

2023 AAHA Technician **Utilization Guidelines**

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CONFLICT OF INTEREST STATEMENT

The authors whose names are listed immediately below report the following details of affiliation or involvement in an organization or entity with a financial or nonfinancial interest in the subject matter or materials discussed in this manuscript.

Heather Prendergast is the CEO of Synergie Consulting. Alyssa Mages is the cofounder and CVO of Empowering Veterinary Teams, LLC.

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Introduction

AAHA recognizes that optimal utilization of trained and educated credentialed veterinary technicians brings myriad benefits to veterinary teams and to the veterinary industry as a whole. Empowering credentialed veterinary technicians to perform the wide range of veterinary medical tasks that fall under their scope of practice not only benefits practices financially but also encourages retention of individuals with valuable skill sets and experience within the profession. Optimal utilization increases job and career satisfaction and contributes to an environment of mutual trust and collaboration. Patients and clients benefit when credentialed veterinary technicians are able to take on more expansive roles equal to their education and training.

Although the need for optimal utilization of credentialed veterinary technicians has been discussed at length within the veterinary profession, little progress has been made in the form of tangible and enduring change. Veterinary medicine is currently facing a crisis of staff shortages, low attraction and retention of skilled professionals, professional burnout, mental health challenges, and lack of patient access to care. To address the significant challenges veterinary practices now

face, it is crucial that veterinary professionals, and in particular veterinarians, embrace the benefits of optimal veterinary technician utilization.

These guidelines provide actionable steps that veterinary practices can take right now to initiate positive change. The guidelines include practical tools to implement and evaluate credentialed technician utilization in individual practices such as:

- Goal worksheets
- Workflows by role for everyday clinical examples
- Veterinary team member utilization assessment tools
- Examples of veterinary technician levels and skills for professional growth and increased learning potential
- Case studies
- Lists of open-ended questions to structure conversations on the issues, feelings, and realities of improving utilization

Together, the action steps, tools, and resources in these guidelines provide veterinary practices with strategies for improving utilization, job satisfaction, and retention of these valuable and skilled veterinary professionals.

Abbreviations and Acronyms

AAVSB American Association of Veterinary State Boards

ADL Adult Learning Theory

AVMA American Veterinary Medical Association

CrVT credentialed veterinary technician (encompassing CVT,

LVT, LVMT, RVTg, and RVT)

CSR customer service representative **ECG** electrocardiogram

NAVTA National Association of Veterinary Technicians in America **SMART** specific, measurable, achievable, relevant, and time-bound

SOC standard of care

SOP standard operating protocol T&D training and development

TPR temperature, pulse, and respiration rate

VA veterinary assistant

These guidelines were prepared by a task force of experts convened by the American Animal Hospital Association. This document is intended as a guideline only, not an AAHA standard of care. These guidelines and recommendations should not be construed as dictating an exclusive protocol, course of treatment, or procedure. This resource is not a substitute for legal or other appropriate professional advice. AAHA is not responsible for any inaccuracies, omissions, or editorial errors, or for any consequence resulting therefrom, including any injury or damage to persons or property. Evidence-guided support for specific recommendations has been cited whenever possible and appropriate. Other recommendations are based on practical clinical experience and a consensus of expert opinion. Variations in practice may be warranted based on individual needs, resources, and limitations unique to each practice setting.

Section 1. Situation Overview

Why develop guidelines on veterinary technician utilization?

The veterinary technology profession is relatively new compared with its human nursing counterpart. Whereas organized human nursing traces its origins back to the late 1800s, the first class of "animal technicians" in the United States officially trained at the State University of New York in Delhi and graduated in 1963.² As veterinary medicine evolved from agrarian to companion animal care, veterinarians began to rely more heavily on formally educated professionals to provide nursing care and to support advances in medicine, patient care, treatments, and diagnostics. Instead of the historical reliance on assistants trained on the job, veterinary medicine required highly skilled, college-educated, credentialed veterinary nursing professionals to meet the expectations of the pet-owning public and the increasing recognition of the human-animal bond.

Almost a decade later, the American Veterinary Medical Association (AVMA) accredited the first animal technician training programs in 1972. Then, in 1989, the AVMA changed the title of "animal technician" to "veterinary technician." Now, 34 years since the birth of the credentialed veterinary technician (CrVT) title, the individuals dedicated to this young-but-vital profession face growing pains and ongoing struggles to be properly utilized in today's demanding veterinary practice.

These AAHA guidelines provide a current situation overview and explore the benefits and advantages of full utilization of credentialed technicians in the profession. Past and current studies demonstrate that CrVTs cite lack of utilization as a top reason for leaving the profession, along with burnout and decreased job satisfaction.3,4,5

Almost every jurisdiction trains and licenses veterinarians to diagnose, prescribe, prognose, and perform surgery. When veterinarians perform nursing tasks outside of these four core functions, it results in staff not being utilized completely and causes practical and financial inefficiencies. Even incremental improvements in utilization improve outcomes, 6 allowing veterinarians to perform more of the core medical services that only they can legally provide. Allowing college-educated, skilled CrVTs to provide the remaining delivery of care defines proper utilization and results in a highly leveraged medical team and optimal veterinary care.

Current economic trends and forecasts reveal serious challenges for the future if veterinary practices cannot attract, retain, and hire more professional staff.7 The sustainability of the public's access to care—whether because of a lack of emergency care services, growth of underserved communities, or extended delays in receiving veterinary services—raises alarms.8 Based on the anticipated growth of the pet healthcare market, the Mars Veterinary Health studies estimate that by 2030, veterinary medicine will require 132,885 CrVTs to meet growing healthcare demands.9 The American Association of Veterinary Medical Colleges proposes a shortage of more than 50,000 CrVTs by that time at current graduation rates. 10 In addition, estimates predict a shortage of veterinarians of up to 15,000 individuals by the year 2030.11 Improved CrVT utilization is now and will remain a key strategy for counteracting these concerning shortfalls.

The efficient use of CrVTs starts with integrative training and mentorship, which also increases an individual's career advancement opportunities and fulfillment. Identifying existing leaders within the veterinary care team improves patient care and staff retention rates. Considering the more conservative estimated need for ~50,000 more veterinary support team members to maximize productivity, every team member retained, especially CrVTs, plays a critical role in the success of individual practices and level of care provided to patients and clients across the profession.¹⁰

The actionable strategies contained within these guidelines provide a picture of what proper utilization looks like and what the benefits are to the individual credentialed technician, veterinary team, and the future of veterinary medical care. Removing or

decreasing barriers to best practice utilization can create positive ripple effects. Proper utilization sets the cornerstone for optimizing team efficiency, which in turn increases access to veterinary services, improves patient care, and addresses staffing and retention problems in the post pandemic veterinary workforce, with its concurrent rise in burnout and drop in professional satisfaction. Along with emulating case studies from within the veterinary profession, veterinary practices can improve the delivery of veterinary care by emulating best practices of utilization and leveraging from similar medical industries, including dentistry, ophthalmology, and human nursing, as examples.

Section 2. Benefits of Optimal Veterinary Technician Utilization

Top 3 Takeaways:

- Support professional longevity for CrVTs by utilizing them to the full extent of their abilities to decrease career dissatisfaction and abandonment.
- **2.** Recognize the economic impacts of fully using CrVTs for their education, licensure, and training.
- **1.** Empower CrVTs to provide all patient care tasks allowable in the respective state's veterinary practice act and improve veterinary teams' awareness of the scope of these allowed tasks.

The veterinary technician's role is vital to a veterinary practice's success and efficiency. However, optimization of veterinary technicians still eludes many practices, hobbling both parties' financial potential and professional advancement as well as impacting patient care. The benefits of optimal utilization, described in detail below, serve both the individual CrVT and the veterinary profession as a whole.

Professional Longevity

When individuals consider their professional career paths, many assume they will remain in their chosen profession for decades. However, studies have found that attrition rates increase exponentially for CrVTs between the 5- and 10-year career mark. Without

definitive longevity studies, current data suggest that anyone spending more than a decade in the veterinary technology profession exceeds the average length of a veterinary technician's career lifespan. 12,13,14,15

Promising preliminary data published by the National Association of Veterinary Technicians in America (NAVTA) suggest improvements in career longevity since their last demographic survey in 2016. The data collected from early 2022 showed an average of 14.4 years in the profession, although higher-quality data are needed to assert improvement fully.¹²

A 2022 literature review published by the *Journal of the American Veterinary Medical Association* indicated that CrVTs measure their intrinsic and extrinsic rewards by both their pay and the value and meaning of the specific tasks they perform. Optimal utilization correlates with higher job satisfaction and self-identity.¹⁶

Despite fewer career lifespan studies of CrVTs than of veterinarians, multiple studies define common themes for career dissatisfaction and attrition. Low pay, lack of recognition, underutilization, toxic work environments, burnout/compassion fatigue, lack of title protection, and unclear professional development opportunities repeatedly make the list.⁵

Using CrVTs to the full extent of their abilities and education in a collaborative and supportive environment diminishes many of the common reasons for career dissatisfaction. To get to this point of optimization, though, it is essential for veterinary practices to create a well-defined training strategy or program. Study after study demonstrates that investments in team training boost job satisfaction and lead to significant increases in profits. However, it is also essential to create an equitable distribution of delegation that considers multiple factors, known as the five rights of delegation. These include:

- 1. The right person
- 2. The right circumstance
- 3. The right task
- 4. The right supervision
- 5. The right direction and communication¹⁸

Optimal utilization, coupled with good training programs and mentorship for CrVTs, leads to less burnout, higher job satisfaction, and a path to career advancement. Ideally, this frees practice managers and owners to focus on team and client retention. improving patient care, and investing in advancing the knowledge and skills of the healthcare team rather than nonstop recruitment.

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Economic Impact

For most businesses, including veterinary practices, client retention supports financial sustainability and establishes a foundation for achieving other goals. In the clinic setting, involving a CrVT in decision-making discussions with clients significantly and positively impacts the client's engagement and capacity for making decisions. Including both CrVTs and veterinarians in client communication increases client education and incorporates client preferences, leading to better case outcomes, better resource management, more satisfied clients, and increased profitability.19

Because satisfaction and retention of clients and of veterinary team members correlate, veterinary leaders and managers must focus on both. Practices repeatedly state that they want to hire more CrVTs but struggle to find them owing to scarcity and an increasingly competitive hiring environment. These challenges can be minimized by focusing on retention and enjoying the rewards of a well-trained and engaged team over

time, leading to higher profitability associated with lower turnover costs. In studies from 2020 and 2022, the authors describe the economic impact of turnover from career burnout and vacancies. They estimate the veterinary industry's CrVT turnover cost associated with burnout to be ~\$933 million annually. Individual turnover cost for a CrVT is ~\$24,000, in addition to another ~\$35,000 lost from potential income during a 40-day vacancy. Note that the study authors considered both figures undervalued.^{6,20}

When looking at the revenue generated from two different studies in North America, one with data from 2007²¹ and the other with data from 2020,6 fully using a CrVT for their education, licensure, and training accrues a revenue benefit of ~\$104,976-\$137,240 per CrVT, per veterinarian.^a

In addition, the 2020 study showed a median increase in revenue of approximately 36% per veterinarian for those veterinarians who rarely or never perform tasks that a CrVT can perform legally. Both the 2007 and 2020 studies also found a marked increase in revenue per veterinarian for CrVTs who earned more compensation.6,21

Other investments in individual employee development also correlate with significant increases in profits. One survey study found that companies that invest as little as \$1,500 per employee each year can see a 24% increase in profits.17

Patient Care

The quality of patient and client care that CrVTs provide is of utmost importance to veterinary professionals, clients, and their pets. As noted in the earlier longevity section, CrVTs find value and meaning in their tasks, and that value and meaning tie directly to overall job satisfaction and self-identity.

a Original currency (CAD) and figures from both studies were converted to US dollars using the Google currency calculator and adjusted for inflation using the US Bureau of Labor Statistics CPI calculator in January 2023.

Considering the five rights of delegation, CrVTs, when used efficiently, not only enhance patient care but increase access to animal health services by enabling veterinarians to see more patients. This requires CrVTs to perform all the tasks allowable in the respective state's veterinary practice act. For example, some states put suturing minor wounds or surgical sites, simple dental extractions, endotracheal intubation, and anesthesia induction within the purview of CrVTs. Remember, practice acts typically limit veterinarians to four tasks: surgery, prescribing, diagnosing, and prognosing. All other tasks—including some that veterinarians often mistakenly believe are illegal for CrVTs to perform (e.g., central line placement, unblocking male cats, capturing diagnostic images via ultrasound, bandaging, and locoregional anesthesia)—fall legally and effectively within a CrVTs scope of practice, depending on the state.

Section 3. Why So Little Progress?

Top 3 Takeaways:

- **1.** Many veterinary teams remain unaware of their own issues with utilization, mostly due to being unfamiliar with licensure and the scope of practice of veterinary technicians.
- **2.** Barriers to trust drive many behaviors that prevent optimal CrVT utilization and must be approached with empathy and understanding.
- **3.** Adequate resources are needed to improve CrVT utilization through training plans.

For decades, the veterinary profession has wrestled with and debated how the CrVT role can be optimized within the profession. Yet, little progress has been made. The reasons for the lack of meaningful progress break down into three major categories. First, many veterinary professionals remain unaware of the root causes and subsequent effects that the failure to optimize CrVT utilization has on the profession, with many veterinary teams not realizing the extent to which CrVTs can be utilized legally. Second, the veterinary profession faces barriers to trust between members of the veterinary team, slowing progress toward sustainable change. Third, those

who recognize and understand the issues preventing CrVT optimization lack the resources to address it meaningfully.

Awareness of the Problem

The profession, first, must recognize CrVT utilization issues and their causes before effecting change. Many veterinary teams remain unaware of their own issues with utilization, mostly due to being unfamiliar with licensure and the scope of practice of veterinary technicians.

Inconsistencies from state to state in the legal scope of practice for CrVTs compound the issues. Although some states list the tasks that CrVTs can perform, they may not actually limit those tasks only to CrVTs. Some states do not define the scope of practice beyond restricting the act of surgery, diagnosis, prescription, and prognosis to licensed veterinarians. In many cases, state regulations specify no difference in scope of practice between a CrVT and a veterinary assistant. This leads to a situation in which veterinary teams, unless they study their state's regulations closely, find themselves exposed to inconsistent advice and opinions on what CrVTs can and cannot do. Amid this confusion, many veterinary teams err on the side of extreme caution.

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Without the scope of practice restriction to CrVTs that clearly defines roles and task boundaries, veterinary teams often take an all-hands-on-deck survival stance, in which every non veterinarian works on everything and anything instead of efficiently managing workflow by directing the right level of

expertise to each task. Unfortunately, when team members are often forced to work overtime to handle the workload, this creates an illusion that all team members are overutilized.

Even when veterinary teams recognize their shortfalls in actively managing workflow and maximizing utilization based on individuals' skill sets, they may not know how to implement change, or they may find the time and commitment required to overturn the status quo too daunting, which also impedes progress.

Barriers to Trust

Barriers to trust in veterinary medicine stand at the core of poor utilization; fear also may drive many behaviors that ultimately prevent good utilization. While CrVTs carry liability for their actions and can lose their licenses in malpractice cases, veterinarians face legal liabilities not shared by other members of the veterinary team. Veterinarians carry additional legal liability for the entire veterinary team, and their medical practice licenses could be negatively impacted or even taken away based on the actions of other team members. This may be a common reason for not delegating tasks to CrVTs. Because it is not only the CrVT's license but also the veterinarian's license that is on the line, veterinarians may be reluctant to allow someone else to perform a procedure or task that could lead to a negative outcome.

Some veterinarians come from an educational background and professional culture that emphasized they should be able to perform all tasks at all times. In addition, in some cases, veterinarians may hesitate to delegate tasks they find fulfilling to perform themselves. After all, everyone gains satisfaction from doing a job well, completing a challenging task, and, perhaps most importantly, providing one-on-one care to patients. By committing to utilizing CrVTs to their maximum potential, veterinarians may feel limited by only doing surgery, diagnosis, prescription, and prognosis or worry about a decline in some of their other hands-on skills. However, CrVTs who are not permitted to use and/or develop skills commensurate with their education and training may also experience

a decline in their hands-on skills and confidence. which can potentially perpetuate this cycle of fear and mistrust. Instead, veterinarians should embrace the opportunity to participate in training and mentoring CrVTs (keeping in mind that mentoring can go both ways) to increase the confidence and trust of both the veterinarian and CrVT.

Making the large shift to optimal utilization of CrVTs leads to a loss of immediate, hands-on control of patient care and means changing the status quo which can trigger fear, discomfort, and resistance.

Disrupting these barriers to trust requires that veterinary team members acknowledge the very real risks of liability and understand that veterinarians and practice owners hold greater legal liability. This issue cannot be solved simply by changing practice culture and mindset because the laws governing licensing remain. However, certain strategies can build trust and ease fears. It is crucial that veterinarians actively participate in the training and professional development of CrVTs to create a solid foundation of trust and collaboration between veterinary team members. It is important to define and recognize the roles of each team member and create a psychologically safe environment with no negative connotations or judgments about learning from peers in all roles. Acknowledging these fears and fostering a practice culture in which team members approach one another with empathy helps promote teamwork based on collaboration and trust.

Resources and Training

Even when veterinary teams commit to addressing the utilization issue, a lack of resources poses a significant challenge. Sources of practical information on state practice acts presented in a digestible manner, models of CrVT treatment planning and efficient handoff between veterinarians and CrVTs, and tools to assess CrVT utilization within practice remain elusive or nonexistent in the veterinary field. Collaborative efforts between national veterinary organizations to create readily accessible resources for veterinary teams have not yet caught up to the needs.

A lack of trust in the skills of CrVTs is sometimes cited as a reason for poor utilization.^{4,22} Although effective training offers a potential solution, several real-world challenges make implementation difficult. Organized training sessions mean setting aside the time to conduct them, which exacerbates the existing pressures of packed schedules and daily demands of clinical practice. It also takes financial resources to hire a dedicated trainer. Successful training and professional development systems typically require dedicated personnel who manage the training process and actively work as trainers on the floor. External learning management systems or continuing education offer another option. Hospital leadership, however, often may find that giving team members time off for external learning increases the burdens on the rest of the team and therefore may not prioritize the importance of these educational opportunities.

An overall shortage and high turnover of CrVTs in the field compounds these issues. 9 Many practices, especially since the COVID-19 pandemic, face serious difficulties in staffing appropriately for demand. Staffing shortages can lead to situations in which team members perform tasks outside of their most effective area of expertise—CrVTs doing janitorial work, for example. Additionally, the perpetual pattern of tending to daily client and patient needs affects the ability to improve utilization proactively through professional education and training. Veterinary teams need to break this pattern for them to remain healthy; poor utilization reduces professional fulfillment and leads to more burnout and turnover, which makes the situation worse and continues the destructive pattern.

Proper training, mentorship, and guidance of less seasoned team members rely on experienced individuals staying on the team. High turnover slows progression toward team maturity because practices keep losing individuals as they start to gain experience. On a macro scale, this profession-wide issue worsens as more people exit veterinary practices for different careers. Over time, high attrition of veterinary professionals in all roles lowers the average skill set retained, slowing maturity in the profession as a whole.

Section 4: Overcoming Barriers

Top 3 Takeaways:

- **1.** Intentionally create a practice culture that includes acting upon a well-defined mission and values and building trust.
- **2.** Provide team training and development and reassess regularly to ensure no one gets left behind.
- **3.** To achieve full CrVT utilization, it is essential to bring veterinarians, practice owners, and managers fully on board.

Although the veterinary medical profession has debated optimal CrVT utilization for decades, the COVID-19 pandemic propelled the costs and consequences of veterinary team inefficiencies into the spotlight, highlighting the need for urgent action. These guidelines have already described several barriers that veterinary practices must overcome to implement optimal utilization—the most obvious being that through state licensure, the veterinarian remains responsible for all activities that occur while delivering patient care. Simply put, veterinarian buy-in is essential, and building a skilled and trusted team is key to achieving this. Veterinary practices must establish a workplace culture that supports collaboration and psychological safety. Without it, full CrVT utilization falls apart.

Culture

Workplace culture shapes the attitudes and behaviors (values) that achieve the shared purpose (mission) of the practice.²³ Although all team members demonstrate and carry out culture, leadership holds responsibility for setting the tone of the culture and continuously cultivating that culture. This work by the leadership team never stops. It is like a garden that needs to be seeded, watered, weeded, and fertilized throughout all seasons every year.

Leadership means influencing, motivating, and inspiring others continuously to be the best they can be. Those in the roles of the practice owner, medical director, practice manager, and any other lead or senior positions in the practice provide leadership. People often see associate veterinarians as leaders as well, and they should be considered as such because of the impact their actions can have on other team members. However, it is crucial that a practice provides leadership training and support to distinguish between a boss and a leader. A boss tells someone what to do and how to do it. A leader demonstrates the behaviors that result in the expected achievement of goals. But for a leader to demonstrate the expected behaviors, they must know (and believe in) the practice goals (vision, mission, and core values) and overall strategic plan.

Psychological safety, trust, and respect are key values for CrVT utilization. This requires veterinarians to trust the skills of each team member for optimal

The leadership team also holds responsibility for creating an environment of psychological safety; this means a workplace environment that allows and encourages collaboration without fear of retribution and supports a culture that promotes excellence, where team members thrive, not merely survive.

Psychological safety, trust, and respect are key values for CrVT utilization. This requires veterinarians to trust the skills of each team member for optimal utilization. Lack of trust looks like a veterinarian insisting on placing all IV catheters in their patients or standing over a CrVT during a bandage application. It may also look like running behind on appointments because the CrVT is not permitted to discuss a diet trial with an allergic patient's caregiver or vaccines/ deworming with a new kitten client. As previously mentioned, it is predominantly the veterinarian's license and livelihood on the line; therefore, they

must feel comfortable with the scope of skills, treatments, and client education delivered. This can only occur when the professional relationship between a CrVT and a veterinarian is based on trust and mutual respect, and it requires work from both team members.

Veterinarians must create a psychologically safe environment that promotes trust and respect. At the same time, the CrVT must be willing to be open to listening, learning, growing, and communicating with the veterinary team to anticipate needs and deliver superior care for every patient. In safe environments, the CrVT feels more willing and comfortable to ask questions, think critically, and problem-solve, thus allowing the veterinarians to feel comfortable and confident in delegating and empowering CrVT utilization.

Maintaining trust and respect between team members requires alignment with practice goals, role clarity, standard operating protocols (SOPs), and standards of care (SOCs). This alignment starts with leadership implementing team meetings to discuss and collaborate on goal achievement (stating the goals and allowing the team to determine how to best achieve those goals); having daily shift huddles to discuss the plan for the day and communicate essential details; developing (and utilizing) SOPs and SOCs collaboratively; and developing a strong training and development program for all team members. These critical efforts create a team-centered veterinary practice that results in a higher level of CrVT retention and attraction.

Team Training and Development

A strong team training and development (T&D) program starts with role clarity; every role in the veterinary practice needs a job description that lists both hard (hands-on, tactile tasks) and soft (emotional intelligence, critical thinking, forwardthinking, conflict resolution, and communication) skills for individuals to demonstrate and carry out every day to meet and exceed practice goals. Develop every job description and training program with the end goal in mind. This ensures every expectation

described contributes to the overall goals and success of the practice. Once expectations are set, the T&D program must be built to support each expectation. Onboard every team member through a standard training program, regardless of the experience they bring with them. This allows all team members, including veterinarians, to be trained in the culture and philosophies of the practice and to understand the expectations for their daily work.

Incorporate the Adult Learning Theory (ADL) into the T&D program for the best success. Typically, this means the learner sees the task, hears it explained, and then completes the task. Most adults need to demonstrate a task several times under the guidance of a trusted trainer/mentor to build confidence and promote a psychologically safe environment.²⁴

Consider the addition of a mentorship program with collaborative learning for both new graduate veterinarians and CrVTs—either resourced externally or built within the practice.

Consider the addition of a mentorship program with collaborative learning for both new graduate veterinarians and CrVTs—either resourced externally or built within the practice. New graduates come with different learning experiences, and not all graduates arrive with the same skills. Different programs use different teaching styles, and the hands-on experience received while in school varies. Practices must be willing to accept this and put T&D into place to help each graduate succeed in the practice. Strong T&D programs also enhance employee retention and practice loyalty. New team members establish bonds to a practice and a job within the first 60 days of employment. Use that initial time together wisely.

In addition to including ADL in training programs, deliver T&D programs in phases to avoid overwhelming new employees. Expect those with more experience to go through the program at a quicker pace than new graduates; that is fine and normal. Set up individuals to succeed from day one, increasing the likelihood of gaining a long-term team member. Also consider implementing a leveling system, with three levels of skills each. Upon demonstrated competency for each level, implement appropriate pay increases in recognition of professional development and advancement (see Table 6.1).

In combination with collaborative culture, clear leadership, and psychological safety, a strong T&D program supports successful and full utilization of CrVTs (and the entire team). However, a T&D program should not stop there. Provide every team member with the continuing education needed to fuel their passion and growth. When veterinarians and CrVTs learn and implement new skills and excel with passion while meeting practice goals, the practice moves from CrVT utilization to CrVT optimization (passion + pride in their work). And advanced training in specialty fields allows CrVTs to pursue a Veterinary Technician Specialist (VTS) certification, ²⁶ enabling full optimization, while potentially adding additional revenue streams for the practice.

Regularly Assess Utilization

In addition to implementing the strategies outlined in these guidelines to reach optimal utilization, it is also important to create a plan to reassess utilization regularly and ensure no team member gets left behind. Monitor for signs that trust or communication are eroding (team conflict, lack of communication among team members, or decreased utilization), and look for warning signs of a toxic culture brewing (gossip, formation of cliques, separation from others, or not being willing to step in and help others). In the absence of trust and good communication throughout the entire team (and driven by leadership), team members begin to form an "I" mentality vs a "team" mentality, resulting in a lack of investment in the

team and negatively impacting the goal of optimal utilization.

If at any time the leadership finds a decrease in optimal utilization, it is time to return to the basics and evaluate from the ground up. Is it a training, communication, or leadership issue? Put SMART goals—Specific, Measurable, Achievable, Relevant, and Time-Bound²⁷—in place that allow the leadership team to adapt as needed, supporting greater goal achievement. To ensure utilization is fully incorporated, modify the original SMART framework to achieve better results—replace achievable with accountability and relevant with resources. Therefore, specific goals identify exactly what needs to be accomplished; measurable metrics are put into place to track goal progression; action items define what objectives (that are achievable) will be carried out and by whom (accountability); resources identify resources that will be needed to achieve the goal; and a timeline identifies when the goal will be achieved and establishes checkpoints along the way. When practices write out goals, teams more easily execute and achieve them. See Table 5.1 for an example of SMART goals in action.

Section 5. What Optimal Utilization Looks Like

Top 3 Takeaways:

- 1. To begin integrating greater utilization into the workflow, prioritize appointments/initial assessment utilization, surgical utilization, and telehealth/teletriage.
- 2. Establish a precise framework of care, including systematic communication and proper handoff between veterinarians and CrVTs in each step of patient care.
- 3. Each practice will look slightly different depending on team members' skills, but regardless of hospital structure, implement empowerment, SOPs, workflow optimization, and patient assessment for the optimal utilization of CrVTs.

A highly functional and coordinated veterinary healthcare team provides the formula for achieving team satisfaction, quality patient care, and profitability.²⁸ Fully utilizing highly trained CrVTs in veterinary practice allows the veterinarian to concentrate on delivering advanced services to clients, thereby increasing practice revenue and the quality of patient care.^{29,30}

"Not finance. Not strategy. Not technology. It is teamwork that remains the ultimate competitive advantage, both because it is so powerful and so rare."—Patrick Lencioni31

Optimization of the CrVT role expands and elevates the entire veterinary team, empowering each person to reach the pinnacle of their licensing, education, and/or expected capacity within the hospital setting. By changing assigned responsibilities and shifting the team's direction from a veterinarian-centric model to a team-centric model, veterinarians can focus on diagnosing, prognosing, prescribing, and performing surgery. This model will look slightly different in each practice based on team members' skills, but the goal remains the same: elevate every team member to their maximal capacity as defined by state regulation. To maintain the integrity of medical authority, develop and use detailed protocols and algorithms to be followed by all team members.

Pathway for Optimal CrVT and **Team Utilization**

Table 5.1 utilizes the SMART goals system as reviewed in Section 4 to establish action plans for success. First, identify the issue needing a solution and define the needed steps to achieve that goal. The action items provide a step-by-step plan to achieve optimal CrVT and team utilization. To begin integrating greater utilization into the workflow, prioritize appointments/initial assessment utilization, surgical utilization, and telehealth/ teletriage. Also, develop detailed plans based on agreed-upon protocols (use algorithms as defined by SOPs, including if/then matrix) and train everyone on implementation.

 TABLE 5.1: SMART Goals to Implement CrVT Utilization and Team Optimization

Issue Identified	Our practice has determined that we do not utilize our team to maximal efficiency, resulting in the loss of team members, decreased revenue, and burnout.				
Goal	Improve revenue, reward the team, decrease turnover, and improve client retention and satisfaction				
Objective	OBJECTIVE 1 OBJECTIVE 2				
S PECIFIC	Implement CrVT utilization to the maximal capacity allowed by state regulation through team development, a gap analysis, and an understanding of maximal capacity as defined by state regulation.	Develop and implement protocols and team training.			
MEASURABLE	 Less than 10% team member turnover year over year Increase revenue by 10% through organic growth (not just price increases) Increase wage ranges based on the scope of duties Increase client satisfaction (as measured through surveys) from an average of 3/5 to 4.8/5 	 50% of VAs are at level 2 within 6 months of hire 75% of current VAs are at level 3 within 3 months of training and SOP rollout 50% of CrVTs are at level 3 within 6 months of hire 75% of current CrVTs are at level 3 within 3 months of training and SOP rollout Increase the number of CrVT appointments by 10% month over month until maximal efficiency has been achieved 			
A CCOUNTABILITY	ACTION ITEMS/ACCOUNTABILITY				
(in place of Achievable)	 Create a Utilization Team with representation from all practice roles (veterinarian, CrVT, VA, CSR, and kennel team) to contribute to and participate in all decisions and activities of the team utilization plan. ASSIGNED TO	 From the completed gap analysis, identify training gaps for current protocols and what training needs to be developed to ensure successful implementation. ASSIGNED TO From the completed gap analysis, identify opportunities for utilization that need to be implemented, what protocol(s) need to be developed, and what training needs to happen to ensure successful implementation. ASSIGNED TO Develop a standardized workflow for optimal utilization that maintains team alignment. ASSIGNED TO Develop standardized hospital processes and procedures to maintain team alignment and improve efficiency. ASSIGNED TO 			

 TABLE 5.1: SMART Goals to Implement CrVT Utilization and Team Optimization, Continued

Objective	OBJECTIVE 1				OBJECTIVE 2	
ACCOUNTABILITY (continued)	 4. Review the scope of practice as outlined by the AAVSB. ASSIGNED TO 5. Create a foundation of transparency with the team; present the findings of the gap analysis and seek input for successful goal implementation. ASSIGNED TO 		 Equitably assign tasks using the five rights mod of delegation described in Section 2. ASSIGNED TO Deliver team training that keeps the team aligned on workflow and provides tools for all team members to perform optimally at their level. ASSIGNED TO Assess progress and provide feedback, both to individuals and as the whole team. Define where the practice was, where it is now, and the remaining goals to achieve. ASSIGNED TO 		the team aligned for all team t their level. edback, both team. Define t is now, and the	
RESOURCES (in place of Relevant)	Resources State Veterinary Practice Act/Rules and Regulations found on the state board of veterinary medicine website AAVSB Model Regulations—Scope of Practice for Veterinary Technicians and Veterinary Technologists			Resources AAHA Implementing Preventive Care Protocols: www.aaha.org/globalassets/05-pet-health- resources/implementing-preventive-care- protocols.pdf Partners for Healthy Pets: www.partnersforhealthypets.org/resources- toolbox/communications/ AAHA Mentoring Guidelines: aaha.org/mentoring		
T IMEBOUND			TIME	ELINE		
	Action item #1 due:	Checkpoint date #1:	Checkpoint date #2:	Action item #1 due:	Checkpoint date #1:	Checkpoint date #2:
	Action item #2 due:	Checkpoint date #1:	Checkpoint date #2:	Action item #2 due:	Checkpoint date #1:	Checkpoint date #2:
	Action item #3 due:	Checkpoint date #1:	Checkpoint date #2:	Action item #3 due:	Checkpoint date #1:	Checkpoint date #2:
	Action item #4 due: Checkpoint date #1: Checkpo		Checkpoint date #2:	Action item #4 due:	Checkpoint date #1:	Checkpoint date #2:
	Action item #5 due:	Checkpoint date #1:	Checkpoint date #2:	Action item #5 due:	Checkpoint date #1:	Checkpoint date #2:
	Action item #6 due: Checkpoint date #1: Checkpoint date #2: Action item #7 due: Checkpoint date #1: Checkpoint date #2:		Checkpoint date #2:	Action item #6 due:	Checkpoint date #1:	Checkpoint date #2:
			Action item #7 due:	Checkpoint date #1:	Checkpoint date #2:	
	Add additional action			on items as neede	d	

CrVT, credentialed veterinary technician; CSR, customer service representative; VA, veterinary assistant

Optimization of the CrVT role expands and elevates the entire veterinary team, empowering each person to reach the pinnacle of their licensing, education, and/ or expected capacity within the hospital setting.

Table 5.2 is an example of a standardized workflow for optimal utilization that improves practice efficiency and maintains team alignment. Areas where protocols can be created to enhance workflow include:

- Triage calls (first aid, primary response) and direction to available care
- Follow-up calls for surgical cases and recent hospitalizations, or returning client calls
- Nutritional/behavioral/hospice/chronic pain management consults with clients
- Preapproved/identified diagnostic tests (sample collection, in-house tests)
- Recheck diagnostics
- Care of in-house patients with routine updates to attending veterinarian
- Auxiliary care appointments such as glucose curve tests and bandage changes or suture removal
- Preplanning of next-day appointments

Include clear and defined steps for the veterinarian, CrVT, and all team members in protocol development, including direct communication pathways for both information and operational support. The British Small Animal Veterinary Association developed a sample triage tool (www.bsava.com/wp-content/ uploads/2022/02/15257-COVID-19-Advice-Sheets-Triage-tool-following-lockdown.pdf) that can be used as a starting point for discussion with CrVTs and the rest of the veterinary team to identify areas where greater utilization can occur and incorporate them into SOPs.

Establish a safe environment (see Section 4) so that all team members feel comfortable with asking questions about tasks, requesting additional training without fear of retribution, and receiving feedback on a frequent basis. Table 5.3 provides a non-inclusive list of tasks and procedures a CrVT could perform. Using this tool, the team can evaluate their current level of utilization and identify and discuss training opportunities.

Likely the most intense and time-consuming effort, training program development is required for successful implementation of utilization improvement plans. Every team member must be on the same page and understand what the other roles contribute and how these roles will benefit each team member. Be sure to develop clear expectations, integrate Adult Learning Theory (Section 4), and include an implementation plan in every training event. The Utilization Team (see objective #1, Table 5.1) must demonstrate the expected behaviors, SOPs, and new workflow pattern. The team should then role-play (without clients) to become comfortable with the changes.

Successful implementation builds opportunities for clear and constructive feedback, review and assessment, and adaptations as necessary. Prescheduled meetings for accolades and constructive feedback builds confidence and encourages engagement from team members. Individual meetings also allow leaders to identify growth opportunities and focus on helping each team member achieve their professional goals. When every member of the team "emotionally owns" the practice, they become accountable, problem-solving participants in achieving practice goals.

Every team member must be on the same page and understand what the other roles contribute and how they will benefit each

TABLE 5.2: Standardized Workflow for Optimal Utilization

Category	Roles 🔻	
Appointments/Initial Assessments	<u></u>	CSR: Obtains initial information, reason for visit, previous medical records
		 CrVT (with VA): Collect data Obtain the relevant history Perform initial triage Note problems found Create preliminary diagnostic plan (i.e., if patient is pale, order CBC) Start basic level of care or initial diagnostics (i.e., collect ear swab samples for cytology) Present case to veterinarian
		Veterinarian & CrVT: • Patient assessment and agreement/prioritization of problem list
		Veterinarian Gives presumptive or working diagnosis Creates therapeutic plan and recommendations Predetermines case management check-ins with CrVT Writes prescriptions and/or performs surgery
		 CrVT & Team: CrVT creates and facilitates nursing plan CrVT develops and facilitates/delegates patient discharge information and keys to clinical outcome success CrVT sets and performs follow up & recheck appts
Initial Assessments/ Emergency Situations	S	CSR: Obtains initial information, reason for visit, previous medical records
		CrVT (with VA): Collect data Obtain the relevant history Initial triage and patient assessment Note problems found Create therapy plan based on agreed protocolized medicine (algorithm) (SOPs, i.e., if/then steps) Order diagnostics (i.e., if patient is pale, order CBC) Initiate basic level of care (i.e., if patient is blue, start oxygen) Present case to veterinarian
		Veterinarian & CrVT: • Patient assessment and agreement/prioritization of problem list

TABLE 5.2: Standardized Workflow for Optimal Utilization, Continued

Category	Roles V	
Initial Assessments/ Emergency Situations, Continued		Veterinarian: Gives presumptive or working diagnosis Creates therapeutic plan and recommendations Predetermines case management check-ins with CrVT Writes prescriptions and/or performs surgery
		CrVT (with VA): • Carries out diagnostics and therapeutic plan
		CrVT & Team: CrVT creates and facilitates nursing plan CrVT develops and facilitates/delegates patient discharge information and keys to clinical outcome success CrVT sets and performs follow up & recheck appts
Anesthesia and Surgery		CrVT: Conducts patient assessment Initial pain score Prepares anesthesia/analgesia protocol (as per protocol(algorithm)/veterinarian direction) Creates surgical plan Equipment Preoperative preparation Monitoring Incision documentation Postoperative pain score
		Veterinarian: • Performs surgery
		 CrVT: Monitors anesthesia and pain Incision documentation and surgical record keeping Postoperative pain score Facilitates nursing care with team Communicates patient updates to clients Prepares and gives discharge instructions Creates a follow up and recheck appointment plan
Triage & Teletriage* (with established VCPR)		All Team Members: Demonstrate a clear understanding of definitions for Telehealth/Triage/VCPR See the AAHA/AVMA Telehealth Guidelines at aaha.org/telehealth for definitions and more information.

TABLE 5.2: Standardized Workflow for Optimal Utilization, Continued

Category	Roles 🔻	
Triage & Teletriage, Continued* (with established VCPR)	<u></u>	 CSR: Initial response (collects signalment and historical information); or Automated information collection for what can be collected
		 CrVT: Performs teletriage: Asks questions to collect more clinical information, photos, and video Uses critical thinking skills to ask differentiating questions Synthesizes generalized problem list Makes recommendation on action: ER, schedule in-person appointment with veterinarian, home care/education, and/or builds plans from SOPs previously approved by a veterinarian
		Veterinarian: • Diagnoses problem and reviews tests • Prescribes treatment
		CrVT: • Schedules necessary tests, communicates with client, performs treatments, prepares discharge & educational information for client • Prepares follow up plan
Telehealth* (follow up appointments and check ins, rechecks)		 CSR: Schedules telehealth appointment with CrVT based on treatment or discharge plans
		 CrVT: Performs telehealth appointments remotely—can include: Post-operative rechecks (such as incision checks) Post diagnosis Check in visits for chronic diseases/senior pet care Restates disease pathophysiology Restates outcome/prognosis discussions Reinforces the timing of repeat labs & reasoning for continued monitoring Schedules appointments for sample collection when deemed necessary Reinforces medication expectations/compliance and discusses: Challenges to compliance Lifestyle changes Exercise routines Nutrition

^{*}See also Resources at aaha.org/technician-utilization

CBC, complete blood count, CSR, client service representative; CrVT, credentialed veterinary technician; VA, veterinary assistant; VCPR, veterinarian-client-patient relationship

TABLE 5.3: Veterinary Team Member Utilization Assessment Tool

This tool is not meant to depict a comprehensive list of tasks CrVTs can perform. In addition, the list of tasks is intended to be agnostic about the differences in state practice acts. It is instead meant to give a view of what is and what is not possible based on the current state of the practice.

For each skill/task, place a 1 in the column if that role regularly performs the task and place a 0 in the column if they do not. Total all points for each column. If the Veterinarian column has more than 5 points, consider moving those tasks to CrVTs. While this list is not inclusive of all skills a CrVT could perform, it gives the team a chance to self-evaluate and identify training opportunities. Overall, the list has 4 required tasks for a veterinarian; depending on state veterinary practice acts (or rules and regulations), all other tasks could be delegated to a CrVT or VA (either under direct or indirect supervision), depending on the skill level of the team.

Use this guide to determine the role of each team member within the practice, then seek (or develop) training to elevate the team to an optimal utilization state. Where overlap exists between the roles of the veterinarian and CrVT (for example, client communication, patient care, and team wellbeing), the veterinarian and CrVT should consider creating a document that defines how they will collaborate and support each other in practice.

Skills/Tasks	Veterinarian Performs	CrVT Performs	Other Veterinary Team Member Performs (VA, CSR)	Not Performed/ Referred Out
Administer subcutaneous fluids				
Administer vaccines				
Anesthesia induction				
Arterial blood pressure monitoring				
Arterial catheter placement				
Bandaging (basic)				
Blood transfusion and crossmatching				
Catheter care (urinary, intravenous, arterial)				
Central line catheter placement				
Chest tube care				
Chest tube placement				
Chest/tracheal tube management				
Client communications (prescription and appointment requests)				
Client education (basic topics—pain assessment, husbandry)				

TABLE 5.3: Veterinary Team Member Utilization Assessment Tool, Continued

Skills/Tasks	Veterinarian Performs	CrVT Performs	Other Veterinary Team Member Performs (VA, CSR)	Not Performed/ Referred Out
Collect urine/fecal samples				
Communicate a patient's prognosis to a client**				
Cystocentesis				
Cytology sample collection				
Dental charting*				
Dental extractions*				
Dental local blocks*				
Dental prophylaxis*				
Dental radiographs				
Dermatological testing				
Diagnose a patient's condition**				
Epidural block*				
Esophagostomy tube maintenance				
Establish an airway during cardiopulmonary arrest				
Feeding tube care				
Fill prescriptions				
Gastric intubation				
Husbandry				
Intraosseous catheter placement				
IV catheter placement*				
IV fluid calculation—maintenance				
Manage team roles during cardiopulmonary resuscitation				
Medication administration, oral				
Medication administration, injectable				

TABLE 5.3: Veterinary Team Member Utilization Assessment Tool, Continued

Skills/Tasks	Veterinarian Performs	CrVT Performs	Other Veterinary Team Member Performs (VA, CSR)	Not Performed/ Referred Out
Microchip insertion*				
Monitor anesthesia parameters and maintain stable anesthetic plane				
Monitor emergent/critically ill patient				
Nail trims, anal gland expression, ear cleanings				
Nasogastric tube placement				
Neonatal care/resuscitation				
Obtain arterial blood gas sample				
Obtain diagnostic electrocardiogram				
On-site triage				
Ophthalmological testing (Schirmer tear test, fluorescein staining, tonometry)				
Orthopedic radiographs (ventrodorsal shoulder, OFA pelvis, spinal series)				
Pain assessment				
Patient restraint				
Perform chest compressions				
Perform euthanasia				
Perform initial teletriage				
Perform intake physical examination (routine surgery patients, etc.)				
Perform point-of-care ultrasounds				
Perform surgery**				
Peripheral catheter placement				
Phlebotomy*				
Physical rehabilitation assessments				
Place intravenous catheter and administer resuscitative drugs during cardiopulmonary resuscitation				

TABLE 5.3: Veterinary Team Member Utilization Assessment Tool, Continued

Skills/Tasks	Veterinarian Performs	CrVT Performs	Other Veterinary Team Member Performs (VA, CSR)	Not Performed/ Referred Out
Radiographs (basic)				
Recheck appointments				
Recover postoperative/sedated patients				
Routine hospital/clinic cleaning: kennels, laundry, floorcare, etc.				
Run and read in-house laboratory tests (urinalysis, complete blood count, chemistry panel, packed cell volume, SNAP tests)				
Surgical assisting				
Suture/staple removal				
Suture existing skin incisions*				
Telehealth/follow-up				
Tracheal intubation*				
Ultrasound-guided nerve blocks*				
Urinary catheter placement (dogs, cats)				
Urinary catheter placement/unblock a male cat				
Vitals (obtained, monitored) on a nonanesthetized patient				
Walk post–orthopedic surgery/neurologic patients				
Walk stable canine patients				
Write prescriptions**				
Totals:				

^{*}State dependent; some practice acts allow VAs or CrVTs to perform tasks as long as a veterinarian is present (on premises or in room).

CrVT, credentialed veterinary technician; CSR, customer service representative; OFA, Orthopedic Foundation for Animals; VA, veterinary assistant.

^{**}These skills/tasks are only performed by a licensed veterinarian.

By implementing these strategies for optimal utilization, veterinary practices can combat burnout and fully commit to team retention. Teams practicing at the peak of everyone's full potential and utilization create greater efficiency, quality of care, and positive patient outcomes.³² Such efforts also decrease overwhelming workloads to levels that protect the veterinary medical team from burnout. Rather than expend effort on showy rewards now and then, focus instead on a true team-based approach to daily practice. By revisioning every element of workflow, veterinary practices can support every team member, whatever the role, to function at the highest level and pursue meaningful professional development. Full and engaged team-wide utilization leads both individuals and practices into a better future—where together they can achieve team satisfaction, quality patient care, and profitability.

Get Involved

Don't like current regulations and/or practice acts? Get involved with your state veterinary medical association or veterinary technician association to participate in developing, reviewing, or updating scope of practice or restricted task lists.

Section 6. Examples of High-Impact Utilization

Top 3 Takeaways:

- **1.** The impact of high utilization of CrVTs goes far beyond profitability.
- 2. Variation in veterinary practices and skill sets of CrVTs requires defining utilization in levels rather than as one single definition.
- 3. Practice leadership is responsible for fostering veterinarian and veterinary technician partnerships

that ensure adherence to their state practice acts while still achieving high-impact utilization.

All businesses need a fine grasp on employee utilization within their organization to improve their profitability. However, the impact of high utilization of CrVTs goes far beyond profitability. When utilizing CrVTs to their full potential, practices experience multiple benefits, including:

- Reduced CrVT turnover
- Stronger ability to attract skilled professionals
- A collaborative environment that benefits the entire staff
- Burnout prevention
- Improvement in the overall health of the practice and practice team
- Increased efficiency and quality of patient care

The act of empowering employees encourages them to share ideas and knowledge to increase the quality of patient care. In addition, when employees feel happier and thrive, the workplace culture reflects this positive and growth-minded energy.

Because of the great variation in veterinary practices as well as in the skill sets of credentialed veterinary technicians, no single definition of high-impact utilization exists. With that in mind, Table 6.1 provides a list of some skill-set examples that fall into three categories (or levels) of veterinary technician utilization. Although not inclusive of all skill sets and experience levels, it provides at least a foundation for assessing the CrVTs within each practice and determining how well their skill sets are utilized.

Recognizing that state practice acts vary in direct versus indirect supervision requirements of CrVTs, high-impact utilization looks different in different practices based on what is (and is not) allowed by that state's practice acts. This list provides a framework to guide behaviors in practice. Ultimately, however, it is up to the veterinarian and veterinary technician, with the support of strong practice leadership, to partner together and ensure adherence to their state practice acts while still achieving high-impact utilization.

TABLE 6.1: Levels of Veterinary Technician Utilization and Examples of Specific Skill Sets

LEVEL 1	LEVEL 2	LEVEL 3
 Obtain/monitor vitals on nonanesthetized patient Cytology Bandaging (basic) Dental prophylaxis Dental radiographs Radiographs (basic) Administer vaccines Anal gland expression Nail trims Client education (basic topics—pain assessment, husbandry) Phlebotomy Urinary catheter care Intravenous catheter care Medication administration Husbandry Anesthesia monitoring (ASA I–II) Fill prescriptions Collect urine/fecal samples Cystocentesis Gastric intubation Tracheal intubation Blood typing Monitoring blood product transfusion Medication/fluid therapy calculations (basic drug calculations, constant rate infusions, percent calculations, mEq) Aseptic technique Basic suturing skills Perform Basic Life Support in CPR Controlled substance handling and monitoring Set up for surgery/procedures Low-stress handling/restraint Perform ophthalmological testing (Schirmer tear test, fluorescein, tonometry) Suture/staple removal Microchip insertion 	 Apply splints or casts Anesthesia monitoring (ASA III–IV) Advanced imaging anesthesia support (CT, MRI, PET) Client education (nutrition, diabetes, rehabilitation skills, palliative care) Esophagostomy tube maintenance Blood transfusion and crossmatching Dental local blocks Surgical assisting Perform Advanced Life Support in CPR Critical care assessments Urinary catheter placement Physical rehabilitation treatments (laser, shockwave, ultrasound, TENS, etc.) Regenerative medicine preparations (PRP, stem cell processing, hyaluronic acid injections) Emergency triage Surgical discharge Multimodal analgesia and interventional prescriptions (vasopressors, gastrointestinal, etc.) Intraosseous catheter placement Perform/position for orthopedic radiographs (VD shoulder, OFA pelvis, spinal series) Perform fine needle aspirates 	 Advanced imaging (CT, MRI, PET) Central line placement Arterial blood pressure monitoring Chest/tracheal tube management Physical rehabilitation assessments Epidural injections Ultrasound-guided nerve blocks Chest tube placement Blocked cat urinary catheter placement Tracheostomy tube care Difficult intubation Epidural catheter care Lead CPR code (RECOVER) Neonatal care Administration of total intravenous anesthesia Nasogastric tube placement

ASA, American Society of Anesthesiologists; CPR, cardiopulmonary resuscitation; CT, computed tomography; OFA, Orthopedic Foundation for Animals; PET, positron emission tomography; PRP, platelet-rich plasma; TENS, transcutaneous electrical nerve stimulation; VD, ventrodorsal

Case Studies

CASE STUDY 1

The following case study demonstrates Level 1 utilization.

Routine preventive healthcare appointment

History

A four-year-old male neutered Labrador retriever presented for a routine leptospirosis vaccine booster. The dog is a regular patient and had been seen for an annual physical examination in the past 6 months. A CSR obtained the patient's weight in the waiting room and escorted the client and patient to the examination room, telling the client that "the technician will be right in."

Veterinary Technician Consultation and Preventive Healthcare

After reviewing the patient's chart, the CrVT entered the room and confirmed the need for the appointment (routine vaccine booster). The CrVT then obtained a history, including whether the dog had been eating and drinking normally or experiencing any vomiting or diarrhea. The CrVT asked if there were any concerns the client would like to discuss. The client responded that there were none.

The CrVT completed a brief physical exam with vitals and, based on the medical record, determined that the dog was also due for a heartworm test. The client asked several questions about heartworm preventives, which the CrVT answered, before he agreed to the heartworm test and the vaccine. The CrVT escorted the pet to the treatment area, drew up the vaccine and asked a VA to restrain the pet while she drew blood for the heartworm test and administered the vaccine. The CrVT then took the pet back to the client while the VA started the heartworm test. The CrVT explained the signs of a vaccine reaction and when to seek medical care, and let the

client know that the heartworm test would be ready in a few minutes. The client elected to be called later with the results.

Summary and Discussion

This case study illustrates Level 1 utilization and provides an example of low-level utilization but high collaboration between the CrVT, CSR, and VA to accomplish a routine vaccine appointment. When the CrVT takes on routine vaccine booster appointments, this allows the veterinarian to continue seeing medical appointments, while remaining available to the CrVT if questions or issues arise during the vaccine visits. Collaboration between the CrVT, CSR, and VA frees up time for the CrVT to administer the vaccine and educate the client about preventive healthcare for his dog.

CASE STUDY 2^b

The following case study demonstrates Level 2 utilization.

Newly diagnosed diabetic patient needs client education and treatment monitoring

History and Presenting Complaint

A strictly indoor, domestic shorthair with a history of low exercise and excess weight presented. Family members recently noticed changes in his routine—significantly increased thirst, erratic appetite, lethargy, and changes in mood. They brought the cat to their veterinarian, who performed a physical examination, ordered laboratory work, and diagnosed the cat as diabetic.

Veterinary Technician Consultation

Following the diagnosis of diabetes, the clients scheduled a consultation with the head credentialed veterinary technician at the clinic. During this

b Case study adapted with permission from Estelle Jenner, RVN, Wangford Veterinary Clinic. In Jenner, E. Diabetic pets can continue to lead healthy lives. Wangford Veterinary Clinic. February 26, 2021. Accessed March 20, 2023. https://www.wangfordvetclinic.com/blog/63787/ Diabetic-Pets-Can-Continue-to-Lead-Healthy-Lives

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consultation, the CrVT discussed what to expect with the treatment plan prescribed by the veterinarian and trained the pet owners on how to administer insulin injections subcutaneously. The CrVT also made recommendations for nutrition and exercise changes to the cat's routine during this consultation.

Treatment and Follow-up

The cat's owners initially struggled with giving insulin injections at home because of the cat's temperament. Additionally, upon return for follow-up glucose curves, the cat's diabetes appeared unmanaged, although the cat's stress levels in the clinic made it difficult to determine the accuracy of the glucose readings. After discussing with the CrVT, the pet owners decided to switch to at-home glucose readings when the cat felt less stressed. The CrVT trained them on how to perform glucose checks themselves. The cat became comfortable at home with the new routine, and the clients performed glucose curves successfully. Results showed significantly lower results than when tested at the clinic. The CrVT communicated the results supplied by the family to the veterinarian, who then adjusted the insulin dosage. The CrVT also worked with the pet owners to establish a weight loss program, including a nutrition and exercise regimen to supplement the treatment plan.

Outcome

The pet owners achieved weight loss in the cat by following the nutrition and exercise regimen recommended by the CrVT. Additionally, using the appropriate insulin dosage determined based on glucose results provided by the pet owner, the cat achieved complete remission of his diabetes.

Summary and Discussion

This case demonstrated high collaboration between the veterinarian and credentialed veterinary technician to achieve compliance and success of the treatment plan. While the veterinarian provided the diagnosis and treatment plan, the CrVT handled the communication through technician appointments and consultations with the pet owners. The CrVT focused on educating the pet owners on the disease process and helped

adjust the plan for the cat's specific needs, such as feeling overly stressed in the clinic for glucose curves. The CrVT's extensive knowledge of diabetes and nutrition provided the additional assurance needed for the family members to be compliant.

This demonstrates high-impact utilization because it allowed the veterinarian to focus on the roles of diagnosing, prescribing and prognosing, while the CrVT assisted with the treatment plan through client education. Although communication and interpersonal skills do not appear on the list of skills, the CrVT utilized such competencies to guide the pet owners through the initial diagnosis and prognosis and work through the challenges of initially unmanaged diabetes. Consider these soft skills as well when evaluating high-impact utilization.

CASE STUDY 3

The following case study demonstrates Level 3 utilization.

Feline urinary obstruction

History

A call came into the practice from an owner who had observed abnormal litter box behavior in their 3-year-old domestic shorthair cat. The CSR asked the credentialed veterinary technician to speak with the owner about these concerns. The owner reported the cat going in and out of the litter box continually for the past 48 hours. The cat cried and strained to urinate without passing any urine. The CrVT explained to the caller that such behavior indicated a major concern, requiring immediate veterinary care and intervention. The owner agreed to an examination and stated they would come right away.

Triage Examination

Approximately 20 minutes later, the owner and cat arrived at the practice. The CrVT immediately brought the owner into the examination room and started the triage process. The CrVT took readings for temperature, pulse, and respiration (TPR) as well as completed an initial pain assessment. The TPR

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parameters revealed elevations across the board with a subjective pain score of 6 out of 10.

Physical Examination

The CrVT quickly alerted the veterinarian of the urgency of the case and shared the triage assessment. An emergency examination found a painful, distended bladder with distress from the cat. The veterinarian suspected a complete urinary tract obstruction and formulated a diagnostic plan and gave it to the CrVT. This diagnostic plan included blood work, urinalysis with sediment, urine culture and sensitivity, ultrasound of the bladder, an electrocardiogram (ECG), and pain medication. The CrVT then created a cost estimate for the owner while the veterinarian outlined the initial diagnostic details to the owner. Next, the CrVT communicated to the client the estimated costs and answered additional questions about the diagnostics. In the meantime, the veterinarian moved on to the next appointment. After the owner approved the initial estimated costs and diagnostic plan, the CrVT initiated the blood work and obtained the imaging and ECG. The veterinarian reviewed the diagnostics, which revealed an increase in blood urea nitrogen, creatinine, phosphorus, and potassium, low ionized calcium, and an increase in glucose. Urinary bladder imaging revealed a distended bladder without stones or bladder wall masses. ECG results revealed normal rhythm, no tall T waves, no prolonged PR intervals, no widened QRS complexes, and no loss of P waves or bradycardia.

The veterinarian formulated a therapeutic plan and communicated it to the CrVT and the owner. This plan included IV fluids and hospitalization, sedation, sacrococcygeal local block, placing a transurethral catheter with a closed urine collection system, pain management (buprenorphine and prazosin), and starting supportive care.

Supportive Care

Once the client approved the therapeutic plan, the CrVT placed the IV catheter, provided sedation and pain medications, placed the urinary catheter, and took radiographs to confirm catheter placement in the bladder. After obtaining the urine sample, the CrVT

performed the urinalysis and prepared the sample for routine bacterial culture. The CrVT also initiated IV fluids at 1.5 times maintenance level to correct dehydration, electrolyte imbalances, relieve postrenal uremia and hyperkalemia, and maintain urinary patency.

Nursing Care

For the next 2 days, the cat's nursing care included IV fluids, supportive care, and monitoring. The CrVT provided all nursing care, including catheter care (IV and urinary), drawing for and monitoring electrolyte panels, pain management, and dietary care. The CrVT also communicated with the owner multiple times per day and performed laser therapy on the kidneys and bladder twice a day during the hospitalization period.

The veterinarian provided all case assessments and therapy progress evaluations. The CrVT removed the urinary catheter 48 hours after the start of IV fluids. The CrVT also repeated blood work, which revealed normal renal values, resolved hyperkalemia, and normal blood glucose.

Outcome

Once the cat passed urine normally after catheter removal, the CrVT scheduled the patient's discharge from the hospital. The veterinarian completed the written discharge instructions for the owner that included all recommendations for follow-up care. The CrVT explained the discharge instructions to the owner. Then, 7 days later, the CrVT made a followup call to check on the cat. The owner reported that everything was going well, and the CrVT relayed that information back to the veterinarian.

Summary and Discussion

In this high-impact utilization case, notice that the veterinarian's role focuses more on case management, rather than patient caretaking. The veterinarian limits their efforts to the diagnosis and treatment plan of the patient with no time spent on procedural tasks. The CrVT serves as the primary caregiver. This case of high-impact utilization involves a CrVT with proper training completed and proficiency demonstrated to the hospital director in all procedures involved.

Section 7. Moving the Needle— **Action Plan and Resources**

Top 3 Takeaways:

- Educate veterinary teams and the public about the full potential of CrVTs.
- Keep CrVTS in the practice setting by utilizing their skills through innovative partnerships.
- Begin improving utilization by using the assessment tools created for these guidelines.

Historically and across industries, the term "technician" has carried a connotation of being less educated and limited in skill set. Many still consider vocational high schools or "tech schools" the only option for those who found little academic success or engagement in traditional school settings. 33 Not only is this inaccurate, but it can also be unfair and discriminatory.

How, then, do we break this stigma? It's complicated, with no simple answers or a single solution. However, it begins with self-awareness and education in the veterinary profession and ultimately extends to clients and members of the general public. This requires public education campaigns in the form of public service announcements via social media platforms and materials people can read at veterinary practices that explain the educational journey and critical role of CrVTs in veterinary medicine. Integrating an understanding of greater technician utilization within veterinary education would also help. But education is only the beginning; the transformation to optimal technician utilization in the veterinary profession culminates with the clinical and communication skills CrVTs can implement in daily practice. Table 5.2 maps out what this looks like in ideal high-utilization practices.

Keeping CrVTs Working via Innovative Career Paths

In addition to underutilization, the exodus of CrVTs stems from a variety of reasons detailed in Section 2. However, practices can take steps that keep CrVTs working in the veterinary space, even if they move away from traditional hands-on clinical roles with patients.

When tied to a specific clinical practice, CrVTs often experience a marked decrease in the variety of career growth avenues to explore, based on limitations such as equipment available and veterinarian comfort level with CrVT utilization within the practice. Yet many CrVTs remain deeply dedicated to pets and clients long after their time in the clinic. Keeping these valued individuals as an integral part of veterinary medicine is key to continuous service to pets and clients.

Those who have already shifted their roles into telehealth, including both veterinarians and CrVTs, report how working remotely often results in a better work-life balance and financial savings on commuting costs and related expenses.

For example, practices can offer CrVTs the benefits of telehealth, such as more flexibility, less physical strain, and the ability to provide support to clients from anywhere. Telehealth offers an excellent way to keep CrVTs engaged with the animals and families that they enjoy serving. Those who have already shifted their roles into telehealth, including both veterinarians and CrVTs, report how working remotely often results in a better work-life balance and financial savings on commuting costs and related expenses. For some CrVTs, the possibility of working with a variety of species while employing the same skill set they currently use in clinical settings may provide a driving factor for continued growth and engagement. Even if clinicians and other team members cannot attest firsthand to nontraditional clinical roles, practice managers and owners can provide references, resources, and time to CrVTs to explore new and different ways to continue working in veterinary medicine. Great resources include industry association sites, blogs, podcasts, templates, and protocols used by other veterinary professionals.

FIGURE 7.1: CrVT Utilization Sample **Open-Ended Questions**



For Veterinarians:

- What aspects of the Veterinary Team Member Utilization Assessment Tool worry you? Why?
- What aspects of the Veterinary Team Member Utilization Assessment Tool surprise you as tasks for CrVTs to perform?
- What areas (skills/tasks) of your practice not listed on the Veterinary Team Member Assessment Tool do you feel CrVTs should perform that they are not currently?
- Of the skills/tasks in the Veterinary Team Member Utilization Assessment Tool, which ones feel easy for you to delegate? Which ones feel complex or challenging, and why?
- How can we start addressing tasks that veterinarians feel nervous about delegating?



For CrVTs:

- As a CrVT, what skills/tasks would you like to learn?
- What areas (skills/tasks) of your practice not listed on the Veterinary Team Member Utilization Assessment Tool do you feel CrVTs should perform that they are not currently?
- How can we start addressing tasks the CrVT team feels nervous about taking on?
- What areas (skills/tasks) listed on the Veterinary Team Member Utilization Assessment Tool for veterinarians do you feel CrVTs should handle? Why?
- Of the skills/tasks in the Veterinary Team Member Utilization Assessment Tool, which ones feel easy for you to delegate to a VA or CSR? Which ones feel complex, and why?



For the entire hospital team:

- What are the differences between a veterinarian, CrVT, VA, and CSR?
- How do you explain what a CrVT is to a pet owner?
- How familiar are you with your state's practice act about what a CrVT and a VA can/cannot do?
- What tasks—if any—would you not be comfortable having a CrVT perform on your own pet and why? What would alleviate and/or address this concern for you?

Where Are We Now?

It is often difficult in a busy practice to take a step back and assess CrVT utilization. The Veterinary Team Member Utilization Assessment Tool (Table 5.3) provides one method of assessing where a practice currently stands in terms of technician utilization. It specifically looks at common procedures and skills performed by CrVTs daily around the world. Although agnostic to state-specific practice acts, it gives teams a way to measure their practice's CrVT utilization, while also exploring possible new revenue streams by making the most of the time and expertise of CrVTs on staff.

Keep in mind CrVTs are allied health professionals, skilled and educated in various veterinary medical, surgical, and laboratory techniques. The comfort levels of a practice's veterinarians and the practice culture often limit CrVT utilization. CrVTs can perform a variety of duties, and practices must set role-appropriate expectations for them.

CrVT roles and expectations are typically outlined by the practice owner, the practice manager, or a combined approach. But what if instead an experienced CrVT, i.e., one who has worked in the practice for 3-plus years, served as a valued voice in the decision-making process? Who better than someone who completed the education, put their time in on the treatment floor, and informed themselves of their state's regulations to establish the framework for the CrVT team?

At a minimum, assessing the current CrVT utilization within a practice can open a conversation with the entire veterinary team about how they can collectively improve or celebrate the ideal leveraging of these valuable CrVT team members. The key to this discussion is the skillful use of open-ended questions (Figure 7.1) specific to CrVT utilization. These essential conversations mark the first step in the journey toward improved teamwork. After gathering the answers to these open-ended questions, it is easier to identify barriers and methods of accelerating utilization. Do not restrict the assessment and problem-solving solely to those inside a given practice. Instead, consider gaining fresh ideas and insights from peers in existing professional organizations and external veterinary and medical communities.

How to Continue Moving Forward

The Veterinary Team Member Utilization Assessment Tool (Table 5.3) gives the practice a starting point, while also assisting with identifying and setting goals. Using this tool and the questions in Figure 7.1, practices can identify what CrVTs and fellow team members could do in accordance with state regulations, skill sets, and trust levels. When developing a plan and goals, be sure to incorporate the examples of duties associated with levels within the CrVT team (Table 6.1). Although including all of the responsibilities of each team member falls outside the scope of these tables, they provide a starting framework. When the team knows who to utilize for what and when, efficiency increases and underutilization decreases.

It is important to reiterate that a CrVT is a professional who completed a 2- to 4-year AVMAaccredited program in Veterinary Technology and successfully passed the Veterinary Technician National Exam (VTNE), whereas a veterinary assistant has not (Figure 7.2). However, it is important to also recognize that the title of assistant feels inadequate for a large percentage of noncredentialed individuals with years of experience. Their superb skills and assets must be included in the assessment, and where allowed by law, their skills must be incorporated into utilization and workflow models. The task force also recognizes that alternate pathways to credentialing without an AVMA-accredited degree exist, and many capable professionals have been credentialed through this route. The task force believes obtaining a formal educational degree followed by passing a national examination is the standard to be met and upheld by each state board going forward, and encourages all veterinary technicians to pursue an education in Veterinary Technology/Veterinary Nursing.

FIGURE 7.2

WHAT IT TAKES TO BECOME A CRVT

CVT, LVT, LVMT, RVT, RVTg



Finish High School

Top grades in math and the sciences (chemistry, biology, physics) and an overall high GPA.

Apply to College

Either a 2-year associate of science (AS) or 4-year bachelor of science (BS) program in Veterinary Technology. Check with the state board to determine which programs qualify.





Get On-the-Job Experience

Prior to acceptance, or during enrollment, it is HIGHLY encouraged to get on-the-job experience as a kennel worker or veterinary assistant in a clinical setting.

Study Hard

Not only in order to graduate, but also for the Veterinary Technician National [licensing] Exam—the VTNE. A score of 75% or better is required to pass.





The State of Things

There are 5 different credentials for a CrVT to obtain, and they differ by state. An individual may hold multiple credentials—meaning they are licensed to practice in multiple states.

CVT, LVT, LVMT, RVT, RVTG

CVT = Certified Veterinary Technician LVT = Licensed Veterinary Technician

LVMT - Licensed Veterinary Medical Technician

RVT = Registered Veterinary Technician

RVTg = Registered Veterinary Technologist





Regulations

Every CrVT is required—by law—to adhere to their state or province's practice acts. As a licensed medical professional, dues are paid and fees assessed in order to maintain appropriate licensure.

Never Stop Learning

Along with state and national licensing fees, continuing education is also required. Anywhere from 16 to 32 continuing education credits every 2 years are mandated for a CrVT to continue practicing. This accompanies constant growth and development while working in practice as well.



A team-based approach to the care of the patient increases job satisfaction for all and ensures better patient outcomes.

Turning Awareness into Commitment and Action

Optimized utilization starts inside individual practices and within each unique team of veterinary professionals. The insights, tools, and assessments included in these guidelines support on-the-ground progress. At the same time, the task force recognizes the need for a national standard for the entire veterinary profession, where every team member and every core role experiences full utilization—and, in turn, the personal satisfaction, career longevity, and growth they deserve.

Section 8. Summary and Next Steps

The goal of the AAHA Technician Utilization Guidelines is to bring the concerns and challenges of the veterinary profession around CrVT utilization to the forefront and stimulate both productive conversation and positive change. The task force focused on areas it collectively felt were most important to achieve these goals. Although the guidelines cover many of the concerns regarding the lack of technician utilization as well as the benefits of it, the task force understands there will always be more ways for the veterinary profession to grow in this regard. By focusing on the areas highlighted in these guidelines, the task force intended to provide an in-depth view of the topic as well as suggestions for implementing utilization improvements in practice. In their discussion, the task force found not a single disadvantage to optimal technician utilization.

Using the clinical scenarios most impacted by technician utilization, the guidelines provide a detailed discussion about the benefits of utilization and how it relates to the financial growth of the practice. Leveraging an optimally utilized veterinarian/CrVT team can bring additional income to a practice and allows for numerous possibilities to increase revenue streams.

Full utilization of CrVTs accrues revenue benefits of ~\$104,976-\$137,240 per CrVT, per veterinarian to the practice; 6,21 this also allows for better compensation of the CrVT. Increasing staff retention through optimized CrVT utilization correlates with better job satisfaction overall for both the CrVT and the veterinarian. Better work-life integration for team members results from shared workloads. In addition, enhancing the level of patient care in the hospital is a major benefit. A team-based approach to the care of the patient increases job satisfaction for all and ensures better patient outcomes. Allowing CrVTs to perform the duties meant for their specific education and skill sets also improves access to timely care for more patients. Utilization offers other benefits, but these things remain most significant to the technician workforce.

Although utilization has been a topic of continual discussion within the veterinary profession, little action has been taken significant enough to promote real and lasting change. The reluctance of veterinarians to let go of some responsibility and legitimate concerns over license liability go hand in hand with not knowing what a CrVT can do in their practice. Veterinary school curricula rarely cover this topic. Most veterinarians never work with a CrVT until they begin clinical rotations in veterinary school, where the team dynamics can be quite different from veterinary practice. For that reason, optimal utilization concepts should be introduced in veterinary school, with continued learning and team building on the part of veterinarians and CrVTs to build confidence in each position's unique role within the context of veterinary medicine. For many, changing the way they practice can cause discomfort and anxiety, particularly around issues of legal liability on the part of veterinarians, and addressing these concerns with empathy, enhanced training, and building mutual trust can help.

The guidelines identify the following as essential to successful CrVT utilization:

- Understanding the Five Rights of Delegation (Section 2)
- Assessing the real-world capabilities and skill sets of the CrVT (Section 5)
- Partnering between CrVTs and veterinarians, where both work optimally with one another (Section 6)
- Building trust throughout the veterinary team (Sections 7 and 8)

A team-based approach to the care of the patient increases job satisfaction for all and ensures better patient outcomes.

Trust is required between all team members and is instrumental to successful outcomes. Trust is not something developed with a tool or pushed upon someone to accept. It comes with time, shared experiences, and the demonstration of available skill sets and participation in clinical settings. As easy as this sounds, building trust can be a daunting process to initiate.

Trust begins by involving the entire practice team, from veterinarians to hospital managers, to increase the likelihood that change will be successful. Access to relevant resources is also imperative. Veterinary practices must make time and sacrifices for training new staff so that the improved utilization process is useful for everyone. Having an actual CrVT to fill a position is a challenge in itself. For practices fortunate enough to hire a CrVT, optimized utilization is instrumental in retaining them. When technicians and veterinarians can work collaboratively, this improves workflow in the hospital, elevates overall patient care, and leads to better outcomes. Teams that leverage these benefits establish a foundation for increasing

medical standards and access to care in the clinic. Everyone benefits, from staff to patients to clients, when that occurs.

With the rationale and practical resources now in hand, consider the first of many required steps toward optimal technician utilization within your practice. Real progress requires active participation and commitment by as many individuals and practices as possible. Such wider ongoing efforts increase opportunities for innovative solutions to emerge and for specific state-by-state challenges to be overcome. To reach the tipping point that can transform CrVT optimization, this requires movement by more than a few passionate advocates. Change starts here.

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