# IMPLEMENTING RETENTION STRATEGIES TO NAVIGATE CHALLENGES OF PHYSICIAN SHORTAGE IN HEALTH CARE

by

Student Name

DBA-FX-8740

Professor's Name

Name, Designation

School of Business, Technology, and Health Care Administration

A Capstone Work Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctorate of Business Administration

Strategy and Innovation

Capella University

Month & year of dean's approval

## Abstract

The purpose of the abstract is to provide a concise and accurate synopsis of key elements of your capstone project. Set the abstract as a single block-style paragraph with no initial indent. Address the following topics (400 words maximum). **Research topic summary (1-5 sentences):** a concise summary of your capstone research topic. Explain the rationale for your study and the need for the study that the capstone addresses. Indicate your research questions, matching the wording used in your capstone sections. **Research methodology (1-2 sentences).** Summarize the research methodology used in the study. **Population and sample (1-2 sentences).** Describe the population and sample, including high-level demographic information regarding your participant pool. If secondary data were used, describe the data set. **Data analysis (1-2 sentences)** provides a concise summary of your data analysis. **Findings (1-3 sentences)** provide a concise summary of your research findings and conclusion(s). Describe the practical implications of your project and the deliverable you created.

**Tips for Developing a Quality Abstract.** (a) The abstract is representative of your work. Researchers will review your abstract to determine whether your manuscript is worthy of reading and relevant to their literature review. Those in your field will review your abstract to learn more about the nature and quality of your doctoral work. Thus, the abstract stands as a record of your doctoral-level work. (b) Additional guidelines for the development of an abstract are in section 3.3 of the *APA Publication Manual*, 7th edition, or on Campus at Academic Writer, https://academicwriter-apa-org.library.capella.edu/learn/browse/QG-59?group=All&view=list&term=abstract&sort=asc (c) References are generally not used in the abstract, as the focus is the study, the research, and the findings.

**Formatting for the Abstract.** Format the abstract as one double-spaced block-style

paragraph (i.e., do not indent the first line). Set the text flush left, ragged right. Do not justify the right margin. Do not use headings, bullets, or bold. The Abstract page is not numbered, and "Abstract" does not appear in the Table of Contents.

ONCE YOU'VE WRITTEN THE ABSTRACT PAGE, DELETE ALL INSTRUCTIONS.

## Dedication

This dedication page is optional. It is your personal acknowledgment indicating your appreciation and respect for significant individuals in your life. The dedication is personal; thus, any individuals named are frequently unrelated to the topic of the capstone.

Typically, learners dedicate the work to the one or two individuals who instilled the value of education and the drive to succeed in educational pursuits. Learners often dedicate capstones to relatives, immediate family, or significant individuals who have supported them or played a role in their lives.

Avoid identifying participants or anyone connected with the research site. You may use individuals' titles with no name (e.g., "Thanks to the research director and site proctor for their help"). Or you may name individuals without connecting them to the site (e.g., "Thanks to Abdul Ibrahim and Mary Carson for their help"). Typically, avoid naming the site.

*Note*: If the Abstract runs onto a second page, change the page number of the Dedication to 4.

ONCE YOU'VE WRITTEN THIS PAGE, DELETE ALL INSTRUCTIONS.

## Acknowledgments

This acknowledgments page is optional. The acknowledgments differ from the dedication in that they recognize individuals who have supported your scholarly efforts related to the advanced doctoral manuscript or who have held a role in your academic career as it relates to the research of the advanced doctoral manuscript. This might mean a mentor and committee members, an advisor, online or colloquium faculty, and other support people from Capella or other organizations. If you received financial support from fellowships, grants, or other organizational support, note it in this section. The acknowledgments are also appropriate for thanking statisticians, transcriptionists, those who have provided permission to use an instrument, and the like.

Avoid identifying participants or anyone connected with the research site. You may use individuals' titles with no name (e.g., "Thanks to the research director and site proctor for their help"). Or you may name individuals without connecting them to the site (e.g., "Thanks to Abdul Ibrahim and Mary Carson for their help"). Typically, avoid naming the site. Learners often thank those who have provided permission to use an instrument.

ONCE YOU'VE WRITTEN THIS PAGE, DELETE ALL INSTRUCTIONS.

## Table of Contents

ONCE YOU'VE WRITTEN THE TOC, DELETE ALL INSTRUCTIONS.

## List of Tables



ONCE YOUR LIST IS COMPLETED, REMOVE INSTRUCTIONS

AND UPDATE THE PAGE NUMBERS.

DELETE THIS PAGE IF NOT NEEDED.

## List of Figures



ONCE YOUR LIST IS COMPLETED, REMOVE INSTRUCTIONS

AND UPDATE THE PAGE NUMBERS.

DELETE THIS PAGE IF NOT NEEDED.

## SECTION 1. PROJECT DESCRIPTION

### Overview of the Project

In the United States, the growing health care needs have increased the workload on health care staff, leading to physician shortages and burnout (Zhang et al., 2020). The shortage of physicians significantly undermined the effectiveness of health care delivery and affected patient safety and health outcomes (Feng et al., 2022). According to the World Health Organization (2022), the projected health care workforce shortage will be 10 million by 2030. The Association of American Medical Colleges (AAMC) reported that projected shortages of physicians in the United States will be between 54,100 and 139,000 by the end of 2033 (Boyle, 2020). DeVries et al. (2023) noted that physician shortages and turnover rates in the health care sector negatively impact health care delivery and care quality standards. Zhang et al. (2020) indicated that insufficient staffing levels hamper hospitals from providing patient care, compromising patient safety and health outcomes.

The shortage of the healthcare workforce affects the care delivery process. Zhang et al. (2020) reported that higher turnover rates lowered physician availability in hospitals, hindering organizations from meeting patient health care needs. In post-COVID-19, the hospital underwent a healthcare workforce shortage of 91,500, affecting care quality standards (Zhang et al., 2020). The lack of retention strategies impacts physicians' ability to continue their jobs du environment at the workplace leads to physician burnout. As an example, the pandemic has increased the number of jobs, resulting in burnout among physicians and affecting their physical and psychological health. Moreover, the burnout rate among physicians rose to 61.7% as opposed to 37.5% prior to the outbreak of COVID-19. Physician burnout has an impact on the efficiency of the organization's operations, which has financial implications. According to Sinsky et al. (2022),

the turnover related to burnout will need to be managed with the help of $979 million yearly. Physician turnover also has an impact on the financial stability of the organization, as the turnover has intangible costs. Nevertheless, new physicians have to be recruited and trained, which is a financial burden to the organization (Pappas et al., 2022). The increased cost of healthcare as a result of physicians leaving meant that there was a need to have retention strategies that would counter burnout in physicians.

Retaining the right physicians is important in the long-term sustainability and strategic innovativeness of an organization. The doctors are the key players in healthcare services as they are the ones who provide good healthcare services to the patients. To address the problem of the staff shortage in the healthcare sector, the retention strategy needs to be implemented (Vries et al., 2023). Once organizations implement retention programs aligned to physician professional objectives and individual well-being via competitive compensation and career growth opportunities, they can inspire a spirit of creativity (Weintraub and McKee, 2019). The use of effective physician retention systems assists institutions in fostering the best care quality practices, enhancing patient safety and health services (Vries et al., 2023). The strategic emphasis of healthcare leaders on retention strategies is ultimately a driving force towards making the healthcare delivery process better. The project aims to enable healthcare leaders to apply retention approaches to master the issue of the physician shortage in the healthcare sector.

## Problem Statement and Purpose

### Problem of Practice

The overall business issue is that hospitals are facing problems with physician retention, which results in increased financial performance, recruiting a greater number of physicians, and decreasing the stability of the organization (Han et al., 2019). These challenges have an impact

on the sustainability of healthcare organizations since they increase costs, reduce employee productivity, and undermine the chances of meeting the organizational goals. To exemplify, Pappas et al. (2022) found that the cost of physician turnover to replace a physician can range between 500,000 and 1,000,000 per physician, which is dependent on the specialty.

The identified business issue is the inefficient process of retaining physicians to stay in the U.S. health care organization, which leads to the 11% turnover rate in U.S. hospitals and lower levels of staff morale and care quality (Raman et al., 2024). The increased turnover rate of the physicians also has a financial cost implication on the organization. According to Filipek (2023), to cover the cost of physician turnover in the burnout-related cases, 2.6-6.3 billion is needed in a year. Moreover, burnout costs approximately $7600 per worked doctor annually, and this impact on the financial stability of the organization (Han et al., 2019). The price of physician burnout and turnover suggests that inefficient retention techniques introduce a financial burden on the health care organization (Pappas et al., 2022). To enhance the quality of care and financial stability of the organization, it is significant to mitigate the specified issue in business.

**Alignment with the Program**

The project is also in line with the doctorate in business administration (DBA) program in specialization, which is under strategy and innovation. The project will help the healthcare leaders to employ retention mechanisms to avoid burnout and turnover among physicians in the hospital (Vries et al., 2023). The DBA specialization course is aimed at discussing the effects of retention plans to avoid burnout and turnover among physicians. One of the practice problems is the poor measures to retain physicians, which results in an increase in turnover and impacts the quality of care (Raman et al., 2024). The project topic is consistent with the DBA program, which aims to deal with the issue of increased turnover in the healthcare sector. The choice of a subject on which

the retention strategies will be implemented within the strategy and innovation specialization program will be an eye-opener on how to deal with the problem of physician turnover.

**Purpose Statement**

The qualitative research project aims to address how healthcare leaders view the issue of retention strategies to deal with the problem of physician shortages in the healthcare sector and enhance turnover and employee morale. The project investigates the role of retention strategies in helping to avoid the problem of physician turnover. The use of retention strategies can assist healthcare leaders in avoiding the phenomenon of physician turnover and burnout and enhance the quality of care in the healthcare sector.

**Gap in Practice**

The existing gap in practice is that health care leaders do not know or cannot create and adopt effective retention strategies (Raman et al., 2024). This disconnect translates to 11% turnover rates in hospitals in the United States and a lowering of staff morale (Raman et al., 2024). In the absence of certain retention policies, leaders fail to address the problems that potentially drive physicians' discontent in their profession, such as miscommunication of expectations, limited professional growth, and inappropriate financial incentives (Pappas et al., 2022). In total, the lack of different retention strategies leads to poor rates of physician satisfaction and, conversely, puts an organization under an extra burden of finances as a result of high rates of turnover that imply higher expenses on recruitment and training (Han et al., 2019). As an example, Abid and Salzman (2021) identified that a lack of optimal retention policies has a range of consequences, including an increased number of employees per employee retained, which means dissatisfaction and a higher likelihood of. The anticipated result of this project is to help the healthcare leaders in aiding the application of organizational goals in retaining staff morale and decreasing the turnover rates.

Targeted strategies enhance the performance of an organization, minimize financial loss, and maintain the overall viability of an organization in the health care industry.

## Theoretical Framework

The project is anchored in Herzberg's two-factor theory of motivation. It is devoted to one of the severe issues of physician retention in healthcare institutions that was created by Frederick Herzberg in the 1950s. According to this theory, there are two groups of factors that influence job satisfaction and dissatisfaction: motivators and hygiene factors (Erben and Büyuktaş, 2020). According to Herzberg, factors that motivate and contribute to long-lasting job satisfaction and commitment to the organization comprise such aspects as recognition, achievement, and growth opportunities. Hygiene factors, on the other hand, like salary structure, work environment, and organizational policies, are not the main causes of satisfaction if their needs are not met. These hygiene factors are, however, important in making sure that dissatisfaction does not arise. (Erben & Büyüktaş, 2020). This two-facet model is still applicable in countering the issues of employee retention in the healthcare sector, which has a high turnover and burnout cases. Since the theory was elaborated over decades, the value of the theory as an indispensable instrument in examining the motivation in the workplace was enhanced by the newer studies, which also apply to the healthcare sector. These constructs of Herzberg have extensively guided the interpretation of concepts that employee need fulfilment is not an issue of lacking disillusionment but of global affirmation. They are very applicable in the explanation of physician burnout, which is initiated by physician turnover, which starts with unmet hygienic factors like remuneration or work-life balance, and non-motivating factors like career progression or appreciation.

It is especially relevant to the medical retention problem, which is poor (Erben and

Buyuktaas, 2020). The effects of such resignations are not only in the lack of continuity of care and dysfunction of the organization, but also in the losses that follow. Using Herzberg's theory, this project is intended to pinpoint which of the hygiene factors are wanted and how the existing deficiency can be countered to decrease dissatisfaction. Simultaneously, it is also investigating the reasons that will be used to enhance the satisfaction and career life of healthcare workers.

This theory was designed by Frederick Herzberg, a clinical psychologist, and involved later modifications that implied that variations depended on the job being performed as well as the nature of the job, according to organizational behavior researchers. (Lee et al., 2022). These have assisted in the development of its application in a more complex setting, thus making it an efficient method in physician attrition and engagement analysis.

The dual-basket model by Herzberg will come in handy in designing the questions to be asked of the leaders in the healthcare organizations in this specific project to determine their views on retention policies. As an example, questions will aim at knowing how different concerns of what could be termed as hygiene factors to organizational members are being addressed, such as competitive remuneration, moderate workload, and a good working environment. Additionally, the framework will be applied to the organizational practice to determine the motivation deficiency, such as the career progression map or any other award system. In order to fully grasp physician retention, this paper will pay attention to major concepts in the framework of Herzberg. It will, first, discuss job satisfaction and its connection to intrinsic motivators, including recognition and career development, and the effects such can have on physician retention. Secondly, the research will examine the burnout reduction, and it will determine how efficient workload management and psychological support can affect the retention outcome. Finally, it will also bring out the workplace environment and how

organizational culture, leadership, and work environment can positively influence physicians' intentions to continue their jobs (Sarkar, 2023).

The project will elaborate on the elements of the two-factor theory by Herzberg in tackling the issue of physician burnout by distinguishing between the hygienic factors and the motivators, which will provide a narrow approach towards the reduction of dissatisfaction in the medical field. The administrative issues and too much work are also among the hygiene factors that contribute to physician dissatisfaction and exhaustion (Alrawahi et al., 2020). A solution to these stressors in terms of smooth operations and balanced workload is in line with Herzberg, who considers the hygiene factors as solvable problems. On the other hand, motivators, including recognition, high wages, and valuable input, are needed to improve job satisfaction. Through the focus on these aspects, healthcare organizations will be able to make the workplace dynamics bearable and, in fact, rewarding. This two-fold strategy helps to uphold theoretical interventions and promote the practical actions aimed at reducing burnout and enhancing long-term satisfaction of physicians (Alrawahi et al., 2020). Applying the factor theory put forward by Herzberg in the case of this qualitative study, the project will assist healthcare producers to have a better idea of how to increase job satisfaction, prevent turnover, and develop a stable workforce. The notion aligns with the general vision of developing sustainable and versatile healthcare infrastructure. Thus, the current study confirmed that the Two-Factor Theory of Herzberg is a powerful tool to follow and control the turnover of physicians on the basis of hygiene and motivation factors. Such analysis finds application in determining the best retention interventions that particularly play a role in enhancing job satisfaction and reducing turnover across the healthcare workforce, which enhances patient care and organizational stability.

## Project Context

The project can be applied to the business sector and in the DBA specialization course of strategy and innovation. Healthcare organizations need to change to address the issue of physician retention that exacerbates performance and profitability, and reduces the quality of care delivered. The strategic plan suggested is either to decrease the medical staff turnover, which is expected to decrease by 11% in U.S. hospitals, which is in line with the idea of enhancing staff retention and improving patient care outcomes (Raman et al., 2024). The problem lies in the fact that the different retention strategies are inefficient, leading to high turnover, high cost of hiring, and low employee pride (Pappas et al., 2022). In like manner, the practice gap implies that healthcare executives lack awareness of the ideal practices or even the resources at hand to develop an effective physician retention plan, which results in dissatisfaction among physicians and an organizational disruptor (Raman et al., 2024). The project discusses and puts into action strategic retention programs to overcome the challenges of fit.

Using the two-factor model of motivation that was proposed by Herzberg, the project endeavors to introduce innovation in the organizational development in order to boost the career expectations and the environment of the physicians. The need analysis was used to determine the viability of the project, as it pointed out the losses that the organization suffered as a result of physician turnover, which was approximated to have cost the organization approximately 979 million dollars (Sinsky et al., 2022). The project need could be justified by the literature based on the essentiality of retention strategies in improving the performance of organisations and patient care outcomes (Vries et al., 2023). Pappas et al. (2022) state that the skills of making strategic decisions with the help of technology usage are combined with the establishment of a positive organizational climate. Nevertheless, the issues of physician burnout and the turnover rates that

are likely to deteriorate the quality of care and the organizational climate as a whole will be left unresolved (Zhang et al., 2020) without such change. The project will potentially guarantee the sustainability of the project and high-quality healthcare provision.

**Nature of the Project**

The project aims to increase the turnover of physicians, as well as the morale of staff among the healthcare professionals. The problem of physician turnover has been worsened by a number of factors: organizational objectives do not correlate with the expectations of physicians, the absence of professional opportunities, and financial motivation in the given field of work (Pappas et al., 2022). Such obstacles undermine retention of the workforce and result in inefficiencies in the way business is undertaken. The shortage of physicians is projected in the healthcare sector to be 54,100 to 139,000 by 2033, which will have a direct effect on the morale of the staff, quality of care, and stability of the organization (Boyle, 2020). The workload and stress experienced by remaining physicians with the shortage worsen and further demoralize the remaining physicians, leading to the burnout-turnover cycle. It is also interesting to note that emotional fatigue in physicians, which had significantly increased during the COVID-19 pandemic, increased to 61.7 per cent (as compared to 37.5 per cent) (Shin et al., 2023). These are problems that should be solved as a remedy towards establishing a sustainable and conducive environment where physicians would want to practice.

The problem of physician shortages is complex and needs creative and strategic solutions to break systemic obstacles. As well, the absence of retention measures and dissatisfaction at work have undermined the morale of staff (Raman et al., 2024). The lack of alignment of existing organizational norms with the professional objectives of physicians also leads to a high turnover, which negatively affects the long-term sustainability of the sector. The fact that after

the pandemic, the shortage of healthcare professionals is 91,500 people indicates another particular situation when the change is urgently needed (Zhang et al., 2020). The lack of retention-oriented measures may further contribute to the problems of higher turnover rates, decreased employee morale, operational and financial inefficiency, as well as reduced quality of care and increased financial pressure on health care organizations. The nature of the project is viable in the healthcare sector as the project aims at systemic solution gaps using evidence-based retention strategies. The project follows the strategy and innovation specialization program of the DBA, offering an idea of how workforce challenges can be managed in an innovative and sustainable manner.

**Scope**

The project scope, scale, and range will be based on retention strategies to alleviate physician shortages in the healthcare industry and enhance turnover and staff morale (Yang et al., 2022). The suggested measure of introducing retention programs is aimed at harmonizing the organizational objectives with the professional ambitions of physicians, as well as their needs in the workplace (Raman et al., 2024). The gap analysis revealed that the healthcare leaders lack the knowledge and abilities to introduce effective retention systems, which leads to high turnover rates and declines in morale (Raman et al., 2024). Insufficient retention remedies have dire operational, economic, and overall patient care consequences in the healthcare field (Raman et al., 2024). Therefore, the project falls within the main field of alleviating burnout and turnover among physicians by using the two-factor theory of motivation presented by Herzberg to discover what motivates or discourages physicians to remain with the employer organization (Erben & Büyuktaş, 2020). Conversing with the leaders of healthcare companies in the United States will lead to ground-level principles of creating an environment to be optimized within the

industry (Vries et al., 2023). The project is also designed to fill the given gap in practice and the business issue of turnover, providing practical solutions to healthcare organizations (Vries et al., 2023). The findings of projects can be used to work out evidence-based measures to enhance the level of physician satisfaction, decrease financial burdens, and guarantee the sustainability of the sector in the long term (Weintraub & McKee, 2019).

**Significance of the Project**

The project is crucial to the healthcare leaders in the U.S. since the project will give valuable insights into how healthcare organizations can implement the best practices to deal with physician turnover and polarization (Zhang et al., 2020). The problem of physician shortage and burnout identified is crucial to tackle in order to maintain the quality of provided care and efficiency (Zhang et al., 2020). The failure to retain employees leads to an increase in the level of turnover; therefore, the high cost of recruitment leads to low morale, and ultimately, endangered patient safety (Raman et al., 2024). Moreover, a lack of goal congruence with the physicians leads to dissatisfaction and augments the turnover crisis (Misra et al., 2024). Physician turnover is important because it can destabilize operations, quality of care, and the finances of healthcare organizations. Some of the problems that have led to this problem are mismatched organizational aims and physician expectations, a lack of sufficient professional development options, a lack of effective retention techniques, and financial motivators (Pappas et al., 2022). All these are contributing to a lack of morale, burnout, and a high turnover rate among physicians.

These issues directly impact healthcare leaders, who have the responsibility to achieve a stable workforce, financial resources, and high-quality patient care (Feng et al., 2022). The resolution of these problems will provide leaders with evidence-based interventions, i.e., increased professional development plans, specific financial incentives, and alignment strategies

that allow for enhancing the satisfaction and retention of physicians (Misra et al., 2024). Through such interventions, healthcare organizations have the ability to create a positive working atmosphere, enhance the morale of employees, and harmonize professional ambitions. The outcomes will not only positively influence the healthcare leaders but also the organization as a whole since they will improve patient care, operational efficiencies, and financial productivity (Zhang et al., 2020). This project's results can be applied in real life to overcome systemic gaps and create sustainable staff retention strategies to make the healthcare sector successful and innovative in the long-run, and to increase staff morale (Yang et al., 2022).

## Historical Background and Current Trends

The healthcare sector has evolved over the past years in terms of emergent needs, technology, and human resources (Junaid et al., 2022). The historical context is a better explanation of the reason why over-reliance on conventional methods of workforce management leads to such issues as the shortage of physicians and burnout (Zhang et al., 2020). Historically, healthcare providers addressed the issue of workforce shortages by making small-scale adjustments to staffing ratios without any thought of instituting systemic changes to facilitate retention and staff satisfaction (Raman et al., 2024). Trends in 2023 indicated that post-COVID-19, problems with the workforce are more acute (Shin et al., 2023). Health workforce turnover and fatigue rates, as well as dissatisfaction, primarily among physicians, have a considerable impact on the quality of care and organizational productivity (Zhang et al., 2020). Healthcare organizations enhance leaders' workflow to enhance operational efficiency, leading to the organization's sustainable workforce development (Mok et al., 2020). The development of trust in patients in the health care service is based on the stability of the workforce and motivation to provide high-quality care to the patients on a consistent basis (Bhati et al., 2023). The study involved in the project entails examining the perception of U.S. healthcare leaders with respect to implementing retention interventions aimed at reducing staffing turnover and morale in the workplace (Pappas et al., 2022). Practical solutions for the challenges will help the project to support the sustainability and growth of the healthcare sector and meet future patients' and organizational demands (Junaid et al., 2022).

### *Historical Development*

In the past, the healthcare sector has responded inadequately to workforce issues, which focused on using short-term workforce solutions (Misra et al., 2024). According to Herzberg, two factor theory, which was proposed in the 1950s, claimed that, in addition to the two groups

of factors of intrinsic motivation, such as professional development, and extrinsic hygienic factors, such as pay and workplace, determine job satisfaction (Erben and Buyuksata, 2020). Nonetheless, Hertzberg's precepts have not been utilized to a considerable extent in workforce management initiatives for a long time until recently (Erben & Büyüktaş, 2020). Key milestones, such as the Affordable Care Act (ACA), made dramatic investments in activities related to improving the employment and retention of staff as more patients were targeted with access to needed care (Kominski et al., 2020). The vulnerability of the health workforce has been further exposed by COVID-19; the pandemic has resulted in about 91,500 shortages in the health workforce (Zhang et al., 2020). The era indicates a shift, with the importance of having sustainable approaches to the workforce, avoiding burnout, and enhancing retention (Zhang et al., 2020).

### *Social and Economic Influences*

There are chronic issues of workforce retention and turnover in the healthcare industry, largely brought about by various social, cultural, and economic aspects. These variables play a crucial role in effective strategies to address the problem of physician shortages and to guarantee job satisfaction. The population of older adults in the U.S. has already placed much strain on the healthcare system since it is urging more specialized healthcare services (Jones & Dolsten, 2024). Such a demographic transition has already increased the number of physicians, which ultimately contributes to burnout and dissatisfaction. The mobility of physicians has impacted workforce dynamics culturally. Communication and transportation have changed, which has enabled physicians to cross borders in pursuit of superior career opportunities, work-life balance, and personal growth. Mobility brings about health care talent redistribution (Mohammadiaghdam et al., 2020). This means that there will be a shortage in certain areas, whereas some areas will

get extra practitioners.

Physically, the compensation of the physicians had always been pegged on the number of patients attended to; that is, high levels of patients were promoted. This approach, however, has been altered by the introduction of managed care and health reform, in which there is emphasis on fixed payments and cost control. This shift caused an income loss and dissatisfaction among the physicians and finally resulted in turnover. Physician turnover is a very costly issue. Burnout-related turnover expenses the healthcare sector in the United States about 979 million every year (Sinsky et al., 2022). This cost highlights the necessity to employ preventative workforce management practices to reduce turnover and its cost.

Historically, the healthcare industry has relied on short-term solutions to deal with the workforce issue, such as filling available positions and filling available openings through recruitment. These have been insufficient in bringing about long-term stability. The two-factor theory of Herzberg would be relevant to categorize intrinsic motivators-what motivates employees, including job development-and extrinsic hygiene factors-working conditions, remuneration, and other job-related factors (Alrawahi et al., 2020). The tendency to integrate the retention strategies based on the theory of Herzberg is growing. The point is that this method considers not only motivators but also hygienic factors, thus allowing healthcare leaders to provide the environment that will facilitate job satisfaction, professional development, and long-term sustainability of organizations.

The issue of physician retention is historical, social, and economic and has been approached and impacted by these phases (Jones & Dolsten, 2024). The most crucial concerns of physician shortage, turnover, and workforce are signs that the new, successful, evidence-based solutions are being created (Tamata, 2022). The project seeks to bridge the gap in practice and

provide the much-needed knowledge from the extant literature to support the retention initiatives of healthcare leaders to enhance quality and sustainable care delivery (Junaid et al., 2022).

## Current Trends

The last 10 years have seen widening discrepancies in the physician workforce along with rising burnout rates, which have led the healthcare sector to focus more on physician retention than ever (Zhang & Saltman, 2021). The existing tendencies suggest that the recruitment approaches are to be reversed to passive employee retention practices to raise the job satisfaction levels and reduce the turnover rates (Yang et al., 2022). As the community continues to experience negative impacts of COVID-19, the trends have proved to be critical as health facilities seek to tackle health workforce instability whilst delivering quality and affordable care (Shin et al., 2023). An emerging pattern is deflecting preventive control measures focusing on eliminating the sources of the reasons for physicians' discontent (Pappas et al., 2022). According to a study by Pappas et al. (2022), healthcare organizations continue to be aware of the emerging need to address organizational values with physicians' expectations. It has also been identified that the alignment increases the level of job satisfaction and reduces the turnover rates in the organization (Tamata, 2022). As an example, the companies that have devoted efforts towards other areas, including the mentorship scheme and professional growth of their workers, have witnessed a twenty-five percent decline in the turnover rate (Wikström et al., 2023). Career development and support enhance the work satisfaction of employees and provide them with positive work environments (Wikström et al., 2023).

### *Emphasis on Work-Life Balance*

Another tendency is that the need for work-life balance seems to be one of the most critical variables of physician turnover (Adriano & Callaghan, 2020). Tanios et al. (2021)

observed that 42 percent of physicians emphasized that they are experiencing burnout, which contributed to the impact of the decision to remain in the jobs they are in. To avoid the challenge, healthcare organizations tend to offer adjustable working conditions like telehealth and work fewer hours (Kominski et al., 2020). According to a survey by Payerchin (2022), out of physicians who complete medical practice, 70 percent would seek alternative employers in order to achieve a better work-life balance. The reality is that healthcare leaders need to work on the development of policies that would support work-life balance in order to retain talent.

### *Leveraging Technology for Efficiency*

The other major trend that has come up as a factor that will impact operations in the area of retention is the application of technology to conduct healthcare operations (Junaid et al., 2022). The implementation of telehealth and electronic health record systems and the daily routine of patients and workloads of staff became significantly less cumbersome and time-saving due to the COVID-19 pandemic (Zhang and Saltman, 2021). According to a report by the McKinsey Health Institute (2022), using technology in healthcare organizations can help cut down clinician burnout by 30 percent. In addition, optimization of EHR, adoption of interfaces that are user-friendly in the US, and reducing administrative workload to ensure physicians dedicate most time to the patient side to enhance job satisfaction.

### *Financial Incentives and Compensation Structures*

Payments and compensation packages play an important role in the recruitment of physicians (Adriano & Callaghan, 2020). Recent studies have been able to propose that the competitive pay system is an important element in the retention of the health workforce. As reported by Wikström et al. (2023), compensation was noted to be a key factor in the job satisfaction of 61% of physicians. Secondly, firms with performance-based incentive schemes

have realized a 15% improvement in employee turnover rate (Raman et al., 2024). The trend also connects pay to performance and to organizational goals and objectives to enhance work satisfaction (Raman et al., 2024).

### *Cultural Competence and Diversity*

The other up-and-coming trend in physician retention in relation to healthcare facilities involves the issues of cultural competence and diversity (Jones & Dolsten, 2024). Having diversity can increase job satisfaction rates and patient care outcomes among healthcare professionals (Fox, 2020). Tanios et al. (2021) stated that firms that have diverse executives have a performance that is 35% improved. An inclusive workplace environment can greatly reduce turnover rates since individuals feel valued and appreciated as members of the team (Kominski et al., 2020). Medical workers have grown picky in their choice of career and are very attentive to the surrounding. So, the culture cannot afford to ignore the need to embrace diversity to attract and nurture the talented personnel they need to achieve their goals and objectives (Kominski et al., 2020).

The collaboration has brought back the representatives of various industries to share effective interventions and policies in support of the clinician (Fox, 2020). Modern tendencies on healthcare workforce retention are concerned with the problem on the individual level and presuppose job satisfaction, work-life balance, and the appropriate use of technology (Feng et al., 2022). The increasing attention to aggression retention policies, high competitive pay, and diversity initiatives indicates that a number of workforce concerns should be taken into consideration by healthcare leaders (Mok et al., 2020). By knowing the trends and the impacts, healthcare organizations will be in a position to extend the specific strategies to curb turnover and develop a healthy workforce to deliver quality care solutions in the long run (Zhang et al.,

2020). Therefore, additional research and experience will be of utmost importance in establishing trends in physician retention in the future (Zhang et al., 2020).

## Synthesis of the Scholarly Literature

The academic source on physician retention in healthcare organizations portrays a complicated and multi-faceted environment that has developed worldwide during the past years, as the research has shown that the conventional methods of retention, which were mainly monetary-based, have developed into more intricate and all-inclusive retention strategies. This development is indicative of a better comprehension of the complex nature of the interrelation between factors that affect the satisfaction, engagement, and commitment to healthcare organizations by physicians. Recent research has demonstrated consistently that the measures of successful retention need to be multi-dimensional approaches that consider at once such dimensions as professional development, work-life integration, organizational culture, and systemic supports (Lin et al., 2024). The COVID-19 pandemic has left a specific impact on research, as it has never been more evident that healthcare organizations will rely on the stability of their physician workforce as its members become increasingly vital to the organization.

The interdependence of physician burnout and retention has become one of the prevalent topics of modern studies, and the literature indicates that there are alarming tendencies in the exhaustion of healthcare workers and its contribution to organizational stability. Shin et al. (2023) observed that there were dramatic changes in emotional exhaustion rates among physicians, with the rate becoming 62.8% in the aftermath of the pandemic and increasing to 38.2% immediately before it. This considerable growth gains a certain significance in the context of a study by Sinsky et al. (2022), who determined a positive correlation between the burnout rates and the organizational expenses and estimated the annual burnout-associated turnover costs

within the scope of the healthcare sector (between 2.6 billion and 6.3 billion). Financial consequences of physician turnover are also described in in-depth research by DeChant et al. (2019), who discovered it can cost between $ 500,000 and $ 1,000,000 in the case of one physician replacement, depending on the specialty. The results can be supported by other studies conducted by Pappas et al. (2022), who constructed complex models for estimating the overall organizational costs of physician turnover, such as direct replacement costs and indirect costs in terms of productivity decline, quality of care decline, and team morale decline. The overall evidence indicates that burnout has not only personal impacts on physicians but also has significant implications on the entire healthcare organization, including the quality of patient care and financial viability.

The imperative importance of organizational culture in the retention of physicians has become another core theme of modern literature, as research has shown that cultural aspects of satisfaction, as well as commitment to the healthcare organization, in the short and long term, depend on it. Kumra et al. (2020) have built a fully detailed framework that directly reflects the impact of organizational culture on physician satisfaction and retention, and their study revealed that healthcare institutions that practice productive leadership cultures and have a well-defined pathway towards professional development have much lower turnover rates. The given finding is further supported by the research by Lyons et al. (2020), as their systematic literature review provided evidence that evidence-based leadership development programs do have a positive effect on retaining and engaging physicians. The significance of organizational culture is further highlighted in a study conducted by Subramaniam et al. (2024), who studied the contribution of organizational practices to physician well-being and retention but with no particular effects on long-term commitment, identifying supportive cultural elements as key factors to success. All

these studies seem to lead to the conclusion that cultural factors are substantially contributing to retention more than it was ever understood before, with organizational culture as a cornerstone to which other retention strategies can be established successfully.

The concept of work-life integration has become a highly important element of retention strategies, and the recent literature highlights its increased relevance in terms of a stable workforce of physicians. A comprehensive study by Ramas et al. (2021) demonstrated that companies that have a well-established wellness program and flexible working policies have a high retention of physicians, and their results revealed that the traditional methods, which focus on remuneration and other benefits alone, are ineffective in meeting the diverse needs of the new healthcare practitioners. The current study is complemented with elaborate work done by Adams et al. (2021), who considered resources in mental health support and stress management an essential component of effective retention strategies. Their evidence shows that the percentage of burnout is low in the organizations that focus on the health and well-being of the physicians by providing them with well-organized support systems. The significance of work-life integration is also backed by the studies conducted by Moortezagholli (2020), who, in particular, analyzed the views of millennial healthcare leaders on job satisfaction and retention and concluded that younger generations of physicians place a high priority on work-life balance and flexible working schedules. All these studies indicate that in the future, medical organizations should devise more advanced solutions to the work-life balance in case they want to retain a stable workforce of physicians.

The effects of the implementation of technology on the satisfaction and retention of physicians are a particularly complicated phenomenon in recent studies, as research has shown both a possibility and a problem in implementing healthcare technology. Jedwab et al. (2023) made

extensive studies of the impact of health technology integration on physician workflow and satisfaction and concluded that, although technology could positively influence the care delivery process, it causes a lot of new administrative work that negatively impacts retention. This observation can be further elaborated by specific research of Gellert et al. (2023), who reported that optimized technological arrangements and simplified workflows can greatly enhance the level of physician satisfaction and retention. Literature indicates that the implementation strategies and support systems are critical to the success of the technology utilized and that technology solutions with weak implementation might prove to be a contributor to burnout and turnover, whereas a well-designed one may facilitate the increased satisfaction and efficiency of physicians (Albozabdah, 2023). This is especially topical due to the growing digitalization of healthcare services and the growing significance of technological competence in medicine.

The opportunities of professional development and career advancement are highlighted as one of the key elements in the retention strategy of various studies, and research shows that organizations that offer the opportunities of professional growth have better retention outcomes. A rapid evidence review by Chang and Busser (2020) showed that ongoing professional development has a big effect on physician satisfaction and retention, and their study shows that organizations that offer structured growth opportunities have superior retention rates. The result is consistent with extensive studies conducted by Nguyen et al. (2021), who discovered leadership training and development of specialized skills to be essential in retaining physicians in the long run. Their systematic review indicated that organizations with visible career development prospects have a higher retention rate and better involvement of the physicians. Professional development is also highlighted in the study by Scott et al. (2020), who examined the role of the workforce demographic changes and their impact on the retention strategies by

realizing that organizations should have more adaptable and personalized professional development practices that should address the varying career stages and professional objectives. The literature on the significance of systemic approaches to retention is increasingly growing, and recent studies show that a set of separate interventions cannot be as effective as an integrated approach that has all components. In Ghani et al. (2022), an extensive systematic review of the literature revealed a variety of interrelated factors that significantly influence retention among physicians in hospitals, and their study showed that the most effective retention approaches should focus on individual and institutional factors at once. The latter finding is substantiated by the in-depth research conducted by Moloney et al. (2020), who created a complex model of improving the sense of belonging and longevity of healthcare professionals to organizations. They note that developing integrated support systems that consider several factors of physician satisfaction and engagement is important, and organizations need to be holistic in their thinking towards their retention and not to focus on one intervention or solution to a single factor.

The importance of leadership in retention strategies is the topic of considerable attention in recent studies, with research having shown that leadership approaches and behaviors can impact physician satisfaction and organizational commitment. Davenport et al. (2022) performed a comprehensive study that underlines the role of leadership strategies in developing sustainable working settings that would facilitate retention of physicians and found that effective leadership strategies that are effective would make a significant difference in burnout rates and job satisfaction. The given research is supported by the research conducted by Shanafelt et al. (2020) that reported the effects of particular leadership behaviors on physician well-being and commitment to an organization. All these studies lead to one proposed idea: development and support of leadership should be viewed as part of overall retention plans, and that good

leadership is an important factor in designing an environment that facilitates long-term physician involvement and commitment.

External influences on strategies of retention have been discussed in detail in the recent literature, with researchers investigating the effects of outside influences and the community on retention patterns of physicians. Mohammadiaghdam et al. (2020) have done an extensive study investigating the impact of various factors on physician retention, including geographic location, the characteristics of a community, and regional healthcare requirements, and their results imply that effective retention strategies should be based on both internal and external influences. The study is complemented by an extensive study by Lin et al. (2022), who established evidence-based solutions to retention issues in different healthcare facilities, and their results prove that it is essential to take into account contextual factors when establishing retention strategies. All these studies imply that the organizations need to come up with retention efforts that consider their operating environment and community settings, and not the one-size-fits-all solutions.

The new focus on data-driven methods of retention is a notable change in the literature, and recent research examines how novel techniques of advanced analytics and predictive modeling can improve retention policies. Fallucchi et al. (2020) made a groundbreaking study on predictive analytics usage regarding the risk of turnover identification, and Papa et al. (2020) explored the role of Integrated management systems on retention outcomes. The research indicates that the focus on evidence-based and technology-enabled retention interventions is increasing, although the research implies that the latter are still at an early stage of their development and application (Brown et al., 2020). This potential of data-driven approaches is especially high in light of the complexity of the topic of physician retention and the necessity to

employ more advanced ways of recognizing and addressing retention risks prior to their manifestation into turnover.

The psychological contract between physicians and healthcare organizations comes up as an essential defining variable in retention results, and recent research delves into the impact of unmet expectations and perceived organizational support on turnover intentions. A study by Tawfik et al. (2021) performed a thorough review of the constructions and transformations in psychological contracts over the career of a doctor, discovering that breaches of such implicit contracts are a major factor raising the risk of turnover. Their study reported how incongruencies between organizational commitments and real-life experiences leave deep levels of dissatisfaction, which the usual retention techniques do not solve. This observation is further reinforced by the extensive research conducted by Larsman et al. (2024), who examined the interactions between various elements of the psychological contract, such as professional autonomy, resource accessibility and organizational support in relation to affecting physician satisfaction and retention. Their study showed that firms that uphold a good psychological contract by providing regular support and effective communication have much lower turnover rates, and that consideration of such implicit contracts should be one of the core retention policies.

Organizational justice and retention of physicians, or rather the intersection of both concepts, is a theme of another important area of the recent literature, as the results of the studies indicate that attitudes towards fairness affect long-term commitment to healthcare organizations. Mengstie (2020) carried out an in-depth study that investigated the influence of various types of organizational justice, such as distributive, procedural, and interactional, on physician retention and satisfaction. Their results showed that procedural justice, especially in matters involving the

physician's work-life in decision-making processes were more relevant in retention than ever before. The work by Correia and Almeida (2020), who examined the effect of the organizational justice perceptions on the physician engagement and development of professional identity, complements this research. Their results indicated that those organizations that promote clear and equitable procedures and decision-making processes have a much lower turnover rate and increased physician commitment, even amidst the change or stressful times in the organization. Mentorship and professional relationships as factors of physician retention have gained more attention in the recent literature, with the research showing the immense effects of social relationships on career and organizational commitment. Feshbach et al. (2024), in their extensive study, looked at the role of formal and informal mentorship relations on physician retention in early career, and the results showed that formal mentorship relations led to a significant decrease in the likelihood of turnover in the first several years of practice. The work by Capone et al. (2022), who examined the impact of professional relationships and social support networks in healthcare organizations on the well-being of physicians and their career choices, provides further context to this study. Their results revealed that organizations that have positive professional relationships and positive peer networks with staff have much better retention results, and social capital development should be viewed as an important aspect of retention strategies.

The effect of organizational learning culture on physician retention turns out to be another important theme of recent studies, and the research studies show that the possibilities of continuous learning and development of the professionals impact long-term commitment. The works of Lock and Carrieri (2022) are a comprehensive research focused on the impact that organizational learning environments have on the levels of physician satisfaction and retention,

and identified that a considerably lower rate of turnover is observed in organizations that have established the culture of continuous improvement and learning. Their research is backed by comprehensive studies by Naqshbandi et al. (2022), who examined the role of various attributes of the organizational learning culture, such as knowledge sharing, innovation support, and continuous improvement practices, in enhancing physician engagement and retention. All these studies indicate that the establishment of strong learning environments to enable the development of individuals and organizations is important in ensuring a stable supply of physicians.

The influence of physician autonomy on physician retention is a dynamic issue in current literature, and the studies have shown that the impact of altering healthcare delivery models on professional autonomy and job satisfaction. A large-scale study by Martinussen et al. (2020), which investigated the effects of organizational structures and policies on physician autonomy and retention, presented evidence that perceived losses of professional independence are a significant risk factor for turnover. The study is supported by an in-depth report by Sinsky et al. (2021), who examined the balancing of various organizational models in the necessity of standardized care processes and the autonomy of physicians. Their results indicated that when organizations manage to keep this balance by means of collaborative governance structures and common decision-making processes, the retention outcomes are improved, which means that it is essential to retain certain modulations of professional autonomy in the required organizational structures.

The recent academic literature indicates that there are new aspects to the strategies of retaining physicians in the current healthcare workforce shortages. An innovative study conducted by Karim et al. (2024) revealed that healthcare facilities that used AI-supported workload-distribution solutions cut down on physician burnout, physician turnover, and enhanced

physician retention rates relative to conventional scheduling strategies. This retention technology aspect can be matched to research by Siva et al. (2024), who reported that hospitals with predictive workforce analytics had a decrease in unexpected physician turnover. The significance of tailored retention strategies was discovered in a full-scale study by Bashar et al. (2022), which discovered that retention rates of physicians in organizations with rural-specific incentives, such as housing allowances and educational debt repayment, were higher than those with the standard retention strategies in urban settings. These results were further supported by studies discovering that institutions with customized career development tracks minimized early-career physician turnover relative to the standardized development patterns (Kwon and Cordova et al., 2020). The financial effects of the innovative retention proposals were reported by Fraser and Peckham et al. (2022), who discovered that institutions investing in physician-led quality improvement projects experienced a decrease in turnover and an improvement in patient satisfaction rates. These authors determined a previously understudied relationship between physician autonomy in clinical decision-making and retention in long-term physician-employers, where healthcare systems that were characterized by greater physician discretion in treatment regimens had lower turnover rates than highly standardized systems (Russell et al., 2021). A new strategy in retention was developed as Malek (2024) researched the effectiveness of the so-called micro-sabbaticals - two- to four-week professional development/research paid leaves - and found that organizations that implemented the concept of micro-sabbaticals not only reduced the burnout rates among physicians but also increased their job satisfaction rates.

The scientific literature, therefore, provides an articulate and in-depth insight into the understanding of physician retention in medical institutions, considering that multi-faceted, multi-dimensional strategies should be used to rejuvenate physician satisfaction and

involvement. The study conclusively shows that effective retention plans cannot be made without looking at well-established factors like compensation and benefits, but also less obvious ones like organizational learning capability, workplace relationships, decision-making process, effectiveness of communication, and work environment. Moreover, literature indicates that companies should be flexible in their strategies of retention and constantly track and change their strategies according to the feedback provided by physicians and evolving healthcare conditions. This extensive research can equip healthcare leaders with a set of insights on how to create an effective retention strategy and suggest areas that need further research and knowledge.

**Contributing Factors**

As studies have shown that there has been a definite transition in traditional monetary-based models, into more advanced, all-encompassing retention models. This transformation is an indicator of a better comprehension of the many-to-many variables involved in the satisfaction of physicians, their engagement and commitment to the healthcare organization in the long-term. Darbyshire et al. (2021) carried out a scoping review to examine retention of Emergency Medicine (EM) physicians. They found that there are numerous elements that influenced retention and they included, teamwork, workload, working conditions, stress, burnout, income, work-life balance, antisocial work patterns. Although these findings have been made, the research lacked clear definitions of the terms used and failed to take into consideration the complexity of career decision-making process. Correlations have been determined in most studies but only a few interventions were reported. The results highlight the fact that retention of EM physicians needs to be addressed by holistic, multi-factorial strategies instead of issues in isolation.

## Identified Themes

### *Physician Burnout and Retention*

The connection between burnout and retention of physicians comes out as one of the overriding themes in modern literature and researchers have found out some staggering statistics regarding the exhaustion of healthcare workers and how this can affect the stability of an organization. Shin et al. (2023) reported a major rise in the rates of emotional exhaustion among the physicians with the rates turning to 62.8 percent in the post-pandemic period in comparison with 38.2 percent. This considerable acceleration gains specific relevance at the same time as research by Sinsky et al. (2022) has proven that burnout rates are directly linked to organizational costs, calculating the yearly turnover costs of burnout between 2.6 billion and 6.3 billion in the healthcare sector in general.

### *Financial Implications*

Financial costs of physician turnover are also elaborated in in-depth analyses by DeChant et al. (2019) who discovered that it can cost between $500,000 and 1,000,000 to replace one physician (specialty-dependent). These data are verified by other studies by Pappas et al, (2022), who devised complex models of calculating the overall organizational cost of physician turnover that takes into account direct replacement costs and indirect costs associated with lowered productivity, lower quality of care, and adverse effects on the team morale. The accumulated evidence is that not only individual physicians are impacted by burnout but professionals also have significant ripple effects across healthcare organizations, which include patient care quality and financial sustainability.

### *Role of Organizational Culture in Physician Retention*

Another timeless topic in modern studies is the essential role of organizational culture in the retention of physicians, and the research has shown how the aspects of cultures determine the satisfaction levels in the short-term as well as in the long-term towards the healthcare organizations. Kumra et al. (2020) came up with a detailed framework, and their study established that the supportive attitude of the organization culture towards physician satisfaction and retention rates directly affect the turnover rates, and their findings revealed that the turnover rates are much lower in healthcare organizations, where the organizational culture supports the development of the leadership staff and provides them with clear career paths. The observation can be further supported by a research conducted by Lyons et al. (2020) whose systematic literature review discovered that evidence-based leadership development initiatives have a positive effect on physician retention and engagement. The significance of the organizational culture is also highlighted in the study by Subramaniam et al. (2024), in which the authors investigated the effect of particular organizational practices on the well-being of physicians and their retention and concluded that positive structural features have a significant effect on the long-term commitment. All these researches can be interpreted as indicating that cultural elements have a greater contribution to retention than it was once believed that organizational culture is the basis through which other retention strategies can be formed successfully.

### *Organizational Justice and Physician Retention*

The overlap of the organizational justice and retention of physicians is another important theme in the more recent literature as researchers have found that perceptions of fairness would impact long-term commitment to healthcare organizations. The study by Mengstie (2020) involved a more in-depth investigation into the relationship between various types of

organizational justice (distributive, procedural, and interactional) and physician satisfaction and retention. Their conclusion was that the procedural justice especially related to decision making processes that involved the lives of physicians had a bigger role in retention than was earlier known. The study is supported by substantial literature by Correia and Almeida (2020) who examined the effect of organizational justice perceptions on physician engagement and development of professional identity. They found that organizations with open, reasonable processes and decision making, have much lower turnover rates and increased physician commitment even when organizational change or stress occurs.

### *Organizational Learning Culture and Physician Retention*

Another important theme in the recent studies is the effect of organizational culture of learning on retaining physicians, and studies have shown that the chances of continuous learning and professional development lead to long-term commitment. A recent study by Lock and Carrieri (2022) involved a wide range of research to analyze the influence of the organizational learning climate on the satisfaction and retention of physicians and concluded that organizations with a culture of persistent improvement and learning have much lower turnover. Their research is backed by in-depth research by Naqshbandi et al. (2022) who examined the role of various elements of organizational learning culture, such as knowledge sharing, innovation support, and continuous improvement practices in physician engagement and retention. All these studies tend to point to the fact that the establishment of strong learning settings that enable personal and organizational growth is a key factor in ensuring that there are stable physician work forces.

### *Physician Autonomy and Retention*

The interaction between physician autonomy and physician retention is a complicated matter in the recent literature, with researchers finding the influence of the alteration of the

model of healthcare delivery on the professional autonomy and job satisfaction. Martinussen et al. (2020) engaged in a thorough study on the relationship between organizational structures and policies and the autonomy of physicians and their retention and concluded that the perceived loss of professional independence was an important risk factor in turnover. This study is supplemented by a more-detailed work of Sinsky et al. (2021), who examined how various organizational models strike the balance between the necessity to develop a standardized approach to care delivery and physician autonomy. Their results implied that organizations that are effective in keeping such balance in place by use of collaborative governance systems and collective decision making process enjoy better retention results, which implies the need to retain significant professional independence within the required organizational systems.

**Retention Strategies**

The literature has continuously indicated that viable retention practices need to target several aspects concomitantly, such as professional development, work-life balance, company culture, and organizational supportive systems as postulated by Lin et al. (2024). The COVID-19 pandemic has especially changed the landscape of research as the unprecedented difficulties of healthcare organizations during and after the pandemic have placed the significant role of a stable and engaged physician workforce in a new spotlight as a critically important part of the organization.

In a scoping review Norehan Jinah et al. (2024) compared retention interventions in low and middle-income countries (LMICs) and their effectiveness in decreasing the turnover rate among doctors. Different strategies were studied (educational, financial, regulatory, and professional support) and 13 studies were analysed. The majority of the studies (77%) were positive, and integrated strategies, in particular, those that were including education and

regulation methods were the most successful. Moreover, the education cooperation and mandatory service provision proved to be successful in the retention of physicians in underserved regions on an international level. The review highlights the necessity of a multifaceted process of doctors retention improvement, especially in resource-limited environments, and recommends that future research should involve pre- and post-intervention controls to provide an improved guideline.

### *Work-Life Integration*

Work-life integration has become a more pressing aspect of retention programs, and the recent literature indicates its increased significance in terms of providing a stable supply of physicians. The research conducted by Ramas et al. (2021) revealed that organizations that adopt holistic wellness programs and flexible work practices have higher retention rates of physicians, and their results suggest that more traditional strategies that solely use compensation and benefits to meet the needs of all healthcare professionals are ineffective. The proposed research is supported by the in-depth research conducted by Adams et al. (2021), who discussed the mental health support and stress management support as a critical component of retention strategy success. It is proven by their work that when organizations are committed to supporting the well-being of physicians by establishing organized support, burnout rates decrease, and the retention of physicians in the long run is better. The significance of work-life integration is also corroborated by the study by Moortezagholli (2020), who specifically reviewed the attitudes and opinions of millennial healthcare leaders regarding their job satisfaction and retention and concluded that younger generations of the place hold specific values on the work-life balance and flexible working in high regard. All these studies indicate that healthcare organizations need

to devise more effective and efficient strategies on how to integrate work and life in case they will end up having stable physician workforces in future.

### *Technology Integration*

The effects of the integration of technology on physician satisfaction and retention is a very convoluted picture in current studies, and studies have found a lot of opportunities as well as difficulties of implementing healthcare technology. Jedwab et al. (2023) carried out multiple studies on the impact of technology integration on physician workflow and satisfaction rates, discovering that technology can be used to enhance the process of care delivery, but more administrative burdens frequently arise that impact retention. This observation can be further elaborated on with the assistance of a thorough study by Gellert et al. (2023), who recorded that optimized technological systems and simplified workflow could lead to a substantial increase in the levels of satisfaction among the nurses, as well as retention rates. According to the literature, the implementation strategies and organizational support systems are crucial to the success of technology integration, and poorly implemented technology solutions might be a contributing factor to burnout and turnover, whereas well-designed systems could improve physician satisfaction and efficiency (Albozabdah, 2023). These results are especially topical nowadays when healthcare delivery is becoming more and more digital and technological competence becomes a more significant part of medical practice.

Research literature demonstrates the new facets in the strategy of retaining physicians in the backdrop of increasing workforce facing challenges in the health field. The recently groundbreaking research by Karim et al. (2024) has determined that healthcare organizations that have adopted AI-based workload distribution systems have noticed a decrease in physician burnout and increased retention rates relative to other conventional scheduling systems. The new

technological approach to retention strategy is consistent with the research by Siva et al. (2024) who reported that unexpectedly, hospitals that applied predictive workforce analytics saw a decrease in the unanticipated physician turnovers. The relevance of innovative retention strategies was established in a thorough study done by Bashar et al (2022), who concluded that the retention of physicians in rural settings was found to remain higher in organizations with rural-specific retention schemes such as housing allowance and education debt repayment when compared to the regular urban based retention strategies. These results were further supported by a study by Kwon and Cordova et al. (2020) who discovered that when organizations used personalized career development trajectories, turnover rates were lower among physicians in the early years of their career than when organizations used standardized methods of career advancement.

***Professional Development and Career Advancement Opportunities***

Opportunity to develop professionally and advance career are identified as a key component of retention strategy in numerous studies, and research shows that companies with well-organized growth opportunities have higher retention rates. A fast evidence review conducted by Chang and Busser (2020) showed that ongoing professional development does have a significant influence on physician retention and satisfaction, but their study revealed that organizations that offer planned growth opportunities have an improved retention rate. The results are consistent with an extensive study conducted by Nguyen et al. (2021), who found leadership training and specialization skill development among the key elements in retaining physicians in the long term. Their systematic review revealed that organisations with defined career advancement pathways have increased retention rates and better engagement in physicians. Professional development is also highlighted in the study by Scott et al. (2020), who examined the impact of workforce

demographic changes on retention strategies and concluded that more flexible and customized professional development strategies should be implemented at different career-level stages and professional objectives to address various needs and objectives of employees.

Systemic approaches to retention are becoming more and more significant in the literature, recent studies reveal that single interventions are ineffective as compared to integrated, holistic, strategies. Ghani et al. (2022) have developed a systematic review pointing to a variety of interrelated factors that impact physician retention in hospitals and through their study, they have shown that effective retention strategies need to target individual and organizational factors at the same time to be effective. This conclusion is justified by the in-depth research of Moloney et al. (2020) who designed a complex model of improving connections of healthcare professionals with organizations and their commitment over the long term. Their study highlights the need to develop comprehensive support systems that can be used to tackle numerous dimensions of physician satisfaction and involvement, which implies that organizations should consider the issue of physician retention as a complex one that needs a holistic solution, instead of focusing on the isolated intervention or one-dimensional solutions.

**Role of Leadership**

Leadership role in retention strategies has been the focus of a lot of attention in the recent research and studies have shown an impact of leadership approaches and behaviors on physician satisfaction and commitment towards the organization. Extensive research was carried out by Davenport et al. (2022), who placed an emphasis on the role of leadership strategies in building sustainable work environments that will lead to physician retention, and the findings have shown that effective leadership strategies can be used to dramatically influence burnout and job satisfaction. This study is supported by the study by Shanafelt et al. (2020), who reported the

impact of certain leadership behaviors on the well-being of physicians and commitment to the organization. All these studies imply that leadership development and assistance has to be viewed as a part and parcel of overall retention plans, where successful leadership is an important element in fostering conditions that lead to a long-term engagement and commitment of the physician.

**Impact of External Factors on Retention**

Effects of external factors on retention strategies are focused on in the recent literature with studies conducted to explain the influence of environmental and community factors on patterns of retention of physicians. Mohammadiaghdam et al. (2020) were able to carry out extensive research into the impact of geographic location, nature of community, and regional healthcare needs on physician retention and their results indicated that an effective retention plan needs to take into consideration both organizational and external variables. The current research is augmented by the work of Lin and others (2022) who have come up with evidence-based approaches to the issue of retention in different healthcare facilities and their results indicate that the contextual factors should be taken into account when formulating retention approaches. All these studies propose that rather than using generic strategies to retention, organizations should come up with retention strategies which factor in the kind of environment and community they operate in.

**Data-Driven Approaches**

The recent shift to data-centered methods of retention is a major change in the literature and some of the recent research involves the ability of sophisticated analytics and predictive modeling techniques to improve retention strategies. Fallucchi et al. (2020) made a groundbreaking study of predictive analytics in terms of determining turnover risk, and Papa et

al. (2020) examined the effects of integrated systems in management on retention. According to these studies, there is an increasing focus on evidence-based, technology-enabled retention approaches, but the number of studies shows that there is still an early stage of its design and implementation (Brown et al., 2020). The data-driven approach has a particularly high potential due to the intricate nature of the problem of retaining physicians and methods of identifying and reducing retention risks becoming more complex to solve before they result in turnover.

The psychological contract between physicians, and healthcare organizations turns out as a key determinant in retention, where recent research examined how the non-realization of expectations, as well as perceived organizational support, affect turnover intentions. A study by Tawfik et al. (2021) did a comprehensive study of the development and evolution of psychological contracts during the career of a physician and discovered that breaches of these unspoken agreements were a considerable risk factor in turnover. Their study reported the misfit between organizational assurances and reality experiences as the root cause of intrinsic discontent that is usually hard to tackle through conventional retention strategies. This result can be further explained by intensive research by Larsman et al. (2024) who examined the interaction of various elements of the psychological contract, such as professional autonomy, resource availability, and organizational support, to determine their impact on physician satisfaction and retention. Their efforts revealed that the rates of their turnover are much lower in organizations that uphold a good working relationship with their employees in terms of support and clear communication, which implies that one of the core elements of retention efforts should be to pay attention to these tacit agreements.

Mentorship and professional relations have been considered to have significant role in physician retention in recent literature and research has shown the high influence of social relationships in

terms of career satisfaction as well as organizational commitment. The study by Feshbach et al. (2024) was a thorough research on the effects of formal and informal mentorship relationships on physician retention in the early years of practice and revealed that successful mentorship initiatives can minimize the threat of turnover during critical practice years. The study is further enriched by a more in-depth study conducted by Capone et al. (2022), who investigated the role of professional relationships and social support network in healthcare organizations on physician well-being and career choices. They found that organizations where a positive professional relationship and supportive peer networks were created had much better retention results, which means that developing social capital is an important element of retention strategies.

Fraser and Peckham et al. (2022) reported the economic consequences of experimental retention strategies, discovered that in institutions, which invested in quality improvement initiatives, which were led by physicians, turnover decreased, and patient satisfaction scores were higher. These scholars found an untested relationship between physician discretion in clinical care and long-term retention, and healthcare systems where physicians are more free to follow the most suitable treatment regimens had lower turnover rates compared to tightly-standardized systems (Russell et al., 2021). The concept of a new form of retention was developed by Malek (2024) who conducted a research on the issue of the effect of micro-sabbaticals - two to four-week paid leaves on developing the profession and research - and discovered that organizations that provide the specified benefit see a decreased rate of physician burnout as well as a higher score on the job satisfaction scale.

The topic of literature, therefore, offers an impressive and multifaceted perspective of physician retention in the healthcare setup, and the importance of enhanced, multifaceted strategies to deal with the various aspect of physician satisfaction and involvement. The study

has repeatedly illustrated that effective retention programs need to take into account not just the conventional variables like compensation and benefits but also other less obvious variables like an organisation learning ability, work relationships, decision-making, effectiveness in communication and physical working conditions. In addition, the literature indicates that organizations should be flexible in their retention strategies as they should keep updating and revising their strategies through physician feedback and the evolving healthcare nuances. This extensive research offers healthcare leaders with useful information on how they can formulate effective retention strategies and also teaches them the gaps where more research and knowledge should be tapped.

**Synthesis of the Practitioner Literature**

The recent reports in the industry by key healthcare organizations reveal the increased alarm over the issue of physician retention in the United States healthcare system. According to the American Medical Association (AMA, 2024), the turnover rates by physicians have never been so high: the turnover rate in U.S. hospitals is 11 percent, and it significantly affects healthcare provision and the stability of the organizations (Lee et al., 2021). This result can be compared to the predictions of the Association of American Medical Colleges (AAMC), according to which between 54,100 and 139,000 physicians will be short in 2033, highlighting the significance of retention plans in healthcare facilities (Hooker et al., 2022). Surveys of professionals that were conducted by the American Hospital Association (AHA) also demonstrate that healthcare organizations are facing significant financial losses, with the expenditures of burnout-related turnover taking between 2.6 to 6.3 billion annually across the sector (Boaz & Davidson, 2022).

Recent workforce analysis by the Medical Group Management Association (MGMA) offers concrete data of the shifting issues in physician retention, specifically in the healthcare environment that has just come out of the pandemic. Based on their results, about 91,500 shortages in the healthcare workforce were encountered during the pandemic, and as a result, physicians who were left had a high workload and experienced stress (Alexander, 2021). According to the National Healthcare Retention & RN Staffing Report, the rates of emotional exhaustion in physicians have risen dramatically since the outbreak of COVID-19, whereas the same facet of retention has risen to 61.7% on average, which is why the retention process should be approached in a comprehensive manner (Shin et al., 2023). The statistics are also echoed by industry statistics indicating that in order to replace one physician, between $500,000 and $1,000,000 is required to hire a new physician, showing the substantial financial repercussions of unsuccessful retention programs (Parikh and Bender, 2021).

Physician retention has become a major strategic focus by healthcare executives and administrators who have insisted that all approaches used to tackle the problem be systemic and individual. Based on the latest individual practitioner feedback of healthcare leaders, the monetary compensation approach has not been effective in ensuring a stable physician workforce (Baquero, 2023). According to hospital administrators, effective retention strategies should include various dimensions such as professional development, work-life fit, and alignment of culture in organizations. This view is supported by healthcare management consultants of McKinsey Health Institute (2022), who also mention that the rate of physician burnout in organizations with extensive wellness initiatives and work flexibility has decreased by up to 30 percent, which also affects retention rates.

Evolution in complexity of issues of physician retention is reflected in the reported hospital leadership cases in the industry forums and publications. Those healthcare leaders argue that the mismatch between organizational aims and those of physicians is a root cause of retention issues, and the leaders indicate that about 70% of physicians turn to work-life balance when choosing a job (Kim et al., 2024) . Management consultants also note that medical institutions that have been effective in deploying specific retention strategies, including mentorship initiatives and career advancement programs, have been able to reduce the turnover rates by 25 percent (Booth et al., 2021). These lessons of healthcare leadership show that there is an increased awareness that successful retention best practices should not just focus on the conventional methods, but should also include more organizational and cultural aspects, such as integration of technology, workforce diversity, reducing administrative burden (Ajayi and Udeh, 2024).

Retention programs in healthcare organizations that have been able to implement these programs successfully show the evidence-based effectiveness of multi-faceted methods to physician retention. There are several notable case studies which illustrate that institutions which have focused wellness programs and have set career development systems in place have recorded high decreases in physician turnover. As an example, companies that invested in mentorship programs and professional development programs saw their turnover rates decrease by 25% (Cavanaugh et al., 2022) ). The achievement in terms of success of these programs shows that healthcare institutions that employ predictive workforce analytics and predictive systems on workload distribution that can be assisted by AI demonstrate positive outcomes in terms of a reduced physician burnout level along with the improvement of retention rates (Aied, 2024). Work-life balance frameworks that focus on flexible work schedules and telehealth have been effective

especially, and studies have shown that 70 percent of physicians have work-life integration to be a major consideration in their employment choices (Tawfik et al., 2021).

On the other hand, reported difficulties and unsuccessful retention plans also give great perspectives on pitfalls, and areas that need to be addressed. Examination of unsuccessful strategies shows that those organisations that emphasise only on financial rewards and overlook underlying systemic challenges have restricted success rates of physician retention in the long term. Hospitals that failed to match the organizational values to physician demands had increased turnover and reduced morale in their staff (Britton, 2024). The main lessons on industry failures underline the necessity to target hygienic factors as well as motivators, which are the two-factor theory of Herzberg (Hugues Poissonnier et al., 2023). As an example, when organizations were not able to introduce effective communication channels and support systems in the COVID-19 pandemic, the rate of emotional exhaustion among physicians rose to 61.7% (compared to 37.5% in a previous study) (Štěpánek et al., 2023). These lessons highlight the importance of designing holistic, flexible retention plans that both consider the needs of individuals and organizations as well as respond to the changes in healthcare issues.

**Real World Applications**

Healthcare institutions in different contexts have adopted unique strategies to deal with the issue of physician retention and significant differences exist between urban health systems, medical groups and analogous hospitals, as well as rural hospitals. Megahospital systems have been able to institute integrated retention models that merge career growth strategies with formal mentorship initiatives, which have been shown to lead to quantifiable physician satisfaction and physician retention (Zhao et al., 2024). Instead, rural healthcare facilities have come up with

retention strategies that are highly-specific such as the housing allowances and education debt repayments programs and have realized high retention rates compared to those applying the regular urban patterns. The use of "micro-sabbaticals" - two- to four-week paid professional-development and research leave - by medical group practices has proven effective in lowering burnout rates and increasing the percentage of job satisfaction (Vries et al., 2023). Such heterogeneous uses demonstrate the necessity of putting retention strategies into context to particular healthcare contexts and preserving the main aspects of professional support and development.

New technological solutions based on wellness programs and initiatives have become an important part of the retention strategies of the present day. Health institutions that have adopted AI-based workload allocation systems have noted a large decrease in burnout rates among physicians and an increase in retention rate rates relative to the conventional system of physician scheduling (Liu et al., 2024). The optimization of telehealth platforms and electronic health record has proven to have potential of reducing administrative burdens, with McKinsey Health Institute (2022) stating that successful technology implementation can help in reducing clinician burnout by up to 30%. Where work-life balance programs have been implemented in wellness programs, they have shown specific promise with organizations giving flexible work schedules as well as offering extensive support systems leading to increased physician satisfaction rates. Such new solutions frequently involve data-driven decision-making solutions, and hospitals employing predictive workforce analytics indicate significant benefits in terms of decreased instances of unexpected physician turnover (Todd and Stern, 2023). The effectiveness of such programs promotes the relevance of integrating tech development and comprehensive wellness programs in contemporary retention programs.

The recent trends in the industry with regard to physician retention mirror tremendous changes in how healthcare is delivered and expectations of the workforce especially in the face of post-COVID changes. There has been paradigms shift in healthcare work arrangements, with telehealth and digital health solutions being rapidly adopted as a normal practice, and no longer an optional choice (Abernethy et al., 2022). Digital health integration has had a significant effect, with organizations saying that the use of technology can decrease clinician burnout by about 30% by simplifying workflows and decreasing administrative workloads (McKinsey Health Institute, 2022). Shifting workforce demands have become a key priority and recent industry surveys show that 70 percent of physicians have made work-life balance and flexibility in their work schedules a significant consideration in their job choice (Payerchin, 2022). These trends have triggered the need to devise more dynamic and holistic approaches to retention, which strategy meets professional as well as personal needs of healthcare specialists.

With a glance at the future directions, the industry forecasts further development of the problems of physician retention and its solutions. Among the challenges that are expected are rising effects of demographic changes, where an ageing population is putting strain on health services and at the same time the retirees are posing a strain on the supply of physicians in the labour market (King et al., 2021). The suggested solutions underline the necessity to come up with coordinated retention models that should integrate technological advancement and humanism-based support systems. Firms are starting to pay attention to predictive analytics and AI-supported workforce management systems to proactively identify and overcome challenges in retention (Madanchian, 2024). Also, more advanced professional development strategies, such as organized mentorship initiatives, and micro-sabbaticals, which demonstrated good outcomes in their initial application, can be suggested by industry professionals (Baran and Zarzycki, 2021).

These proactive plans demonstrate an increased awareness of the necessity to implement more voluminous and flexible methods of medical staff retention in the conditions of a changing healthcare environment.

### *Convergence and Divergence with Scholarly Literature*

The overlapping of the scholarly and practitioner literature shows that there are a number of areas where there is a consensus on the strategies of physician retention. Both pieces of literature underline the essence of multi-faceted strategies of retention that may take a multi-level approach to both personal and organizational factors. An example is that academic literature by Darbyshire et al. (2021) concurs with the practitioners in the study that workload, working conditions and work-life balance are significant determinants of physician retention. The overlap is especially noticeable in the similarity of understanding that technology can play a role in retention, as both academic literature (Jedwab et al., 2023) and industry reports (McKinsey Health Institute, 2022) suggest that use of technology to alleviate clinician burnout can lessen by about 30 percent with effective implementation. Moreover, the two sides take into consideration the financial cost of physicians turnover as the scholarly literature (Pappas et al., 2022) and their own observations reveal that the costs of replacing a physician are between 500,000 and 1,000,000 dollars.

Nonetheless, there are significant points of difference between the learning and practice-based approaches to retention strategies implementation. Whereas in scholarly articles the underlying theory of retention is stressed based on different theoretical frameworks, including the two-factor theory by Herzberg (Erben and Buyuktaas, 2020), practice articles concentrate more on immediate and practical retention methods such as flexible work schedules and

mentorship (Wikstrom et al., 2023). One huge disparity is seen in the methods used to measure success, with the academic literature preferring long-term focused measures of success (Lin et al., 2024) and the applied literature focusing on less rational, short-term indicators such as turnover rates and direct cost reductions (Raman et al., 2024). Also, although scholarly literature has been widely developed on the psychological contract between physicians and organizations (Tawfik et al., 2021), practitioner literature has been more inclined towards concrete measures (such as compensation schemes and workplace changes) (Zhang et al., 2020).

### *Practical Implications*

To ensure proper implementation of effective physician retention strategies, resources allocation and timeline planning have to be carefully considered and the implementation process depends on a number of most important factors. Healthcare organizations have to evaluate the financial aspects of a wide-ranging retention programs given that the turnover costs occurring due to burnout in the health care industry have a ratio of between 2.6 and 6.3 billion a year (Goldman & Barnett, 2022). Both short-term interventions (e.g., technology incorporation and workflow optimization), both of which McKinsey Health Institute (2022) indicates can end clinician burnout by 30 percent, and long-term cultural changes that will yield sustained retention can be implemented over a period. The factors contributing to success are alignment of organizational goals with physician expectations, development of strong mentorship programs that proved to reduce the turnover rates by 25%, and work-life balance programs as 70% of physicians said that this factor plays a key role in their employment choice (McDermott et al., 2022). Evidence-based strategies that include AI-based workload distribution systems and professional development pathways, as well as implementation roadmaps, should be integrated to form the best practice frameworks, and both systemic factors and individual factors

influencing physician retention, including the organization of favorable organizational cultures and wellness programs, should be addressed (Štěpánek et al., 2023).

## Alignment of the Project With the Literature and Discipline

The emphasis on the strategies of physician retention in the project proves to be highly consistent with the academic and practitioner viewpoints and meets the essential gap in healthcare leadership practices. The academic literature, especially the two-factor theory of Herzberg (Erben and Buyuksapsun, 2020), can be used to theoretically explain the complicated interaction between motivational and hygiene factors and physician retention. This theoretical foundation correlates with the current findings of research that highlight complexity of retention issues such as burnout rates that have escalated to 61.7% at the end of the COVID-19 (Shin et al., 2023), and high costs of retention turned a yearly cost to 500,000-1,000,000 a physician (Pappas et al., 2022). The fact that the project is focused on the creation of the holistic retention strategies directly responds to the estimates of the future physician shortage of 54,100 to 139,000 by 2033 (Boyle, 2020), which puts the project at the cross of both the theoretical and practical knowledge and need.

The combination of the practitioner and academic insights with the research enhances the alignment of the project to both the academic and professional fields further. The academic results on the significance of work-life balance are confirmed by statistics provided by the industry and professional experiences, as 70 percent of physicians are concerned with the given factor during the selection of a job (Payerchin, 2022). The technological integration the project is interested in is also on-trend in the industry, with McKinsey Health Institute (2022) data showing that the successful implementation of all technologies can alleviate clinician burnout by 30%. In

addition, the fact that organizational culture and leadership development was considered in the project aligns with the focus on organizational justice in the academic literature (Mengstie, 2020) and the focus on diversity and inclusion by practitioners, which has been reported to lead to better organizational performance by 35% (Tanios et al., 2021). This fit between the theoretical concepts and their real-life applications positions the project to leave a significant impact on the academic discourse and the practice in healthcare leadership.

## SECTION 2. PROCESS

### Project Questions

### Project Design/Method

### Stakeholders, Participants, and Target Audience

### Role of the Researcher

### Project Study Protocol

#### *Sample*

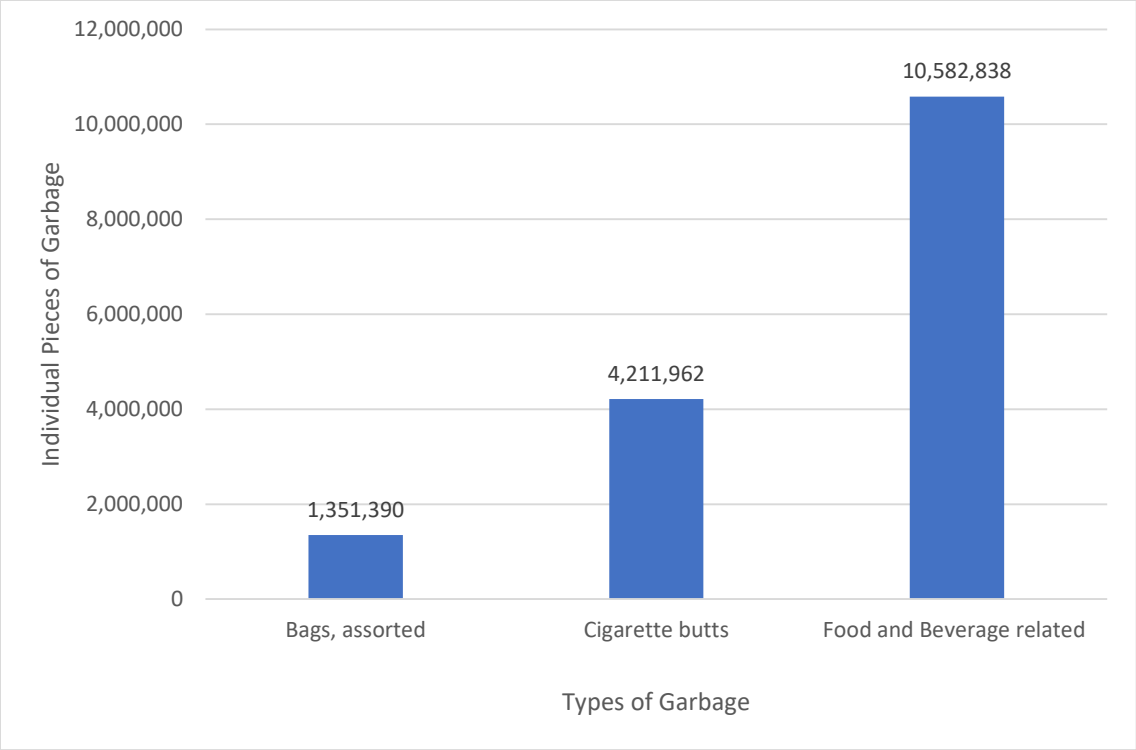
#### *Data Collection*

### Ethical Considerations

### Data Analysis

**Figure 1**

*Types of Garbage*




*Note:* Include details of the source or presentation of the data in case you did not make the figure. Include copyright/permission notices for information copied, including government, and force a 10-point notice underneath the image. Remember to make a permission acknowledgement, e.g., Reprinted [or adapted] with permission. Templates: see the templates at https://academicwriter-apa-org.library.capella.edu/learn/browse/QG-28.

**Table 1**

*Demographic Information*

| Participant | Age | Sex | Position | Years in position |
|---|---|---|---|---|
| P1 | 25-30 | Male | Chairman | 10-15 |
| P2 | 41-45 | Female | CEO | 6-10 |

*Note.* Potential participants under age 16 were omitted from the sample. Only essential notes need to be included. See Table setup (apa.org) and https://academicwriter-apa-

org.library.capella.edu/learn/browse/QG-44?group=All&view=list&term=tables&sort=asc. The Doctoral Publications Guidebook also addresses tables and figures.

## SECTION 3. FINDINGS AND APPLICATION

### Relevant Outcomes and Findings

### Application and Benefits

### Implications

#### *Recommendations for Policy*

#### *Recommendations for Practice*

#### *Recommendations for Future Work*

### Conclusion

## REFERENCES


Abernethy, A., Adams, L., Barrett, M., Bechtel, C., Brennan, P., Butte, A., Faulkner, J., Fontaine, E., Friedhoff, S., Halamka, J., Howell, M., Johnson, K., Long, P., McGraw, D., Miller, R., Lee, P., Perlin, J., Rucker, D., Sandy, L., & Savage, L. (2022). The promise of digital health: Then, now, and the future. *NAM Perspectives*, *6*(22). https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9499383/

Abid, R., & Salzman, G. (2021). Evaluating physician burnout and the need for organizational support. *Missouri Medicine*, *118*(3), 185. https://pmc.ncbi.nlm.nih.gov/articles/PMC8211002/

Adams, R., Ryan, T., & Wood, E. (2021). Understanding the factors that affect retention within the mental health nursing workforce: A systematic review and thematic synthesis. *International Journal of Mental Health Nursing*, *30*(6), 1476–1497. https://doi.org/10.1111/inm.12904

Adriano, J., & Callaghan, C. W. (2020). Work-life balance, job satisfaction and retention: Turnover intentions of professionals in part-time study. *South African Journal of Economic and Management Sciences*, *23*(1), 10–33. https://doi.org/10.4102/sajems.v23i1.3028

Aied, K. (2024). The impact of AI on nursing workload and stress levels in critical care settings. *Pak. J. Life Soc. Sci*, *22*(2), 8529–8542. https://doi.org/10.57239/PJLSS-2024-22.2.00643

Ajayi, F. A., & Udeh, C. A. (2024). Innovative recruitment strategies in the IT sector: A review of successes and failures. *Magna Scientia Advanced Research and Reviews*, *10*(2), 150–165. https://doi.org/10.30574/msarr.2024.10.2.0057

Alexander, P. (2021). Early multidrug treatment of SARS-CoV-2 infection (COVID-19) and reduced mortality among nursing home (or outpatient/ambulatory) residents. *Medical Hypotheses*, *153*, 110622. https://doi.org/10.1016/j.mehy.2021.110622

Alrawahi, S., Sellgren, S. F., Altouby, S., Alwahaibi, N., & Brommels, M. (2020a). The application of Herzberg's two-factor theory of motivation to job satisfaction in clinical laboratories in Omani Hospitals. *Heliyon*, *6*(9), 1–9. https://doi.org/10.1016/j.heliyon.2020.e04829

American Medical Association. (2024, July 2). *Physician burnout rate drops below 50% for first time in 4 years.* https://www.ama-assn.org/practice-management/physician-health/physician-burnout-rate-drops-below-50-first-time-4-years

Baquero, A. (2023). Hotel employees' burnout and intention to quit: The role of psychological distress and financial well-being in a moderation mediation model. *Behavioral Sciences*, *13*(2), 84. https://doi.org/10.3390/bs13020084

Baran, M., & Zarzycki, R. (2021). Key effects of mentoring processes — Multi-tool comparative analysis of the career paths of mentored employees with non-mentored employees. *Journal of Business Research*, *124*, 1–11. https://doi.org/10.1016/j.jbusres.2020.11.032

Bashar, F., Islam, R., Khan, S. M., Hossain, S., Sikder, A. A. S., Yusuf, S. S., & Adams, A. M. (2022). Making doctors stay: Rethinking doctor retention policy in a contracted-out primary healthcare setting in urban Bangladesh. *PLOS ONE*, *17*(1), e0262358. https://doi.org/10.1371/journal.pone.0262358

Bhati, D., Deogade, M. S., & Kanyal, D. (2023). Improving patient outcomes through effective hospital administration: A comprehensive review. *Cureus*, *15*(10), 1–12.

https://doi.org/10.7759/cureus.47731

Boaz, I., & Davidson. (2022). *During Covid-19 pandemic: A systematic review*. http://wagner.radford.edu/775/7/BIDavidson_Capstone_FINAL.pdf

Bond, A. M., Casalino, L. P., Tai-Seale, M., Mark Aaron Unruh, Zhang, M., Qian, Y., & Kronick, R. (2023). *Physician turnover in the United States*. https://doi.org/10.7326/m22-2504

Booth, J., Coldwell, M., Müller, L.-M., Perry, E., & Zuccollo, J. (2021). Mid-career teachers: A mixed methods scoping study of professional development, career progression and retention. *Education Sciences*, *11*(6), 299. https://doi.org/10.3390/educsci11060299

Boyle, P. (2020, June 26). *U.S. physician shortage growing*. Association of American Medical Colleges.https://www.aamc.org/news/us-physician-shortage-growing

Britton, E. G. (2024). *How physicians' perceptions of satisfaction and morale affect retention*. ScholarWorks. https://scholarworks.waldenu.edu/dissertations/15389/

Brown, A., Barnes, C., Byaruhanga, J., McLaughlin, M., Hodder, R. K., Booth, D., Nathan, N., Sutherland, R., & Wolfenden, L. (2020). Effectiveness of technology-enabled knowledge translation strategies in improving the use of research in public health: Systematic review. *Journal of Medical Internet Research*, *22*(7), e17274. https://doi.org/10.2196/17274

Capone, V., Borrelli, R., Marino, L., & Schettino, G. (2022). Mental well-being and job satisfaction of hospital physicians during covid-19: Relationships with efficacy beliefs, organizational support, and organizational non-technical skills. *International Journal of Environmental Research and Public Health*, *19*(6), 3734. https://doi.org/10.3390/ijerph19063734

Cavanaugh, K., Cline, D., Belfer, B., Chang, S., Thoman, E., Pickard, T., & Holladay, C. L. (2022). The positive impact of mentoring on burnout: Organizational research and best practices. *Journal of Interprofessional Education & Practice*, *28*, 100521. https://doi.org/10.1016/j.xjep.2022.100521

Cordova, M. J., Gimmler, C. E., & Osterberg, L. G. (2020). Foster well-being throughout the career trajectory: A developmental model of physician resilience training. *Mayo Clinic Proceedings*, *95*(12), 2719–2733. https://doi.org/10.1016/j.mayocp.2020.05.002

Correia, I., & Almeida, A. E. (2020). Organizational justice, professional identification, empathy, and meaningful work during covid-19 pandemic: Are they burnout protectors in physicians and nurses? *Frontiers in Psychology*, *11*. https://doi.org/10.3389/fpsyg.2020.566139

Darbyshire, D., Brewster, L., Isba, R., Body, R., Basit, U., & Goodwin, D. (2021). Retention of doctors in emergency medicine: A scoping review of the academic literature. *Emergency Medicine Journal*, *38*(9), 663–672. https://doi.org/10.1136/emermed-2020-210450

Davenport, D., Alvarez, A., Natesan, S., Caldwell, M., Gallegos, M., Landry, A., Parsons, M., & Gottlieb, M. (2022). Faculty recruitment, retention, and representation in leadership: An evidence-based guide to best practices for diversity, equity, and inclusion from the council of residency directors in emergency medicine. *Western Journal of Emergency Medicine*, *23*(1), 62–71. https://doi.org/10.5811/westjem.2021.8.53754

DeChant, P. F., Acs, A., Rhee, K. B., Boulanger, T. S., Snowdon, J. L., Tutty, M. A., Sinsky, C. A., & Thomas Craig, K. J. (2019). Effect of organization-directed workplace interventions on physician burnout: A systematic review. *Mayo Clinic Proceedings:*

*Innovations, Quality & Outcomes*, *3*(4), 384–408. https://doi.org/10.1016/j.mayocpiqo.2019.07.006

DeVries, N., Boone, A., Godderis, L., Bouman, J., Szemik, S., Matranga, D., & Winter, P. (2023). The race to retain healthcare workers: A systematic review on factors that impact retention of nurses and physicians in hospitals. *The Journal of Health Care Organization, Provision, and Financing*, *60*. https://doi.org/10.1177/00469580231159318

Erben, G. S., & Büyüktaş, G. A. (2020). Job satisfaction preferences of Generation Y; the relationship between job satisfaction and organizational commitment. *Beykent Üniversitesi Sosyal Bilimler Dergisi*. https://doi.org/10.18221/bujss.491812

Fallucchi, F., Coladangelo, M., Giuliano, R., & William De Luca, E. (2020). Predicting employee attrition using machine learning techniques. *Computers*, *9*(4), 86. https://doi.org/10.3390/computers9040086

Feng, J., Li, L., Wang, C., Ke, P., Jiang, H., Yin, X., & Lu, Z. (2022). The prevalence of turnover intention and influencing factors among emergency physicians: A national observation. *Journal of Global Health*, *12*. https://doi.org/10.7189/jogh.12..04005

Feshbach, K. B., Klimenko, M., Fluet, K., & Lang, V. J. (2024). Mentoring: Shaping the professional identity of the academic internal medicine hospitalist. *Journal of Hospital Medicine*, *19*(12), 1104–1112. https://doi.org/10.1002/jhm.13452

Filipek, D. (2023). *Healthcare news of note: Healthcare organizations continue to deal with turnover and workforce shortages*. Healthcare Financial Management Association. https://www.hfma.org/leadership/healthcare-news-of-note-healthcare-organizations-continue-to-deal-with-turnover-and-workforce-shortages/

Folland, S., Goodman, A. C., Stano, M., & Shooshan Danagoulian. (2023). *The Economics of*

*Health and Health Care*. Routledge. https://doi.org/10.4324/9781003308409

Fox, K. C. (2020). Mentor program boosts new nurses' satisfaction and lowers turnover rate. *The Journal of Continuing Education in Nursing*, *41*(7), 311–316. https://doi.org/10.3928/00220124-20100401-04

Gellert, G. A., Socha, J. R., Marcjasz, N., Price, T., Heyduk, A., Agata Mlodawska, Kacper Kuszczyński, Aleksandra Jędruch, & Orzechowski, P. (2023). The role of virtual triage in improving clinician experience and satisfaction: A narrative review. *Telemedicine Reports*, *4*(1), 180–191. https://doi.org/10.1089/tmr.2023.0020

Ghani, B., Zada, M., Memon, K. R., Ullah, R., Khattak, A., Han, H., Montes, A. A., & Castillo, L. A. (2022). Challenges and strategies for employee retention in the hospitality industry: A review. *Sustainability*, *14*(5), 2885. Mdpi. https://doi.org/10.3390/su14052885

Goldman, A. L., & Barnett, M. L. (2022). Changes in physician work hours and implications for workforce capacity and work-life balance, 2001-2021. *JAMA Internal Medicine*. https://doi.org/10.1001/jamainternmed.2022.5792

Han, S., Shanafelt, T. D., Sinsky, C. A., Awad, K. M., Dyrbye, L. N., Fiscus, L. C., Trockel, M., & Goh, J. (2019). Estimating the attributable cost of physician burnout in the United States. *Annals of Internal Medicine*, *170*(11), 784. https://doi.org/10.7326/m18-1422

Hooker, R. S., Kulo, V., Kayingo, G., Jun, H.-J., & Cawley, J. F. (2022). Forecasting the physician assistant/associate workforce: 2020–2035. *Future Healthcare Journal*, *9*(1), 57–63. https://doi.org/10.7861/fhj.2021-0193

Hugues Poissonnier, Oihab Allal-Chérif, & Marie-Anne Le Dain. (2023). Developing a sustainable buyer-supplier collaboration: An approach based on Herzberg's Two-Factor Theory. *Supply Chain Forum*, 1–14. https://doi.org/10.1080/16258312.2023.2288851

Institute of Medicine . (2019). *The changing nature of health care*. Nih.gov; National Academies Press (US). https://www.ncbi.nlm.nih.gov/books/NBK52825/

Jedwab, R. M., Manias, E., Redley, B., Dobroff, N., & Hutchinson, A. M. (2023). Impacts of technology implementation on nurses' work motivation, engagement, satisfaction and well-being: A realist review. *Journal of Clinical Nursing*, *32*(17-18). https://doi.org/10.1111/jocn.16730

Jones, C. H., & Dolsten, M. (2024). Healthcare on the brink: navigating the challenges of an aging society in the United States. *Aging*, *10*(1), 1–10. https://doi.org/10.1038/s41514-024-00148-2

Junaid, S. B., Imam, A. A., Balogun, A. O., De Silva, L. C., Surakat, Y. A., Kumar, G., Abdulkarim, M., Shuaibu, A. N., Garba, A., Sahalu, Y., Mohammed, A., Mohammed, T. Y., Abdulkadir, B. A., Abba, A. A., Kakumi, N. A. I., & Mahamad, S. (2022). Recent advancements in emerging technologies for healthcare management systems: A survey. *Healthcare*, *10*(10), 1–45. https://doi.org/10.3390/healthcare10101940

Karim, M., Alrazeeni, D. M., Akter, F., Latifun Nesa, Dipak Chandra Das, Muhammad Join Uddin, Begum, J., Most. Tahmina Khatun, Md. Abdun Noor, Ahmad, S., Sabren Mukta Tanha, Tuli Rani Deb, & Mst. Rina Parvin. (2024). The role of artificial intelligence in enhancing nurses' work-life balance. *Journal of Medicine Surgery and Public Health*, *3*, 100135–100135. https://doi.org/10.1016/j.glmedi.2024.100135

Kim, J. L., Forster, C. S., Allan, J. M., Schondelmeyer, A., Ruch-Ross, H., Barone, L., & Fromme, H. B. (2024). Gender and work–life balance: Results of a national survey of pediatric hospitalists. *Journal of Hospital Medicine*. https://doi.org/10.1002/jhm.13413

King, E. M., Randolph, H. L., Floro, M. S., & Suh, J. (2021). Demographic, health, and economic transitions and the future care burden. *World Development*, *140*, 105371. https://doi.org/10.1016/j.worlddev.2020.105371

Kominski, G. F., Nonzee, N. J., & Sorensen, A. (2020). The Affordable Care Act's impacts on access to insurance and healthcare for low-income populations. *Annual Review of Public Health*, *38*(1), 489–505. https://doi.org/10.1146/annurev-publhealth-031816-044555

Kumra, T., Hsu, Y.-J., Cheng, T. L., Marsteller, J. A., McGuire, M., & Cooper, L. A. (2020). The association between organizational cultural competence and teamwork climate in a network of primary care practices. *Health Care Management Review*, *45*(2), 106–116. https://doi.org/10.1097/hmr.0000000000000205

Larsman, P., Pousette, A., & Törner, M. (2024). Nurses' organizational climate of perceived organizational support and its relationships with psychosocial working conditions and psychological contracts: A longitudinal questionnaire study. *Scandinavian Journal of Psychology*. https://doi.org/10.1111/sjop.13017

Lee, B., Lee, C., Choi, I., & Kim, J. (2022, October 2). *Analyzing determinants of job satisfaction based on Two-factor theory*. MDPI. https://doi.org/10.3390/su141912557

Lee, J. Y., McFadden, K. L., Lee, M. K., & Gowen, C. R. (2021). U.S. hospital culture profiles for better performance in patient safety, patient satisfaction, Six Sigma, and lean implementation. *International Journal of Production Economics*, *234*, 108047. https://doi.org/10.1016/j.ijpe.2021.108047

Lin, T. K., Werner, K., Kak, M., & Herbst, C. H. (2022). Health care worker retention in post-conflict settings: A systematic literature review. *Health Policy and Planning*, *38*(1). https://doi.org/10.1093/heapol/czac090

Lin, Z., Gu, H., Gillani, K. Z., & Fahlevi, M. (2024). Impact of green work–life balance and green human resource management practices on corporate sustainability performance and employee retention: Mediation of green innovation and organisational culture. *Sustainability*, *16*(15), 6621–6621. https://doi.org/10.3390/su16156621

Liu, H., Ding, N., Li, X., Chen, Y., Sun, H., Huang, Y., Liu, C., Ye, P., Jin, Z., Bao, H., & Xue, H. (2024). Artificial intelligence and radiologist burnout. *JAMA Network Open*, *7*(11), e2448714. https://doi.org/10.1001/jamanetworkopen.2024.48714

Lock, F. K., & Carrieri, D. (2022). Factors affecting the UK junior doctor workforce retention crisis: An integrative review. *BMJ Open*, *12*(3), e059397. https://doi.org/10.1136/bmjopen-2021-059397

Lyons, O., George, R., Galante, J. R., Mafi, A., Fordwoh, T., Frich, J., & Geerts, J. M. (2020). Evidence-based medical leadership development: A systematic review. *BMJ Leader*, *5*(3). https://ora.ox.ac.uk/objects/uuid:ed5ff28e-510d-4186-ba8c-9e194d4c1cc8

Lyons, O., George, R., Galante, J. R., Mafi, A., Fordwoh, T., Frich, J., & Geerts, J. M. (2020). Evidence-based medical leadership development: A systematic review. *BMJ Leader*, *5*(3). https://ora.ox.ac.uk/objects/uuid:ed5ff28e-510d-4186-ba8c-9e194d4c1cc8

Madanchian, M. (2024). From recruitment to retention: AI tools for human resource decision-making. *Applied Sciences*, *14*(24), 11750. https://doi.org/10.3390/app142411750

Malek, N. (2024, September 24). *Sabbaticals in the private sector: An overlooked tool to boost employee retention and productivity*. Prodoscore. https://www.prodoscore.com/blog/an-overlooked-tool-to-boost-employee-retention-and-productivity/

Martinussen, P. E., Magnussen, J., Vrangbæk, K., & Frich, J. C. (2020). Should I stay or should I go? The role of leadership and organisational context for hospital physicians' intention to

leave their current job. *BMC Health Services Research*, *20*(1). https://doi.org/10.1186/s12913-020-05285-4

McDermott, O., Antony, J., Bhat, S., Jayaraman, R., Rosa, A., Marolla, G., & Parida, R. (2022). Lean six sigma in healthcare: A systematic literature review on challenges, organisational readiness and critical success factors. *Processes*, *10*(10), 1945. https://doi.org/10.3390/pr10101945

McKinsey Health Institute. (2022, May 27). *Addressing employee burnout: Are you solving the right problem?* McKinsey & Company. https://www.mckinsey.com/mhi/our-insights/addressing-employee-burnout-are-you-solving-the-right-problem

McKinsey Health Institute. (2022, May 27). *Addressing employee burnout: Are you solving the right problem? | McKinsey*. Www.mckinsey.com. https://www.mckinsey.com/mhi/our-insights/addressing-employee-burnout-are-you-solving-the-right-problem

Mengstie, M. M. (2020). Perceived organizational justice and turnover intention among hospital healthcare workers. *BMC Psychology*, *8*(1). https://doi.org/10.1186/s40359-020-0387-8

Misra, A. D., Kay, R., & Stoller, J. K. (2024). A review of physician turnover: rates, causes, and consequences. *American Journal of Medical Quality*, *19*(2), 56–66. https://doi.org/10.1177/106286060401900203

Mohammadiaghdam, N., Doshmangir, L., Babaie, J., Khabiri, R., & Ponnet, K. (2020). Determining factors in the retention of physicians in rural and underdeveloped areas: A systematic review. *BMC Family Practice*, *21*(1). https://doi.org/10.1186/s12875-020-01279-7

Mok, C., Boneham, W., & Lennon, M. J. (2020). A “healthy” health care workforce: Insights into satisfaction and retention of doctors. *Medical Education*, *54*(9), 781–783.

https://doi.org/10.1111/medu.14269

Naqshbandi, M. M., Meeran, S., & Wilkinson, A. (2022). On the soft side of open innovation: The role of human resource practices, organizational learning culture and knowledge sharing. *R&D Management*, *53*(2). https://doi.org/10.1111/radm.12566

Norehan Jinah, Adnan, I. K., Pangie Bakit, Ili Abdullah Sharin, & Lee, K. Y. (2024). Retention strategies for medical doctors in low- and middle-income countries (LMICs): Are they effective? A scoping review. *BMC Health Services Research*, *24*(1). https://doi.org/10.1186/s12913-024-12154-x

Papa, A., Dezi, L., Gregori, G. L., Mueller, J., & Miglietta, N. (2020). Improving innovation performance through knowledge acquisition: The moderating role of employee retention and human resource management practices. *Journal of Knowledge Management*, *24*(3). https://www.emerald.com/insight/content/doi/10.1108/JKM-09-2017-0391/full/html?casa_token=i6qyfz-ICqAAAAAA:IRC0vIHs6yUYFfiQkR-

Pappas, M. A., Stoller, J. K., Shaker, V., Houser, J., Hebert, A. D., & Rothberg, M. B. (2022). Estimating the costs of physician turnover in hospital medicine. *Journal of Hospital Medicine*, *17*(10), 803–808. https://doi.org/10.1002/jhm.12942

Parikh, J. R., & Bender, C. E. (2021). How radiology leaders can address burnout. *Journal of the American College of Radiology*, *18*(5), 679–684. https://doi.org/10.1016/j.jacr.2020.12.005

Payerchin, R. (2022, March 11). *New physicians want work-life balance in first job, survey says*. MedicalEconomics. https://www.medicaleconomics.com/view/new-physicians-want-work-life-balance-in-first-job-survey-says

Peckham, A., Rudoler, D., Bhatia, D., Allin, S., Abdelhalim, R., & Marchildon, G. P. (2022). What can Canada learn from accountable care organizations: A comparative policy analysis. *International Journal of Integrated Care*, *22*(0), 1. https://doi.org/10.5334/ijic.5677

Raman, S. S. S., McDonnell, A., & Beck, M. (2024). Hospital doctor turnover and retention: A systematic review and new research pathway. *Journal of Health Organization and Management*, *38*(9), 45–71. https://doi.org/10.1108/jhom-04-2023-0129

Ramas, M.-E., Webber, S., Braden, A. L., Goelz, E., Linzer, M., & Farley, H. (2021). Innovative wellness models to support advancement and retention among women physicians. *Pediatrics*, *148*(Supplement 2), e2021051440H. https://doi.org/10.1542/peds.2021-051440h

Russell, D., Mathew, S., Fitts, M., Liddle, Z., Murakami-Gold, L., Campbell, N., Ramjan, M., Zhao, Y., Hines, S., Humphreys, J. S., & Wakerman, J. (2021). Interventions for health workforce retention in rural and remote areas: A systematic review. *Human Resources for Health*, *19*(1). https://doi.org/10.1186/s12960-021-00643-7

Sarkar, D. (2023, July). *Physician burnout and well-being: A systematic review and framework for action*. ResearchGate.net. https://www.researchgate.net/publication/317288307_Physician_Burnout_and_Well-Being_A_Systematic_Review_and_Framework_for_Action

Shanafelt, T. D., West, C. P., Sinsky, C., Trockel, M., Tutty, M., Wang, H., Carlasare, L. E., & Dyrbye, L. N. (2022). Changes in burnout and satisfaction with work-life integration in physicians and the general US working population between 2011 and 2020. *Mayo Clinic Proceedings*, *97*(3), 491–506. https://doi.org/10.1016/j.mayocp.2021.11.021

Shanafelt, T., Trockel, M., Rodriguez, A., & Logan, D. (2020). Wellness-centered leadership. *Academic Medicine*, *96*(5). https://doi.org/10.1097/acm.0000000000003907

Shin, P., Desai, V., Antonio Hernandez Conte, & Qiu, C. (2023). Time out: The impact of physician burnout on patient care quality and safety in perioperative medicine. *The Permanente Journal*, *27*(2), 160–168. https://doi.org/10.7812/tpp/23.015

Shin, P., Desai, V., Antonio Hernandez Conte, & Qiu, C. (2023). Time out: The impact of physician burnout on patient care quality and safety in perioperative medicine. *The Permanente Journal*, *27*(2), 160–168. https://doi.org/10.7812/tpp/23.015

Shin, P., Desai, V., Conte, H., & Qiu, C. (2023). Time out: The impact of physician burnout on patient care quality and safety in perioperative medicine. *The Permanente Journal*, *27*(2), 160–168. https://doi.org/10.7812/tpp/23.015

Sinsky, C. A., Bavafa, H., Roberts, R. G., & Beasley, J. W. (2021). Standardization vs customization: Finding the right balance. *The Annals of Family Medicine*, *19*(2), 171–177. https://doi.org/10.1370/afm.2654

Sinsky, C. A., Biddison, L. D., Mallick, A., Dopp, A. L., Perlo, J., Lynn, L., & Smith, and C. D. (2020). Organizational evidence-based and promising practices for improving clinician well-being. *NAM Perspectives*. https://nam.edu/organizational-evidence-based-and-promising-practices-for-improving-clinician-well-being/

Sinsky, C. A., Shanafelt, T. D., Dyrbye, L. N., Sabety, A. H., Carlasare, L. E., & West, C. P. (2022). Health care expenditures attributable to primary care physician overall and burnout-related turnover: A cross-sectional analysis. *Mayo Clinic Proceedings*, *97*(4). https://doi.org/10.1016/j.mayocp.2021.09.013

Siva, McDonnell, A., & Beck, M. (2024). Hospital doctor turnover and retention: A systematic review and new research pathway. *Journal of Health Organization and Management*, *38*(9), 45–71. https://doi.org/10.1108/jhom-04-2023-0129

Štěpánek, L., Nakládalová, M., Janošíková, M., Ulbrichtová, R., Švihrová, V., Hudečková, H., Sovová, E., Sova, M., & Vévoda, J. (2023). Prevalence of burnout in healthcare workers of tertiary-care hospitals during the COVID-19 pandemic: A cross-sectional survey from two central European countries. *International Journal of Environmental Research and Public Health*, *20*(4), 3720. https://doi.org/10.3390/ijerph20043720

Subramaniam, S. H., Wider, W., Cloyd, J., Kim Yew Lim, Jiang, L., & Manoch Prompanyo. (2024). Key factors influencing long-term retention among contact centre employee in Malaysia: A Delphi method study. *Cogent Business & Management*, *11*(1). https://doi.org/10.1080/23311975.2024.2370444

Tamata, A. T. (2022). A systematic review study on the factors affecting shortage of nursing workforce in the hospitals. *Nursing Open*, *10*(3), 1247–1257. https://doi.org/10.1002/nop2.1434

Tanios, M., Haberman, D., Bouchard, J., Motherwell, M., & Patel, J. (2021). Analyses of burn-out among medical professionals and suggested solutions—A narrative review. *Journal of Hospital Management and Health Policy*, *0*(3), 7–10. https://doi.org/10.21037/jhmhp-20-153

Tawfik, D. S., Shanafelt, T. D., Dyrbye, L. N., Sinsky, C. A., West, C. P., Davis, A. S., Su, F., Adair, K. C., Trockel, M. T., Profit, J., & Sexton, J. B. (2021). Personal and professional factors associated with work-life integration among US physicians. *JAMA Network Open*, *4*(5), e2111575–e2111575. https://doi.org/10.1001/jamanetworkopen.2021.11575

Tawfik, D. S., Shanafelt, T. D., Dyrbye, L. N., Sinsky, C. A., West, C. P., Davis, A. S., Su, F., Adair, K. C., Trockel, M. T., Profit, J., & Sexton, J. B. (2021). Personal and professional factors associated with work-life integration among US physicians. *JAMA Network Open*, *4*(5), e2111575–e2111575. https://doi.org/10.1001/jamanetworkopen.2021.11575

Todd, J., & Stern, S. (2023, September 6). *Towards more nuanced patient management: Decomposing readmission risk with survival models: The Operational Research Society's Annual Conference*. Bond University Research Portal. https://research.bond.edu.au/en/publications/towards-more-nuanced-patient-management-decomposing-readmission-r

Vries, N. de, Lavreysen, O., Boone, A., Bouman, J., Szemik, S., Barański, K., Godderis, L., & Winter, P. de . (2023). Retaining healthcare workers: A systematic review of strategies for sustaining power in the workplace. *Healthcare*, *11*(13), 1–29. https://doi.org/10.3390/healthcare11131887

Vries, N., Lavreysen, O., Boone, A., Bouman, J., Szemik, S., Barański, K., Godderis, L., & Winter, P. (2023). Retaining healthcare workers: A systematic review of strategies for sustaining power in the workplace. *Healthcare*, *11*(13), e1887. https://doi.org/10.3390/healthcare11131887

Weintraub, P., & McKee, M. (2019). Leadership for innovation in healthcare: An exploration. *International Journal of Health Policy and Management*, *8*(3), 138–144. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6462199/

Wikström, E., Arman, R., Dellve, L., & Gillberg, N. (2023). Mentoring programs – Building capacity for learning and retaining workers in the workplace. *Journal of Workplace Learning*, *35*(8), 8–12. https://doi.org/10.1108/jwl-01-2023-0003

World Health Organization. (2022). *Global strategy on human resources for health: workforce 2030: Reporting at seventy-fifth world health assembly*. https://www.who.int/news/item/02-06-2022-global-strategy-on-human-resources-for-health--workforce-2030

Yang, J.-T., Wan, C.-S., & Fu, Y.-J. (2022). Qualitative examination of employee turnover and retention strategies in international tourist hotels. *International Journal of Hospitality Management*, *31*(3), 837–848. https://doi.org/10.1016/j.ijhm.2011.10.001

Zhang, X., & Saltman, R. (2021). Impact of Electronic Health Records interoperability on Telehealth service outcomes. *Medical Informatics*, *10*(1), 5–7. https://doi.org/10.2196/31837

Zhang, X., Lin, D., Pforsich, H., & Lin, V. W. (2020). Physician workforce in the United States of America: Forecasting nationwide shortages. *Human Resources for Health*, *18*(1). https://doi.org/10.1186/s12960-020-0448-3

Zhao, Y., Quadros, W., Shobhana Nagraj, Wong, G., English, M., & Attakrit Leckcivilize. (2024). Factors influencing the development, recruitment, integration, retention and career development of advanced practice providers in hospital health care teams: A scoping review. *BMC Medicine*, *22*(1). https://doi.org/10.1186/s12916-024-03509-6

## APPENDIX A. TITLE OF APPENDIX A

The titles of the format are indicated here. Not to include recruitment flyers, permission correspondence, invitation to subject matter experts, and informed consent forms. They ought to be cleared out before handing them over to the committee for review of doctoral publications.

Put tables and figures in the areas where they are expounded.

As soon as you have written out the Appendices, erase all the instructions.

DELETE PAGE (Unless used).

## APPENDIX B. TITLE OF APPENDIX B

The titles of the format are indicated here. Exclude recruitment flyers, permission correspondence, invitations to subject matter experts, and informed consent forms. They need to be taken out and then submitted to the committee and the scrutiny of doctoral publications. Tables and figures should be used at the points where they are being discussed.

After you are done with the writing of the appendices, erase all instructions.

DELETE THIS PAGE: Not used.