

Profitability of rural practice

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Abstract

There is a crisis in rural veterinary medicine as rural practitioners face challenges in different business environments. Rural veterinary practices are complex organizational systems with economic and demographic challenges directly associated with various causal conditions which affect practice profitability and efficiency. Supported by a grant from the U.S. Department of Agriculture, data was collected from 16 mixed rural veterinary practices in the southeastern United States over 4 years. A 3-year financial analysis found profits and owners' compensation of 20.3% of gross revenues, cost of goods sold (COGS) of 37.8% of gross revenues, practice and doctor averages client transactions of \$102 and \$117, respectively. Population and income averages within 40 miles of the practice were 452,939 people with household incomes of \$67,780. Compared to the averaged Well-Managed Practice Benchmarks 2019, American Animal Hospital Association 2019, and American Veterinary Medical Association 2017 data, potential causal conditions challenges for rural practices limiting profitability are COGS, clinical revenue production, and clinical work efficiency.

Key words: profitability, rural mixed animal practice, income, EBITDA

Introduction

There is a crisis in rural veterinary medicine that affects us all.¹ The United States Department of Agriculture (USDA) declared 221 veterinary shortage areas in 48 states for the fiscal year 2021.² Many of these shortages are in private practice, specifically in rural areas, and focus primarily on food animal medicine.³⁻⁵ The American Veterinary Medical Association (AVMA) defines a food animal veterinarian as one involved in Food Supply Veterinary Medicine, which helps protect the health and welfare of animals that produce eggs, milk, meat, wool and other protein and fiber products. These veterinarians also protect against conditions that pose risks to herd health as they do to public health. In addition, they are the first line of defense against diseases that can affect public health. These food animal veterinarians are charged ethically with promoting public health and safety while protecting animal health and welfare.

The challenges faced by food animal veterinarians in rural areas which contribute to the crisis are numerous and broad in scope. These veterinarians work in different business environments with high case and workloads, an ever-expanding client service area, long hours, lower salaries than other veterinarians within the industry, labor shortages, and increased educational debt loads.^{1,6,7} In addition, studies show that switching from a career in food animal veterinary medicine is high among young associates, with approximately half of new grads exiting rural animal practice less than 5 years after starting.⁸ I posit some of the challenges are driven by a lack of veterinary business training, specifically practice profitability and efficiency, and rural practice demographics.

Rural veterinary practices are complex medical business operations. Rural veterinary practices' strategies for profitability and success revolve around several causal explanatory factors and

different initial conditions within the practice. These factors and conditions are the underlying organizational phenomena that describe the causal complexity of the practice. Several external and internal factors challenge the profitability of rural mixed animal practice. The external factors are often beyond the control of the clinic. The internal factors can be assessed and evaluated to maximize profitability and increase the bottom line. Some of these factors are the cost of goods, account receivables, human resources, staff/employee and client communication, workflow efficiency, price structure, and item categorization. Understanding these factors and what drives them helps us better understand how to control them within the practice.

Profitability, the degree to which a business yields a profit or financial gain, is measured via a profit and loss or income statement. The income statement lists income and expenses during a specific time period for the practice. Whether you record profitability from the past period or project profitability for the coming period, measuring profitability is essential for success. When assessing the financial performance of a veterinary practice, there are 2 main metrics you can examine within the income statement. One is the operating income, which is revenue minus operating expenses. The second is earnings (operating income), before interest, taxes, depreciation and amortization, more commonly referred to as EBITDA. Both are useful metrics to analyze and compare to provide insight into rural veterinary practice's financial performance and potential. Each has advantages and limitations compared to the other. Together, they can provide a more complete and accurate picture of a company's profitability.

Operating income is calculated by subtracting operating expenses from gross revenue/income. Gross income consists of all the practice's income minus the cost of goods sold (COGS), labor, and operating expenses. The operating income figure does not typically include paying interest, taxes, depreciation, and amortization expenses. However, EBITDA factors those "balance sheet" expenses into an equation.

EBITDA is calculated by adding expenses for interest, taxes, depreciation and amortization to the practice's net income. Operating income, also known as net income, is the proverbial "bottom line" and is usually the last figure at the income statement's bottom. It refers to a company's earnings minus business and operating expenses. Interest includes interest paid on loans. Taxes consist of any income or other taxes the company paid during the period. Depreciation, a non-cash item, accounts for the loss in value over time of assets owned by the practice. Lastly, amortization, another non-cash item, is the amount loan balances are reduced as the practice pays debts. EBITDA provides insights and understanding of a practice's earning power and cash flow. Finally, while investors, owners, and managers use EBITDA for comparing the earning power of various size practices, it is not an official measure under Generally Accepted Accounting Standards (GAAP).

Increasing or maintaining profitability is one of the most important tasks of business owners or managers. Owners and managers are constantly looking for ways to change the business to improve profitability. Increasing profitability is easier said than done. Simply put, there are two ways to increase the

profitability of a practice, increase revenue and cut expenses. These potential changes can be analyzed with a pro forma income statement or a budget. Budgeting allows you to assess the impact on the profitability of a minor or incremental change in the practice before it is implemented.

Clinical samples

Supported by a grant from the USDA, data was collected from 16 mixed rural veterinary practices in the southeastern United States over 4 years. The veterinary practices were selected at random, and each met the USDA standard for being in a designated rural veterinary shortage area. The sample collection employs mixed methods via qualitative (e.g., observations) and quantitative methods (e.g., financial and demographic data) collected from January 2018 through June 2021.

Rural veterinary practices are complex organizational systems that include economic and demographic causal condition variables that affect profitability. The Auburn University Veterinary Practice Management Group (AUVPMG) visits each rural practice for a minimum of 3 days.

Financial analysis consists of revenue analysis, production analysis, profit and loss statement, and balance sheet. The financial analysis focuses on 3 years of clinical financial performance and information provided by the leadership team from the practices' financial software program. The VPMG averages 3 years of financial data and uses the average for analysis.

Financial variables collected include practice average client transaction (PACT), the 3-year dollar average spent by the client per invoice. Full-time equivalent veterinarians in practice (FTEV) is the 3-year running average of veterinarians working forty to fifty hours per week. Doctor revenue (DR) is the 3-year running average of total dollars generated by a veterinarian in practice. Doctor average client transaction (DACT) is a 3-year running average of the dollars generated by an individual doctor per invoice. COGS as a percentage of gross revenue is a 3-year running average of the total dollars spent on goods purchased for resale, divided by the total revenue generated by the practice (RPS). The RPS is the 3-year running average of the percentage of professional services within the revenue analysis for the practice. Finally, the operating profit or EBITDA is the earnings before interest, taxes, depreciation and amortization plus owners compensation as a percentage of gross revenue.

Demographic data is collected and compiled using Esri ArcGIS Business Analyst. Esri ArcGIS Business Analyst helps make more intelligent planning, site selection and customer segmentation by combining demographic, business, lifestyle, spending and census data with map-based analytics. The demographic data included population within 40 miles (POP40) and average household incomes within 40 miles (AHI40). A 40-mile range from the practice's primary location was selected as the radius range since 30-50 miles was the radius range for most of the practices visited. The demographic numbers were collected at the time of the practice assessment and represented demographic numbers at that point in time.

Results

Current financial results for PACT, FTEV, doctor revenue (DR), DACT, COGS as a percentage of gross revenue, RPS, and the operating profit or EBITDA as a percentage of gross revenue are located in Table 1.

The average operating profit or EBITDA was 20.3% of gross revenue, with a range of 9.3% to 34.3% compared to an average of 27.0% for Well-Managed Practice Benchmarks 2019 (WMPB), American Animal Hospital Association 2019 (AAHA), and AVMA 2017. The RPS was 24.2%, with a range of 12.2% to 43.3% compared to an average of 27.1% for WMPB and AAHA. COGS was 37.8%, with a range of 24.9% to 49.5% compared to an average of 27.1% for WMPB, AVMA and AAHA. DACT was \$117, with a range of \$84 to \$229 compared to an average of \$202 for WMPB and AAHA. PACT was \$102, with a range of \$76 to \$168 compared to an average of \$161 for WMPB and AAHA. DR was \$538,836, with a range of \$327,000 to \$771,000 compared to an average of \$644,777 for WMPB and AAHA. FTEV in the practices averaged 3, with a range of 1-6.

Current demographic data for the population within 40 miles (POP40) and average household incomes within 40 miles (AHI40) are located in table one below. The POP40 averaged 452,939 and ranged from 46,000 to 1.3 million. The AHI40 average was \$67,780 and ranged from \$48,000 to \$93,000.

Discussion and clinical relevance

EBITDA is calculated by adding expenses for interest, taxes, depreciation, and amortization to the practice's operating income. Operating income, also known as net income, is the proverbial "bottom line" and is usually the last figure at the income statement's bottom. EBITDA provides insights and understanding of a practice's earning power and cash flow. Still, it doesn't account for the variability of owner's compensation when comparing veterinary practices. Therefore, in an attempt to compare "apples to apples" or "practices to practices," the owner's compensation should be added to EBITDA. Once a baseline of operating profits, EBITDA, and owner's compensation is accounted for, practices can be compared, allowing for study and analysis, leading to a better financial understanding of the practice performance.

The average operating profit or EBITDA and owners compensation was 20.3%, with a range of 9.3% to 34.3% compared to an average of 27.0% for WMPB, AAHA and AVMA. As an example, a \$1.5 million gross revenue practice (2 FTE veterinarians) would generate an average EBITDA along with owners compensation of 20.3% or \$303,938. Suppose we image a 50-50 split for owner and practice. In that case, we can then estimate \$151,969 for the owner's compensation (dispersed however the owner decides) and \$151,969 retained for practice (used for future practice operation). Compared to an average of 27.0% or \$408,000 for WMPB, AAHA and AVMA using the same \$1.5 million practice example. If we split those earnings 50-50, we can estimate \$204,000 for the owner's compensation (dispersed however the owner decides) and \$204,000 retained for practice (used for future practice operation).

As mentioned in the introduction, there are 2 ways to increase a practice's profitability, increase revenue and cut expenses. The results are categorized in 3 ways, income or clinic production, expenses or costs, and the outcome of operating profit (EBITDA & Owner's compensation). Income or clinic production is associated with RPS, DACT, PACT, DR and FTEV. These 5 result variables can increase or decrease practice income and directly affect profitability. In addition, COGS is a critical expense category and directly connected to the practice's bottom line or profitability.

Table 1: Current 3-year Financial and Demographic Data Averages for 16 Rural Veterinary Practices in the South Eastern United States from 2018-2021.

	Average	Range	Reported average	Reporting agency
Operating Profit/EBITDA & Owner's Compensation as a % of Gross Revenue (EBITDA)	20.3%	9.3 – 34.3%	27%	AVG of WMPB, AVMA & AAHA
Percentage of Revenue from Professional Services (RPS)	24.2%	12.2 – 43.3%	27.1%	AVG of WMPB & AAHA
Cost of Goods Sold as a Percentage of Gross Revenue (COGS)	37.8%	24.9% – 49.5%	27%	AVG of WMPB, AVMA & AAHA
Doctor Average Client Transaction (DACT)	\$117	\$84 – \$229	\$202	AVG of WMPB & AAHA
Practice Average Client Transaction (PACT)	\$102	\$76 – \$168	\$161	AVG of WMPB & AAHA
Doctor Revenue (DR)	\$538,836	\$327K – \$771K	\$644,777	AVG of WMPB & AAHA
Full Time Employed Vets in the Practice (FTEV)	3.0	1 – 6		
Population within 40 Miles (POP40)	452,939	46K – 1.3M		
Average Household Incomes within 40 Miles (AHI40)	\$67,780	\$48K – \$93K		

Well-Managed Practice Benchmarks (WMPB) 2019, American Animal Hospital Association (AAHA) 2019 and American Veterinary Medical Association (AVMA) 2019.

Let's begin the discussion with COGS, the expense side. COGS is the direct costs of producing the goods sold in the practice or company. COGS is an important metric on the profit and loss statement since it is subtracted from the practice's total revenues to get its gross profit. The gross profit is a profitability measure that evaluates how efficiently a company manages its labor and supplies. Knowing the cost of goods sold helps analysts, investors and managers estimate the company's bottom line. COGS consist of or consume an estimated average of 27.1% of the gross revenue within a private practice based on AVMA, AAHA and WMPB. COGS for rural mixed animal practices average 37.8%. Subtracting the average of 27.1% from the 37.8% is a difference of 10.7%. Assuming a total gross revenue for rural practice is \$1.5 million, a 10.7% difference would mean a loss in COGS of approximately \$160,500. Several factors drive an increase in COGS; lack of inventory, dropped or lost charges, declining revenue, expired products, embezzlement, theft, unrelated personal expenses, and product discounts directly increase COGS. Lastly, increased accounts receivables (AR) increase COGS as the practice has extended credit to the client. AR is a challenge for rural veterinary practices. It's challenging to discuss profitability without a quick review of a rural practice AR.

In rural animal mixed practices visited, account receivables range from an estimated \$48,000 to \$510,000, with an average gross clinic revenue of \$1.5 million. That's an average account receivable range of about 3 to 34%. A general rule for account receivables is 3 to 5% of gross revenue. The estimated average for the clinics visited is approximately \$150,000 or 10% of gross revenue. The average increase in account receivables for clinics visited is roughly \$20,000 a year. Mixed rural practices must be aware of the danger signs that indicate problems with account receivables and collection policies. These problems are directly connected to cash flow problems due to declining revenue.

The income side or clinic production is associated with RPS, DACT, PACT, DR and FTEV. In addition, these essential variables, such as full-time veterinarians, can increase revenue if

the caseload is present, evaluated by DR and DACT. An example is the PACT; in rural practice, the PACT is \$102 compared to the WMPB and AAHA average of \$161, a difference of \$59. The average total patient invoices for these rural practices was 14,139. Therefore, the potential difference in an urban/suburban practice compared to rural practice is \$59 multiplied by 14,139 total invoices or an estimated \$834,201. However, we know that the key to that difference is demographics. Therefore, consider demographics and assume a PACT difference of \$5 or \$10. If we multiply total invoices, 14,139, by the \$5 or \$10 difference will generate an estimated \$70,695 or \$141,390, respectively. These estimated increased revenue numbers lead to the question, where do we find the \$5 or \$10? The simple answer is in price and price structure, which is associated with the more detailed understanding of service vs. products, profit margins, unit labor and hidden cost, and clinic efficiency, to name a few things to consider. A revenue analysis is an excellent starting point to examine some of these factors. Through a revenue analysis, the rural practice results produced 24.2% from professional services compared to 27.1% for WMPB and AAHA. This is a 2.9% difference or \$43,500 based on gross revenue of \$1.5 million. This is important to consider as the profit margin is much higher for service items than products since products are directly connected to COGS. Therefore, the WMPB and AAHA clinics increase their profits over rural practices.

Improving the bottom line means increasing profitability. The bottom line is nothing more than gross revenue minus expenses (cost of goods, salaries and operating expenses). As rural veterinary owners and managers, consideration must be given to many causal conditions that affect profitability to increase revenue and control expenses. The rural practices' primary causal conditions limiting increased profitability are focused on COGS, clinical revenue production, and clinical work efficiency.

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