Use Case 2_ Add new facts

In this case new facts are added to the OBSERVATION_FACT table regardless of whether or not the fact's encounter exists. This involves overwriting any matching fields. i.e. if the incoming fact matches a particular stored fact and its update date is greater than the update of the matching fact, then the new fact will overwrite the old fact.

Example:

```
<observation update_date="2008-05-04T18:13:51.498-04:00" sourcesystem_cd="PFT">
<event_id source="HIVE">100</event_id>
<patient_id source="HIVE">100</patient_id>
<concept_cd>FC30.00620</concept_cd>
<nval_num>10.9</nval_num>
</observation>
<observation update_date="2008-05-04T18:13:51.498-04:00" sourcesystem_cd="PFT">
<event_id source="HIVE">100</event_id>
<patient_id source="HIVE">100</patient_id>
<concept_cd>FC30.00621</concept_cd>
<nval_num>20.2</nval_num>
</observation>
<observation update_date="2008-10-04T18:13:51.498-04:00" sourcesystem_cd="PFT">
<event_id source="HIVE">100</event_id>
<patient_id source="HIVE">100</patient_id>
<concept_cd>FC30.00622</concept_cd>
<nval_num>76.0</nval_num>
</observation>
```

The rows in the OBSERVATION_FACT table **before** the update:

ENCOUNTER_NUM	PATIENT_NUM	CONCEPT_CD	NVAL_NUM	UPDATE_DATE
100	100	FC30.00620	10.9	2008-05-04 18:13:51
100	100	FC30.00621	20.2	2008-05-04 18:13:51
100	100	FC30.00622	6.0	2008-05-04 18:13:51

The rows in the OBSERVATION_FACT table **after** the update:

ENCOUNTER_NUM	PATIENT_NUM	CONCEPT_CD	NVAL_NUM	UPDATE_DATE
100	100	FC30.00620	100.9	2008-05-04 18:13:51
100	100	FC30.00621	6.0	2008-05-04 18:13:51
100	100	FC30.00622	76.0	2008-10-08 18:13:51

Assumption: *the record(s) in the update file (new record) has the same primary key as a record(s) in the associated table (existing record).*
Primary Key includes:

Description	Column Name	XML tag
Encounter number	ENCOUNTER_NUM	<event_id>
Patient number	PATIENT_NUM	<patient_id>
Concept code	CONCEPT_CD	<concept_cd>
Start date	START_DATE	<start_date>
Modifier code	MODIFIER_CD	<modifier_cd>
Observer code	PROVIDER_ID	<observer_cd>

Append Flag = True
The following conditions will result in the new record **replacing** the existing record:

new record update date	equal to (=)		update date on the existing record	
new record update date	greater than (>)		update date on the existing record	
new record update date	is not null	AND	update date on the existing record	null
new record update date	null	AND	update date on the existing record	null

The following conditions will result in **ignoring** the new record and **not** updating the existing record:

new record update date	less than (<)		update date on the existing record	
new record update date	null	AND	update date on the existing record	is not null