

## A Geriatric Patient with Oral Health Issues Moves Through the Health System

Ms. Lena Walton is an 86-year-old woman with moderate to severe dementia, type 2 diabetes, hypertension, and hyperlipidemia. She lives with her daughter, Pamela, who serves as her primary caregiver along with her two sisters who take turns staying with Lena during the day. As her dementia has progressed, she requires increasing assistance to perform activities of daily living (ADLs) such as dressing, toileting, and bathing, but she enjoys reminiscing about the past, eating favorite foods including biscuits and roast chicken, and listening to music with her family.

Clinical Data Elements	Recommended Coding
<b>Medical History:</b> <ul style="list-style-type: none"> <li>Moderate to severe dementia</li> <li>Type 2 diabetes</li> <li>Hypertension</li> <li>Hyperlipidemia</li> </ul>	<ul style="list-style-type: none"> <li>F03.90 - Unspecified dementia without behavioral disturbance</li> <li>E11.9 - Type 2 diabetes without complication</li> <li>I10 - Essential (primary) hypertension</li> <li>E78.5 - Hyperlipidemia, unspecified</li> </ul>

One morning, one of Lena's front teeth breaks while she is eating breakfast. Because her mobility is limited, making outpatient medical visits is very difficult for Lena and Pamela, and Lena does not have a dental home. Lena does not seem to be upset by her broken tooth and so Pamela does not seek further care. Over two weeks, Pamela notices that Lena has less interest in her meals and is eating less. She tries to serve her softer foods like mashed potatoes, but Lena is less interested in these than her preferred foods. Over the next two weeks, Lena requires even more support to ambulate and transfer from a chair and becomes less talkative. Pamela and her sisters also notice that Lena it is very difficult to get Lena to take in fluids.

Clinical Data Elements	Recommended Coding
<ul style="list-style-type: none"> <li>Broken front tooth</li> <li>Reduced appetite/food</li> </ul>	<ul style="list-style-type: none"> <li>S02.5 - Fracture of tooth (traumatic)</li> <li>R63.0 - Anorexia</li> </ul>

One morning, they find Lena minimally responsive, opening her eyes only when they call her name. They call Lena's primary care physician who recommends they take her to the emergency department (ED) for evaluation.

In the emergency department, Lena has a CT scan of her head, which does not show any bleeding or masses. Her labs are notable for a creatinine of 1.6 (last measured 0.9 one year before) and a sodium of 155 (normal 136-145). She is admitted to the hospital's internal medicine service for altered mental status, acute kidney injury, and hypernatremia. On admission, the hospitalist, Dr. Lund, notes that Lena has dry mucus membranes, minimal responsiveness (withdrawing only to pain), and poor dentition.

Clinical Data Elements	Recommended Coding
<ul style="list-style-type: none"> <li>Creatinine of 1.6</li> <li>Sodium of 155 (normal 136-145)</li> <li>Altered mental status</li> <li>Acute kidney injury</li> <li>Hypernatremia</li> <li>Dry mucus membranes</li> </ul>	<ul style="list-style-type: none"> <li>R41.82 - Altered mental status-unspecified</li> <li>N17.9 - Acute kidney failure, unspecified</li> <li>E87.0 - Hyperosmolality and hypernatremia</li> <li>K08.9 - Disorder of teeth and supporting structures, unspecified</li> </ul>

<ul style="list-style-type: none"> <li>Minimal responsiveness (withdrawing only to pain)</li> <li>Poor dentition</li> </ul>	<ul style="list-style-type: none"> <li>E86.0 - Dehydration</li> </ul>
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In the hospital, Lena is given intravenous fluids and is closely monitored. Her serum creatinine quickly returns to her baseline, and her sodium is normalized by her second day in the hospital. However, she continues to eat and drink very little, requiring intravenous hydration. Dr. Lund speaks with Pamela and learns about Lena’s recently broken tooth. Pamela shares that is has been almost ten years since Lena visited a dentist. Dr. Lund examines Lena’s mouth more closely and notices a decayed root tip in the front of her mouth, several areas where teeth appear to be missing, and several badly decayed posterior teeth in both the mandible and maxilla.

Clinical Data Elements	Recommended Coding
<ul style="list-style-type: none"> <li>Decayed root tip in the front of her mouth</li> <li>Several areas where teeth appear to be missing</li> <li>Several badly decayed posterior teeth in both the mandible and maxilla</li> </ul>	<ul style="list-style-type: none"> <li>K02.7 - Dental root caries</li> <li>K08.409 - Partial loss of teeth-unspecified cause, unspecified class</li> <li>K02.53 - Dental caries on pit and fissure surface penetrating into pulp</li> </ul>

A consult to the oral medicine department is placed. The oral medicine specialist, Dr. Bergstrom, conducts an oral exam and uses a portable intraoral radiograph machine to collect periapical radiographs of Lena’s teeth. She finds that teeth #1, 2, 4-6, 12-14, 16, 17-20, and 29-32 are missing, and that teeth #3, 8, and 10 are badly decayed root tips, which also exhibit 2+ mobility from periodontal disease. She does not identify any frank abscess or gingival swelling around these teeth but does find that Lena moves away when she presses on the gingiva above #8.

Clinical Data Elements	Recommended Coding
<ul style="list-style-type: none"> <li>Oral exam focused on Lena acute oral health needs</li> <li>Intra-oral periapical radiographs for remaining dentition</li> </ul>	<ul style="list-style-type: none"> <li>D0140 - Limited oral evaluation, problem-focused</li> <li>D0220 - Intraoral periapical, first radiographic image</li> <li>D0230 - Intraoral periapical, subsequent radiographic images</li> </ul>
If conducted as part of an inpatient hospital admission, fee-for-service reimbursement for oral health diagnosis and treatment would not be provided.	

Dr. Bergstrom speaks to Dr. Lund and recommends that Lena have her 3 non-restorable teeth extracted during this admission. As Lena’s renal function and hyponatremia have improved, Dr. Lund agrees there are no medical contraindications to dental treatment. Dr. Bergstrom gets consent from Pamela, who is acting as Lena’s healthcare proxy, to extract the teeth.

Clinical Data Elements	Recommended Coding
<ul style="list-style-type: none"> <li>Discussion between oral medicine and hospitalist clinicians</li> <li>Extraction of #3, 8, and 10</li> </ul>	<ul style="list-style-type: none"> <li>D9992 - Dental Case Management – Care coordination</li> <li>D7140 - Limited oral evaluation, problem-focused</li> </ul>
If conducted as part of an inpatient hospital admission, fee-for-service reimbursement for oral health diagnosis and treatment would not be provided.	

As part of Lena’s discharge, referrals are arranged to follow-up with oral medicine. Lena’s inpatient nurse case manager also arranges transportation in a chair car to allow Pamela and Lena to more easily attend the dental appointment. She conducts a more thorough exam and her dental hygienist scales and

polishes Lena’s remaining teeth. Lena is doing well at home and the extraction sockets have healed well. At this follow-up visit, Dr. Bergstrom and Pamela participate in shared decision making and ultimately decide that given Lena’s dementia and overall function, she would likely not cope well with having new dentures made.

Clinical Data Elements	Recommended Coding
<ul style="list-style-type: none"> <li>• Arrangement of transportation for outpatient appointment</li> <li>• Discussion with patient’s health care proxy</li> <li>• Comprehensive oral examination</li> <li>• Adult dental prophylaxis</li> </ul>	<ul style="list-style-type: none"> <li>• D9991 - Dental Case Management – addressing appointment compliance barriers (or appropriate ICD-10 case management code)</li> <li>• D9994 - Dental Case Management – patient education to improve oral health literacy</li> <li>• D0150 - Comprehensive oral exam</li> <li>• D1110 - Dental prophylaxis, adult</li> </ul>

Pamela is also referred to a geriatrician to provide comprehensive geriatric care, and who arranges several hours of home health aide assistance each week to support Pamela and her sisters in caring for Lena at home. With her pain resolved, Lena returns to her previous enjoyment of eating and drinking, and her daughters are grateful to spend time with their mother.