**Primary Question:**  How do I represent smoking status in Consolidated CDA?

**Linked Questions:**

1. How do I represent the effectiveTime for each of the smoking statuses?
2. What are these codes for heavy tobacco smoker (428071000124103) and light tobacco smoker (428061000124105) specified in Meaningful Use Stage 2, and can I use them?

**Answer**  
The Smoking Status Observation (templateId 2.16.840.1.113883.10.22.4.78) is part of the Social History (templateId 2.16.840.1.113883.10.20.22.2.17) section. It represents a single ***current*** smoking status of a patient. It does not support (without extension) historical smoking statuses except for status code 8517006. It does not support (without extension) the types or quantity of smoking used by the patient. It is simply a single observation of the patient’s current smoking status intended to facilitate easy interoperability between vendors certifying for Meaningful Use.

Therefore, the effectiveTime/low value represents the date at which the patient began smoking, and the effectiveTime/high value represents the date at which the patient quit smoking.

**Example XML** (with descriptive comments):

Figure 1: Smoking Status

<!-- Smoking status observation for a current smoker -->  
<section>  
 <!-- Social History Section templateId -->  
 <templateId root="2.16.840.1.113883.10.20.22.2.17"/>  
 <code code="29762-2" codeSystem="2.16.840.1.113883.6.1"   
 displayName="Social history"/>  
 <title>Social History</title>  
 <text>Began smoking daily on 4/10/2011.</text>  
 <entry>  
 <observation classCode="OBS" moodCode="EVN">  
 <templateId root="2.16.840.1.113883.10.20.22.4.78"/>  
 <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>  
 <statusCode code="completed"/>  
 <effectiveTime>  
 <!-- Date the person began smoking -->  
 <low value="20110410"/>  
 </effectiveTime>  
 <value xsi:type="CD" code="449868002" codeSystem="2.16.840.1.113883.6.96"  
 displayName="Current every day smoker" />  
 </observation>  
 </entry>  
</section>  
  
  
<!-- Smoking status observation for a former smoker -->  
<section>  
 <!-- Social History Section templateId -->  
 <templateId root="2.16.840.1.113883.10.20.22.2.17"/>  
 <code code="29762-2" codeSystem="2.16.840.1.113883.6.1"   
 displayName="Social history"/>  
 <title>Social History</title>  
 <text>Former smoker from 4/10/2011 to 4/1/2012.</text>  
 <entry>  
 <observation classCode="OBS" moodCode="EVN">  
 <templateId root="2.16.840.1.113883.10.20.22.4.78"/>  
 <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>  
 <statusCode code="completed"/>  
 <effectiveTime>  
 <!-- Date the person began smoking -->  
 <low value="20110410"/>  
 <!-- Date the person stopped smoking -->  
 <high value="20120401"/>  
 </effectiveTime>  
 <value xsi:type="CD" code="8517006" codeSystem="2.16.840.1.113883.6.96"  
 displayName="Former Smoker" />  
 </observation>  
 </entry>  
</section>  
  
  
<!-- Smoking status observation for someone who never smoked -->  
<section>  
 <!-- Social History Section templateId -->  
 <templateId root="2.16.840.1.113883.10.20.22.2.17"/>  
 <code code="29762-2" codeSystem="2.16.840.1.113883.6.1"   
 displayName="Social history"/>  
 <title>Social History</title>  
 <text>Patient has never smoked.</text>  
 <entry>  
 <observation classCode="OBS" moodCode="EVN">  
 <templateId root="2.16.840.1.113883.10.20.22.4.78"/>  
 <code code="ASSERTION" codeSystem="2.16.840.1.113883.5.4"/>  
 <statusCode code="completed"/>  
 <effectiveTime>  
 <!-- A smoking start date is not applicable for non-smokers -->  
 <low nullFlavor="NA"/>  
 </effectiveTime>  
 <value xsi:type="CD" code="266919005" codeSystem="2.16.840.1.113883.6.96"  
 displayName="Never smoker" />  
 </observation>  
 </entry>  
</section>

1. **How do I represent the effectiveTime for each of the smoking statuses?**
   1. Typically, a CDA observation’s effectiveTime represents the timeframe for which the observation holds (is effective). However, in this simplified representation of current smoking status where only a single observation exists, there must be a consistent meaning for each effectiveTime value. Therefore:
      1. The low effectiveTime shall represent the date when the patient first started smoking.
         1. If a patient never smoked (266919005), this element’s nullFlavor should be “NA” (not applicable).
         2. If a patient’s smoking status is completely unknown (266927001), this element’s nullFlavor should be “NASK” (not asked).
         3. If it is known that a patient is a smoker, but the start date is unknown, this element’s nullFlavor should be “UNK” (unknown)
      2. The high SHOULD only be required for former smoker (8517006). The effectiveTime/high represents the date when the patient quit smoking. It
         1. If a former smoker’s quit date is unknown, this element’s nullFlavor should be “UNK” (unknown).
         2. If a smoker’s current status is unknown, the high element shall be omitted.
      3. If you wish to submit multiple status or historical statuses, you may use the Tobacco Use template.
2. **What are these codes for heavy tobacco smoker (428071000124103) and light tobacco smoker (428061000124105) specified in Meaningful Use Stage 2, and can I use them?**
   1. Heavy tobacco smoker and light tobacco smoker are included in Meaningful Use Stage 2 as valid smoking status SNOMED codes. While not included in the C-CDA release 1.1 smoking status value set, these codes may be used as standalone value codes for smoking status. Receivers should be prepared to receive these statuses, but transmitters are encouraged to stick to the 6 codes listed in C-CDA release 1.1.
   2. >>Add to DSTU Commennts - # XXX