1.  In Vol 1 and Vol 2, change
"In such cases, a UTC **time zone** must be specified everywhere a datetime field is provided."
to
"In such cases, a UTC **offset** must be specified everywhere **a time component in a** datetime field is provided."

Rationale: as currently written, it could be interpreted to convert all datetime to UTC, which we don't think is the intent.  Also, the CMS IG [1] requires a UTC offset only where a "time" field is provided.

[1] <https://ecqi.healthit.gov/system/files/QRDA_HQR_2019_CMS_IG_final_508.pdf>

2.  The QRDA sample file for STU 5.1 violates the Vol 1 text.

      <!-- Example of an author who is a device -->
      <author>
        <time value="20180329224411+0600"/>

but all other datetimes in the sample file do not use a UTC offset.

The sample file should not violate the Vol 1 and Vol 2 constraints related to UTC offset.
Sample file should be updated.

Other items for discussion:

3.  [1] also lists some exceptions which are not in the STU 5.1 review draft.
Should STU 5.1 include the exceptions listed in [1]; i.e., birthDate, and reporting parameter act effectiveTime (low and high)?

4.  STU 5.1 Vol 2, CONF:81-10130 is contradictory: it says "SHOULD", but the note below it says "SHOULD NOT".  This requirement is from C-CDA (without the note), so is it ok that QRDA and C-CDA use the same CONF# but define it differently?  Is this difference significant enough to require a different template identifier OID?

5.  Figure 142 (Vol 2) is not a good example.  One part mentions "IVL<TS>", but the text under Table 262 says "This data type uses the same rules as US Realm Date and Time (**DT.US.FIELDED**), but is used with elements having a datatype of **TS**."  Another part uses the time element, but that template is for the effectiveTime element.  CONF statements about the time element do not elaborate about the @value.  The example shown includes UTC offsets, which seems to contradict the "SHOULD NOT" note. The time element example mentions "precise to the day for a birthdate ", which may be confusing given the "birthDate" element and CONF:1198-32418 "for cases where information about newborn's time of birth needs to be captured."

6.  (Note that **DT.US.FIELDED** is defined in C-CDA, but **not in QRDA Cat I**. In C-CDA, DT.US.FIELDED does use IVL<TS>.
The sentence "This data type ... DT.US.FIELDED..." (mentioned above) should be deleted from STU 5.1.)

7.  Vol2:
CONF:1098:32776 should represent QDM "startTime", not "stopTime".
CONF:1098:32777 should represent QDM "stopTime".

8.  FHIR has different requirements for dateTime compared to QRDA.
See <https://www.hl7.org/fhir/fhir-base.xsd>

<xs:complexType name="**date**">
    <xs:annotation>
      <xs:documentation xml:lang="en">A date or partial date (e.g. just year or year + month). **There is no time zone**. The format is a union of the schema types gYear, gYearMonth and date.  Dates SHALL be valid dates.</xs:documentation>
      <xs:documentation xml:lang="en">If the element is present, it must have either a @value, an @id, or extensions</xs:documentation>
    </xs:annotation>
    <xs:complexContent>
      <xs:extension base="Element">
        <xs:attribute name="value" type="date-primitive" use="optional"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>
  <xs:simpleType name="dateTime-primitive">
    <xs:restriction>
      <xs:simpleType>
        <xs:union memberTypes="xs:gYear xs:gYearMonth xs:date xs:dateTime"/>
      </xs:simpleType>
      <xs:pattern value="-?[0-9]{4}(-(0[1-9]|1[0-2])(-(0[0-9]|[1-2][0-9]|3[0-1])(T([01][0-9]|2[0-3]):[0-5][0-9]:[0-5][0-9](\.[0-9]+)?(Z|(\+|-)((0[0-9]|1[0-3]):[0-5][0-9]|14:00))?)?)?)?"/>
    </xs:restriction>
  </xs:simpleType>
  <xs:complexType name="dateTime">
    <xs:annotation>
      <xs:documentation xml:lang="en">A date, date-time or partial date (e.g. just year or year + month).  **If hours and minutes are specified, a time zone SHALL be populated.** The format is a union of the schema types gYear, gYearMonth, date and dateTime. Seconds must be provided due to schema type constraints but may be zero-filled and may be ignored.                 Dates SHALL be valid dates.</xs:documentation>
      <xs:documentation xml:lang="en">If the element is present, it must have either a @value, an @id, or extensions</xs:documentation>
    </xs:annotation>
    <xs:complexContent>
      <xs:extension base="Element">
        <xs:attribute name="value" type="dateTime-primitive" use="optional"/>
      </xs:extension>
    </xs:complexContent>
  </xs:complexType>