VISITATION REPORT

To the School of Veterinary Medicine, University College Dublin (UCD), Dublin, Ireland

On 01 – 05 November 2021

By the Visitation Team

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Introduction

The UCD School of Veterinary Medicine originated in the Veterinary College of Ireland (1901). Both the School of Veterinary Medicine (SVM) and the School of Medicine are included in the 'One Health' College of Health and Agricultural Sciences (CHAS). The specific facilities were assigned in 2002. In 2010, veterinary medicine was taught at the School of Agriculture, Food Science and Veterinary Medicine, a component of the College of Life Sciences. The School of Veterinary Medicine (called the Veterinary Education Establishment (VEE) in this Report), the only one in its profile in Ireland, was created as an autonomous unit of UCD College of Agriculture, Food Science and Veterinary Medicine in September 2011. However, with further University re-organisation in 2015, the VEE became one of 5 schools within the College of Health and Agricultural Sciences.

The VEE's Strategic Plan is focused on and dedicated to values of equality, diversity and inclusion. Veterinary science, besides sports-related science, was the highest QS-ranked subject in UCD; in 2017 the VEE was included in the top 50 world QS rankings for veterinary science.

The UCD VEE was last visited by the EAEVE on October 11-15th, 2010 and fully approved by ECOVE. A strategic restructuring of the VEE sections took place in July 2017. Subsequently, new academic sections such as Equine Clinical Studies, Diagnostic Imaging, Anaesthesia and Small Animal Clinical Studies were created as well as a specific section for the veterinary nursing programme. The communication strategy further improved (VEE google community; stakeholder newsletters; enhanced website; social media, etc.) by the appointment of a Communication Manager. In 2017, the VEE launched a new Clinical Skills Centre and a full-time Director was hired to manage it (2019). The dairy herd at UCD Lyons Farm benefited from a major project and increased its number of dairy cows to 200. The farm was modernised, the housing and research facilities were renovated, the handling facilities were upgraded and a rotary platform parlour was added.

The UCD VEE is being evaluated under the ESEVT SOP 2019.

Standard 1. Objectives, Organisation and QA Policy

1.1 The VEE must have as its main objective the provision, in agreement with the EU Directives and ESG recommendations, of adequate, ethical, research-based, evidence-based veterinary training that enables the new graduate to perform as a veterinarian capable of entering all commonly recognised branches of the veterinary profession and to be aware of the importance of lifelong learning.
The VEE must develop and follow its mission statement which must embrace all the ESEVT standards.

1.1.1. Findings
The vision of the VEE is to be "a flourishing veterinary school, positively impacting health, animal welfare, and the environment". Based on its mission, the "UCD SVM strives to be an inclusive community, delivering excellence in education, research and clinical endeavour". The VEE is committed to the UCD's values of equality, diversity, and inclusion.
The overall objective of the Bachelor of Veterinary Medicine (MVB) curriculum is to develop competences progressively from novice to veterinary professional. Students are supported to develop the required knowledge, skills, and professional attributes to day one entry to the veterinary profession and to become lifelong learners, problem solvers and global citizens. The MVB enables the holder to register as a veterinary practitioner with the Veterinary Council of Ireland (VCI), in other EU countries under mutual recognition procedures, in the UK under a mutual recognition agreement, and in the USA and Canada through the AVMA COE Accreditation.

1.1.2. Comments
None.

1.1.3. Suggestions for improvement
None.

1.1.4. Decision
The VEE is compliant with Substandard 1.1.

1.2 The VEE must be part of a university or a higher education institution providing training recognised as being of an equivalent level and formally recognised as such in the respective country.
The person responsible for the veterinary curriculum and the person(s) responsible for the professional, ethical, and academic affairs of the Veterinary Teaching Hospital (VTH) must hold a veterinary degree.
The decision-making process of the VEE must allow implementation of its strategic plan and of a cohesive study programme, in compliance with the ESEVT standards.

1.2.1. Findings
The UCD is an autonomous degree-awarding institution, which operates within the governance framework in Irish Universities. Educational funding is provided from the Higher Education authority. The VEE is an Executive School within the University, and one of five schools within the College of Health and Agricultural Sciences (CHAS). The Dean of the VEE brings school-strategic issues to meetings of the CHAS Senior Management Team (SMT). The CHAS SMT meets monthly.

The Dean, Head of the VEE, is a registered veterinarian and the VEE's chief executive officer. He reports to the Registrar/Deputy President on academic matters and to the Bursar on financial matters. The Dean is a member of UCD's Extended Leadership Group. The Associate Dean for teaching and learning is a registered veterinarian and has responsibility for the veterinary curriculum. The Clinical Director of the UCD Veterinary Hospital is a registered veterinarian. The major committees within the VEE are the SMT, School Executive, Programme Board and the Veterinary Equality Diversity and Inclusion – Athena SWAN committee (VetEDIAS).

The VEE's role is an oversight of major operational issues and strategic developments. It has an External Advisory Board, which monitors the activities and progress of the VEE and ensures it is operating in line with expectations and best practice. The External Advisory Board is responsible for ensuring that the strategic plan of the VEE has appropriate objectives, goals, indicators and targets against which performance can be clearly measured. It meets once a year.

The SMT is chaired by the Dean and the other members are: Associate Dean for Research, Innovation & Impact; Associate Dean for Teaching and Learning; Associate Dean for Admissions and Student Affairs; Clinical Director; Director SVM Office; Equality, Diversity & Inclusion Lead, and Communications Manager. The SMT meets bi-monthly. The SMT has three subcommittees: School Executive Committee, Health and Safety Committee, and Veterinary Medicine & Veterinary Nursing Programme Board.

The School Executive Committee is advisory to the Dean and SMT and liaison between the six academic sections, namely 1) Veterinary Biosciences, 2) Veterinary Pathobiology, 3) Herd health and Animal Husbandry, 4) Small Animal Clinical Studies, 5) Equine Clinical Studies, Diagnostic Imaging & Anaesthesia, and 6) Veterinary Nursing Programme, and the SMT. Technical and administrative staff are represented at the Executive Committee. The Director of SVM Office, HR Partner and College Finance Officer are also members of the Executive Committee. It discusses operational and strategic issues and meets once a month.

The Heads of the Sections are included in the School Executive Committee. At Executive Meetings, the Dean reports on strategic issues from the VEE's SMT and the CHAS SMT. The SVM Executive meetings are held monthly. The Heads of Sections report to the VEE's Executive Committee under the themes of teaching and learning, research, veterinary hospital, human resources, and finance. They also raise issues of a strategic nature in relation to annual staff / budgetary planning, curriculum and clinical delivery. Additionally, the Dean schedules individual meetings with the Section Heads for more informal discussions.

The Health and Safety Committee ensures compliance with health and safety procedures, monitors risks, oversees training, reports on incidents and develops health and safety protocols and procedures. The administrative and technical staff are represented in the SVM's Health and Safety Committee.

The SVM's Programme Board is chaired by the Dean and has faculty and student representatives of all years of the MVB programme as well as Heads of Subject, the Administrative Director of the Programme, the Student Adviser and the Associate Dean for Teaching and Learning. It deals with issues related to the development, delivery and assessment of the MVB degree programme, student requests and concerns as well as matters relating to the student code of conduct. The SVM Programme Board meetings occur twice each teaching trimester. It has five subcommittees: Curriculum Review Committee, Admissions Committee, Student Progression Committee, Fitness to Practice Committee and Fitness to Study Committee.

The VEE's VetEDIAS committee meets monthly to support and monitor the progress of the Action Plan and ensure timely delivery of specific actions. Students are represented in this Team.

The Staff-Student Liaison Committee meets twice per trimester identifying any academic or non-academic issues of interest or concern to students, ensuring dialogue between academic staff and each class of the veterinary medicine programme.

UCD Lyons farm is of strategic importance to the VEE, and the Dean sits on the Farm Oversight Committee. Any strategic decisions influencing the delivery of the MVB degree programme and the research of the VEE must be agreed at this committee.

Formal collaborations with other establishments are limited to the Dublin Society for the Prevention of Cruelty of Animals (DSPCA), which is used for surgical skills. The Module Coordinator for Surgical Skills in the final year of the programme is responsible, supported by the SMT. The Module Coordinator reports to the Associate Dean for Teaching and Learning in the context of the Curriculum Review Committee, which then reports to the SVM's Programme Board. Strategic decisions in relation to the VEE's relationship with the DSPCA must have the approval of the Dean.

1.2.2. Comments

- The organisational structure of the VEE appears complicated but the existence of various committees and other official bodies was clarified on site.
- The VEE can be commended on its effective and participative leadership.

1.2.3. Suggestions for improvement
None.

1.2.4. Decision
The VEE is compliant with Substandard 1.2.

1.3 The VEE must have a strategic plan, which includes a SWOT analysis of its current activities, a list of objectives, and an operating plan with a timeframe and indicators for its implementation.

1.3.1. Findings
The UCD VEE has a 5-year Strategic plan 2019-2024 'One Health – One Welfare'. The strategic goals of the VEE are:
1) Excellence in education
2) Exceptional student experience
3) Impactful and innovative research
4) Highest standards of animal care and welfare
5) Effective engagement with stakeholders
6) Inclusive and empowering community

The operational plan is based on these six strategic goals and includes actions, outcomes, key performance indicators and timeframes within the 5 years. Each goal has 3-6 objectives. In addition to qualitative indicators, selected numerical data (such as QS Subject rankings, academic staff FTE, publication volume and research awards) relevant to the Strategic Plan are being monitored. Complementary documents include a planning template aligned to the UCD Strategy 2020-2024 'Rising to the future' and a 'Risk Register'.

The process of creating the VEE's Strategic Plan 2019-2024 was a 'bottom-up' process, in which the Heads of the academic sections and section-level discussions had a major role. Students were not directly involved in creation of the VEE's strategic plan. The VEE has already taken measures to confirm their participation in the future processes.

The External Advisory Board, supporting the Dean of the VEE, is responsible for ensuring that the strategic plan of the VEE has appropriate objectives, goals, indicators and targets against which performance can be clearly measured. It meets once a year.

1.3.2. Comments
- The SWOT analysis is not publicly available and was not included in the Self-Evaluation Report (SER) but was provided on request.

1.3.3. Suggestions for improvement
- Ensure the participation of students in future processes regarding strategic planning.
- Consider including the SWOT analysis more explicitly in the Strategic Plan and making it publicly available.

1.3.4. Decision
The VEE is compliant with Substandard 1.3.

1.4 The VEE must have a policy and associated written procedures for the assurance of the quality and standards of its programmes and awards. It must also commit itself explicitly to the development of a culture which recognises the importance of quality, and quality assurance, within their VEE. To achieve this, the VEE must develop and implement a strategy for the continuous enhancement of quality. The development and implementation of the VEE's strategy must include a role for students and other stakeholders, both internal and external, and the strategy must have a formal status and be publicly available.

1.4.1. Findings
Quality assurance at institutional level is delivered under the Framework for Quality Assurance in Irish Higher Education. The Irish QA system fully conforms with the ENQA / ESG standards. The last institutional review of UCD was carried out by Quality and Qualifications Ireland (QQI) in October 2019. UCD's arrangement for QA and enhancement are described in the Annual Institutional Quality Report that is provided to QQI each year. Quality enhancement and assurance is considered as collective responsibility of faculty and staff.

The key features are set out in the UCD Quality Assurance and Quality Enhancement Policy (Appendices & Annexes pp. 96-99). It includes 1) a commitment to widespread involvement of faculty, staff, students and other stakeholders in quality processes, 2) critical self-reflection and rigorous peer review, 3) systematic collection and analysis of evidence, 4) multiple avenues for student, faculty and staff input to quality processes, and 5) the use of external evaluation such as external examiners, members of quality review teams and professional statutory and regulatory bodies. Based on the Policy, the university is responsible for the academic standards of awards made in its name, and has a range of systems and procedures for assuring and enhancing the standards and the quality of its educational provision. A commitment to assessing outcomes is included in the Policy.

The Policy is supplemented by a set of QA procedures and guidelines including periodic review of schools and support units, guidelines for review group members, and guidelines for the review of collaboratively taught arrangements.

Two VEE faculty members sit on UCD's Academic Council Quality Enhancement Committee. The most recent university-level quality review of the VEE was carried out in December 2014.

The VEE is currently accredited by the Veterinary Council of Ireland (VCI), EAEVE, the AVMA COE and the Australasian Veterinary Boards Council, and the Royal College of Veterinary Surgeons (RCVS).

The VEE has a comprehensive approach to gathering outcomes data to help evaluate teaching and assessment approaches across the programme as well as the attainment of Day One Competences at graduation. The data is channelled into the SMT, School Executive and critically to the Programme Board's Curriculum Review Committee to support effective and timely change. Examples of outcomes-informed changes include the new curriculum design, communication skills training, increased case-based learning and reduced lecture numbers. External examiner feedback and external consultation are used for review of assessment across the curriculum. The VEE has been upskilled through participation in AMEE/ESME online programmes and international assessment courses. This has supported development of modernized assessments and development of the MVB Assessment Matrix to collate information across the whole curriculum.

External Examiners, appointed by subject areas, exist for all modules in the veterinary curriculum. They review module content and assessment (at the planning stage and following completion by students) and normally visit the VEE at the end of the academic year to discuss their findings. They submit reports that are reviewed by Module Coordinators and Subject Heads who provide appropriate responses and implement changes to the modules if required. These responses are communicated to the University Registry. Heads of Subjects present the key elements of External Examiner feedback to the Programme Board. A Programme Board meeting dedicated to the reports of the External Examiners to discuss their implementation at module and curriculum level is scheduled to take place in the next trimester.

1.4.2. Comments
- The University-level quality assurance and quality enhancement is very systematic with clear policy and guidelines, and the VEE follows these guidelines. Even though the quality assurance of education is working well in the VEE - based on the SER and the on-site Visitation, it appears somewhat fragmented.

1.4.3. Suggestions for improvement
- The VEE might benefit from a separate Quality Management Committee or strengthening the role of quality assurance and enhancement of a relevant existing Committee.

1.4.4. Decision
The VEE is compliant with Substandard 1.4.

1.5 The VEE must provide evidence that it interacts with its stakeholders and the wider society. Such public information must be clear, objective and readily accessible; the information must include up-to-date information about the study programme, views and employment destinations of past students as well as the profile of the current student population.

The VEE's website must mention the ESEVT VEE's status and its last Self Evaluation Report and Visitation Report must be easily available for the public.

1.5.1. Findings
The SVM's External Advisory Board is made of colleagues from equine, farm animal and small animal practice as well as colleagues from the DAFM (Department of Agriculture, Food and

the Marine) and representatives of the agricultural and pharma industries. It meets the VEE's SMT annually. The VEE also receives feedback from external stakeholders in the context of the outcomes-based assessment process. Colleagues have been engaged in the development of the communication models within the 'professional strand' and in the development of a mentoring programme for new graduates.

UCD is a stakeholder in Animal Health Ireland, which has facilitated an ongoing constructive conversation around the farm animal curriculum and research-based prioritization of animal health and welfare issues.

Even though not mentioned in the SER, the VEE's website offers publicly available, up-to-date information about the study programmes and mentions the ESEVT approval status, with links to the VEE's last SER and Visitation Report.

1.5.2. Comments

- Public information about the employment destinations of past students and the profile of the current student population is not easily found.

1.5.3. Suggestions for improvement

None.

1.5.4. Decision

The VEE is compliant with Substandard 1.5.

1.6 The VEE must monitor and periodically review its activities, both quantitative and qualitative, to ensure that they achieve the objectives set for them and respond to the needs of students and society. The VEE must make public how this analysis of information has been utilised in the further development of its activities and provide evidence as to the involvement of both students and staff in the provision, analysis and implementation of such data.

Any action planned or taken as a result of this data analysis must be communicated to all those concerned.

1.6.1. Findings

The Strategic Plan has an important role in performance for growth meetings, dealing with staff development. It also informs discussions around strategic allocation of resources at meetings of the academic sections, the Executive Committee, the SMT as well as at meetings between the Dean with individual Heads of Section. This process also informed the annual discussions with the CHAS finance officer and the UCD Bursar.

The veterinary medicine programme has undergone curricular review and change since 2015. This includes adopting a comprehensive mixed-methods approach to the assessment of outcomes, which employs a variety of strategies to gather feedback from a range of key stakeholders. This approach allows the VEE to monitor the impact of curricular change and informs future decision-making. It is considered fundamental to ensuring that the curriculum remains dynamic and responsive to a changing society.

The outcomes-based assessment approach includes data collection via examination results, surveys and feedback (internal and external student surveys, student feedback to module coordinators, class representative feedback to Year Coordinators and Student Adviser, Student Progress Committee feedback, Annual Student focus groups at year level and Student Representatives reporting into the Curriculum Review Committee). Additionally, the Staff/Student Liaison Committee, External stakeholders (graduates, employers, EMS providers,

External Advisory Board) and External examiners have a major role in the outcomes-based assessment.
External educational development experts are tapped in specific areas, such as assessment and clinical skills curriculum, communication skills and professional curriculum.

1.6.2. Comments
None.

1.6.3. Suggestions for improvement
None.

1.6.4. Decision
The VEE is compliant with Substandard 1.6.

1.7 The VEE must undergo external review through the ESEVT on a cyclical basis. Evidence must be provided of such external evaluation with the assurance that the progress made since the last ESEVT evaluation was linked to a continuous quality assurance process.

1.7.1. Findings
The last ESEVT Visitation was in 2010 and resulted in "Full approval". Since then, improvements have been implemented in the suggested items including:
- Exposure to first-opinion cases: a new relationship was established with the Dublin Society for the Prevention of Cruelty to Animals (DSPCA) to replace the terminated link with the Dogs Trust, to ensure students' exposure to canine neutering. Collaboration with a busy private practice for a first-opinion rotation involving individual students has been initiated. An equine ambulatory service has been developed.
- Epidemiology and immunology teaching has been developed.
- An online tool (MyProgress) has been established to manage and provide feedback on extramural studies placements.
- Ways of encouraging clinical/translational research have been found through the activities of the School's Research, Innovation & Impact Committee and strategic plan.
- Elective bovine surgeries have been dispensed with from the teaching programme.
- The Veterinary Teaching Hospital (VTH) has been able to increase its income substantially.

1.7.2. Comments
None.

1.7.3. Suggestions for improvement
None.

1.7.4. Decision
The VEE is compliant with Substandard 1.7.

Standard 2. Finances

2.1 Finances must be demonstrably adequate to sustain the requirements for the VEE to meet its mission and to achieve its objectives for education, research and services. The description must include both expenditures (separated into personnel costs, operating costs, maintenance costs and equipment) and revenues (separated into public funding, tuition fees, services, research grants and other sources).

2.1.1. Findings

The University, to which the VEE belongs, is primarily funded by a block grant from the Irish Higher Education Authority, which is student-number driven. University resources are annually distributed to the respective schools based on the last year's allocation as a starting point for negotiations. Student tuition fees are credited to the University, and the University shares an additional Net Fee Income with the respective schools based on clear incentives and expectations (performance-based funding).

The VEE generated an average total revenue of approx. 20.6 Million EUR (SER Table 2.1.2) or 20.74 M (SER Table 2.1.3) per year against approx. 20.9 M EUR (SER Table 2.1.3) of annual expenses. Approx. 60% of the revenues are received as University Appropriation to cover expenditure such as staff salaries, maintenance cost, electricity, consumables, repairs, etc. Extramural research grants and contracts account for approx. 20% of the revenue, and revenues from Teaching Hospital and diagnostic laboratory and other external services generate approx. 14% of annual revenue. Service of equipment and buildings used by the VEE must be paid out of the VEE's budget.

Total revenues and expenditures of the VEE have increased slightly over the past years. Unspent funds remain with the VEE, can be accumulated and carried over to the next year. In 2018/19, 1.47 M EUR were carried over and at the disposition of the VEE for strategic and capital investments and unforeseeable expenses. Pay expenditure totalled €14,9M in 20/21, of which 60% related to school activities and 40% was hospital staff related. Financially, VEE Hospital revenues rose from €2.8M in 2019/20 to €3.9M in 2020/21 due to an increased demand for hospital services. In addition, the Irish Higher Education Authority (HEA) provided funding to the University for COVID-19 related costs, of which the VEE received its share. Due to the expected financial challenges related to the COVID-19 pandemic, the VEE - in line with UCD policy - was requested to pause staff recruitment until completion of an assessment of the institutional actions and finances. This recruitment ban at the time of the Visitation had been lifted.

Approximately one-third of all veterinary students enrolled are international, and they generate a substantial proportion of the income through tuition fees. A loss of that student cohort would result in a financial challenge for the VEE that can only be partly compensated by filling these slots with Irish or EU students.

2.1.2. Comments

- The VEE is sufficiently funded by the University to meet its objectives (mission) in teaching, service and research support. The primary funding source is considered as stable.
- Revenues from the VTH and other services are only a minor component of the revenues, and student (tuition) fees are collected by the University and included in the University Appropriation received by the VEE.
- The revenues generated from international students must not interfere with the provision of a sufficient number of slots for domestic students.

2.1.2. Suggestions for improvement
None.

2.1.4. Decision
The VEE is compliant with Substandard 2.1.

2.2. Clinical and field services must function as instructional resources. Instructional integrity of these resources must take priority over financial self-sufficiency of clinical services operations. The VEE must have sufficient autonomy in order to use the resources to implement its strategic plan and to meet the ESEVT Standards.

2.2.1. Findings
The Veterinary Teaching Hospital (VTH) revenues account for only 14% of the VEE revenues. The hospital falls under the line management of the Dean, running costs are part-funded by the income and subsidized by the VEE annual budget allocation. The VTH is seen as a teaching resource rather than a fund-generating operation. In addition, the VEE, together with approx. 30 regional practices, is a 49% partner of the Belfield Pet Emergency Hospital with the objective to provide emergency out of hours service for small animal clients, and together with the UCD School of Agriculture operates the Lyons (production animal) Farm. Running costs for the Lyons Farm are separately funded. Overall funding of the VEE is mainly dependent on the University funding, has slightly increased over the last few years, and is in part linked to the number of students accepted.

2.2.2. Comments
- The funding situation of the VEE is stable and in line with the needs to implement the strategic plans and meet both the national and international educational requirements.
- The VEE has sufficient autonomy to take strategic decisions, and is not dependent on increasing either VTH or student fee revenues in order to remain functional.

2.2.3. Suggestions for improvement
None.

2.2.4. Decision
The VEE is compliant with Substandard 2.2.

2.3. Resource allocation must be regularly reviewed to ensure that available resources meet the requirements.

2.3.1. Findings
Annual allocation of funds by the University is negotiated between the VEE and the University based on the previous year's budget and set to meet the operational needs. Within the VEE, finances are a standing item on the VEE Executive Board agenda, and both needs and decisions are communicated to the Head of Sections, the VEE Senior Management Team and, when relevant to students, at trimester meetings between the Dean and Student representatives.

2.3.2. Comments
- Due to the funding structure, financial needs are regularly reviewed and funds allocated accordingly.

- In addition, the VEE management has the possibility to accumulate surplus funds and use them for strategic and capital investments and unforeseeable expenses.

2.3.3. Suggestions for improvement
None.

2.3.4. Decision
The VEE is compliant with Substandard 2.3.

Standard 3. Curriculum

3.1 The curriculum must be designed, resourced and managed to ensure all graduates have achieved the graduate attributes expected to be fully compliant with the EU Directive 2005/36/EC (as amended by directive 2013/55/EU) and its Annex V.4.1. The curriculum must include the subjects (input) and must allow the acquisition of the Day One Competences (output) listed in Annex 2. This concerns Basic Sciences, Clinical Sciences in companion animals (including equine and exotic pets), Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management), Food Safety and Quality, and Professional Knowledge.

3.1.1. General findings

3.1.1.1. Findings
The University follows a trimester system: (i) an autumn term of 12 weeks teaching followed by one week of revision and 10 exam days, (ii) a spring term of 14 weeks followed by one week of revision and 11 exam days, and (iii) a summer term of 10 weeks with one week of revision and one week of exams. Winter break is from Christmas until mid-January and summer break between early August and mid-September. The VEE offers two pathways of veterinary education, a 5-year track for high school graduates and a 4-year graduate entry track. Both tracks merge in the 3rd year of the full track (Clinical Sciences I). Listed classes of the veterinary curriculum are only offered in trimesters 1 and 2.

The MVB (Bachelor of Veterinary Medicine) degree follows the requirements set by EU Directive 2005/36/EC (as amended by directive 2013/55/EU) and its Annex V.4.1., and currently enables holders to register as a veterinary practitioner in Ireland, all other EU countries, the UK, the USA and Canada.

Responsibility for the curriculum lies with the VEE Programme Board, chaired by the Dean. Oversight is provided through regulations, policies and procedures of the University, and the curriculum is subject to review by the Academic Council. The curriculum was thoroughly reviewed in 2015/2016. It is outcome-based, and outcomes were mapped to Day One Competencies (D1C) of AVMA, EAEVE, RCVS and VCI to meet all respective standards. Competences in practical skills are taught vertically through all years. Since 2019 a curriculum mapping software (Sophia) is used to show how teaching outcomes (teaching activities, module outcomes and assessments) map to the intended learning objectives, D1C and accreditation standards. In this mapping process, 6 knowledge, 8 professional attributes and 18 general competence domains were identified, described in verbal terms, and mapped to the UCI and EAEVE requirements. Based on this mapping, all D1C listed in the 2019 SOP were reported to have been met.

The 5-year MVB programme consists of 3494 curriculum hours (between 496 and 647 hours in years 1-4 and 1220 hours in year 5). Students in the 4-year Graduate Entry (GE) track have 351 less curriculum hours to complete. Of the 3494 hours, approx. 31% are delivered as lectures and 28.4% as clinical animal work. Approx. 260 curriculum hours of elective modules in various subject areas are offered. During the final year, students attend practical rotations under academic staff supervision (not EPT) of between one and three weeks duration per discipline / species, totalling 27 weeks. In addition, 5th year students select three weeks of elective rotations. Mandatory external practical training (EPT) in preclinical (years 1+2) and clinical animal work (both companion and production animals) and Food Safety / VPH account for an additional 36 weeks of training. The total number of mandatory curriculum hours therefore exceeds 5200 hours over the course of 5 years. Due to the COVID19-related closure of the University campus in March 2020, the already existing blended and online learning experiences were used and innovative educational technologies implemented to create a 'virtual classroom' environment. The VEE developed a series of online lectures and innovative media rich learning resources for students to deliver the module content. Students were motivated through specifically developed learning activities and discussion forums. However, not all components of the curriculum could be delivered online and rotations in the UCD Veterinary Hospital (UCDVH) were disrupted. Following virtual delivery of material and adjustment of the timetable, hands-on clinical teaching started again in the UCDVH on September 7th, 2021.

In 2021/2022, the first cohort of students will have completed the revised curriculum, albeit with their final years disrupted by the CODIV-19 Pandemic. The VEE continuously monitors the performance of the curriculum and has developed a Curriculum Review and Change Roadmap (Annex. 3.5) which lists the larger changes over time, including the introduction of new modules by year of study.

3.1.1.2. Comments
- The VEE must be commended for the large effort to create an outcome-based horizontally and vertically integrated curriculum that meets both the national and international standards.
- Students are exposed to non-clinical and then clinical animal work early in the curriculum, and the curriculum places emphasizes on practical training, professional skill development and research.
- In 2021/2022, the first cohort of students will / has completed the revised curriculum; however, the COVID19-related restrictions have substantially affected their learning experience.
- The VEE constantly monitors the performance of the training and has established a QS to adjust the curriculum when seen necessary; however, a full assessment of the quality of the training by students that have completed the course of study and entered the profession is not yet possible.

3.1.1.3. Suggestions for improvement
None.

3.1.1.4. Decision
The VEE is compliant with Substandard 3.1.1.

3.1.2. Basic Sciences

3.1.2.1. Findings
The VEE in table 3.1.2 of the SER lists only 40 hours of lecturing in total in basic subjects with Medical Physics (3 hrs), Animal Biology, Zoology and Cell Biology (6), Feed Plant Biology and Toxic Plants (2) and Biomedical statistics (7 hrs lecturing, 16 hrs supervised self-learning and 6 hrs lab and desk-based work). Inorganic and organic chemistry is not taught in the curriculum since a higher-level leaving certificate in Chemistry is an entry requirement for application to the programme. The VEE during the Visitation provided only limited evidence of how learning objectives related to basic subjects are addressed throughout the integrated curriculum in larger modules.

The curriculum places substantial emphasis on basic veterinary sciences subjects such as Anatomy, Histology and Embryology (268 hrs), Physiology and Biochemistry (229 hrs), 248 hrs in infectiology subjects (Parasitology, Microbiology, Immunology), 110 hrs in Pathology, 79 hrs in Pharmacology and Toxicology, 47 hrs in Animal nutrition, 27 hrs in General and Molecular Genetics, and also covers important subjects such as Animal Welfare and Ethology, Information Literacy, Professional Ethics and Communication, Animal Health Economics and Epidemiology. Some subjects are either taught with less or with more hours in the 4-year graduate track, therefore adjusting for their prior course of study as well as admission requirements.

In the curriculum, the biological principles of health are integrated into system-based modules rather than taught as self-standing subjects. The VEE assumes that the relevant physical, chemical and biological principles are included into broader modules and taught in the applied medical setting. The integration of basic sciences topics, biochemistry, physiology and pharmacology into system-based modules with clinical relevance is used to engage students in underpinning science into their future practical work.

3.1.2.2. Comments
- Basic subjects as mandated by the EU Directive 2005/36/EC Article 38 and listed in Annex 2 of the 2019 SOP have been assigned none (0) or a very low number of teaching hours in the current curriculum
- Specific basic subject learning objectives considered necessary by the visitation team for following higher-level modules are not explicitly specified in the curriculum.
- Basic veterinary science subjects have sufficient to good hours allocated in the curriculum
- It is concluded that the curriculum provides adequate training in basic sciences but is inadequate in the number of hours and specific learning outcomes related to basic subjects.
- This inadequacy is due to poor mapping of the basic veterinary science subjects linked to learning outcomes.

3.1.2.3. Suggestions for improvement
- The VEE should formulate learning outcomes specific to basic subjects and include the minimum number of hours in the curriculum needed to cover them.
- The VEE should improve the mapping of basic science subjects to learning outcomes.

3.1.2.4. Decision
The VEE is compliant with Substandard 3.1.2.

3.1.3. Clinical Sciences in companion animals (including equine and exotic pets)

3.1.3.1. Findings

The MVB curriculum is competency-oriented. Therefore, and moreover following its recent review, it is outcomes-based and adopts a reverse- engineered approach from Day One Competences. As a consequence, the competences relating to the development of practical/clinical skills in companion animals are delivered vertically through Years 1-5. However, the largest part of the relevant knowledge is delivered in years 3-4 (lectures, seminars and practicals) and 5 (clinical rotations).

In the section of Clinical Sciences it includes:
- Obstetrics, reproduction and reproductive disorders.
- Diagnostic pathology
- Medicine and surgery including anaesthesiology
- Clinical practical training in all common domestic animal species.
- Preventive medicine
- Diagnostic imaging
- Therapy in all common domestic animal species.
- Propaedeutics

The clinical rotations in companion animals including equines are organized as follows:

Small animal clinical studies (SACS)		Weeks
	Small Animal Internal Medicine	4 (2 + 2)
	First Opinion Internal medicine	1
	Intensive care unit	1
Anaesthesia and Diagnostics – Multispecies		
	Anaesthesia	2
	Diagnostics	2
	Paraclinical/Pathology	1
Small and large animal surgery		
	Intro to surgery	1
	Basics of surgery at DSPCA	1
	Small animal surgery	2
Equine clinical studies		
	Equine field service	1
	Equine Internal Medicine	1
Total		17

The balance of hours between the subjects is sufficient, although subjects like preventive medicine and propaedeutics seem to have few hours of lectures/seminars. Despite the curriculum duration of 5 years only, the number of practical hours in clinical work with animals is sufficient. The total number of weeks spent in companion animal clinical work is 9 weeks and 2 weeks in equine clinical work. The clinical exposure of each student is good (see Indicators). Additionally, a variety of active teaching methods, including case-based learning, where students are allowed to practice problem solving, clinical reasoning, sourcing and using evidence to make and apply clinical judgements, and with coordinated input from microbiologists, parasitologists, pathologists and clinicians, is implemented.

The Equine field service rotation, under full control of the UCD, exposes students to a range of routine equine cases.

The curriculum also incorporates hands-on skills training in the well-equipped and managed Clinical Skills Centre.

Students are directly involved in case management. A typical rotation in the small animal clinic includes 3-4 students, two students sharing the same case. The students are made aware of their duties and roles. They prepare the case the night before, are responsible for taking the history and performing an initial physical examination, then present the case to their senior and agree a management plan. The student retains responsibility for performing many aspects of the plan, assisted by one or two senior clinicians on duty, which are supported by residents, interns, nurses and animal care attendants. On surgical rotations, students scrub animals, assist the surgeon and draft the surgical report. In anaesthesia, students are responsible for reviewing patient files, performing pre-anaesthetic checks, formulating the medication plans and direct participation in all relevant procedures. In Diagnostic Imaging (DI), the students assist in imaging procedures and image interpretation.

The 24/7 emergency system consists of an emergency call attended by students and interns who are organised in shifts. When a clinical case comes to the hospital for surgery or hospitalisation, it has to be referred by a veterinarian, and the students who are in the clinical rotation are called, and it is compulsory for them to attend and go to the hospital. The responsibility of the pharmacy/dispensary lies on the shoulders of the on-duty academics.

3.1.3.2. Comments
- The different activities prior to clinical rotations (exercises / practices / seminars / clinical skills centre work) are appropriate and allow the student to acquire a good level to face the clinical rotations. The core clinical rotations are appropriate according to the hours as set out for these.
- In Equine the 24 Emergency Call Service is fulfilled and the students must attend either emergency cases that arrive at the Equine Field Service or the hospitalised animals housed in the Hospital.
- The VEE had a deficiency in the consultation visit in July 2017, related to the insufficient exposure of all undergraduate students to the services of emergency in pets and equines. Nevertheless, the changes made by the VEE are working and the number of cases has increased significantly; the relationship and coordination with the private clinicians is more fluid with the emergency system of 24 hours and is improving the number of cases referred.
- The number of rabbits, rodents, birds and exotic cases is low (see §5.1), but the VEE tries to increase the number of cases by setting up an exotics consultation with a teacher who is an expert in exotics. The VEE has also made an agreement with a private clinic where students can see more exotics cases, but the numbers of animals seen in this vicinity are not included in the relevant indicator and there is no mandatory exposure to such cases.

3.1.3.3. Suggestions for improvement
None.

3.1.3.4 Decision
The VEE is compliant with Substandard 3.1.3.

3.1.4. Clinical Sciences in food producing animals

3.1.4.1. Findings

In respect to the education in clinical sciences in food producing animals, the curriculum delivered by the VEE includes all the subjects indicated in Annex 2 of the ESEVT SOP 2019. The related subjects are spread through the entire study period, starting - especially for "Animal Production" - as from the first years.

In respect to Animal Production, a total of 186 hours is provided to the students through the entire curriculum.

"Preclinical Extra Mural Studies" are organized in the first two years of study. In respect to food-producing animals, the students have to allocate the PreCEMS in a period of 8 weeks, including dairy, beef, sheep and pigs (2 weeks each). In this approach practical animal handling skills introduced in the first two years of study are reinforced.

Courses on clinical sciences (similarly to the approach taken for companion animals) start as from the 3rd year, mostly delivered according to discipline and organic systems.

The module "Introduction to Clinical Medicine and Surgery" in 3rd year provides an overview on surgery practice and principles of radiography, being the basis for all subsequent clinical and surgical teaching. Moreover, this module introduces clinical examination and also incorporates hands-on skills training in the Clinical Skills Centre.

The module on "Farm Animal Clinical Studies" is provided at the 5th year and addressed both to individual animal and herd health (including fertility management). A specific module on "Veterinary Herd Health and Population Medicine" is provided in 4th year and covers all food-producing animal species. This module also emphasizes the principles of disease prevention and biosecurity.

Surgery in large animals is included in the module "Small and Large Animal surgery" and provided in 5th year.

The final year is entirely lecture-free, with students working in a hospital-based setting while passing through the various specialist rotations according to their individualized timetables.

Clinical practical rotation under academic staff supervision in farm animals is organized during the last year for both the degrees. The size of the groups ranges from 6 to 7 for "Large Animal Surgery (2 weeks)" and 18 to 24 for "Farm Animal Clinical Skills (5 weeks)". The SER indicates that larger groups get subdivided into sub-groups of ~7 or less in the case of farm animals. Additional weeks of practical rotation are included in multispecies discipline-oriented rotations (such as anaesthesia, diagnostic, pathology).

The Farm Animal rotation addresses the individual farm animals in the hospital context whereas health and fertility management is developed at herd and flock level on co-operating dairy farms as well as at the UCD Lyons Farm.

The rotation also includes the practice of post-mortem pathology (paraclinical rotation).

The rotation is supervised by one or two dedicated "Service Chiefs" on duty.

The SER details in depth the organization and the responsibilities of the students.

"Clinical Extra Mural Studies" (EPT) are organized in the last 2.5 years of both degrees. In respect to farm animals, the CEMS include a minimum of 4 weeks (each week 5 to 7 days).

Both PreCEMS and CEMS students make their own arrangements with practices and EMS supervisors that they wish to attend that, in any case, should be pre-approved through the UCD online Placement System (MyProgress link). Feedback of this experience can be provided both by the students and the EMS supervisors.

The PreCEMS and the CEMS providers have an agreement with the VEE.

Moreover, placement providers are offered free webinars on EMS.

The SER details in depth all the processes related to the agreement, the organization and the development of the PreCEMS and CEMS.

In 2020-2021 students were also offered final year non-compulsory optional elective courses on "Herd health and Animal Husbandry" in dairy herd, pig medicine reproductive technologies, animal welfare, veterinary pathology.

The Clinical Skills Centre is a support for the students to supplement scheduled classes and reinforce their skills throughout rotations.

A specific subcommittee "Curriculum Review Committee (CRC)" is committed to verify the education quality, support student learning as well as review the curriculum and eventually develop it.

3.1.4.2. Comments

- The curriculum is outcomes-based and is focused on providing students with the Day One Competences in Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management), not only as indicated in Annex 2 of the ESEVT SOP 2019, but also according to AVMA, RCVS and VCI expectations.
- Each module is detailed and described in depth, with the indication of the learning outcomes and type of assessment, among the others. This information is available online.
- There is evidence of the presence of a committee structure that oversees, reviews and manages the curriculum as well as of a QA system that monitors the different teaching and learning aspects of the curriculum.
- The EPT (called EMS in the SER) is well organized, managed and quality assured.

3.1.4.3. Suggestions for improvement
None.

3.1.4.4. Decision.
The VEE is compliant with Substandard 3.1.4.

3.1.5. Food Safety and Quality

3.1.5.1. Findings
According to SER table 3.1.2., there is a total of 210 hours taken by each student in the area of Food Safety and Quality, Veterinary Public Health and One Health Concept. They are divided into 54 for lectures, 5 for seminars, 47 for laboratory/desk-based practical, 75 for non-clinical animal work and 3 for other activities. The curricular hours taken by EU-listed subjects are 77 for Veterinary legislation, 43 for Control of food, feed and animal by-products, 12 for zoonoses, 50 for Food hygiene and food microbiology and approximately 18 for Food technology. The numbers of hours under both Food Technology & Meat Inspection are in total 47.25 hours (18.75 + 28.5 respectively).

Two core Veterinary Public Health (VPH) modules are delivered in Year 4, including instruction on zoonoses, food safety and environmental health. During completion of these modules in trimester 1 of year 4, groups of 10-12 students performed visits to commercial beef and broiler processing plants. Students are accompanied by VPH faculty and are hosted by Official Veterinarians (OV) from the Department of Agriculture, Food & the Marine (DAFM) based in these facilities.

Currently, practical classes (PC) in meat inspection are taught on-site in the VPH teaching laboratories. Before each practical class, instructions and introductory materials are delivered to students. Students have access to carcasses and organs which are transported from abattoirs

and to the VPH teaching laboratory. In these classes, students examine, palpate and incise specimens and learn about the procedures used in *post mortem* meat inspection.

Other related topics including, for example, Auditing, National Residue Monitoring Programmes, Traceability systems, Pre-harvest food safety, National Animal Health Surveillance Programmes are delivered within the two VPH modules.

Currently, the safety of fish and seafood are covered in lecture material delivered by a senior specialist veterinarian from the Seafood Protection Authority of Ireland. The eggs safety such as the control of Salmonella & drug residues are also covered in lecture material.

All students must complete a one-week EMS placement (arranged by the VEE) in an approved abattoir under the supervision of DAFM OV, at the end of Year 4. Students are also required to complete a written assignment based on this placement.

Due to the COVID-19 pandemic it was not possible to get access to factories for the Meat Inspection EMS placements. However, with the permission of the Department of Agriculture, Food & the Marine (DAFM), a Meat Inspection training video material covering all of the main food animal species (beef, sheep, pigs and poultry) is shown to students. In addition, UCD has gained access to the 'Virtual Abattoir' software package that has been developed by Dr Alessandro Seguino (European Veterinary Public Health specialist) & colleagues from the University of Edinburgh in collaboration with a software development company. This teaching material has been designed as an interactive resource specifically for delivering relevant VPH teaching pertaining to abattoirs & meat inspection within Veterinary Medicine Programmes. Students can take a virtual tour through an abattoir and are presented with various scenarios of non-compliance with legislation. They are required to identify the severity of any non-compliance, read the information provided by the software which includes relevant legislation and identify possible solutions or follow up actions that may be necessary.

A one-week VPH elective is also offered to students, which includes a placement for two days with Local Veterinary Authority Officers.

3.1.5.2. Comments
- The number of hours in the curriculum designated to FSQ and VPH as well as the range of topics covered is well-balanced.
- It is anticipated by the VEE that the EMS Meat Inspection placements will take place as normal for the current Stage 4 students during Summer 2022.

3.1.5.3. Suggestions for improvement
- The practical classes should be extended to canteens to allow students to know the standard procedures performed during an audit of a food Establishment.

3.1.5.4. Decision
The VEE is compliant with Substandard 3.1.5.

3.1.6. Professional Knowledge

3.1.6.1 Findings
Following a recent review by the VEE, the enhanced MVB curriculum is outcomes- based and reverse engineered across the merged domains of knowledge, skills and professional attributes adopting Bruner's spiral curriculum design and delivering a scaffolded active learning approach. The competences relating to the development of practical/clinical skills and professional attributes are delivered vertically through Years 1-5.

In Year 1 students are introduced to the concept of professionalism, outlining the attributes expected of the new graduate. Topics covered include exploring personal values, responsible use of social media, team-working, leadership styles, understanding regulatory frameworks and professional standards, fitness to practice, wellness, business and professional identity development. This strand sees the expansion of 'professional' modules from year 1 of the programme to all other years, culminating in the final year with a 'Professionalism Week', which will focus on transitioning to the workplace as a new graduate.

Six sub-themes are introduced in year 1 and are further developed each subsequent year in alignment with their progressive knowledge and skills development. They include Business and Law, Ethics and Animal Welfare, Personal Development, Communication, Evidence-based Veterinary Medicine (EBVM) as well as Health and Safety.

During clinical Extra Mural Studies (EMS), external practical training which commences in year 3 of the programme, students have opportunities to develop further insight into the professional aspects of practice, gaining a deeper understanding of the ethical, legal, financial and welfare issues that face practitioners during day-to day activities through this valuable workplace-based learning.

3.1.6.2 Comments
- The VEE must be commended for its approach for integrating professional knowledge into the curriculum from year one.

3.1.6.3 Suggestions for improvement
None.

3.1.6.4. Decision
The VEE is compliant with Substandard 3.1.6.

3.2 Each study programme provided by the VEE must be competency-based and designed so that it meets the objectives set for it, including the intended learning outcomes. The qualification resulting from a programme must be clearly specified and communicated and must refer to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area.
The VEE must provide proof of a QA system that promotes and monitors the presence of an academic environment highly conducive to learning including self-learning. Details of the type, provision and updating VEE of appropriate learning opportunities for the students must be clearly described, as well as the involvement of students.
The VEE must also describe how it encourages and prepares students for self-learning and lifelong learning.

3.2.1. Findings
The veterinary medical programme has undergone curricular review since 2015 using an outcomes-based approach, and curricular development is ongoing. Decisions about change are evidence-based. A range of data collection tools are deployed multiple times throughout the year to collate both quantitative and qualitative data, which are triangulated by the Curriculum Review Committee, which has representation of students from all levels of studies. Feedback is collected from a range of key stakeholders, both internal and external. Subject External Examiners and external educational development consultants contribute to review and development of teaching, assessment and the curriculum in a wider sense.

At the module level, examination results are considered at the Programme Exam boards. Recommendations for module enhancement can be identified and considered by the Curriculum Review Committee. Student feedback on modules is addressed by the module coordinator with input from relevant Subject Heads. Proposed changes to modules and assessment strategies are guided by the Lecturer in Veterinary Education and Associate Dean for Teaching and Learning, and are considered by the Curriculum Review Committee to ensure alignment with programme goals before being signed off by the Dean.

Survey data and feedback are collected and handled in various ways. Focus group feedback at year level is channelled through the Year Coordinator for response by module coordinators. A written report is reviewed by the Head of the School and Associate Dean for Teaching and Learning and furnished to the students to close the feedback loop. This feedback is also considered by the Curriculum Review Committee. Survey data from graduating students, graduates and employers are considered by the SMT, Curriculum Review Committee, and School Executive and Programme Board. Proposals for curriculum change are informed by this data. Staff/Student Liaison Committee meeting findings are shared with the Associate Dean for Teaching and Learning for consideration. Feedback from EMS providers is collated by the EMS supervisor and reported into the Curriculum Review Committee. Student Advisor and Student Progress Committee feedback is anonymized and trends related to academic performance are identified. External Examiner reports are considered by the relevant module coordinators. Head of subject, Associate Dean for Teaching and Learning, Head of School and Curriculum Review Committee and inform decision making at module and programme level.

The SER does not include information on the level of the national qualification framework for higher education but the following information is published on the VEE's webpage under Course Summary: Degree Qualification: MVB (Hons) (NFQ Level 8).

The VEE has attempted to reduce teacher-led approaches in favour of student-active learning approaches when possible. The lecture volume of certain years is still considered higher than desirable and efforts continue to reduce teacher-led approaches and drive a scaffolded active learning approach, seeing students more active in their learning and thus further developing their life-long learning skills. Interactivity in lectures has already been increased. The new curriculum design embodies the philosophy that 'competence is a habit of lifelong learning'. Competence is developed through the habitual use of communication, knowledge, technical skills, clinical reasoning, emotions, and values combined with reflection in daily practice. The new curriculum will be fully implemented by 2022.

3.2.2. Comments
- The VEE is aware of the challenges and has ongoing development work related to modules with many contributors, student feedback and further development of students' active learning and life-long learning skills.
- The proposed changes to modules and assessment strategies, initiated by examination results and student feedback, are ensured to be aligned with programme goals.

3.2.3. Suggestions for improvement
- Harmonising the way how learning outcomes are described for the individual modules would be helpful for staff, students and administration.

3.2.4. Decision
The VEE is compliant with Substandard 3.2.

3.3 Programme learning outcomes must:
- **ensure the effective alignment of all content, teaching, learning and assessment activities of the degree programme to form a cohesive framework**
- **include a description of Day One Competences**
- **form the basis for explicit statements of the objectives and learning outcomes of individual units of study**
- **be communicated to staff and students**
- **be regularly reviewed, managed and updated to ensure they remain relevant, adequate and are effectively achieved.**

3.3.1. Findings

The complete current list of 32 programme learning outcomes, mapped to ESEVT and VCI competences, is available on the VEE's webpage. The programme-level learning outcomes are reviewed regularly by the Curriculum Review Committee and approved by the SVM Programme Board. For each module, learning outcomes, indicative content, teaching and learning strategies, student effort hours, prior learning requirements, assessment and feedback strategies are documented. The updated curricular information is published online prior to the commencement of each academic year.

Details of the curriculum's structure and its modules are defined and published online each academic year through the UCD Curriculum Management System (CMS), linked from UCD Registry. CMS lists the curriculum's vision and programme outcomes. Additionally, a curriculum mapping system 'Sofia' since 2019 is used to track the integration of standards, programme outcomes, content domains and assessment mappings, and offers a tool for identifying curriculum redundancies.

Data from multiple sources, such as curriculum mapping data and outcomes assessment data, student focus group data and module evaluation data are available to identify gaps, redundancies and overlaps of content as well as instructional quality and effectiveness. This data is shared with relevant faculty and associated programme governing committees to support curriculum monitoring and the decision-making process to ensure programme objectives are being met. Curriculum changes are required to align with the agreed principles which guide the current curriculum evolution.

3.3.2. Comments
- The learning outcomes are described for each module but there is large variation in the style and depth in which they are described.

3.3.3. Suggestions for improvement
- The approach used to describe the learning outcomes of individual modules needs harmonisation.

3.3.4. Decision
The VEE is compliant with Substandard 3.3.

3.4 The VEE must have a formally constituted committee structure (which includes effective student representation), with clear and empowered reporting lines, to oversee and manage the curriculum and its delivery. The committee(s) must:
- **determine the pedagogical basis, design, delivery methods and assessment methods of the curriculum**

- **oversee QA of the curriculum, particularly gathering, evaluating, making change and responding to feedback from stakeholders, peer reviewers and external assessors, and data from examination/assessment outcomes**
- **perform on going and periodic review of the curriculum at least every seven years by involving staff, students and stakeholders; these reviews must lead to continuous improvement. Any action taken or planned as a result of such a review must be communicated to all those concerned**
- **identify and meet training needs for all types of staff, maintaining and enhancing their competence for the ongoing curriculum development.**

3.4.1. Findings

The SVM Programme Board is ultimately responsible for the regulation and QA of the overall programme and the academic welfare of students. The Board is bound by regulations, policies and procedures of the UCD, and is subject to review by the Academic Council or its nominated committee. The Programme Board is chaired by the VEE's Dean. The pedagogical basis of the curriculum is described in Section 3.1.

The Curriculum Review Committee oversees the management of the curriculum and its delivery, and reports to the SVM Programme Board. Recommendations for curriculum change are made by this Committee and are subject to approval by the SVM Programme Board. The Associate Dean for Teaching and Learning acts as chairperson of the Committee, and the members include the Year Coordinators, student representatives from all years of the programme(s), Lecturer in Veterinary Education, the Programme Manager, PreCEMS and CEMS Supervisors, leaders of 'current projects' (e.g. Clinical Skills Curriculum, Professional Growth Curriculum, Case-based learning and Assessment), and the Student Adviser. The Dean and Subject Heads are ex-officio members of the Curriculum Review Committee.

The remit of the Curriculum Review Committee includes performing ongoing and periodic review of the curriculum at least every seven years by involving staff, students and stakeholders. Additionally, the Committee ensures that the curriculum provides a framework for students to develop the required competencies for entry to the veterinary profession and ensures quality of the programmes. It sets priorities, provides recommendations, develops scientific proposals and implements proposed changes (approved by SVM Programme Board) to continually improve the student learning experience and develops processes for central oversight and ongoing monitoring and evaluation of the programmes. The Curriculum Review Committee considers coherence of all aspects of the curriculum at programme level.

Multiple Subject External Examiners are appointed across the programme and visit at least once per year to review module curricula, learning outcomes, appropriateness of content, teaching methods and assessment approaches.

Members of the Curriculum Review Committee (and the Year Curriculum Review Groups) are actively involved in continuing professional development opportunities relating to medical/veterinary medical education and educational research. This helps faculty to innovate and identify best practice to inform curricular change. The VEE also arranges in-house staff development events to support the delivery of change. A SVM Teaching and Learning Special Interest Group was formed in 2019 and holds monthly 'show and tell' workshops. External consultant expertise has been used to inform decision making.

Graduating students are surveyed online (and on paper) regarding their preparedness for employment in the Spring Trimester of final year. Ethical approval for incentivization of students was gained for the 2020 data collection cycle to enhance response rates. Responses have shown less satisfaction in preparedness for business/financial aspects of the workplace, communication skills and emergency and critical care. Consequently, the VEE has commenced embedding a vertical business/financial theme in the programme, communication skills

training, and a clinical skills curriculum and introducing OSCEs for assessment of clinical skills. In the 2020-2021 survey, a larger proportion of graduating students than before felt that they were not prepared to work as a veterinarian after graduation. The VEE expects this to be due to COVID-19, but will closely monitor the situation.

Surveys are sent to alumni via the UCD Alumni Office and promoted via several ways (website, social media). Graduates employed in the UK are targeted through the Veterinary Schools Council Graduate Survey. Currently, one CVE point for completion of the survey is awarded to enhance response rates. These surveys have revealed that graduates could be more prepared for transitioning into employment and areas for development have been identified. This feedback has been addressed by curriculum changes such as vertical clinical skills and professional curricula and embedding more student active learning opportunities.

Employers are approached by a team of senior students at the annual Veterinary Hospital Conference and targeted emails are sent to practices. UK based employers' feedback revealed that for most competences, respondents rated their employees as meeting expectations. Strengths, such as displaying ethical conduct and applying new veterinary treatments and procedures, as well as areas of development, such as basic surgical skills and emergency and critical care management, were identified. These findings, aligned with those of graduating students and recent graduates informed the development of the clinical skills curriculum.

3.4.2. Comments
- The VEE has developed a comprehensive approach to gathering outcomes data, and examples of outcomes-informed changes have been given. However, in spite of some new incentives offered, the response rate of some feedback surveys is far too low for using them as a reliable tool for making evidence-based decisions.
- A comprehensive review of assessment across the curriculum, using external feedback and training as well as expert consultation, has not only modernized assessment but also developed faculty in a wider sense.

3.4.3. Suggestions for improvement
- Increase the response rate of student surveys by optimizing their timing and informing the students of the importance of the responses for quality assurance and curriculum development.
- Attempts to use the VEE's advanced assessment program as a model for describing all feedback as a system could be beneficial.

3.4.4. Decision
The VEE is compliant with Substandard 3.4.

3.5 External Practical Training (EPT) is compulsory training activities organised outside the VEE, the student being under the direct supervision of a non-academic person (e.g. a practitioner). EPT cannot replace the core intramural training nor the extramural training under the close supervision of academic staff (e.g. ambulatory clinics, herd health management, practical training in FSQ and VPH).
Since the veterinary degree is a professional qualification with Day One Competences, EPT must complement and strengthen the academic education inter alia by enhancing student's professional knowledge.

3.5.1. Findings

The term used by the VEE for EPT is Extra Mural Studies (EMS). Students undertake work placements during the preclinical and clinical phases of the programme. These are co-curricular programme progression requirements and complement core learning.

In the pre-clinical year, students undertake 12 weeks of pre-clinical work placements/EMS with two weeks each of dairy, sheep, equine, pig, companion animal experience, one week of beef experience and one week of exposure to an alternative enterprise.

In the clinical years they undertake 24 weeks of placements/clinical extramural studies (CEMS) with a minimum of two weeks in equine practice, four weeks in companion animal practice, four weeks in farm animal /mixed practice and one week in a meat plant / slaughter facility. Students make their own arrangements with practices and other establishments, and placements outside of Ireland are possible.

Evaluations on all clinical assignments including clinical EMS are recorded through an online tool (MyProgress) that can be used both by students and the EMS coordinator to monitor completion.

3.5.2. Comments

- Both preclinical work placements and clinical EPT are used to expose students to the major fields of veterinary professional work. They are well-structured and coordinated, and feedback both from students and providers is routinely collected.

3.5.3. Suggestions for improvement

None.

3.5.4. Decision

The VEE is compliant with Substandard 3.5.

3.6 The EPT providers must have an agreement with the VEE and the student (in order to state their respective rights and duties, including insurance matters), provide a standardised evaluation of the performance of the student during their EPT and be allowed to provide feedback to the VEE on the EPT programme.

There must be a member of the academic staff responsible for the overall supervision of the EPT, including liaison with EPT providers.

3.6.1. Findings

Placement providers are directed to the VEE EMS webpage (https://www.ucd.ie/vetmed/study/clinicalextramuralstudies/) to prepare for accepting a student on placement. This page provides information on what is taught in each year, expectations of the placement provider and the students on placement as well as an insurance statement.

All Clinical EMS placements must be approved by the CEMS Coordinator before commencement.

Preclinical EMS students are assigned a Pre CEMS supervisor who must pre-approve all placements through a UCD online Placement System (MyProgress link). Providers are contacted by the student to arrange CEMS.

Students identify and record online their learning objectives for each placement and can give feedback on their overall experience of EMS through online student module questionnaires, and verbally with the module coordinator.

The CEMS web page provides a link where CEMS providers can download the form and submit it in confidence should they not wish to discuss feedback with the student. Contact details for

the EMS administration team and module coordinator are available via this portal if CEMS hosts wish to contact UCD directly about any veterinary student regarding CEMS.

All feedback and comments collected through MyProgress are assessed, and any issues are addressed directly should they arise. Spot check phone calls and emails are performed regularly after placement forms have been submitted by students to monitor any attempts at falsification of documentation.

Preclinical EMS (Pre-CEMS) providers sign-off, verifying that the student completed the placement and can email or phone the pre-CEMS supervisor with feedback.

3.6.2. Comments
- A member of the academic staff is responsible for supervision of the EPT, the approval of individual student proposals, and the interaction with EPT providers. Information on responsibilities and expectations including feedback forms is provided through a web-based platform.

3.6.3. Suggestions for improvement
None.

3.6.4. Decision
The VEE is compliant with Substandard 3.6.

3.7 Students must take responsibility for their own learning during EPT. This includes preparing properly before each placement, keeping a proper record of their experience during EPT by using a logbook provided by the VEE and evaluating the EPT. Students must be allowed to complain officially and/or anonymously about issues occurring during EPT. The VEE must have a system of QA to monitor the implementation, progress and then feedback within the EPT activities.

3.7.1. Findings
A document on pre-CEMS is circulated to all students in year 1. They are also asked to attain prior approval before undergoing a placement, and to submit feedback.

In the module Professional Growth 3, students prepare a mind map using the requirements of CEMS and provide a clear plan of how they will meet those requirements, their learning objectives, and their reasoning behind their choice of clinical placement. Students identify their learning objectives for each placement, record them online through the UCD MyProgress link. As part of the preparation for EMS, students must complete the 'EMS Driving Licence' before commencing EMS.

Student feedback from the practice preceptor is requested at the end of each placement. This is submitted online using MyProgress software.

Students provide feedback on their overall experience of CEMS through online student module questionnaires, programme experience questionnaires, focus groups, and verbally with the module coordinator. Successful completion of EMS requires the submission of all feedback forms and overall compliance with CEMS regulations.

If an issue arises during EMS, the student is advised to raise it as soon as possible with the EMS coordinator or School Office. Complaints are usually handled at school level as with all student complaints and appeals, addressed in Standard 7.

3.7.2. Comments
- Students have to prepare themselves for each EPT, and learning objectives and evaluation forms are provided.
- A respective QA system is in place to monitor performance and, when necessary, act accordingly.

3.7.3. Suggestions for improvement
None.

3.7.4. Decision
The VEE is compliant with Substandard 3.7.

Standard 4. Facilities and equipment

4.1 All aspects of the physical facilities must provide an environment conducive to learning, including internet access. The VEE must have a clear strategy and programme for maintaining and upgrading its buildings and equipment. Facilities must comply with all relevant legislation including health, safety, biosecurity, accessibility to people with reduced mobility, and EU animal welfare and care standards.

4.1.1. Findings
The VEE is located on the main campus of University College Dublin, Ireland's largest University. The campus is easily accessible, with easy and quick access of both Dublin City Centre and to extramural field activities. The core facility occupied by the VEE is a building of area $3,800m^2$, which is divided into two sections of similar size: the Veterinary Sciences Centre and the Veterinary Teaching Hospital (VTH). The Veterinary Sciences Centre is housed in a three-floor building, whereas the VTH is a single level building, connected to the main structure. The anatomy teaching area, the necropsy room, the large animal isolation facility and the veterinary public health teaching areas are adjacent to the VTH on the same level. UCD also owns a University farm (UCD Lyons Farm; 35 km from main campus; 250Ha) where teaching and research activities in the farm animal and equine areas take place.

Maintenance of the facilities in the main campus is carried out by the University on a cyclical basis. UCD already approved a business plan to ensure substantial upgrades and new facilities.

All activities and equipment are compliant with the national rules and regulations (Safety, Health and Welfare at Work act 2005, General Application regulations 2007, Biological Agents Regulations 2013, Chemicals Safety Act 2008 and 2010). Radio protection is supervised by the Radiological Protection Institute of Ireland (RPII).
A range of standardized procedures are in place to cover all aspects of patient/client care, staff and student safety, including use of cytotoxic drugs, use of specialized equipment, use of potentially hazardous chemicals/anaesthetic agents and potential exposure to zoonotic infectious agents. An external company is hired to audit hospital facilities and functions on a contractual basis. Service contracts are in place to ensure the safe functioning of all anaesthetic machines, scavenging units, chemical fume hoods, autoclaves etc.
The VTH equipment and organisation is designed to provide the best clinical services with a full respect of animal welfare. In the small animal clinic, the VEE began to separate dogs and cats as much as possible and further efforts, like in the owners' waiting room at the entrance, are already planned.

The VEE has full Wi-Fi network coverage, and Eduroam also is fully operational.

4.1.2. Comments
- The maintenance and/or renewal of the buildings and equipment is done in a very efficient way. The overall impression is very positive, providing the students with an environment that is fully conducive to learning.
- More broadly speaking, the VEE is located very close to other high-standard UCD buildings, like the O'Brien Science Centre and the Student and Sports Centre. The Centre for Science is a huge building with state-of-the-art connected amphitheatres that the VEE uses on a regular basis.
- Another UCD additional building is under construction that will provide more lecture Halls and modern learning equipment to which the VEE will have access in the near future.

4.1.3. Suggestions for improvement
None.

4.1.4. Decision
The VEE is compliant with Substandard 4.1.

4.2 Lecture theatres, teaching laboratories, tutorial rooms, clinical facilities and other teaching spaces must be adequate in number, size and equipped for the instructional purposes and must be well maintained. The facilities must be adapted for the number of students enrolled. Students must have ready access to adequate and sufficient study, self-learning, recreation, locker, sanitary and food service facilities. Offices, teaching preparation and research laboratories must be sufficient for the needs of the academic and support staff.

4.2.1. Findings
All lecture halls, tutorial rooms and teaching labs are adequate, adapted to the number of students and well equipped. The Veterinary Sciences Centre also houses the veterinary library and the Vet-Ed Hub, a centre with a staff that helps drive innovation and best practice in discipline specific teaching and learning and supports teaching and learning scholarship.

The VEE has three lecture theatres (two tiered and one flat) but also routinely uses several large capacity lecture theatres in the O'Brien Science Centre and Health Sciences buildings (less than 5-minute walk from the VEE). The ground floor of the Veterinary Sciences Centre also contains two large multi-purpose teaching laboratories. The well-equipped anatomy teaching laboratory comprises a wet room with floor drains and an inbuilt air handling unit to change the air and minimize exposure to any embalming chemicals for all users. The room and the trolleys are easily cleanable. The students also have access to skeletons, plastic models and plastinated pieces.

The Clinical Skills Centre has been refurbished and relocated, becoming a central key to the implementation of the VEE new spiral, scaffolded curriculum. It is used for both practicals under academic staff supervision and on a free-access basis, where students are provided with clear station instruction booklets.
The VEE's student café area offers a social space for students. Lockers are provided, with a total of 479 lockers in the VEE. During study times, in advance of examination periods, the

VEE makes all appropriate spaces available for students for studying, including the theatres. Of course, students also avail of all University facilities including the UCD Student Centre with its sports facilities, swimming pool, cinema, pharmacy, debating chamber and theatre. The Student Health Centre is also situated in UCD Student Centre.

Students also have access to the numerous restaurants provided by UCD, in a close walking distance from the VEE. A shared common room with basic kitchen facilities is available to the final year students in the VTH. Five interns can take a rest in a dedicated apartment within the VTH, whilst an additional three are accommodated on separate campus accommodation.

4.2.2. Comments
- The whole campus as well as the VEE buildings and facilities are fully adequate in size, equipment and are well maintained.
- The student's welfare is really considered, and huge efforts are made to provide them the best learning environment. It is really commendable for the VEE and for UCD.

4.2.3. Suggestions for improvement
None.

4.2.4. Decision
The VEE is compliant with Substandard 4.2.

4.3 The livestock facilities, animal housing, core clinical teaching facilities and equipment used by the VEE for teaching purposes must:
- **be sufficient in capacity and adapted for the number of students enrolled in order to allow safe hands-on training for all students**
- **be of a high standard, well maintained and fit for the purpose**
- **promote best husbandry, welfare and management practices**
- **ensure relevant biosecurity and bio-containment**
- **be designed to enhance learning.**

4.3.1. Findings
The Lyons Farm is jointly managed by the Schools of Agriculture and Food Science and the VEE, under supervision of a Farm Manager and has to balance teaching, research and commercial needs. It provides dairy cows (200 heads), beef cattle (150), sheep (350), horses (15), pigs (400, although this facility needs updating) and poultry (20 hens) facilities. Milk is sold to a dairy cooperative. Research projects can be performed there but have to be financed in case of negative impact on the performance. In the SER it is reported that teaching activities are prioritized. In fact, some animals (pigs for example) are not easily accessible to students.
The farm is used throughout the curriculum, during the first (animal handling), second (nutrition, reproductive biology, food animal systems), fourth (clinical reproduction) and final year (clinical activities). The facilities are used for clinical teaching and practical classes in animal handling, nutrition, reproduction and herd health. The farm is approximately 45 min from the main campus by bus/car.
The Veterinary Public Health (VPH) teaching laboratories provide post-mortem meat inspection teaching. The wet lab is a designed facility for small groups of students, with stainless-steel sinks, non-slip resin floor with drainage, a boot washing station, stainless steel benching and a walk-in chill for storing specimens for practical classes. The rail and rollers allow proper carcass management.

4.3.2. Comments
None.

4.3.3. Suggestions for improvement
None.

4.3.4. Decision
The VEE is compliant with Substandard 4.3.

4.4 Core clinical teaching facilities must be provided in a veterinary teaching hospital (VTH) with 24/7 emergency services at least for companion animals and equines. Within the VTH, the VEE must unequivocally demonstrate that standard of education and clinical research are compliant with all ESEVT Substandards, e.g. research-based and evidence-based clinical training supervised by academic staff trained to teach and to assess, availability for staff and students of facilities and patients for performing clinical research and relevant QA procedures. For ruminants, on-call service must be available if emergency services do not exist for those species in a VTH. The VEE must ensure state-of-the-art standards of teaching clinics which remain comparable with or exceeding the best available in the private sector. The VTH and any hospitals, practices and facilities (including EPT) which are involved with the curriculum must meet the relevant national Practice Standards.

4.4.1. Findings
The VTH operates all year-round on a 24/7 basis. Consultations are primarily scheduled from Monday to Friday but an Out of Hours (OOHs) service is ensured for all patients currently under its care in all disciplines. This OOHs activity also runs in equine and farm animals on demand, including the equine field service. Additionally, UCD is a 49% stakeholder in the Belfield Pet Emergency Hospital (a joint venture with over 25 surrounding small animal practices), to which OOHs small animal emergencies are referred with the potential to be transferred the following (working day) morning to UCD if required. The small animal caseload provides for comprehensive student exposure to cardio-respiratory, oncology, gastrointestinal, endocrine, dermatology, urinary tract, metabolic, hematopoietic and neurology cases. Most disciplines are covered by academic staff, some of them (for example cardiology) being conducted by contract practitioners coming into the VTH on a regular basis.

The in-house equine medicine service focuses on all aspects of internal medicine and dermatology, with referrals under all major body systems. The service also regularly assesses poor performing horses. The diagnostic imaging unit is running a combined small animal/equine (standing) CT unit and 1.5 Tesla small animal/equine MRI unit, in addition to X-Ray, ultrasonography etc.

As the VTH is predominantly of referral nature, rotations include the Small Animal Surgery rotation at the DSPCA (one week concentrating predominantly on canine neutering procedures), first opinion small animal practice (one week at Village Vets) and the Equine Field Studies rotation (ambulatory service, one week). Additionally, the VEE has a close relationship with Dublin Zoo to facilitate instruction in the safe handling and management of zoo animal species.

The Pathology service conducts post-mortem examinations on cases derived from VTH, external practices, Lyons farm, Dublin Zoo and various animal charities. These sources provide material from all common domestic species, zoo animals, small exotic mammals and aquatic life. Similarly, the clinical pathology service provides support for clinicians in all relevant disciplines (cytology / haematology / biochemistry). The diagnostic service in microbiology and parasitology accepts samples from all veterinary species submitted by VTH clinicians and pathologists (~60% of the activity) as well as by external veterinary practitioners (~40%). The diagnostic laboratories collaborate with numerous external laboratories to ensure the full range of modern assays required for internal/external cases (e.g., gene testing, PCR assays etc.).

Clinical activity commences within the VTH with Board Rounds and initial patient assessment at 7.30- 8.00 am in all disciplines. Final Board rounds and patient preparation for OOHs care occurs between 4.00 and 6.00 pm each evening. All consultations involve the full involvement of students; under direct supervision or responsibility of the clinical staff, they are delegated certain tasks and functions as part of case work-up and management. As the VEE also trains students involved in the nurse curriculum, tasks are clearly defined and assigned to the relevant students.

All facilities and establishments, whether on site within UCD or by external collaboration, meet all relevant national Practice Standards.

4.4.2. Comments
- The overall organisation in all VTH sections is commendable, as is it designed to deserve all activities in the most efficient way. Biosafety and biosecurity procedures are displayed in relevant places.

4.4.3. Suggestions for improvement
None.

4.4.4. Decision
The VEE is compliant with Substandard 4.4.

4.5 The VEE must ensure that students have access to a broad range of diagnostic and therapeutic facilities, including but not limited to: diagnostic imaging, anaesthesia, clinical pathology, intensive/critical care, surgeries and treatment facilities, ambulatory services, pharmacy and necropsy facilities.

4.5.1. Findings
Students have access to all facilities, with different prerogatives depending on the activity. Nearly all disciplines and topics are covered, with the notable exception of small mammals and exotics, which are not accepted in the VTH. The students may have contact with such species during their rotation at Village Vets, but it is mainly the result of chance and this is not considered in the skills to be acquired.

The Drug Dispensary (Pharmacy) and broadly speaking drug storage and handling within all VTH sections are commendable.

4.5.2. Comments
- Due to the increasing number of companion animals other than dogs and cats in the daily routine, students have to be exposed to clinical cases in these species (at least rabbits, guinea pigs and some birds).
- Some of the technical skills are included in the Clinical Skills Lab and some students are involved in such cases in Village Vets or during their EPT.

4.5.3. Suggestions for improvement
- The VEE should consider any lever to ensure a minimal clinical exposure to every student in small mammals and some exotics species (see Section 5.1.4).

4.5.4. Decision
The VEE is compliant with Substandard 4.5.

4.6 Appropriate isolation facilities must be provided to meet the need for the isolation and containment of animals with communicable diseases. Such isolation facilities must be properly constructed, ventilated, maintained and operated to provide for animal care and for prevention of spread of infectious agents. They must be adapted to all animal species commonly handled in the VTH.

4.6.1. Findings
Both small and large animal isolation facilities are available in the VTH and appropriate protocols posted there and are included in the handbook provided to students. The large animal isolation facility consists of 3 boxes plus a treatment room with stocks contained in a separate enclosed yard with restricted access. Disinfection, changing and cleaning facilities are associated with each box. A colour code system (red/yellow/green) allows the use of the three boxes according to the level of risk.

For small animals there is an isolation room dedicated to animals with infectious diseases. The isolation is divided into a first five kennel unit for infectious diseases, including but not limited to viral or bacterial diseases or certain parasitic infections/infestations, and a second unit, consisting of two large walk-in kennels, designed for dogs with MDR infections. Strict barrier nursing protocols and SOPs are in operation. Facilities to allow effective cleaning and disinfection are available both within and outside the isolation facility.

Students are also given instruction in biocontainment throughout the didactic curriculum, in practical/clinical teaching at UCD Lyons Farm, and on herd health visits.

4.6.2. Comments
- The large animal isolation facility is very big, well-designed and equipped. The waste management is ensured according to the level of risk, with the same colour code than the corresponding boxes.
- The small animal facility is large enough to ensure routine use according to the risk level. In both facilities the changing areas for staff and students do not allow an easy separation of clean and dirty circuits and could be optimized.

4.6.3. Suggestions for improvement
- The VEE could consider a better organisation of the changing areas in order to avoid any possible circulation escaping from the procedures.

4.6.4. Decision
The VEE is compliant with Substandard 4.6.

4.7 The VEE must have an ambulatory clinic for production animals or equivalent facilities so that students can practice field veterinary medicine and Herd Health Management under academic supervision.

4.7.1. Findings
The equine field service visits equine clients within a 20 km radius of the campus, providing a wide variety of first line cases. Two academic clinicians run the service and take four students, using a crew cab jeep with sufficient space, in a series of deep drawers, to carry necessary clinical equipment and drugs. The vehicle is new and very-well designed and maintained. The service provides an emergency service, backed up by the UCD Veterinary Hospital.

Herd health cases from private practices are referred to VTH from all areas of the country. Herd fertility visits are also organized. Students are involved in the investigations during their relevant rotation. They are brought on the visits on a voluntary basis. These visits are conducted by board certified specialists in bovine health management or animal reproduction as appropriate, with the assistance of their resident. As part of the Farm Animal Clinical Studies rotation, students will also attend on commercial dairy farms. Animals requiring veterinary attention in the UCD Lyons Farm are also available for clinical teaching.

4.7.2. Comments
- The VEE operates an ambulatory service for horses and organises bovine herd health visits under academic supervision.

4.7.3. Suggestions for improvement
None.

4.7.4. Decision
The VEE is compliant with Substandard 4.7.

4.8 The transport of students, live animals, cadavers, materials from animal origin and other teaching materials must be done in agreement with national and EU standards, to ensure the safety of students and staff and to prevent the spread of infectious agents.

4.8.1. Findings
The VEE owns two 9 seats and one 7 seats minibuses, a jeep for towing a horse box / trailer and three trailers suitable for transporting horses, cattle and small ruminants, an equine ambulatory jeep and a two seater van. Larger groups of students are transported using private transport company buses.

The 7 seater minibus with a large cargo area is used for transport of animal cadavers and animal organs. It is licenced as a vehicle for transporting Category 1 waste.

4.8.2. Comments
- The transport of students, animals, cadavers and equipment follows both national and EU standards.

4.8.3. Suggestions for improvement
None.

4.8.4. Decision
The VEE is compliant with Substandard 4.8.

4.9 Operational policies and procedures (including e.g. biosecurity, good laboratory practice and good clinical practice) must be taught and posted for students, staff and visitors and a Biosafety manual must be available. The VEE must demonstrate a clear commitment for the delivery of biosafety and biosecurity, e.g. by a specific committee structure. The VEE must have a system of QA to monitor and assure clinical, laboratory and farm services, including a regular monitoring of the feedback from students, staff and clients.

4.9.1. Findings
The safety rules within the VEE are derived from UCD's parent safety statement and are under the responsibility of the Dean. Health and Safety is at the agenda of all School Executive, Hospital Board and Section meetings, with incident reports when necessary. The protocols are regularly reviewed by the VEE Health and Safety Committee.
A risk assessments policy has been developed for each laboratory and clinical procedure. The results are on-file with the Safety Office. Safety audits of specific areas and procedures have taken place over the last few years. They were carried out by independent consultants. Some minor improvements that have been recommended include the provision of additional eye wash stations and improved laboratory seating, in some individual cases.
Waste disposal, including clinical waste, is handled locally by the VEE through an annual contract with a commercial waste disposal company.

4.9.2. Comments
- The VEE has a clear commitment for the delivery of biosafety and biosecurity standards, and these standards are taught respectively posted to students, staff and visitors.

4.9.3. Suggestions for improvement
None.

4.9.4. Decision
The VEE is compliant with Substandard 4.9.

Standard 5. Animal resources and teaching material of animal origin

5.1 The number and variety of healthy and diseased animals, cadavers, and material of animal origin must be adequate for providing the practical and safe hands-on training (in the areas of Basic Sciences, Clinical Sciences, Pathology, Animal Production, Food Safety and Quality) and adapted to the number of students enrolled.
Evidence must be provided that these data are regularly recorded and that procedures are in place for correcting any deficiencies.

5.1.1. Findings
Animals and materials of animal origins are provided for the training across all the curriculum's years, satisfying the need for the anatomy, animal handling, animal production and finally the clinical training.

The main sources of animals, both healthy and diseased, as well as materials of animal origin are:

- the Lyons Farm (especially normal farm animals, herd health experience and reproduction teaching resources;
- the University Veterinary Hospital (mainly referral-based intramural individual clinical case load related to companion animal, equine and farm animal);
- DSPCA-Dublin Society for the Prevention of Cruelty to Animals (used for extramural training as part of surgery rotation, especially neutering and shelter medicine);
- the Equine Ambulatory Service (specifically equine extramural first opinion clinical cases);
- Village Vets private animal clinics (included in the rotation and mainly finalized to increase each student's volume/range in first opinion exposure in companion animals and in the future exotic animals as extra practical training);
- the Belfield Pet Emergency Hospital (mainly first opinion and emergency clinical caseload of companion animals as extra practical training);
- dairy herd health visits (population medicine issues including mastitis control, fertility disorders, dairy/beef production issues, nutritional advice and epidemiological investigations, as well as occasional extramural food producing animal clinical cases);
- VEE's diagnostic services (mainly material used for teaching pathology); local abattoirs (mainly large animal parts for anatomy, pathology and VPH);
- organized CEMS (mainly first opinion clinical caseload of all species as extra practical training);
- Tullyraine Equine Veterinary Clinic (formal arrangement for extramural both first–opinion and referral equine clinical cases, particularly devoted to endoscopy);
- the so-called Schools Body Donor Programme (especially donated companion animals and wild animals for use in anatomy teaching);
- wildlife zoo facilities (mainly for post-mortem examination or anatomy as well as handling, management and diseases of zoo animal species);
- the Irish Marine Institute (fish caught under ongoing fisheries stock monitoring programmes);
- local farmers (submitted carcasses for pathology).

With respect to the above-mentioned principal sources of learning material and teaching activities, during the COVID-19 pandemic the teaching hospital accepted urgent and emergency cases from referring veterinary practitioners in the initial time period March-June 2020 before returning to full staff and case number capacity in Summer 2020; the Lyons Farm continued working through a busy spring calving and lambing season.

All procedures carried out on animals by students in Lyons farm are subject to licence from the Health Products Regulatory Authority (HPRA) under the requirements of Directive 2010/63/EU. This requires in the first instance an application to the UCD Animal Research and Ethics Committee (AREC) followed by an application to the HPRA. The responsibility for non-compliance is with designated persons. This has increased the bureaucratic and legislative burdens for staff responsible for the farm animal clinical rotations and electives.

Table 5.1.1. of the SER shows the adequacy of the cadavers and material of animal origin used in practical anatomy training.

Table 5.1.2 of the SER shows the adequacy of the number of healthy animals used for preclinical training.

In the case of healthy animals or animal remains for use in Anatomy, the related utilization is operated under protocols approved by the UCD Animal Research Ethics Committee.

All the materials of animal origin ready for disposal are first deposited in a Category 1 waste management skip, held on site in a chilled room and then removed by a licensed Category 1 waste management company.

In respect to the clinical training - thanks to the internal facilities and equipment present in the teaching hospital, as well as to the several collaborations with the external institutions and the structures indicated above - the VEE provides the students with learning resources that cover all major veterinary disciplines, both for companion animals and food producing animals.

Although the in-house caseload is mostly referral-based, the rotation in external placements, in the Clinical EMS as well as in the Equine Ambulatory Service allows an adequate practice in first opinion cases in companion animals and in horses. The Herd Health group unit does provide high-quality exposure to population medicine issues.

The in-house caseload of farm animals is mostly first opinion but also referral. During the ESEVT Visitation, the teaching staff that belongs to the "herd health group" indicated that when they carry out the herd visits, the students have the possibility to observe several cases of "routine" diseases (e.g., pneumonia and calf diarrhea) that are discussed with the accompanying teachers and/or the local veterinary practitioner.

Table 5.1.3. of the SER (indicating the number of patients seen intramurally) shows that the number of the rabbit, rodent, bird and exotic patients seen intramurally is not adequate to the number of the students involved, being the relative ESEVT Indicator (I11) below the minimum expected according to Annex 4 of the ESEVT SOP 2019. The exposure to this animal species is mostly based on the rotation at EPT structures or on voluntary attendance to structures specifically specialized. As a compensation, the VEE has recently initiated a formal arrangement with the multi-centre Village Vets private practice for non-conventional and exotic animals. In fact, the Village Vets company is constructing a new purpose-built facility for exotic animals that will be available for on-site attendance by the students as from April 2022 (an agreement has already been signed).

Table 5.1.4. of the SER indicates the number of patients seen extramurally (in the ambulatory clinics).

The table shows that the number of patients related to companion animals seen extramurally is not adequate to the number of the students involved, being the relative ESEVT Indicators (I12) below the minimum expected according to Annex 4 of the ESEVT SOP 2019. In respect to this, the VEE considers the elevated numbers of intramural companion animal cases (Indicator I8) as sufficient to compensate for this limitation. In addition, the formal arrangement for the companion animal first-opinion one-week rotation with Village Vets (commenced in September 2020) has been increasing the exposure to first opinion clinical cases during the rotation, with an estimated average case number per student per week in the range of 60-80 animals. This equates to a total student body exposure of 8,100-10,800 companion animals/year (based on a final year student count of 135). Moreover, as the teaching activity at the DSPCA (Dublin Society for the Prevention of Cruelty to Animals) is carried out in the context of the rotation in surgery under the direct supervision of a member of the teaching staff, this can be considered extramural caseload.

The same table 5.1.4. shows that the number of patients related to ruminants and pigs seen extramurally is not adequate to the number of the students involved, being the relative ESEVT Indicators (I13) below the minimum expected according to Annex 4 of the ESEVT SOP 2019. However, as mentioned above, students have access to several cases of "routine" diseases (e.g., pneumonia and calf diarrhoea) during the herd health visit, with discussion of clinical cases directly with the accompanying teachers and/or the local vet. These cases are not reported in the record system of the VEE and therefore are not counted in the tables and the Indicators.

Table 5.1.7. within the SER indicates the number of visits in herds/flocks/units for training in Animal Production and Herd Health Management.

Although the number of visited ruminants and pig herds is within the expected Indicator range (I15), the table shows that the number of visits of poultry and farmed rabbit units is not adequate to the number of students involved, being the relative ESEVT Indicator (I16) below the minimum expected according to Annex 4 of the ESEVT SOP 2019. The VEE is aware of these limitations and considers its satisfaction quite difficult to be met due to the absence of commercial rabbit farm units in the country and the unavailability of commercial poultry industry to allow external people to visit these units based on their biosecurity SOPs, respectively. To compensate this, the VEE has recently put in place a unit at Lyons farm for 20 laying hens that has been used for animal handling classes with first year veterinary medicine students and as a facility for students in the clinical years. Moreover, the teachers have been using multimedia material (e.g. videos) to provide the students with adequate learning materials.

During the COVID-19 pandemic a series of online lectures, innovative media rich learning resources for students (e.g. the creation of videos of the bovine clinical examination, live seminars and tutorials), and discussion forums were fostered. Subjects such as diagnostic imaging worked particularly well in a virtual context.

5.1.2. Comments
- The VEE is strongly committed to let the student be involved in all aspects of patient care and management.
- All major domestic species (companion and farm animals) are included in the recruitment of the learning resources.
- Despite the figures reported in the SER, the Visitation found evidence that students are exposed to a sufficient extramural caseload of large animal clinical cases during the "herd health visits".
- The VEE is aware that the low number of rabbit, rodent, bird and exotic patients has to be increased. The recent formal arrangement with the multi-centre Village Vets private practice is a first step to increase these numbers.
- Despite the figures reported in the SER, the Visitation evidenced that students are exposed to a more than adequate global exposure to both first opinion and referral clinical cases related to companion animal and that the low figure related to Indicator I12 is adequately compensated by the intramural caseload as well as by the caseload during the extramural and EPT training.

5.1.3. Suggestions for improvement
- It is suggested that the VEE set further compensations to increase the exposure of the students to clinical cases related to rabbit, rodent, bird and exotic patients.

- It is suggested that the VEE set further compensations to increase the exposure of the students to experiences related to poultry.

5.1.4. Decision
The VEE is partially compliant with Substandard 5.1 because:
- The number of the rabbits, rodents, birds and exotic patients is not adequate for the number of the students involved.
- The number of poultry provided to the students is not sufficient for an adequate hands-on exposure to poultry.

5.2 In addition to the training provided in the VEE, experience can include practical training at external sites, provided this training is organised under direct academic supervision and following the same standards as those applied in the VEE.

5.2.1. Findings
The students have several possibilities to include in their training, both preclinical and clinical, practical experiences in external sites, organised under the direct academic supervision of the teaching staff (that are present at such sites) and satisfying the same standards as those guaranteed in the VEE.
Among different possibilities, the VEE has set official relationships with the DSPCA-Dublin Society for the Prevention of Cruelty to Animals (used for extramural training as part of surgery rotation, especially neutering and shelter medicine), the Equine Ambulatory Service (specifically equine extramural first opinion clinical cases), dairy herd health visits (population medicine issues including mastitis control, fertility disorders, dairy/beef production issues, nutritional advice and epidemiological investigations, as well as occasional extramural food producing animals clinical cases) and finally the Tullyraine Equine Veterinary Clinic (formal arrangement for extramural both first–opinion and referral equine clinical cases, particularly devoted to endoscopy).

5.2.2. Comments
- The VEE provides the students with several possibilities of adequate training at external sites both as extramural training under the direct supervision of the teaching staff as well as EPT in adequate and approved structures and practices.

5.2.3. Suggestions for improvement
None.

5.2.4. Decision
The VEE is compliant with Substandard 5.2.

5.3. The VTH must provide nursing care skills and instruction in nursing procedures. Under all situations students must be active participants in the clinical workup of patients, including problem-oriented diagnostic approach together with diagnostic decision-making.

5.3.1. Findings

Nursing support integrated with the training of the students is organised by the VEE for all clinical disciplines. Instruction in nursing is enhanced by a structured relationship among the clinicians, nurses and students.

Nursing staff are strongly integrated in the clinical in-house daily activity, being also involved in the training and supervision of the students in many practical tasks (e.g. sample collection, diagnostic interventions, patient preparation for surgical procedures, patient monitoring, etc.).

This kind of training is supervised by dedicated Service Chiefs on duty, belonging to the teaching staff.

The Student Hospital Handbook completes the indications needed by the students for a satisfactory training based on "hands-on" tasks, giving information also under a legislative as well as ethical point of view.

5.3.2. Comments

- The VEE is strongly committed to providing an efficient system of nursing care skills and instruction in nursing procedures, detailed in the Student Hospital Handbook and aimed to let the students be actively involved in the clinical activities and in the direct management of the clinical cases.
- Organising various board/ward rounds, seminars and tutorials to maximise the learning opportunity of each case and to share the experience among peers is a very good way for all students to benefit from each case.

5.3.3. Suggestions for improvement

None.

5.3.4. Decision

The VEE is compliant with Substandard 5.3.

5.4 Medical records must be comprehensive and maintained in an effective retrieval system (preferably an electronic patient record system) to efficiently support the teaching, research, and service programmes of the VEE.

5.4.1. Findings

The patients are recorded in the in-house computer management system (Vetscope) that enables the interfaced management of the different disciplines, including the ancillary service disciplines. Moreover, it also serves for the management of the reports and referral letters. The system allows the retrieval of clinical information for teaching or research purposes.

Data that originate off-site for UCD patients are recorded on the Vetscope system when the staff return on-site.

Another medical records system is utilized for storing computerized digital imaging. It is usable by the students via networked computers throughout the hospital.

Another separate PACS server is used for uploading Ultrasound, CT and MRI images. This system can be accessed by staff and students.

Another computer system is used for herd health reports to record and analyse data. It is usable by students and staff.

5.4.2. Comments

- As indicated also in the SER, the Vetscope is somewhat outdated and a new system is being procured.

- The VEE is aware of the usefulness of having a unique system integrated with all the different services of the VEE (including diagnostic services and diagnostic imaging).

5.4.3. Suggestions for improvement
None.

5.4.4. Decision
The VEE is compliant with Substandard 5.4.

Standard 6. Learning Resources

6.1 State-of-the-art learning resources must be adequate and available to support veterinary education, research, services and continuing education. When the study programme is provided in several tracks/languages, the learning resources must be available in all used languages. Timely access to learning resources, whether through print, electronic media or other means, must be available to students and staff and, when appropriate, to stakeholders. State-of-the-art procedures for bibliographical search and for access to databases and learning resources must be taught to undergraduate students.

6.1.1. Findings
The University has outlined its Educational Strategy 2015-2020, which emphasizes the value of a holistic education; one that stimulates learning in a research-intensive environment and encourages students to develop their personal and professional qualities while studying at UCD. This strategy relies on the actions of the following core units for support, development, and hosting of learning resources:
- UCD Library
- UCD IT Services which provides all central IT applications, support and infrastructure for staff and students throughout the University and hosts the e-learning environment Brightspace.
- UCD Teaching and Learning, a dedicated unit which supports staff to deliver inclusive, innovative, and research-informed teaching that leads to engaging and meaningful learning experiences for all UCD students.

Students receive an IT induction introducing them to key services including their UCD Connect account, IT facilities on campus, software, UCD apps, wireless services, online safety, the virtual learning environment and where to find help and advice. They receive training and ongoing support for MyProgress, PathXL and ePortfolio software from the educational technologist.

Library induction: At the start of each semester, peer mentors, trained by the Liaison Librarian, lead small groups of students on a tour of the library to demonstrate the facilities and teach them how to optimise their use of the library.

Staff

University College Dublin provides a comprehensive programme of development opportunities for academic and professional staff.

A specific half-day course, the UCD Orientation Programme, is presented for new staff providing information on, among other topics, strategy, organisational structure, and services across the University.

Collections Services Unit (CSU)

The CSU staff are responsible for selecting, ordering, and processing Library materials at every stage of their lifecycle. Books listed on the module reading list in the module descriptor are normally given priority.

New technologies judged important to assist the VEE, are licensed by the VEE after being through the Educational Technology Advisory Network (ETAN) system, The acquisition of these technologies is approved by the Dean.

Examples include:

- Tutor - a virtual microscopy platform,
- MyProgress - a workplace-based assessment platform,
- Sofia - a curriculum mapping platform.

Faculty members are offered training and support by staff in the VetEd Hub team, to integrate these platforms into the programme.

In 2018 the institutional Virtual Learning Environment (VLE) was migrated from Blackboard to D2L BrightSpace.

6.1.2   Comments
None.

6.1.3   Suggestions for improvement
None.

6.1.4.   Decision
The VEE is compliant with Substandard 6.1.

6.2 Staff and students must have full access on site to an academic library administered by a qualified librarian, an Information Technology (IT) unit managed by an IT expert, an e-learning platform, and all the relevant human and physical resources necessary for the development of instructional materials by the staff and their use by the students.

The relevant electronic information, database and other intranet resources must be easily available for students and staff both in the VEE's core facilities via wireless connection (Wi-Fi) and from outside the VEE through a hosted secured connection, e.g. Virtual Private Network (VPN).

6.2.1. Findings
UCD Library (https://www.ucd.ie/library/) comprises five libraries with four library sites on Belfield Campus. UCD Students have access to all UCD Libraries and three are situated in close proximity to each other - the School of Veterinary Medicine library, the Health Sciences Library, and the James Joyce Library.

The UCD VEE library is in the VEE with 90,000 user visits on average each year providing access to a world-class electronic library service and subscribes to other databases including CAB Direct, the key Veterinary Medicine Database.

The Client Services Team is responsible for the development and management of high-quality services responsive to user needs.

- The User Services Manager is responsible for the management of the Veterinary Medicine Library.
- The VEE Liaison Librarian (SLL) is a member of the Programme Board and Staff/Student Liaison Committee. Among other duties, the SLL supports Teaching & Learning, and provides Library Orientation and training for 1st year undergraduates.
- The Collection Development & Resource Description Librarian is responsible for the

collection development/selection & acquisition of materials, cataloguing, and deciding on what is currently present in the collection.

Opening hours: These are very extensive from 08:00-22:00 most days with extended hours available in the 6 weeks before examinations.

Capacity: The Veterinary Library has recently increased the study desk capacity by 25% to a total of 133 seats. In total, UCD Library provides over 3,000 study spaces for groups and individuals with two well-equipped library hubs for collaborative work / group study and another 24 group study rooms across all sites.

All are well equipped, and some run a laptop lending service.

An online booking system (Dashboard) is in place that enables students to book study spaces in any one of the libraries.

UCD also hosts an extensive Online Research Library providing 24/7 remote access.

The library office, centrally located, provides on-site support for students and academics in the VEE.

BrightSpace is the institutional VLE that enables online delivery of modules. All programme modules have a presence on BrightSpace providing blended learning and online assessment opportunities for students.

Technology Support

The VEE has licensed the three main software packages mentioned above to support the attainment of key programme outcomes.

UCD IT Services provide additional software and support for a multimedia suite available to students and staff online, through drop-in clinics and an IT Helpdesk.

Human and Physical Resources in Learning and Instructional Materials

The VEE has a Veterinary Education Team (VetEd Hub) to support active student learning and it provides hardware and software supports for enhanced multimedia resources.

One faculty member of the VEE is currently undertaking a UCD Fellowship in Teaching and Academic Development examining the blended learning approaches using BrightSpace.

UCD Teaching and Learning and UCD IT Services run events and workshops covering the design and delivery of on-line materials. The VEE hosts an informal Teaching and Learning Special Interest Group to share best practice.

Full Access: All academics, staff and registered students are issued with an individual ID and Login to the 'UCD Connect Portal' enabling them to access electronic library resources while on campus and when logged in from a remote site. High-speed wireless access is available campus-wide and UCD Connect users can also access the network via Eduroam.

A VPN is available to staff.

6.2.2. Comments
- There is easy access for students and staff to an enormous information resource, with full support from library and IT staff for teaching and learning.

6.2.3. Suggestions for improvement
None.

6.2.4. Decision
The VEE is compliant with Substandard 6.2.

6.3 The VEE must provide students with unimpeded access to learning resources, internet and internal study resources, and equipment for the development of procedural skills (e.g. models). The use of these resources must be aligned with the pedagogical environment

and learning outcomes within the programme and have mechanisms in place to evaluate the teaching value of changes in learning resources.

6.3.1. Findings

The Veterinary Library currently has over 12000 books in its collection. Most of these are available on open access in two main collections - the General Long Loan Collection and the Short Loan Collection.

Online library resources

Over 400 e-books are available within the library catalogue. The library purchases journal titles in digital format but maintains print journal titles if an electronic version is unavailable. It contains most of the relevant veterinary journal titles published in English.

Technology on-line

Access to learning resources is available online both on and off campus via BrightSpace where all modules have a presence. The VetEd Hub team encourages and supports best pedagogical practices. SOFIA, the VEE's curriculum mapping platform, provides evidence of teaching and learning alignment to module and programme learning outcomes supported by the systems in InfoHub.

Outcome assessment/evaluation

Outcomes assessment continues throughout the academic year. At the end of each module the student is offered a feedback survey through InfoHub and data at module, year and programme level provide insights for module coordinators to evaluate their teaching and provide enhancements where appropriate.

CSC

The Clinical Skills Centre is student-focused and is designed to help students learn and improve their practical skills by introducing clinical procedures using small and large animal mannequins, simulations, and models to practise in a relaxed environment. The capacity is currently 28 students allowing for small-sized group practical sessions and classes.

The CSC focuses on skills that are aligned with learning outcomes of module content, to better prepare the students for clinical placements and assessments (OSCEs and DOPS). It is an integral part of both the Veterinary Medicine and Veterinary Nursing curriculum and can be used during self-directed learning sessions or during practical classes.

All the material has been developed with support from the lecturers and clinicians and international experts and is constantly being reviewed. Models include a full-size horse and a full-size bovine, limbs with latex tubing, latex pads and canine and feline models to practise skills such as bandaging, injection techniques, catheter placement/management, blood sampling and suturing. There is also a laboratory and anaesthesia station.

A Clinical Skills Tutor is available to assist students and give feedback from 8am-5pm Monday to Friday, and students can also gain access to the Centre outside of these times, by using a stored key and agreeing to abide by the clearly displayed House Rules.

Security cameras operate 24/7 to monitor Health and Safety and ensure student safety.

6.3.2. Comments

- The VEE must be commended for the well-resourced Clinical Skills Centre.

6.3.3. Suggestions for improvement

- It is strongly suggested that the management of the VEE provide the Clinical Skills Centre with both more physical space as well as further technical help.

6.3.4. Decision

The VEE is compliant with Substandard 6.3.

Standard 7. Student admission, progression and welfare

7.1 The VEE must consistently apply pre-defined and published regulations covering all phases of the student "life cycle", e.g. student admission, progression and certification.
In relation to enrolment, the VEE must provide accurate and complete information regarding all aspects of the educational programme in all advertisings for prospective national and international students.
Formal cooperations with other VEEs must also be clearly advertised.

7.1.1. Findings
Information for potential applicants is available through UCD's and VEE's website. Full descriptions of the programmes and modules are linked from that site. The module descriptions include detailed information on content, teaching and learning methodology, learning outcomes, prerequisites, and assessment and remediation strategy.
Additional measures to inform prospective applicants include outreach events at secondary schools, representation at the UCD annual open day and UCD summer festival and participation in the annual higher options career fair in Dublin. A 2-week summer training program for secondary school students has 5 places reserved for students from socio-economic disadvantaged backgrounds. Equal regional representation is also ensured. Additionally, regular site visits are organised to the on-campus veterinary hospital by secondary school students and parents from a diverse background. The summer school is a week-long training programme designed so that secondary school students can learn more about veterinary medicine as well as studying at UCD. A pre-clinical staff member, together with a team from the school office has been responsible for organising and running the summer school.

7.1.2. Comments
None.

7.1.3. Suggestions for improvement
None.

7.1.4. Decision
The VEE is compliant with Substandard 7.1.

7.2 The number of students admitted must be consistent with the resources available at the VEE for staff, buildings, equipment, healthy and diseased animals, and materials of animal origin.

7.2.1. Findings
Based on the size of the physical facilities, staff numbers and Veterinary Hospital caseload, the VEE has the capacity to accommodate approximately 140 to 150 students per study cohort. For the 5-year EU undergraduate program, the Higher Education Authority of Ireland has set the number of places at 82, while the Graduate entry program is limited to 50. Resources are continuously considered by the VEE's SMT and School Executive, and appropriate action is implemented to ensure sufficient capacity.

7.2.2. Comments
- An example of identified and corrected bottleneck along with an increase of student intake was given in the SER.

7.2.3. Suggestions for improvement
None.

7.2.4. Decision
The VEE is compliant with Substandard 7.2.

7.3 The selection and progression criteria must be clearly defined, consistent, and defensible, be free of discrimination or bias, and take into account the fact that students are admitted with a view to their entry to the veterinary profession in due course.
The VEE must regularly review and reflect on the selection processes to ensure they are appropriate for students to complete the programme successfully. If the selection processes are decided by another authority, the latter must regularly receive feedback from the VEE.

Adequate training (including periodic refresher training) must be provided for those involved in the selection process to ensure applicants are evaluated fairly and consistently.

7.3.1. Findings
UCD offers two Veterinary Medicine Programmes: a 5-year Undergraduate Program ('standard programme') and a 4-year Graduate Program. Each has its individual admission criteria, tailored to the population of students eligible to apply. These are explained in detail in the SER for both programmes, separately for EU students and international applicants (= from a country outside the European Union, EU and European Economic Area, EEA). The selection process for undergraduate EU-entrants to the 5-year programme is wholly managed by the Central Applications Office, whereas the selection process for all non-EU students and all those applying through the graduate entry route is managed by the University Admissions Office and the SVM Admissions Committee.

The SVM Admissions Committee is a sub-committee of the SVM Programme Board and subject to UCD Admissions Policy. It defines admission criteria and selects students for entry to the VEE. It reports to the SVM Programme Board and the Dean. The Committee is chaired by the Associate Dean for Admissions and Student Progression and is comprised of a total of 6 academics with administrative support from the programme office. Two new non-voting members representing the veterinary profession (1 Irish, 1 international) will be appointed from 2021. The Committee considers all graduate applicants to the 5- and 4-year programme and international applicants to the 5-year programme. It reviews applications, conducts interviews, ranks applicants and recommends decisions to the SVM Programme Board, which makes offers. It assesses and recommends for acceptance transfer applicants to the programmes, reviews entry routes and develops new non-standard routes as appropriate. All members of the Admissions Committee are expected to take relevant training to their roles (e.g. interview technique, unconscious bias training) where appropriate. The Committee conducts an annual process review at the end of each admission cycle and reports to the SVM Programme Board and the Dean.

EU applicants to the 5-year programme need to meet the University Matriculation entry requirements as determined by performance in the State Leaving Certificate (or equivalent) exam in six subjects with minimum O6/H7. Equivalents for other European/International School Leaving Examinations are calculated by the UCD Admissions Office. The applicants also must have required ≥ 60 hours of animal handling or veterinary practice experience with at least two of defined animal species categories. This is independently verified by the VEE.

UCD is fully compliant with the Higher Education Authority of Ireland Higher Education National Plan for Equity of Access. This policy sets equity of access to higher education as a fundamental principle of Irish education policy with a target of 33% participation of students from under-represented groups in undergraduate programmes. The policy is coordinated by the UCD-Widening Participation Committee, in which the VEE has a direct representation. Ten out of 80 places on the 5-year programme are reserved for applicants who are disadvantaged by reason of socio-economic circumstances or disability via the Higher Education Access Route and Disability Access Route to Education (DARE). These applicants are considered at entry point levels 15% below those required for entry through the general pool. Full details are available on the website. Applicants are also eligible to be considered through UCD's Elite Athlete and Elite Performing Arts scholarship pathways, which allow for entry with up to 60 fewer CAO points than the general pool. A quota of 2 places is available.

Recently, the SVM Admissions Committee has recommended mature entry to Veterinary Medicine based on completion of a structured UCD Access to Science, Engineering & Agriculture course, required experience working with animals under veterinary supervision and an interview process. This new mature entry is aimed to be established for September 2022 intake and is currently being reviewed by the SVM Program Board for consideration.

A full description of the selection process is available on the Central Admission Office website. Students are offered places, based on the number available, in order of Leaving Certificate points score, or equivalent. The Office has an Independent Appeals Commission to which applicants, whose complaints have not been resolved by the Office, can contact. This process is described on the website.

International students for the 5-year programme may apply directly through the UCD Admissions website. Applicants are judged by the Admissions Committee based on academic achievement in general education and basic sciences, academic and DVM References, contribution to society and personal statement.

Graduates with an honours degree in biological sciences are eligible to apply to the 4-year (Graduate entry) programme (up to 50 places). EU applicants (5-8 places) are initially screened using their Aptitude test (GAMSAT = Graduate Australian Medical Schools Admissions Test) scores and approximately the top 20 are called for an interview. These are further ranked based on a combination of their GAMSAT score, interview and scores in other categories (contribution to society, higher educational achievements, relevant experience, personal statement) and offers/no offer/reserve recommendations are made. Decisions for international applicants (40-45 places) are made based on degree grade/GPA, score in other categories (academic and DVM references, contribution to society, experience, personal statement) and queries raised by the Admissions Committee.

Admission intake numbers are reviewed annually by the UCD Admissions Committee and the SVM Associate Dean for Admissions in consultation with the Dean and Senior Management Team of the VEE. The intake is stable and predictable, and varies little from year to year. Any increase in enrolment is planned 12-24 months in advance by the UCD Admissions Committee, the Dean and SMT of the VEE in consultation with the SVM Programme Board and SVM Admissions Committee.

The VEE prefers not to fill all of the places rather than reduce entry standards. In 2019, 87% of students in the 5-year programme and 86% of students in the 4-year programme graduated in time, and 10-11% within one year's delay.

7.3.2. Comments
None.

7.3.3. Suggestions for improvement
None.

7.3.4. Decision
The VEE is compliant with Substandard 7.3.

7.4 There must be clear policies and procedures on how applicants with disabilities or illnesses are considered and, if appropriate, accommodated in the programme, taking into account the requirement that all students must be capable of meeting the ESEVT Day One Competences by the time they graduate.

7.4.1. Findings
All students with a disability or significant ongoing illness have the opportunity to receive relevant academic and/or exam support via the UCD Access & Lifelong Learning unit. To receive support, students are invited to attend a short meeting called Needs Assessment. Teachers get the suggestions from the UCD Access unit on class lists, and staff facilitate reasonable accommodation required by the students. Support includes examination accommodations (e.g. extra time, alternative location), classroom accommodations (e.g. permission to use assistive technology), guides on how to manage particular disabilities (on website), and adoption of universal design concepts in teaching and assessment to meet the needs of a diverse class. Student advisers, peer mentors and program office staff offer timely support to students.

Student attendance and engagement is monitored by year and module coordinators, which allows timely identification of student issues and facilitates early intervention. In case faculty or staff notice informally that a student is struggling (e.g. a change in physical wellbeing, behaviour or academic progress), they may speak to the student or contact the Student Adviser to discuss their concerns. Classmates may also report concerns about a peer to a member of faculty or the Student Adviser.

The VEE is currently piloting a project that tracks academic engagement via the virtual learning environment (Supporting Student Success - A Collaborative Approach to Enhancing Engagement, Employability & Life Skills).

7.4.2. Comments
- The policies and procedures for student support are clear.
- The VEE can be commended on its excellent student support office.

7.4.3. Suggestions for improvement
None.

7.4.4. Decision
The VEE is compliant with Substandard 7.4.

7.5 The basis for decisions on progression (including academic progression and professional fitness to practise) must be explicit and readily available to the students. The VEE must provide evidence that it has mechanisms in place to identify and provide remediation and appropriate support (including termination) for students who are not performing adequately.

The VEE must have mechanisms in place to monitor attrition and progression and be able to respond and amend admission selection criteria (if permitted by national or university law) and student support if required.

7.5.1. Findings

The University Academic Regulations set out the UCD's formal regulations in relation to how a degree programme is structured, its workload, assessment, progression requirements and award classification.

A typical year comprises of 60 credits (usually 30 credits per teaching trimester). Progression to a subsequent year of the course typically occurs when a student has met all requirements of that year. A student may progress to the subsequent year without completing the previous year in case the credits required by the student to complete the incomplete year do not exceed 10 credits, and the student has completed all preceding years to the incomplete year. The student may not take any modules as part of the subsequent year that conflict with their ability to take modules as part of the incomplete year. All student grades are reviewed at the Examination Board, which is attended by all module coordinators. Students with potential continuation concerns are also identified at meetings of the SVM Programme Examination Board.

Most students perform satisfactorily in their programme. Delayed progression can arise from several reasons, including reasons of extenuating circumstances. The VEE and UCD provide a range of support services to students to aid their performance and progression. In case of student illness, the UCD Extenuating Circumstances Policy is followed. The student may apply online for these circumstances via their SISWeb account and has to provide supporting documentation, which will be reviewed by the module coordinator. The matter currently may be referred onwards to the Examinations Board for consideration and a final recommendation. Students identified as being potential progression concerns are contacted by a representative of the SVM Programme Office to arrange a meeting with a Student Progress Committee that has been convened for this purpose.

The UCD Academic Regulations outline requirements and limits for student workload. A programme may not require a student to take more than 30 credits per trimester (including elective credit), and a student may not register to more than 40 credits in any trimester. In determining workload, credits from resits and repeats shall be counted by a Programme Board. In case the Board finds a student's workload unsustainable, it may, following appropriate consultation with the student, require that the student's workload be reduced.

The VEE follows the UCD Continuation and Readmission Policy and Procedures regarding students' continuation issues. This procedure includes an appeal mechanism. UCD Academic Regulations outline continuation and readmission issues. The SVM Programme Board reviews the academic performance of a student who fails to remediate a failed module after 3 defined attempts or the student fails to achieve any additional standards for acceptable performance and progression for the programme as defined in the programme specification. Where a student's performance is deemed to be academically unacceptable by a Programme Board, it refers the case to the Academic Council or its relevant committee and the student's registration may be discontinued.

The University Continuation Review Meetings aim to inform students of the support that is available to address any issues that may have contributed to their poor academic performance, and also put in place a clear academic plan to remediate failed modules and support their progression. The 'Record of Continuation Review Meeting' template ensures that students are clear on what was discussed and/or agreed. Following the meeting the 'Agreed Academic Plan' (section C) can be copied and pasted into Unishare as a record of the meeting and it can also be copied and pasted into the follow-up email to the student.

The VEE is subject to UCD regulations on academic misconduct and fitness to practice. The UCD Student Code sets out the UCD regulations and expectations in respect of student behaviour and conduct, and describes the policy and procedures for managing student academic misconduct. The UCD policy and process for assessing and managing fitness to practice are detailed on the UCD website. The VEE has a Fitness to Practice Committee comprised of 3 senior academics who report to the School Program Board and the Dean and meet on an ad-hoc basis.

In 2019, 86.8% of students graduated on time. The main reasons for relative student attrition are academic (failure on modules), but students may also take time away from studies for personal or medical issues. Approximately 4.5% choose to leave the programme.

The UCD and VEE's system for student support and progression are working efficiently. From 2020 on, a new UCD wide student support system is being implemented.

The SVM Admissions Committee reviews the admission criteria annually and can recommend any changes to the SVM Programme Board and the Dean who act together agree to any amendments. The SVM Admissions Committee has the freedom to identify and bring to the SVM Programme board and the Dean changes in the admissions criteria for consideration and adoption by the SVM Programme Board and the Dean.

A system to monitor student intake metrics and correlate them with student progression is being implemented.

The new entry pathway for mature students is being adopted and will be implemented from 2022 onwards.

7.5.2. Comments
None.

7.5.3. Suggestions for improvement
None.

7.5.4. Decision
The VEE is compliant with Substandard 7.5.

7.6 Mechanisms for the exclusion of students from the programme for any reason must be explicit. The VEE's policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, must be transparent and publicly available.

7.6.1. Findings
The VEE follows established UCD policies regarding matters relating to student progression and continuation. Information for students is available linked from the UCD Student Engagement, Conduct, Complaints and Appeals website.

The VEE is subject to UCD regulations on academic misconduct and fitness to practice, and this determines the mechanism for exclusion of students. The UCD Student Code sets out the UCD's regulations and expectations in respect of student behaviour and conduct, and describes policy and procedures for managing student academic misconduct. The UCD policy and process for assessing and managing fitness to practice are detailed on the website. The SVM Fitness to Practice Committee meets on an ad-hoc basis to address cases as they arise (twice in the last two years) and reports to the School Program Board and the Dean.

The UCD Assessment Appeals Policy describes the circumstances under which students may submit assessment appeals and the procedures that are followed. Appeal of continuation and

readmission are described under the policy on continuation and readmission on the UCD webpage.

7.6.2. Comments
None.

7.6.3. Suggestions for improvement
None.

7.6.4. Decision
The VEE is compliant with Substandard 7.6.

7.7 Provisions must be made by the VEE to support the physical, emotional and welfare needs of students. This includes, but is not limited to, learning support and counselling services, career advice, and fair and transparent mechanisms for dealing with student illness, impairment and disability during the programme. This shall include provision of reasonable adjustments for disabled students, consistent with all relevant equality and/or human rights legislation.
There must be effective mechanisms for resolution of student grievances (e.g. interpersonal conflict or harassment).

7.7.1. Findings
The UCD Student Desk primarily deals with queries regarding fees, official documents, student registration and examinations. The UCD Students' Union represents all students and provides a range of services, such as training for class representatives, representation on University committees and welfare support. UCD Global provides extra support and information for international students.
The UCD Student Adviser provides pastoral advice and information on social, personal and practical issues and may refer students for more specialised advice to other services. The SVM Student Adviser offers students time and space to explore personal, social or emotional issues of concern to them. She works closely with the Dean and the SVM Programme Board. She also provides advice on relevant UCD policies, procedures and services. Interactions and contacts with students are documented using My UniShare system. In the 2020-2021 academic year, the SVM Student Adviser documented approximately 4,000 interactions (17% of all interactions with the Student Advisory unit across the UCD).
The UCD Chaplaincy Team is available throughout the year for support, guidance and advice in complete confidence for those of all faiths and none, along with activities and volunteering opportunities for students.
The Student Welfare Fund and Student Assistance Funds aid students who have financial difficulties. Student Advisers/ Chaplains are routinely involved in helping students apply for these funds.
The UCD Student Health and Counselling provides on-campus medical, psychological and psychiatric care to registered students. Full details are available on the website. Student counselling is free and confidential service staffed by professionally qualified psychologists and counsellors. The service provides support for students when personal issues arise that affect their well-being, capacity to cope, relationships or learning. The waiting list to the psychological counselling services is currently approx. 2-3 weeks. If a case is urgent, the UCD Counselling Service will see a student within a number of hours - 24 hours. The most common

welfare problems of the students are stress and anxiety, financial concerns as well as family and social issues.

An addiction counsellor is also available. UCD Access and Lifelong Learning provides support for students who have a disability or a chronic, long-term illness.

UCD has a broad range of student clubs and societies, and VEE students are encouraged to participate in the university-wide activities. UCD VetSoc, an official society of which all VEE students are members, organises both social and academic events. There are several veterinary student-led societies such as UCD One Health, European Veterinary Business Association and Veterinary Equestrian Club. Students with exceptional academic, sporting or cultural performance are supported through membership of UCD's Ad Astra Academy.

The VEE operates an integrated School and Programme Office which students use for support on issues including admissions, academic progression, letters of reference, assistance with registration, and liaison with offices across UCD. The Programme Office team is responsible for extra-mural studies and timetabling and annual academic calendar events and liaises daily with the Student Advisers, administrators and UCD Registry and all other university units. The Associate Dean for Teaching and Learning works closely with the Office staff and the Student Adviser and responds to the issues raised by students individually, in groups, or by student representatives. A member of the academic staff is responsible for liaising with each year group as Year coordinator. This involves regular meetings with Class Representatives and attendance at Staff-Student Liaison Committee meetings. Each module has an academic coordinator.

The Peer Mentor Programme provides training for students who then act as mentors for new students, commencing during orientation week and continuing throughout the academic year.

There is a UCD specific process for resolution of student grievances, linked from the UCD Student Engagement, Conduct, Complaints and Appeals website. The governance document is the Student Complaints Policy. Students are advised to raise their complaint as soon as possible with the relevant person or area in order to get the issue resolved quickly at the local level. If the student is not satisfied with the local response, he/she may submit a formal complaint form to the Head of the School. If the student remains dissatisfied, having received a formal response from the Dean/Unit, they can make a complaint at University level, by submitting a Student Complaint Form, which is reviewed by the Student Complaints Officer.

Bullying, harassment and sexual harassment are contrary to the UCD Dignity and Respect Policy, which sets the framework for dealing with complaints informally as well as information on the formal procedure. It also contains information on the supports available for staff and students. Students, staff and visitors to UCD can report issues of a Dignity & Respect nature anonymously through the UCD Report and Support tool.

7.7.2. Comments
- Career advice was not mentioned in SER under the support mechanisms but a Career Office is located on campus.
- Students have easy access to the SVM Student Adviser and this support is highly valued.
- The UCD and VEE systems for student support are commendable.

7.7.3. Suggestions for improvement
None.

7.7.4. Decision
The VEE is compliant with Substandard 7.7.

7.8 Mechanisms must be in place by which students can convey their needs and wants to the VEE. The VEE must provide students with a mechanism, anonymously if they wish, to offer suggestions, comments and complaints regarding compliance of the VEE with national and international legislation and the ESEVT standards.

7.8.1. Findings

Multiple systems are in use to collect and analyse students' opinions. Students submit feedback on each module, with module coordinators having the opportunity to augment the basic set of questions included in the feedback process. The module feedback is not compulsory, and the response rate is very low, between 10-15% across all modules. The VEE systematically organizes focus groups, consisting of 12-15 students per stage, at the end of every academic year with each class group to get students' opinion on what worked well and what could be improved. The feedback from each year group is then presented to and discussed by the relevant academic staff. The agreed action items are agreed and communicated back to students.

Staff-student Liaison Committees are held twice in trimesters 1 and 2 and offer a key vehicle for obtaining and canvassing student opinion. Student representatives sit on the SVM Governing Board and are invited regularly with the Dean and Programme Office staff to discuss specific issues of concern and potential new initiatives.

A confidential post box is provided at a prominent location for students who wish to raise issues anonymously. The School Office looks after the Post Box and any issues would be reported to the Dean straight away to review suggestions/concerns raised by the student.

7.8.2. Comments

- Students have several ways for conveying their needs and wants to the VEE and find that their voice is heard.

7.8.3. Suggestions for improvement

None.

7.8.4. Decision

The VEE is compliant with Substandard 7.8.

Standard 8. Student assessment

8.1. The VEE must ensure that there is a clearly identified structure within the VEE showing lines of responsibility for the assessment strategy to ensure coherence of the overall assessment regime and to allow the demonstration of progressive development across the programme towards entry-level competence.

8.1.1. Findings

The general framework guiding assessments is regulated by the University, and the UCD Assessment unit provides support to the Schools in scheduling, implementation of exams and grading, and also in adapting the examination processes wherever needed. This process is supported by the University-wide software BrightSpace.

The Veterinary Medicine Programme Exam board, which is formally responsible for the awarding of grades, progression and graduation of veterinary students, is governed by a range of University regulations.

A range of data collection tools are deployed multiple times throughout the year to collate both quantitative and qualitative data related to student assessment, which are further analysed by

the Curriculum Review Committee. The VEE regularly reviews its programme of assessment to ensure that graduates have achieved the programme outcomes and demonstrated the identified clinical competencies. This strategic approach to assessment is informed by evidence-based pedagogy (Swanwick, 2014) and best (veterinary) educational practice (Baille, 2014) as well as ongoing consultation with medical assessment experts.

8.1.2. Comments
- The VEE must be commended for the assessment framework, use of multiple modes of assessment which allows for an equal opportunity for students with strengths in different modes of examination to show their knowledge across all subjects.
- The support provided by the University to implement and evaluate both the exam process and the exam outcomes, and also for continuously working on scientifically based improvements to this process. The approach shows clear lines of responsibility for the assessment strategy and allows constant development across the programme towards predefined day one competencies.

8.1.3. Suggestions for improvement
None.

8.1.4. Decision
The VEE is compliant with Substandard 8.1.

8.2. The assessment tasks and grading criteria for each unit of study in the programme must be published, applied consistently, clearly identified and available to students in a timely manner well in advance of the assessment. Requirements to pass must be explicit. The VEE must properly document the results of assessment and provide the students with timely feedback on their assessments. Mechanisms for students to appeal against assessment outcomes must be explicit.

8.2.1. Findings
After the winter and the spring trimester, the end-of trimester examinations are scheduled. Students have approx. one week of revision time between the end of classes and the beginning of the examination period. Assessment information is provided to students through the published module descriptors, and details are also published by the module coordinators in BrightSpace (online information system). Additionally, more general guidelines related to the examination process are published on the University website.

The VEE's examination schedules are planned centrally in meetings between Module Coordinators and the management to ensure appropriate timing and student workload.

The grading schemes are based on University Academic Regulations and use letter grades (A-F). For objective and quantitative assessment components, a UCD alternative numerical scale is used and subsequently converted into the letter grade scale. For some assessment formats, the pass/fail option is implemented. Grades have values attached to them; this is used to calculate grade point averages (GPA) for each student. The minimum pass grade is D- which corresponds to 50% of the possible points in the respective exam or test. Quality assurance processes are implemented by UCD Assessment for all assessment types to reduce the scope for error and to ensure that assessment items are correctly formatted, testing time is sufficient, and exam papers are internally and externally reviewed.

All assessment results have to be entered into the University-wide system "GradeBook" no longer than 20 days post assessment due date. The UCD Assessment Team together with the

University (student) Registry oversees the grading rules and GPA calculations and provides feedback to the respective programme exam boards. Timelines for posting provisional and final examination results are published online in a Grade Approvals Process Schedule. Students can appeal the results of exams to the Academic Council Committee on Assessment Appeals (ACCAA) by following the respective procedures and policies, which are available online.

8.2.2. Comments
- The assessment tasks and grading criteria in the programme are published in a timely manner, and requirements for passing are explicit.
- Assessment results are centrally documented and evaluated, and students have predefined options to appeal against assessment outcomes.

8.2.3. Suggestions for improvement
None.

8.2.4. Decision
The VEE is compliant with Substandard 8.2.

8.3. The VEE must have a process in place to review assessment outcomes, to change assessment strategies and to ensure the accuracy of the procedures when required. Programme learning outcomes covering the full range of professional knowledge, skills, competences and attributes must form the basis for assessment design and underpin decisions on progression.

8.3.1. Findings
The VEE, in a curriculum review process that started in 2015, adopted an outcome-based approach by mapping all teaching activities to learning objectives. This was subsequently formalised by the purchase of a curriculum mapping software (Sofia) that visualizes how teaching activities, module outcomes and assessments map to predefined learning outcomes of the respective programme, domains of competence and accreditation standards. Student progress is monitored in each academic year and summarised in the MVB assessment matrix. Throughout the course of study, a wide range of direct and indirect assessment types such as in-class and online quizzes and MCQ, essays, posters and presentations but also (especially in higher trimesters) case-based learning, Objective Structured Clinical Examinations (OSCE) and Direct Observation of Procedural Skills (DOPS) formats. In addition to instructor-based assessment formats, peer assessment is used to increase feedback opportunities, particularly in the development of clinical skills. In clinical rotations, a Work-based Assessment (WBA) with end of rotation evaluation forms using Likert-Scale descriptors is implemented.
Both direct and indirect assessment methods are used summatively and formatively throughout the programme, and evaluation of the results is used to improve both the curriculum and the assessment approaches.

8.3.2. Comments
- The VEE must be commended for the effort taken to – in detail - map teaching activities, module outcomes and assessments to predefined learning outcomes.
- Student progress covering the full range of professional knowledge, skills, competences and attributes is assessed by a wide range of different approaches, results are monitored and summarized annually, and the information is used to change assessment strategies when seen necessary.

8.3.3. Suggestions for improvement
None.

8.3.4. Decision
The VEE is compliant with Substandard 8.3.

8.4. Assessment strategies must allow the VEE to certify student achievement of learning objectives at the level of the programme and individual units of study. The VEE must ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach.

8.4.1. Findings
The process of having mapped learning objectives and assessments to expected outcomes and domains of competencies during the curriculum review process as well as the use of the curriculum mapping software (Sofia) has generated an approach of learning and assessment that utilises a broad range of assessment formats and is student-centred. Students are activated by the diversity of learning and testing formats that include OSCE and DOPS formats as well as peer-review activities. For objective and quantitative assessment components a UCD alternative numerical scale is used for all individual class assessments and subsequently converted into the letter grade scale. For some assessment formats, the pass/fail option is implemented. Letter grades are converted into a numerical scale with values attached to them; this is used to calculate grade point averages (GPA) for each student.

For work placements in extramural studies (EMS) during the preclinical and clinical study phase, students are pre-actively involved in identifying the respective learning objectives related to their placement, which are recorded in the University Placements system and must be approved by the module coordinator.

8.4.2. Comments
- The assessment and grading process enables the VEE to certify student achievement of learning objectives both at the level of the programme and individual units of study.
- Student representatives are involved at various levels in the assessment-related QA processes. Approaches such as group work, peer-to-peer feedback, OSCE and DOPS as well as the formulation of own learning objectives are used to actively engage students in the learning process.

8.4.3. Suggestions for improvement
None.

8.4.4. Decision
The VEE is compliant with Substandard 8.4.

8.5. Methods of formative and summative assessment must be valid and reliable and comprise a variety of approaches. Direct assessment of clinical skills and Day One Competences (some of which may be on simulated patients), must form a significant component of the overall process of assessment. It must also include the quality control of the student logbooks in order to ensure that all clinical procedures, practical and hands-on training planned in the study programme have been fully completed by each individual student.

8.5.1. Findings

The current approach of formative and summative assessments used by the VEE was developed during the recent curriculum review and is based on Miller's Pyramid of competencies. The principle form of assessment of clinical skills and day one competences related to practical clinical work are OSCE and DOPS. Students have to complete 18 DOPS which can be attempted in a number of clinical services. Students can decide when they feel adequately prepared to approach a DOPS. Failures to complete a DOPS result in feedback and a remediation plan. Students can repeat the DOPS in the same or a later rotation. In addition, students are evaluated by the faculty while working alongside them. To increase uniformity, new end-of-rotation evaluation forms were implemented in 2019, in which the clinical (faculty) team concludes whether the students' performance meets, is above or is below expectations.

8.5.2. Comments

- A variety of valid and reliable formative and summative assessment approaches is used, and the direct assessment of clinical skills and Day One Competences makes up a significant component of the overall process of assessment.

8.5.3. Suggestions for improvement

None.

8.5.4. Decision

The VEE is compliant with Substandard 8.5.

Standard 9. Academic and support staff

9.1 The VEE must ensure that all staff are appropriately qualified and prepared for their roles, in agreement with national and EU regulations and must apply fair and transparent processes for the recruitment and development of staff.

A formal training (including good teaching and evaluation practices, learning and e-learning resources, biosecurity and QA procedures) must be in place for all staff involved with teaching.

Most academic staff (calculated as FTE) involved in veterinary training must be veterinarians. It is expected that more than 2/3 of the instruction that the students receive, as determined by student teaching hours, is delivered by qualified veterinarians.

9.1.1. Findings

The academic staff - the majority of that represented by veterinarians - does cover all the competences needed for the veterinary program. In some limited areas, external expertise is brought in to cover some minor areas. Moreover, the VEE has recently appointed a new Chair in Veterinary Ethics and Welfare (full professor) and an externally funded residency in Morphological Pathology.

The number of faculty employed depends on government Higher Education Authority (HEA) funding. This is based also on the student:faculty ratio.

Table 9.2.2.in SER confirms that Academic staff is mostly represented by veterinarians, being the relative ESEVT Indicators (I2) compliant with the range expected by Annex 4 of the ESEVT SOP 2019.

However, in the context of the 'One Health-One Welfare' strategy adopted by the VEE, an interdisciplinary integration with non-veterinarian colleagues is also desired to widen the expertise and the competences for an adequate teaching and research in the "One health"

concept. Similarly, the integrated academic section of Herd Health and Animal Husbandry also expects to receive interdisciplinary expertise from non-veterinarians staff in order to deliver an adequate training in the 'farm-to-fork' concept. Furthermore, the same is expected in the context of translational medicine.

The VEE provides different formal training for both the academic and professional staff involved in teaching. Although not mandatory, practically all the teaching staff has attended one or more of these training sessions.

In this respect, a School Teaching and Learning Special Interest Group has been established.

9.1.2. Comments

- All requested competences for an adequate delivery of veterinary training are covered, the majority by veterinarians.
- The academic staff is properly qualified and the VEE has a system to provide them with continuing updating in Teaching and Learning (T&L), as well as prompt the staff to keep a continuing education attitude.

9.1.3. Suggestions for improvement

None.

9.1.4. Decision

The VEE is compliant with Substandard 9.1.

9.2 The total number, qualifications and skills of all staff involved with the programme, including teaching staff, 'adjunct' staff, technical, administrative and support staff, must be sufficient and appropriate to deliver the educational programme and fulfil the VEE's mission.

A procedure must be in place to assess if the staff involved with teaching display competence and effective teaching skills in all relevant aspects of the curriculum that they teach, regardless of whether they are full or part time, residents, interns or other postgraduate students, adjuncts or off-campus contracted teachers.

9.2.1. Findings

Table 9.2.1. indicates the number of the academic staff involved in the veterinary programme. The table shows that the number is compliant with the range expected by the related Indicator (I2) of the Annex 4 of the ESEVT SOP 2019. In any case, it is not expected that within the next 3 years there will be substantial changes in the numbers of academic and support staff, although two already funded positions have been recently advertised and filled in Veterinary Ethics and Welfare (full professor) and Morphological Pathology (resident).

The staff involved with teaching is assessed in terms of the adequacy of taught modules, standards of assessment and competence by an external examiner system that is the same used in the UK.

A number of the staff members are certificated/diplomated in UCD's Graduate Certificate/Diploma in Teaching and Learning (T&L), and some others have completed an equivalent distance learning degree at other institutions such as the Royal Veterinary College.

Recruitment of academic staff is done at international level. The interview panel also involves members external to the VEE. Candidates are selected also on the basis of an interview and the presentation of a seminar. A dedicated page within the UCD's web page provides information for staff wishing to advertise, interview and select new staff as well as information on all aspects

of the Interview & Selection process. The information provided is primarily aimed at those setting up and running the interview process.

For each new proposed position, a job description is created, and the position is approved as part of the yearly School staff budget plan.

The VEE has set a Veterinary Education Team (VetEd Hub) that provides guidance in the design of learning interactions and materials that support active student learning using appropriate educational technologies.

The UCD has set a specific Consultancy and External Work Policy that outlines policies and procedures for each of the categories of outside work allowed by the VEE. The categories of the allowed external works are: external work undertaken in a private capacity (either pure private consulting or Pro Bono unpaid activity) and University Consulting (work which the university has contracted for with a third party, either with or without remuneration).

All external activities (both external work & university consulting) should not exceed two sessions per week, or 20% of working time.

9.2.2. Comments
- The total number of the staff involved in the veterinary programme is sufficient and appropriate to deliver the educational programme and fulfil the VEE's mission.
- The VEE has in place procedures to assess the staff involved with teaching, together with the possibility of awarding the staff member with recognition in Teaching and Learning.

9.2.3. Suggestions for improvement
None.

9.2.4. Decision
The VEE is compliant with Substandard 9.2.

9.3 Staff must be given opportunities to develop and extend their teaching and assessment knowledge and must be encouraged to improve their skills. Opportunities for didactic and pedagogic training and specialisation must be available. The VEE must clearly define any systems of reward for teaching excellence in operation.

Academic positions must offer the security and benefits necessary to maintain stability, continuity, and competence of the academic staff. They must have a balanced workload of teaching, research and service depending on their role. They must have reasonable opportunities and resources for participation in scholarly activities.

9.3.1. Findings
Several initiatives (both at the level of the UCD and the VEE) allow the teaching staff to improve the teaching skills and knowledge, including the possibility of being awarded with a Professional Certificate/Professional Diploma in Teaching and Learning. Also, the professional staff are offered similar improvement possibilities.

All academic staff, residents, interns and temporary faculty are invited and encouraged to attend development activities regularly offered to highlight best practice in veterinary medical assessment and teaching. Seminars are offered by invited veterinary medical/medical assessment experts.

A School Teaching and Learning Special Interest Group has been established.

A specific program (Aurora Leadership programme) is specifically offered to women up to associate professor and equivalent professional services level in order to optimise the leadership

potential of women. Specific leadership training is also reserved to the Heads of Section and the Dean.

The workload of the academic staff is the following: 40% research, 40% teaching / continuing education and 20% administration / leadership roles.

The workload of the academic clinical staff is the following: 50% clinical service and 50% off-clinics split between other teaching / continuing education, research and administration / leadership roles.

The sabbatical leave is possible to all permanent teaching staff and can be granted for study, research or scholarly work, either within the University or elsewhere. However, the number of applications is small and the VEE is reflecting on how to improve sabbatical policy and culture.

9.3.2. Comments

- Teaching and professional staff are given several opportunities to improve their knowledge and skills.
- The academic staff (including the clinical part) has a balanced workload of teaching, research, continuing education and service. Reasonable opportunities and resources for participation in scholarly activities are offered, although the number of applications for sabbatical leave is small.

9.3.3. Suggestions for improvement

None.

9.3.4. Decision

The VEE is compliant with Substandard 9.3.

9.4 The VEE must provide evidence that it utilises a well-defined, comprehensive and publicised programme for the professional growth and development of academic and support staff, including formal appraisal and informal mentoring procedures.

Staff must have the opportunity to contribute to the VEE's direction and decision-making processes.

Promotion criteria for academic and support staff must be clear and explicit. Promotions for teaching staff must recognise excellence in, and (if permitted by the national or university law) place equal emphasis on all aspects of teaching (including clinical teaching), research, service and other scholarly activities.

9.4.1. Findings

The different academic positions are Assistant Professor, Associate Professor, Professor and Full Professor. A period of continuous employment of three years is expected prior to applying for promotion and is expected to be only step by step. The three dimensions used for the staff evaluation and for the academic promotion are: research, scholarship and innovation; teaching and learning; leadership and contribution.

Application rate of the clinician staff is recognized as lower than other components of the staff and therefore clinician are particularly addressed with initiatives and seminars to be encouraged to apply for promotion.

9.4.2. Comments

- The programme for professional growth and development of academic and support staff is well-defined.

9.4.3. Suggestions for improvement
None.

9.4.4. Decision
The VEE is compliant with Substandard 9.4.

9.5 A system for assessment of teaching staff must be in operation and must include student participation. Results must be available to those undertaking external reviews and commented upon in reports.

9.5.1. Findings
Students may contribute feedback to each module of the programme through an online questionnaire for each semester of the curriculum and with a level of anonymity. The questionnaire is divided into two sections: Course Experience Questionnaire (students view on the entire semester); Module Feedback Questionnaire (6 core questions on each module).
The evaluation results of the individual modules are available to the module coordinators as well as to those undertaking external reviews.
Student feedback is one criterion for module/curriculum refinement and development and is made available to all academics teaching on the module, as well as used as criteria for promotion applications.

9.5.2. Comments
- A system for assessment of teaching staff is in operation and thoroughly considered by the VEE.

9.5.3. Suggestions for improvement
None.

9.5.4. Decision
The VEE is compliant with Substandard 9.5.

Standard 10. Research programmes, continuing and postgraduate education

10.1. The VEE must demonstrate significant and broad research activities of staff that integrate with and strengthen the veterinary degree programme through research-based teaching.

10.1.1. Findings
Both the University and VEE rank high in international ranking platforms. The VEE on average generated approx. 4.6 Million € through extramural research grants and contracts. Over the last complete academic year, as referred in SER table 10.1.1b, the funded research programmes corresponded to a total of annual funding of 3,374,637 €.
Faculty staff is engaged in a range of external research panels, advisory and editorial boards. Staff have both research and teaching responsibilities, and the VEE has defined a number of areas of research such as One Health, translational research, veterinary epidemiology and national disease control, and veterinary clinical studies. It reports a total of 878 publications over the past three years made by faculty (excluding those by PhD candidates, postdoctoral and technical staff), 580 of them journal articles (548), books (2) or book chapters (28), and 190

conference papers and posters. Research concepts as well as new research findings related to (clinical) veterinary medicine are presented to students in various classes throughout the curriculum.

Undergraduate students have the opportunity to participate in One Health research through the STAR programme (established by the UCD2 Transatlantic One Health Alliance and sponsored by Zoetis) that is an undergraduate research exchange programme between UCD and UC Davis. Beginning in 2017, two students annually (one each from UCD and University of California Davis) have taken part in this student exchange programme. In Clinical extra-mural studies (CEMS), students have the opportunity to participate in research projects for up to 6 weeks.

10.1.2. Comments
- The VEE has significant and broad research activities of staff teaching in the veterinary degree programme and actively involves students through research-based teaching.

10.1.3. Suggestions for improvement
None.

10.1.4. Decision
The VEE is compliant with Substandard 10.1.

10.2. All students must be trained in scientific method and research techniques relevant to evidence-based veterinary medicine and must have opportunities to participate in research programmes.

10.2.1. Findings
Students throughout the curriculum are exposed to critical thinking and evidence-based decision taking, with focus on critical review of literature relevant to the veterinary medicine theme. Study programme outcomes include the ability to review and critically analyse relevant literature to improve clinical practice and decision-making. Of the over 50 non-elective modules in the curriculum, 31% of individual learning outcomes directly map to research-related programme outcomes. Most module coordinators reported exposure of students to or participation of them in research-related activities within their module. Students are required to complete scientifically-based assignments such as writing critical literature reviews and evaluations, and contribute to ongoing studies by collecting data during their clinical rotations. For example, in Year 1 module VET10170, students work in groups to write a 5000-word essay quoting properly the surveyed literature (VET10050); in Year 2, students are required to write a review of topics in genetics and animal breeding. In the subsequent clinical years, research-based and evidence-based veterinary medicine are highlighted in several modules. Students also participate in the collection of data for clinical research during rotations (e.g. VET40280, VET40290). As part of their 26 weeks clinical extra-mural studies (CEMS) module, students can undertake up to 6 weeks dedicated to research.

Extracurricular activities to expose students to research include an annual week of One Health seminars with national and international speakers and weekly evening talks of the UCD veterinary society and farm veterinary society that are open to students. A range of opportunities for individual undergraduate students is available to, on a voluntary basis, actively participate in research projects. A number of endowments are available to financially support students through stipends; these are competitive, and students must apply for them.

In 2019/2020, twenty undergraduate students were directly involved in research, and four peer-reviewed publications have students as author or co-author.

10.2.2. Comments
- All students are exposed to scientific methods and research techniques relevant to evidence-based veterinary medicine in a range of mandatory courses / modules.
- Opportunities for students to participate in research on a voluntary basis exist.

10.2.3. Suggestions for improvement
- Consider having all students do a small mandatory research-based project and write a project report / bachelor thesis that is graded.

10.2.4. Decision
The VEE is compliant with Substandard 10.2.

10.3. The VEE must provide advanced postgraduate degree programmes, e.g. PhD, internships, residencies and continuing education programmes that complement and strengthen the veterinary degree programme and are relevant to the needs of the profession and society.

10.3.1. Findings
The VEE offers a Doctor of Veterinary Medical Specialisation (DVMS) programme which is conducted in parallel with the requirements of a variety of residency programmes approved in UCD by the European Board of Veterinary Specialisation (EBVS).
Interns are hired as staff members for one year within the UCD Veterinary Hospital. Residents undergoing specialist training must be enrolled in a European Board of Veterinary Specialisation residency programme (or equivalent).
Other postgraduate programmes were offered by the VEE to veterinary practitioners and veterinary nurses.
The VEE on average has almost 80 graduate students enrolled in a doctoral (DVMS or PhD) and 12 students enrolled in a Masters training programme for which the principal investigator / supervisor is staff of the VEE. In 2018/2019, twenty-one residents were enrolled in postgraduate clinical training and fifty-four students were enrolled in a PhD postgraduate research training. All PhD students enrolled at the University for a period of four years as students and have to complete a structured 30 ECTS programme in relevant topics. In addition, 20 European College residents in 10 disciplines are currently trained at the VEE, often in combination with a non-structured doctoral degree programme (DVMS). In addition to the doctoral and residency tracks, the VEE offers graduate certificate programmes in Small Animal Medicine, Dairy Herd Health and Equine Medicine, and has plans to reactivate three currently resting graduate programmes to provide veterinary practitioners with a broad range of opportunities to refresh or enhance their skills in specific subject areas. In addition, continuous education modules in Animal Welfare and Animal Ethics are offered free of charge online to veterinarians that accept veterinary students on (EPT) placement.
Other postgraduate programmes were offered by the VEE to veterinary practitioners and veterinary nurses. Once a year, a one-day continued education conference is offered, to which approx. 550 veterinarians and veterinary nurses from across Ireland enrol. The COVID19-related restrictions increased the pressure on current postgraduate students regarding completion of their laboratory work and the knock-on effect to completion dates and agency funding/fees as well as on future research support budgets. The VEE provided Public

Health Guidance in relation to various requests from both students and staff on movement related to research projects around the country during the emergency.

10.3.2. Comments
- The VEE has an active postgraduate degree programme leading to either PhD, DVMS or MVM degrees as well as European College residency programmes in 10 disciplines.
- In addition, the VEE offers a continuing education programme that is relevant to the needs of the profession.

10.3.3. Suggestions for improvement
None.

10.3.4. Decision
The VEE is compliant with Substandard 10.3.

10.4. The VEE must have a system of QA to evaluate how research activities provide opportunities for student training and staff promotion, and how research approaches, methods and results are integrated into the veterinary teaching programmes.

10.4.1. Findings
The VEE has a standing Research Committee (RC) chaired by the Associate Dean for Research Innovation and Impact. The role of the Dean, supported by the Committee, is to promote and communicate research innovation and impact within the VEE, to the University and the stakeholders. The RC meets regularly, generally monthly, and discusses the implementation of a strategic plan, established in 2018. Communications with staff are carried out twice a year at the School Forum and also through the RC e-zine. In the strategic research plan, research conducted by clinicians and early career academics has been identified as an area requiring specific support. Research needs and strategies are discussed at the weekly senior management team meetings. The VEE is actively supporting activities to involve individual students in competitive research (award) programmes. The RC provides a disposable budget for undergraduate students participating in summer research projects with the supervision of staff members. The information about the organization of summer research projects is emailed to all students.

10.4.2. Comments
- Although the VEE has a Committee designated to steer research activities, a formal (QA) based process of planning and assessing how research is implemented into teaching is not evident.

10.4.3. Suggestions for improvement
- Develop and implement a Plan-Do-Check-Adjust (PDCA) cycle of how research should be implemented into undergraduate teaching, and how this can be systematically assessed and adjusted if necessary.

10.4.4. Decision
The VEE is compliant with Substandard 10.4.

11. ESEVT Indicators

ESEVT Indicators

	Name of the Establishment:	UCD School of Veterinary Medicine, University College Dublin				
	Name & mail of the Head:	Michael Doherty michael.doherty@ucd.ie				
	Date of the form filling:					26-Aug-20
	Raw data from the last 3 full academic years		**Year -1**	**Year -2**	**Year -3**	**Mean**
1	n° of FTE academic staff involved in veterinary training		100	99	95.6	98.20
2	n° of undergraduate students		592	566	563	573.67
3	n° of FTE veterinarians involved in veterinary training		82	81	77.6	80.20
4	n° of students graduating annually		114	96	123	111
5	n° of FTE support staff involved in veterinary training		93.9	94.2	97.8	95.3
6	n° of hours of practical (non-clinical) training		883	883	883	883
7	n° of hours of clinical training		992	992	992	992
8	n° of hours of FSQ & VPH training		200	200	200	200
9	n° of hours of extra-mural practical training in FSQ & VPH		48	48	48	48
10	n° of companion animal patients seen intra-murally		7956	7801	7951	7902.66667
11	n° of ruminant and pig patients seen intra-murally		403	408	420	410.333333
12	n° of equine patients seen intra-murally		1290	1211	1547	1349.33333
13	n° of rabbit, rodent, bird and exotic patients seen intra-mura		64	24	24	37.3
14	n° of companion animal patients seen extra-murally		0	0	0	0.0
15	n° of individual ruminants and pig patients seen extra-mura		2	1	3	2.0
16	n° of equine patients seen extra-murally		929	789	959	892.3
17	n° of visits to ruminant and pig herds		99	83	75	85.7
18	n° of visits of poultry and farmed rabbit units		0	0	0	0.0
19	n° of companion animal necropsies		236	241	286	254.3
20	n° of ruminant and pig necropsies		182	167	114	154.3
21	n° of equine necropsies		54	45	42	47.0
22	n° of rabbit, rodent, bird and exotic pet necropsies		159	166	146	157.0
23	n° of FTE specialised veterinarians involved in veterinary tr		39	37	37	37.7
24	n° of PhD graduating annually		22	11	7	13.3

The boxes within the red frames must be filled in by the Establishment (the other values will be automatically calculated)

ESEVT Indicators

Name of the Establishment:	UCD School of Veterinary Medicine, University College Dublin				
Date of the form filling:	26/08/2020				
Calculated Indicators from raw data		**Establishment values**	**Median values[1]**	**Minimal values[2]**	**Balance[3]**
I1	n° of FTE academic staff involved in veterinary training / n° of undergraduate studer	0.171	0.15	0.13	0.045
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating an	0.723	0.84	0.63	0.093
I3	n° of FTE support staff involved in veterinary training / n° of students graduating an	0.859	0.88	0.54	0.319
I4	n° of hours of practical (non-clinical) training	883.000	953.50	700.59	182.410
I5	n° of hours of clinical training	992.000	941.58	704.80	287.200
I6	n° of hours of FSQ & VPH training	200.000	293.50	191.80	8.200
I7	n° of hours of extra-mural practical training in FSQ & VPH	48.000	75.00	31.80	16.200
I8	n° of companion animal patients seen intra-murally / n° of students graduating annua	71.195	62.31	43.58	27.615
I9	n° of ruminant and pig patients seen intra-murally / n° of students graduating annuall	3.697	2.49	0.89	2.807
I10	n° of equine patients seen intra-murally / n° of students graduating annually	12.156	4.16	1.53	10.626
I11	n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating an	0.336	3.11	1.16	-0.824
I12	n° of companion animal patients seen extra-murally / n° of students graduating annu	0.000	5.06	0.43	-0.430
I13	n° of individual ruminants and pig patients seen extra-murally / n° of students gradu	0.018	16.26	8.85	-8.832
I14	n° of equine patients seen extra-murally / n° of students graduating annually	8.039	1.80	0.62	7.419
I15	n° of visits to ruminant and pig herds / n° of students graduating annually	0.772	1.29	0.54	0.232
I16	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0.000	0.11	0.04	-0.045
I17	n° of companion animal necropsies / n° of students graduating annually	2.291	2.11	1.40	0.891
I18	n° of ruminant and pig necropsies / n° of students graduating annually	1.390	1.36	0.90	0.490
I19	n° of equine necropsies / n° of students graduating annually	0.423	0.18	0.10	0.323
I20	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annual	1.414	2.65	0.88	0.534
I21*	n° of FTE specialised veterinarians involved in veterinary training / n° of students gr	0.339	0.27	0.06	0.279
I22*	n° of PhD graduating annually / n° of students graduating annually	0.120	0.15	0.07	0.050
[1]	Median values defined by data from Establishments with Accreditation/Approval status in May 2019				
[2]	Recommended minimal values calculated as the 20th percentile of data from Establishments with Accreditation/Approval status in May 2019				
[3]	A negative balance indicates that the Indicator is below the recommended minimal value				
*	Indicators used only for statistical purpose				

The majority of the Indicators at the UCD VEE fall in the positive range with very high balance for Indicators I4 (practical training) and I5 (clinical training). Nevertheless, some of the Indicators such as I11 (rabbit, rodent, bird and exotic seen intramurally), I12 (companion animal patients seen extramurally), I13 (individual ruminants and pig patients seen extramurally -8.8!) and I16 (visits of poultry and farmed rabbit units) are very low.

12. ESEVT Rubrics (summary of the decision on the compliance of the VEE for each ESEVT Substandard, i.e. (total or substantial) compliance (C), partial compliance (PC) (Minor Deficiency) or non-compliance (NC) (Major Deficiency))

Standard 1: Objectives, Organisation and QA Policy	C	PC	NC
1.1 The VEE must have as its main objective the provision, in agreement with the EU Directives and ESG recommendations, of adequate, ethical, research-based, evidence-based veterinary training that enables the new graduate to perform as a veterinarian capable of entering all commonly recognised branches of the veterinary profession and to be aware of the importance of lifelong learning. The VEE must develop and follow its mission statement which must embrace all the ESEVT standards.	X		
1.2 The VEE must be part of a university or a higher education institution providing training recognised as being of an equivalent level and formally recognised as such in the respective country. The person responsible for the veterinary curriculum and the person(s) responsible for the professional, ethical, and academic affairs of the Veterinary Teaching Hospital (VTH) must hold a veterinary degree. The decision-making process of the VEE must allow implementation of its strategic plan and of a cohesive study programme, in compliance with the ESEVT standards.	X		
1.3 The VEE must have a strategic plan, which includes a SWOT analysis of its current activities, a list of objectives, and an operating plan with a timeframe and indicators for its implementation.	X		
1.4 The VEE must have a policy and associated written procedures for the assurance of the quality and standards of its programmes and awards. It must also commit itself explicitly to the development of a culture which recognises the importance of quality, and quality assurance, within their VEE. To achieve this, the VEE must develop and implement a strategy for the continuous enhancement of quality. The development and implementation of the VEE strategy must include a role for students and other stakeholders, both internal and external, and the strategy must have a formal status and be publicly available.	X		
1.5 The VEE must provide evidence that it interacts with its stakeholders and the wider society. Such public information must be clear, objective and readily accessible; the information must include up-to-date information about the study programme, views and employment destinations of past students as well as the profile of the current student population. The VEE's website must mention the ESEVT VEE's status and its last Self Evaluation Report and Visitation Report must be easily available for the public.	X		
1.6 The VEE must monitor and periodically review its activities, both quantitative and qualitative, to ensure that they achieve the objectives set for them and respond to the needs of students and society. The VEE must make public how this analysis of information has been utilised in the further development of its activities and provide evidence as to the involvement of both students and staff in the provision, analysis and implementation of such data. Any action planned or taken as a result of this data analysis must be communicated to all those concerned.	X		
1.7 The VEE must undergo external review through the ESEVT on a cyclical basis. Evidence must be provided of such external evaluation with the assurance that the progress made since the last ESEVT evaluation was linked to a continuous quality assurance process.	X		
Standard 2: Finances			
2.1 Finances must be demonstrably adequate to sustain the requirements for the VEE to meet its mission and to achieve its objectives for education, research and services. The description must include both expenditures (separated into personnel costs, operating costs, maintenance costs and equipment) and revenues (separated into public funding, tuition fees, services, research grants and other sources).	X		
2.2 Clinical and field services must function as instructional resources. Instructional integrity of these resources must take priority over financial self-sufficiency of clinical services operations. The VEE must have sufficient autonomy in order to use the resources to implement its strategic plan and to meet the ESEVT Standards.	X		
2.3 Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.	X		
Standard 3: Curriculum			
3.1 The curriculum must be designed, resourced and managed to ensure all graduates have achieved the graduate attributes expected to be fully compliant with the EU Directive 2005/36/EC (as amended by directive 2013/55/EU) and its Annex V.4.1. The curriculum must include the subjects (input) and must allow the acquisition of the Day One Competences (output) listed in Annex 2. This concerns Basic Sciences, Clinical Sciences in companion animals (including equine and exotic pets), Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management), Food Safety and Quality, and Professional Knowledge. **3.1.1. General findings**	X		
3.1.2. Basic sciences	X		
3.1.3. Clinical Sciences in companion animals (including equine and exotic pets)	X		
3.1.4. Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management)	X		
3.1.5. Food Safety and Quality	X		
3.1.6. Professional Knowledge	X		
3.2 Each study programme provided by the VEE must be competency-based and designed so that it meets the objectives set for it, including the intended learning outcomes. The qualification resulting from a programme must be clearly specified and communicated and must refer to the correct level of the national qualifications framework	X		

for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area. The VEE must provide proof of a QA system that promotes and monitors the presence of an academic environment highly conducive to learning including self-learning. Details of the type, provision and updating of appropriate learning opportunities for the students must be clearly described, as well as the involvement of students. The VEE must also describe how it encourages and prepares students for self-learning and lifelong learning.			
3.3 Programme learning outcomes must: ensure the effective alignment of all content, teaching, learning and assessment activities of the degree programme to form a cohesive framework include a description of Day One Competences form the basis for explicit statements of the objectives and learning outcomes of individual units of study be communicated to staff and students be regularly reviewed, managed and updated to ensure they remain relevant, adequate and are effectively achieved.	X		
3.4 The VEE must have a formally constituted committee structure (which includes effective student representation), with clear and empowered reporting lines, to oversee and manage the curriculum and its delivery. The committee(s) must: determine the pedagogical basis, design, delivery methods and assessment methods of the curriculum oversee QA of the curriculum, particularly gathering, evaluating, making change and responding to feedback from stakeholders, peer reviewers and external assessors, and data from examination/assessment outcomes perform ongoing and periodic review of the curriculum at least every seven years by involving staff, students and stakeholders; these reviews must lead to continuous improvement. Any action taken or planned as a result of such a review must be communicated to all those concerned identify and meet training needs for all types of staff, maintaining and enhancing their competence for the ongoing curriculum development.	X		
3.5 External Practical Training (EPT) is compulsory training activities organised outside the VEE , the student being under the direct supervision of a non-academic person (e.g. a practitioner). EPT cannot replace the core intramural training nor the extramural training under the close supervision of academic staff (e.g. ambulatory clinics, herd health management, practical training in FSQ and VPH). Since the veterinary degree is a professional qualification with Day One Competences, EPT must complement and strengthen the academic education inter alia by enhancing student's professional knowledge.	X		
3.6 The EPT providers must have an agreement with the VEE 7and the student (in order to state their respective rights and duties, including insurance matters), provide a standardised evaluation of the performance of the student during their EPT and be allowed to provide feedback to the VEE on the EPT programme. There must be a member of the academic staff responsible for the overall supervision of the EPT, including liaison with EPT providers.	X		
3.7 Students must take responsibility for their own learning during EPT. This includes preparing properly before each placement, keeping a proper record of their experience during EPT by using a logbook provided by the VEE and evaluating the EPT. Students must be allowed to complain officially and/or anonymously about issues occurring during EPT. The VEE must have a system of QA to monitor the implementation, progress and then feedback within the EPT activities.	X		
Standard 4: Facilities and equipment			
4.1 All aspects of the physical facilities must provide an environment conducive to learning, including internet access. The veterinary VEE must have a clear strategy and programme for maintaining and upgrading its buildings and equipment. Facilities must comply with all relevant legislation including health, safety, biosecurity, accessibility to people with reduced mobility, and EU animal welfare and care standards.	X		
4.2 Lecture theatres, teaching laboratories, tutorial rooms, clinical facilities and other teaching spaces must be adequate in number, size and equipped for the instructional purposes and must be well maintained. The facilities must be adapted for the number of students enrolled. Students must have ready access to adequate and sufficient study, self-learning, recreation, locker, sanitary and food service facilities. Offices, teaching preparation and research laboratories must be sufficient for the needs of the academic and support staff.	X		
4.3 The livestock facilities, animal housing, core clinical teaching facilities and equipment used by the VEE for teaching purposes must: be sufficient in capacity and adapted for the number of students enrolled in order to allow safe hands-on training for all students be of a high standard, well maintained and fit for the purpose promote best husbandry, welfare and management practices ensure relevant biosecurity and bio-containment be designed to enhance learning.	X		
4.4 Core clinical teaching facilities must be provided in a veterinary teaching hospital (VTH) with 24/7 emergency services at least for companion animals and equines. Within the VTH, the VEE must unequivocally demonstrate that standard of education and clinical research are compliant with all ESEVT Standards, e.g. research-based and evidence-based clinical training supervised by academic staff trained to teach and to assess, availability for staff and students of facilities and patients for performing clinical research and relevant QA procedures. For ruminants, on-call service must be available if emergency services do not exist for those species in a VTH. The VEE must ensure state-of-the-art standards of teaching clinics which remain comparable with or exceeding the best available in the private sector. The VTH and any hospitals, practices and facilities (including EPT) which are involved with the curriculum must meet the relevant national Practice Standards.	X		
4.5 The VEE must ensure that students have access to a broad range of diagnostic and therapeutic facilities, including but not limited to: diagnostic imaging, anaesthesia, clinical pathology, intensive/critical care, surgeries and treatment facilities, ambulatory services, pharmacy and necropsy facilities.	X		

4.6 Appropriate isolation facilities must be provided to meet the need for the isolation and containment of animals with communicable diseases. Such isolation facilities must be properly constructed, ventilated, maintained and operated to provide for animal care and for prevention of spread of infectious agents. They must be adapted to all animal species commonly handled in the VTH.	X		
4.7 The VEE must have an ambulatory clinic for production animals or equivalent facilities so that students can practise field veterinary medicine and Herd Health Management under academic supervision.	X		
4.8 The transport of students, live animals, cadavers, materials from animal origin and other teaching materials must be done in agreement with national and EU standards, to ensure the safety of students and staff and to prevent the spread of infectious agents.	X		
4.9 Operational policies and procedures (including e.g. biosecurity, good laboratory practice and good clinical practice) must be taught and posted for students, staff and visitors and a Biosafety manual must be available. The VEE must demonstrate a clear commitment for the delivery of biosafety and biosecurity, e.g. by a specific committee structure. The VEE must have a system of QA to monitor and assure clinical, laboratory and farm services, including a regular monitoring of the feedback from students, staff and clients.	X		
Standard 5: Animal resources and teaching material of animal origin			
5.1 The number and variety of healthy and diseased animals, cadavers, and material of animal origin must be adequate for providing the practical and safe hands-on training (in the areas of Basic Sciences, Clinical Sciences, Pathology, Animal Production, Food Safety and Quality) and adapted to the number of students enrolled. Evidence must be provided that these data are regularly recorded and that procedures are in place for correcting any deficiencies.		X	
5.2 In addition to the training provided in the VEE, experience can include practical training at external sites, provided this training is organised under direct academic supervision and following the same standards as those applied in the VEE.	X		
5.3 The VTH must provide nursing care skills and instruction in nursing procedures. Under all situations students must be active participants in the clinical workup of patients, including problem-oriented diagnostic approach together with diagnostic decision-making.	X		
5.4 Medical records must be comprehensive and maintained in an effective retrieval system (preferably an electronic patient record system) to efficiently support the teaching, research, and service programmes of the VEE.	X		
Standard 6: Learning resources			
6.1 State-of-the-art learning resources must be adequate and available to support veterinary education, research, services and continuing education. When the study programme is provided in several tracks/languages, the learning resources must be available in all used languages. Timely access to learning resources, whether through print, electronic media or other means, must be available to students and staff and, when appropriate, to stakeholders. State-of-the-art procedures for bibliographical search and for access to databases and learning resources must be taught to undergraduate students.	X		
6.2 Staff and students must have full access on site to an academic library administered by a qualified librarian, an Information Technology (IT) unit managed by an IT expert, an e-learning platform, and all the relevant human and physical resources necessary for the development of instructional materials by the staff and their use by the students. The relevant electronic information, database and other intranet resources must be easily available for students and staff both in the VEE's core facilities via wireless connection (Wi-Fi) and from outside the VEE through a hosted secured connection, e.g. Virtual Private Network (VPN).	X		
6.3 The VEE must provide students with unimpeded access to learning resources, internet and internal study resources, and equipment for the development of procedural skills (e.g. models). The use of these resources must be aligned with the pedagogical environment and learning outcomes within the programme and have mechanisms in place to evaluate the teaching value of changes in learning resources.	X		
Standard 7: Student admission, progression and welfare			
7.1 The VEE must consistently apply pre-defined and published regulations covering all phases of the student "life cycle", e.g. student admission, progression and certification. In relation to enrolment, the VEE must provide accurate and complete information regarding all aspects of the educational programme in all advertisings for prospective national and international students. Formal cooperations with other VEEs must also be clearly advertised.	X		
7.2 The number of students admitted must be consistent with the resources available at the VEE for staff, buildings, equipment, healthy and diseased animals, and materials of animal origin.	X		
7.3 The selection and progression criteria must be clearly defined, consistent, and defensible, be free of discrimination or bias, and take into account the fact that students are admitted with a view to their entry to the veterinary profession in due course. The VEE must regularly review and reflect on the selection processes to ensure they are appropriate for students to complete the programme successfully. If the selection processes are decided by another authority, the latter must regularly receive feedback from the VEE. Adequate training (including periodic refresher training) must be provided for those involved in the selection process to ensure applicants are evaluated fairly and consistently.	X		
7.4 There must be clear policies and procedures on how applicants with disabilities or illnesses are considered and, if appropriate, accommodated in the programme, taking into account the requirement that all students must be capable of meeting the ESEVT Day One Competences by the time they graduate.	X		
7.5 The basis for decisions on progression (including academic progression and professional fitness to practise) must be explicit and readily available to the students. The VEE must provide evidence that it has mechanisms in place to identify and provide remediation and appropriate support (including termination) for students who are not performing adequately. The VEE must have mechanisms in place to monitor attrition and progression and be able to respond and amend admission selection criteria (if permitted by national or university law) and student support if required.	X		
7.6 Mechanisms for the exclusion of students from the programme for any reason must be explicit. The VEE's policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, must be transparent and publicly available.	X		

7.7 Provisions must be made by the VEE to support the physical, emotional and welfare needs of students. This includes, but is not limited to, learning support and counselling services, career advice, and fair and transparent mechanisms for dealing with student illness, impairment and disability during the programme. This shall include provision of reasonable adjustments for disabled students, consistent with all relevant equality and/or human rights legislation. There must be effective mechanisms for resolution of student grievances (e.g. interpersonal conflict or harassment).	X		
7.8 Mechanisms must be in place by which students can convey their needs and wants to the VEE. The VEE must provide students with a mechanism, anonymously if they wish, to offer suggestions, comments and complaints regarding compliance of the VEE with national and international legislation and the ESEVT standards.	X		
Standard 8: Student assessment			
8.1 The VEE must ensure that there is a clearly identified structure within the VEE showing lines of responsibility for the assessment strategy to ensure coherence of the overall assessment regime and to allow the demonstration of progressive development across the programme towards entry-level competence.	X		
8.2 The assessment tasks and grading criteria for each unit of study in the programme must be published, applied consistently, clearly identified and available to students in a timely manner well in advance of the assessment. Requirements to pass must be explicit. The VEE must properly document the results of assessment and provide the students with timely feedback on their assessments. Mechanisms for students to appeal against assessment outcomes must be explicit.	X		
8.3 The VEE must have a process in place to review assessment outcomes, to change assessment strategies and to ensure the accuracy of the procedures when required. Programme learning outcomes covering the full range of professional knowledge, skills, competences and attributes must form the basis for assessment design and underpin decisions on progression.	X		
8.4 Assessment strategies must allow the VEE to certify student achievement of learning objectives at the level of the programme and individual units of study. The VEE must ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach.	X		
8.5 Methods of formative and summative assessment must be valid and reliable and comprise a variety of approaches. Direct assessment of clinical skills and Day One Competences (some of which may be on simulated patients), must form a significant component of the overall process of assessment. It must also include the quality control of the student logbooks in order to ensure that all clinical procedures, practical and hands-on training planned in the study programme have been fully completed by each individual student.	X		
Standard 9: Academic and support staff			
9.1 The VEE must ensure that all staff are appropriately qualified and prepared for their roles, in agreement with national and EU regulations and must apply fair and transparent processes for the recruitment and development of staff. A formal training (including good teaching and evaluation practices, learning and e-learning resources, biosecurity and QA procedures) must be in place for all staff involved with teaching. Most academic staff (calculated as FTE) involved in veterinary training must be veterinarians. It is expected that more than 2/3 of the instruction that the students receive, as determined by student teaching hours, is delivered by qualified veterinarians.	X		
9.2 The total number, qualifications and skills of all staff involved with the programme, including teaching staff, 'adjunct' staff, technical, administrative and support staff, must be sufficient and appropriate to deliver the educational programme and fulfil the VEE's mission. A procedure must be in place to assess if they display competence and effective teaching skills in all relevant aspects of the curriculum that they teach, regardless of whether they are full or part time, residents, interns or other postgraduate students, adjuncts or off-campus contracted teachers.	X		
9.3 Staff must be given opportunities to develop and extend their teaching and assessment knowledge and must be encouraged to improve their skills. Opportunities for didactic and pedagogic training and specialisation must be available. The VEE must clearly define systems of reward for teaching excellence in operation. Academic positions must offer the security and benefits necessary to maintain stability, continuity, and competence of the academic staff. Academic staff must have a balanced workload of teaching, research and service depending on their role. They must have reasonable opportunities and resources for participation in scholarly activities.	X		
9.4 The VEE must provide evidence that it utilises a well-defined, comprehensive and publicised programme for the professional growth and development of academic and support staff, including formal appraisal and informal mentoring procedures. Staff must have the opportunity to contribute to the VEE's direction and decision-making processes. Promotion criteria for academic and support staff must be clear and explicit. Promotions for teaching staff must recognise excellence in, and (if permitted by the national or university law) place equal emphasis on all aspects of teaching (including clinical teaching), research, service and other scholarly activities.	X		
9.5 A system for assessment of teaching staff must be in operation and must include student participation. Results must be available to those undertaking external reviews and commented upon in reports.	X		
Standard 10: Research programmes, continuing and postgraduate education			
10.1 The VEE must demonstrate significant and broad research activities of staff that integrate with and strengthen the veterinary degree programme through research-based teaching.	X		
10.2 All students must be trained in scientific method and research techniques relevant to evidence-based veterinary medicine and must have opportunities to participate in research programmes.	X		
10.3 The VEE must provide advanced postgraduate degree programmes, e.g. PhD, internships, residencies and continuing education programmes that complement and strengthen the veterinary degree programme and are relevant to the needs of the profession and society.	X		
10.4 The VEE must have a system of QA to evaluate how research activities provide opportunities for student training and staff promotion, and how research approaches, methods and results are integrated into the veterinary teaching programmes.	X		

C: (total or substantial) compliance; PC: partial compliance (Minor Deficiency); NC: non-compliance (Major Deficiency)

Executive Summary

Brief history of the Establishment and its previous EAEVE Visitations
The UCD School of Veterinary Medicine originated in the Veterinary College of Ireland well over a century ago. Both the School of Veterinary Medicine (SVM) (called the VEE in this Report) and the School of Medicine are included in the 'One Health' College of Health and Agricultural Sciences (CHAS). The SVM is the only VEE within Ireland.
The VEE's Strategic Plan is focused on and dedicated to values of equality, diversity and inclusion. Veterinary science has almost the highest QS-ranking in UCD and in 2017 the VEE was included in the top 50 world QS rankings for veterinary science.

The VEE was last visited by ESEVT in 2010 and then fully approved by ECOVE.
Subsequently, new academic sections such as Equine Clinical Studies, Diagnostic Imaging, Anaesthesia and Small Animal Clinical Studies were created as well as a specific section for the veterinary nursing programme; in addition, the VEE has launched a Clinical Skills Centre with a full-time Director. The dairy herd at UCD Lyons Farm benefited from a major project and increased the number of dairy cows to 200, as well as improving the housing and research facilities.

The UCD VEE is being evaluated under the ESEVT SOP 2019.

Brief comment on the SER
Although the SER was well written and comprehensive, the Visitation Team identified several areas where a large number of links to crucial data were provided rather than a summary within the SER.
The use of different names of similar committees or other official bodies was confusing at some points, as the number of committees is also very high.

Brief comment on the Visitation
Answers to the questions sent to the VEE prior to the Visitation were only provided a short time prior to the Visitation. Additional information was provided on site.
Although the Visitation had been postponed, the ESEVT team utilised the original SER with some later updates from the VEE.
The Visitation programme itself was well organised and the VEE dealt efficiently with several requests from the ESEVT team for alterations and additional visits.

Areas worthy of praise (i.e. Commendations), e.g.:

- The systematic and continuous enhancement of the outcome-based spiral curriculum
- It is obvious that the academic staff is implementing student-centred and research-led teaching with a strong commitment to continuous improvement for the benefit of students.
- The VEE benefits from a very strong structuring of the quality approach at university level, which is then applied at the level of faculties, schools and departments with perfectly codified and formalised procedures.
- The well-equipped and maintained infrastructure that the VEE has access to is commendable.
- The rapidly developing and supervised clinical skills lab
- Enthusiastic students and staff who are proud of their institute
- Presence of an excellent student support office

- Efforts to provide students with both referral and first opinion clinical cases
- Strong leadership and participative management

Additional commendations are described in the Visitation Report.

Areas of concern (i.e. Minor Deficiencies):

- The VEE is partially compliant with Substandard 5.1 because:
    - The number of the rabbits, rodents, birds and exotic patients is not adequate for the number of the students involved.
    - The number of poultry provided to the students is not sufficient for an adequate hands-on exposure to poultry.

Additional suggestions for improvement are described in the Visitation Report.

Items of non-compliance with the ESEVT Standards:

None.

Glossary

AVMA: American Veterinary Medical Association
CEMS: Clinical extramural studies
CHAS: UCD College of Health and Agricultural Sciences
COE: Council of Education
DAFM: Department of Agriculture, Food and the Marine
DSPCA: Dublin Society for the Prevention of Cruelty to Animals
DOPS: Direct Observation of Procedural Skills
DVMS: Doctor of Veterinary Medical Specialisation
D1C: Day One Competences
EAEVE: European Association of Establishments for Veterinary Education
EBVS: European Board of Veterinary Specialisation
ECOVE: European Committee on Veterinary Education
EMS: Extramural studies
EPT: External Practical Training
ESEVT: European System of Evaluation of Veterinary Training
ESG: Standards and Guidelines for Quality Assurance in the European Higher Education Area
FSQ: Food Safety and Quality
FTE: Full-Time Equivalent
HEA: Higher Education Authority
IT: Information Technology
MVB: Bachelor of Veterinary Medicine (the undergraduate programme)
OSCE: Observed Clinical Structured Exams
QA: Quality Assurance
QQI: Quality and Qualifications Ireland
RCVS: Royal College of Veterinary Scientists
SER: Self Evaluation Report
SMT: Senior Management Team
SOP: Standard Operating Procedure
SVM: School of Veterinary Medicine
UCD: University College Dublin
VCI: Veterinary Council of Ireland
VPH: Veterinary Public Health
VTH: Veterinary Teaching Hospital

Decision of ECOVE

The Committee concluded that no Major Deficiencies had been identified.

The Veterinary Education Establishment (VEE) of the University College Dublin (UCD) is therefore classified as holding the status of: **ACCREDITATION.**