IARJSET ISSN (O) 2393-8021, ISSN (P) 2394-1588

International Advanced Research Journal in Science, Engineering and Technology

Impact Factor 8.066 ⁜ Peer-reviewed & Refereed journal ⁜ Vol. 12, Issue 5, May 2025

DOI: 10.17148/IARJSET.2025.125127

A Study on Workforce Challenges and Their Effect on Accounts Receivable in RCM (Revenue Cycle Management)

Mr. Rajkumar S[1], Dr. Narmadha[2]

IInd MBA- Business analytics, Department of Management Studies, VISTAS[1]

Assistant Professor of MBA Business Analytics, Department of Management Studies, VISTAS[2]

Abstract: This study investigates how workforce issues impact the performance of accounts receivable (AR) in the healthcare sector's Revenue Cycle Management (RCM) process. Any disruption brought on by personnel problems such as excessive employee turnover, insufficient training, burnout, or a lack of subject expertise can result in delays in claim processing and a rise in denials because AR is essential to preserving cash flow and financial stability. Through data gathered from RCM experts, the study seeks to uncover important workforce-related factors that impede AR efficiency and examine their effects. The results indicate that targeted actions aimed at resolving these workforce concerns can greatly improve AR outcomes and overall revenue cycle performance. The study ends with helpful suggestions for healthcare institutions looking to increase operational effectiveness and employee engagement.

Keywords: healthcare finance, accounts receivable (AR), workforce issues, employee turnover, staff training, burnout, subject matter expertise, operational efficiency, employee engagement, healthcare administration, financial stability, performance improvement, and delays in processing claims.

I. INTRODUCTION

Revenue Cycle Management (RCM) is a critical function in the healthcare industry, encompassing the entire financial process from patient registration to final payment collection. At the heart of RCM lies Accounts Receivable (AR)—the process of tracking and recovering payments owed by insurance companies and patients. Efficient AR management ensures steady cash flow, reduces financial risk, and improves the overall financial health of healthcare providers.

However, the effectiveness of AR operations is heavily dependent on the workforce that manages these processes. In recent years, the RCM industry has been facing numerous workforce challenges, including high employee turnover, inadequate training, skill gaps, burnout, and workload imbalances. These issues directly affect the productivity, accuracy, and timeliness of AR operations, leading to increased aging of receivables, higher denial rates, and delayed reimbursements. This study aims to explore and analyze how these workforce challenges impact AR performance. By identifying the root causes of inefficiencies and understanding the link between human resource management and AR outcomes, the research seeks to propose actionable solutions that can help organizations optimize their RCM performance.

II. REVIEW OF LITERATURE

Saxena and Rao (2018) highlight that high employee attrition and inadequate training in healthcare BPOs significantly impact AR processes. Their study found that companies with stable, well-trained teams had 20% faster claim resolution compared to those with frequent turnover.

Johnson (2019) explored the impact of staff burnout and workload on claim accuracy in the RCM process. The study revealed that overburdened employees were prone to errors, leading to increased denial rates and longer AR cycles. The findings supported the need for workload balancing and supportive HR policies.

Lee and Carter (2020) examined the correlation between staff competency and AR aging. They concluded that employees with specialized knowledge in denial management and insurance protocols contributed to faster collections and fewer rejections. Their research emphasized structured onboarding and continuous training.

IARJSET ISSN (O) 2393-8021, ISSN (P) 2394-1588

International Advanced Research Journal in Science, Engineering and Technology

Impact Factor 8.066 ⁜ Peer-reviewed & Refereed journal ⁜ Vol. 12, Issue 5, May 2025

DOI: 10.17148/IARJSET.2025.125127

Anderson et al. (2021) focused on the outsourcing trends in RCM and the challenges faced by BPOs in retaining skilled talent. Their study showed that inadequate investment in employee development led to operational inefficiencies, directly affecting metrics such as Days Sales Outstanding (DSO) and collection rates.

Patel and Mehta (2022) conducted a case study on a leading RCM firm and found that workforce satisfaction directly correlated with AR performance. Improved employee morale and engagement resulted in a 25% improvement in claim processing time and a significant reduction in billing errors.

Kumar (2020) argued that technology solutions, while valuable, cannot replace the human expertise needed for tasks such as denial analysis and appeals. His research called for a hybrid approach—leveraging technology while prioritizing workforce development.

Thomas and Iyer (2021) studied the skill gap in RCM and found that many new hires lacked domain-specific knowledge despite general BPO experience. Their research recommended tailored certification programs and internal mentoring systems to improve performance.

Singh and Thomas (2023) explored how remote work, introduced during the COVID-19 pandemic, affected productivity in AR teams. While flexible work models offered benefits, the study found that lack of supervision and communication tools led to new challenges in workforce coordination.

Arora and Das (2022) focused on denial management trends and observed that high denial rates often stemmed from manual errors due to inadequate training or unclear SOPs. Their study supported the creation of knowledge management systems and continuous performance tracking

NEED OF THE STUDY

The efficiency of Accounts Receivable (AR) within Revenue Cycle Management (RCM) is critical to the financial health of healthcare organizations. While technology and automation have advanced, workforce-related challenges such as high attrition, insufficient training, employee burnout, and skill gaps continue to disrupt AR processes. These issues lead to billing errors, claim denials, and delays in collections, ultimately impacting revenue flow. Despite their impact, these human resource challenges are often underestimated in RCM strategies. Therefore, this study is essential to investigate how workforce inefficiencies affect AR performance and to provide insights that can help organizations improve employee management, enhance process efficiency, and strengthen overall revenue outcomes.

OBJECTIVE OF THE STUDY

1. To identify key workforce challenges such as attrition, inadequate training, and burnout affecting Accounts Receivable processes in Revenue Cycle Management.
2. To analyze the impact of these workforce issues on AR performance metrics like claim aging, denial rates, and collection efficiency.
3. To propose strategic recommendations for improving workforce management in RCM to enhance AR outcomes and overall operational efficiency.

III. RESEARCH METHODOLOGY

This study adopts a descriptive and analytical research methodology to examine the impact of workforce challenges on the effectiveness of Accounts Receivable (AR) processes within the Revenue Cycle Management (RCM) domain. The approach is designed to capture both qualitative and quantitative insights from professionals working in healthcare RCM services. Primary data is collected through structured questionnaires distributed to employees across various departments involved in AR, including billing, coding, denial management, and collections. In addition, semi-structured interviews are conducted with team leads and managers to gain deeper qualitative perspectives on staffing issues and operational challenges. Secondary data sources include industry publications, company performance reports, academic articles, and benchmarking studies relevant to workforce performance in RCM.

The sampling technique used is purposive sampling, targeting individuals with direct experience in AR functions within RCM firms. A sample size of 50–100 respondents ensures sufficient data for meaningful analysis. The data collected is processed and analyzed using statistical tools such as Microsoft Excel and SPSS to identify trends, patterns, and the correlation between workforce factors (such as attrition, training gaps, and workload pressure) and AR performance metrics (such as aging reports, denial rates, and collection efficiency).

IARJSET ISSN (O) 2393-8021, ISSN (P) 2394-1588

International Advanced Research Journal in Science, Engineering and Technology

Impact Factor 8.066 ⁜ Peer-reviewed & Refereed journal ⁜ Vol. 12, Issue 5, May 2025

DOI: 10.17148/IARJSET.2025.125127

Ethical considerations are also addressed by ensuring voluntary participation, anonymity of respondents, and data confidentiality. The study is limited to a specific segment of the RCM workforce, particularly those working in outsourced healthcare service providers, and may not fully capture the challenges faced in in-house hospital RCM settings. Despite these limitations, the chosen methodology provides a structured framework to evaluate workforce-related inefficiencies and propose data-driven recommendations for improvement.

IV. ANALYSIS AND INTERPRETATION

4.1 REGRESSION:

SUMMARY OUTPUT

Regression Statistics	
Multiple R	0.15184944
R Square	0.023058252
Adjusted R Square	0.015600682
Standard Error	1.063945823
Observations	133

ANOVA

	df	*SS*	*MS*	*F*	*Significance F*
Regression	1	3.5	3.5	3.091925466	0.081016948
Residual	131	148.2894737	1.131980715		
Total	132	151.7894737			

	Coefficients	*Standard Error*	*t Stat*	*P-value*	*Lower 95%*	*Upper 95%*	*Lower 95.0%*	*Upper 95.0%*
Intercept	3.263157895	0.576137305	5.663854543	8.95913E-08	2.123420873	4.402894916	2.123420873	4.402894916
Age	0.5	0.284351482	1.758387177	0.081016948	-0.062515061	1.062515061	-0.062515061	1.062515061

Table no 1: UNDERSTANDING OF RCM PROCESS AND AGE

H0: there is no relationship between understanding of rcm process and age
H1: there is a relationship between understanding of rcm process and age

INTERPRETATION:
Since $p = 0.081 > 0.05$, we fail to reject the null hypothesis, indicating the regression model is not a significant predictor of understanding based on age.

There is a very weak and statistically insignificant relationship between age and understanding of the RCM process. Age does not significantly explain the variation in understanding levels.

IARJSET ISSN (O) 2393-8021, ISSN (P) 2394-1588

International Advanced Research Journal in Science, Engineering and Technology

Impact Factor 8.066 ⁜ Peer-reviewed & Refereed journal ⁜ Vol. 12, Issue 5, May 2025

DOI: 10.17148/IARJSET.2025.125127

4.2 ANOVA:SINGLE FACTOR:

Anova: Single Factor

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Occupation	133	231	1.736842105	0.195374801
Work Experience	133	259	1.947368421	0.686602871

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	2.947368421	1	2.947368421	6.683544304	0.010267531	3.876923577
Within Groups	116.4210526	264	0.440988836			
Total	119.3684211	265				

Table no 3:Relationship between occupation and work experience

H0: there is no statistically significant difference between occupation and work experience
H1: there is a statistically significant difference between occupation and work experience

Interpretation:
P-value = 0.0103 < 0.05
Therefore, we reject H_0. There is a statistically significant difference between occupation and work experience. This suggests that the level of work experience varies significantly across different occupations in the sample.

4.3 CORRELATION:

	Technology (e.g., RPA, workflow tools) can reduce manual AR tasks.	*My organization invests adequately in staff training and upskilling.*
Technology (e.g., RPA, workflow tools) can reduce manual AR tasks.	1	
My organization invests adequately in staff training and upskilling.	0.822472932	1

Table 4: Relationship between technology and organisation investing in upskilling

H0: there is no statistically significant difference between technology and organisation investing in upskilling.
H1: there is a statistically significant difference between technology and organisation investing in upskilling.

Interpretation:

- The correlation coefficient is 0.8225, which indicates a strong positive correlation between the two variables.
- This means that as technology use increases, the investment in staff upskilling also tends to increase, and vice versa.
- Since the correlation is very strong (close to +1), we can conclude that there is a statistically significant relationship between technology adoption and organizational investment in upskilling.
- Thus, we reject the null hypothesis (H_0) and accept the alternative hypothesis (H_1).

FINDINGS:

The study reveals that workforce challenges significantly impact the performance of Accounts Receivable (AR) functions within the Revenue Cycle Management (RCM) sector. One of the major findings is that staff shortages and high employee turnover disrupt the continuity of AR processes, leading to delays in follow-ups, increased days in accounts receivable, and a rise in claim denials. The lack of adequately trained personnel also contributes to errors in documentation,

IARJSET ISSN (O) 2393-8021, ISSN (P) 2394-1588

International Advanced Research Journal in Science, Engineering and Technology

Impact Factor 8.066 ⁜ Peer-reviewed & Refereed journal ⁜ Vol. 12, Issue 5, May 2025

DOI: 10.17148/IARJSET.2025.125127

miscommunication with payers, and inefficient resolution of rejections, which ultimately hampers cash flow. Furthermore, burnout and low employee morale, especially in high-pressure environments, result in reduced productivity and engagement, directly affecting collection efficiency. The shift to remote or hybrid work models—accelerated by the COVID-19 pandemic—has added complexity in supervision, coordination, and performance tracking, further straining AR operations. The findings also indicate that many RCM firms lack robust onboarding and continuous training programs, making it difficult for new employees to adapt to payer-specific processes and technology platforms. Additionally, reliance on manual processes in some organizations exacerbates workforce pressure, while firms that have adopted automation and performance analytics show more resilience in managing AR tasks despite workforce limitations. Overall, the study underscores that addressing workforce issues through structured training, technology integration, and employee retention strategies is essential for maintaining AR performance and ensuring sustainable revenue flow in the RCM ecosystem.

V. CONCLUSION

Workforce challenges have a significant and direct impact on the efficiency of Accounts Receivable (AR) processes within Revenue Cycle Management (RCM). This study highlights how issues such as high employee turnover, insufficient training, burnout, and lack of domain expertise can hinder timely claim processing, increase denial rates, and delay collections. While automation and technology play an important role in streamlining operations, the human workforce remains central to the success of AR management. Addressing these workforce challenges through strategic hiring, continuous training, and employee engagement can lead to improved AR performance and enhanced revenue flow for healthcare providers. Therefore, investing in human capital is not just a support function but a critical driver of operational and financial success in the RCM industry.

REFERENCES

[1]. **Anderson, P., Kumar, R., & Shah, M. (2021).** Outsourcing trends in healthcare RCM and their operational impact. Journal of Health Management, 23(2), 145–159.
[2]. **Arora, S., & Das, V. (2022).** Denial management and workforce efficiency in medical billing. International Journal of Healthcare Administration, 14(1), 55–67.
[3]. **Becker's Hospital Review. (2021).** How workforce shortages are reshaping RCM performance. Retrieved from https://www.beckershospitalreview.com/
[4]. **HFMA. (2020).** RCM Workforce Report: Staffing shortages and training needs. Healthcare Financial Management Association.
[5]. **Johnson, L. (2019).** The human factor in revenue cycle delays: Stress and burnout among AR staff. Health Economics Review, 8(3), 110–118.
[6]. **Kumar, S. (2020).** The limits of automation in healthcare AR. Journal of Medical Systems, 44(6), 102–109.
[7]. **Lee, J., & Carter, B. (2020).** Training and competency in denial management: A quantitative approach. Journal of Healthcare Finance, 46(4), 78–86.
[8]. **Patel, A., & Mehta, R. (2022).** Employee engagement and its effect on AR performance in RCM firms. Indian Journal of Management Studies, 17(2), 89–98.
[9]. **Saxena, R., & Rao, N. (2018).** Workforce attrition and its operational impact on healthcare BPOs. Asia-Pacific Journal of Business Process Management, 12(1), 34–42.
[10]. **Singh, P., & Thomas, D. (2023).** Remote work in RCM: Challenges and opportunities for AR teams. Journal of Business Continuity & Emergency Planning, 15(1), 29–41.

