the size of the cavity, whereas resin composites are difficult to discern at the composite tooth interface and their removal is more likely to increase the cavity size. Amalgam might be more appropriate restorative material for posterior primary teeth in situations in which tooth isolation and patient cooperation is difficult to obtain. 

Stainless steel crowns/ preformed metal crowns

They are indicated in class II restorations where amalgam/ resin composite restorations are likely to fail. For class II restorations where the proximal box will extend beyond anatomic line angles stainless steel crowns are the only successful option. However factors like age of the patient, level of cooperation, carries risk, cost and time factor should be considered which makes the treatment decision more complex. Placing stainless steel crowns in children who are at high risk for dental caries, who are unlikely to attend regular recall appointments or who are unlikely to be reliable preventive patients will reduce cost and treatment time. Stainless steel crowns are full coverage restorations allowing little scope for plaque accumulation and recurrent caries and have superior physical properties than other restorative materials. It should be noted that recurrent caries and fracture are the most common causes for replacement of restorations. The most important function of primary molars is to maintain space for the permanent successors. When proximal restorations are subject to failures, drifting of teeth can occur till the time of replacement, there by space loss. This means that orthodontic treatment needs to be initiated in order to correct this. Thus the cost effectiveness of the crown goes beyond the actual cost of the crown itself. If the restoration is expected to last for more than 2 years, priority should be given to crown placement especially in large proximal box preparations. Stainless steel crowns are less technique sensitive and hence suitable for uncooperative children. Today’s crowns which are pretrimmed, prefestedoed and precrimped require only minimum modification and hence time for placement is equal to that of multi surface restoration. 

The availability of preveneered posterior stainless crowns have overcome the esthetic concerns to a certain extent.

Conclusion:

A successful class II restoration in a primary molar is factor of clinician’s understanding of the behavior of the child patient, the extent of the lesion, carries risk of the individual and a thorough understanding of the various restorative materials available. Continued development of the existing materials is likely to make them more esthetic and user friendly.

References:

2. Wahl MJ. Amalgam-