

## Kidney disease and oral health

The association between renal insufficiency and periodontal disease was first reported in 2005 when a group of researchers discovered an increased risk for initial and severe periodontal disease in a population of patients with reduced glomerular filtration rates.<sup>1</sup> Subsequent studies have confirmed that individuals with chronic kidney disease, those undergoing continuous ambulatory peritoneal dialysis or hepatic dialysis have a higher prevalence of periodontal disease and tooth loss.<sup>2,3,4,5</sup> Studies have also shown that the severity of oral disease is related to the level of progression of kidney dysfunction, with normal oral health found in the early stages of renal deficiency and periodontal disease developing prior to dialysis and becoming more severe throughout the course of dialysis.<sup>6,7,8</sup> More recent studies have tried to determine the cause for this relationship. One study demonstrated changes in the chemistry of saliva where levels of creatinine, urea, sodium, potassium, chloride and alpha-amylase were significantly higher in dialysis patients than in controls.<sup>9</sup> A 2008 study demonstrated that oral markers, such as the edentulism or the level of antibody to a common periodontal pathogen may help predict risk for chronic kidney disease.<sup>10</sup>

### **EBICP benefits for persons with kidney disease**

With an indicator of a diabetes diagnosis, a participant is eligible for up to two additional dental visits in a benefit year for adult prophylaxis or periodontal maintenance. Coverage will be at the group-contracted benefit level, with the additional frequency allowance being the only change. There is no end date on this additional coverage. There is no age requirement and the patient may be the subscriber, spouse or other covered dependent.

The combined body of evidence shows that individuals with more advanced kidney disease or those undergoing dialysis have a higher risk for periodontal disease and a greater severity of periodontal disease. Identifying this risk and providing early and adequate treatment may help prevent the onset or reduce the severity of periodontal disease.

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