

Australian Medicines Terminology
(AMT)
New Model Class Diagram
V 1.7
27th Nov 2009

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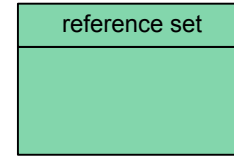
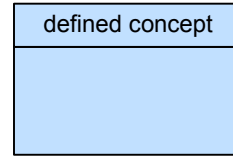
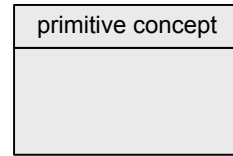
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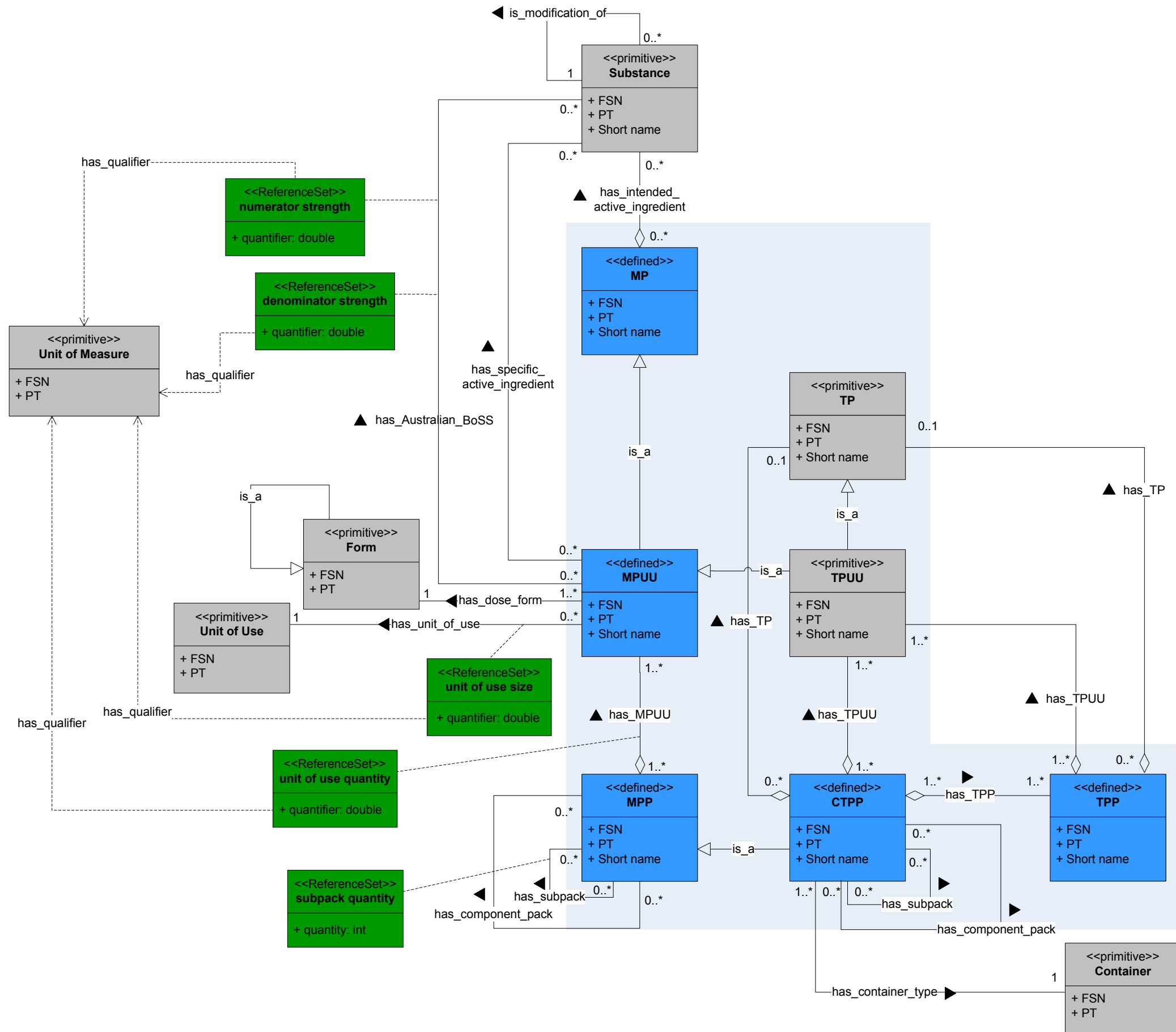
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Document History

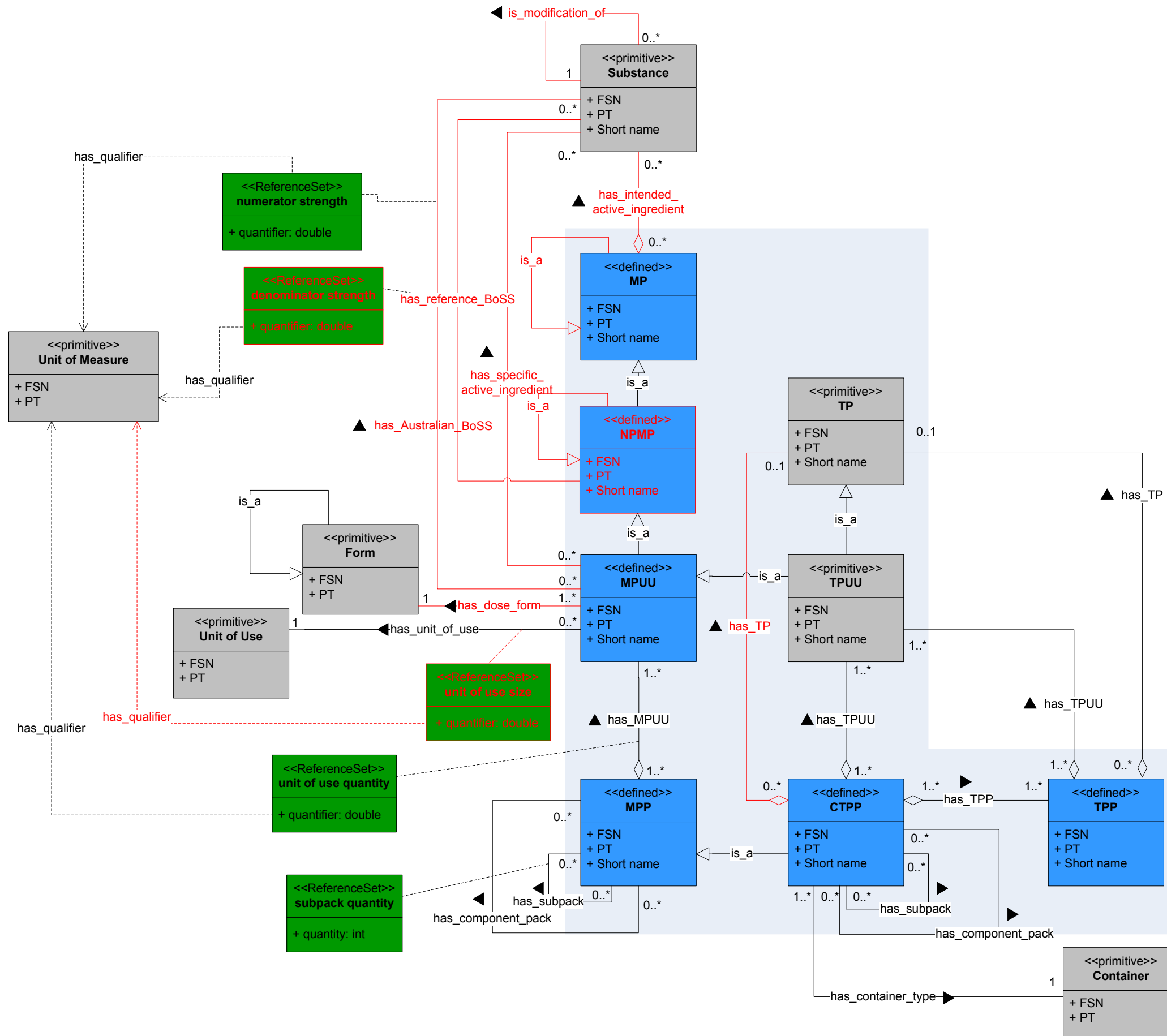
Version	Date	Author	Comments
V1.0	14 th August 2009	AMT Model Review Group	<ul style="list-style-type: none"> IS A relationship between MP and MPP removed Recursive IS A relationship removed for MP and MPUU IS A relationship between TP and TPP changed to aggregation has TPUU Reference set for the following modelled <ul style="list-style-type: none"> ◇ GTIN ◇ ARTG ID ◇ Subpack quantity ◇ Unit of Use Quantity ◇ Numerator strength ◇ Denominator strength ◇ Subpack quantity IS A relationship added between form and unit of measure Is Modification of relationship for substance removed Has unit of measure relationship between form to Unit of Measure
V1.1	25 th August 2009	AMT Model Review Group	<ul style="list-style-type: none"> IS A relationship between TP and TPP changed back to IS A aggregation has TPUU IS A revised between Form, Unit of Use and Unit of Measure Unit of use concept created IS A relationship added between form and unit of use
V1.2	28 th August 2009	AMT Model Review Group	<ul style="list-style-type: none"> Is Modification of relationship for substance added back Unit of Use and Form concepts separated
V1.3	17 th September 2009	AMT Model Review Group	<ul style="list-style-type: none"> TP and TPG exemplified changed (codral) TP to TPG relationship direction corrected TP to TPUU relationship type corrected Has Ingredient relationship to salt where salt is present and relevant
V1.32	30 th September 2009	AMT Model Review Group	<ul style="list-style-type: none"> History Added Panadeine Forte relationship corrected
V1.4	30 th October 2009	AMT Model Review Group	<ul style="list-style-type: none"> Model updated to reflect changes and impacts emerging from IHTSDO decisions on SNOMED CT medicines model. Annotated version of the model added. Repetitious example removed to reduce review burden. Examples updated to reflect the above changes, including a summary of changes made to each. Further examples added to illustrate population examples of key elements of the model.
V1.6	13 th November 2009	AMT Model Review Group	<ul style="list-style-type: none"> Removal of recursive TP Addition of TP has TPP Removal of TPP is a MPP Removal of TPP is a CTPP Addition of CTPP has a TPP
V1.7	27 th November 2009	AMT Model Review Group	<ul style="list-style-type: none"> Has TPP relationship changed to has TP and direction of relationship reversed Has CTPP relationship changed to has TP and direction of relationship reversed Data type changed for unit of use size and unit of use quantity reference sets Has qualifier relationship added between unit of use quantity and Unit of Measure Recursive relationship at the MP level removed in AMT model and this is retained in the international model Cardinality changes for the relationships has dose form, has MPUU, is modification of, has TPUU, has TPP and has container type

Note:
The GTIN, Licence ID and ATC Code have been removed from all examples to preserve space and provide clarity to the MPUU and TPUU relationship without the clutter.



Summary of Changes

Changes to the model inherited from the final requirements of the IHTSDO medicines model agreed at the Pharmacy Working Group are represented using red print in this diagram.



1. The MP to Substance *has_ingredient* relationship name has been updated to *has_intended_active_ingredient* to reflect the meaning that has consistently been applied to it in IHTSDO and AMT modeling. I.e. the ingredient that has the intended activity on the patient.
2. A new intermediate concept class has been created in the International Release in order that a suitable level of abstraction is available for other IHTSDO Member extensions to integrate with SNOMED CT. Named the Non Proprietary Medicinal Product its definition is the same as the MPUU but without representation of the Unit of Use.
3. The requirement for modeling Basis of Strength Substance has resulted in the inclusion of the *has_reference_BoSS* relationship in the International Release. The name of this relationship has been defined to differentiate it from any national decision to use a different substance against which to model strength.
4. The MPUU to Substance *has_ingredient* relationship has been refined in response to national feedback to differentiate it from *has_intended_active_ingredient* applied at the MP level.
5. The MPUU to Substance *has_BoSS* relationship name has been refined to *has_Australian_BoSS* to reflect it is an Australian component.
6. The *is_modification_of* relationship has been added back into the model to correct the error of its exclusion.
7. The Denominator Strength RefSet will be consistently populated following a decision to standardise strength representation to a unitary level in order to improve understandability and reusability. I.e. the denominator value will always be '1' associated with an appropriate unit of measure.
8. In order to process size of the unit of use associated with the MPUU the decision described in 6. above requires the creation of a Unit of Use Size RefSet added to *has_unit_of_use* relationship.
9. The recursion at MP removed during the Sydney workshop has been reinstated in the International Model to accommodate the requirement for different Members to define different levels of specialisation of MP depending on national clinical convention. However, individual national releases will have the capacity to define the allowable set of MPs in their extension and the Australian requirement for ensuring only one MP is available for use will be preserved.
10. The same use case has defined the recursion modeled at the IHTSDO NPMP concept level. The same capacity to define the allowable set of content for the Australian release of AMT when integrated with SNOMED CT will ensure the NPMP class is not available unless use cases emerge that define its routine use.
11. The non-repeatability of the value of the *has_unit_of_use* relationship to consistently represent the value of the qualifier of the Unit of Use Size RefSet has required the addition of specific qualifier to that RefSet to manage these exceptions.
12. The relationship between TP and pack class has been moved to refer to the CTPP and appropriately renamed in order that the TP is related to a physical rather than virtual class instance.