Notes on order sets

JT 2015-09-02

**Naming/calling order sets in the UI**

At ordering time, you can definitely find the set (so you can invoke it) if

1. you specify the set name, or a leading subset of the set name, in the concept search box.
2. You find the order set in the catalog under the Order Sets tab (see below)
3. You might also find it by specifying one of the major drugs in it, but this isn’t reliable, as there could be a lot of ‘unimportant’ drugs that appear in many sets. It is probably better to give the set a primary name and additional search names by which it could be called, most of which are text (e.g., “isoniazid/pyridoxine” set can be the primary name of a set, and alternative names could be “INH”, “pyridoxine”; or, “Five-drug Tb regimen 1” could be a name, and alternative search strings that find it could be “tuberculosis”, “Tb”, “anti-Tb”, “isoniazid”, “INH”, “rifampin”, etc.

Order sets can have multiple types of orders, so the primary means of invoking them should be a separate tab that lists the order sets by family and name. Sets that are “primarily” about drugs might be findable in the drug search with a synonym, or with a drug name, as above – but this isn’t fully consistent when you start to have larger order sets.

**Start time field**

The start time for a routine order *or* for an order set order should be similar. As partly described below, the start time field can include constants such as NOW, STAT, ROUTINE, TOMORROW, in the AM; could be a specified absolute date and/or time; could be a relative time (starts from Day 0, Hour 0); could be a time relative to another event or order (30 minutes after ampicillin is fully given). In an order set, these would all be allowed – and would be entered in the current orders just as if you entered NOW, TOMORROW, or a relative time right into a direct order – but if relative times are used, they would be relative to when the order set was invoked.

**Order set creation notes**

UI for writing order sets should allow you to nest in existing order sets; should allow you to specify the operator for any set; should allow you to pre-check any or all of the orders if the operator is ANY.

Sequence

We don’t need to specify a sequence number for any orders – as per last week’s discussion, any sequencing would be done in the Start Time field or in the instructions.

Notes on the order set Java classes from the wiki page:

|  |  |
| --- | --- |
|  | class OrderSet extends BaseOpenmrsMetadata { |
|  |  Operator operator; |
| Not needed |  Concept indication; |
| Not needed – this is mainly a special case written for chemotherapy |  boolean cyclical |
| Not needed |  Integer cycleLengthInDays; |
| Add: (1) order set name; Possible add: (2) families (e.g., antibiotic sets; hydration sets) or that can be a relational table; (3) management metadata: date created, date reviewed, version, author(s), reviewer(s) |  List<OrderSetMember> members; |
|  | } |
|  |   |
|  | abstract class OrderSetMember extends BaseOpenmrsObject { |
|  |  OrderSet orderSet; |
| Not sure of role of title and comment |  String title; |
|  |  String comment; |
|  |  boolean selected; |
| Start Time (consistent for most orders) includes constants (IN AM, NOW, STAT), specific date and specific time (whether absolute or relative), or relative time BEFORE/AFTER other order or other event |  Integer relativeStartDay; |
| Duration is more complex than this and differs for different order types; would not include this up here, but use duration field of the order itself |  Integer lengthInDays; |
| ? |  String template; |
|  | } |
|  |   |
|  | abstract class SingleOrderSetMember extends OrderSetMember { |
|  |  abstract OrderType getOrderType(); |
|  |  Concept concept; |
| Indication not commonly used, although okay |  Concept indication; |
| Instructions belong either here or with the order-type-specific class, not both |  String instructions; |
|  | } |
|  |   |
|  | class TestOrderSetMember extends SingleOrderSetMember { |
|  |  OrderType getOrderType() { test order } |
|  | } |
|  |   |
|  | class DrugOrderSetMember extends SingleOrderSetMember { |
|  |  OrderType getOrderType() { ORDERTYPE\_DRUG } |
| Make sure this follows the full drug-order class (except start time). Needs strength, strength units, form (unless that’s part of the drug), frequency units, duration |  Drug drug; |
|  |  Double dose; |
|  |  String units; |
|  |  Concept route; |
|  |  String frequency; |
| Needs asNeededReason |  boolean asNeeded; |
| See above note on instructions |  String administrationInstructions; |
|  | } |
|  |   |
|  | class NestedOrderSetMember extends OrderSetMember { |
|  |  OrderSet nestedOrderSet; |
|  | } |