

# Adapting Dental Care for Patients with Autism Spectrum Disorders

Modified routine dental procedures to suit patient needs and improve outcome



**Hypersensitivity to sights and sounds, unfamiliar settings, and anxiety can prevent individuals with autism spectrum disorders (ASD) from receiving adequate dental care**



of children with ASD are hypersensitive to sound and have a low pain threshold<sup>1</sup>



Suboptimal oral care significantly increases the risk of oral health problems in children with ASD<sup>1</sup>



Techniques such as desensitisation, symbolic remodelling, and positive reinforcement along with sophisticated behavioural guidance techniques, and a dental team trained in caring for patients with ASD can facilitate the dental care of patients with ASD<sup>1</sup>



A study found 45% children required general anaesthesia for dental treatment<sup>2</sup>



**For children with ASD<sup>2</sup>**

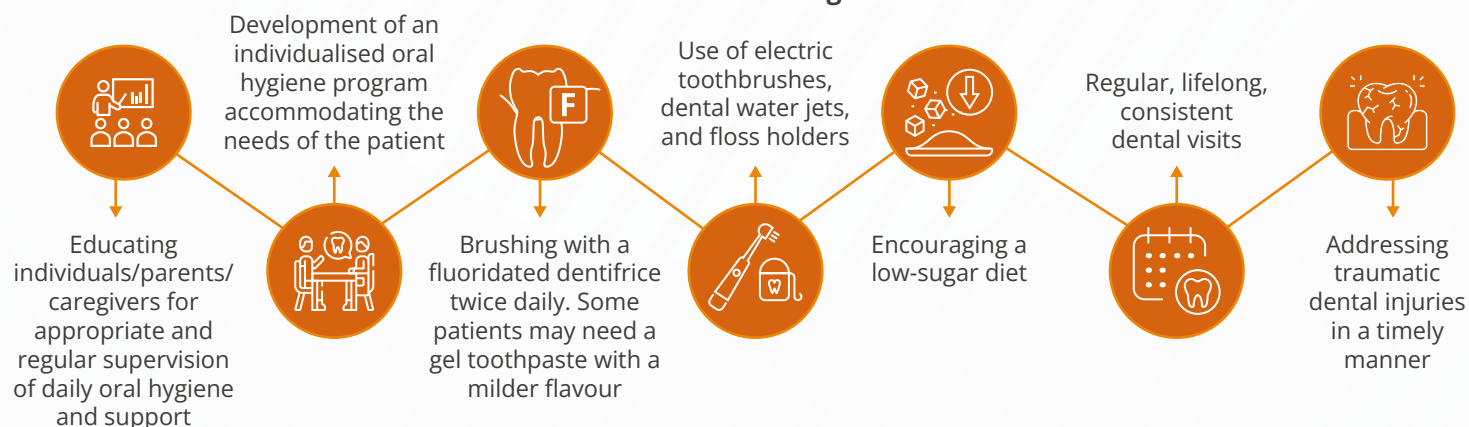
Nitrous oxide/oxygen inhalation may be required for dental treatment with good behavioural management or in some cases general anaesthesia



**For adults**

Inhalation sedation, intravenous sedation, or general anaesthesia along with good behavioural management may be needed to facilitate dental care

## Preventive strategies<sup>3</sup>



**Establishing dental visits for children with ASD by 12 months of age can be crucial in providing them with adequate and comprehensive dental care<sup>3</sup>**

Dental homes provide:



Accessible care



Coordinated and regular visits



Family-centred treatment approach



Children with ASD reaching adulthood need continuous oral healthcare, which may be beyond the scope of the paediatric dentist's practice, necessitating a coordinated transition from a paediatric to an adult dental home

# Adapting the care environment and dental procedures for individuals with ASD



Individuals with ASD, especially those who are hypersensitive to sensory stimuli, are more likely to experience anxiety in dental settings<sup>4</sup>



Sensory-adapted dental environments (SADE) reduce the impact of sensory stimuli on individuals with ASD, reducing anxiety

## Strategies for controlling stimuli in SADE

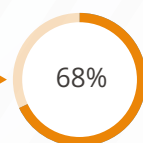


The SADE provides a higher likelihood of successfully treating patients with ASD compared to the regular dental environment (RDE)



20% of children with ASD were treated successfully in RDE

In a study where the SADE was created using a screen to project movies, soft lighting, and noise reduction<sup>4</sup>:



68% of children in the same cohort were successfully treated in SADE

## Using pictograms to improve oral health outcomes in children with ASD

The Treatment and Education of Autistic Children TEACCH method involves tailoring the dental environment to<sup>5,6</sup>:



Reduce behavioural disturbances



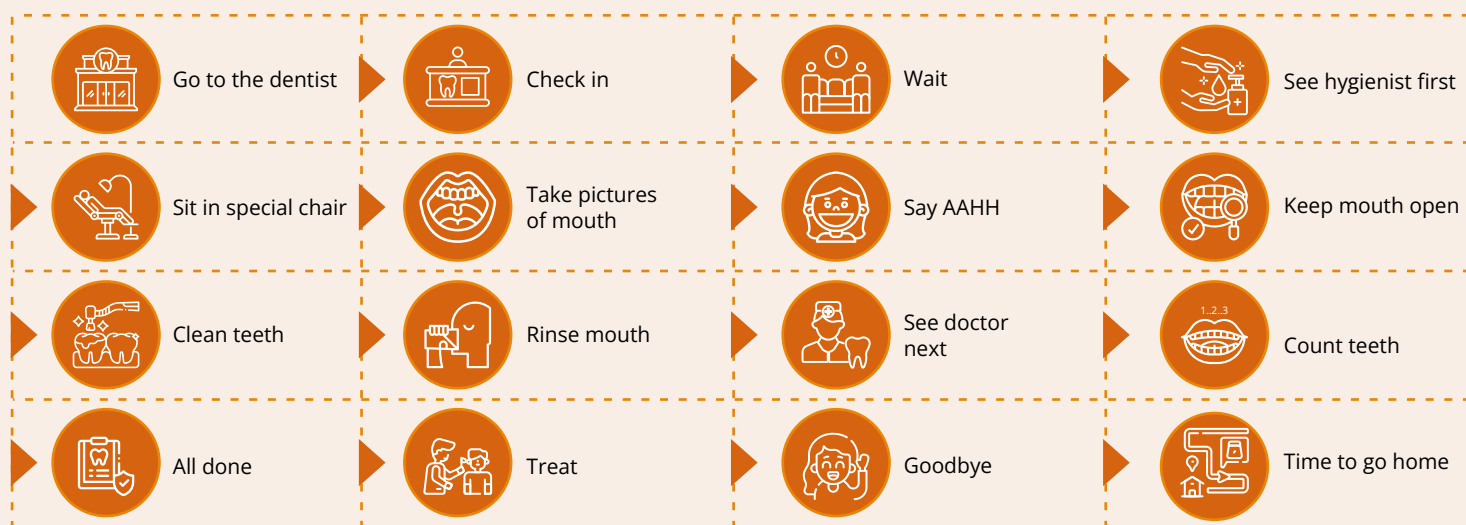
Foster predictable routines in the care setting



Encourage independence in performing tasks

## Visual tools can enhance the TEACCH method in several ways<sup>6</sup>

### Visiting dental professionals



Regular dental, visual aids: visiting the dental professional<sup>5</sup>

Adapted from Aljubour *et al.* (2022). DOI: 10.3390/children9050666



Visual schedules streamline dental visits



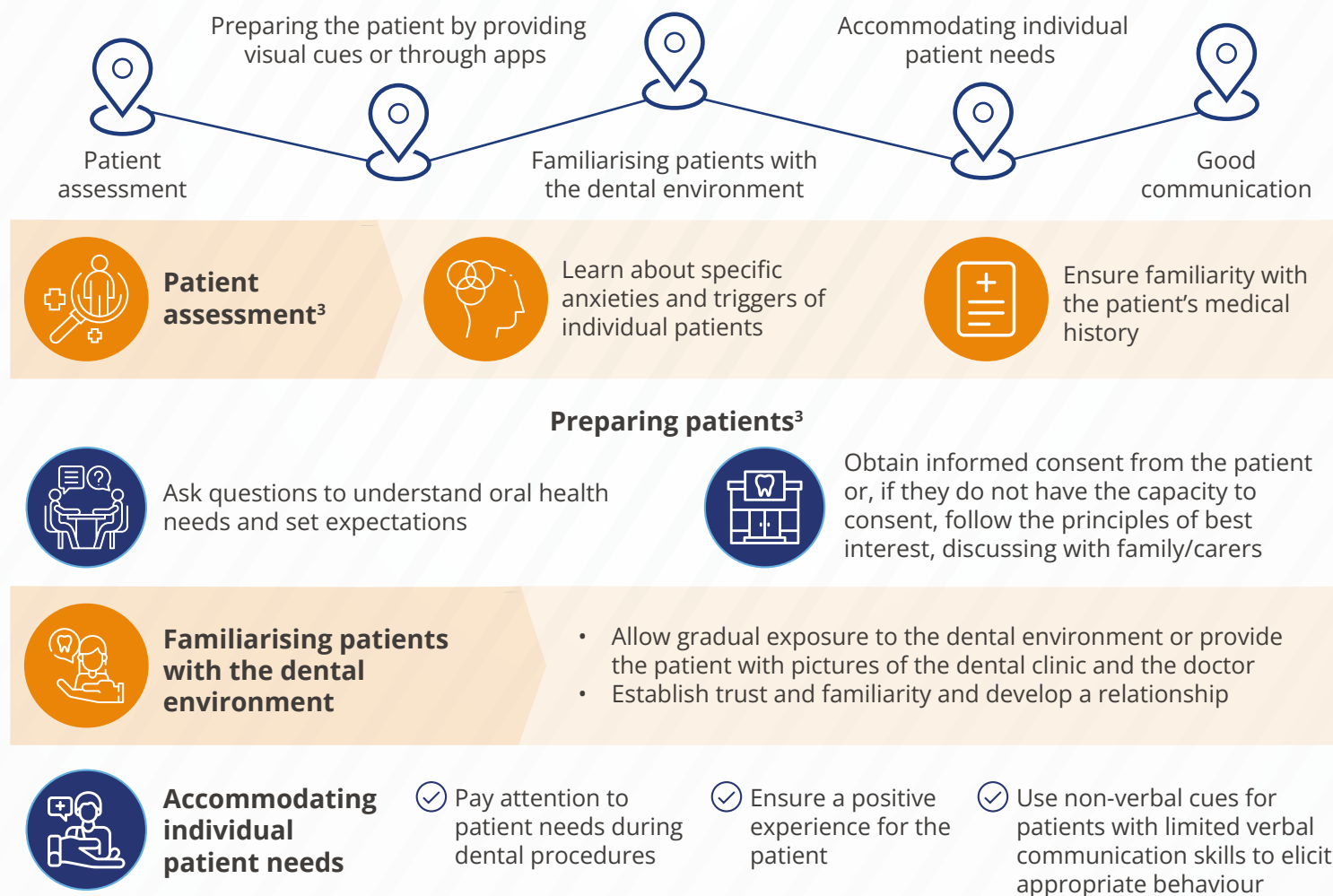
Pictograms aid in explaining procedures step-by-step



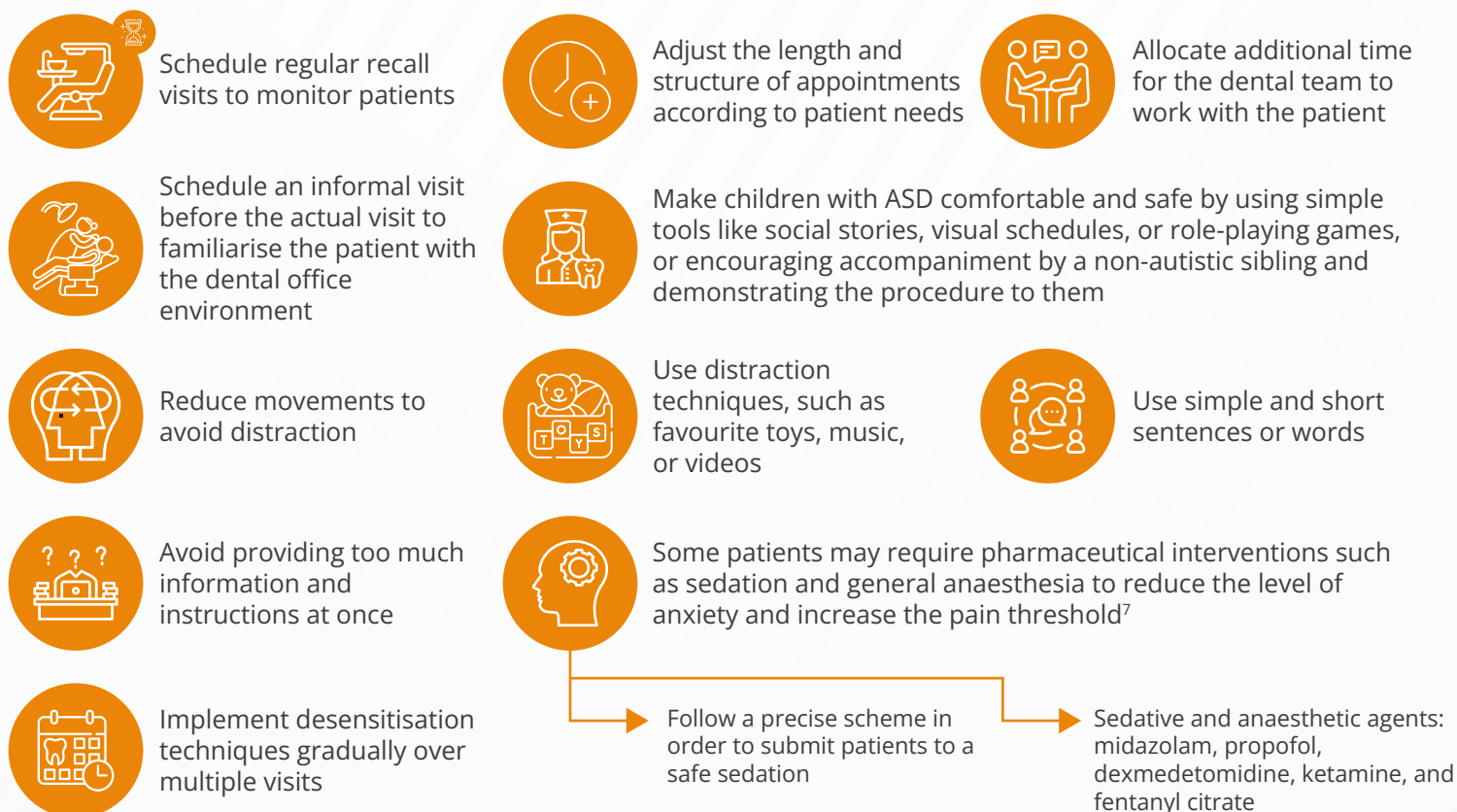
Pictures help familiarise patients with the dental care environment

Visit [for additional resources](#)

# Treatment outcomes for patients with ASD can be improved by paying attention to individual needs at each step<sup>3</sup>

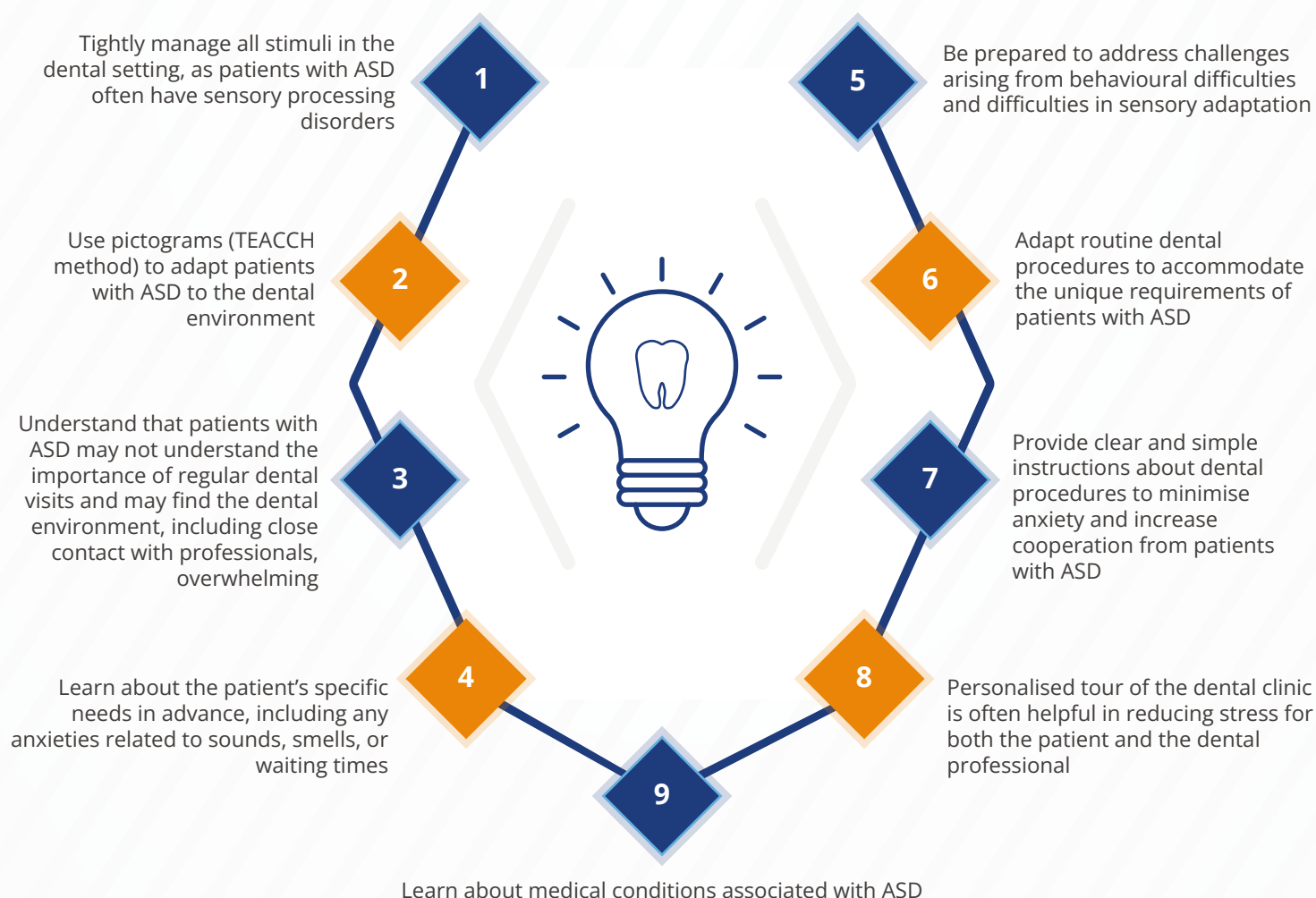


## Ways to adapt routine dental procedures for patients with ASD



Visit [<>](#)  
for additional resources

# Key suggestions for dental professionals working with patients with ASD



## Key message

**These strategies can be effective in establishing a dental home and ensuring a comfortable and effective experience for patients with ASD while providing them with the necessary dental care**

### References:

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6. Aljubour, A., AbdElBaki, M., Meligy, O. E., Jabri, B. A., & Sabbagh, H. (2022). Effect of culturally adapted dental visual aids on oral hygiene status during dental visits in children with autism spectrum disorder: a randomized clinical trial. *Children*, 9(5), 666.
7. Gallottini, S. G., Giammarini, S., Amato, A., & Gallottini, L. (2023). General anesthesia and dental sedation in patients with special needs: why, when and how. A clinical guide for dental practitioners. *Journal of Osseointegration*, 15(1), 62–78.