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Leadership in Dental Practice: a Three Stage Systematic Review and Narrative Synthesis

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Title: Leadership in Dental Practice: a Three Stage Systematic Review and Narrative Synthesis.

Abstract

Objectives

To review leadership for dentists in patient facing, primary care dental practice.

Methods

A three stage systematic review with narrative synthesis:

1. A scoping overview - management and leadership policy context.
2. A systematic review of reviews of leadership in healthcare.
3. A systematic focused review of leadership in patient-facing dental practice.

Results

The healthcare literature mirrors the generic literature in relation to the temporal evolution of leadership theories. Policy papers influence healthcare literature, though these are generally written by independent bodies, link solely to medical publications, and are often commissioned from the grand strategic level thereby grounding them in a politicised system. The healthcare leadership literature offers few studies at the operational (patient care) level of leadership, with none of these focused explicitly on dentistry and dental practice.

Numerous aims, definitions, models, conceptualisations, and links to theories of leadership are reported. The stage 1 literature demonstrates more contemporaneous ideas of leadership, while the dental practice literature is too often grounded in outdated concepts and theories.

Conclusions

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.

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. (246 words)

Clinical significance.

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. (43 words)

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Introduction

Leadership has received an increased profile of importance in healthcare in recent years; espoused as one of the major influences on patient safety, quality of clinical care and the shaping of healthcare culture in our society. [1-4] Reports into a number of high profile cases of inadequate patient care in the UK identified failings in leaders and leadership that may have been responsible for these negative outcomes. [5,6] An upsurge in focus on leadership in healthcare policy and guidance followed [7-9]; the NHS developed its own leadership academy; and regulators mandated leadership in their training, education and inspection protocols. [3, 10-13] During events such as the recent covid-19 pandemic, effective leadership is reported to be needed more than ever, as we face new and difficult challenges, across healthcare professions and across the globe.

Over the last decade, leadership has become an important domain of learning in dentistry. The General Dental Council (GDC) registers and regulates all dental professionals in the UK and sets out legally binding standards of practice. They include the requirement that "*management and leadership should be embedded in training from the outset of their [dental registrants'] career*". [12 p12] The Association of Dental Education in Europe (ADEE) developed outcomes expected of a pan-European graduating clinician that include management and leadership. [14] Likewise, the Australian Dental Association published 'Professional competencies of the newly qualified dentist' [15] that embed leadership, linking to the Australian Health LEADS framework; [16] and the American Dental Association collaborated with dental leadership organisations to create a leadership education framework and toolkit. [17] However, despite widespread enthusiasm, there remains a paucity of information relating to a clear definition, theoretical model, aim or concept of leadership;

making operationalisation in educational, development or training contexts highly problematic.

Theoretical underpinnings

Leadership is reported to be a *"fluid, dynamic, socially constructed and mediated concept…. [whose] meaning changes over time and between cultures*". [18 p896] Literature includes a myriad of definitions, based on almost as wide a variety of underpinning foundations, and has been defined *"in terms of traits, behaviors, influence, interaction patterns, role relationships, and occupation of an administrative position*". 19 [p24] Multiple models and theories exist which have evolved over time. They are often related to the most popular theory of leadership at the time of development; the political and social situation; or the researchers' own prior work. [19-22] This trend is depicted in figure 1.

[Figure 1 near here]

This temporal transition has not been a smooth or linear process, nor has the development of one theory necessarily negated the previous ones. The general trend is from leaders being 'born not made' via inherited traits of greatness [23,24] to the current prevailing view that everyone in an organisation shares the duties of leadership, subscribes to the vision and takes a fair share of responsibility, that is, leaders are 'made not born'. [4, 25-28] In short, the trend is from leaders to leadership.

Aims and Objectives

The aim of this review was to inform a PhD exploring leadership at the patient care and primary care dental practice level, in order to support authentic dental education. The narrative methodology, combining robust approaches from the social, natural and biomedical sciences, provides the scaffold that draws together disparate literature in a meaningful way. [29, 30] This review focused on UK governance frameworks and policy because the

subsequent work was being completed within the UK, but the outcomes may be transferable to clinicians in various contexts. The search methodology can be developed easily to refine the inclusion and exclusion criteria relevant to the context of work being undertaken. Through this it will be possible to recognise if, how, or where, political, governance or profession level literature influences leadership at the patient-facing level. The results demonstrate relevance to clinicians in all areas of practice, clinical educators, trainers and researchers across the spectrum of specialties and crossing geo-political boundaries.

The questions the review addresses are:

- What is already known about and understood by the terms 'management and leadership' in healthcare?
- Are the terms 'management and leadership' conceptualised in a relevant way for the dental setting?
- Are any accepted leadership styles, theories, skills, traits or behaviours deemed necessary to enable dentists to provide effective clinical care for their patients in primary care practice?

Narrative synthesis as a form of storytelling is a highly appropriate method to collate disparate and large volumes of information from across a wide range of sources and types of literature. [29,30] Systematic searching and analysis of this heterogeneous literature, permits conclusions to be drawn from across dissimilar study types, research methods, outcome measures, modes of analysis and types of data. The results of the combined synthesis across all stages thus define the current understanding of leadership and its relevance to the primary care dental practice setting.

The aim of this paper is to describe an effective and reproducible method of exploring the leadership literature, and to clarify the current understanding of leadership in dental practice.

Methods

Owing to the quantity, diversity and breadth of the literature on leadership, the review comprised three stages.

1. A scoping overview of management and leadership policy context.
2. A systematic search for a review of reviews of leadership in healthcare.
3. A systematic search for a focused review of leadership in dental or relevant primary care, patient-facing practice.

A systematic search methodology ensured appropriate sensitivity and specificity when capturing the available literature, and papers from all three stages were reviewed as a single body of literature. Searches were completed on 22nd January 2019.

Stage 1 was a scoping exercise incorporating overarching, commonly cited literature on management and leadership in organisations that influence the UK sector, as well as aspects of the more policy driven grey literature in healthcare. Some of this relates to NHS and organisational governance in general, rather than clinical practice in particular. The NHS has been the major influence for healthcare development including dentistry, and continues to have a profound impact on the entire healthcare environment. It is a unique UK institution and distinctive from governance processes in other countries. It was therefore important to include this literature as it may influence the operationalisation of leadership in this context. Table 1 details the 22 documents retrieved though this initial scoping website search.

[Table 1 near here]

Stage 2 was a review of reviews of leadership in healthcare; more specifically describing the current academic ideas of leadership in clinical healthcare settings. The inclusion of this

field gives context to the healthcare setting where patient-oriented outcome measures are often influential in addition to consumer, organisation or employee outcomes.

Stage 3 related specifically to leadership in primary care clinical practice centring on dental practice. The healthcare setting and the clinician emphasis enhances the relevance of the search findings to dental practice. Studies that related to leadership qualities in clinical care practices of other front line clinical staff were included where they utilised a conceptual rather than governance angle, to enhance the relevance of the review findings.

For stages 2 and 3, nine databases were searched: Medline (EBSCO), British Education Index (EBSCO), Dentistry and Oral Sciences Source (EBSCO), PsychInfo (ProQuest), Excerpta Medica Database (Embase), Jstor, Business Source Complete (EBSCO), Health Management Information Consortium (HMIC), Cumulative Index of Nursing and Allied Health Literature (CINAHL) (EBSCO). They were identified to provide wide coverage across the fields of leadership in business, healthcare and medical education. [31,32] Searches were conducted using Boolean operators and notations appropriate for the specific database as described below in table 2, and using the SPICE framework eligibility criteria in table 3.

[Table 2 & 3 near here]

Search strategies were conducted in line with guidelines and best practice [31,32] and studies were assessed for eligibility for inclusion through the lead researcher in liaison with members of the research team. This was continued throughout the process to minimise the possibility of single researcher influence over the review, and to enhance transparency. Table 4 depicts the inclusion and exclusion criteria.

[Table 4 near here]

The PRISMA diagram details the search strategies of stages 2 and 3 and is depicted in figure 2.

[Figure 2 near here]

630 records were retrieved across the two searches and 151 articles remained after duplicates and SPICE frameworks were applied to the abstract and titles. These full texts were studied against the specific inclusion and exclusion eligibility criteria in table 4. 53 studies were then included across these two stages.

The literature on leadership in healthcare has developed greatly within the last 15 years with multiple organisations seeking to enhance the profile of leadership since 2010. Stage 2 and 3 searches were therefore limited to the last 12 years. Ancestry searching of the included studies was undertaken to identify any additional potentially relevant publications. [32] Duplicates from this process were not included for a second time. Only two papers appeared in more than one stage of the review and each of these was considered once only. 73 works were therefore included in the final complete review.

22 from stage 1 – the policy review context

33 from stage 2 – the review of reviews in healthcare

18 from stage 3 – the focused review in dental practice.

Quality Assessment Rating (QAR) and Post Sensitivity Analysis.

All studies underwent a QAR to inform a post sensitivity analysis where the impact of removing the lower quality studies from the analysis was explored. [34] There is currently no single accepted method for quality assuring such a wide range of publications and web resources. CASP tools (http://www.casp-uk.net/casp-tools-checklists) were used for quality assurance of systematic reviews and studies employing qualitative methods while the Cochrane risk of bias tool (http://methods.cochrane.org/bias/assessing-risk-bias-included-studies)

(covering bias in the areas of selection; performance; detection; attrition; reporting; other) was utilised for other types of study.

All studies from stages 2 and 3 of the review were given a final quality rating of low, medium or high. For the CASP literature review, question 6 was not included as this is a description of the results and forms part of the overall synthesis. Therefore the CASP rating for systematic reviews was out of 9, the rating for qualitative studies was out of 10. CASP ratings of 0-3 resulted in a low quality rating; 4-6 medium; 7-10 high.

The Cochrane Risk of Bias (RoB) gave results of Yes (Y), No (N) or can't tell (CT) across 5 areas. A low rating was awarded for 0-2 N & 3-5 Y; medium for 0-2 N & 2 or fewer Y; high for a minimum of 3 N and 0 Y.

Due to the nature of the policy review documents in stage 1 of the literature it was not possible to rate them all and so the impact of removing all the works reviewed within stage 1, the overview of policy context, was also considered.

There were ultimately 15 low quality studies identified, equivalent to 29% of the second and third stage corpus. By disregarding the entirety of the first stage of the review along with the low quality studies, just 36 papers were considered of the total 73 (49% of the original corpus) in the post review analysis. This had a significant effect on citations by removing some publications entirely; including all but one of the government and policy context reports. There was no significant impact on the spread of citations across the years covered by the review, however, with included papers from 2008 to 2018 inclusive. Links to compassionate, engaging, and trait theories of leadership were removed but links remained to authentic or congruent leadership theory. It is interesting to note that while engaging leadership is the main theory espoused within the overview of policy context literature, it has not yet emerged in the more academic literature in healthcare. It is also interesting to note

that policy does not appear to be based on evidence from the peer-reviewed literature, and relies heavily on findings from independently commissioned reports. Post sensitivity analysis reinforced the outcome that there is a dearth of evidence at most levels of leadership, and that the majority of evidence comes from the organisational or strategic level – that is, it is considered at the management level of a hospital, and not at the clinical or operational (patient facing) level. The only significant impact of the post synthesis analysis related to the aim of leadership by removing the paper that stated explicitly that leadership is needed at and across all levels of an organisation whether the aims are shared or different. [35]

Overall the post sensitivity analysis had little impact on the results of this full review and will not be considered further. Results below are from the review of the full dataset.

Results

Data were extracted and analysed with respect to citation; document or study type; leadership level, aim, concept and explicit link to recognised theories or models (detailed in Appendix 1).

Policy context of leadership.

A number of bodies that are influential in terms of setting the context for leadership in dentistry have publications included in stage one of this review. These organisations have published multiple documents over the last 15 years in the pursuit of 'professionalising' leadership within healthcare. Many of their publications have been commissioned or written by other independent bodies, who have their own agendas and consider leadership within the NHS only. They are rarely independent pieces of academic research and a 2015 FMLM literature review found "*relatively little research conducted to a high academic standard*". [2 p10] Nonetheless, this work is influential in healthcare and training even if it demonstrates variable academic quality.

Although purporting to relate to dentists as well as doctors, all of the documents in stage 1 were mapped solely to General Medical Council (GMC) publications and used competencies, situations, case studies and criteria specifically related to medical practice. There was no mention of 'dental' or 'dentist' in any of the publications. Assessment methods and techniques had been informed by reviews of medical literature, attitudinal studies and critical analysis of medical curricula; there was no direct observation or ethnography to confirm, clarify or operationalise them and there was no evidence that they have any direct link to dentistry either within or outside the NHS setting. The majority of these publications concentrated on leadership within the NHS framework in a secondary care hospital setting at an organisational (strategic) level.

The underpinning leadership models or theories they linked to, come from a wide range of sources themselves, many of which are not from the peer reviewed literature, nor do they have published peer-reviewed evidence bases on which they have been developed. The policy context derived from stage 1 has infiltrated into healthcare more generically and informed some of the more specific literature included in stages 2 and 3, both implicitly and explicitly. [35-42] This promulgates policy context based ideas, with their grounding in a politicised system, into the healthcare specific literature.

Defining leadership.

There are multiple and varied definitions of leadership – in fact at least 350,000 within the academic literature. [43] The 'Leadership and Better Patient Management in the NHS' document states that: "*leadership is better explained as a process or series of processes of interaction rather than the presumption that it consists of observable and measurable characteristics".* [43 p24] Within this review a definition of leadership was provided in only 12 of the 73 papers.

Leadership was defined as:

- A social or influence process occurring in a group [2,37,44-48]
- An ability, art or skill that leads to goal attainment [49-52]
- A regulatory, problem solving process that infers sustainability (dependability and predictability) [53]

Only one paper provided a specific definition of **clinical** leadership in general dental practice where it was defined as, "*the skills required to provide effective patient care within a successful business*". [42 p255] A literature review specifically about clinical leadership in healthcare reported that there is no standard definition of clinical leadership, but that the clinical component relates to "*anyone with a clinical patient role"*. [35 p4] They defined clinical leadership as a social process for goal attainment or an influence process with or without an end-point or aim. Clinical leadership in other studies tended to allude mainly to those in management roles who were trained clinicians, whether or not they continued to perform clinical duties.

In line with the generic literature, these 12 studies found no common ground where a definition was concerned. Nor did any of the studies attempt to operationalise leadership. The FMLM confirm "*there is no best way to develop leaders; good leader development is context sensitive"* [2, p18] and that there is no single best method of leadership. Contextual factors that support a successful strategy in one situation may render them totally ineffective in another. [37]

The contemporaneous definition of leadership is therefore reinforced as a context dependent, multifaceted process containing several interacting areas that influence one another in a variety of ways. Interactions and influences are reciprocal but not necessarily equal or stable.

Considering leadership levels.

Organisational and leadership levels are a method of classifying a strategic hierarchy that leadership may be related to, investigated at, or conceptualised by, within an organisation or business. Such classification identifies this specific contextual element to leadership, and is defined at five levels: individual, dyadic (tactical/relational), team (unit/operational), organisation (strategic), systems (grand strategic/political). [2,40,42,54-56] Across the papers in this review leadership levels were used to define job roles and hierarchical structures; and demonstrate the level at which individuals are making decisions and plans, and thus the impact of those decisions. Figure 3 depicts how the organisational and leadership levels relate to one another, to the secondary care, hospital setting and to primary care dental practice environments.

[Figure 3 near here]

Table 5 depicts the spread of these levels within the included papers of this review. Numbers in this and the following tables refer to the paper's position in the systematic process (Appendix 1): 1-22 are stage 1 (the scoping policy review), 23-55 stage 2 (review of reviews in healthcare), and 56-73 stage 3 (the focused clinical patient facing review). Of the reviewed papers, 26 neither stated nor implied which organisational or leadership level they were situated in or referring to.

[Table 5 near here]

20 of the reviewed works make explicit links to leadership at the organisational level; that is the leadership level for an entire hospital or dental practice (see figure 3). 15 related leadership to the individual qualities of the clinician, independent of role, function or context and 11 explicitly stated that they were relating their findings to all levels. There were only three that claimed to investigate leadership at the clinical practice, patient facing operational

level, and none of these were found in part 3 of the review with the direct link to dental practice. Therefore, none of the reviewed literature is related directly to leadership in dentists in their clinical role in a patient care, practice setting. This is a clear gap in the literature at present.

There were also no studies at the tactical level concerning relationships, and yet relationships are likely to play a significant role in any patient-facing situation. It is interesting to note that there were only two studies at the grand strategic political systems level where policy is created (national or local government roles) and many more at organisational level where the policies are put into practice. Many of the reports aimed at organisational level leadership, however, were commissioned at grand strategic level. This may influence the reporting or operationalising of outcomes in some way as there may be a pre-determined political agenda in what is commissioned and how. This section highlights the relevance of including the UK based policy and grey literature to this review; and that widening or changing the geo-political slant of the inclusion criteria may be useful in other contexts when studying these phenomena.

Reviewing competency frameworks.

While competency frameworks remain popular, it has been recognised that the "*competency approach…..only reflects a fragment of the complexity that is leadership*" [91 p147] and ticking the competency box is insufficient to support effective leadership. [21,25,37] Although deemed insufficient in current leadership literature, competency frameworks for leadership remain popular within the NHS, with new iterations being compiled on a regular basis, from the original Medical Competency Leadership Framework (MCLF) [74] to the more recent, "Developing People – Improving Care. A national framework for action on improvement and leadership development in NHS-funded services". [4] Throughout the

documents in this review there are a number of competency-based models of leadership. [4,54,72-75,92] Many others also suggest that leadership requires merely a specific set of skills or abilities. [37,41,42,49,56,59,60,68,82,86,93] The competencies reported to be required are many and varied and include: problem solving and decision making, creating and communicating a vision, remaining calm under pressure, being creative, being experienced and competent, and being supportive and empathetic. Thus, while multiple diverse competencies are related to leadership, there remains no clear consensus across authors or contexts. Neither is there evidence to show that demonstration of such competencies alone is sufficient to be successful at leadership.

Models and theories of leadership.

Out of the 73 papers in this review, 23 made no explicit links to an existing theory or model of leadership. Of the remaining 50, no one single theory or model was used consistently, and some papers continue to refer to leaders rather than leadership, and to rely on or use outdated trait and/or competency based models.

Table 6 summarises the range of theories linked across the three stages of this review.

[Table 6 near here]

The medical literature mirrors the generic literature regarding the generally accepted temporal course of ideas on leadership models and theories depicted in figure 1. [2,40,43,57] Gender issues remain prevalent in healthcare leadership conversations and trait theories are still referred to in studies from stage 3 of this review. [37,52,68] This ‘old-fashioned’ way of thinking about leadership, and the concern that it is still being used within the time-frame of this review, may exert a negative influence on the behaviour of individuals within such professions.

Despite being outdated, there are still many models and theories described throughout the papers in this review that are based on behavioural concepts. The 2010 Health Foundation report for example utilises the Indicators of Quality Leadership© framework (IQL©) to identify and rank 120 leadership behaviours; [57] and in 2016 the FMLM published their latest 'Leadership and management standards for medical professionals (2nd edition)' detailing 48 effective leadership behaviours under seven sub headings allegedly suitable "*across all career levels*". [3 p1]

The most frequently cited behavioural model across this literature is transactional leadership. This may be because it is a relatively simple concept to align with policy, and use for training. The more recent literature in this review departs from behavioural, transactional theories towards transformational leadership or a combination of the two differing approaches. [36,43,47,72,79,85,87] Transformational theory is popular within healthcare in this review and considered the most influential theory guiding healthcare leadership in recent times. [2] Within the NHS, this may be linked to the need to keep staff engaged and aligned despite funding shortfalls. [94, 95]

A newer relational theory, shared or collective leadership, is also recognised across papers in this review. To engage people throughout an organisation in decision-making processes and link their individual objectives to organisational goals, collective or shared leadership spreads the leadership positions throughout and across an organisation. [65, 80] This ensures everyone takes responsibility for the success of the whole organisation, not just of their own role. Such leadership retains a formal hierarchy, but the leadership at any moment is dependent on the situation, with power being situationally dependent on who has the expertise at each moment, for each task. [9] These relational theories start to take into account followership [90, 96, 97] where the perspective of both leader and follower, as well as their relationship, will potentially influence the success or otherwise of a shared leadership

system. [7, 9, 26, 50, 60, 61, 92, 97, 98] Collective and transformational leadership theories have been reported as the keys to unlock and generate cultural change in the NHS. [9, 43]

Engaging leadership is a popular theory within stage one publications [4, 7, 36, 57, 65] where it is promoted as the answer to running a successful organisation and demonstrating effective leadership in today's diverse, inclusive, competitive and ever-changing society. However, as with the critique of relational theories in general, 'followers' need to be engaged for success to be achieved. In addition to engaging leadership, compassionate leadership is being recognised increasingly as vital in today's NHS. Defined by the King's Fund on their website: "*compassionate leadership means paying close attention to all staff and really understanding the situations they face. Then responding empathetically and taking thoughtful and appropriate action to help*". Compassionate leadership is said to underpin an inclusive culture that delivers quality and efficiency improvements quickly, while taking care of staff and the organisation itself. This is in addition to being akin to compassionate patient care. [41] The King's Fund report 'Caring to change' [55] makes great claims about how this theory of leadership is fundamental to the NHS. It incorporates elements of relational theories and reinforces the importance of 'crossing boundaries'. Although the 2016 NHS Improvement policy report is based on this theory, it is not widely found in the literature outside of the King's Fund publication, and is only mentioned in one further paper found in this review [41] whose author also reviewed the King's Fund paper.

Like compassionate leadership, engaging leadership is linked less explicitly with the more academic and operational health care literature. [86] This may be in part attributed to the time-lag inherent in operationalising academic research. A different view might be that there was need for a 'quick fix' in the NHS, so that ideas and policies were developed within very short time spans to suit the pressing social and political agendas of the time, rather than waiting for the outcomes and publications of peer reviewed academic work.

Emotional Intelligence (EI) has been linked to relational theories of leadership and as an underlying component of transformational leadership in particular. [44, 45, 88] In healthcare a patient is rarely predictable, often highly animated, and adds an additional level of complexity into the picture –meaning the clinician has to manage their own emotions while responding to the emotions of others. The 2011 NIHR publication 'Leadership and Better Patient Care: Managing in the NHS' devotes an entire section to emotion and the need for emotional intelligence in healthcare work. [43 p27-33] These and other authors describe the issue of 'emotional labour' where individuals are required to manage their own emotions (emotional regulation) while concurrently portraying a specific, non-emotional reaction to their clients or patients as 'part of their job'. [43, 84]

Emotional intelligence, emotional regulation and emotional labour are complex areas of theory, but in today's ever changing, competitive and unpredictable society, "*emotional regulation is …. associated with effective and good leadership and is essential in relation to how people deal with negative emotions in order to reduce potentially adverse outcomes*". [84 p287] Individuals cannot perform emotional regulation efficiently if they do not possess EI, although it is a complex area to study and is not an explicit inclusion in much of the academic healthcare literature. [45, 88]

Authentic leadership combines the relational theories with EI to re-consider the importance of the individual inhabiting the leadership role. Authentic leadership is not always about managing change or working to a goal, but "*it is about where the leader stands, not where they are going*". [99 p522] Authentic leadership purports that those in leadership roles need to embed a positive moral perspective and develop psychological capital to enhance their self-awareness and self-regulation, enable relational authenticity and their ongoing adaptation for positive self-development of themselves and others. [48, 100-106] Authentic leadership theory supports a shared leadership system and not only integrates ideas from the relational

theories with EI, but embeds the more recent idea of the need for crossing boundaries. [55, 107] This supports development of a positive organisational culture where all are working together, regardless of role, level or perceived hierarchy, creating an environment where all feel empowered and valued to optimise performance. Authentic leadership is critiqued as being subject to all the risks of the dark side of trait theories, [26, 108] of not being gender neutral due to the deeply embedded traditional historical and cultural male dominance of leadership [101, 104] and of the need to be more conscious of the importance of followership and response to leadership. [96, 97] Authentic leadership is reported as one of the most useful of all theories to relate to healthcare leadership [48] where leadership and clinical care values and beliefs are seen to be reflected in one another and shared as authentic values of the individual. [101, 109] Individuals demonstrating authentic leadership communicate honestly and openly to achieve positive outcomes for staff, patients and the organisation [48] through their consideration for and of the individual 'follower' enabling them to "*assess their moves and satisfy their needs*". [43 p24] Authentic leadership supports the development of leadership being the focus over the individual leader, and where leadership is about performing activities while also being effective and inhabiting the role of leader in an authentic manner. It is the most up to date theory connected explicitly to today's healthcare environment in this review and also linked to both emotional intelligence and transformational leadership theories. [2, 48, 50, 60, 73, 108, 111]

Across the three stages of the review, transformational and shared or collective theories were the most commonly linked. As can be seen, however, some of the more contemporary theories (including shared, engaging, and compassionate) still link mainly to stage 1 of the review: the overview of policy context, containing independently commissioned reports. Authentic leadership, the theory that aligns most closely with these, is mainly found in the academic healthcare literature of stage 2. The focused review of the primary care patient

facing setting retains its reliance on outdated ideas of leadership as well as the use of simplified competency frameworks.

Conceptualising leadership.

Beyond the theories used in different papers, concepts of leadership were expressed in varied ways. While much of the literature conceptualises leadership appropriately as a complex process, 43 of the 73 papers still used a simple binary dichotomy such as 'management versus leadership' and 'individual versus relational' context. In addition, many papers include behavioural, trait, skill or contextual/situational frameworks as their conceptual basis for discussing or investigating leadership, which oversimplifies its complex nature. As with the links to theory and models, there is no one single concept of leadership that underpins or aligns with the majority of the reviewed work.

The conceptualisation of 'management' and 'leadership', separately or conjoined, is itself challenging. Much literature suggests there is a distinct division between the two concepts: "*management is doing things right, leadership is doing the right thing*"; [103 p9] "*management is transactional, leadership is transformational*". [63 p5] In contrast, however, the two concepts are also often seen as inextricably interwoven and with various activities linked equally to both and all required. [61, 65, 78, 104]

Regardless of specific definition, concept, or alignment or otherwise with management, the agreed overarching understanding of leadership is as an abstract construct that is not observable directly; as a socially constructed process that needs other people ('followers'); and as a complex and dynamic activity that contains multiple interacting variables. It is dependent or 'contingent' on who an individual is, how they behave, and the context in which they work.

Aims of leadership.

Throughout the reviewed works there were multiple purported aims of leadership and 22 of the 73 papers reported no aim at all. Across the remaining 51 papers, aims of leadership included: to act as a change agent, to manage and deliver services, to create culture and articulate vision, and to maintain or improve the work place and team dynamic as well as enhance the quality of services for the benefit of patients. There is no single aim of leadership shared across the reviewed works, and many (33) of the papers documented multiple co-existing aims, all worthy goals, but with wide ranging and ambitious responsbilities for leadership to achieve. Many of the papers with multiple aims include development and support for the clinical environment and individuals, in addition to driving organisational change. [35, 69] Setting the tone and culture of an organisation is intertwined with resolving conflict, giving feedback and creating a non-judgemental learning environment for all. [39, 56, 79] Only one study [58] defined which levels of leadership were aligned with which aims. Where works did not differentiate the aim of leadership between or across specific organisational and/or leadership levels, it was described according to a variety of areas as relating to:

- People and managing talent [62, 66]
- The organisation as an entity to build a legacy of success in the system [53]
- Creating culture [67]
- Processes. To imagine, will and drive change, [43] actively support effective teamwork, [73] make a difference to the care delivery process [64, 81]
- Outcomes. To ensure quality care and healthy workplaces, [83] foster a healthy work environment & create inspiring relationships based on mutual trust, [45] influence well-being at work, [89] improve the quality of patient care, [57, 72]

drive service improvement and provide effective management of teams to deliver excellence in patient care. [58,70]

The review demonstrates that there is no shared agreement of the aim of leadership either within or across the three stages of literature reviewed.

Conclusions

This narrative review of the literature incorporating a three-stage search strategy has shown that there is no clear, single or agreed definition, aim or concept of leadership; nor one theory or model that is useful in every healthcare situation or eventuality. Leadership is espoused, however, as being the solution to a multitude of issues across healthcare systems, to have numerous and varied aims and to be needed at all levels. This is not mirrored in the more academic literature, neither is there evidence to operationalise leadership at each level. The shift from the importance of individual leaders to leadership processes does appear to be consistent but there are still many writers relying on outdated ideas and talking about 'leaders' within these reviews. [4, 35, 61, 63, 70, 71, 73]

While the policy context and system level standards and reports are laudable and welcomed, in-depth high quality studies are needed to substantiate their multitude of claims at the operational (team) and dyadic (tactical) levels. Empirical evidence is required to ensure that the quality of patient care, staff performance, organisational maintenance and improvement of healthcare overall can indeed be enhanced through such leadership practices.

Leadership is seen as a process that can be conceptualised in numerous ways, and consisting of multiple moderating variables and elements, all of which demonstrate reciprocal influence on one another to impact its effectiveness. It is a dynamic socially constructed process, which is only apparent in a group setting. The outcomes of this review reinforce the context dependence of leadership as part of a highly complex interactive social activity; but there is a

dearth of evidence available relating to specific contexts, or including complex analytical frameworks for such activity. There is a need to identify the overall aim(s) of leadership within the specific context in which it is being performed or studied. Many of the models and existing theories of leadership may well end up being useful in specific situations, however at this stage the evidence base is inconclusive about which might be useful where.

This review has highlighted the need to create a more academically rigorous evidence base for leadership for dentists in practice in particular and for clinicians in general. It has demonstrated clearly the geo-political systems level influence on healthcare, and provided a means to identify that influence across or within different contexts and for varying specialities. It has also confirmed the complex reciprocal nature of leadership and its need to consider not just the individual leader, but their relationships with, and the fundamental importance of, the reactions of those being led.

These findings can now be embedded into clinical and education practice, while acknowledging the need for additional, operational level empirical studies of leadership. The exploratory study informed by this review of leadership literature in the context of the general dental practitioner has begun to address this. The final results of which may also be generalisable to any clinician in a patient facing situation.

Finally, this narrative synthesis has described a review process including systematic and reproducible searching strategies that can be carried out by others to support the ongoing understanding and evidence base of leadership in the clinical context.

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Tables

Table 1. List of publications relating to management and leadership from stage 1: review of policy context.

Author	Month/Year	Publisher	Title
Darzi	2008	Department of Health	High Quality Clinical Care For All
NHS	2009	NHS Leadership Academy	Medical Leadership Competency Framework (MLCF)
GMC	2009	General Medical Council	Tomorrow's Doctors
Giordano	2010	King's Fund	Leadership needs of medical directors and clinical directors
Hardacre Cragg Shapiro Spurgeon Flanagan	January 2011	The Health Foundation	What's Leadership got to do with it?
King's Fund	2011	The King's Fund	The future of leadership and management in the NHS: no more heroes
Nicolson Rowland Lokman Fox Gabriel Heffernan Howorth Ilan-Clarke Smith	April 2011	National Institute for Health Research	Leadership and Better Patient Care: Managing in the NHS
Alimo-Metcalfe	2012	The King's Fund	Leadership and engagement for improvement in the NHS: Together we can
NHS	2012	NHS Leadership Academy	Clinical Leadership Competency Framework
GMC	2012	GMC	Leadership and management for all doctors
Francis	February 2013	The Stationery Office	Report of the Mid Staffordshire NHS Foundation Trust Public Inquiry
Storey Holti	June 2013	The Open University Business School	Towards a new model of leadership for the NHS
King's Fund	2013	The King's Fund	Patient-centred leadership: Rediscovering our purpose
NHS	2013	NHS Leadership Academy	Healthcare Leadership Model v1.0
West Eckert Steward Pasmore	May 2014	The King's Fund Center for Creative leadership (CCL©)	Developing collective leadership for health care
King's Fund	May 2014	The King's Fund	Culture and leadership in the NHS: The King's Fund 2014 survey
West Armit Loewenthal	2015	Faculty of Medical Leadership and	Leadership and Leadership Development in Health Care: The Evidence Base

Eckert West Lee		Management (FMLM)	
GMC	2015	GMC	Outcomes for Graduates
Sarah Massie	2015	The King's Fund	Talent management. Developing leadership not just leaders
FMLM	2016	Faculty of Medical Leadership and Management (FMLM)	Leadership and management Standards for Medical Professionals. 2nd Edition
NHS	December 2016	NHS Improvement	Developing People – Improving Care A national framework for action on improvement and leadership development in NHS-funded services
Michael West Regina Eckert Ben Collins Rachna Chowla	May 2017	The King's Fund	Caring to change. How compassionate leadership can stimulate innovation in health care

Table 2. Search terms, Boolean operators and limiters for stages 2 and 3 searches

Search terms and Boolean operators stage 2	Search terms and Boolean operators stage 3	Limiters
Leader* OR "management and leadership" (Title)	Leader* OR Leading OR "management and leadership" (Title)	2006-January 2019 Written in English Full text available
AND	AND	
review OR "literature review" OR synthesis OR "meta review" OR "meta synthesis" (Title)	Dent* (Abstract)	
AND		
Health* OR medi* OR doctor* OR clinic* OR dentist* OR dental OR nurs* OR patient* (abstract)		

Table 3. SPICE framework for systematic search of stages 2 and 3

	Stage 2	Stage 3
Setting	Healthcare or healthcare organisation	Clinical healthcare patient facing primary care practice.
Perspective	Studies identifying or evaluating or discussing management and/or leadership qualities.	Studies identifying or evaluating or discussing management and/or leadership qualities of dentists or other patient facing frontline healthcare practitioners (clinicians).
Phenomena of Interest	Management and/or leadership qualities, styles, theories, traits or behaviours, or which provide any conceptual framework or underpinning of the same.	Management and/or leadership qualities, styles, theories, traits or behaviours, or which provide any conceptual framework or underpinning of the same.
Comparison	Studies with or without comparators will be included.	Studies with or without comparators will be included.
Evaluation	Reviews or syntheses of a body of literature.	Studies that evaluate the impact of different management and leadership styles, theories, strategies, or those which evaluate qualities that impact perceived management and leadership traits: directly related to clinical practice. Studies that evaluate any causal or inter-relationship between management and leadership and personal or professional qualities of clinicians.

Table 4. Eligibility criteria for stages 2 and 3 of systematic search

Stage 2: review of reviews in healthcare		**Stage 3: focused review of patient facing clinical practice**	
Inclusion	Exclusion	Inclusion	Exclusion
Last 12 years (2006 – present)	Prior to 2006	Last 12 years (2006 – present)	Prior to 2006
English	Non English	English	Non English
Full text only articles	No full text available	Full text only articles	No full text available
Peer reviewed	Non peer reviewed	Peer reviewed	Non peer reviewed
Review or synthesis of body of literature	Reviewing/synthesis of other than body of literature	Relating to clinicians undertaking direct patient care	Relating to non-clinicians or clinicians with no direct patient care responsibilities
		UK setting	Non UK setting
		Specifically related to leadership qualities of practitioners	Not specifically related to leadership
		Related to clinical practice	Related to clinical education, evaluation of training programmes or research
		Any managerial level directly related to clinical frontline practice where clinical work or patient care is still undertaken	Strategy or senior management governance level removed from front line clinical practice; unrelated to clinical work or where no patient care is undertaken

Table 5. Showing how each of the reviewed works relates to the different levels of leadership

Organisational/leadership level in paper	Part 1	Part 2	Part 3
All	1, 5, 8, 11, 13, 17	26, 37, 40, 52	65
Grand strategic (political/systems)	6		63
Strategic (organisation)	4, 6, 12, 15, 16, 19, 21, 22	35, 45	57, 59, 60, 64, 67 68, 70, 71,72, 73
Operational (team/unit)	15	34, 44	
Tactical (relational/dyadic)			
Individual	2, 3, 4, 7, 9, 10, 14, 18, 20	35	56, 58, 61, 62, 66
None		23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 36, 38 39, 41, 42, 43, 46, 47, 48, 49, 50, 51, 53, 54, 55	69

Table 6. Papers in the review and their link to existing leadership theories

Leadership theory/model	Papers stage 1	Papers stage 2	Papers stage 3
None	4, 10, 14,15, 18, 20	24, 26, 27, 28, 30, 33, 36, 40, 41, 45, 49	56, 61, 67, 68, 72, 73
Transformational	17	32, 34, 39, 42, 47, 48, 51, 52, 53, 54	59, 60, 63, 66, 71
Transactional		34, 39, 47, 53, 54	59
Shared/collective	6, 7, 8, 9, 11, 13, 16, 17, 19	44, 50	58, 60, 67, 71
Emotional Intelligence	7	38, 48, 51, 52	
Authentic/congruent	17	34, 37, 55	
Compassionate	21, 22	29	
Engaging/inclusive	5, 6, 8, 12, 21	46	
Kaiser Permanente	1, 2, 3		
Situational/contingency		23, 34, 54	58, 66
Social exchange/self determination		23, 29, 39	
Self-concept/self-schema		25	
Servant		29, 31, 35	
Followership		50	
Participative		43, 46, 53	
Citizenship & work behaviour		31	
Trait			57, 60
Hofstede culture (individualism vs collectivism)			64, 66
Existing competency & standards frameworks/models			62, 63, 64, 65, 66, 67, 69, 70

Figure Legends:

Figure 1. Timeline showing progression of leadership theories over time (adapted from Alban-Metcalfe & Alimo-Metcalfe) [21]

Figure 2. Flow diagram of searches for stages 2 and 3 – based on PRISMA guidelines. [33]

Figure 3. Organisational and leadership levels and how they relate to the healthcare setting.

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