. Clinic internship A is observational and reflective and occurs in private chiropractic practice. The students follow a study plan, and a logbook is signed by the chiropractor.

Elective clinic internship in module B9 is in private chiropractic practice, five full days following an experienced chiropractor and assessed through a logbook.

In the Pre-clinic internship students are prepared to manage patients. The students will be able to manage patients at a basic level and are assessed through an OSCE examination.

The main clinic internship is divided into an internship at a hospital rheumatology department for 16 weeks and 3 external internships each of 4 weeks duration.

The hospital internship is at 3 different sites, each student is part of a multidisciplinary team managing patients under supervision.

The external internship (3x4 weeks) where one internship is in private chiropractic practice and the other two can occur in relevant hospital departments.


Assessment of students is through miniCEX and an online portfolio.

The number of new patients is on average 14 for each module with a number of follow up visits. The students are evaluated regularly and follow the Faculty of Health evaluation plan. The evaluation of the internship is under revision by the university.

#### 4.2.7b Analysis

The experience that students gain in the Spine Centre is very valuable with exposure to a wide variety of serious patient conditions. These are perhaps not the most common in chiropractic practice, it is therefore important that the period students spend in private chiropractic practice is more formalised in order for students to have a relevant and equitable experience of patient care.

#### 4.2.7c Conclusion

SDU substantially complies with Standard 2.7. 

### 4.2.8 Curriculum Structure, Composition and Duration

**The institution/programme must describe the content, duration and sequencing of courses that guide both staff and students on the learning outcomes expected at each stage of the programme, and the level of integration between the basic sciences and clinical sciences.**

#### 4.2.8a Description

The duration of the Bachelor and Master of Science programmes follow the Danish national requirements.

The bachelor's is a full-time degree over three calendar years (equivalent of 180 ECTS points). The Master of Science is a full-time degree over two calendar years (Equivalent of 120 ECTS points). Upon completion of both these degrees students are authorised as chiropractors by the Danish Patient Safety Authority. Completing the one-year postgraduate internship will allow graduates to work independently.


There is horizontal and vertical integration of courses in both the Bachelor and Master's programmes. Student – centred learning is central to the approach. Since 2013, the guiding principles of embedding learning is to have guided researchers, students, staff and management to cooperate in training courses.

The first semester of the master's programme includes electives that can be completed abroad as summer school courses at one of SDU's partner universities.

#### 4.2.8b Analysis

The length of both the bachelor's and master's programmes follow Danish law and conforms to the Bologna agreement. The bachelors programme is very challenging in content for students and it is therefore important to review the content and length of each module and in particular insuring there are no horizontal or vertical overlaps.

#### 4.2.8c Conclusion

SDU fully complies with Standard 2.8. 

### 4.2.9 Programme management

**A curriculum committee (or equivalent (s)) must be given the resources, responsibility, authority and capacity to plan, implement and review the curriculum to achieve the aims and objectives of the chiropractic programme.**

#### 4.2.9a Description

The study board is the regulatory body of the education and its contents. It ensures the organisation, realisation and development of educational and teaching activities as stipulated by the Danish Act on Universities.

The Head of Studies is the chairman of the study board and together with the Vice Head of studies have the overall responsibility for the delivery of the bachelor's and the master's programmes.

The study board has 5 scientific staff (elected for 4 years at a time) and 5 students (elected each year). Decisions made at the study board meetings (held every month) are implemented by the Head of Studies/Vice Head of Studies.

The persons responsible for the various courses/subject, the students and the Head/Vice Head of studies can initiate changes to the curriculum by sending a request to the Study Board. If the Study Board approves the request, then it is sent for approval by the Dean. On approval, the unit for SUND Education (responsible for teaching and examination, education services and clinic placement, educational quality and internationalisation) formulates a protocol for the revision and implements it in collaboration with the study board.

There is also a SUND Research unit responsible for health research training education and support.

#### 4.2.9b Analysis

The team found good evidence from both staff and students that the Study Board functions well. There were examples of initiatives suggested by students that were acted upon by the Board in a responsive and creative manner.

#### 4.2.9c Conclusion

SDU fully complies with Standard 2.9.



#### 4.2.10 Linkage with subsequent stages of education and training, chiropractic practice and the health care system

**Operational linkage must be assured between the first qualification programme and the subsequent stage of training or practice that the student will enter after graduation.**

**The curriculum must reflect the environment in which graduates will be expected to work and be responsive to feedback from graduates, the profession and the community.**

#### 4.2.10a Description

The undergraduate programme is closely linked to the postgraduate internship training. The master's exit competences provide students with the basic skills in clinical diagnosis, management, treatment and prevention of musculoskeletal conditions which are required to enter the postgraduate internship.

On graduation, students receive a "small" chiropractic licence from the Danish Health Authorities enabling them to practice under the supervision of an experienced chiropractor. The postgraduate internship is for one year managed by the Nordic Institute of Chiropractic and Clinical Biomechanics. Content of the internship is closely aligned with the main education and consists of a clinical part as well as an educational part.

On completion of the postgraduate internship the graduates, receives the "large" chiropractic licence from the Danish Health Authorities, enabling them to practice independently as a chiropractor in Denmark.



#### 4.2.10b Analysis

The relationship with the institution and the chiropractic profession in Denmark seems to work well. This enables a close relationship for the graduates in their intern year to gain the experience necessary to become fully registered by the Danish government as chiropractors. Introducing the miniCEX as a tool to enhance learning in this year should be done as soon as possible.

#### 4.2.10c Conclusion

SDU fully complies with Standard 2.10. 

### 4.3 ASSESSMENT OF STUDENTS

#### 4.3.1 Assessment methods

**The chiropractic institution/programme must define and document the methods used for assessment, including the criteria for progression and appeals procedures. Assessment methods must be regularly evaluated, and new assessment methods developed as appropriate.**

#### 4.3.1a Description

On a macro level, assessment is currently aligned with the rules and regulations laid down by the general law, which governs all exams at Danish Universities, the grading scale and the appointment of external examiners.

On a more micro level, evidence has been provided of alignment between the intended learning outcomes, the teaching and learning activities and the assessment tasks. More importantly, a variety of digitally supported assessment methods ensures that reliability and validity is in place. Moreover, the Study Board ensures the meta-assessment of the assessment methodologies.

#### 4.3.1b Analysis

The panoply of assessment methods mentioned, particularly the miniCEX and the portfolios, allows the students to engage in reflective practices and provides tools for the academic staff to provide timely feedback and further track each individual learning curve and prevent and address potential failures.

The important role played by private clinics requires that complementary approaches be adopted to secure some level of homogeneity and consistency between the educational experiences of the different students.

#### 4.3.1c Conclusion

SDU fully complies with Standard 3.1. 

#### 4.3.2 Relation between assessment and learning

**The assessment principles, methods and practices must be appropriate to the learning outcomes and the educational aims and objectives and promote appropriate learning practices.**

#### 4.3.2a Description

The assessment methods and the relation between them and the learning outcomes are clearly outlined in the study guides of both BSc and MSc programmes, and so are the rules and regulations for appealing.

#### 4.3.2b Analysis

Despite the diversity of assessment methods, the formal nature of summative assessments still impacts heavily on the students' workload.

The assessment methodologies must elicit a continuing approach that dilutes the [negative] impact of assessment on the actual learning processes.

Additional options of blended learning strategies (e.g., flip classroom) may help to minimise the impact posed by formal assessment strategies.

#### 4.3.2c Conclusion

SDU fully complies with Standard 3.2.



## 4.4 STUDENTS

### 4.4.1 Admission policies and selection

**The institution/programme must have a clearly defined admission policy that is consistently applied, and that includes a clear statement on the rationale and process of selection of students.**

#### 4.4.1a Description

SDU's quality assurance of the admission policy is described in the sub-policy for recruitment and admission. The admission policy is based on the Danish application system KOT and features 2 different groups of applicants; Quota 1: applicants with a Danish qualifying examination with a grade point average of at least 9.0. Quota 2: applicants with a foreign qualifying examination and citizenship from an EU or EEA country with a grade point average of at least 6.0. Quota 2 applicants need to pass an entrance test consisting of an uniTEST and a Case based interview. The uniTests is based upon critical, quantitative and linguistic thinking and the 145 applicants with the highest scores are invited to the CBI conducted in Danish. In 2019, there were 105 students places on the bachelor's programme in Clinical Biomechanics. Of the total number of students admitted to the programme 25 % were included in quota 1 and 75 % in quota 2.

The Clinical Biomechanics programme allows for the transfer of students from any other programme of higher education (chiropractic or other) into the appropriate level of the course, according to the applicant's level of relevant subjects and acquired competences. A merit committee consisting of one student and academic staff looks at each application individually, which will be presented to the study board for approval.

#### 4.4.1b Analysis

Electronic information available on SDUs website (Danish and English) set clearly defined entrance requirements and ensure that students have the right qualifications to carry out the course. The admissions process is thorough, of high quality and appears to successfully select only the most motivated students for the programme. Any applicant presenting with concomitant physical/mental disability can apply special circumstances related to quota 2. To current date, the Case Based Interview has been postponed due to Covid-19 and the uniTest has been managed electronically. The latter has proven to be beneficial and will most likely be implemented to make it easier for

international students to apply for the program, limited to Nordic countries as Danish is the main language of teaching.

#### 4.4.1c Conclusion

SDU fully complies with Standard 4.1.



#### 4.4.2 Student intake

**The size of student intake must be defined and related to the capacity of the chiropractic institution/programme to provide adequate resources at all stages of the programme.**

##### 4.4.2a Description

In 2019, 113 - out of 392 applicants - were admitted to the bachelor's programme in Clinical Biomechanics. Slightly more students are admitted than the number of study places of 105 due to drop-outs at the start of the course. There are no plans to increase enrolment over the period of accreditation.

##### 4.4.2b Analysis

The overall responsibility for balancing student intake and capacity lies with the Dean of the Faculty of Health. Student capacity is evaluated on a regular basis in consultation with the Head of Studies and currently there are no plans to increase enrolment over the period of accreditation. Clinical training/internship is at the moment under revision, and Clinical Biomechanics will soon be part of the online evaluation system used for the medical education.

#### 4.4.2c Conclusion

SDU fully complies with Standard 4.2.



#### 4.4.3 Student support and counselling

**The institution/programme must offer appropriate student support, including induction of new students, counselling in terms of student progress and other academic matters, and personal and social needs of students.**

##### 4.4.3a Description

The SDU has a General Study Counselling, student chaplain and career guidance which provides study counselling to students at all faculties. In addition, Clinical Biomechanics have employed 2 students with in-depth knowledge of the curriculum who function as academic advisers. If the student presents with issues beyond the academic advisers, they refer them to those with expertise. In collaboration with the Head of Studies, the academic advisers have composed a list with different counselling possibilities which students are annually informed about and encouraged to inform the Head of Studies, if they have any feedback on how to improve student well-being.

If a student has a permanent physical or psychological condition and needs specific support, one can apply for Special Educational Support (SPS). SDU is extra careful and attentive when students encounter problems or frustrations during their studies and to identify students who otherwise would stay anonymous in the system. If a student for some reason is delayed in the programme, they can be called in for a talk with the Head of Studies in order to solve and receive advice on any potential problems.

#### 4.4.3b Analysis

The student support and counselling services are well organized and supplied within the department and at a university level. Students from all years felt that support was readily available if needed. At-risk students are generally identified at an early stage and offered the appropriate assistance. Extra-curricular activities are encouraged and supported. No sports clubs exist at the programme level as this is not a part of the Danish university culture. There are several opportunities to take part of a variety of clubs outside the University.

#### 4.4.3c Conclusion

SDU fully complies with Standard 4.3.



#### 4.4.4 Student representation

**The institution/programme must support student representation and appropriate participation in the design, management and evaluation of the curriculum, and in other matters relevant to students.**

#### 4.4.4a Description

The students are represented in several important SDU committees including The Board of Governors, Committee of representatives, the Dean's Office, Academic Council and the study board. The study board of Clinical Biomechanics consists of an equal number of academic staff (5) and students (5) which deals with organization, implementation and development of education and teaching together with a variety of cases relevant to the students. The board meet once a month for appropriate discussion and prepares proposals for curriculum changes which is forwarded to the Deans for approval. The students are encouraged to take part in the governing activities from day one, where they are introduced to the activities by their tutors.

#### 4.4.4b Analysis

Students are formally represented on academic committees and other relevant bodies in the University; however, these are not necessarily students on the Clinical Biomechanics programme. The interested students voluntarily choose to run for elections if they wish to become involved. 5 students are represented on the Study board of Clinical Biomechanics and states they feel fully integrated into the work of the board. The students reported that their feedback and comments is met with favorable responses and acted upon.

#### 4.4.4c Conclusion

SDU fully complies with Standard 4.4.



## 4.5 ACADEMIC and CLINICAL FACULTY (STAFF)

### 4.5.1 Faculty (Staff) recruitment

**The institution/programme must have a faculty recruitment policy, which outlines the type, responsibilities and balance of faculty required to deliver the curriculum adequately, including the balance between chiropractic and non-chiropractic faculty, and between full-time and part-time faculty.**

#### 4.5.1a Description

SDU has set in place a policy for actively recruiting academic staff, which emphasises the commitment and expected add-value of faculty members to R&D activities.


With 45 academic staff (23 of which are full-time), the school appears keen to maintain some level of academic turn-over, with additional 65 guest lecturers and 72 clinical employees involved in teaching/supervising students.

The integration of new faculty members in the school follows a formal induction process, during which they receive an introduction to the workplace, work tasks and colleagues, thus ensuring that job requirements/expectations are matched to the new employee background.

#### 4.5.1b Analysis

Staff-student ratio is said to be virtually impossible to calculate due to the design of the curriculum, particularly in the BSc years. Overall, this parameter should be regarded as pivotal in informing the definition and management of SDU's workforce and human resources. On the other hand, despite SDU's commendable commitment to research, it's important to secure a higher number of permanent academic staff, thus improving the retention rates among the academic staff and enhancing its stability and consistency.

#### 4.5.1c Conclusion

SDU fully complies with Standard 5.1. 

### 4.5.2 Faculty Promotion and Development

**The institution must have a faculty policy that addresses processes for development and appraisal of academic staff and ensures recognition of meritorious academic activities with appropriate emphasis on teaching and research.**

#### 4.5.2a Description

Faculty development relies on staff performance and development reviews, which are compulsory and focus on 3 distinct aspects: R&D, educational and administrative activities, with the first being highly valued in terms of promotion.

Moreover, to ensure the quality of the teaching, assistant professors and teaching assistant professors must complete the Lecturer Training Programme.

#### 4.5.2b Analysis

The SDU provides academic staff with a comprehensive approach for faculty development and promotion, aiming not only to provide feedback on staff's activity, but also allowing faculty members to acquire competences that may be valuable both in terms of research, but also education.

#### 4.5.2c Conclusion

SDU fully complies with Standard 5.2.



## 4.6 EDUCATIONAL RESOURCES

### 4.6.1 Physical facilities

**The institution/programme must have sufficient physical facilities for the faculty, staff and the student population to ensure that the curriculum can be delivered adequately, and library facilities available to faculty, staff and students that include access to computer-based reference systems, support staff and a reference collection adequate to meet teaching and research needs.**

#### 4.6.1a Description

SDU is vast, scattered across several cities. The main facilities used by the education are located in Odense, across 4 sites: Winsløwparken near the University Hospital, Klinikbygningen at the University hospital, University campus in Odense, The skills lab 'iLab' in Videnbyen. There are several large lecture halls, a range of small group teaching rooms, laboratory facilities and a dissection lab.

There are two large technique rooms which, mostly house the subjects taught on the Professionalisation track, fitted with Chiropractic couches and all necessary equipment to provide modern skills training and teaching.

The iLab is fitted with 38 treatment couches, while the skills training lab is fitted with 30 treatment couches along with the equipment required to deliver high quality Chiropractic technique teaching. The university campus also offers a comprehensive library, and an IT department, servicing both staff and students.

#### 4.6.1b Analysis

The visit was conducted virtually due to the travel restrictions implemented as a result of the pandemic. The university campus offers all facilities that are commonly expected for undergraduate study. The construction of a new University Hospital and Faculty of Health Science began in 2018 and is expected to be finished in 2022.

#### 4.6.1c Conclusion

SDU fully complies with Standard 6.1.



### 4.6.2 Clinical training resources

**The institution/programme must ensure adequate clinical experience and the necessary resources, including sufficient patients with an appropriate case-mix, and sufficient clinical training facilities including sufficient equipment and treatment rooms.**

#### 4.6.2a Description

The clinical experience is gained in internships at approved private chiropractic practices, one of the two onsite skills labs and the Spine Centre of Southern Denmark, of which, is the home to an outpatient spine clinic and an orthopaedic surgical department. During the internships, students have access to rehabilitation and exercise gyms, Xray units, MR scanners, ultrasound scanners, and an electrodiagnostic unit.

#### 4.6.2b Analysis

SDU has extensive clinical resources available to the students.

The introduction of the Mini-CEX, that is completed by the student for every patient contact, allows for feedback between the student and their clinical supervisor, in a timely manner. The information from the Mini-CEX is also input into an electronic system which allows the clinical supervisor to keep track of the number of patient contacts, the types of patients and conditions that the student is seeing, and their overall level of learning.

Clinical experience is also gained within an internship in a private practice. There is no formal mechanism for ensuring that the experience is equal and adequate for all students.

The faculty report that there has been an increase in student numbers. The clinical facilities will need to be addressed should the student numbers continue to rise.

#### 4.6.2c Conclusion

SDU substantially complies with Standard 6.2.



### 4.6.3 Information Technology

**The institution/programme must have sufficient IT facilities for faculty, staff and students to ensure the curriculum can be delivered adequately, and that IT is effectively used in the curriculum.**

**Students must be able to use IT for self-learning, accessing information and managing patients.**

#### 4.6.3a Description

Utilisation of IT by the teaching staff and students is an integral part of teaching and learning at University level. The bachelor's and master's programmes have a corresponding e-learning course which is used to administer the course.

SDU IT is the centre for support and operations and is part of the overall digital organisation at SDU. SDU IT has developed an IT guideline for students to offer IT support and guidance on IT security.

Students are also introduced to, and make use of, more IT systems when managing patients in the clinical part of their training.

The University Library has access to nearly 200 000 scientific journals and numerous databases for searching literature, all of which are free of charge, and is very much utilised by both staff and students.

SDU offers a wide range of courses for employees, additionally, The Centre for Teaching and Learning at SDU, offers an array of courses to the staff, but also consultancy support and counselling tailored at the specific needs of a teacher or a group of teachers.

#### *4.6.3b Analysis*

In light of the pandemic, SDU responded rapidly and swiftly in making sure the students were able to access learning resources online. Lectures have been delivered online since March 2020. The IT infrastructure has supported the 'virtual' university through zoom and Microsoft teams. It has highlighted the importance of data security.

#### *4.6.3c Conclusion*

SDU fully complies with Standard 6.3.



### **4.6.4 Educational expertise**

**The institution must ensure the appropriate use of educational expertise in the design and development of the chiropractic curriculum and instructional (teaching and learning) and assessment methods.**

#### *4.6.4a Description*

SDU is committed to providing high quality teaching to its students, whilst also offering teachers and staff the opportunity to build on and expand their knowledge.

The education in Clinical Biomechanics is run by the Head of Studies and Vice Head of Studies, both of which are Chiropractors, hold PhD degrees and are active researchers, as well as completing the Lecture Training Programme.

SDU Centre for Teaching and Learning (SDUUP) collaborates with all faculties and relevant units in order to improve the quality of teaching, learning and assessment, including e-learning and e-assessment, at the SDU.

SDUUP's activities are research and evidence based, it is continually striving to assure quality and develop learning strategies that coincide with the most up to date research in the field of workplace and adult learning.

SDUUP is involved in tasks such as curriculum and course development, development of staff by offering a wide range of tailored courses, hosting the annual 'Teaching for Active Learning Conference', organising and running the 'Lecturer Training Programme', which is a mandatory one-year long programme for newly appointed assistant professors at SDU, but is also an opportunity for other academics.

#### *4.6.4b Analysis*

The calibre of staff within the faculty is high, all with varying levels of experience, allowing for a very high standard of teaching.



There is ample opportunity and resources for the faculty and staff to enhance their learning and experience. SDU offers a wide range of courses that are available to everyone, regardless of the position that is held within the SDU.

Most of the teaching staff set aside 50% of their time to teaching, with the remaining 50% of their time dedicated to research.

*4.6.4c Conclusion*

SDU fully complies with Standard 6.4.



#### **4.6.5 Administrative and technical staff and management**

**The administrative and technical staff of the institution/programme must be appropriate to support the implementation of the institution's undergraduate programme and other activities, and to ensure good management and deployment of its resources.**

**The management must include a programme of quality assurance, and the management itself should submit itself to regular review to ensure best employment of its resources.**

*4.6.5a Description*

There is a robust administrative structure within the Faculty of Health Sciences. The Faculty of Health Sciences is responsible for quality assurance, secretarial support, status meeting, advisory boards and evaluation, all of which is overseen by the Dean. Along with the heads of departments, the Dean constitutes the management group.

The administration consists of three service areas: SUND Education, SUND Research and The Dean's Office. An annual status meeting between the Head of Studies and the Dean of The Faculty of Health Science ensures a high quality of teaching and continuing development of the Chiropractic program.

*4.6.5b Analysis*

The administrative and technical staff provide a high level of support to the programme, especially in recent months with the delivery of online lectures and modules. All support staff are subject to annual review by their direct line manager.

*4.6.5c Conclusion*

SDU fully complies with Standard 6.5.



#### **4.7 RELATIONSHIP BETWEEN TEACHING AND RESEARCH**

**The chiropractic institution/programme must facilitate the relationship between teaching and research and must describe the research facilities to support this relationship as well as the research priorities at the institution/programme.**

*4.7a Description*

Within SDU's policy for quality in education, a sub-policy 'Research Basis and Knowledge Basis in Study Programs' exists as a part of quality in education and aims to provide high quality research and knowledge base at any SDU's programme. Throughout the programme of Clinical Biomechanics,

students are taught from the very beginning the connection between basic research and clinical research for patient care to provide research-based education at all levels. Two key performance indicators (VIP-DVIP & STÅ-VIP) set out the relationship between teaching and research. The VIP-DVIP ratio is an indicator of how much of the teaching is carried out by teachers carrying out research at SDU, the higher ratio, the greater indication that students receive research based-teaching. STÅ-VIP ratio indicate whether the students have good opportunities for contact with active researchers during the teachings, the lower the ratio, the better possibility of contact. Both ratios were satisfactory for Clinical Biomechanics according to the latest status meeting report.

A full-time academic staff member of Department of Sports Science and Clinical Biomechanics (IOB) is expected to divide equally between externally financed research 50% and IOB financed teaching 50%. Exceptions can occur and to ensure a proper balance between research, teaching and administration each staff member makes an individual agreement on this ratio with the research leader of IOB. Moreover, the commitment to research is reflected in the curriculum with 32 ECTS in the bachelor programme for research-related subject and 20 ECTS in the masters programme allocated for a small teaching programme and dissertation.

#### 4.7b Analysis

The Clinical Biomechanics Faculty has a strong and developed research department with highly qualified teaching and research staff. The policy of 50% of contracted hours allocated for research activity emphasis the relationship between teaching and research. Contemporaneously over the 5 years, 52 ECTS (equivalent to a little less than 1 year of full-time studies) are set aside to research-related activities. The research facilities are of the highest standard with available ample funding and support from the University.

#### 4.7c Conclusion

SDU fully complies with Standard 7.



## 4.8 PROGRAMME EVALUATION

### 4.8.1 Mechanisms for programme evaluation

**The institution/programme must establish a mechanism for programme evaluation that monitors the curriculum, quality of teaching, student progress and student outcomes, and ensures that concerns are identified and addressed.**

#### 4.8.1a Description

SDU has a fully developed quality system which is linked to the Standards and Guidelines for Quality Assurance in the European Higher Education Area. This provides the framework of ensuring high quality in all the university's programs. Based on the implementation of this system the Faculty of Health use several metrics to evaluate and monitor programme performance:

Electronic student evaluations are carried out throughout the bachelor and master's programme which collects a wide range of information (overall student satisfaction, evaluation of individual subjects, student progress, curriculum and graduate evaluations). The SSR gives prominence to the role of external examiners in programme evaluation. These are proposed by the existing chairman of the external examiners and recruited according to Danish law from the chiropractic community appointed for a 4-year period. The external examiners can be involved in exams at more than one level including pre-screening of exam questions, participation on the exam day or as observers. All external examiners are systematically asked to fill out an evaluation form. In addition, the advisory board provides important feedback to the education about the exit competencies of the chiropractic students. All evaluations are fed back into the Study board for appropriate discussions and action(s) to take place. This information is discussed at the annual status meeting between the Faculty of Health and Head of Studies, and, in some cases, at the Advisory Board.

#### *4.8.1b Analysis*

Monitoring processes are strongly integrated within the quality processes at SDU. The evaluation processes are overseen by the Study Board and discussed annually between the Faculty of Health and Head of Studies. The programme has a robust process for internal and external programme evaluation which monitors the curriculum, quality of teaching, student progress and outcomes on an annual and continuous basis and ensures that concerns are identified and addressed.

#### *4.8.1c Conclusion*

SDU fully complies with Standard 8.1.



### **4.8.2 Faculty and student feedback**

**Both faculty and student feedback must be systematically sought, analysed and responded to so as to develop and improve the curriculum.**

#### *4.8.2a Description*

Regular student evaluations via electronic questionnaires are carried out for each subject in order to get feedback from the students. In addition to questionnaires, there is an 'open door' policy which means that students can contact staff responsible for teaching directly either by appointment, by e-mail or by telephone. Both the faculty staff and students have access to give feedback on issues relating to the education via the study board, through the Head and Vice Head of Studies, through the Head of Faculty Administration and through the Dean. All clinic internships are evaluated regularly. At the moment, the evaluation of the internships is under revision, and Clinical Biomechanics will soon be part of the online evaluation system used for the medical education.

#### *4.8.2b Analysis*

Evaluative feedback from students is elicited via electronic questionnaires at the end of each module and produces, on average, about 50-60% returns. Students are proactive in conducting evaluations and can approach staff at any time due to an open-door policy. Staff reports sufficient opportunities

to provide feedback which contributes to the feedback mechanisms available throughout the programme and University system. The feedback is systematically sought and analyzed by the Study Board, addressing any problems in a timely fashion.

*4.8.2c Conclusion*

SDU fully complies with Standard 8.2.



### 4.8.3 Student cohort performance

**Student cohort performance must be analysed in relation to the curriculum and the aims and objectives of the programme.**

*4.8.3a Description*

Student cohort performance, educational quality and statistical data are provided in the faculty-managed database called the “White book”. The White book provides wide ranging statistical data on the students throughout their university career. Based on the informative data, analyses are released regularly which allow benchmarking relative to other comparable courses. It has been found useful to compare parameters such as grades and pass/failure rates, student progression and status for Clinical Biomechanics against courses in the medical programme.

*4.8.3b Analysis*

Student cohort performance is measured and analyzed in relation to the component parts of the curriculum and appears to be robust which allows for early detection of risk students or module concerns. The SSR stresses benchmarking against the medical programme, which has yearly been in receipt of both dropouts and students transfers throughout the bachelor’s program.

*4.8.3c Conclusion*

SDU fully complies with Standard 8.3.



### 4.8.4 Involvement of stakeholders

**Programme evaluation must involve the governance and administration of the institution, the faculty, staff and the students, and the outcomes communicated to a range of stakeholders.**

*4.8.4a Description*


SDU has several mechanisms, involving both faculty, staff, students and external examiners to ensure programme evaluation. Being a state -run University the Danish government is through its legislative programme for higher education involved in the evaluation of the programme on behalf of Danish society. The advisory board provides important feedback to the education about the exit competencies of the chiropractic students and the content of the education

*4.8.4b Analysis*

SDU provides a good record of external stakeholders who are involved in programme evaluation. Management and administration of the institution involve the faculty, staff and students in

programme evaluation. There is an opportunity to involve patients and/or previous patients in the evaluation of the clinical elements of the programme.

*4.8.4c Conclusion*

SDU substantially complies with Standard 8.4. 

## 4.9 GOVERNANCE AND ADMINISTRATION

### 4.9.1 Governance

**Governance and committee structures and functions of the chiropractic institution/programme must be defined, including their relationships within the university (as appropriate).**

*4.9.1a Description*

The Department of Sports Science and Clinical Biomechanics is located within the Faculty of Health, one of the five academic faculties of the University of Southern Denmark. The University is governed according to Danish Law and its Board of Governors formulates the overall vision and direction for the university within the parameters set by the Ministry of Science, Technology and Innovation.

*4.9.1b Analysis*

The Department has a well-defined structure with committees supported by both students and staff, this seems to fit well into the overall structure of the University. The University as a whole has recently undergone an evaluation by the Danish accrediting agency resulting in a positive accreditation.

*4.9.1c Conclusion*

SDU fully complies with Standard 9.1. 

### 4.9.2 Academic leadership

**The responsibilities of the academic head of the first qualification chiropractic programme, and of the academic management structures, must be clearly stated.**

*4.9.2a Description*

Programme management resides under the umbrella of Syddansk Universitet's Faculty of Health Sciences. The academic leadership is provided at the level of Faculty by the Dean and at departmental level by the head of department. The Head of Department and the Head of Research plan employee's work distribution between research, teaching and administration and plans the research strategy. The Head of Studies are responsible for providing teachers to relevant subjects. The Head of Studies, appointed by the Dean on the recommendation of the study board also has regular peer reviews by the Dean to ensure strategy with specific goals are achieved.

#### 4.9.2b Analysis

The Department benefits from an experienced and well qualified Head of Studies with good support both from the Dean and from the Vice Head of Studies. The responsibilities of all managers are clearly stated and understood.

#### 4.9.2c Conclusion

SDU fully complies with Standard 9.2. 

### 4.9.3 Educational budget and resource allocation

**The institution/programme must have a clear line of responsibility and authority for the curriculum and its resourcing, including remuneration of teaching staff, in order to achieve the overall aims and objectives of the chiropractic programme.**


#### 4.9.3a Description

SDU has defined the process for budgeting for all faculties including the Faculty of Health Sciences. The budgeting process ensures adequate distribution of the available funds to all stakeholders. The Faculty of Health Science regularly conducts status meetings for all educations offered at SDU. The purpose of these meetings is, among other things, to establish a realistic budget through agreement between the Dean and the Director of Studies. This allows adequate financing of decisions on educational strategy, goals and plans of action with financial consequences. The budget for the education in Clinical Biomechanics closely matches the needs of the curriculum as the continuous development of the curriculum necessitates a continuous process of financial adjustments.

#### 4.9.3b Analysis

The allocation of resources follows the University regulations. The Dean has a clear understanding of the need of the programme, with increased number of students there is equivalent increase in resources for the enhancement of both teaching and research.

#### 4.9.3c Conclusion

SDU fully complies with Standard 9.3. 

### 4.9.4 Interaction with professional sector

**The institution/programme must have a constructive interaction with the chiropractic and chiropractic-related (health-related) sectors of society and government.**

#### 4.9.4a Description

Clinical Biomechanics has an Advisory Board stipulated by the Danish Act on Universities. This ensures a systematic dialog between the education and relevant stakeholders. Relevant stakeholders and health professionals are involved in the development of the curriculum. The Head and Vice Head of Studies also have a dialogue with the Danish Patient Safety Authority regarding the content of the postgraduate internship and other relevant issues.

#### 4.9.4b Analysis

As the Department is embedded within a Government recognised institution it benefits from relationships established within this system both as regards education and health.

The post graduate year run jointly by the Department and the Danish chiropractic profession ensures dialogue and understanding between educators, students and practitioners. It is possible that patient representation could be enhanced either by focus groups or questionnaires.

*4.9.4c Conclusion*

SDU fully complies with Standard 9.4.



## 4.10 CONTINUOUS RENEWAL AND IMPROVEMENT

**The chiropractic institution/programme must have procedures for regular reviewing and updating of its structure and functions to rectify deficiencies and meet changing needs. (See 8.1 of standards). The outcome of these procedures should be made public (i.e. institutional websites) and should lead to continuous improvement of the programme. Institutions should publish information about their activities, including programmes, which is clear, accurate, objective, up-to-date and readily accessible.**

*4.10a Description*

The quality system as previously described (standard 8.1) provides the framework for ensuring the quality of all educational programmes at the university including Clinical Biomechanics.

The Advisory Board gives direction in matters of relevance of the education and contributes with future visions on the labour market and new or revised demands on the qualification. The Advisory Board ensures contemporary updates of the chiropractic programme.

The Annual Status Meeting also ensures the quality of teaching and continues the development of the programme.

There is also a Graduate evaluation of the entire programme which is used to make plans for future curricular changes.

*4.10b Analysis*

Review and update of the programme is facilitated by the structure including the Advisory Board and Study Board. The team found evidence of improvements and changes to the curriculum based on discussions in these boards and with appropriate stakeholders enabled to take part in the decision making. The Graduate year, not part of the official degree, would benefit from further patient feedback and representation. The overall University website includes the necessary information about the programme.

*4.10c Conclusion*

SDU fully complies with Standard 10



## CONCLUSIONS

### 5.1 SUMMARY

In conclusion, the Evaluation Team was impressed by the overall quality of the chiropractic education and training provided by the university. The following commendations and recommendations are highlighted:

### 5.2 COMMENDATIONS, RECOMMENDATIONS AND CONCERNS

For the purposes of this report, the Evaluation Team adopted the following definitions from the Standards:

- **Commendations** – Areas that meet or exceed the *Standards* and are worthy of specific recognition.
- **Recommendations** – Areas requiring specific attention and action by an institution.
- **Concerns** – Areas of substantial weakness/concern as to jeopardise the accreditation of an institution that require specific attention and action by the institution *as a matter of urgency*.

#### 5.2.1 Commendations:

- 5.2.1.1 The supportive environment provided by the Head and Vice Head of Department for both staff and students.
- 5.2.1.2 General satisfaction and enthusiasm of students, for the course, the faculty and their studies.
- 5.2.1.3 The programme benefits from an engaging and inclusive Health Sciences Faculty.
- 5.2.1.4 Rapid response of the university in light of the Covid-19 pandemic, supported by both students and staff.
- 5.2.1.5 Ability for part time faculty to progress in their career at the university.
- 5.2.1.6 The quality of the research and the inclusion and stimulation of research in all aspects of the curriculum, supported by a motivated team.
- 5.2.1.7 The introduction of the Mini-CEX to provide and receive feedback in a timely manner, keeping track of the students learning curve within the Spine Centre.



### 5.2.1 Recommendations:

- 5.2.1.1 Formalise the relationship with the private clinics involved in the programme to provide equal and sufficient experience for students.
- 5.2.1.2 Maximise the horizontal integration and minimize the overlap in order to overcome some of the existing curricular overload in the bachelor's programme.
- 5.2.1.3 Enhance the current relation with the medical programme in order to expose students to interprofessional learning activities.
- 5.2.1.4 Make use of the, newly implemented, virtual platform and online delivery to enhance the international collaboration with both academic staff and students.
- 5.2.1.5 Review the admissions/marketing process to recruit a broader spectrum of international learners.
- 5.2.1.6 Ensure that patients are included as stakeholders and contribute to the reviewing and updating of the programme.

### 5.2.3 Concerns:

There were no concerns.

## 5.3 ACKNOWLEDGEMENTS

The Team wishes to extend its thanks to the university, faculty and department for the hospitality and courtesy afforded to it during the on-site visit.

## APPENDIX 1 – TIMETABLE

<b>Sunday 21 February</b>	Meeting with	Personnel	Team members	Standards	Inviterede personer
Evening	Preparatory meeting		All		
<b>Monday 22 February</b>	Meeting with	Personnel	Team members	Standards	
09.00-09.15	Welcome & Private meeting of team				
09.15-10.00	Course management team		All	1.2,1.3,2.1,2.8,5 .1,5,2,9,1,9,2,9. 3, 10	
10.05-10:50	Programme Management to include Quality Assurance		All	2.1,2.8,2.9,3.1., 2,4.3,4.4,5.2,6.4 ,6.5, 8.1, 8.2, 8.3, 8.4, 10	
10:50-11:20	Break				
11:20-12:25	Assessment and Learning	.	All	3.1, 3.2,8.3	
12:30-13:15	Meetings with students		All	3.2,4.1, 4.2, 4.3, 4.4, 6.1,, 6.2 6.3, 8.2, 8.4	
13:15-14:00	Lunch				
14:00-14.45	Students in Clinic		All	2.7,6.2,7,10	
14:50-15:35	HR representatives		All	5.1, 5.2, 6.5	
15:35-16:00	Break				
16:00-16:45	Meet with P/T staff working less than 0.8 FTE			2.1,2.2,2.3,2.4,6 .4, 6.5	
<b>Tuesday 23 February</b>	Meeting with	Personnel	Team members	Standards	
09.00-9:45	Clinic Faculty (chiropractic)		All	1, 2 (with exception of 2.6), 3, 5.2, 6.2, 6.3, 6.4	
9:50-10:35	Staff delivering basic sciences and social sciences not seen before		All	2.3,2.4	
10:35-11:05	Break				
11:05-11:50	Subsequent stages & Links to profession and patient involvement		All	1.4,2.7,2.10,8.4, 9.4,2.10	
<b>11:50- 12.50</b>	Lunch				
12:55-13:40	Research and teaching		All	2.2,2.6, 7	
13:45-14.30	Student support and representation		All	4.3,4.4	
14.35-15.10	Marketing/ Learning Resources / Library/IT		All	6.1,6.3,6.4	
15.10-17:00	Meeting of team		Accreditation team		
17:00	Verbal feedback to institution				