

**Subject:** Re: gforge task - Timing and MedicationPrescription.dosageInstruction examples  
**Date:** Tuesday, June 30, 2015 at 1:03:02 AM Pacific Daylight Time  
**From:** Grahame Grieve (sent by grahameg@gmail.com <grahameg@gmail.com>)  
**To:** Miller,Michelle M  
**CC:** Pivonka,Fran, Pharmacy HL7, fhir@lists.hl7.org

hi Michelle

Thanks for these examples. my responses in inline.

I had submitted the original ballot comment (7912) asking for more Timing examples due to our questions trying to use timing in context of MedicationPrescription.dosageInstruction. I'll give a couple examples below, but they raise additional questions – many of which cross the line from Timing back to MedicationPrescription. I've also copied the Pharmacy work group for their input and visibility as well.

**Example 1: Duration for an antibiotic (product)**

Ordered as: Amoxicillin 250 mg oral tab, 2 tablets (= 500 mg), TID, for 14 days

When mapping to FHIR:

MedicationPrescription.medication.code = Amoxicillin 250 mg oral tab

MedicationPrescription.dosageInstruction.doseQuantity = 2 tab

MedicationPrescription.dosageInstruction.scheduledTiming.code = TID

**Question 1A:** How do we communicate the duration of 14 days?

\* Timing.repeat.duration is not appropriate since that is how long it happens when it happens.

\* Timing.repeat.bounds currently only supports a Period, but in an outpatient setting, the physician doesn't know when the patient will start taking the med at home. Timing.bounds is being enhanced to support a Range (after change request [6252](#) is implemented). It seems like we might need Timing.repeat.bounds enhanced to also support Quantity (14 days in my example). I logged [8344](#) for this enhancement.

you can withdraw 8344 because I've now actioned an older task asking for the same thing (5951). I've just actioned 6252 now as well

**Question 1B:** When the patient is responsible for taking this outpatient prescription, it is preferable to set quantity to 2 tabs. However, in an inpatient setting, when the drug is being administered by a nurse, we prefer to communicate both the quantity (2 tab) and the dose strength (500 mg). Although drug strength (250 mg) x quantity (2 tab) = dose strength (500 mg), for safety reasons, we would prefer to communicate both. Is there a way to communicate both in the MedicationPrescription resource?

**Example 2: Start date for a med (non-product) that treats a chronic condition (no end date)**

Ordered as: Lisinopril, 20 mg, BID, start on 7/1/2015 at 1:00 PM

When mapping to FHIR:

MedicationPrescription.medication.code = Lisinopril

MedicationPrescription.dosageInstruction.doseQuantity = 20 mg

MedicationPrescription.dosageInstruction.scheduledTiming.code = BID

MedicationPrescription.dosageInstruction.scheduledTiming.repeat.bounds.start = 7/1/2015 at 1:00PM

**Question 2:** In order to communicate the start date (not dateWritten), I assume I can use Timing.repeat.bounds.start despite no other elements of Timing.repeat being populated since I am using Timing.code, correct?

yes all the other properties are 0..1, so this is valid

**Example 3: Count for a “one time” order**

Ordered as: Diflucan, 150 mg, QD (once per day frequency), 1 dose (duration), start date = stop date = 7/1/2015 at 1:00PM

When mapping to FHIR:

MedicationPrescription.medication.code = diflucan

MedicationPrescription.dosageInstruction.doseQuantity = 150mg

MedicationPrescription.dosageInstruction.scheduledTiming.repeat.count = 1

MedicationPrescription.dosageInstruction.scheduledTiming.code = QD

MedicationPrescription.dosageInstruction.scheduledTiming.repeat.bounds.start = 7/1/2015 at 1:00PM

MedicationPrescription.dosageInstruction.scheduledTiming.repeat.bounds.end = 7/1/2015 at 1:00PM

**Question 3:** Does this create inconsistency and confusion around where the prescription start and stop dates can be found?

> MedicationPrescription.dosageInstruction.scheduledPeriod vs  
MedicationPrescription.dosageInstruction.scheduledTiming.repeat.bounds

yes, I already have a task open about this

I'm not going to offer opinion on the pharmacy questions

Grahame

\*\*\*\*\*

[Manage your subscriptions](#) | [View the archives](#) | [Unsubscribe](#) | [Terms of use](#)