Key trends and transformers in dentistry for 2025

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Executive summary

Importance

- A personal outlook on the evolving trends and transformers expected to dominate dentistry in South Africa in 2025.
- Insights on how dental practitioners can leverage emerging trends to elevate practice efficiency, improve patient outcomes, and maintain a competitive edge and thrive in a rapidly changing environment.

Key points

- Integrating advanced technologies is becoming essential for practices aiming to improve patient outcomes, enhance precision, and increase operational efficiency.
- Patients are seeking a more personalized and convenient experience.
- There is a stronger shift toward preventive care and overall wellness.
- Economic pressures are driving integrated health care partnerships (Wellness)
- Clinics), formation of group practices, and dental management service organisations.
- There is a growing demand to improve accessible and affordable dental care.

Practice implications

- Digital marketing and online presence will be a major practice transformer.
- Rapid technological changes are driving demand for continuous professional development (CPD) in areas like implantology, periodontology, orthodontics, and digital workflows.
- Prioritizing sustainable eco-friendly practice solutions.

Evolving dental landscape

The dental landscape in South Africa is continuously evolving and poised for significant transformation during 2025. Emerging trends are fuelled by a confluence of rapid advancements and innovations in technology, evolving patient expectations and needs, renewed focus of personalized, preventive and holistic care, economic pressures, and a growing focus on public health initiatives promoting equitable access to oral healthcare. Dentists who embrace these drivers proactively by integrating advanced technologies, focusing on patient convenience and preferences, preventive care and wellness, whilst

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addressing practice efficiency, accessibility and affordability challenges, will remain relevant, competitive and thrive in a rapidly changing environment.

This is my personal outlook on evolving trends and key transformers expected to dominate dentistry in South Africa in 2025 and to offer some insights on how dental practitioners can leverage them to elevate their practice, improve patient outcomes, and maintain a competitive edge.

I. Integration of advanced dental technologies

As dental technologies continue to evolve, integrating the latest tools is becoming essential for practices aiming to improve patient outcomes, enhance precision, and increase operational efficiency. In 2025, the focus will shift towards seamless adoption of cutting-edge digital tools such as 3D-printing, intraoral scanners (IOS) (digital impressions), cone beam computed tomography (CBCT) and artificial intelligence (AI) powered diagnostics with predictive analytics, and practice management automation.

Rapid technological changes are driving demand for continuous professional development in areas like implantology, orthodontics, and digital workflows.

Integrating advanced technologies isn't just about keeping up with industry trends—it's about offering faster, more accurate, and patient-centered care. In 2025, practices that embrace these tools will not only improve treatment quality but also enhance the overall patient experience, and operational efficiency of their practice, setting a new standard for modern dentistry.

• Al-powered automation of administrative tasks

As we move into 2025, the adoption of AI and automation will be pivotal for practices looking to streamline administrative tasks, optimize workflows, improve patient communication, and enhance the patient experience.

Smart scheduling systems will automatically manage appointments, optimize chair time, and reduce no-shows through predictive algorithms and automated reminders.

In addition Al-driven software will also be able to handle billing, coding and medical aid claims ensuring accuracy and reducing administrative workload. Automated inventory systems will track inventory in real time, alerting staff to reorder supplies and preventing shortages. Practices will also be able collaborate with suppliers via digital platforms to ensure timely delivery of materials.

• Cloud-based practice management software

Cloud-based practice management software will centralize all patient information, including electronic health records (EHR's), treatment history, and financial details, enabling seamless access across multiple locations. Integration with other healthcare systems will allow dentists to collaborate with other health care practitioners, ensuring a holistic approach to patient care. The integration of digital records enables better continuity of care and improved collaboration with other healthcare providers.

• Cone Beam Computed Tomography (CBCT) – Digital Radiographic Imaging

Cone Beam Computed Tomography (CBCT) powered by Al software, now allows for more accurate and personalized diagnostics and predictive analytics allowing for early detection of disease, more precise treatment planning and better patient outcomes, is now the new standard of care when it comes to dental radiographic imaging. Even though CBCT has many advantages, it also has some disadvantages, such as cost considerations, training is required for accurate interpretation, and a CBCT has a higher radiation exposure than with a traditional dental X-rays. Thus, prudent and responsible application is required in order to optimize benefits and reduce risks.

Intraoral Scanners (IOS) – Digital impressions

IOS eliminate the need for traditional impressions, thus providing faster, more comfortable, and highly accurate digital impressions. Accurate recording of the finish line of restorations however remain a concern due to moisture control and subgingival restorative margins. Next generation ultrasonic scanner impressions will be able to see through moisture and gingiva providing better definition and more accurate reading of the finish line.

• 3D Printing - Digital manufacturing

3D printing has emerged as a powerful tool for dentists and dental laboratories, offering numerous advantages over traditional manufacturing methods. By utilizing advanced 3D printing techniques, dental practitioners can accelerate fabrication of models, restorations, surgical guides, bite plates, and customized prostheses enhancing precision, optimal fit and function, whilst significantly reducing turnaround times and boosting patient satisfaction. 3D printing also expands material options, and at the same time minimizes material waste, promoting sustainability and reducing the environmental impact of dental production.

CAD/CAM Systems

Computer-Aided Design (CAD) and Computer-Aided Manufacturing (CAM) systems have been in use in dentistry since the early 80's. CAD/CAM systems enable practices to design and produce dental restorations faster and more precisely. This reduces turn-around time, the need for adjustments during fitting, minimizes chair time, and increased patient satisfaction. However, initial cost of equipment, time

and money on training, and return on investment (ROI) remain major concerns for solo practice owners.

CAD/CAM systems have progressed and evolved rapidly over the last 25 years. Enhanced automation and integration of AI into CAD/CAM systems will significantly reduce the 'skill-gap', allowing less experienced operators to produce restorations and prostheses with greater accuracy. CAM software is evolving to handle hybrid processes seamlessly. Hybrid systems using 3D-printing will enable dentists to produce same day restorations with unparalleled precision, using improved materials and reduced production times. Cloud-based platforms will enable dentists to use CAD/CAM systems and collaborate with other operators within a clinic, laboratory or centralised location to minimize equipment cost and training.

• Sustainable eco-friendly practices

Digital transformation will reduce paper use, such as for scheduling, billing, and patient records, aligning with eco-friendly initiatives. Dental practices are prioritizing sustainable solutions, including use of biodegradable materials, energy-efficient equipment, and paperless workflows, in response to growing environmental concerns.

II. Patient convenience and preferences

In 2025, dental practitioners will need to prioritize patient experience and patient satisfaction, not only to attract new patients, but also to retain loyal ones. Key patient preferences and expectations include personalized care, convenience, comfort and a holistic caring experience that extends beyond the dental chair.

In an increasingly competitive environment, prioritizing patient satisfaction can have a significantly impact on practice growth.

Patient portals and mobile applications

The journey doesn't start and end at the dental chair; it begins with the first online interaction. In 2025, practices will need patient portals to optimize their digital touchpoints, offering patient engagement features like online booking, automated appointment reminders, and virtual consultations. Mobile apps will streamline patient check-ins, including form filling and insurance verification. Digital platforms allow patients to book appointments, access records, and monitor treatment progress online. Patient portals and mobile apps will not only boost convenience but also make patients feel more connected to their service providers.

Comfort and Amenities

Patients are seeking for more comfort and convenience during their visits. Offering amenities like calming waiting areas, noise-cancelling headphones, and sedation options for anxious patients that can leave a lasting impression, improving patient retention and boosting patient referrals.

Personalization is key

Patients want to feel understood and valued as individuals. Personalized treatment plans, based on a patient's unique oral health needs and preferences, can greatly improve their overall experience. Dentists that utilize patient data effectively can customize treatment reminders, oral health education, and wellness tips, to enhance patient engagement and satisfaction.

Cosmetic dentistry, digital smile and treatment simulations

Cosmetic dentistry has always played a significant role in dentistry, but its popularity is expected to surge in 2025. Patients are now looking for quick solutions for correcting mal-aligned, discoloured, or damaged teeth, with a focus on procedures that offer noticeable results with minimal intervention and discomfort to enhance their smile and confidence. Social media influences, a rising middle class, and increased awareness of smile and appearance are driving demand for less invasive cosmetic procedures such as injection mould composite bonding, no-prep veneers, teeth whitening, clear aligner orthodontics, and laser gum recontouring to enhance their smiles. In addition, patients are increasingly seeking digital previews of their expected results (smile) before committing to procedures. Al and augmented reality (AR) is increasingly being used to simulate various treatment scenarios, enabling patients to visualize treatment outcomes before they begin. This not only aids in smile design and decision-making but also increases patient treatment acceptance, trust, and satisfaction.

III. Shift towards preventive care and wellness

In 2025, dental practice's will see a stronger shift toward preventive care and overall wellness, reflecting a broader trend in healthcare. With high rates of oral diseases such as caries and periodontal disease, there is an emphasis on preventive care to reduce the burden on the healthcare system

Health consciousness

People are generally becoming more health-conscious, seeking preventive solutions such as early detection, patient education, and lifestyle interventions, rather than major reactive treatments. Conditions like heart disease, diabetes, and even mental health have links to oral health, making it vital for patients to understand the broader implications of good dental hygiene. Growing recognition of the link between oral

health and systemic conditions (e.g., cardiovascular disease, diabetes) is encouraging interdisciplinary collaboration between dentists and medical professionals.

To promote holistic wellness, practices should incorporate lifestyle counselling into regular check-ups providing guidance on nutrition, smoking cessation, stress reduction, and other factors that contribute to oral health. Dentists are not just treating oral issues as they arise; they are becoming integral to their patients' overall health and wellness plans. Dentists will be engaging a proactive approach emphasizing regular check-ups and screening for early detection of disease, and personalized care plans to prevent conditions like dental decay, periodontal disease, and even oral cancers.

• Early detection and prevention

Emphasis on early detection and prevention is reshaping the approach to oral health, with tools like caries detection lasers, saliva diagnostics, and wearable health devices gaining traction. Artificial intelligence (AI) tools will play a bigger role in preventive care, analysing patient data to predict risks for conditions like periodontal disease, tooth decay, and oral cancer. This will allow for earlier interventions tailored to personalized needs.

• Tele-dentistry

Tele-dentistry will not only support routine care but also facilitate wellness check-ins, helping patients maintain oral hygiene between visits. Dentists can use virtual consultations to monitor progress, offer guidance, and promote preventive strategies. This will not only improve oral outcomes and enhance overall patient wellness but also build stronger patient relationships, and increase long-term patient retention. As patients become more informed and proactive about their overall health, the role of dentists will evolve from treatment providers to wellness partners.

Smart tools

Smart ultrasonic toothbrushes and oral health tracking apps are empowering patients to take effective control of their dental hygiene.

IV. Economic pressures and business initiatives

Economic challenges, such as fluctuating currency value and inflation, are influencing dental practices to adopt cost-efficient technologies and pricing models.

• Integrated healthcare partnerships

The wellness trend and oral-systemic link is driving the trend towards 'Wellness Clinics' where dental clinic, medical

practitioners, dieticians, physiotherapists, audiologists, pharmacists (etc.) are all under one roof. Patients are also preferring the concept of a 'one stop shop'. Dental practices are becoming more integrated with general healthcare systems, emphasizing the role of oral health in overall well-beina.

• Consumer-Driven choices

Patients are increasingly value-conscious, seeking more treatment options, comparing prices and prioritizing providers that offer transparency and flexible payment options. Practices are adopting cost-effective technologies, such as 3D printing and in-house labs, to offer affordable care without compromising quality.

• Digital marketing

Rapidly evolving digital marketing will be a game-changer for dental practices in 2025. By embracing digital marketing tools, dentists can increase their online presence and practice growth. Key digital marketing trends include: (i) Personalizing patient communication through email campaigns for enhanced patient engagement to help build loyalty and make patients feel more connected to your practice; (ii) Local search engine optimization (SEO) to attract local clients is crucial; (iii) Video marketing showcasing clinical expertise, patient testimonials, office environment, and informative clips to engage with clients and to build trust through visual content; and (iv) Creating added value content, like blog posts, guides, or FAQs, is a great way to establish your dental practice as a trusted source for dental health information. Embracing digital marketing trends not only attracts new patients, but also builds trust and educates your patients.

• Increased specialization and expanded functions

Dentists will increasingly focus on developing and expanding their skills in specialized fields (i.e. periodontology, dental implantology, endodontics, prosthodontics, oral surgery, orthodontics)

• Consolidation and management of dental practices

Currently the world-wide trend is moving towards less solo practices and more mergers and acquisitions due to factors such as: (i) high cost of opening and running a practice; (ii) keeping up to date with costs of materials, innovations and technology; (iii) acquiring, training and managing human resources; and (iii) competition and growing patient base. Besides the increase in group practices and wellness clinics, another developing trend on the rise is dental management service organizations.

• Valuing your practice - EBITDA

Running a dental practice is more than just quality patient care - it is also a business and understanding the numbers behind your practice's value, profitability and financial health is equally important. EBITDA (Earnings Before Interest, Taxes, Depreciation, and Amortization) has become the preferred way to measure how profitable your practice is from its core operations, without getting tangled up in other costs like loan interest, taxes, or equipment depreciation. EBITDA is a powerful tool for assessing a practice's real earning potential and investment attractiveness to buyers or investors. In the dental industry your EBITDA is crucial for practice evaluations, mergers, acquisitions, and attracting investors. EBITDA is a benchmark that help buyers and sellers compare your practice's performance to industry standards, and to negotiate a fair price for a dental practice. In addition, by knowing your EBITDA you will be able to make smarter decisions about investments, growth strategies and planning for the future. Strategies to improve your practice's EBITDA include: (i) reduce expenses and costs; (ii) increase revenue by investing in new technology or launching marketing campaigns to attract more patients; or (iii) improving collections.

Eco-friendly practices

Growing environmental awareness is driving dental practices to adopt sustainable methods, such as reducing waste, using biodegradable materials, and implementing energy-efficient equipment and paperless administrative workflows

V. Public health initiatives

• Cultural and Demographic Shifts

As more people move to urban areas, there is growing demand for accessible,

And affordable dental care in cities. Younger generations prioritize aesthetic and

preventive dental care, influencing demand for modern, patient-centered dental services.

· Accessibility and Affordability

South Africa's socio-economic disparities are driving efforts to improve access to affordable dental care for rural and low-income populations. Public-private partnerships and mobile clinics are likely to play a significant role. The ongoing implementation of South Africa's NHI framework emphasizes equitable healthcare access, potentially reshaping private and public dental care delivery models. Whether such an ambitious project will succeed remains to be seen and will

dependent on availability of funds, administrative leadership, national health information system, and a well-functioning health care infrastructure at public and private levels.

Expanded duties and function

Greater focus will be placed of on use of oral hygienists with expanded duties and dental therapists to meet the demands of low cost medical aid and other underserved groups within a National Health Insurance system or Public Health Care.

Tele-dentistry

The rise of remote consultations and digital monitoring tools is enhancing accessibility and patient communication particularly for rural and underserved populations. Teledentistry is increasingly used to reach patients in remote and underserved areas, addressing access challenges unique to South Africa's diverse geography. Virtual consultations create more opportunities for patient education, encouraging better oral health habits and proactive engagement. With digital monitoring, dentists can track patients' treatment progress between visits and provide timely guidance.

Conclusion

Staying ahead in the evolving dental landscape isn't just about adopting the latest tools - it's about understanding how emerging trends will transform the future of dentistry. The evolving dental landscape in 2025 will be driven by a confluence of technological innovations, changing patient preferences, increased focus on preventive care and wellness, economic pressures and healthcare reform.

Digital transformation will profoundly reshape dental care service delivery and practice management, streamlining workflow, enhancing patient experience, and boosting overall efficiency. From cutting-edge Al diagnostics to personalized patient care and a stronger emphasis on preventive wellness, online presence, business savvy, and public health initiatives, these trends have the potential to redefine how practices will operate and how care is delivered.

Dental practitioners that embrace these trends, while addressing the unique challenges of accessibility and affordability, will remain competitive and thrive. Think of your practice as a dynamic organism, constantly adapting to a changing environment by embracing advanced technology to enhance your practice's capabilities and efficiency. Invest in continuing education to keep up to date with the latest innovations, techniques and materials, and networking with fellow dentists, and industry leaders, sharing insights best practices and trends that can fuel your practice's growth. If you want to thrive, you need to grow and evolve along with it