



PharmBiz

Software Vendors Forum

11th June 2013

Agenda

- Introduction/setup
- PharmBiz
- Review Action Items
- PharmCIS go-live
- PBS Number
- Late changes
- Text extracts
- Proposed changes
- Future development
- Brand Substitution audit
- Developer assistance
- Other Business
- Meeting Close

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PharmBiz

- Project has closed
- Delivered PharmCIS
- Transition to “business as usual”
- PIMS manages all aspects of publication of PBS Schedule

PharmBiz

- PBS XML support
- Single point of contact
- PBS.Contact@health.gov.au

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Action Items

1. Document Prescriber Type group labels
2. Provision of XSL stylesheets for Continued Dispensing and Medication Charts
3. Document solution for MPUU identifiers
4. Populate mpuu, tpuu data
5. Support for PBS XML v1.8 schema
6. AMT workaround for Chemotherapy

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PharmCIS

- PharmCIS is now live
- Migrated October 2012 Schedule (+ history) from legacy systems
- Produced December 2012 Schedule

PharmCIS

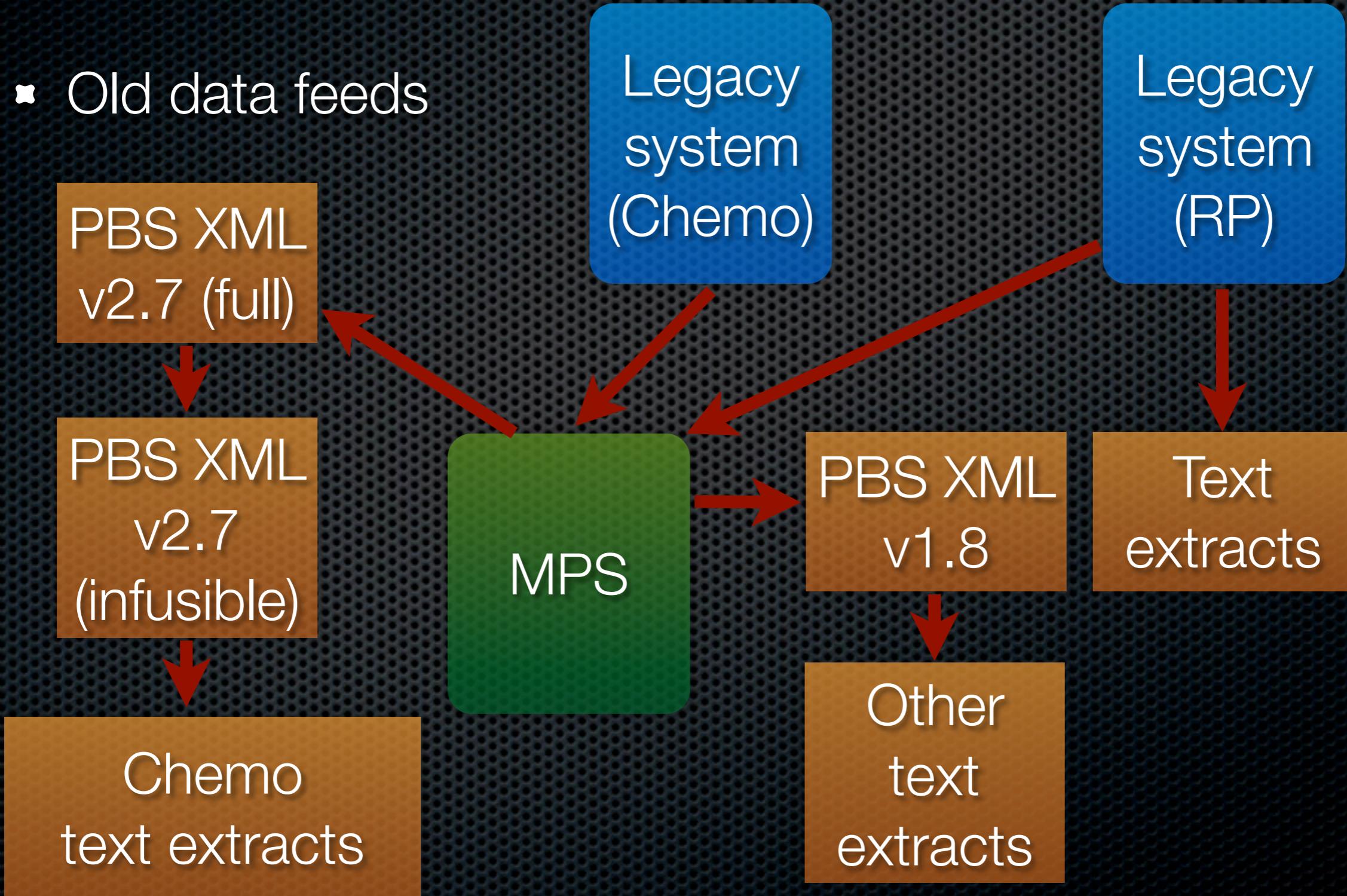


PharmCIS

- PBS XML Schema v2.8 in production
- PharmCIS producing PBS XML documents
- Single, integrated source of data
- PDFs, website, text extracts generated from PBS XML

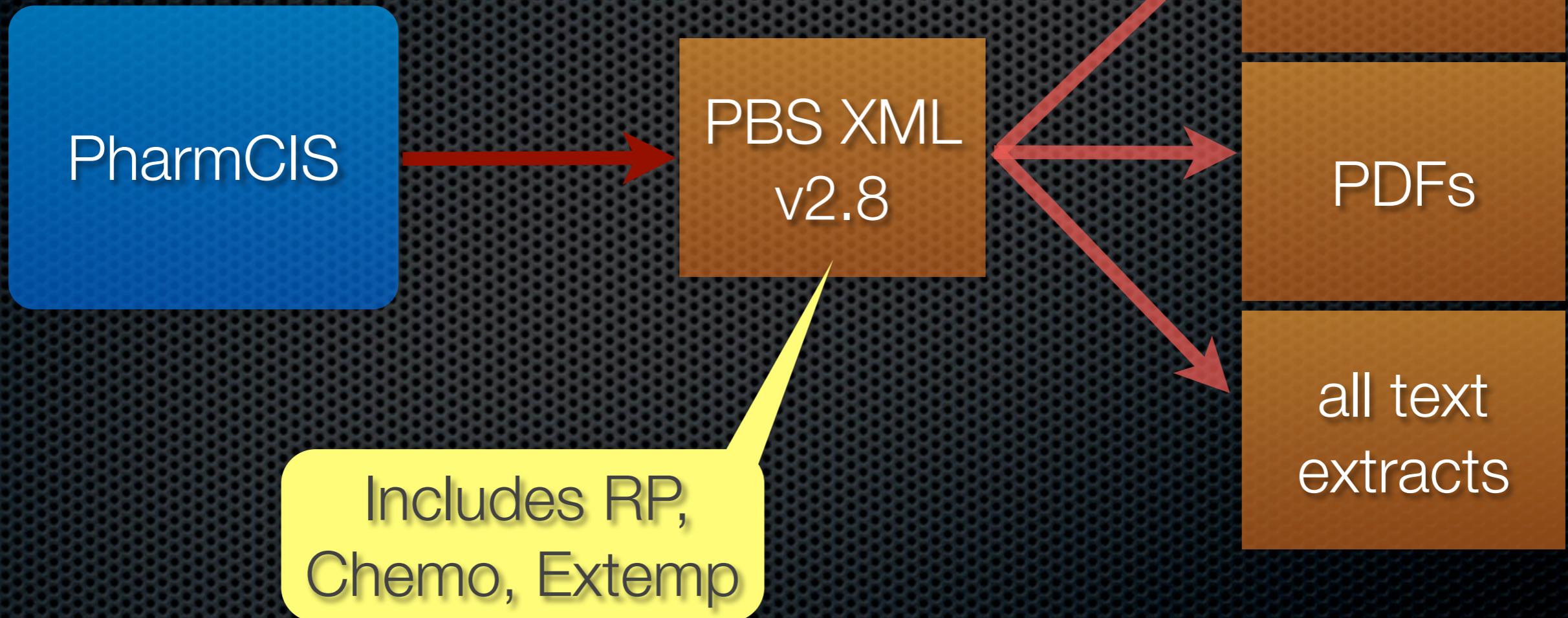
PharmCIS

- Old data feeds



PharmCIS

- New data feed



PharmCIS

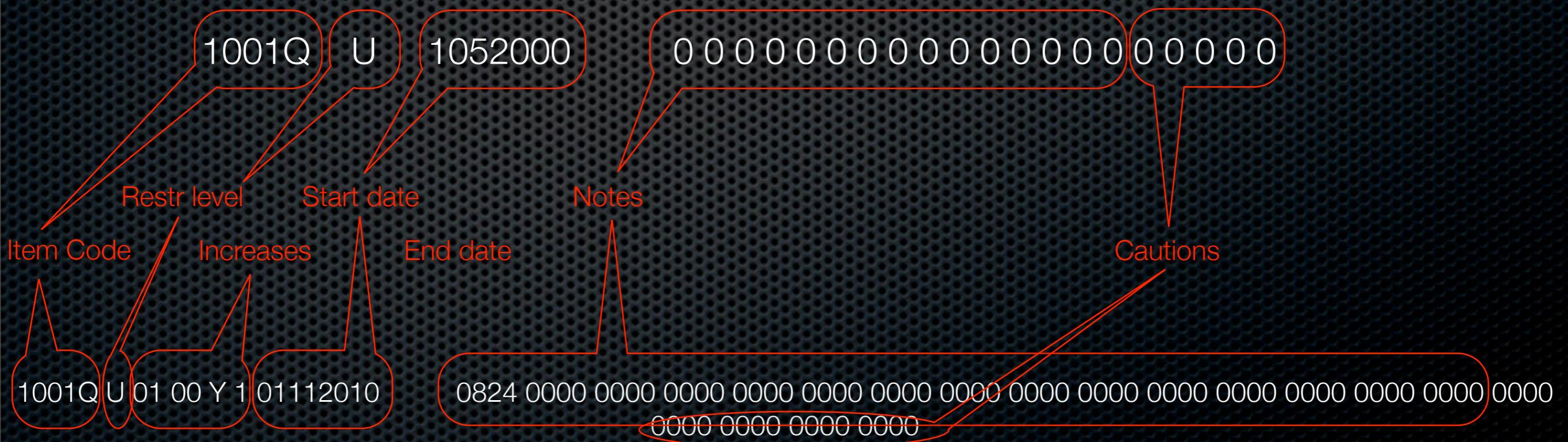
- Data issues
 - AMT
 - Start dates

PharmCIS

- AMT
 - Perindopril with Amlopidine
 - Amlopidine with Perindopril
- Nehta

PharmCIS

- Start dates
 - (Pharmacy) PBS Item Table, LinkExtract
 - Start of what?



PharmCIS

Item Code	Restr Code	Start date	Note
1002R	17153	01082003	0824 0000

Usage Code End date Caution

PharmCIS

- PBS XML is more fine-grained
- Each element, including references, has individual effectivity

```
<pbs:prescribing-rule>
  <pbs:effectivity>
    <pbs:start>2010-03-01</pbs:start>
  </pbs:effectivity>
</pbs:prescribing-rule>
```

PharmCIS

- Proposal:
- For prescribing rule start date is derived from effectiveness of product listings
- Most recent start of contiguous listings

1001Q

AA

BB

CC

PharmCIS

- Most recent start of contiguous listings

1001Q

AA

BB

1001Q

AA

CC



PharmCIS

- All start dates requires schema change

1001Q

AA

BB

1001Q

1001Q

AA

CC

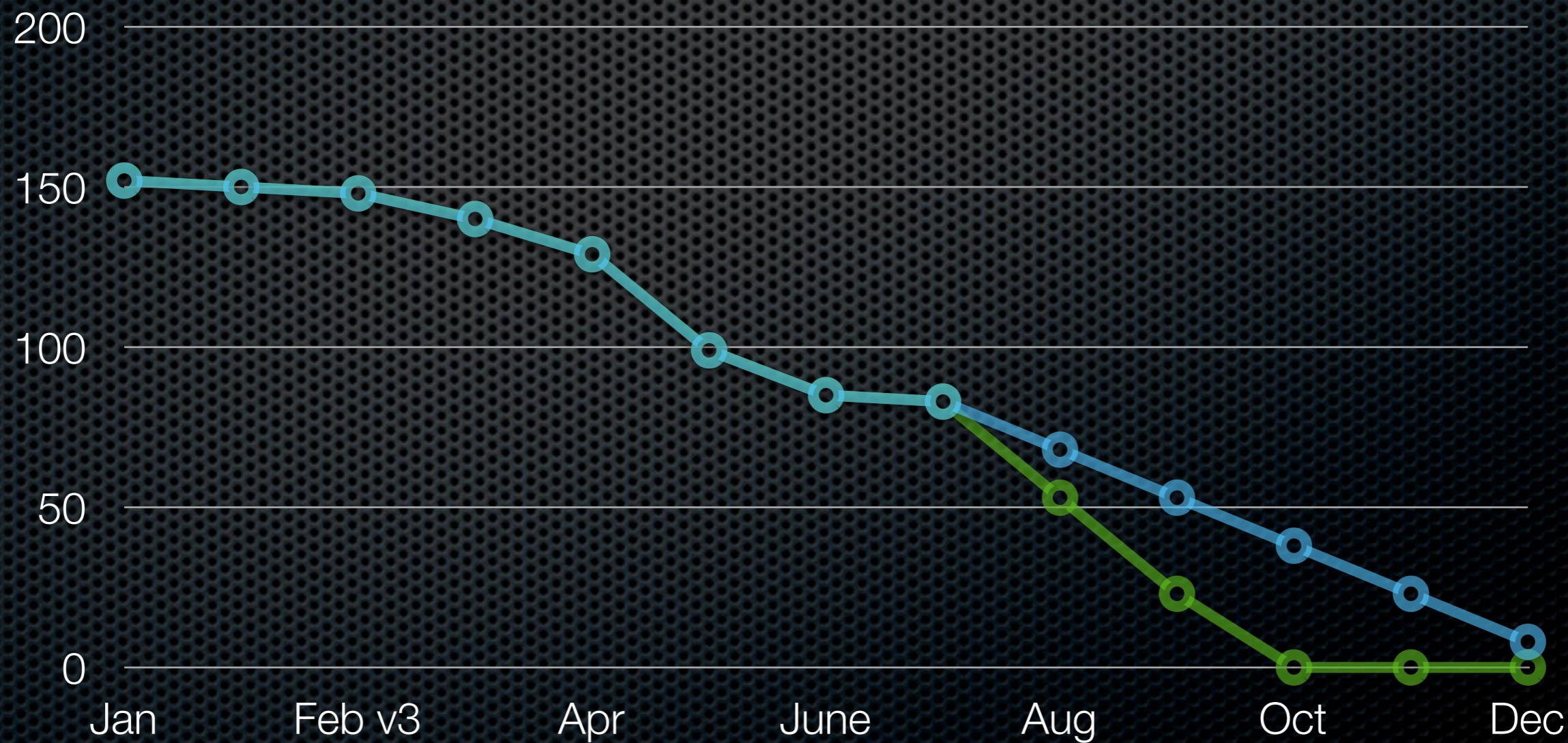


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PBS Number

- PharmCIS allocating 4 digit Item Codes
- Nearing complete exhaustion



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Late Changes

- Changes to PBS Schedule
- After start of Embargo period
- Before Effective Date
- Eg. Queensland Flood emergency listings

Late Changes

- Erratum
 - Change to existing information
- Addendum
 - Addition of new information

Late Changes

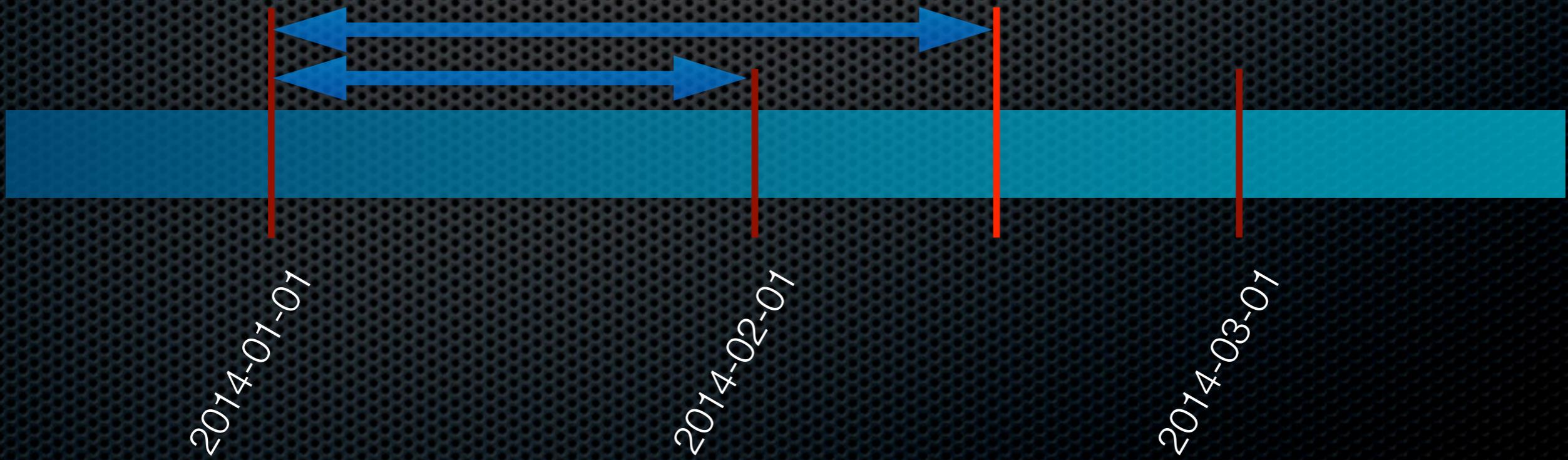
- Communication:
- Erratum or Addendum posted to dev.pbs.gov.au
- Notification sent to mailing list

Late Changes

- Data:
 - New version of PBS XML posted to dev.pbs.gov.au
 - Will use incremented version number
 - ...-v2.xml, ...-v3.xml
 - Same effective date

Late Changes

- Delta ($\text{pbs}:\text{changes-list}$)
- Contains all changes from previously published schedule
- Changes in previous versions must be reversed



Late Changes

- Summary of Changes for next month will not include late changes

Late Changes

- Changes to PBS Schedule
- After Effective Date
- Eg. Docetaxel, Risedronic Acid court case
- Process not currently well defined (ie. ad-hoc)
- Erratum or Addendum posted to dev.pbs.gov.au
- Notification sent to mailing list

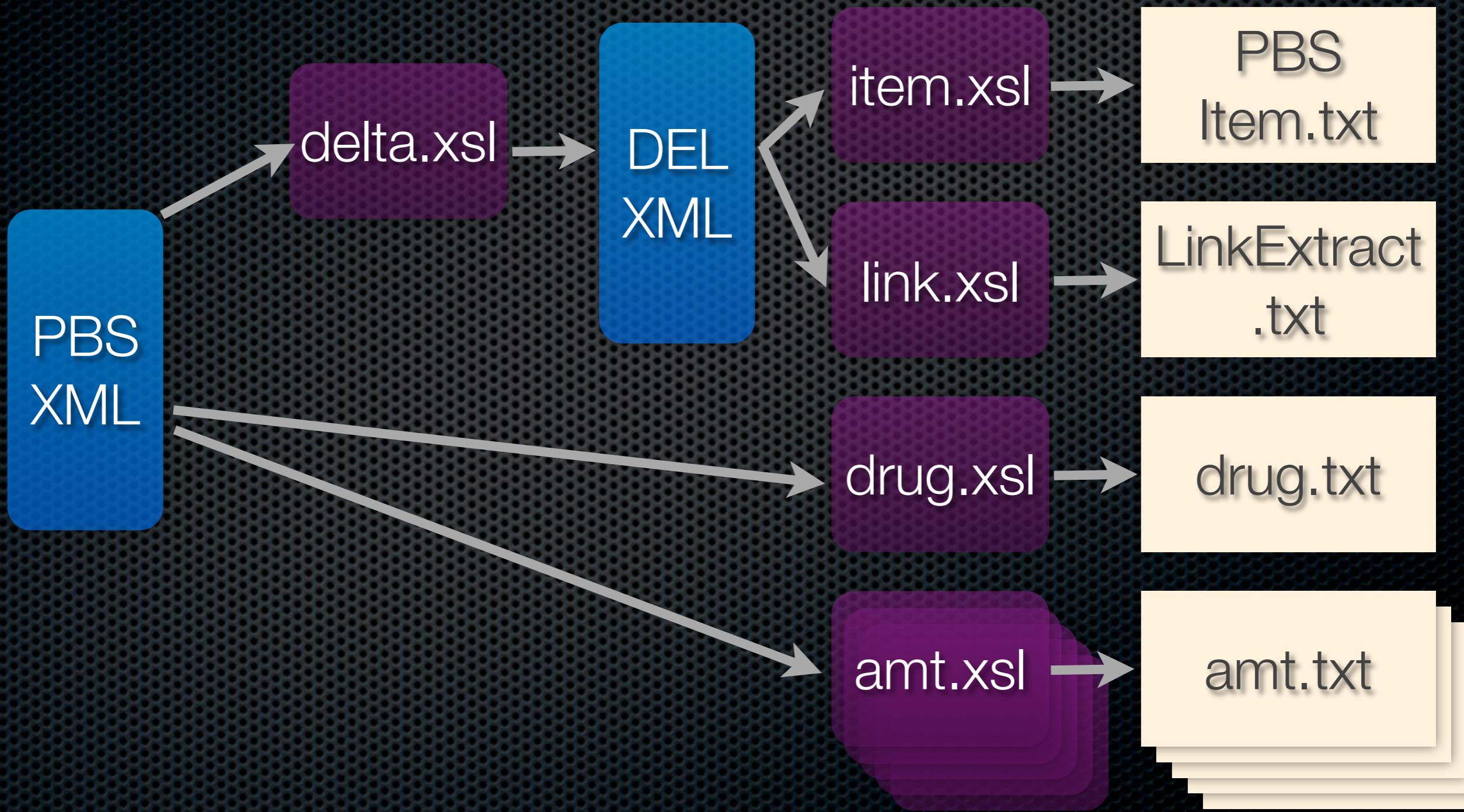
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Text Extracts

- Legacy system no longer producing text extracts
- XSL stylesheets - ‘PBS Software’
- Now separate from PBS XML Schema package
- dev.pbs.gov.au
 - Download
 - Documentation

Text Extracts



Text Extracts

- Text files not suitable for loading data
 - Eg restriction text, subscripts
 - non-ASCII characters
- Good for (human) analysis

Text Extracts

- Publish text files
- Available on effective date, not under embargo
- May be different set of files
- May be different format
- Need to determine requirements; Use Cases

Text Extracts

- PDF still useful
- PDFs will not be discontinued
- HTML may be published during Embargo period

Text Extracts

- XSL stylesheets will be released as Open Source Software
- MIT/Artistic License
- Open up development/maintenance
- Build community
- DoHA will continue to contribute until 31/12/2013
- DoHA may further contribute after 1/1/2014

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New Measures

- Continued Dispensing
- Medication Charts
- Legal Instrument text

Continued Dispensing

- Already included in PBS XML Schema v2.8
- Data will be included in PBS XML starting with August 2013 Schedule

Medication Charts

- Proposed changes:
 - PBS XML Schema v2.9
 - Controlled Vocabularies 2013-05-15

PBS XML Schema

- In pbs:prescribing-rule
- Optional, empty element
 - <pbs:medication-chart/>
- If present indicates that item may be prescribed via Medication Chart
- If absent indicates that item must not be prescribed via Medication Chart

Controlled Vocabularies

- New values:
 - pbs:continued-dispensing-default
 - pbs:medication-chart-default
- Will appear in rdf:RDF section
- Similar to Safety Net default values

Defaults

```
<skos:Concept rdf:about="pbs:continued-dispensing-default">
  <skos:definition>Default value for Continued Dispensing</skos:definition>
  <skos:prefLabel>continued dispensing default</skos:prefLabel>
  <skos:note>no</skos:note>
  <skos:broader rdf:resource="http://schema.pbs.gov.au"/>
</skos:Concept>
<skos:Concept rdf:about="pbs:medication-chart-default">
  <skos:definition>Default value for Medication Charts</skos:definition>
  <skos:prefLabel>medication chart default</skos:prefLabel>
  <skos:note>no</skos:note>
  <skos:broader rdf:resource="http://schema.pbs.gov.au"/>
</skos:Concept>
```

Legal Instrument Text

- DoHA-Internal layer
- Labels and descriptions for Legal Instruments
- Only for publishing system

<int:title>Injection 50 mg in 2 mL ampoule</int:title>

<dbk:title>fluphenazine decanoate 50 mg/2 mL injection, 5 x 2 mL ampoules</dbk:title>

<pbs:mpp-reference xlink:href="#a48840760">
 <int:pharmaceutical-item-reference xlink:href="#a48812749"/>
</pbs:mpp-reference>

Legal Instrument Text

```
<int:pharmaceutical-items-list>
<int:pharmaceutical-item xml:id="a48805021">
  <dbk:title>"BCG Immunotherapeutic" (Bacillus Calmette-Guérin/ Connaught strain)</dbk:title>
  <dbk:subtitle>Powder for intravesical administration containing 6.6 to 19.2 x
10<dbk:superscript>8</dbk:superscript> CFU</dbk:subtitle>
  <pbs:administration>
    <pbs:moa-value>admin:intravesical</pbs:moa-value>
  </pbs:administration>
  <int:agreed-ex-manufacturer>135.00</int:agreed-ex-manufacturer>
  <int:pricing-quantity>1</int:pricing-quantity>
</int:pharmaceutical-item>
```

Legal Instrument Text

- Merge internal layer into public layer
- Minimal change:
 - Make internal layer visible
- Comprehensive change:
 - Remove internal layer
 - Merge elements into pbs: namespace
 - (see also Future Development)

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Future Development

- Feedback
- Can PBS XML be simpler, easier to use?
- “It’s too complicated” doesn’t help...

Future Development

- Fun facts:
 - June PBS XML: 83.5MB
 - Without indentation: 55.3MB
 - Expanded (de-normalise): 167MB

Future Development

- Fun facts:
 - July PBS XML: 108.3MB
 - Without indentation: 73.5MB
 - Expanded (de-normalise): 190.7MB

Future Development

- Broken down (June):
 - schedule 52MB
 - restrictions-list 24MB
 - drugs-list 5MB
 - RDF 1.5MB
 - changes-list, groups-list, organisations-list <1MB

Future Development

- Programs:
 - GE 43MB
 - EP 340KB
 - HB, HS 4MB
 - R1 1.6MB
 - IN, IP, TY, TZ 1.5MB
 - PL 850KB
 - CT, DB, GH, IF, MD, MF, PQ < 2MB

Future Development

- AMT (v2.42): >300MB
- text format

Future Development

- Changes to PBS XML Schema
- Minor changes
- Major changes

Future Development

- Minor changes
- Backward-compatible
 - Repeat start/end dates
 - Add pbs:lowest/pbs:ex-manufacturer
 - Add pbs:code to pbs:group
 - Review use of machine-readable labels, eg rwt:alternate-text

Future Development

- Minor changes
- Non-backward compatible
 - Remove deprecated elements
 - Eg TPUU-related elements for Chemo
- Version 3.0

Future Development

- Major changes
- Version 3.0
- Refactor `pbs:pricing` element
- Redesign RWT module
 - Use (X)HTML instead of DocBook

Future Development

- Changes to PBS XML data model
- “API” (Web Services)
- Data granularity
- Pilot study

Future Development

- Managing change
- Backward-compatible
 - Parallel within document
 - Deprecated elements
 - Eg. pbs:tpp/pbs:tpuu-ex-manufacturer

Future Development

- Non-backward-compatible
 - Separate document
 - Alongside previous version
 - Deprecated elements removed

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Brand Substitution Audit

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Developer Assistance

- Online Forum
- Documentation
 - dev.pbs.gov.au
 - FAQ
 - Schema

Developer Assistance

- Tutorials
 - XSL stylesheet usage
- Workshops

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Meeting Close

- Next meeting