Current trends in veterinary medicine:

A closer look at large-group consolidation

MAY 2019

Authored by: Pablo Perez Ruiz, MA
Project Advisor: Anibel Ferus-Comelo, PhD

Contents

The author is solely responsible for the accuracy of the statements and interpretations contained in this publication.

Executive Summary

This report presents a concise analysis of the recent move towards large-group consolidation of veterinary practices. Large-group consolidation has taken place simultaneously with an increased focus on companion animal medicine within veterinary services. The number of pet owners has significantly increased in the past few decades, resulting in an increased overall spending on veterinary care. Pet owners are also increasingly willing to spend more money on their pets. Using primary sources of industry data, key industry news sites, and interviews with industry experts and employees of corporate veterinary practices, this report presents insight into the recent consolidation of veterinary practices, which has been particularly remarkable in urban areas and within specialty and emergency services.

Although veterinary services are still a highly fragmented industry, projections show that corporate-owned practices may represent a significant – and growing - portion of industry revenue and visits in the coming years. Walmart's recent announcement that it will open around 80 veterinary clinics over the next year provides one example of this trend (Thomas 2019). Because of their size and resources, corporate consolidators have a significant influence on industry standards, requiring close attention.

The report considers these changes in the context of the veterinary workforce, which is projected to see high job growth prospects in the coming years, but which is also experiencing generalized problems with wellness among veterinarians and with job satisfaction and pay among veterinary support staff. The report pays closer attention to veterinary support staff, as they have historically received less coverage in the literature but represent around 70 percent of the veterinary workforce. Issues such as high turnover, low wages and benefits, skill underutilization and lack of standard credentialing are common within support staff. These problems have, in some cases, been exacerbated as hospitals have transitioned to corporate ownership.

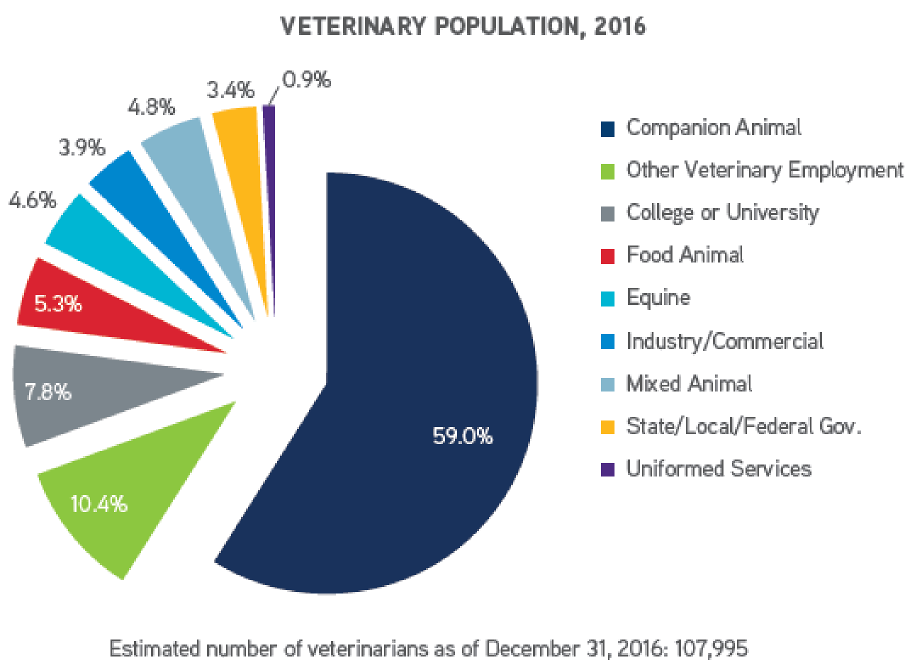
The full impacts of large-group consolidation will emerge more clearly as more data becomes available, but this report considers some of the key areas of concern that have already been identified, including pricing, competition, employee benefits, client relationships and quality of patient care. The findings are not meant as a critique of large-group consolidation - which this report considers to be an irreversible process - but rather as a call to large corporate groups to be more cognizant of their capacity to raise employment standards in the industry, especially considering their size, resources, and profile.

The report ends with a set of recommendations and suggestions for further research. Increasing transparency within large group-consolidators, promoting client education, creating standardized credentials for technicians and giving them a seat at the management table, and supporting unionization of support staff are some of the measures that would ensure the wellbeing of veterinary workers, and ultimately of the pets they care for. Further comparative research with other countries (such as the U.K), other industries (such as the pharmaceutical industry), and other professions (such as nurses) could also provide additional insights into where the veterinary industry might be heading, how to avoid pitfalls, and how to maximize long-term sustainability.

The veterinary world is acquainting itself with the increasing presence of corporate consolidation. While the benefits of corporate consolidation - such as economies of scale and improved business practices - have been largely discussed in the literature, this report pays attention to shortcomings of corporate consolidation. As a worker interviewed for this report put it: *"Companies like MARS have the ability to make this occupation [veterinary technician] a recognized, inspiring one."* The aim of this report is to pose the challenge and encourage consolidators to address it, so that the veterinary workforce can continue caring about pets and the people who love them for the long haul.

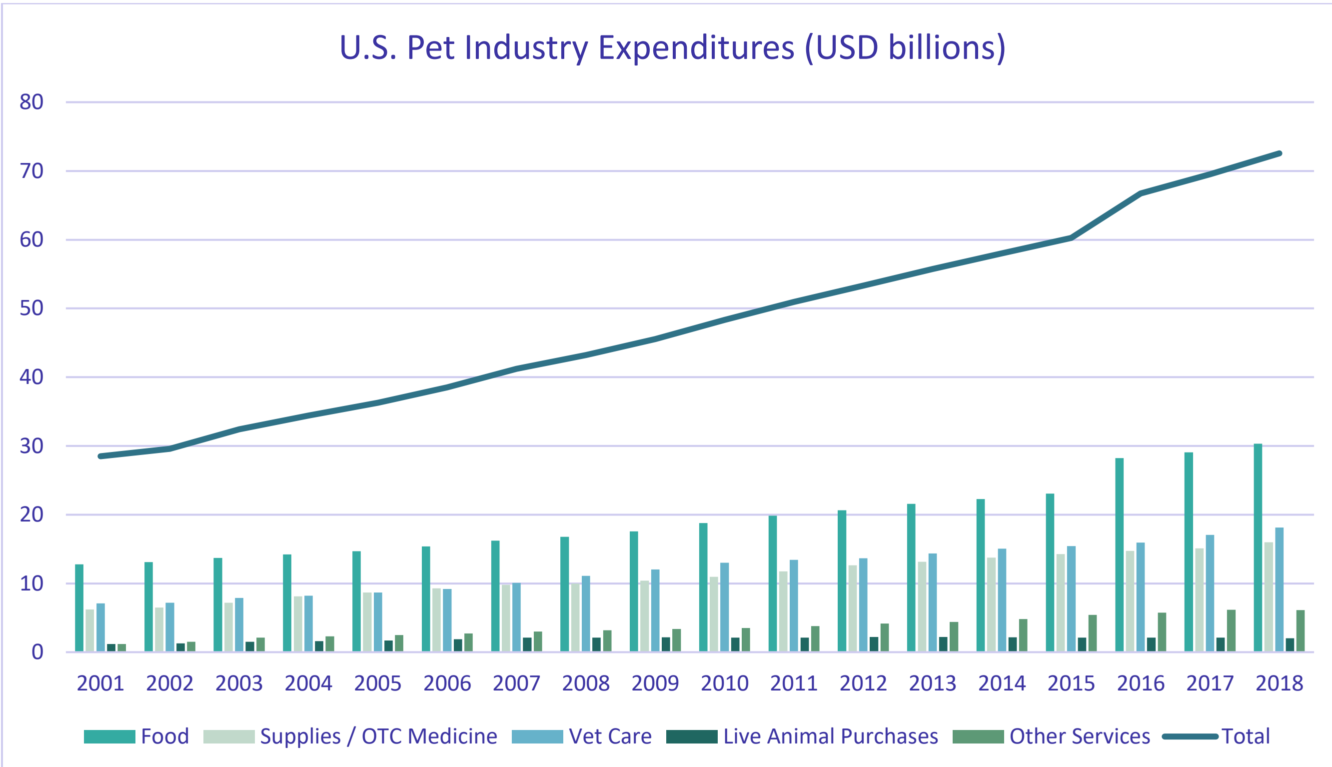
Introduction

The animal healthcare industry has undergone important changes in recent times, including an **increased focus on companion animal medicine and large-group consolidation of veterinary practices**. Regarding the former, the American Veterinary Medical Association (AVMA) (Larkin 2013) estimates that the share of veterinarians working in companion animal medicine grew by 40 percent between 1954 and 2011, reaching 59 percent of all veterinarians in 2016:



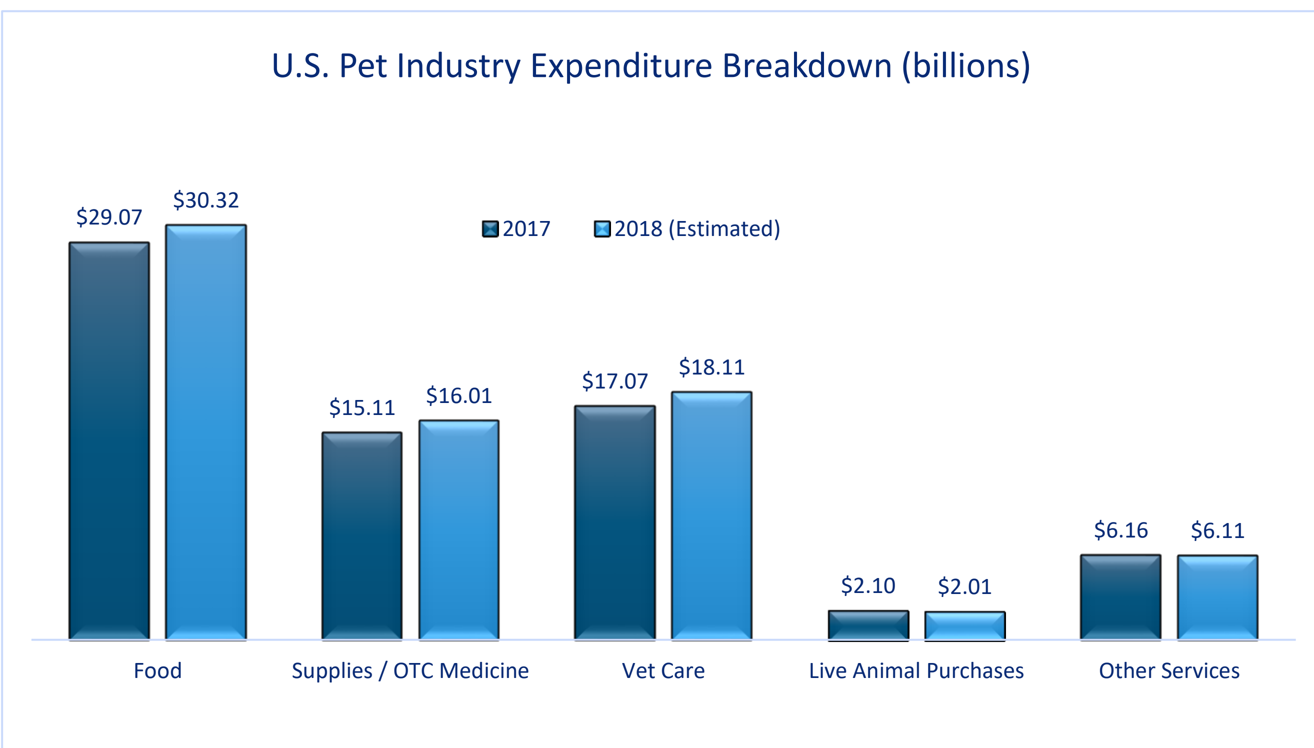
Extracted from: AVMA 2017a:12

The growth in companion animal medicine has gone hand in hand with the growth in the pet population. According to the American Pet Products Association (APPA 2019), **68 percent of U.S. households or 86.4 million homes are home to a pet today, compared with 50 percent of households in 1988**. In the case of dogs kept as pets, the total number increased by 50% between 1988-2017. The growth of pet ownership has led to a massive increase in pet industry expenditures, including veterinary services. The APPA has traced pet industry expenditures over time, showing a dramatic increase in the past 25 years as illustrated in the chart below:



Source: APPA (2019)

A closer look at pet industry expenditure for the 2017-2018 period shows the following:



Source: APPA (2019)

As shown above, veterinary care has been a key area of growth. The reason for this is not just increasing pet ownership, but also rising average life expectancy of pets and more advanced pet treatment care options. Older pets require more healthcare services due to age-related problems, while new technologies (often derived from human healthcare) allow veterinarians to diagnose and treat "new and complex pet diseases" (Ilic-Godfrey 2019, IBISWorld 2019). The Bureau of Labor Statistics (BLS) Consumer Expenditure Survey (2019) reports a **35 percent increase in average yearly U.S. household spending on pets between 2007 and 2016**, from $431 to $583. Similarly, IBISWorld (2019) estimates a rise in average profit within the industry from 13 to 14.7 percent of total revenue between 2014 and 2024, "as industry operators consolidate and transition to larger, group practices that offer a greater range of services and spread fixed operating costs."

In fact, while "traditionally, veterinary practices [were] run by small business owners," the industry's growth potential has led large consolidators to increase their presence (IBISWorld 2019). Although **most of the nearly 30,000 veterinary practices operating in the U.S. today are still small and individually-owned**, corporate ownership has increased significantly (VBA 2018). As Scott Nolen (2018) states: "private equity firms, which see companion animal practice as a relatively safe investment offering respectable returns, are funding many of the acquisitions by corporate groups" [*see: Sectoral Analysis below*].

An industry executive interviewed in Forbes has talked about **two recent waves of private equity investment** (Balshem 2018). The first one started in 2014 with Ares Management's purchase of National Veterinary Associates, one of the largest veterinary groups in the U.S. with 422 practices. The second started in September of 2017 when MARS Inc., "one of the biggest family-owned companies in the world with more than $35 billion in annual sales" (Thompson 2018), acquired Veterinary Centers of America (VCA) for $9.1 billion. At the time of purchase, VCA owned 780 facilities in 43 U.S. states and five Canadian provinces (5.9 percent U.S. market share), employed 23,000 people and, in 2015, had a revenue of $2.1 billion (Mark 2018). MARS also owns Blue Pearl, Banfield Pet Hospitals, and Pet Partners. In total, MARS currently owns over 2,000 practices in North America and Europe, making it the world's largest practice owner and employer of veterinarians. The significance of the recent move towards large-group consolidation in companion animal practices will be discussed throughout this report.

Methodology

This report mainly draws from publicly available data as well as interviews with industry experts and with veterinary support staff working in corporate hospitals throughout the U.S. West Coast.

The main primary sources of industry data and trends used were:

- U.S. Bureau of Labor Statistics and Census Data
- IBIS World's Industry Profiles
- American Veterinary Medical Association (AVMA) 2017 Economic Report
- American Pet Products Association Pet Industry Market Size and Ownership Statistics
- National Association of Veterinary Technicians of America 2016 Survey
- California Veterinary Medical Association 2016 Economic Issues Survey

In terms of secondary data, this report used information from key industry news sites, including (but not limited to):

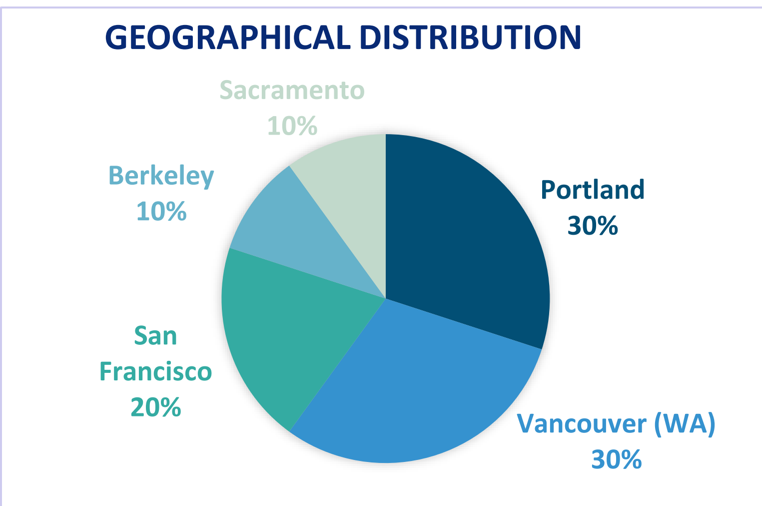
- Veterinary Business Advisors
- VIN News
- American Veterinary Medical Association News
- DVM360
- American Animal Hospital Association (AAHA) *Trends* magazine
- Today's Veterinary Business
- Veterinary Practice News

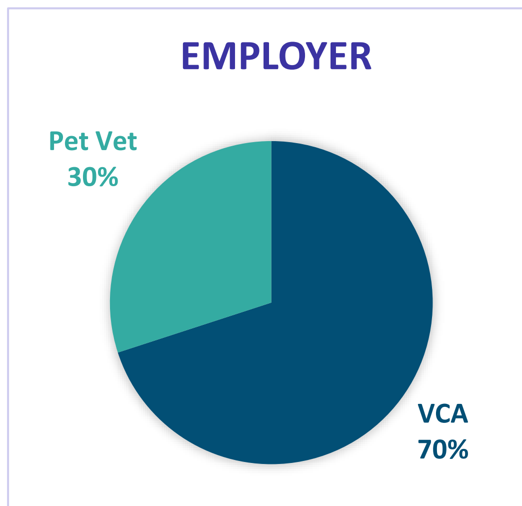
To get a better insight into recent trends within the industry, expert interviews were conducted with representatives from AVMA, Brakke Consulting, the American Hospital Managers Association (AHMA), Veterinary Idealist, the Independent Veterinary Practices Association, and the National American Veterinary Technicians Association (NAVTA) [*see References for further detail*].

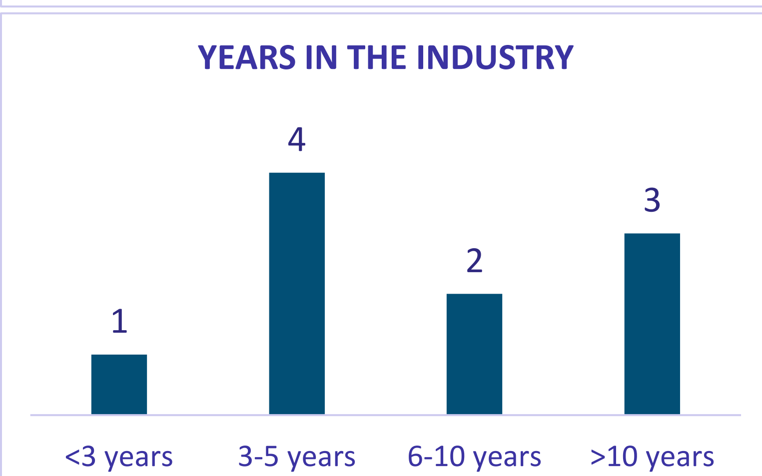
Finally, to get a preliminary picture of working conditions at corporate hospitals, ten phone interviews were conducted with veterinary support staff at a range of general and specialty hospitals owned by private corporations throughout the U.S. West Coast. All workers were technicians except for one, who worked as a customer service representative. To maintain worker confidentiality and minimize the risk of employer retaliation, names or specific facilities will not be referenced.

The overall demographics, geographical distribution, employer, and experience of those interviewed are as follows:

- Interviewees' ages ranged from 28 to 47, with an average age of 38.6 years.
- All interviewees identified as female and all identified as white except for one, who identified as Latina.







Nine of the ten workers interviewed have been in the industry over three years, showing their commitment to the profession and their breadth of knowledge.

Industry Overview

This section provides an overview of the Veterinary Services industry, with a focus on large-group consolidation within companion animal practices. It first looks at the structure and size of the industry, including factors of profitability that attract corporate investors and private equity firms. It briefly considers the case of the U.S. West Coast and the emergence of MARS as the main corporate player.

Structure, Size and Profitability

Under 'Veterinary Services,' U.S. Census County Business Patterns (2016) indicates 28,431 firms owning 31,205 establishments and employing a total of 304,761 workers. This **high industry fragmentation** is further illustrated in the table below, showing the share of establishments and firms by employment size:

Employees	% of Establishments	% of Firms
0-4	28.2%	30.7%
5-9	25.8%	28.3%
10-19	25.5%	27.6%
20-99	13.1%	13%
100-499	0.9%	0.3%
500+	6.5%	0.1%
Source: U.S. Census, 2016 County Business Patters		

Of these establishments, IBISWorld (2019) estimates that approximately 10-15 percent are corporate-owned, accounting for around 15 percent of industry revenue in 2019. This is likely to grow in the coming years: Brakke Consulting predicts that **25 percent of practices will be corporate-owned by 2023 and will represent 50 percent of veterinary visits** (Burns 2018). This is significant: despite high fragmentation, large group consolidators are likely to represent a considerable amount of industry revenue and veterinary visits, so that their actions will greatly impact industry standards, client satisfaction and quality of patient care.

As highlighted in the *Background* section, in 2016 companion animal medicine represented 59 percent of the market of veterinarians, and 65.7 percent of veterinary practices (IBISWorld 2019). Within companion animal medicine, there are general, specialty and emergency practices. While general practices are still dominant and represent 50-60 percent of all practices, there has been a recent growth in emergency and specialty practices, which attend to niche markets of consumers and have a higher profit value (M. Salois, personal communication). In fact, **consolidation is predominantly present in specialty and emergency practices**, where corporate ownership "might be getting into the range of 40 percent" (Volk, cited in Fiala 2018).

Large-group consolidation and corporate acquisition have been possible due in part to the combination of "increasing numbers of baby boomers who are ready to retire" and "young veterinarians with plenty of student loan debt who don't want to go even further in debt by buying a practice" (VBA 2016) [*see Veterinary Workforce > Veterinarians*]. Corporate investors have a strong appeal to those selling practices as they are "sophisticated negotiators" and can offer good prices and quick transactions (VBA 2018b, 2016). A letter mailed in spring 2014 from VCA to 2,000 owners of small veterinary clinics read as follows:

"By combining your practice with a current VCA Hospital, we remove the burden of day-to-day management, helping you achieve a more balanced lifestyle while you continue to practice veterinary medicine. If retirement is what you are looking for, a merger with VCA can be your exit strategy […] Transactions are done entirely with cash" (Lau 2014).

However, **consolidation of veterinary practice operators has not been a uniform process** and includes multiple players with different characteristics. Davidow (2019) has provided a useful classification of large groups consolidating veterinary practices:

1. Veterinary-led groups such as AZ Vet, MAVANA, MedVet and Ethosvet.
2. Private-equity backed groups such as Pathway Vet Alliance, VetCor, PetVet Care Centers and Wellhaven.
3. Wealthy families looking to diversify their portfolios, such as MARS and Desmarais.
4. Pop up and pet-store-based clinics such as VIP Petcare.

Top Five Corporate Operators by Number of Hospitals			
Group	**Est.**	**Hospitals (2019)**	**Financial/Equity Partner**
Community Vet Clinics / VIP Pet Care	2009	2000+	PetIQ, Inc (PETQ)
Banfield	1985	1000+	MARS
VCA	1986	731	MARS
National Veterinary Associates (NVA)	1996	422	Ares Management, OMERS private equity
VetCor	1996	308	Oak Hill Capital Partners, Harvest Partners, Cressey and Company

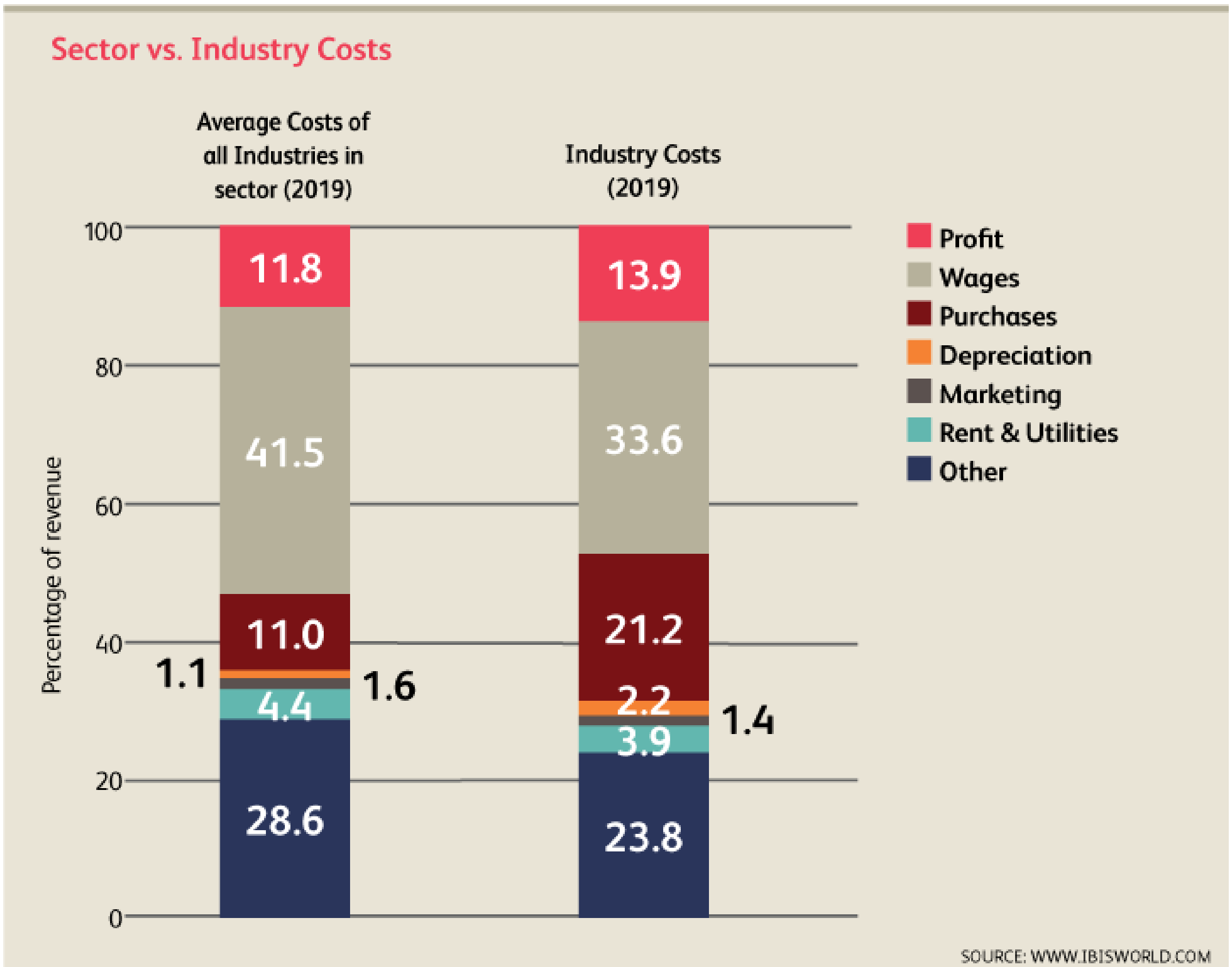
Source: Davidow (2019)
See Appendix 1 for Complete Table

Apart from the growth in the pet population and the increasing willingness of owners to spend more resources on their pets [*see: Background Section*], **reasons that have drawn investors towards veterinary practices** include (VBA 2016; Balshem 2018):

- Private pay, "out-of-pocket" revenue, meaning returns are earned immediately. Pet insurance is still underdeveloped and only 2.1 million pets (less than 1% of the total number of dogs and cats) are insured (III 2019).
- Lower malpractice insurance costs and emotional damage payments than in human medicine (courts still treat pets like property).
- Healthy and steady growth of the industry over the last 40 years and recession-proof market. IBISWorld [2019] estimates an annual growth of 3.5 percent between 2014-2024 for the veterinary industry, compared to 2.1 percent for the US GDP.

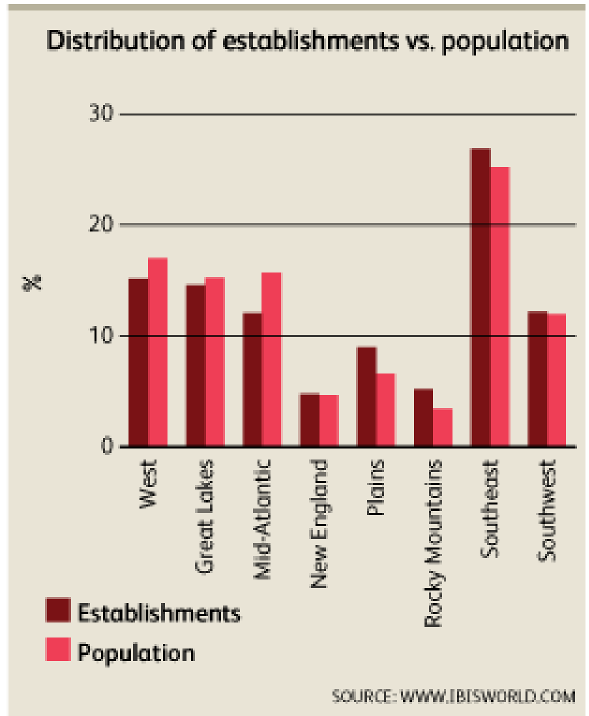
Industry expert John Volk (personal communication) claims that **large group consolidation is changing profitability in the veterinary medicine industry**. Volk argues that while small independent practices owned by veterinarians with little training in business prioritized quality of care over profitability, with annual profit rates between 8-10 percent, corporate-owned practices backed by private equity firms place a stronger emphasis on profitability and have management teams highly experienced in business.

Increasing consolidation has led to increasing profitability, as indicated in the *Background Section*. As the graph below shows, the cost structure of the U.S. Veterinary Services industry has a higher share of profits than the Professional, Scientific, and Technical Services sector, under which the North American Industry Classification System (NAICS) places the industry. The implications of a higher share of profits and a significantly lower share of wage costs becomes relevant when discussing the current situation of the veterinary workforce [*see Veterinary Workforce Section]*.



Let's now consider the structure of the industry in the U.S. West Coast, one of the main areas of concentration of veterinary services nationally.

U.S. West Coast



As could be expected, **veterinary services concentrate in areas with dense populations and higher per capita income**, "because residents are better able to afford pet ownership and the associated veterinary services" (IBISWorld 2019). It is for this reason that California, representing 12 percent of the U.S. population, is one of the leading states in the industry and accounts for 10.9 percent of all U.S pet-care establishments (5,691) and 8.5 percent of total national industry revenue ($4.1 billion) (IBISWorld 2019b). In total, the U.S. West Coast is the region with the second highest number of establishments (around 15 percent), following the Southeast.

With the U.S. West Coast being one of the main areas of industry activity, it is worth looking into some of its core metropolitan areas.

Seattle

Because Seattle is one of the areas where the Federal Trade Commission (FTC 2017) ruled that VCA had to sell practices to prevent a monopoly after its merger with MARS, it has drawn the attention of industry experts such as Davidow (2019b). She found that of the 65 veterinary hospitals / specialty providers based in Seattle, 21.5 percent are owned "by large groups with primarily non-veterinary ownership," with 15.4 percent owned by MARS through BluePearl, Banfield and VCA. This is still not a high level of concentration but evidences the higher presence of large groups in certain urban areas.

San Francisco - Bay Area

Like Seattle, 16.7 percent of veterinary hospitals in the San Francisco-Daly City area are corporate-owned, this time exclusively by MARS family companies (personal research). If we look at the wider Bay Area, the MARS group owns 68 hospitals (VCA has 38 locations, Banfield 29, and BluePearl 1), while PetVet has 3 hospitals.

Main Player: MARS Petcare

According to their website, MARS Petcare "is a growing segment of approximately 50 brands, made up of about 85,000 Associates in more than 55 countries who serve the nutrition and health needs of [animals] every day" (MARS 2018). **MARS is the largest buyer in the U.S. veterinary market**, and is also present in Europe and Brazil, making pet-care MARS's fastest-growing business. According to MARS chairman Stephen Badger, "the biggest transformation that we're continually pondering is our portfolio transformation," meaning its transition from the candy to the animal industry (Thompson 2018).

MARS seems to allow for certain freedoms of operation among associates. In their *Associate's Guide to the Essence of Mars* (2018), they claim that "we're an organization made up of diverse Associates, working in a variety of business models and serving different customers and consumers." However, they also mention a "common thread," based on MARS management philosophy: The Five Principles (Quality, Responsibility, Mutuality, Efficiency and Freedom). According to Clenfield (2017), MARS "corporate culture is infused with the personality of its founder, a perfectionist known for setting strict profit targets." In fact, **MARS CEO Gran Reid announced in 2019 that they aim to double the size of the business over the next ten years**, pushing sales beyond $70 billion from the current $35 billion "as it expands deeper into pet care and non-confectionery nutrition" (Pendleton 2019).

One of the issues that the increased presence of MARS in the veterinary industry has raised is that of access to data. **As a family-owned company, MARS "is not required to disclose its financial data"** (Pendleton 2019). AVMA's chief economist Matthew Salois has pointed how "We [at AVMA] can survey private practices because they are AVMA members, but corporate entities are more protective of their data"; moreover, while VCA was a publicly traded company, its acquisition by MARS has made it private, meaning that its “business metrics and acquisition activities, which were once in the public domain, soon won’t be” (Scott Nolen 2018). MARS chairman Stephen Badger has emphasized that they are “100% committed to staying private” because it allows them “to pursue our own path, our own future, and to really invest in the long term” (Thomson 2018b). Although this certainly gives the company certain flexibility in terms of “not being subject to the quarterly stock market and […] the focus that it puts upon earnings,” it can also lead to lack of transparency in its operations unless they decide to share their business metrics with professional associations such as the AVMA or with workers themselves. As further shown in the *Impacts of Large Group Consolidation* section below, despite being a family business, the size of MARS often makes it opaque to workers, especially when compared to the proximity and approachability of independent practice owners.

In the United States, the MARS family of veterinary practices includes Banfield, VCA Hospitals, Pet Partners and BluePearl Veterinary Partners.

Company	Acquired by MARS	Practices
Banfield	2007	1000+
BluePearl	2015	66
Pet Partners	2016	86
VCA	2017	731

Sources: Fiala 2018b, Pet Partners 2019

The following **short snippets of MARS family companies** operating veterinary practices in the U.S. is not only meant to be informative, but also to show the diversity within MARS and the difficulty of studying MARS on its own without attending to the specificities of its subsidiaries.

BluePearl Veterinary Partners

BluePearl is the “nation’s biggest chain of companion animal specialty and emergency care clinics, with 53 locations in U.S. states” (Larkin 2017). BluePearl focuses on referral veterinary medicine and provides primary care services. It is headquartered in Tampa (FL).

Banfield

Banfield is the largest of the MARS companies practicing veterinary medicine, employing over 2,000 veterinarians and with many of its clinics operating inside PetSmart stores. It is headquartered in Vancouver (WA) and it also owns clinics in Mexico and the United Kingdom.

Pet Partners

Pet Partners is headquartered in Wilton (NY), employs 1,828 workers, and specializes in "purchasing neighborhood animal hospitals" (PetPartners 2019). In their website, they explicitly set themselves apart from other companies of the MARS family:

"While other group practices promote a one size fits all approach, a Pet Partners' veterinary hospital is encouraged to retain their unique personal style. We work with practices to remove roadblocks and enable them to reach goals they never thought possible." (PetPartners 2019)

VCA Animal Hospitals

VCA Animal Hospitals is headquartered in Los Angeles (CA) and "operates veterinary diagnostic laboratories and freestanding, full-service animal hospitals" (IBISWorld 2019b). They provide diagnostic services to more than 17,000 independent hospitals, represent 5.9% of the market share for veterinary services and employ 3,000 veterinarians. The company has experienced significant growth in the past five years.

Veterinary Workforce

This section provides an overview of the veterinary workforce, with an emphasis on veterinary support staff, who have historically received less attention in the literature than veterinarians but represent 70 percent of the veterinary workforce.

Overview

The veterinary services industry is labor intensive, as "there is a high level of hands-on care required in diagnosing and treating animals" (IBISWorld 2019). **The U.S. Bureau of Labor Statistics (BLS) projects veterinary occupations to "grow at a rate of 19 percent over the 2016-2026 decade, almost 3 times faster than the 7-percent average projected for all occupations"** (Ilic-Godfrey 2019). The table below shows the breakdown of employment across veterinary occupations and growth projections for the 2016-2026 decade. This table illustrates that support staff make up the bulk of those working in veterinary medicine.

Occupation	Employment, 2016	Projected employment, 2026	Number change, 2016–26	Percent change, 2016–26
Veterinarians	79,600	94,600	15,000	19
Veterinary technologists and technicians	102,000	122,400	20,400	20
Veterinary assistants and laboratory animal caretakers	83,800	100,000	16,300	19
Total, all veterinary occupations	265,400	317,000	51,700	19

Source: U.S. Bureau of Labor Statistics (2016)

As the table below shows, an overwhelming majority of those in veterinary occupations are employed in the private veterinary services industry, which encompasses animal hospitals, veterinary testing laboratories, and veterinarians' offices, practices and clinics. The remainder of veterinary health practitioners are employed in the education sector, by government, in other industries, or are self-employed.

Industry	Veterinarians (employment in percent)	Veterinary technologists and technicians (employment in percent)	Veterinary assistants and laboratory animal caretakers (employment in percent)
Veterinary services	79.4	91.0	84.9
Self-employed	13.2	0.2	0.0
Government	3.0	1.3	0.8
Colleges, universities, and professional schools; state, local, and private institutions	1.2	3.3	5.7
Remaining industries	3.2	4.2	8.6
Source: U.S. Bureau of Labor Statistics (2016)			

If we adjust the total employment numbers to the industry breakdown above, the veterinary services industry has a 1.5 : 1 ratio of technicians to veterinarians. If we include assistants and laboratory animal caretakers, the ratio goes up to 2.6 veterinary support staff per veterinarian. Therefore, paying attention to the conditions of support staff is crucial, especially as the profession is expected to grow significantly in the next seven years.

Veterinarians

A significant part of the literature on the veterinary workforce focuses on veterinarians. AVMA's annual Veterinary Economic Report includes two dedicated sub-reports on the market for veterinarians and veterinary education, providing a detailed analysis of the latest available data (AVMA 2017a). The report estimates 108,000 active veterinarians in the U.S. today, a ratio of one veterinarian per 3,300 people. Together with the U.S. economy generally, the profession is growing, with declining unemployment and increasing mean starting salaries (AVMA 2017a:12). Although veterinarians are nationally situated within the top ten percent of U.S. earners (Volk 2012:1), there are significant regional differences, both in terms of applicant-to-job ratios and wages. In the U.S. West Coast (California-Washington-Oregon), applicant-to-available-jobs are some of the lowest in the country, ranging from 0.12 to 0.90, while mean wages for veterinarians in 2017 were $96,585.41, ranking sixth out of the nine U.S. regions identified by the AVMA report (2017a:9,11,72). This shortage of applicants may be related to the challenges that veterinarians face today.

Several commentators have pointed out a **generalized problem with wellness in the veterinary profession** (Tomasi et. al, 2019; Lau 2018). A survey of 3,500 veterinarians conducted by Merck Animal Health in 2018 revealed that 1 in 20 veterinarians suffers from serious psychological distress (Fender 2018). Some of the potential causes for this negative wellbeing are: high student debt, job satisfaction and burnout. AVMA's 2017 Economic Report recognizes that "the problem of large student debts has accelerated in recent years." While "most veterinarians who graduated before 1990 paid off their student loans in less than 10 years," less than 20 percent of those who graduated in 2005 were able to pay off their loans in 10 years or less (2017a:77). The relationship between job satisfaction and mean income is also significant (AVMA 2017a:84), as is working for practices with a greater emphasis on production (which tend to be large group practices) (Lau 2018).

Veterinary Support Staff

Data on veterinary support staff (technicians, assistants, customer service representatives, etc.) is scarce and fragmentary. The U.S. Bureau of Labor Statistics (BLS) provides disaggregated information for veterinary technicians and assistants, but it has not been possible to find disaggregated data for other job categories within the industry of veterinary services.

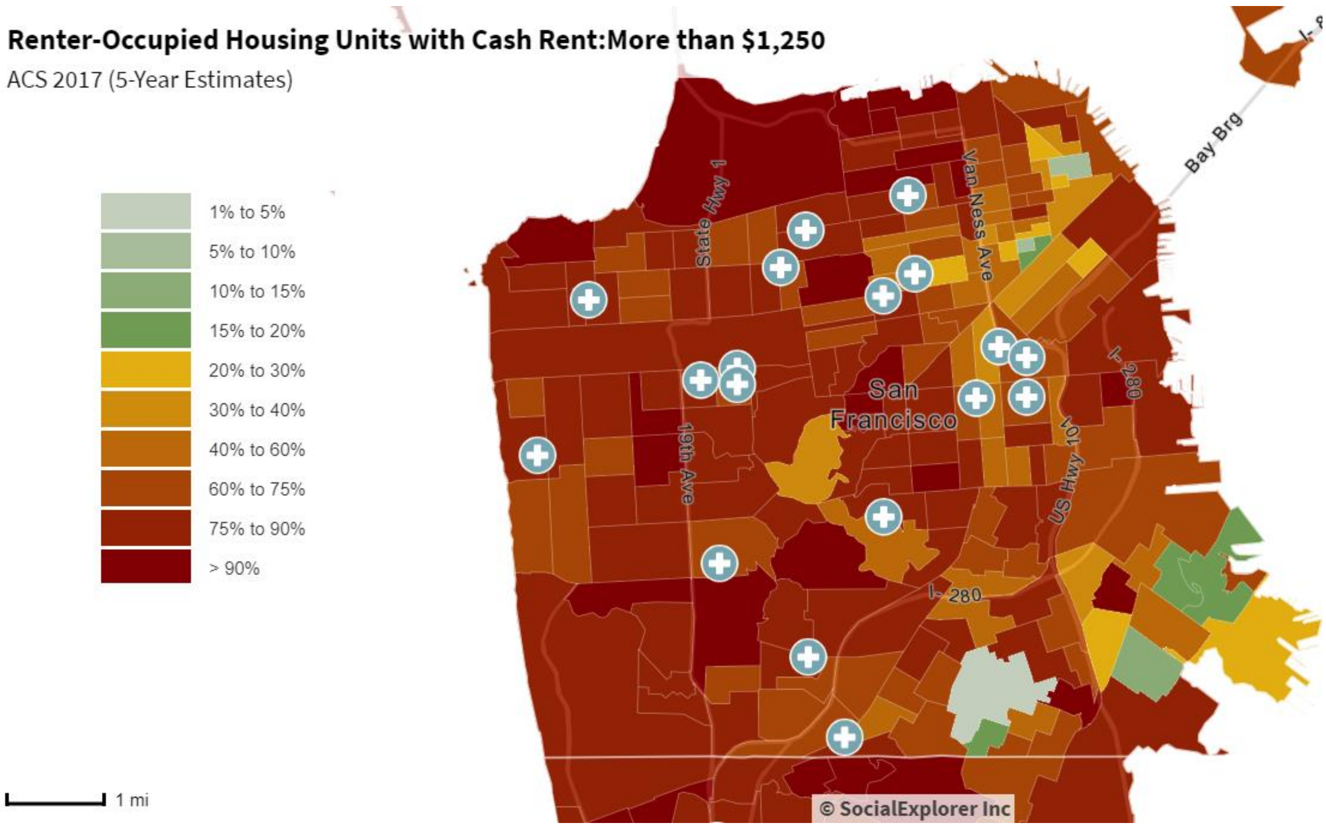
Veterinary Technicians

Veterinary technicians and technologists provide professional support to veterinarians, including “specific animal care tasks […] staff training, drug reporting, inventory management and other management duties” (CVMA 2017, p.122). The BLS (2018) estimates 106,680 active technicians in the U.S. today, making an average of $35,560 per year. As VBA states, **“even the well-paid veterinary technicians [after taxes] are only slightly above the poverty line for a family of four in the U.S., $24,300”** (VBA 2019).

BLS (2018b) data indicates 9,270 technicians working in California, 1,810 in Oregon and 2,120 in Washington. In terms of earnings, if we concentrate on the major metropolitan divisions we find the following mean hourly wages:

Metropolitan Division	Mean Hourly Wage ($)
SF-Redwood City-South SF, CA	23.06
San Rafael, CA	21.33
Oakland-Hayward-Berkeley, CA	20.52
Los Angeles-Long Beach-Glendale, CA	19.32
Anaheim-Santa Ana-Irvine, CA	19.84
Seattle-Bellevue-Everett, WA	18.99
Tacoma-Lakewood, WA	18.56
Portland-Vancouver-Hillsboro, OR-WA	17.66
	Source: Bureau of Labor Statistics (2017)

When compared to the cost of living in these metropolitan areas, the mean hourly wages above are clearly inadequate. Indeed, **several technicians interviewed for this report mentioned that “wages were not going up in par with costs of living.”** In Seattle, “the Self-Sufficiency Standard for Washington State 2017 report found that an hourly wage of about $33 is necessary to support a single parent living in Seattle with two young children” (VPN 2018). In San Francisco, the mean hourly wage for a veterinary technician results in technicians having to spend significantly more than 30 percent of their wages on rent (the threshold rate for housing affordability). In fact, one technician interviewed had recently moved from San Francisco to Antioch due to the lower cost of living, increasing the commute to work to over two hours per day. The map below shows the location of corporate hospitals in San Francisco (crosses) compared to renter occupied units where rent is more than $1,250 (per bedroom), the affordable rent threshold for technicians earning the mean hourly wage:



Created by author using Social Explorer.

Apart from BLS data, there are two other publicly available sources of quantitative data on veterinary technicians: a 2016 demographic survey conducted by the National Association of Veterinary Technicians in America (NAVTA 2016) and an economic issues survey conducted by the California Veterinary Medical Association (CVMA 2016). The former received 2,790 responses, representing 2.7 percent of all U.S. veterinary technicians, while the latter obtained 625 responses, representing 6.4 percent of all California veterinary technicians.

NAVTA's survey disaggregates by type of practice (60.1 percent of respondents worked for private, small animal practices) but not by owner, while CVMA's survey indicates that 28 percent of respondents worked for a corporate practice, 16 percent of which worked for MARS group companies. Although not specific to consolidated practices, both surveys give an indication of the demographics of the workforce and overall rates of satisfaction, wages, hours worked and worker preferences and concerns.

The veterinary technician profession has been traditionally female, but BLS household data does not disaggregate by ‘veterinary technicians,’ so surveys like NAVTA’s are the closest data available. NAVTA’s survey respondents were predominantly female (94.7 percent) and within the 29-34 age range (22.9 percent). Just over half (54 percent) indicated ‘Low salary and Benefits’ as the main factor that negatively affects the job. **Together with low income, respondents indicated burnout, lack of recognition and career advancement and underutilization of skills.** Moreover, respondents indicated that the lack of support from management was the least fulfilling aspect of the job. When taken together, all these factors can have a huge **impact on the retention of trained and experienced workers, and indirectly on client satisfaction and the quality of pet care**. In fact, according to the report, the average tenure of a veterinary technician in the industry is seven years; technicians are leaving the profession at a faster rate than new technicians are graduating.

CVMA’s survey was specific to California’s Registered Veterinary Technicians (RVTs). Some of its main findings overlap with those of NAVTA’s survey:

- The average age of RVTs in California is 38.6 years, with 59 percent of workers under 39 years (p.114)
- The workforce is predominantly female (92%) and has graduated within the past 10 years (69%) (p.114).
- 15% of respondents are dissatisfied with their job, with 48% being ‘somewhat satisfied’ (p.127).
- 46% work more than 40 hours per week (p.131), and 31% of full time RVTs work more hours than they want (p.134).
- While size of practice is not a major concern, the ethics of owners, clinical quality of practice, recognition of value as a worker, work-life balance and compensation are extremely important (p.137).

- The median salary among California RVTs is $39,500 ($42,000 in the Bay Area) (p.140).
- 39% of RVTs who graduated in the last 10 years considered student loan payments a major burden, and 32% would not have joined the profession had they know the cost of student loans relative to their current salary (pp.145-6).
- 23% of RVT respondents are actively seeking a new position, an additional position or more hours (p.160). The main reasons are wanting better compensation (67%), more recognition/appreciation (51%) and a better work environment (46%).
- 5% of respondents have some form of Veterinary Technician Specialty certification (p.167).

These two surveys provide an insight into the demographics, conditions and concerns of veterinary technicians. Some of the key concerns are a **"pervasive disconnect between skills and potential earnings,"** and how certain employers "erode the professional pipeline by hiring less-expensive, unlicensed assistants" despite the evidence from a 2007 AVMA study showing that "the average veterinarian's gross revenue increased by $93,311 for each additional credentialed veterinary technician" (Fanning 2010). These concerns have led to a national shortage of veterinary technicians, despite the profession's growth projections mentioned above (Johnson 2019:52, Dittmar 2016:20).

Technicians' skillsets vary: while some have learned on the job, others attend two-year veterinary technician programs. These associate degrees "are offered at many inexpensive community colleges," but can also cost $30,000-40,000 per year at private institutions (Griffith 2011). Moreover, "each state has different requirements for credentialing veterinary technicians" (NAVTA 2019). There are multiple titles that technicians can hold, such as:

- Registered Veterinary Technician (RVT), which means that a technician is part of a governmental list of practitioners. The criteria for registration differ across states.
- Licensed Veterinary Technician (LVT), which means a technician has been qualified by an authority to perform certain tasks.

- Certified Veterinary Technician (CVT), which means a technician has achieved a series of voluntary standards recognized by a private sector organization (such as a professional association).

NAVTA partly associates the **fragmentation in credentialing** with the lack of recognition of technicians' work and has pushed for a single and standard title such as 'Veterinary Nurse' to "unify the profession and grow professional recognition" (VNI 2019). It is not clear whether this initiative will be successful, but Veterinary Nurse Initiative co-leader Heather Prendergast points out a critical flaw in the lack of a wage differential:

"The value of credentialing is so varied among states, but when there's no pay difference between on-the-job(–trained) or credentialed techs, why go to school and get a $30,000 loan and get paid the same amount as the assistant at $15 an hour?" (Larkin 2018).

Veterinary Assistants

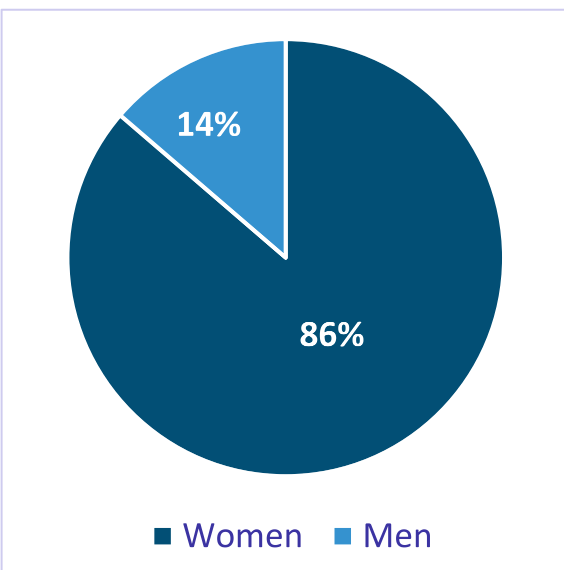
The BLS (2018c) aggregates veterinary assistants with laboratory animal caretakers and describes the tasks of this occupational category as follows:

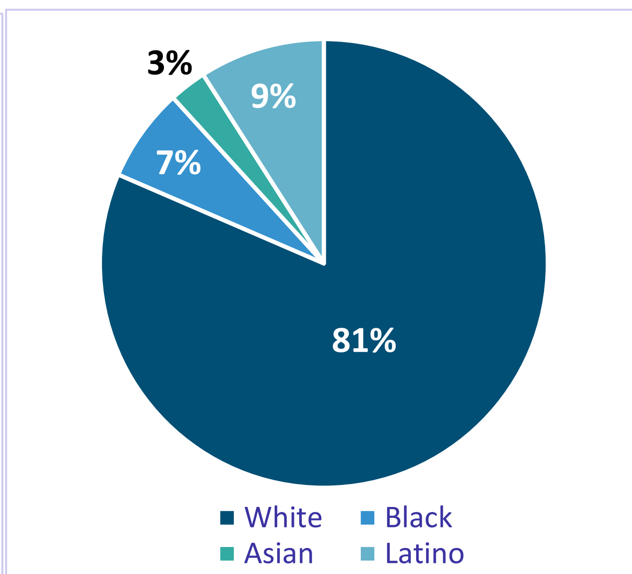
"Feed, water, and examine pets and other nonfarm animals for signs of illness, disease, or injury in laboratories and animal hospitals and clinics. Clean and disinfect cages and work areas, and sterilize laboratory and surgical equipment. May provide routine post-operative care, administer medication orally or topically, or prepare samples for laboratory examination under the supervision of veterinary or laboratory animal technologists or technicians, veterinarians, or scientists."

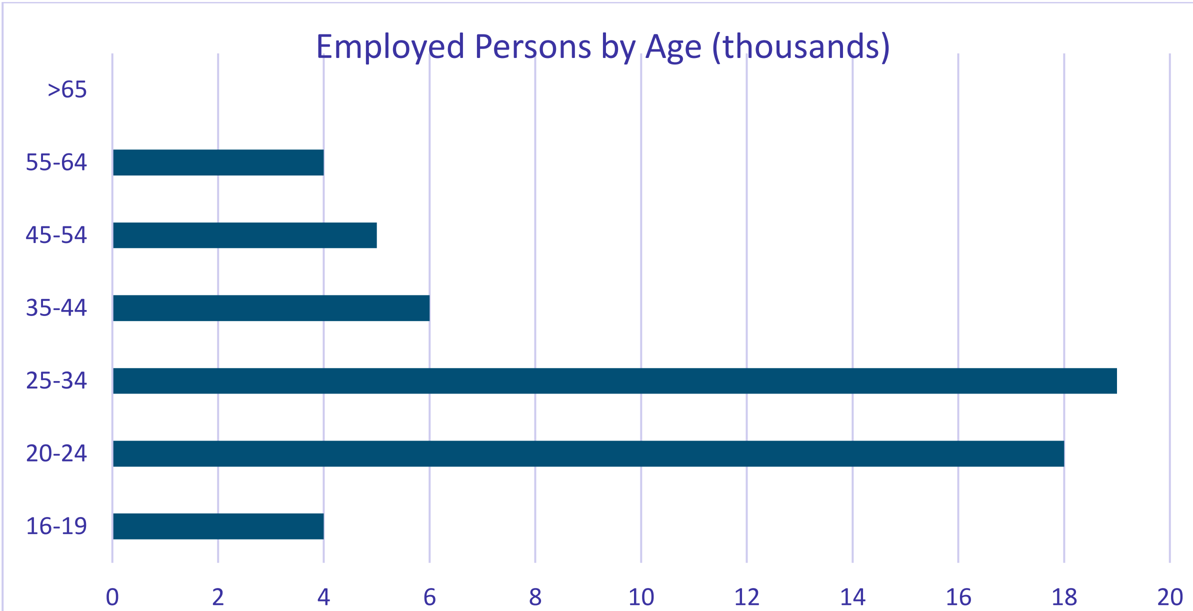
The BLS estimates 89,480 workers in this segment, with a mean annual wage of $28,690. California leads in the employment of this category of workers nationally, with 12,410 workers (43.5 percent of whom are in the wider Los Angeles-San Francisco metro areas) and a slightly higher annual mean wage of $32,480. Meanwhile, the state of Washington has one of the highest concentrations of jobs in this category nationally, employing 3,650 workers, 65 percent of whom are in the Seattle-Tacoma-Bellevue metropolitan area. The mean hourly wages of veterinary assistants in the main West Coast metropolitan areas are even lower than those of technicians, making the pay insufficient compared to the costs of living:

Mean Hourly Wage ($) for Veterinary Support Staff		
Metropolitan Division	**Assistants**	**Technicians**
SF-Redwood City-South SF, CA	17.75	23.06
San Rafael, CA	16.84	21.33
Oakland-Hayward-Berkeley, CA	15.20	20.52
Los Angeles-Long Beach-Glendale, CA	14.53	19.32
Anaheim-Santa Ana-Irvine, CA	14.14	19.84
Seattle-Bellevue-Everett, WA	15.04	18.99
Tacoma-Lakewood, WA	14.92	18.56
Portland-Vancouver-Hillsboro, OR-WA	15.11	17.66
Source: Bureau of Labor Statistics (2017)		

In contrast to veterinary technologists and technicians, BLS household data disaggregates Veterinary Assistants and Laboratory Animal Caretakers. The national demographics of the profession (see figures below) indicate a predominance of young, white women.







Source: BLS 2018 Household Data

One of the main issues affecting both technicians and assistants is employee turnover, likely associated with their low rates of pay. While **NAVTA estimated in 2016 a 35 percent turnover rate for technicians (Dittmar 2016:20), the Veterinary Economics 2010 Benchmarks Survey of Well Managed Practices indicated a turnover of 26 percent for receptionists, 21 percent for assistants, and 44 percent for ward attendants.** This is significantly higher than the national average turnover for the entirety of the workforce, which was 15.9 percent in 2010. As discussed in the next section, turnover is a "pervasive and expensive problem" for both veterinary technicians and assistants (VBA 2019).

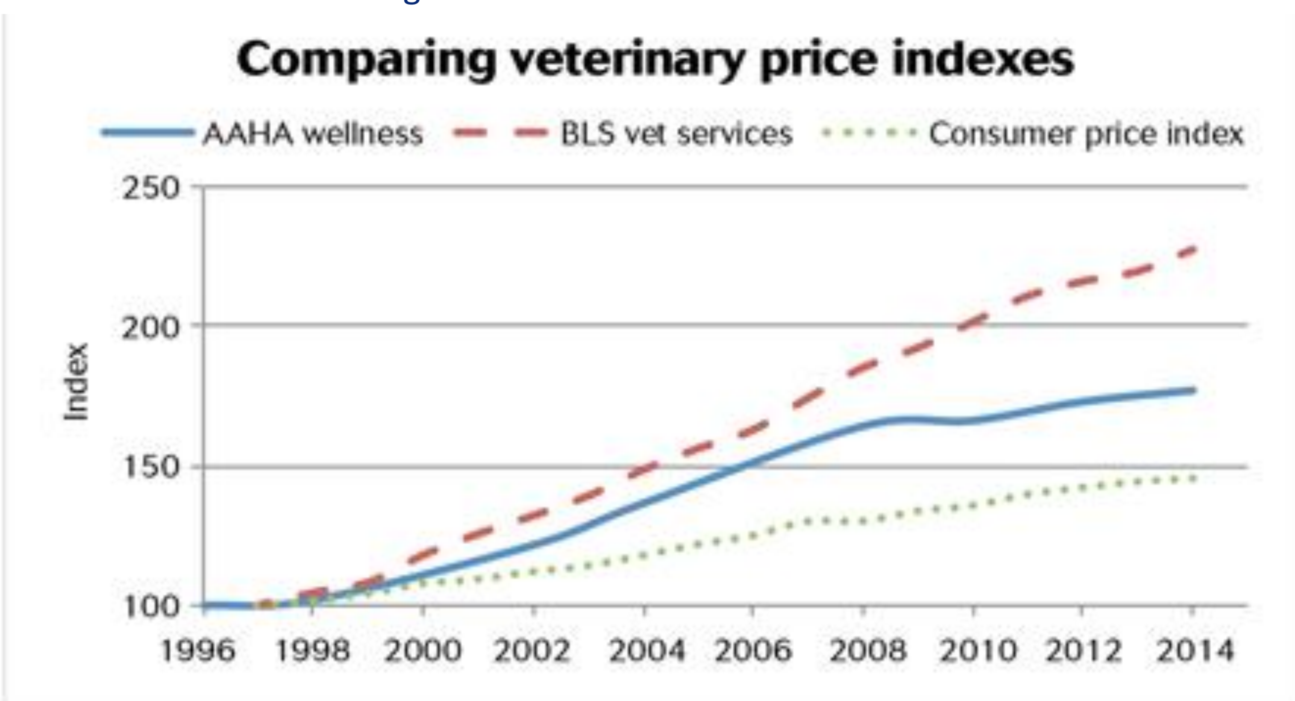
While this section has provided a general overview of the veterinary workforce, with a focus on veterinary support staff, the next section on *Impacts of Large-Group Consolidation* provides a closer look at the concerns of technicians working at corporate practices, using data from one-to-one interviews.

Impacts of Large-Group Consolidation

This section discusses some of the main impacts of large-group consolidation on veterinary medicine. Although data is fragmentary due to the rapid, ongoing changes in the industry, the subsections below synthesize recent discussions in the literature and provide new insights from worker interviews. Some of the issues mentioned below are not necessarily unique to practices owned by large consolidators and may be equally present in small, independent practices. However, **due to their higher profile, resources and reach, large group consolidators have a key role in establishing industry standards and defining the future of the veterinary medicine industry.**

Prices

According to Downing (2014), "historically, prices for veterinary services […] grew more slowly than inflation," with veterinary price increases lagging inflation by 25 percent between 1972 and 1996. However, **between 2000 and 2013, prices for veterinary services increased 91 percent, compared with an inflation increase of 35 percent**. The figure below illustrates these changes:



From: Brake & Dicks (2017)

Rising prices are part of a broader push towards profitability**. The 2017 AVMA Economics Report notes that: "currently the profession is focused only on practice profitability rather than the more comprehensive financial performance,"** which includes not just pricing and cost control strategies but also asset turnover. Coming from a business background and in some cases being driven by private equity firms looking for high returns on investment, large group consolidators could be at the forefront of this trend.

In fact, industry experts have pointed to the correlation between large-group consolidation and the rise in prices of veterinary services (Davidow, personal communication). Although there is currently insufficient statistically significant data to establish causation, anecdotal evidence and worker interviews conducted by the author suggest a potential connection. Several of the workers interviewed for this report revealed that their corporate employer followed a strategy of quarterly price increases. When prompted about the reasons for these increases, one worker described these policies as a "black box to employees." This matches the evidence available: between 2001 and 2013, VCA consistently reported declines in visits to existing clinics and increases in revenue per invoice, suggesting increasing prices (Downing 2014). Price increases can price out customers, and as one worker interviewed stated: "economic euthanasia increases together with prices, as owners can't afford treatments."

While price increases may be due to increased demand for services, **a 1999 KPMG study found only a weak link between price and demand in veterinary services**, "with price identified as the ninth most important factor for choosing a veterinarian after veterinarian kindness and gentleness, veterinarian respectfulness and informativeness, reputation for high-quality care, past experience with veterinarian, range of services, location, convenient hours, and recommendation from friends." Indeed, 74 percent of owners who took part in the study would stay with the same veterinarian even if prices rose by 10% (Dicks 2013:1053). This study raises important questions regarding the extent to which large groups can raise prices with a stable demand for services. Increased prices may not always lead to increased profits as demand significantly contracts (Brake and Dicks, 2017). Moreover, there is still plenty of choice among providers of veterinary services, and large-group oligopoly is not currently the case at the national level, thus not theoretically affecting output or prices.

Competition, Ownership and Independence

While the impacts of concentration on prices is highly debated, veterinarians feel that consolidation can harm competition, “owing to corporations’ ability to outbid individuals on practices for sale, and to leverage economies of scale” (Lau 2017). **Consolidation has been a concern for some veterinarians as they have felt a potential loss of independence and capacity for ownership** (M. Salois, personal communication). In independent practices, veterinarian-owners can make the decisions even if they hire a manager, whereas corporate structures do not always allow veterinarians to make strategic and business decisions (Davidow, personal communication). IVPA President Bonnie Bragdon (personal communication, 2019) argues that: “veterinarians should always be at the center of the business and at the center of care, helping drive business and business practices that protect animal health standards.” Moreover, veterinarians who own practices tend to earn more than associate veterinarians who work for corporate practices (Volk, personal communication).

Indeed, “as veterinary practice chains grow larger, so do their influence,” something that worries independent practitioners and has raised questions of representation at the American Veterinary Medical Association (Fiala 2018b). This has led to the recent formation of the Independent Veterinary Practitioners Association, “founded with the goal of promoting the value of independently, locally owned and operated veterinary practices” (IVPA 2019).

That said, consolidated, multi-doctor practices can “appeal to veterinarians due to the benefits and flexible work schedule that is typically not available to sole practitioners or single-site providers” (IBISWorld 2019). As pointed out by AVMA’s chief economist M. Salois (personal communication), “younger veterinarians do not want to work 60-70 hour per week as former veterinarians did, and corporate practices can offer better working hours for them.” Large group practices can also be a great place for new graduates to gain experience while considering their options.

Operating Costs

There are obvious advantages to consolidation in terms of reducing operating costs: **consolidation "lowers the costs of financing equipment purchases and upgrading technology" through economies of scale and greater purchasing power** (IBISWorld 2019). According to John Volk (personal communication), large consolidators have more access to resources and better business acumen, making it harder for independent practices to compete with them. Large consolidators "can develop and employ more sophisticated and rational pricing strategies, and they can use inventory control strategies that veterinarians are largely ignorant of to reduce their costs of goods sold" (Woodman 2018). Through more efficient scheduling and overtime management, large groups can also reduce employee costs, although cutting wages is not an option given the "notorious" low pay of veterinary medicine (Woodman 2018).

On the other hand, several of the technicians interviewed complained about having budgets to buy supplies cut, and higher management being "uninterested in staff but rather interested in what a facility can do for the business." A technician commented that "management looks at profit on a weekly basis, without understanding how money flows through a hospital." **Discussions about reducing operating costs should always consider the goal of reducing costs, whether this goal is being met, and what the repercussions may be**.

Moreover, discussions around the lower operating costs of large group consolidators often invoke the trope of independent veterinary practice owners as "unschooled in the financial aspects of running a business." (Miller 2018:47). One should not assume, however, that small independent practices necessarily lack the business acumen required to run a successful practice, as they still represent most practices operating in the U.S.

Employee Benefits

Lower operating costs may result in increased investment in equipment and personnel. In fact, a BluePearl (2015) employee notice circulated among staff after the company became a part of MARS Petcare the same year stated that:

"As part of Mars Petcare, our practice and clinicians will be able to make key investments in our associates, facilities, systems and infrastructure that would not be possible without Mars ownership."

According to BluePearl co-founder Dr. Neil Shaw, these investments include providing additional advancement opportunities to team members and increasing the benefit package over time (Lau 2015). Banfield is currently experimenting with veterinary debt relief programs to support veterinarians with their school debt through employer contributions of $150 per month (Lau 2017b).In September of 2018, Banfield's Chief Medical Officer Dr. Dan Aja "described a new focus on elevating veterinary technicians" including "pay increases, expanded support for continuing education and professional development, and promoting opportunities for technicians" so that their skills are not under-used (Wogan 2018b). This may be a response to low morale, high turnover, shortages of associate veterinarians, as outlined in the previous section, and increased pressured from technicians themselves, who have started to unionize in several hospitals across the West Coast. Whatever the combination of reasons, "Banfield's actions have the potential to influence the profession because of its size" (Wogan 2018b). Several interviewees shared that they liked the opportunities for professional growth that bigger corporate practices provide, giving them the chance to "try new things and do new things." Others enjoyed receiving pet care and continuing education benefits.

The capacity of large-group consolidators to increase employee benefits has, however, not always translated into a reality. Most of the veterinary support staff interviewed for this report have experienced worsening employee benefits after their practice transitioned to corporate ownership, especially healthcare benefits. In one case, the manager claimed that support staff had to pay more into their health insurance because "women have higher health requirements," highlighting signs of discrimination within the industry. The physical intensity of veterinary support work often leads to chronic back pain and joint pain. Bite injuries and radiation exposure is also common, with potential long-term health effects. According to the BLS (2017) incident rates of non-fatal occupational injuries are some of the highest for veterinary services, similar to those for nursing and residential care facilities. Reductions in the healthcare benefit package is thus a worrying development, one that employers should address if they want to make the profession of veterinary support staff sustainable.

Client Relationships

One of the main differences between corporate and independent practices raised in the literature is that of client relationships. Woodman (2018) has noted that **"whereas corporations may be able to outcompete independent practices at transactional medicine, independents hold the edge at relationship medicine."** While consolidated practices may treat more patients and provide a wider range of services, small independent practices are well situated to developed closer relationships with their clients. Some of the reasons for this is independent practices' commitment to the communities they serve, lower doctor turnover (meaning that clients always see the same doctor), higher veterinarian-client time (versus the cluster scheduling model of corporate practices), and less profit-oriented medicine (versus corporate wellness plans that sometimes include unnecessary procedures) (DVM360 2017).

One of the technicians interviewed for this report shared that "effectiveness of communication with client" is one of the main factors that impacts the quality of care. Communication with clients is most effective when there is an established relationship, something that small practices may be more successful in achieving. However, more research is needed to address this question.

Strong client relationships are also related to worker satisfaction. Another technician interviewed revealed that the most positive aspect of her job is the relationship with clients, which is more rewarding when "clients have been around for a longer time." This technician also commented that, following the transition to corporate ownership, short staffing and the pressure to "do more things in less time" limited the "opportunities to build relationships with clients." Thus, large group consolidators need to address nonfinancial indicators such as client relationships if they aim to achieve both high worker satisfaction and quality of patient care.

Quality of Patient Care

There is no conclusive evidence available on the impact of large group consolidation on the quality of patient care, but preliminary evidence provides a starting point. Some argue that lower operating costs (see above) directly lead to better medical care because they allow consolidated practices "to purchase additional medications to stock for the clients, new diagnostic tools, cheaper in-house blood work, in-house ultrasound machines, or new CT or MRI for specialty hospitals" (Pachtinger in DVM360 2017). Similarly, others argue that being a big player leads to higher accountability and thus ensures an adequate level of patient care (Rothstein in DVM360 2017). Although there is general agreement on this point, a couple of concerns have been raised in the literature concerning the relationship between large group consolidation and patient care.

On the other side of the spectrum, some large consolidators have been criticized for using strict protocols that are not always responsive to professional judgement or sound scientific evidence and best practices. The usefulness of these protocols depends on their rigidity and whether they are evidence-based. It is unclear how widespread these protocols are, but companies such as Banfield Pet Hospital have been criticized in the past for the "one-size-fits-all" approach to patient care of their wellness plans, which may have led to over-vaccination among the two million covered pets (Clenfield 2017). Trying to hit sales targets by seeing more patients in less time can also be damaging to the quality of care, as evidenced in Banfield's "pet drop-off" policy, which made some workers feel like a "pit crew" (Clenfield 2017). These practices led to a legal suit against Banfield in Oregon in 2010 in which the accuser alleged that "veterinarians and staff were pressed by their superiors to pump up the clinic's earnings at the expense of patient welfare" (Lau 2010). The state investigation was ultimately closed without a ruling on the substance of the complaint. Determining whether these are isolated incidents or part of broader structural issues within the industry requires further research, but it is important to keep in mind the potential flaws of consolidation when driving "best practices."

Another aspect that may harm patient care is low staff morale. The National Veterinary Professionals Union (NVPU 2019) claims that:

“patients will suffer the consequences of poor patient care due to inadequate veterinary professional to patient ratios, poor and ineffective staff recruitment and retention, employee bullying, workplace health and safety issues, etc.”

One technician interviewed for this report did indeed mention how “low staffing is affecting the level of care, as we [technicians] are overwhelmed by the amount of patients.” Another said that understaffing has led to “subpar care, as there is not enough time to do but the bare minimum.” Although this is not solely an issue in consolidated practices and also affects independent veterinary practices, large group consolidators can have a key role in leading the way for the rest of the industry, due to their higher profile and reach.

Staffing

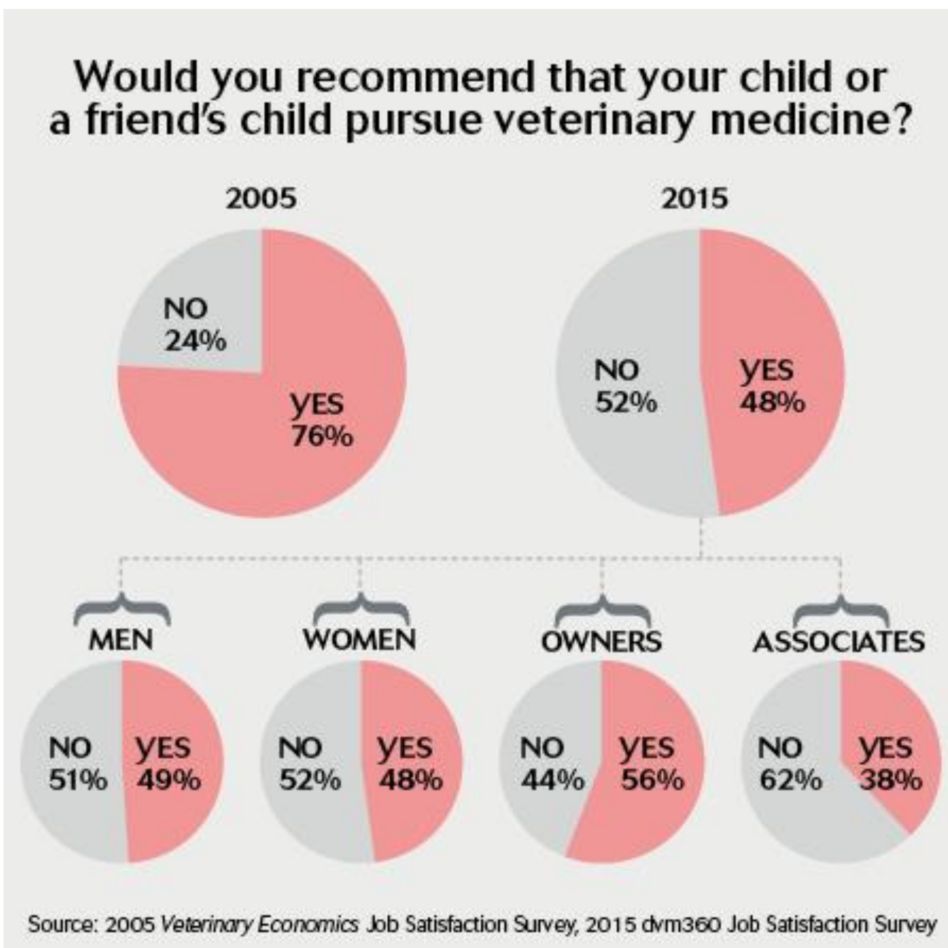
High employee turnover, especially among veterinary support staff, seems to be an issue across the industry (see *Industry Overview > Veterinary Support Staff*). Several interviewees brought up this issue: one technician commented that “people keep leaving because they want to be heard more, they want better salaries” while another revealed that their company “is now promoting kennel workers because they can’t find technicians to do the job.” Interviewees noted that this had led to practices hiring “new people with less experience” and losing the existing skillset, or as a technician put it “losing dedicated folk.” Another technician lamented that “hiring standards have decreased due to desperation.”

Interviewees remarked that several consolidators tried to cut down on staff after buying a practice, with one commenting that “they want as little people doing as much work as possible.” A couple of interviewees mentioned that the number of managers was reduced after the transition, making communication harder and creating “more work for current staff.” Another technician observed that understaffing led to overtime, which results in higher stress for staff and higher costs for employers.

Paying serious attention to staffing issues is important, and large group consolidators have an added responsibility in this regard due to their higher profile and greater resources. A technician interviewed observed that the drive for efficiency had led her corporate hospital to require workers to clock out for lunch, which meant support staff were losing 2.5% of their annual salary. Given the already low salary of veterinary support staff, these types of practices are likely to harm staff morale, and consequently relationships with clients and patient care. Another technician interviewed commented that to have a gold standard of patient care, animal hospitals should also have a gold standard of employee care and noted that “your first client is your employee.”

Worker Satisfaction

Davidow (2018) has speculated about whether consolidation and non-veterinary ownership has contributed to increasing dissatisfaction among veterinarians. Despite correlation in timelines, there is not enough data suggesting causation. What seems apparent is that, in some instances, consolidation has brought in managers without a background in veterinary medicine who treat medical care “as if it were any other retail business” (Clenfield 2017). Although this development can bring about better financial and business performance in theory, it has also created tensions as “associates have less voice and less control over the way the work happens;” in fact, in the Merck survey mentioned above, practice owners reported higher well-being than associates (Davidow 2018). The graphic below illustrates higher rates of dissatisfaction with the profession among associates, those who are not practice owners.



Extracted from DVM360 (2015)

Interviews with technicians have revealed that working for a corporate practice can lead to an "impersonal relationship" with the employer, a general sense of being under surveillance, and "feeling like a number, not a person." One technician said communicating with higher management had become "a bad game of telephone," while another commented:

"Before, I could go to my boss and tell them: this is the problem. Because we had a personal connection, they would assign the appropriate amount of weight to that conversation. Now, it's harder to communicate to a big corporation – they don't necessarily listen unless you have concrete numbers and statistics, but who has time to come up with this type of statistics?"

Most of the workers interviewed had recently experienced the transition of their practice from private to corporate ownership. Although day-to-day operations stayed mostly the same in the short-term, interviewees shared that it was now "slower to get things done" due to the "longer chain of command." Communicating with management was even harder when they did not come from a veterinary background. Several interviewees felt that management would not always understand what is best for the practice and would only focus on the short-term outcomes of quarterly financial reports. In fact, the decision-making control of veterinary support staff seems to be minimal: one technician commented that this was leading some people to leave because they felt "stuck in the role." Even a technician working in a supervisory role said that her voice was only heard when her ideas would "improve the hospital without costing any money." Another technician shared that "having to fight to the nails for every little thing is demoralizing, and makes you feel disrespected."

Most interviewees did, however, report a positive relationship with other co-workers and with doctors, and believed that their team was one of the most positive aspects of their current job. A technician interviewed commented that "friendly and collaborative staff make people feel appreciated and keeps morale up." Good working culture could, however, be damaged by high staff turnover; one technician interviewed stressed the importance of trusting your coworkers in regular tasks such as "holding animals so you don't get bit."

Unionization

Although NAVTA (2019b) found that "it is uncommon for employees of veterinary clinics to unionize," Wogan (2018b) has noted that:

"While Banfield works proactively to address veterinary technicians' concerns, two other Mars entities — VCA Animal Hospitals and BluePearl — are processing veterinary technicians' dissatisfaction a different way. Citing problems including lack of respect, overwork and poor salaries, support staff at one BluePearl and two VCA hospitals on the West Coast voted to unionize this year [2018]."

According to technicians involved in this effort, unionization has been a direct response to large-group consolidation (Wogan 2018). These technicians recognize the wealth of the parent companies and believe large-group consolidators have the capacity to raise wages and improve working standards.

Unionization has created a heated debate within the industry, and in the process, highlighted working conditions of veterinary support staff. However, according to interviews conducted for this report, some large-group consolidators have resorted to union-busting strategies, hiring "anti-union" law firms and holding "required" employee meetings at which support staff have been verbally discouraged from forming unions. This is a negative development considering the labor shortage of qualified support staff and the need for better wages and benefits to attract more people to the profession. Although there is some fear that unionization will lead to higher costs of veterinary services, the current profit margins of veterinary practices allow for better working conditions without necessarily damaging the overall financial health of a practice.

Recommendations

A set of recommendations stem from this report, most of which have already been put forward by other groups. To work most effectively, these measures are to be considered holistically rather than separately, as any single measure will find limitations if implemented on its own. These recommendations are listed below in no particular order.

Increasing transparency within large-group consolidators

As mentioned in the *Industry Overview* section, access to data from large-group consolidators may become an issue as corporate entities are more protective of their data than private practices. MARS, for example, is not a publicly traded company. Lack of transparency can lead consumers to become less trusting of large groups, and workers to feel uninformed and disempowered. To remedy this, MARS and its associated companies could share their financial performance and wage data so that the public and their employees are informed and make them accountable to any inconsistencies in their operations. Sharing this data is not contradictory with MARS's goal of pursuing their own path and investing in the long term, but would in fact contribute to this goal by establishing checks and balances within the industry.

Promoting client education

Worker and industry expert interviews have revealed that many consumers are not aware of the quick changes the veterinary industry is experiencing, despite being willing to spend more money on their pets. Promoting client education is key to ensuring clients are aware of recent changes in veterinary medicine, and how these changes could affect them in both positive and negative ways. Rising prices could price out many clients, while stagnant wages for support staff could harm quality of care. Clients will continue to have choice of practice, but they should be aware of what these choices entail. The development of a consumer bill of rights for animal healthcare could be a great start and something practices could adhere to.

Creating a national standardized credential and title for technicians

As mentioned in the *Veterinary Workforce* section, a standardized credential and a consistent title for technicians across the country would provide a starting point towards the professionalization and increased recognition of the veterinary technician profession. Having a standardized credential and consistent title received 90 percent support in NAVTA's 2016 survey and would mean all technicians possess a similar range of skills and can perform a certain set of tasks, tackling skill underutilization and potentially leading to higher wages. However, standardized credentialing and titles may not be enough to raise wages and recognition, as Lizzie Lockett, the executive director of the Royal College of Veterinary Surgeons (the veterinary licensing body for the U.K.), recently pointed out (Larkin 2018b). It is for this reason that this measure should go hand in hand with others proposed in this section.

Giving technicians a seat at the table

This report echoes Davidow's (2018c) call for the widespread establishment of chief veterinary technician officers who represent technicians at the management table, in order "to help build sustainable workplaces that truly provide quality veterinary care." Technicians are the backbone of animal hospitals, administering medication, running laboratories and performing a wide range of medical procedures. Being at the forefront of animal care, technicians can provide excellent suggestions for operational improvements, but this is only truly possible if they have a formal seat at the management table to ensure their voices are taken seriously. It is rare to find technicians in the executive teams of large-group hospitals, but it could be a fruitful way to address high turnover and burnout rates among technicians and support staff. Davidow (2018c) has provided excellent comparative evidence from human medicine, where "all of the 10 best human hospital systems have nurses as either part of their executive team or as part of the senior regional teams."

Supporting unionization among veterinary support staff

Unionization could be a game-changing way of not just “saving” hospitals with deficient management, but of making the profession more respectable. If unionization of veterinary support staff followed a similar path to that of nurses’ unionization, it could change how people see veterinary support work. It would transform the work from being a “stepping stone,” “passing by” or “not for grownups,” as several interviewees described it, to a respectable, well-paid and recognized profession, with technicians and others as equal team members rather than subordinates. As Veterinary Business Advisors (2018) puts it, “collective bargaining is one avenue towards helping workers obtain fair compensation and boost retention rates at practices.”

Suggestions for Further Research

This report has provided a preliminary overview of some of the impacts of large group consolidation, mainly focusing on potential areas of improvement. More time and research are required to understand the full impacts of consolidation in companion-animal veterinary medicine. In the meantime, the following avenues of research can potentially yield useful insights into what the future of veterinary medicine may look like:

- A comparative study of the veterinary medicine industries in the U.S. and U.K., as the latter currently presents levels of corporate concentration of around 60-65 percent.
    - IVPA President B. Bragdon (personal communication, 2019) has suggested this comparison as a way of looking into how the U.K. veterinary industry has dealt with the challenges of large-group consolidation, what lessons can be learned and what risks could be minimized.

- A comparative study of the current path of the veterinary medicine industry with that of pharmacies, which are currently consolidated and run by a few big companies.
    - Davidow (2018b) has already conducted some preliminary research on this topic, but a more thorough comparative analysis could provide insights into how large-group consolidators could coexist with independent facilities that have found their niches.

- A comparative analysis of the current unionization trend among veterinary support staff in the U.S. West Coast with the history of unionization among nurses in human medicine.
    - The National Veterinary Professionals Union has compared their industry to that of human healthcare, where nurses are also a predominantly female labor force and perform similar tasks to veterinary technicians.
    - Some of the debates that have happened around nurse unionization could provide insights to current unionization efforts, such as professionalism versus unionism, patterns of union activity, bargaining power, credentials, etc.

References

Expert Interviews

Bragdon, B. (March 15, 2019) President, IVPA.

Davidow, B. (March 29, 2019) Writer, Veterinary Idealist.

Salois, M. (March 22, 2019) Chief Economist, AVMA.

Shupe, C. (March 18, 2019) Executive Director, VHMA.

Spencer, E. (April 16, 2019) President, NAVTA.

Volk, J. (March 1, 2019) Senior Consultant at Brakke Consulting Inc.

Primary Sources

APPA (2019) 'Pet Industry Market Size & Ownership Statistics,' https://www.americanpetproducts.org/press_industrytrends.asp , accessed 3/1/2019.

AVMA (2017a) *2017 Report on the Market for Veterinarians*.

BLS (2017) 'Injuries, Illnesses, and Fatalities,' https://www.bls.gov/iif/oshwc/osh/os/summ1_00_2017.htm#soii_as_t1.f.1 , accessed 5/16/2019.

BLS (2018) 'Occupational Employment and Wages, Veterinary Technologists and Technicians,' *Occupational Employment Statistics*, https://www.bls.gov/oes/current/oes292056.htm#nat , accessed 4/29/2019.

BLS (2018b) 'May 2018 State Occupational Employment and Wage Estimates – California,' *Occupational Employment Statistics*, https://www.bls.gov/oes/current/oes_ca.htm#29-0000, accessed 4/29/2019.

BLS (2018c) 'Occupational Employment and Wages, Veterinary Assistants and Laboratory Animal Caretakers,' *Occupational Employment Statistics*, https://www.bls.gov/oes/current/oes319096.htm#nat , accessed 4/29/2019.

CVMA (2016) 'Economic Issues Survey – Report of Findings,' https://cvma.net/wp-content/uploads/2017/01/CVMAEconomicSurveyReport_2016final.pdf, accessed 4/29/2019.

IBISWorld (2019) 'Industry Report 54194: Veterinary Services in the US,' https://clients1.ibisworld.com/reports/us/industry/default.aspx?entid=1447, accessed 4/22/2019.

IBISWorld (2019b) 'Industry Report CA54194: Veterinary Services in California in the US,' https://clients1.ibisworld.com/reports/us/industry/default.aspx?entid=11162 , accessed 4/22/2019.

Insurance Information Institute (III) (2019) 'Facts + Statistics: Pet Statistics,' https://www.iii.org/fact-statistic/facts-statistics-pet-statistics , accessed 4/22/2019.

NAVTA (2016) 'Demographic Survey,' https://cdn.ymaws.com/www.navta.net/resource/resmgr/docs/2016_demographic_results.pdf, accessed 4/29/2019.

U.S. Census County Business Patters (2016), https://www.census.gov/data/datasets/2016/econ/cbp/2016-cbp.html, accessed 4/22/2019.

Other Sources

Balshem, D. (2018) 'PE Firms Still Drooling Over Veterinary Practice Management Space,' *Forbes* (May 7), https://www.forbes.com/sites/mergermarket/2018/05/07/pe-firms-still-drooling-over-veterinary-practice-management-space/#606946f78af5, accessed 4/22/2019.

BluePearl (2015) 'BluePearl Q&A,' https://www.vin.com/apputil/image/handler.ashx?docid=7051971 , accessed 4/29/2019.

Brake, R. and M. Dicks (2017) 'The pricing struggle: How high is too high for pet owners?,' *DVM360* (August 3), http://veterinarynews.dvm360.com/pricing-struggle-how-high-too-high-pet-owners , accessed 4/29/2019.

Burns, K. (2018) 'Practice, supplier consolidations continue apace,' JAVMA News, https://www.avma.org/News/JAVMANews/Pages/180901t.aspx , accessed 3/1/2019.

Clenfield, J. (2017) 'The High-Cost, High-Risk World of Modern Pet Care,' *Bloomberg* (January 5) https://www.bloomberg.com/news/features/2017-01-05/when-big-business-happens-to-your-pet , accessed 4/22/2019.

Davidow, E. (2018) 'Burnout in veterinary medicine: let's talk action,' *Veterinary Idealist* (March 29), https://vetidealist.com/burnout-veterinary-medicine/ , accessed 4/29/2019.

Davidow, E. (2018b) 'What Veterinarians Can Learn from Successful Independent Pharmacies – Part One,' *Veterinary Idealist* https://vetidealist.com/independent-pharmacies-part-one/ , accessed 5/16/2019.

Davidow, E. (2018c) ' A seat at the table: The case for Chief Veterinary Technician Officers,' *Veterinary Idealist* (October 16), https://vetidealist.com/chief-veterinary-technician-officers/ , accessed 5/16/2019.

Davidow, E. (2019c) 'Who is Buying Veterinary Hospitals – The Update,' *Veterinary Idealist* (March 8), http://vetidealist.com/who-is-buying-veterinary-hospitals-update/ , accessed 4/22/2019.

Davidow, E. (2019b) 'Who Owns Veterinary Hospitals in Seattle?' *Veterinary Idealist* (October 23), https://vetidealist.com/who-owns-veterinary-hospitals-seattle/ , accessed 4/22/2019.

Dicks, M. (2013) 'A short history of veterinary workforce analyses,' JAVMA, Vol 242, No. 8, pp.1051-1060.

Dicks, M. (2017) 'Mars and VCA: Welcome to Industry Consolidation 101,' *DVM360* (January 30), https://www.avma.org/PracticeManagement/BusinessIssues/Documents/2017-Jan-30_Mars-and-VCA_Welcome-to-industry-consolidation-101.pdf, accessed 4/29/2019.

Dittmar, C. (2016) 'The Relationship Between Continuing Education and Job Satisfaction for Veterinary Technicians', *NAVTA Journal* (2016 Convention Issue), pp.20-22.

DVM360 (2015) '2015 dvm360 Job Satisfaction Survey,' *DVM360* (April 28), http://veterinarynews.dvm360.com/2015-dvm360-job-satisfaction-survey?pageID=4 , accessed 4/29/2019.

DVM360 (2017) 'Busting out the big questions on medical protocols, patient care and client satisfaction: Is it better or worse in corporate?' *DVM360* (April 15), http://veterinarymedicine.dvm360.com/busting-out-big-questions-medical-protocols-patient-care-and-client-satisfaction-it-better-or-worse , accessed 4/29/2019.

Downing, J. (2014) 'Veterinary private-practice sector makes modest rebound,' *VIN News* (May 13), https://news.vin.com/VINNews.aspx?articleId=32051 , accessed 4/29/2019.

Fender, K. (2018) 'Merck study: Veterinarians have normal mental health but poor well-being,' *DVM360* (February 16), http://veterinarynews.dvm360.com/merck-study-veterinarians-have-normal-mental-health-poor-well-being, accessed 4/29/2019.

Fanning, J. (2010) 'Contribution of veterinary technicians to veterinary business revenue, 2007,' *JAVMA* Vol. 236, No.8 (April 15), https://www.vin.com/apputil/image/handler.ashx?docid=4910593 , accessed 4/29/2019.

Fiala, J. (2018) 'Veterinarians Form Group Dedicated to Independent Practice,' *VIN News* (February 1), https://news.vin.com/VINNews.aspx?articleId=47475 , accessed 4/22/2019.

Fiala, J. (2018b) 'Proliferation of corporate practice at forefront of veterinary meeting,' *VIN News* (January 8), https://news.vin.com/VINNews.aspx?articleId=47337 , accessed 4/22/2019.

FTC (2017) 'FTC Requires Mars to Divest 12 Veterinary Clinics as a Condition of Acquiring Pet Care Company VCA Inc.' (August 30), https://www.ftc.gov/news-events/press-releases/2017/08/ftc-requires-mars-divest-12-veterinary-clinics-condition , accessed 4/22/2019.

Griffith, D.A. (2011) 'Veterinary technicians: Opportunities, but at what cost?' *VIN News* (June 9), https://news.vin.com/VINNews.aspx?articleId=18757, accessed 5/16/2019.

Ilic-Godfrey, S. (2019) 'Ahead of the pack: why are veterinary occupations growing much faster than average?' *Beyond the Numbers: Employment & Unemployment*, vol. 8, no. 4 (U.S. Bureau of Labor Statistics) https://www.bls.gov/opub/btn/volume-8/veterinary-occupations-growing.htm , accessed 4/22/2019.

IVPA (2019) Website, https://iveterinarians.org , accessed 4/29/2019.

Johnson, A. (2019) 'Tech Talk: What to Look for in a Technician Program,' *Trends Magazine* (February).

Larkin, M. (2013) 'One for the History Books: A Visual History of the AVMA's First 150 years,' *JAVMA News* (July 15), https://www.avma.org/News/JAVMANews/Pages/130715a.aspx, accessed 4/22/2019.

Larkin, M. (2017) 'Veterinarians Incorporated,' *JAVMA News* (February 17), https://www.avma.org/News/JAVMANews/Pages/170301a.aspx, accessed 4/29/2019.

Larkin, M. (2018) 'Prime issue for veterinary technicians: Underutilization,' *JAVMA News* (October 31), https://www.avma.org/News/JAVMANews/Pages/181115b.aspx , accessed 5/16/2019.

Larkin, M. (2018b) 'What's in a name? Veterinary Nurse Initiative faces an uphill battle,' *JAVMA News* (November 7), https://www.avma.org/News/JAVMANews/Pages/181115a.aspx , accessed 5/28/2019.

Lau, E. (2010) 'Complaint by second ex-Banfield veterinarian hits dead end,' *VIN News* (September 29), https://news.vin.com/vinnews.aspx?articleId=16647 , accessed 4/29/2019.

Lau, E. (2014) 'VCA Inc.: Gentle Giant or Takeover Threat,' *VIN News* (July 11), https://news.vin.com/VINNews.aspx?articleId=32842 , accessed 4/22/2019.

Lau, E. (2015) 'Mars Petcare wooed fast-growing BluePearl,' *VIN News* (October 29), https://news.vin.com/vinnews.aspx?articleId=38551 , accessed 4/29/2019.

Lau, E. (2017) 'Mars antitrust remedy 'not even a drop in the bucket'?' *VIN News* (September 26), https://news.vin.com/VINNews.aspx?articleId=46420 , accessed 4/29/2019.

Lau, E. (2017b) 'Banfield joins employer trend with offer to defray student debt,' *VIN News* (December 1), https://news.vin.com/VINNews.aspx?articleId=47035 , accessed 4/29/2019.

Lau, E. (2018) 'Majority of Veterinarians Don't Recommend the Profession,' *VIN News* (February 6), https://news.vin.com/vinnews.aspx?articleId=47603 , accessed 4/29/2019.

Mark, J. (2018) 'SF veterinary workers unionize, attempt to drive hard bargain with $9 billion VCA corporation,' Mission Local, https://missionlocal.org/2018/08/sf-veternary-workers-unionize-attempt-to-drive-hard-bargain-with-9-billion-vca-corporation/ , accessed 3/1/2019.

MARS (2018) 'Mars Petcare' https://www.mars.com/made-by-mars/petcare , accessed 4/22/2019.

Miller, C. (2018) 'Practice Finance Made Easy: Part 1,' *Trends Magazine* (November Issue), pp.47-51.

NAVTA (2019) 'Credentialing,' https://www.navta.net/page/credentialing , accessed 5/16/2019.

NAVTA (2019b) 'Unionization FAQ,' https://c.ymcdn.com/sites/navta.site-ym.com/resource/resmgr/files/NAVTA_Unionization_FAQ.pdf , accessed 5/16/2019.

NVPU (2019) 'Frequently Asked Questions,' http://www.natvpu.org/faq.html , accessed 4/29/2019.

Pendleton, D. (2019) 'M&M's Maker Mars Gives Rare Peek Into Its $70 Billion Future,' *Bloomberg* (January 17), https://www.bloomberg.com/news/articles/2019-01-17/m-m-s-maker-mars-aims-to-double-sales-to-70-billion-in-a-decade , accessed 4/22/2019.

Scott Nolen, R. (2018) 'The corporatization of veterinary medicine,' https://www.avma.org/News/JAVMANews/Pages/181201a.aspx, JAVMA News, accessed 3/1/2019.

Thomas, L. (2019) 'Walmart is opening dozens of veterinary clinics in its stores and launching an online pet pharmacy,' *CNBC* (May 7), https://www.cnbc.com/2019/05/06/walmart-to-open-dozens-of-vet-clinics-launch-online-pet-pharmacy.html, accessed 5/29/2019.

Thompson, C. (2018) 'The Company Behind Some of the Most Popular Candies in the World is Quietly Taking Over the Pet-Care Industry,' *Business Insider* (June 13), https://www.businessinsider.com/mars-plans-to-grow-products-services-expand-digitally-2018-6, accessed 4/22/2019.

Thompson, C. (2018b) 'Mars chairman explains why the $35 billion chocolate giant will never go public,' *Business Insider* (June 4), https://www.businessinsider.com/mars-chairman-reveals-why-company-will-never-go-public-2018-6 , accessed 4/22/2019.

Tomasi, S. et al. (2019) 'Suicide among veterinarians in the United States from 1979 through 2015,' *Journal of the American Veterinary Medical Association,* Vol. 254, No.1, pp.104-112.

VBA (2016) ' Competing with Corporate Consolidation' (November 18), https://veterinarybusinessadvisors.com/competing-with-corporate-consolidation/ , accessed 4/22/2019.

VBA (2018) 'Unions in the Veterinary Industry: Pros, Cons and What to Consider,' https://veterinarybusinessadvisors.com/unions-in-the-veterinary-industry-pros-cons-and-what-to-consider/ , accessed 3/1/2019.

VBA (2018b) 'Anatomy of Negotiation: Talking to Corporate Consolidators' (November 21), https://veterinarybusinessadvisors.com/anatomy-of-negotiation-talking-to-corporate-consolidators/ , accessed 4/22/2019.

VBA (2019) 'Compensation Best Practices in 2018' (February 19), https://veterinarybusinessadvisors.com/compensation-best-practices-in-2018/ , accessed 4/29/2019.

VNI (2019) 'Veterinary Nurse Initiative,' http://veterinarynurse.org , accessed 5/16/2019.

Volk (2012) 'Financial Health: How Do You and your Practice Compare?' *Brakke Consulting*, pp.1-3.

VPN (2018) 'Union label within the profession?' *Veterinary Practice News* (January 25), https://www.veterinarypracticenews.com/union-label-within-profession/ , accessed 5/15/2019.

Woodman, D. (2018) ' Veterinary practice consolidators feign independent ownership,' *VIN News* (November 8), https://news.vin.com/VINNews.aspx?articleId=50767 , accessed 4/29/2019.

Wogan, L. (2018) 'Support Staff Unionize at Two Veterinary Hospitals,' VIN News, https://news.vin.com/vinnews.aspx?articleId=49064, accessed 3/1/2019.

Wogan, L. (2018b) 'Veterinary technicians get boost from major employer,' *VIN News* (October 26), https://news.vin.com/VINNews.aspx?articleId=50522 , accessed 4/29/2019.

Appendix I. Acronyms and Other Abbreviations Used in This Report

- American Veterinary Medical Association (AVMA)
- American Pet Products Association (APPA)
- American Animal Hospital Association (AAHA)
- American Hospital Managers Association (AHMA)
- Bureau of Labor Statistics (BLS)
- California Veterinary Medical Association (CVMA)
- Independent Veterinary Practitioners Association (IVPA)
- National Association of Veterinary Technicians in American (NAVTA)
- National Veterinary Professionals Union (NVPU)
- Veterinary Hospital Managers Association (VHMA)
- Veterinary Nurse Initiative (VNI)

Appendix II. Veterinary Groups with Number of Hospitals and Financial Partners

Source: Davidow, E. (2019) 'Who is Buying Veterinary Hospitals – The Update,' March 8, http://vetidealist.com/who-is-buying-veterinary-hospitals-update/, accessed 4/1/2019.

Group	Founding Date	Number of Hospitals April 2017 (DVM 360)	Number of Hospitals June 2018	Number of Hospitals February 2019	Financial/Equity Partner
AZ Pet Vet	1984	17	21	21	Veterinary owned
Banfield	1985	981	1000+	1000+	MARS
VCA	1986	779	750+	731	MARS
MedVet	1988	16	21	24	Majority veterinary ownership, Stonehenge Partners (PE) & Skyknight Capital Fund(PE) - minority partners
National Veterinary Associates (NVA)	1996	417	469	422	Ares Management (PE), OMERS private equity (PE)
VetCor	1996	>200	272	308	Oak Hill Capital Partners(PE), Harvest Partners (PE), Cressey and Company (PE)
Pathway Veterinary Alliance	2003	35	130	186	Morgan Stanley (PE)
Pet Partners	2003	82		86	MARS
BlueRiver Pet Care	2007	43	74	90	First Merit Bank (debt financing)
BluePearl Vet	2008	60		60	MARS
Vital Pet	2009	17	23	24	Undisclosed investors
Obrien Veterinary Management, LLC	2009	10	10+	13	Steelwood Capital
Community Vet Clinics/VIP Pet Care	2009		2000+	2000+	PetIQ, Inc – publicly traded as PETQ on Nasdaq

Community Veterinary Partners	2009	27	48	56	Cortec Group (PE)
The Pet Vet	2009			6	Partnership with Petco (9 more coming)
CAPNA	2010	56		85	MARS/VCA has 80% stake
Veterinary Practice Partners	2011	35	42	55	Pamlico Capital (PE)
PetVet Care Centers	2012	96	138	182	KKR (PE)
Petwell Partners	2013	20	20+	30+	2017 financing – 59 separate investors
Southern Veterinary Partners	2014	20	52	73	Shore Capital Partners (PE)
Compassion First	2014	28	37	41	Quad C Management (PE) - Purchase in progress JAB Consumer Fund
VetEvolve	2014	undetermined	undetermined	undetermined	Undetermined
Thrive Affordable Vet Care	2014			46	Petco/Pathway Vet Alliance
American Veterinary Group	2015	5	10	17	Latticework Capital (PE)
Innovetive PetCare	2015	11	14	14	Prospect Partners (PE)
Ethos Vet	2015		17	17	Veterinary majority owned, Brown Brothers Harriman (PE) minority stake
Heartland Veterinary Partners	2016	undetermined	undetermined	undetermined	Tyree and D'Angelo Partners (PE)
MAVANA	2016	21	28	29	Veterinary owned
Lakefield Veterinary Group	2017	19	30	33	Desmarais Family
Midwest Veterinary Partners	2017		26	38	Shore Capital Partners (PE)
WellHaven PetHealth	2017		22+	43	Capricorn Healthcare (PE)
Amerivet Veterinary Partners	2017		15	15+	Imperial Capital (PE)
People, Pets and Vets	2017		17	20	Cressey and Company (PE)
VetIQ PetCare	2018			20	PetIQ, Inc – publicly traded as PETQ on Nasdaq

Appendix III. Veterinary Hospitals in San Francisco-Daly City

City	Zip	Hospital Name	Corporate Owner
San Francisco	94115	San Francisco -SPCA Veterinary Hospital	nonprofit
San Francisco	94103	San Francisco - SPCA Veterinary Hospital Mission	nonprofit
San Francisco	94110	VCA San Francisco Veterinary Specialists	VCA - Mars
San Francisco	94103	VCA All Pets Hospital	VCA - Mars
San Francisco	94118	Presidio Way Veterinary Hospital	independent
San Francisco	94115	Blue Cross Pet Hospital	independent
San Francisco	94117	San Francisco Pet Hospital	independent
San Francisco	94118	Arguello Pet Hospital	independent
San Francisco	94121	Balboa Pet Hospital	independent
San Francisco	94122	Park Animal Hospital	independent
San Francisco	94122	Irving Pet Hospital	independent
San Francisco	94122	Animal Internal Medicine & Specialty Services	independent
San Francisco	94114	The Castro Animal Hospital	independent
San Francisco	94122	Ocean Beach Veterinary Clinic	independent
San Francisco	94122	Sunset Veterinary Hospital	independent
San Francisco	94127	Healthy Pets Veterinary Hospital	independent
San Francisco	94110	Mission Pet Hospital	independent
San Francisco	94131	Seven Hills Veterinary Hospital	independent
San Francisco	94109	Nob Hill Cat Clinic & Hospital	independent
San Francisco	94112	Ocean Avenue Veterinary Hospital	independent
San Francisco	94123	Marina Pet Hospital	Banfield
San Francisco	94116	Bay Area Bird Hospital	independent
San Francisco	94116	Veterinary Vision Animal Eye Specialists	independent
San Francisco	94116	Avenues Pet Hospital	independent
San Francisco	94116	Especially Cats Veterinary Hospital	independent
San Francisco	94123	Urban Pet Hospital	independent

San Francisco	94112	Animal Farm Pet Hospital	independent
Daly City	94014	St Francis Veterinary Hospital	independent
Daly City		Banfield Pet Hospital	Banfield
Daly City	92014	Nor Cal Veterinary Emergency and Specialty Hospital	BluePearl - Mars