Supplementary Appendix S1—Hypothetical example of a quality plan for an in-clinic laboratory.

Quality Plan for Laboratory Services

1. Name and Location

The laboratory operates within a mixed-animal practice known as [practice name]. The laboratory is located in [city], [state].

2. Laboratory Vision and Mission Statement

The [practice name] aims to provide, in a timely manner, high quality veterinary laboratory testing that is perceived to represent good value for money. The highest priority is to do this in a caring way, with consideration for staff, clients, and patients, to support the highest quality of veterinary care. We value integrity, honesty, communication, and ongoing education about laboratory testing and its applications. All staff and management are expected to participate in a continuous quality improvement effort within the laboratory and help promote a culture of ongoing improvement. All feedback and ideas from staff as well as identification of nonconformities and complaints from clients will be considered and addressed through the continuing improvement opportunity process.

3. Environment

The [practice name] is located in [neighborhood] of [city] and provides service to hospital clients that include pet owners, local animal shelters, and local farms. The laboratory provides hematologic, biochemical, fecal, and urine testing as well as benchtop serologic testing for selected infectious diseases and selected cytologic and microbiological testing for dermatologic diseases. Laboratory samples may be sent for analysis at a contracted reference laboratory.
Mammalian samples can be analyzed in the laboratory; avian and reptilian samples will be referred for testing to a contracted reference laboratory.

4. Facilities

The [practice name] is situated in a [___] square foot section of the northwest area of the treatment room of the hospital. The hospital has ample parking for staff and any clients delivering specimens to the laboratory. The laboratory is operational during all working hours of the hospital, with employees suitable for the caseload present for each shift. There is room for expansion within the existing grounds as well as a [___] square foot adjacent yard for patient exercise and canine urine or fecal sample collection. Lockers are present for employees, with padlocked locker space available for each employee’s coats and other belongings. The laboratory area contains a bookshelf with various reference books and journals as well as several computers with laboratory information software and internet access. Online access is available to various publications, including the option to purchase articles for a fee.

5. Personnel

Hiring of trained staff with experience in veterinary diagnostic testing will be given the highest priority. If trained staff are not identified among the applicants, all persons will be given training appropriate for the job for which they have been hired. Veterinary technicians with appropriate qualifications (registered or licensed veterinary technicians with certification by the Academy of Veterinary Clinical Pathology Technicians) will be sought as needed. Other qualified support staff will be hired or trained to support the laboratory services processes.

6. Equipment

The laboratory contains modern instruments and equipment appropriate to meet the requirements for analysis and turnaround time to meet the needs of clients. All instruments will undergo
method or instrument validation studies appropriate for the instrumentation prior to initiation of routine testing (see fourth article in this series). All tests have defined quality requirements and appropriate methods of statistical and nonstatistical QC. Routine maintenance and calibration of equipment will be performed in accordance with manufacturers’ recommendations. Reagents and other necessary materials will be stored according to specification and properly disposed of on their expiration date. A state-of-the-art hospital and laboratory information system (H-LIS) will be used to facilitate the laboratory processes and reporting, with password-based security and regular backup to ensure the security and integrity of the data. Automatic transfer of hematologic and biochemistry results from the instruments to the H-LIS ensures accuracy of data transmission.

7. Health and Safety

All local, state, and federal regulations applying to health and safety will be observed. All employees will receive training regarding potential zoonoses associated with laboratory testing during their initial orientation and periodic continuing education thereafter. A health and safety plan will be in place and described in a health and safety manual.

8. Working Practices

The processes of the laboratory will be conducted in accordance with written procedures and policies that are subject to document control (the latter encompasses review, modification, distribution, and accessibility of current documents and removal of older versions from circulation). Clients will be informed, prior to testing, about testing options and associated costs. Continuing education will be provided for staff and clients. All laboratory-related waste will be recycled when possible, or disposed of safely, to include dedicated sharps and biohazardous waste disposal systems. Submitted samples are the property of the laboratory once received, and
written policies are available regarding specimen retention and use for ongoing internal QA and QC. All sample submissions are subject to client confidentiality, and results are not released to or discussed with other veterinarians or owners unless the client specifically gives permission or requests this.