



RE-VISITATION REPORT

**To the Faculty of Veterinary Medicine, University of Teramo,
Teramo, Italy**

On 24 – 26 October 2022

By the Re-visitiation Team:

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Introduction

The Faculty of Veterinary Medicine of the University of Teramo (called the Veterinary Education Establishment (VEE) in this Report) was evaluated by an ESEVT team in November 2021. In the report submitted by the team to ECOVE, several Minor Deficiencies were pointed out:

- The SER and Appendix 2 include some inaccurate data regarding the total number of hours in the curriculum and the partial number of hours of training in all groups of subjects (Core, Electives and Graduation Thesis).
- Insufficient focus on medical and surgical teaching regarding ruminants within the curriculum.
- The number of bovine cadavers available in pathology and the clinical caseload of bovines are insufficient for hands-on training of students.
- The clinical skills lab to practice procedures prior to performing on live animals is not adequate.
- There is insufficient direct assessment of clinical skills and control of logbooks to ensure all clinical procedures, practical and hands-on training have been fully completed by each individual student.

On March 30, 2022, ECOVE made the following decision that was notified to the VEE:

The Committee concluded that the following Major Deficiencies had been identified:

1. Non-compliance with Standard 5.1 because the number of bovine cadavers in pathology as well as the clinical caseload of bovines are insufficient to guarantee training for every student, with no clear procedure in place for correcting this deficiency.
2. Non-compliance with Standard 8.5 because of insufficient direct assessment of clinical skills in the overall process of assessment, and insufficient quality control of logbooks to ensure all clinical procedures, practical and hands-on training have been fully completed by each individual student.

In accordance with the European System of Evaluation of Veterinary Training (ESEVT) and based on the educational requirements of the Directive 2005/36/EC as amended by Directive 2005/36/EC as amended by Directive 2013/55/EU, the status of the VEE of the University of Teramo is Pending Accreditation.

A Re-visitation (RV) was planned for October 2022 and the RV Self-Evaluation Report (RSER) was submitted to EAEVE and the team in due time.

The current ESEVT RV was performed according to the “Exceptional rules for ESEVT Visitations planned in 2022 considering the extraordinary circumstances linked to the COVID-19 pandemic” as approved by the Executive Committee of EAEVE on 14 December 2021. The option A was applied, with all experts present in person.

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The RSER was sent on time to the visiting team and the RV was well prepared and organized and in full agreement with the SOP.

The 2019 ESEVT SOP as amended in September 2021 is valid for this RV.

1. Correction of the Major Deficiencies

1.1 Major Deficiency 1: Non-compliance with Standard 5.1 because the number of bovine cadavers in pathology as well as the clinical caseload of bovines are insufficient to guarantee training for every student, with no clear procedure in place for correcting this deficiency.

1.1.1. Findings

The VEE has taken several actions to correct the Major Deficiency addressed by several approaches and measures:

- Signature of *ad hoc* agreements with 14 medium-to-large sized cattle farms located around 15 Km from the VEE as a source of bovine cadavers available for necropsies in the extramural professional training (EPT, for the VEE PPT), intramural Clinical Rotation and practicals of Pathology. Clinical Rotation and Pathology are mandatory core subjects and regarding EPT, the VEE has established 1 mandatory week of training in cattle farms for all students.
- Veterinary practitioners involved in training of EPT approved and signed such agreements to act as middleman between these farms and the VEE to alert on the availability of a cadaver.
- Bovine cadavers weighing less than 150 kg are carried out by VEE vehicles to the necropsy room, used for teaching and then disposed upon the cost of the VEE.
- Bovine cadavers larger than 150 kg are necropsied at the farm, as addressed in the agreements, following the National and Regional legislation.
- Specific biosecurity procedures were drawn up to manage the cadavers at the VEE and/or at the farm during necropsy procedures.
- Students must write a detailed necropsy report (one per cadaver), including photos and the most relevant pathological findings.
- All necropsies are made available for other students, under the supervision of a pathologist, via the intranet “Fenice”,
- The VEE has increased 2 staff dedicated to necropsies, one DVM and one graduate in Animal Welfare. The DVM is academic staff for supporting practicals of pathology intramurally and the one graduated in Animal Welfare for the transportation and disposal of the cadavers.
- Topographic Anatomy increased the use of healthy organs of horses, ruminants, and pigs from the slaughterhouses.
- The signed agreements with the farms to provide cadavers are also a source of clinical cases in bovines since ill animals or those destined to slaughter may pass through the VTH.
- To increase the clinical caseload in cattle another agreement with a livestock trader was signed, in agreement with the legislation on Animal Welfare and control of notifiable diseases, to provide live animals for teaching students intramurally before slaughtering. In case of a notifiable disease the animal is normally sacrificed and necropsied at the IZP.

1.1.2. Comments

- From December 2021 to June 2022 a total of 18 necropsies in cattle have been performed by a group of 1 to 3 students with a pathologist, which is a substantial increase in comparison with the academic year 2018-2019 where students performed only 1 necropsy in cattle. On site, this figure was updated to 22 cadavers of bovines necropsied in the Academic Year 2021-22, and most of them were calves' necropsies performed intramurally (16 out of 22).
- There is a slight increase of the intramural clinical cases of ruminants in the academic year 2020-21 (56 in total, 41 bovines, and 17 small ruminants) in comparison to 2018-19 (47 in total, 23 bovines, and 24 small ruminants)
- There is a substantial increase of the extramural clinical cases of ruminants in the academic year 2020-21 (2,035 in total, 848 bovines, and 1,187 small ruminants) in comparison to 2018-19 (536 in total, 447 bovines and 89 small ruminants).
- “Fenice” software is not appropriate to retrieve large size files with images and the material is not available outside the school. On site, the team verified a new contract (already signed by the Dean and the Company) to install “SmartVet”, a new software easy for opening and revising large files with pictures that would be handy to use and accessed outside the school by staff and students.

1.1.3. Suggestions

None.

1.1.4. Decision

Major Deficiency 1 has been fully corrected.

1.2. Major Deficiency 2: Non-compliance with Standard 8.5 because of insufficient direct assessment of clinical skills in the overall process of assessment, and insufficient quality control of logbooks to ensure all clinical procedures, practical and hands-on training have been fully completed by each individual student.

1.2.1. Findings

Several measures have been taken by the VEE to correct the Major Deficiency:

- A new Day One Competences (D1C) Handbook was designed where the D1C defined by EAEVE are mapped to specific skills which must be acquired by the students in the different years, modules, rotations and EPT (RSER Annex 1). This informative document is public for staff and students. The handbook is published on the VEE's website.
- Based on the D1C Handbook, 2 D1C Logbooks (RSER Annex 2) were designed to evaluate (3 times per skill) the acquisition of skills by the student: (i) the Clinical Rotations Logbook, and (ii) the EPT Logbook (PPT-Professional Practical Training or “Tirocinio” for the VEE). Both Logbooks are published in the VEE's website.
- Criteria for the evaluation of D1C in both Logbooks are based on a rubric defined in the Evaluation Handbook (RSER Annex 3) divided in 4 scoring marks: insufficient, (0-4) sufficient (5-8), good (9-12), and optimal (13-15). This rubric is also available for students at the beginning of the academic year.

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- Staff is nominated academic tutor of 1 student in the first year to supervise and be supportive to his/her career progression. A teacher may tutorise 5 to 10 students maximum in the 5 academic years. Each tutor performs a yearly evaluation of the Logbooks of the student and prepares a Skill's Certificate (RSER Annex 4) which is requisite for the graduation.
- A third Logbook for Core Subjects will be designed using data collected from specific rubrics that were developed by the VEE at the beginning of the academic year 2022-23 in all subjects; examples of these rubrics are provided as annexes the modules: "Infectious Diseases, Prophylaxis and Sanitary Policy (I)", "Infectious Diseases, Prophylaxis and Avian Pathology", "Diagnostic Imaging", and "Small Animal Surgery".
- The VEE aims to discuss and get feedback from internal (staff and students) and external stakeholders (practitioners, IZP, ..) of the new rubrics and assessment in the "Cooperative Learning Day" held yearly around March, to decide some improvements for the next academic year.

1.2.2. Comments

- The VEE properly mapped the D1C defined by EAEVE into specific skills in the D1C Handbook which is public and available for staff and students.
- Assessment criteria, available for students beforehand, are now objective and clearly settled for the scoring of students by applying the rubrics in Core Subjects. These rubrics are revised by the VEE's Committee for Assessment.
- The VEE applies objective formative assessment of clinical skills based on predefined criteria (rubrics) applying the rubric defined in the Evaluation Handbook for grading the student in both DOC Logbooks.
- Progression of students is now tracked through the annual evaluation of the D1C Logbooks by the academic tutor.
- The VEE does not implement any OSCE or final exam to assess clinical skills, however the academic tutor prepares a Skills Certificate for each student which is requisite for graduation. Moreover, a new Decree will apply for the Academic Year 2022-23, or 2023-24 which changes the National Exam mandatory after graduation as a licensing requisite to a National Exam before graduation, as requisite to get the Diploma. The definition of the competencies to be assessed is under discussion by the Italian Veterinary Chamber, the Association of Italian Veterinarians, the deans of the Italian VEEs, and representatives of the Zooprohylactic Institutes and the Ministry of University and Research and Ministry of Health.

1.2.3. Suggestions

None.

1.2.4. Decision

Major Deficiency 2 has been fully corrected.

2. Correction of the Minor Deficiencies

2.1. Minor Deficiency 1: Partial compliance with Standard 3.1 because of inaccurate data addressed in Table 3.1.1 and 3.1.2 of the SER and Appendix 2, regarding the total number of hours in the curriculum and the partial number of hours of training in all groups of subjects:

- the core subjects as addressed in p32 of the SOP 2019 as amended in September 2021 and listed in the Annex 5.4.1 of the Directive 36/2005/EC;
- the electives;
- the Graduation (Final degree) Thesis.

2.1.1. Findings

An updated version of the SER was done 6 December 2021, that has been sent to the team and EAEVE Office in due time, with tracking of the changes done in the document on the following parts: Tables 3.1.1, 3.1.2, 3.1.4, 5.1.6, 9.2.4, Indicators I18 and I20, and Appendix 2, and a new version of the following tables of the Standard 2 that have been slightly modified to enhance clarity: 2.1.1.a, 2.1.1.b, 2.1.2, and 2.1.3. This updated version of the SER was published by the EAEVE website.

2.1.2. Comments

The VEE has updated the SER correcting the inaccuracies in Table 3.1.1, 3.1.2 and Appendix 2.

2.1.3. Suggestions

None.

2.2. Minor Deficiency 2: Partial compliance with Standard 3.1.4 because there is suboptimal focus on medical and surgical teaching regarding ruminants within the curriculum.

2.2.1. Findings

The VEE has revised the contents of medical and surgical courses and the Faculty Board approved on 16 March 2021 an update of the curriculum by including 2 new ECTS (24h) training (theoretical and practical) on surgical procedures in farm animals, applying to 5th Year students in the academic year 2025-26, and 1 new ECTS (12 h) training on equine and bovine Medical Diseases, applying to 4th Year students in the academic year 2024-25).

The surgical and medical caseload have been increased in bovines (see 1.1.2). The recruitment of 4 farm-animal practitioners involved in the EPT training allows the VEE to increase the extramural caseload of clinical cases in ruminants that are not the main species in the Abruzzo region (less than 5% of ruminants of the Italian livestock population).

The assessment methods applied in the EPT have been revised and updated to monitor and control the acquisition of D1C in the different species through the EPT Logbook and its academic tutor evaluation (see 1.2).

The contracts with the 4 farm-animal practitioners are renewed every academic year depending on the financial situation of the VEE. For the next academic years the University provided 140,000€ per year: 110,000€ to maintain also the two new staff for necropsies (see 1.1.1) and 30,000€ to contract the EPT practitioners to develop the 1 week mandatory EPT in bovine farms (see 1.1.1). Moreover, from last year the VEE is refunded with 58,33% of the 12% taxes paid to the University from all clinical income, that is 7% of the taxes, and with 120€ per student from the tuition fees.

2.2.2. Comments

- The VEE has increased the theoretical and practical training in ruminants to better balance the training for each common species in the curriculum and will continue with a further revision of the curriculum to progressively decrease the hours of training in basic subjects to increase the hours of training in veterinary specific subjects. Also, the number of groups in practicals are increased and the size of the group decreased to better hands-on training. All these changes contributed to the increase in the caseload of necropsies and clinical cases in ruminants.
- The caseload of clinical cases in bovines and small ruminants have been substantially increased.
- The continuous assessment of clinical skills on ruminants have been improved through the implementation and control by the tutor of the new EPT Logbook.
- The contracts with new staff and the 4 farm-animal practitioners are financially secured by the University and the VEE.

2.2.3. Suggestions

The VEE is encouraged to continue the revision of the overall distribution of credits in the curriculum for better balancing the number of credits between Basic sciences and Veterinary Specific subjects.

2.3. Minor Deficiency 3: Partial compliance with Standard 4.8 because of the need to replace the damaged safety devices in the student transport and because of suboptimal respect of biosafety rules in the pickup truck serving as a mobile clinic.

2.3.1. Findings

The VEE developed a new self-certification form applying to the external company which provides the transportation of students (mainly buses) to verify that the vehicles are compliant with national regulations, including the safety devices (i.e., safety belts, etc).

The VEE prepared new procedures, in line with National Legislation on biosecurity to prevent transmissible infectious diseases, for the entry/exit and transportation of animals/cadavers from farms that are available inside the vehicles and circulated to staff members who are going to drive them.

The VEE has built a new concrete pitch, close to necropsy room, to wash and disinfect the vehicles any time they return from a farm with a cadaver, or from a consultation with the ambulatory clinic vehicle; the driver of the vehicle oversees implementing the cleaning and disinfection procedure that is recorded in a specific register.

The equipment and instruments used in the large animal ambulatory clinic is clean and sterilised before departure following the same procedures than the one utilised in the VTH.

2.3.2. Comments

The VEE has implemented several methods to improve the biosafety of vehicles and the cleanliness and disinfection of the medical and surgical instruments used in the ambulatory clinic.

2.3.3. Suggestions

None.

2.4. Minor Deficiency 4: Partial compliance with Standard 6.3 because of an inadequate clinical skills lab to practice procedures prior to performing on live animals.

2.4.1. Findings

The VEE has set up two rooms as provisional skills labs while the new building is finished, to collect all models and simulators: (i) a skills lab for small animals, provided with a dog head, a dog forelimb, a dog paw, skin suture models and one cat and one dog dummy for rescue training under critical conditions, and (ii) a skills lab for large animals located in the stables, provided with one equine model, equine fore and hind distal legs and one head. These labs have free access to students upon register and under the supervision of 4th and 5th Year students. Students are in charge of the organisation of appointments and shifts to use both skills labs; they have established 4 turns in hours with no teaching activities, from 12.30 to 14.00 and from 17.00 to 19.00, with a maximum of 4 students in each of the rooms at the same time.

The VEE plans to purchase new simulators, training models and dummies depending on the financial situation.

2.4.2. Comments

The VEE has set up two provisional skills labs that have basic equipment to train students in basic clinical procedures prior to performing on live animals (blood sampling, intravenous and intramuscular injection, bandage, skin suture, restraint, and rescue procedures).

Students are working on a voluntary basis as supervisors of both skills labs, recording and overseeing their appropriate use by other students. They are happy and motivated to learn and practice harmful procedures in models to be more confident in their capabilities to perform it on live animals.

2.4.3. Suggestions

The VEE is encouraged to increase the equipment of the skills labs to cover more sophisticated but routinary clinical practices such as rectal palpation, parturition, insemination, ultrasound, ECG, osteosynthesis, castration/neutering procedures, etc.

3. ESEVT Indicators

3.1. Findings

The VEE has sent the RV Team in due time an update of the indicators filled in August 2022.

Raw data of the number of ruminant and pig patients seen intramurally have substantially increased from a median of 19.33 per academic year to 58 in the academic year 2020-21. Accordingly, Indicator I9 has increased from a value of 0.475 ruminant and pig patients seen intramurally per student graduated annually to 1.363, a figure above the minimal values calculated by EAEVE on the 20% percentile of the accredited VEEs.

Raw data of the number of individual ruminants and pig patients seen extramurally have substantially increased from a median of 521.7 per academic year to 2,056 in the academic year 2020-21. Accordingly, Indicator I13 has increased from a value of 12.828 ruminant and pig patients seen extramurally per student graduated annually to 32.650, a figure highly above the median values calculated by EAEVE on the 20% percentile of the accredited VEEs.

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Raw data of the number of visits to ruminant and pig herds have substantially increased from a median of 37 per academic year to 82 in the academic year 2020-21. Accordingly, Indicator I15 has increased from a value of 0.9102 visits to ruminant and pig herds per student graduated annually to 1.488, a figure above the median values calculated by EAEVE on the 20% percentile of the accredited VEEs.

Raw data on the number of ruminant and pig necropsies have not changed in the academic year 2020-21 with respect to previous years, however, indicator I18 has slightly increase from 2.360 ruminant and pig necropsies per student graduated annually to 2.413, a figure clearly above the minimal values calculated by EAEVE on the 20% percentile of the accredited VEEs.

3.2. Comments

The VEE is commended for developing a successful strategy to increase the indicators to values that are above the median values calculated by EAEVE on the 20% percentile of the accredited VEEs.

3.3. Suggestions

None.

4. Conclusions

The two Major Deficiencies have been fully corrected.

Two of the Minor Deficiencies have been corrected (Standard 3.1 and Standard 4.8) and an ongoing process is in place for correcting the remaining ones (Standard 3.1.4 and Standard 6.3).

Decision of ECOVE

The Committee concluded that the Major Deficiencies identified after the Full Visitation on 08 – 12 November 2021 had been corrected.

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