



Case Study: Cardiology – Tennessee Heart & Vascular

Enhancing Cardiac Physician Productivity with Dr. Know's Unified Reporting Solution

Executive Summary

- + 66% Increased Revenue Production
- + 57% Reduction in Age Impact
- + \$421k Increased Annual Revenue Over National Average

Introduction

This study examines the impact of Dr. Know's unified, structured reporting solution on the productivity of cardiologists, specifically measured by Work Relative Value Units (wRVUs or RVUs).

The findings demonstrate that cardiologists using Dr. Know's solution generate significantly higher and more consistent RVU rates than the national average, leading to substantial productivity and financial benefits for their hospitals and medical practices.

Background

Cardiology is a highly specialized field where physician efficiency and productivity are crucial as their work is often a primary source of an organization's income. RVUs are a key industry metric used to assess the value of services provided by physicians, directly influencing reimbursement and the overall financial performance of an organization.

Tennessee Heart & Vascular (TNHV) is a busy cardiology practice that has been serving the extended Nashville, TN regions for more than 30 years. They are composed of 11 cardiologists, led by industry expert, **Dr. Tracy Callister, MD, FACC**. TNHV currently practices at 3 major hospitals, with 3 main offices, several clinics, and over 450 connected technicians and staff.

Over the years, their expertise has been sought by thousands of physicians worldwide through extensive training courses in partnership with GE Healthcare for Cardiac CT training and certification. They have published extensively, with 50+ major publications, cited hundreds of times, by over 4k researchers. Their research is recognized in the top 5% by Doximity.

Problem Statement

Cardiologists face numerous challenges in maintaining high RVU productivity levels including:

- Multiple inefficient, disconnected, and frustrating reporting or dictation experiences, often leading to long working hours and slow turnaround times
- Poor clinical workflows between physicians, technicians, and support staff
- Keeping up with complex and evolving industry protocols and updates
- Burdensome administrative tasks

These challenges lead to lower RVU generation and physician burnout with age, both impacting financial performance and patient care quality.

Solution

Dr. Know's unified reporting solution is designed to help solve these challenges by:

- Unifying, enhancing, and streamlining clinical reporting and workflows
- Immediate report turnaround time and routing (faxing, HL7 interfaces, etc.)
- Providing the right information, to the right people, at the right time
- Reducing physician burnout, even into older age
- Keeping up with industry changes through ongoing expert curation efforts and insights
- Enhancing and optimizing patient interactions and outcomes
- Reducing administrative burdens

These benefits are all achieved while consolidating and reducing traditional associated costs.

Dr. Know is also designed to work standalone or fit alongside existing healthcare IT investments (e.g. EMR, PACs, imaging workstations), reducing or eliminating the risk of IT replacement.

When using Dr. Know's solution, physicians can focus on the tasks they are trained for rather than being continuously overburdened with unnecessary, and often redundant, experiences and chores. In addition to improved and sustained productivity, this leads to better patient experiences, outcomes, and overall improved financial performance for the organization.

Dr. Know has been tested and optimized in busy clinical settings for over 25 years.

Methodology

To assess the impact of Dr. Know's solution on RVU productivity, we conducted a comparative analysis between TNHV cardiologists using Dr. Know's solution and those who do not, using national numbers provided from MedAxiom's annual Cardiology Compensation Report¹.

The study includes data collection, statistical analysis, and industry benchmarking to validate its findings. References are included at the end of this study.

Results

RVU Productivity

The comparative analysis revealed a significant increase in RVU productivity for cardiologists using Dr. Know's solution compared to the national average.

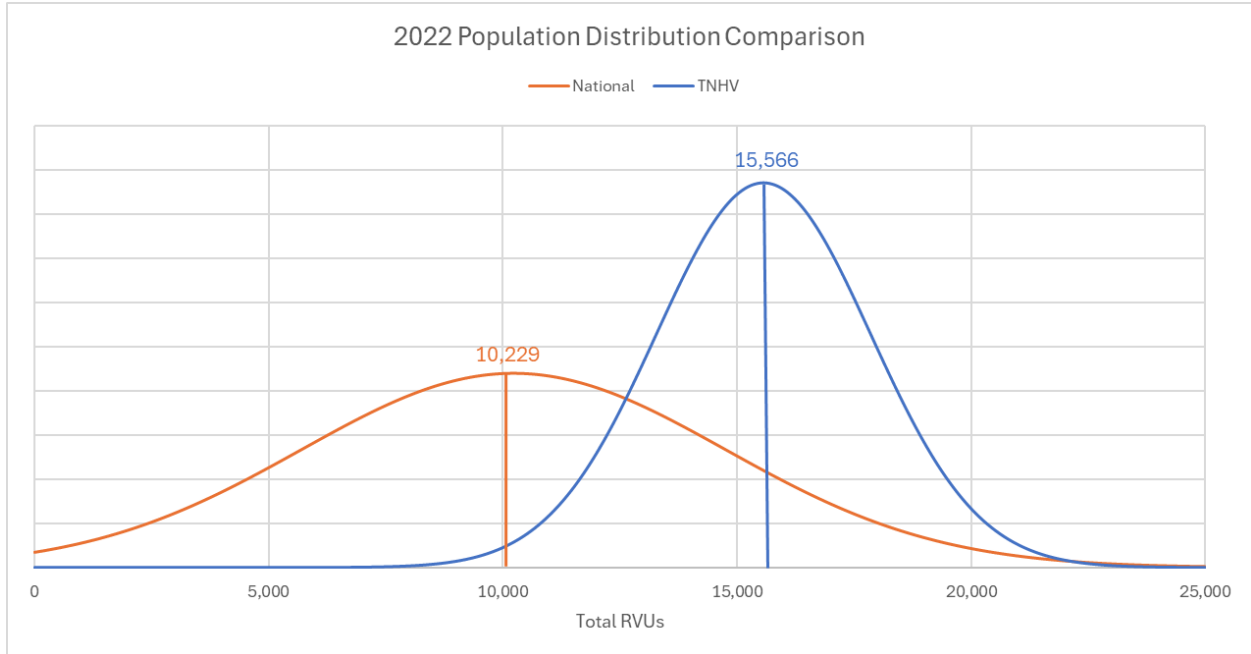


Figure 1: 2022 Population Distribution Comparison

Metric	National Data ¹	TNHV ²	% Change
Mean RVUs	10,229	15,566	+52%
Standard Deviation	4,532	2,288	-50%
Co-Efficient of Variation	44%	13%	-67%
Weeks Worked	48	44	-8%
RVUs per Day Worked (5 Day Week)	43	71	+66%

Table 1: 2022 Annual RVU data for FTE Cardiologist

The data shows (Table 1) that the average physician at TNH V produces 52% more RVUs per year over the national average. When adjusted for TNH V physicians working **4 fewer weeks per year**, this productivity jumps to 66%. As a group, TNH V physicians also have more consistent RVU scores (a 50% less standard deviation and a 67% lower co-efficient of variation).

Age Impact

Age was also less of a factor for TNHV physicians than in the national numbers.

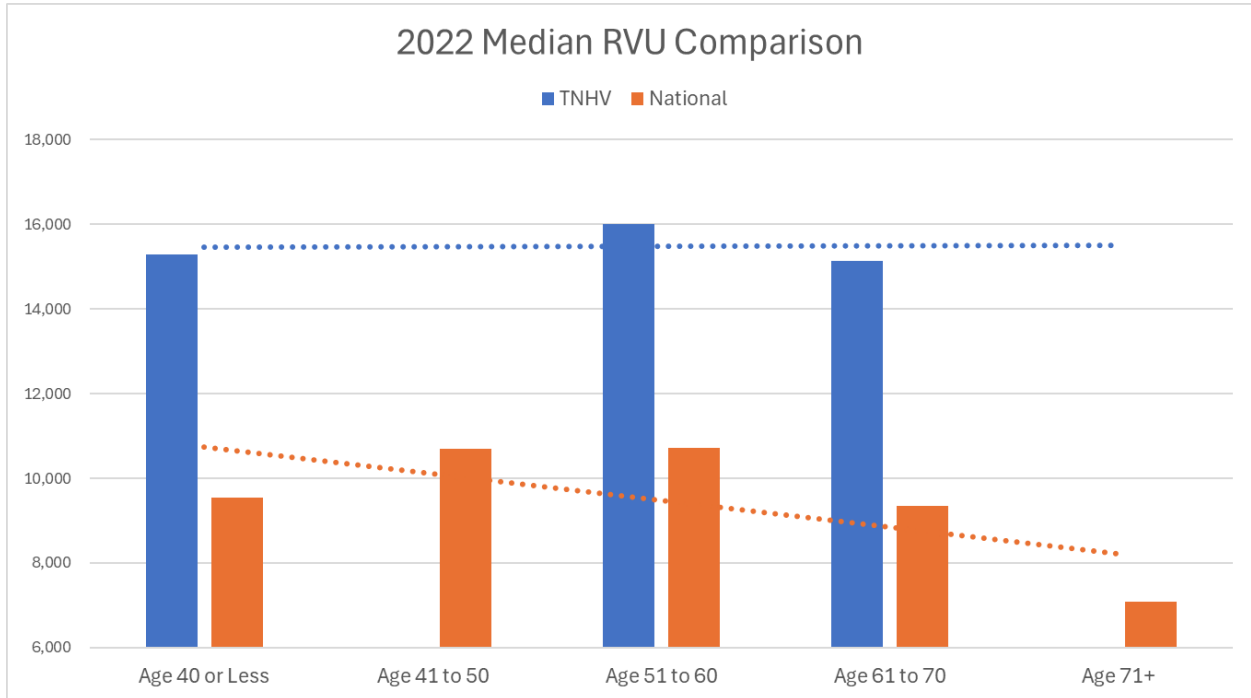


Figure 2: 2022 Median RVU Comparison

The MedAxiom study specifically calls out physicians aged 61-70 on average see a 12.8% drop in RVU production when compared to their top performing peers in the 51-60 bucket. That number drops even further to a significant 33.8% for physicians in the 71+ age range.

By comparison, TNHV saw a modest 5.4% productivity drop (Figure 3) between these same two age groups, while also performing 62% higher than their peers in the 61-70 bucket before accounting for differences in weeks worked. TNHV physicians also showed continued growth year over year (Figure 4), regardless of age.

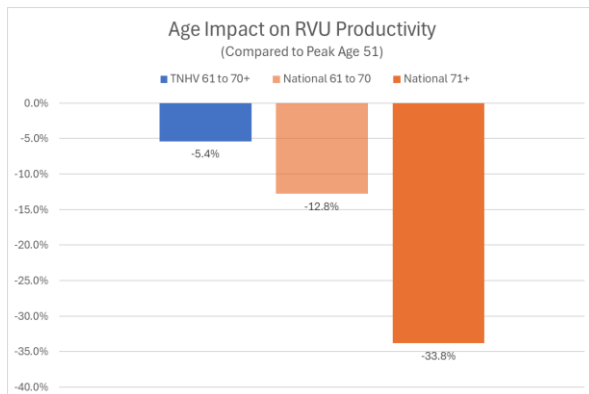


Figure 3: Age Impact on RVU Productivity

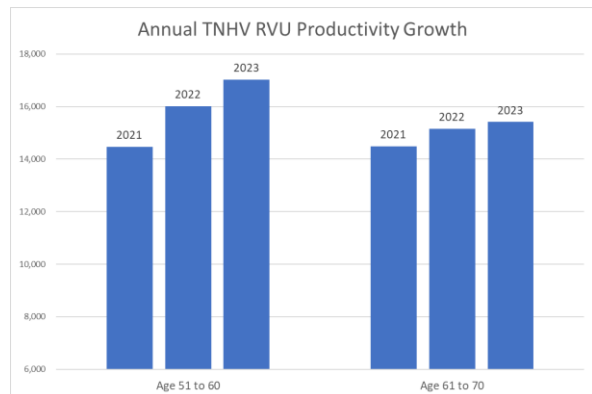


Figure 4: Annual TNHV RVU Productivity Growth

Financial Impact

The increase in RVU productivity translates into substantial financial gains for TNHV over the national average.

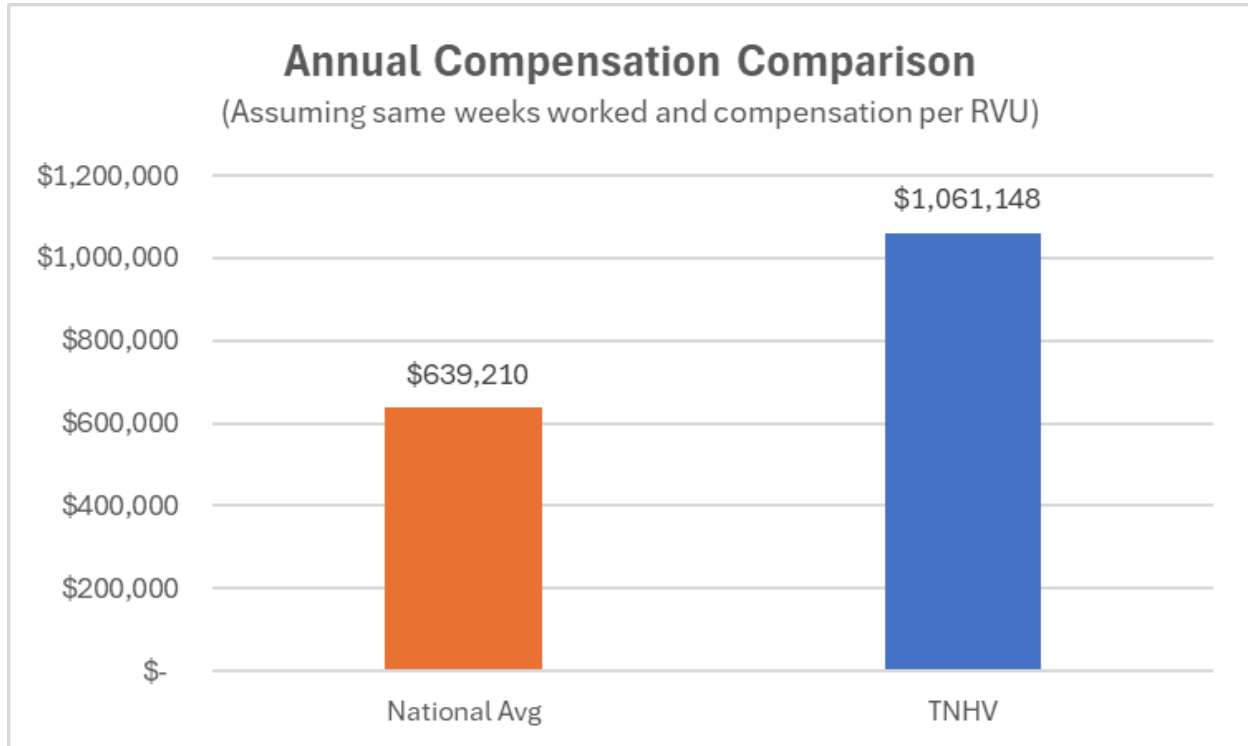


Figure 5: Annual Compensation Comparison

By generating an additional 141 RVUs per week, cardiologists using Dr. Know's solution can achieve significant revenue increases. Assuming the national average reimbursement rate of \$62.49¹ per RVU in 2022, this equates to an additional \$8,790 per week, or over \$421,938 annually per physician (assuming 48 weeks worked).

Using the age distribution from MedAxiom's annual report showing that 26% of cardiologists are in the 61+ age bucket, this number becomes even more meaningful for practices with older physician populations because Dr. Know helps prevent burnout and sustain physician productivity longer returning an incremental 431 RVU's over their peers annually on top of the 6,752 quoted from above (141*48) which increases the value of Dr. Know up to \$448,907 annually, per physician, when physicians are 61+ years old (still assuming 48 weeks worked).

Additional financial benefits realized at TNHV by utilizing Dr. Know's solution include:

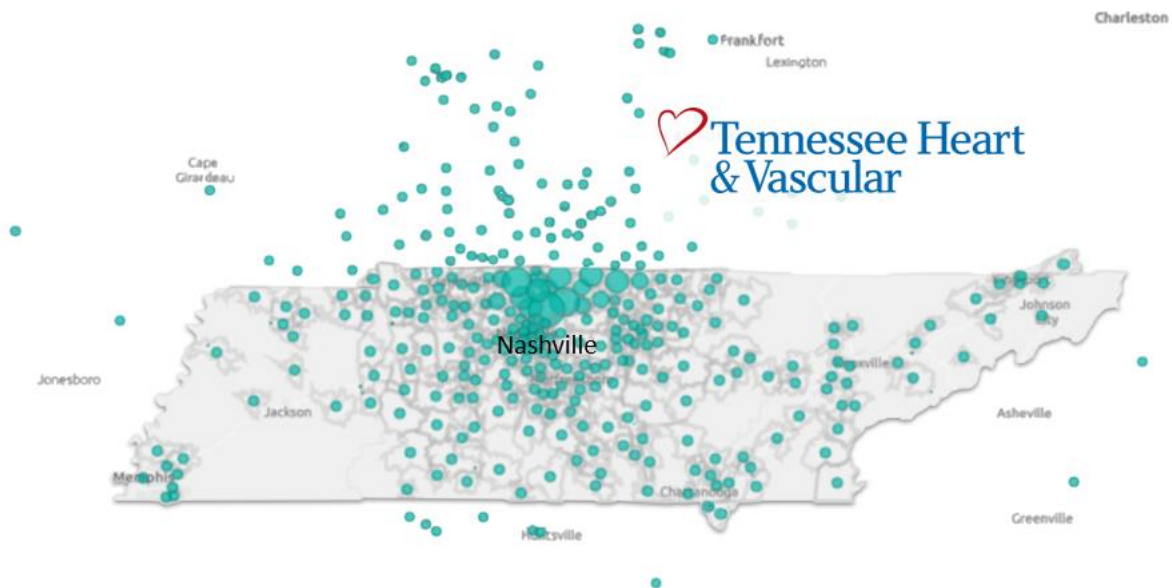
- Reduced or eliminated transcription costs
- Consolidated or eliminated reporting software licenses
- Automatic report summarizations, reducing manual efforts
- Reduced insurance claim re-filings and lost revenues

Conclusion

In summary, Dr. Know's unified reporting solution helped TNHV solve several of cardiology's toughest challenges by offering:

- Increased physician RVU productivity, at reduced cost
- Sustained physician RVU productivity, even into old age
- Improved financial performance for the organization

Below is a map of zip codes that TNHV currently serves. They plan to expand even further in 2025, delivering these benefits to new physicians and patients throughout middle Tennessee.



Call to Action

Dr. Know's mission is to empower every healthcare player in the world to achieve more through electronic record innovations.

For cardiology practices looking to improve RVU productivity, reduce physician burnout, enhance patient experiences and outcomes, and increase revenue, adopting Dr. Know's reporting solution is a smart strategic choice.

Contact Dr. Know today to learn more about how our solution can benefit your practice and to schedule a demo.

References

- 1) 2023 MedAxiom Compensation Survey Report
- 2) Data collected from TNHV cardiologists using Dr. Know's software