Out of concern for an individual’s total exposure to radiation from all sources, the US Food and Drug Administration (FDA) has developed guidelines for taking dental radiographs (more commonly known as X-rays). The guidelines promote the appropriate use of dental X-rays and help dentists determine how to best use them for each patient.

Before taking any X-rays, the guidelines recommend that dentists perform a complete oral evaluation, as well as a review of patient history, previous X-rays taken, risk assessment and general health of the patient. Following the evaluation, X-rays should only be taken when the resulting diagnostic information will affect patient care. X-rays should not be prescribed at pre-set levels for all patients.

The guidelines also encourage providers to practice the ALARA (As Low As Reasonably Achievable) principle in order to minimize radiation exposure. Examples of practicing this principle include:

- Using the fastest film for the diagnostic image
- Proper film exposure and processing
- Use of protective aprons and thyroid collars
- Limiting images to the minimum necessary to obtain the diagnostic information

Dentists must weigh the benefit of taking X-rays against exposure to radiation, because even though the level is low, radiation accumulates in the body and never dissipates.

A bitewing is a type of X-ray taken periodically to view the area between the back teeth. Typically, one or two films are taken on each side of the mouth. These can help dentists diagnose disease when the area between the teeth cannot be visualized.
Dental benefit companies place limitations on how frequently they will cover bitewing X-rays. United Concordia Dental’s standard limitations (see chart below) are based on these FDA guidelines, which are also supported by the American Dental Association.

<table>
<thead>
<tr>
<th>Member Age</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 19</td>
<td>Once per 12 consecutive months</td>
</tr>
<tr>
<td>19 and older</td>
<td>Once per 18 consecutive months</td>
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</tbody>
</table>

Writing in the New York Times on July 25, 2016, in answer to the question, “Do I need bitewings every year?”, Austin Frakt wrote:

“The American Dental Association says I don’t, and you may not either. Adults without apparent dental problems do not need dental X-rays of any kind every year, the A.D.A. says. Adults who properly care for their teeth and have no symptoms of oral disease or cavities can go two to three years between bitewing X-rays, according to the A.D.A.

Adults with a high risk of cavities (like those with a history of them) should receive them at least every 18 months, and possibly more frequently, depending on the condition of teeth and gums. The interval between X-rays is determined by the rate at which cavities develop. Typically, it takes about two years or more for cavities to penetrate adult teeth enamel. The rate is faster for children, so the recommended bitewing intervals are shorter for them. However, children with adequately spaced primary (baby) teeth and no cavities do not need any dental X-rays. Older children with a low propensity for cavities can go 18 months to three years between bitewing X-rays. Those at the highest risk may need them more frequently.”

Using the FDA guidelines as the basis for our limitation allows our members to receive coverage for effective services while protecting them from excessive radiation. Allowing payment for more frequent bitewings is not supported by the guidelines, and increases the risk of radiation exposure. United Concordia will continue to use the FDA guidelines to support its benefit limitations and promote the appropriate use of dental X-rays.