

Minimum Intervention Dentistry for children with tooth decay



Tooth decay is one of the **most common childhood diseases** affecting nearly half of 15-year-olds and a third of 12-year-olds.

These numbers are even higher when early-stage decay is included. It can cause **significant pain, suffering and missed school time** for children.

Children, parents and dental professionals supportive of approach and call for more research

- Conventional treatment for tooth decay involves **anaesthesia, drilling and fillings**
- Injections and drills often **cause fear, discouraging dental visits**
- Fillings in permanent teeth require periodic replacement, **creating a long-term burden for children** into their adulthood

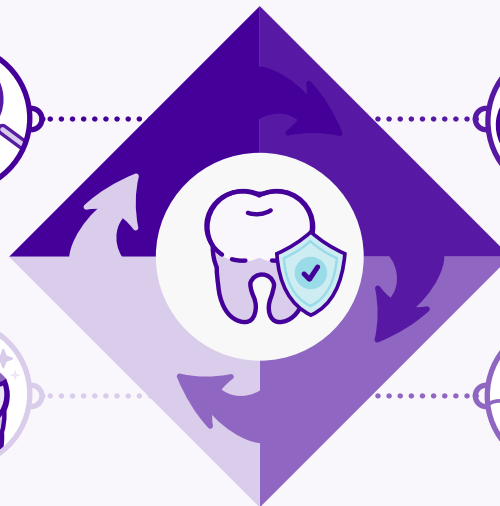
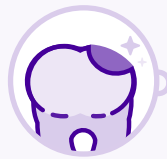
What is Minimum Intervention Dentistry (MID)?

Also referred to as Minimum Intervention Oral Care (MIOC)

MID focuses on **early detection, diagnosis, prevention, restoration (if needed) and review**



For advanced decay, **minimally invasive techniques** can be used to preserve more of the natural tooth with smaller fillings



By detecting tooth decay early, we can **assess risk and reduce the need for drilling and filling**

Early-stage decay can be stopped with **preventive methods like sealing**

Addressing the MID research gap

- We conducted the **first study** on MID in children's permanent teeth and its implementation and acceptability
 - **86 children** (ages 6-16) with tooth decay in their permanent teeth
 - **10 NHS primary care dental practices**
 - **questionnaires and interviews**
- We sought to determine the feasibility of running a larger trial investigating the clinical cost effectiveness of MID
- Participants viewed MID positively
- Dental professionals were supportive of MID, further training and research
- MID is an acceptable approach for children with tooth decay
- The study highlighted challenges for aspects such as caries risk assessment, delivering prevention, and allocating recall
- With refinements in design, a larger definitive trial across dental practices is feasible

We recommend a larger definitive trial, and to:

- **increase research** into MID
- consider **NHS contract changes** to facilitate the delivery of MID in dental practices
- **facilitate scenario-based and face-to-face MID training** for dental professionals
- inform and engage **dental practices' wider teams** about MID
- **create video resources to raise awareness** for MID amongst children and parents

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