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# Effective Leadership in A Dental Practice: Strategies for Enhancing Profitability and Efficiency in Healthcare Management.

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## I. INTRODUCTION

Effective leadership in dental practice plays an imperative role in optimizing both patient care and operations. Healthcare leadership, apart from guiding clinical decisions, is also about resource management, financial accountability, and staffing to ensure that the practice operates smoothly and effectively, gaining substantial profitability. Dental clinics, like other healthcare organizations, require skilled leaders who can effectively balance clinical expertise and strategic management to achieve efficiency, maximize profitability, while addressing operational challenges. Leaders in a dental clinic unlike other larger healthcare organizations may or may not have simultaneous administrative and clinical skills. For instance, in a corporate hospital chain, the administrative and clinical leadership have widely different roles and responsibilities, requiring vastly different skillsets. As the wider healthcare landscape continues to evolve, understanding the influence of transformational leadership on the financial and operational success of dental practices assumes vital importance. (Lior Naamati-Schneider, 2024). Leadership, characterized by inspiring and motivating team members, can lead to improved treatment outcomes and highly efficient practice. (Bass & Riggio, 2006) Across various dental practices, such as general dentistry, specialty practices [e.g., orthodontics, endodontics], private and group practices struggle with unique set of challenges and opportunities regarding financial success and profitability. Moreover, the locality of the practice plays a pivotal role in its monetary performance due to factors like patient demographics, local economic conditions, and industrial competition. (Li et al., 2023) The financial prospects of a dental clinic also depend on the type of insurance accepted by the practice- dental discount plan, dental preferred provider organization (DPPO) plans or the dental health maintenance organization (DHMO) plan. This scoping review explores the impact of leadership traits on the profitability of dental practices, while considering the type and geographic location of practice.

## II. BACKGROUND

Leadership traits in the healthcare domain, including dentistry, has been studied largely in terms of its influence on staff satisfaction, patient care and compliance. (Hanks et al., 2020) Therefore, the specific relationship between leadership characteristics, type of practice, and profitability in dental settings remains largely unexplored. Dental practices vary mostly in terms of their organizational structure and patient base, with general practices typically providing a broader range of services to a diverse patient demographic while specialty practices focus on niche specialty areas. Group practices and multi-location practices also present distinct leadership challenges and monetary dynamics compared with solo practices. (DesPortes & Sinha, 2022) Leadership style directly impacts operational efficiency, patient retention, employee satisfaction and ultimately financial profitability. (Chen et al., 2021) Geographic location also plays a crucial role in determining the financial success and profitability of a clinical dental setup. Practices located in urban regions usually have access to a larger and highly diverse patient population, but they face higher operational costs, including rents, wages, and an increased industrial competition from similar dental practices. In contrast, practices located in suburban or sparsely populated areas may have reduced operating charges but struggle with a narrow clientele, lower patient acquisition and limited access to specialized dental facilities. (Solomon & Jones, 2016) These elements, paired with efficient leadership style and knowledge sharing can positively affect financial turnover, i.e enhance profitability of the practice. (Cakir & Adiguzel, 2020). Existing literature and research focus on general healthcare management, overlooking how leadership traits specifically affect profitability across various types of dental practices and locations. (Pan, Trakulmututa, & Youravong, 2020) A gap exists in understanding how leadership strategies can be uniquely tailored according to the requirements of diverse dental practices and how local economic and demographic factors affect these strategies. Research into how leadership affects profitability across both urban and rural clinical setups, and across diverse practices remains limited.



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### III. PURPOSE

The scoping review aims to investigate the relationship between leadership characteristics and profitability across dental practices. Identifying effective leadership traits across various kinds of dental practices [e.g., general practice, specialty practice, solo and group practices] in enhancing operational efficiency and financial outcomes. Additionally, exploring the influence of geographic location of a practice, urban or rural, and type insurance acceptance on profitability.

The research question in focus is: How do leadership characteristics across various dental practices and locations impact profitability and operational efficiency?

The review aims to investigate the relationship between leadership characteristics and profitability across different kinds of dental practices. Examining how leadership traits affect operational efficiency, patient and staff satisfaction, and financial outcomes within various types of dental practices (e.g., general practice, specialty practice, solo and group practices). Explore the impact of geographic location (urban vs. rural) and insurance models (e.g., DHMO, DPPO, dental discount plans) on the profitability of the clinic. Moreover, the review also attempts to address existing literature gaps, on how leadership strategies can be tailored specifically catering to the needs of various dental practice types and locations.

Addressing the gap in existing literature regarding the impact of leadership characteristics on the profitability of dental practices, the review will provide pragmatic solutions to address major operational challenges such as, patient satisfaction, staff retention, regulatory compliance, and operational deficiencies. (Hanks et al., 2020) Providing applicative insights for dentists, dental practice owners, managers, and healthcare management experts. The results and findings will enable dental practitioners, faculty and students to adopt and strategize leadership based on the practice type and location, ultimately leading to better financial outputs and industrial practices. Further informing policy decisions and training initiatives to elevate the standards and profitability of dental practices. (Muhammad et al., 2024)

### IV. METHODS

This review is based on the guidelines provided by Arksey and O'Malley and Levac et al. In 2005 to chart the published literature on the relationship between leadership characteristics and profitability in dental practices. (Arksey & O'Malley, 2005)

#### *Search Strategy*

The search will be strategized to capture all relevant literature on leadership in dental practices, particularly focusing on profitability and operational efficiency. The search includes multiple databases, ensuring wide coverage.

#### *Databases:*

##### *1. Science Direct*

("leadership" OR "management") AND ("profitability" OR "financial outcomes") AND ("dental practice" OR "dentistry" OR "dental clinic") AND ("efficiency" OR "productivity" )

The three mentioned databased utilize the same search terms

1. Biomed Central
2. PubMed
3. Wiley Online Library- limited to journals

("leadership" OR "leadership style" OR "leadership characteristics" OR "management" OR "healthcare leadership") AND ("profitability" OR "financial performance" OR "economic impact" OR "revenue" OR "financial success" OR "business growth" OR "clinic revenue") AND ("dentistry" OR "dental practice" OR "dental clinic" OR "dental professionals" OR "oral healthcare") AND ("efficiency" OR "practice management" OR "operational success" OR "productivity" OR "workforce optimization") AND ("urban" OR "rural" OR "geographic location" OR "healthcare access")

##### *2. Inclusion Criteria*

The following were included in this review:

- Studies highlighting the role of leadership approaches in a dental practice, including both general and specialty practices.
- Research discussing the relationship between leadership traits and profitability, financial outcomes, or operational efficiency in dental clinics.
- Studies including solo, group, and multi-location practices.
- Studies that address geographic location (urban vs. rural) and insurance and their effects on the clinic's profitability.



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- Review and research articles in English, published between 2015 and 2025.

### 3. *Exclusion Criteria*

The following were excluded from this review:

- Studies focusing solely on clinical treatment outcomes without any reference to leadership or financial outcomes.
- Non-peer-reviewed articles, including abstracts, discussions, opinion pieces, editorials, or non-dental related conference abstracts.
- Articles published before 2015 and those outside the dental/healthcare area.
- Studies lacking central focus on leadership.

### 4. *Study Selection Criteria*

Studies were selected based on their availability on databases and relevance to the topic. Major research focused on ocused on review and research articles.

### 5. *Data Extraction*

Data will be extracted, ensuring consistency and relevance of collected information across all databases and studies.

Practice type: General practice, specialty practice, solo practice, or group practice

Leadership Style: Transformational leadership, transactional leadership, and others

Noteworthy Outcomes: Impact on operational efficiency, patient retention, staff satisfaction, and financial outcomes.  
Geographic Location: Urban /rural Key Findings and Implications for dental practice management and leadership

### 6. *Data Analysis*

The data shall be analyzed, allowing to organize and summarize the results, answering the research question.

The analysis will be further subdivided into:

Leadership's impact on Profitability: How leadership affects operational outcomes such as financial outputs, staff satisfaction, and patient retention.

Type of practice and Leadership style: Various leadership styles and their effect across various types of dental practices, including general, specialty, solo, and group practices.

Location and Profitability: How location of a clinic (urban vs. rural) impacts the larger relationship between leadership style and profitability.

Insurance types: The role of different insurance models in shaping the financial outcomes of dental practices under leadership approach.



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V. RESULTS

Why	Where	When	Title	Authors	Year Published	Study aim
Failed patient attendance in a university dental clinic is detrimental to the student learning experience, the university as a business, and to members of the public awaiting urgent dental treatment.	Journal of Dental Education (JDE)  AUS	2015 to 2019.	Laura Jade White MDent, Kate Ellise Butler-Howell MDent, Naomie Nadon-Hoysted MDent, Madeleine Carly Schulz MDent, Jeroen Kroon PhD	Dec 2020		This study aimed to identify the demographic, appointment characteristics, and time-related factors associated with patient attendance in a university dental clinic.



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<p>To review leadership for dentists in patient facing, primary care dental practice. Leadership is embedded in regulatory guidance and standards relating to general dental practice. It is therefore crucial to have an evidenced based understanding of what leadership means in this context, and what further work is necessary to support clinicians in the leadership domain.</p>	<p>UK</p>		<p>Leadership in Dental Practice: a Three Stage Systematic Review and Narrative Synthesis</p>	<p>Sally Hanks, Debby Cotton, Lucy Spowart</p>	<p>November 2020</p>	<p>The overarching trend is from leaders to leadership; with no unified definition, model, theory, concept nor aim recognised. The fundamental importance of specific context and the reaction of others to leadership is reinforced. Leadership theories aligned to healthcare include Engaging, Authentic, Collective and the Transformational-Transactional continuum.</p> <p>Leadership is a dynamic, socially constructed process, only occurring in a group setting. Consisting of multiple moderating variables that demonstrate reciprocal influence on one another, these influences are neither equal nor stable.</p>
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<p>Although diverse methodologies provide valuable quantitative wisdom, their application is often misaligned with broader economic theories or healthcare purposes, limiting their contribution to advancing theoretical and practical understanding of efficiency and productivity in healthcare systems. In this respect, the current study endeavors to bridge the research gap concerning the lack of a comprehensive overview of productivity measurements in the healthcare sector.</p>		<p>2003 and 2023</p>	<p>Measuring productivity in the healthcare sector: a bibliometric and content analysis</p>	<p>Ionela-Andreea Puiu &amp; Abigaela Bîlbîie</p>	<p>March 2025</p>	<p>The study aims to raise awareness that future efforts should prioritize multidimensional and context-sensitive approaches to measuring healthcare productivity, balancing efficiency, technological progress, and quality of care.</p>
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As technology and the industry continue to evolve at a rapid pace, service organizations and solo practices alike are turning to these advancements to make practice operations more efficient.	USA		Corus Orthodontists: An OSO for changing times	Dr. Paul Helpard	2022	Aims to create an alternative OSO model focused on nurturing and empowering the next generation of orthodontists to advance the specialty and focus on patient care
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Dental educators and leaders need to understand the impact of these trends in the practice environment in order to both prepare graduates for practice and make decisions about planning for the workforce of the future.	USA		Practice Location Characteristics of Non-Traditional Dental Practices	Eric S Solomon, Daniel L Jones	April 2016	The aim of this study was to compare the location characteristics of non-traditional practices and traditional dental practices. After identifying non-traditional practices across the United States, the authors located those practices and traditional dental practices geographically by zip code.
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<p>This article explores effective strategies for increasing dental practice production in the face of current industry demands. It highlights the importance of implementing foundational practice management systems to enhance performance and profitability.</p>			<p>Practical Strategies to Increase Dental Practice Production</p>	<p>Roger P Levin</p>	<p>Jan 2025</p>	<p>By recognizing opportunities that are within their control, dentists can increase production and profitability over time, leading to greater financial stability and independence even in a difficult economic environment.</p>
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<p>Periodontists perceive the need to expand services, increase the number of providers in their practices or create group practices to account for increased corporate dentistry, graduate debt, digitalization, and volume of periodontal procedures performed by GPs.</p>	<p>USA</p>		<p>Virginia-based periodontists' perceptions: Current and future trends of the specialty</p>	<p>John H. White, Caroline K. Carrico, Sharon K. Lanning, Thomas C. Waldrop, Robert Sabatini, Christopher R. Richardson, Janina Golob Deeb</p>	<p>July 2019</p>	<p>The aim of this survey was threefold: (1) describe the demographics of periodontists and their practices in Virginia; (2) explore periodontists' perceptions of the impact that changes in the field of dentistry (i.e. increasing corporate dentistry, graduate debt, digitalization, and volume of periodontal procedures done by general practitioners [GPs]) are having on the specialty; (3) explore how periodontists might adjust their practices to account for these trends.</p>
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<p>They explore an alternative model of practice that may be possible in the next 10 years to better serve patients and improve outcomes while honoring the role of practitioners.</p>	<p>Globally</p>	<p>2016</p>	<p>Commentary on an Innovative Interprofessional Dental Practice for 2026</p>	<p>Brad Guyton, Jan LeBeau, Rebecca Sorci, Amy Doneen</p>	<p>June 2016</p>	<p>An innovative interprofessional model is described for the delivery of dental care in the year 2026 to optimize efficiency and profitability while enhancing quality of care.</p>
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<p>Research examining productivity, quality, and outcomes of traditional pediatric dental care are generally lacking. The literature shows that education, qualifications, and roles are changing with case examples of success, but what these changes portend for patient care remains an open question. New dental team configurations show promise to improve oral health literacy and access to pediatric dental care. However, some workforce innovations are currently geographically restricted to a few areas</p>	<p>USA</p>		<p>Pediatric Workforce Issues</p>	<p>Elizabeth Mertz PhD, MA,          Joanne Spetz PhD,          Jean Moore DrPH, MSN</p>	<p>July 2017</p>	<p>This study reviews journal publications, reports, and issue briefs regarding evidence-based approaches to enhancing the workforce available to address children’s oral health. The article organizes the findings into (1) new models in the dental field, including existing and new providers; and (2) workforce models outside the dental field.<sup>3</sup> Interdisciplinary models constitute a growing area of innovation in workforce configurations.</p>
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<p>Our authors are all experts in the emerging orthodontic marketplace and offer their perspective on what has become the business of orthodontics. Special emphasis will be given to the “elephant in the room,” the entry of corporate dentistry on what was once the domain of the sole practitioner.</p>	USA		<p>Changing times, changing paradigms: Emerging trends in orthodontic practice opportunities</p>	Eric J. Ploumis	March 2022	<p>More than ever before, the topic “Changing Times, Changing Paradigms” is an apt metaphor for the state of our profession. This article explores some of these changing paradigms.</p>
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<p>In spite of the need, there are very few published studies on dental leadership. Therefore, the current study aimed: (i) to describe the leadership style and level of dentists who are the heads of dental departments in community hospitals in southern Thailand; and (ii) to evaluate the factors influencing their leadership levels. The results of this study should provide suggestions for leadership development of these dentists.</p>	Thailand	November 2016 to February 2017.	Self-perception of leadership style of dentists: heads of dental departments in community hospitals, Southern Thailand	Temsiri Por Pan, Jutamaneek Trakulmututa, Nattaporn Youravong	June 2020	The aims of this analytical cross-sectional study were to evaluate the self-reported leadership behaviours and the factors influencing leadership behaviors among dentists who were heads of dental departments in community hospitals, southern Thailand.
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Study Title	Authors	Country	Practice Type	Leadership Style	Key Findings
Impact of demographics on patient attendance	White et al., 2020	Australia	University Clinic	Not Specified	Demographics affect on attendance and learning outcomes.
Leadership in Dental Practice	Hanks et al., 2020	UK	General Dental Practice	Engaging, Authentic, Transformational	Leadership is context-driven and socially constructed.
Corus Orthodontists: An OSO for changing times	Helpard, 2022	USA	Group Orthodontics	Empowering	Empowering leadership helps navigate modern challenges.

Practice Location Characteristics	Solomon & Jones, 2016	USA	Non-traditional/Traditional	Not Specified	Urban vs rural dynamics , comparison of practice types.
Practical Strategies to Increase Production	Levin, 2025	USA	General Practice	Strategic Practice Management	Strategic planning boosts production and profitability.
Virginia-based periodontists' perceptions	White et al., 2019	USA	Specialty (Periodontics)	Adaptive	Adaptations needed to face industry changes.
Innovative Interprofessional Dental Practice 2026	Guyton et al., 2016	Global	Interprofessional	Collaborative	New models enhance care quality and efficiency.
Pediatric Workforce Issues	Mertz et al., 2017	USA	Pediatric Dentistry	Innovative	Workforce innovation improves access to pediatric care.
Changing paradigms in orthodontic practice	Ploumis, 2022	USA	Orthodontics	Strategic Business	Market changes challenge traditional solo practices.
Self-perception of leadership style	Pan et al., 2020	Thailand	Community Hospitals	Transformational	Leadership linked to operational success in community settings.



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