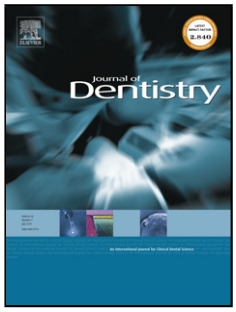

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Replacing amalgam with a high-viscosity glass-ionomer in restoring primary teeth: A cost-effectiveness study in Brasilia, Brazil

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ABSTRACT

Objectives: When planning primary oral health care services the cost implications of adopting new intervention practices are important, especially in resource-strapped countries. Although on a trajectory to be phased-out, amalgam remains the standard of care in many countries. **Methods:** Adopting a government perspective, this study compared the costs of performing amalgam and ART/high-viscosity glass-ionomer cement (HVGIC) restorations and the consequences of failed restorations over 3 years in suburban Brasilia, Brazil. Cost data were collected prospectively; cost estimates were developed for the study sample and a projection of 1,000 single- and 1,000 multiple-surface restorations per group. Probabilistic sensitivity analysis was conducted in TreeAge Pro. **Results:** Results were mixed. For single-surface restorations, ART/HVGIC will cost US$51 per failure prevented, while for multiple-surface restorations, ART/HVGIC was cost-effective with a savings of US$11 compared to amalgam. Probabilistic