

ePrescribing Prior Authorization & GELLO

**Clinical Decision Support (CDS) Technical Committee
Clinical Guidelines (CGL) SIG
Thursday, 1/12/06, 1Q**

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Discussion Topics

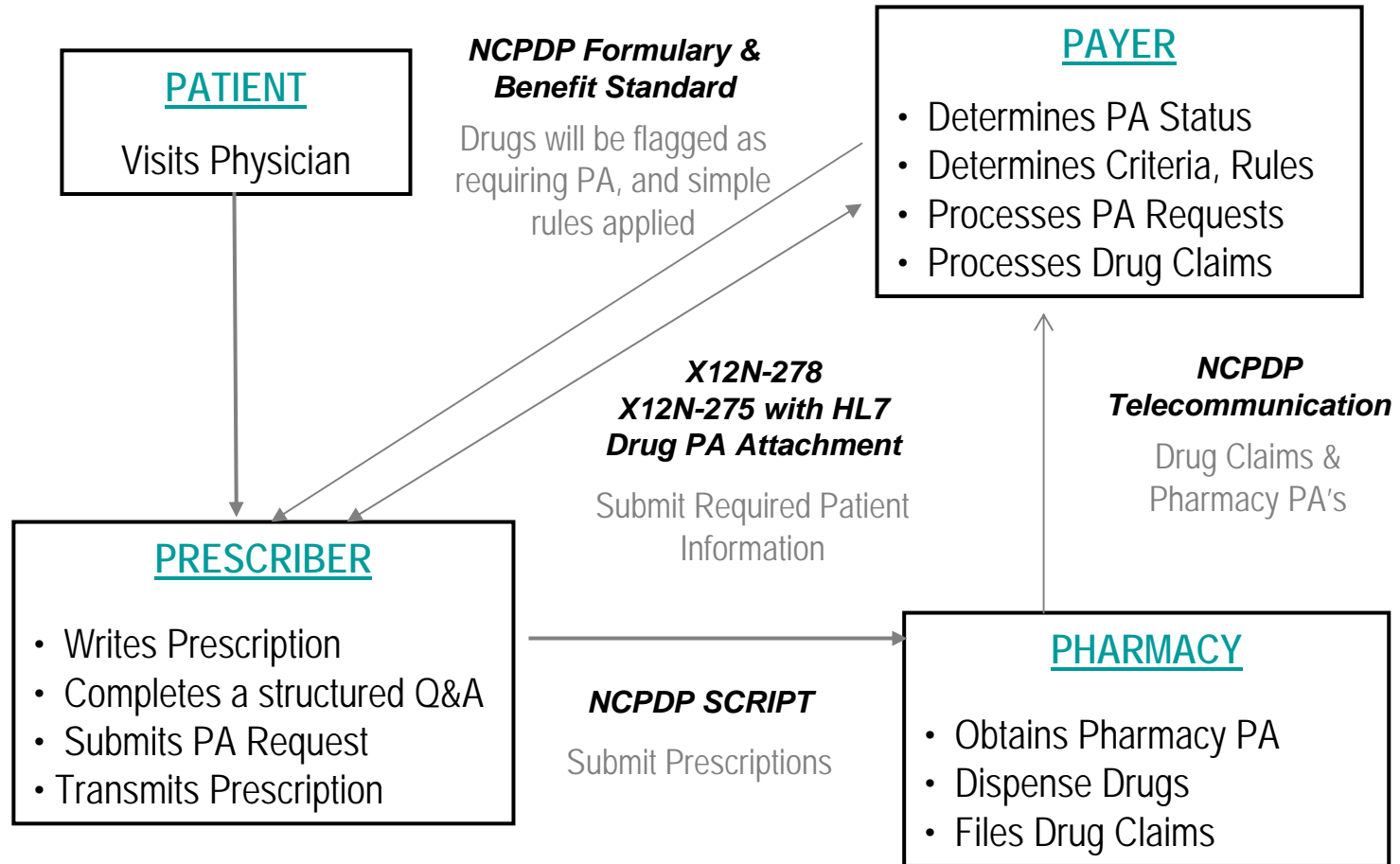
- **ePrescribing PA**
- **Automation of PA Process**
- **Standards Delivery Timeline**
- **Status Update**
 - **NCPDP Progress & Future Work**
 - **AHRQ GELLO/PA Project**
- **Next Steps**

ePrescribing PA

With the passage of the Medicare Modernization Act's (MMA) in 2003, additional emphasis was placed on automating and testing prior authorization as part of the ePrescribing process.

- The National Committee on Vital Health Statistics (NCVHS) was designated to oversee the development of ePrescribing standards and extended its support to include prior authorization.
- NCPDP Prior Authorization Workflow-to-Transaction Task Group was formed to understand workflow in physician office, plan and pharmacy; identify standards required to support ePrescribing PA; and make recommendations to NCVHS.
- As specified in the MMA, CMS has just awarded contracts to four coalitions to pilot test ePrescribing during 2006. While some aspects of prior authorization will be included in these pilots, the complete prior authorization process outlined by the NCPDP PA TG will be tested in subsequent pilot initiatives.

Automation of PA Process



PA Standards Delivery Timeline

<u>Standards</u>	<u>1/06</u>	<u>2/06</u>	<u>3/06</u>	<u>4/06</u>	<u>5/06</u>	<u>6/06</u>
X12N – 278 HC Request for Review & Response	-	TG2 & X12N vote to publish Guide at 2/06 conference	X12J technical assessment review▶		Approve for publication by 6/06 conference
X12N – 275 Wrapper to carry add'l information in HL7 Attachment	Post for public comment	2/06 conference status update	Respond to public comment; prepare for Info Forum▶		Informational Forum at 6/06 conference
HL7 - Drug PA Attachment	Review draft of AIS Drug PA Attachment	Post 1 st ballot	Respond to public comments▶	Reconcile ballot comments at 5/06 conference	Post 2 nd ballot if necessary
NCPDP: <i>Formulary & Benefit</i> <i>Script</i> <i>Telecomm</i>	Complete & ready for ePrescribing pilot testing					

NCPDP - Progress

WG 11 – PA Workflow-to-Transaction Task Group

- Developed flow diagrams of standard and LTC PA processes.
- Leveraged AHRQ grant to complete analysis of PA forms.
 - Analyzed 350 forms/ 1,750 questions / 53 payers
- Created database to store analysis of industry forms.
- Leveraged additional AHRQ grant to normalize data in six (6) therapeutic categories, and one (1) unspecified category.
 - Antifungals
 - Erectile Dysfunction
 - Growth Hormone
 - NSAIDs/COX2
 - Opioid Agonists
 - PPIs
 - Unspecified Drug
- Formed separate task group to address LTC PA.
- Presented progress report to NCVHS in 12/05.

NCPDP - Future Work

WG 11 – PA Workflow-to-Transaction Task Group

- Identify additional therapeutic categories for PA data normalization.
- Continue jointly developing future AIS technical requirements with HL7 ASIG, as additional therapeutic categories are identified.
- Develop PA Guidance Document for CMS-MMA ePrescribing pilots to assist participants in creating PA transaction sets.
- Review comments received on first ballot of HL7 Drug PA Attachment.
- Seek partners to conduct subsequent PA pilots to test the complete prior authorization process.

AHRQ – GELLO/PA Project

- Purpose of project:

To complete a more in depth analysis of the use of GELLO within the ePrescribing prior authorization process by:

- 1) Analyzing the ability of the HL7 RIM to store PA criteria.
- 2) Analyzing how well GELLO could encode PA criteria into GELLO expressions.
- 3) Developing simulated models to demonstrate how web based GELLO tools might function in a real life application.

- Project Timeframe:

October 3, 2005 – November 20, 2005

- Project Team:

- Robert Dunlop, InferMed
- Robert Greenes, Partners HC
- Ross Martin, Pfizer
- Barbara McKinnon, Point-of-Care Partners
- Tony Schueth, Point-of-Care Partners
- Margarita Sordo, Partners HC

AHRQ – GELLO/PA Project

- Basis for Analysis:

The six (6) drug therapeutic categories, whose data was normalized by the NCPDP PA TG and also incorporated into the *new* HL7 Drug PA Attachment just posted for public comment by the HL7 ASIG, was used as the basis for analysis

- | | |
|-------------------------|---------------------------|
| 1) Antifungal | 4) NSAID's/COX2 |
| 2) Erectile Dysfunction | 5) Opioid Agonists |
| 3) Growth Hormone | 6) Proton Pump Inhibitors |

- Project Deliverables:

Four (4) project reports were delivered to AHRQ on 11/20/05.

- 1) Project Executive Summary
- 2) HL7 RIM Analysis of above six (6) therapeutic categories
- 3) GELLO Analysis & Coding of above six (6) therapeutic categories
- 4) Web Based Solution demonstrating how GELLO Authoring & Delivery Tools might support the automation of ePrescribing PA.

The balance of today's presentation will provide an overview of these reports.

AHRQ – GELLO/PA Project

- HL7 RIM Analysis
 - A Defined Message Information Model (D-MIM) was illustrated in the analysis, rather than an R-MIM, since the HL7 Drug PA Attachment messaging approach and content had not been finalized at the time of this project.
 - Method for mapping primitives into RIM classes-attributes:
 - Created storyboard.
 - Defined PA criteria primitives from six (6) therapeutic categories contained in HL7 Drug PA Attachment booklet draft.
 - Mapped PA criteria primitives to HL7 RIM.

AHRQ – GELLO/PA Project

▫ Defined PA criteria primitives

By transcribing data elements from each of the six (6) therapeutic categories into an Excel spreadsheet, elements were clustered into related entities. Example: Prescriber/Patient

HL7 Pharmacy PA Attachment
(All Questions Answers Defined Across Therapeutic Category Sections)

		Therapeutic Category Key	Comments
PRESCRIBER		N, U, E, I, P, G	Information about individual prescribing drug
	Name	N, U, E, I, P, G	
	Identifier	N, U, E, I, P, G	
	Specialty Taxonomy Code	N, U, E, I, P, G	
	Contact information	N, U, E, I, P, G	Contact information for individual prescribing the drug
	Phone number	N, U, E, I, P, G	
Fax number	N, U, E, I, P, G		
PATIENT		N, U, E, I, P	Patient history related to drug request
	History	N, U, E, I, P	
	Related diagnosis	N, U, E, I, P	
		N, U, E, I, P	
	Diagnosis confirmed by	U, I	Triggered by related diagnosis
	DXESTAB - AnswerList	U	Triggered for unspecified request
	LabT Laboratory examination	U	
	RadT Radiological examination	U	
	ODIag Other diagnostic examination	U	
	ClE Clinical Evaluation	U	
	AFDX - AnswerList	I	Triggered if LabT selected ??
	FCul Fungal culture	I	
	PAS PAS Stain Results	I	
	KOH KOH Preparation	I	
	NBIOP Nail Biopsy	I	
	?OTH Other	I	
	Fungal Infection	I	Site of fungal infection
	Location	I	
	FUIS - AnswerList	I	
	FN Finger Nail	I	
	TN Toe Nail	I	
	OTH Other	I	
	Other	I	
Number of Nails	I	Triggered if FN or TN selected	

Therapeutic Category Key: : N=NSAID; COX2; U=Unspecified; E=Erectile Dysfunction; I=Imidazole-Related Anti-Fungal; P=PPI; G=Growth Hormone

1

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- Mapped PA criteria primitives to HL7 RIM

Once the data elements were categorized into primitives, they were mapped to the HL7 RIM classes & attributes.

	A	B	C	D	E	F	G	H	I
1	Entities				Prescriber	Patient	Parent	Mother	Father
2	Entity	classCode	CS	EntityClass	PSN	PSN	PSN	PSN	PSN
3		determinerCode	CS	EntityDeterminer	INSTANCE	INSTANCE	KIND	INSTANCE	INSTANCE
4		id	SET<II>		Identifier	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5		code	CE	EntityCode		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6		quantity	SET<PQ>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7		name	BAG<EN>		Name	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
8		desc	ED		Information about	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9		statusCode	CS	EntityStatus	active	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10		existenceTime	IVL<T>			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11		telecom	BAG<TEL>		Phone number; F	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12		riskCode	CE	EntityRisk		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13		handlingCode	CE	EntityHandling		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14									
15	LivingSubject	administrativeGenderCode	CE	AdministrativeGender	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16		birthTime	TS			<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17		deceasedInd	BL			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18		deceasedTime	TS			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19		multipleBirthInd	BL			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20		multipleBirthOrderNumber	INT			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21		organDonorInd	BL			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22									
23	Person	addr	BAG<AD>		<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24		maritalStatusCode	CE	MaritalStatus	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25		educationLevelCode	CE	EducationLevel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
26		raceCode	SET<CE>	Race	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
27		disabilityCode	SET<CE>	PersonDisabilityType	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
28		livingArrangementCode	CE	LivingArrangement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
29		religiousAffiliationCode	CE	ReligiousAffiliation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
30		ethnicGroupCode	SET<CE>	Ethnicity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
31									
32									
33				Not represented in RIM Entity:	Specialty Taxonomy Code				

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▫ HL7 D_MIM

The following D-MIM diagrams use the color-coded Class and Relationship representations specified by HL7:

Entity – defined as a ‘physical thing, group of physical things or an organization capable of participating in Acts, while in a role’.

Entity
classCode: CS determinerCode: CS id: SET<II> code: CE quantity: SET<PQ> name: BAG<EN> desc: ED statusCode: SET<CS> telecom: BAG<TEL> riskCode: CF

Role – defined as a ‘competency of the Entity playing the Role as identified, defined, guaranteed, or acknowledged by the Entity that scopes the Role’.

Role
classCode: CS id: SET<II> code: CE negationInd: BL addr: BAG<AD> telecom: BAG<TEL> statusCode: SET<CS> effectiveTime: IVL<TS> certificateText: ED quantity: RTO positionNumber: LIST<II>

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▫ Findings

The HL7 RIM mapping demonstrated that PA criteria queries and responses could be managed within HL7-compliant systems and tools. In the future, further refinements of the draft D-MIM will be needed to develop a R-MIM diagram.

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- GELLO Analysis & Coding
 - The GELLO analysis used the D-MIM as a data model to identify the relevant RIM classes and attributes and then converted the PA questions and answers contained in the HL7 Drug PA Attachment into simple GELLO expressions or Boolean combinations of simple expressions:
 - To retrieve specific pieces of information, e.g. *prescriber name, and*
 - For decision support rules involving all classes identified, e.g. *to determine whether a lab result was abnormal or not.*
 - **Approach Used:**
 - Identified subjects and equivalent classes in HL7 RIM.
 - Identified GELLO expressions used across six (6) therapeutic categories.
 - Coded GELLO expressions by therapeutic category.

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▫ Identified subjects and equivalent classes in HL7 RIM

Therapeutic Category Subjects	Equivalent Class in the HL7 RIM
Patient	Person
Prescriber	Person
Medication to be ordered	SubstanceAdministration
Past/Current Medications	SubstanceAdministration
Allergies/Side effects	Observation
Lab Results	Observation
Assessments	Observation
Procedures/Treatments	Procedure

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- Identified GELLO expressions used across six (6) therapeutic categories.

Expression	GELLO Expression	AF	ED	GH	NSAIDS	OA	PPI
Patient							
Name	Person.name	x	x	x	x	x	x
ID	Context Person Self.ID = "xxx"	x	x	x	x	x	x
DOB	LivingSubject.birthTime	x	x	x	x	x	x
Gender	LivingSubject.administrativeGenderCode		x				
Height	let height: Observation = Factory.Observation-> select(interpretationCode(code-for-height)).sortedBy(effectiveTime.high).last() height.value			x			
Weight	let weight: Observation = Factory.Observation-> select(interpretationCode(code-for-weight)).sortedBy(effectiveTime.high).last() weight.value			x			
History	let observations: Observation = Factory.Observation-> select(interpretationCode('code-for-disease')		x	x		x	x

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- Coded GELLO expressions by therapeutic category.

ANTIFUNGAL				
Class	Attributes	Used	GELLO Expression	Description
PATIENT	Name	X	Person, name	Person's name within a predefined patient-specific context
	ID	X	Context Person Self.ID="xxx"	All expressions are patient-specific, so normally, the prescriber enters the patientID and this will set the context/scope for the subsequent expressions.

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▫ Findings:

The HL7 GELLO Expression Language provided a consistent framework for the standard representation of PA criteria and, when coupled with the HL7 RIM as a standard data model, could effectively support the sharing of knowledge across applications.

In addition, this approach allows integration of terminology standards, such as SNOMED, RxNorm, and ICD-9

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- **Web Based Solution**

This report illustrated how the GELLO might be used, within two web based tools, to further automate the ePrescribing prior authorization process.

The proposed tools are:

Authoring Tool - The purpose of this tool would be to develop a database of normative prior authorization guidelines coded in the HL7 GELLO expression language. The resulting GELLO PA Guidelines database would be used by the Delivery Tool.

Delivery Tool - The Delivery Tool would link to ePrescribing systems and be available to prescribers at the point of care. The tool would be activated when a prescriber selected a drug that required prior authorization. Its two primary functions would include.

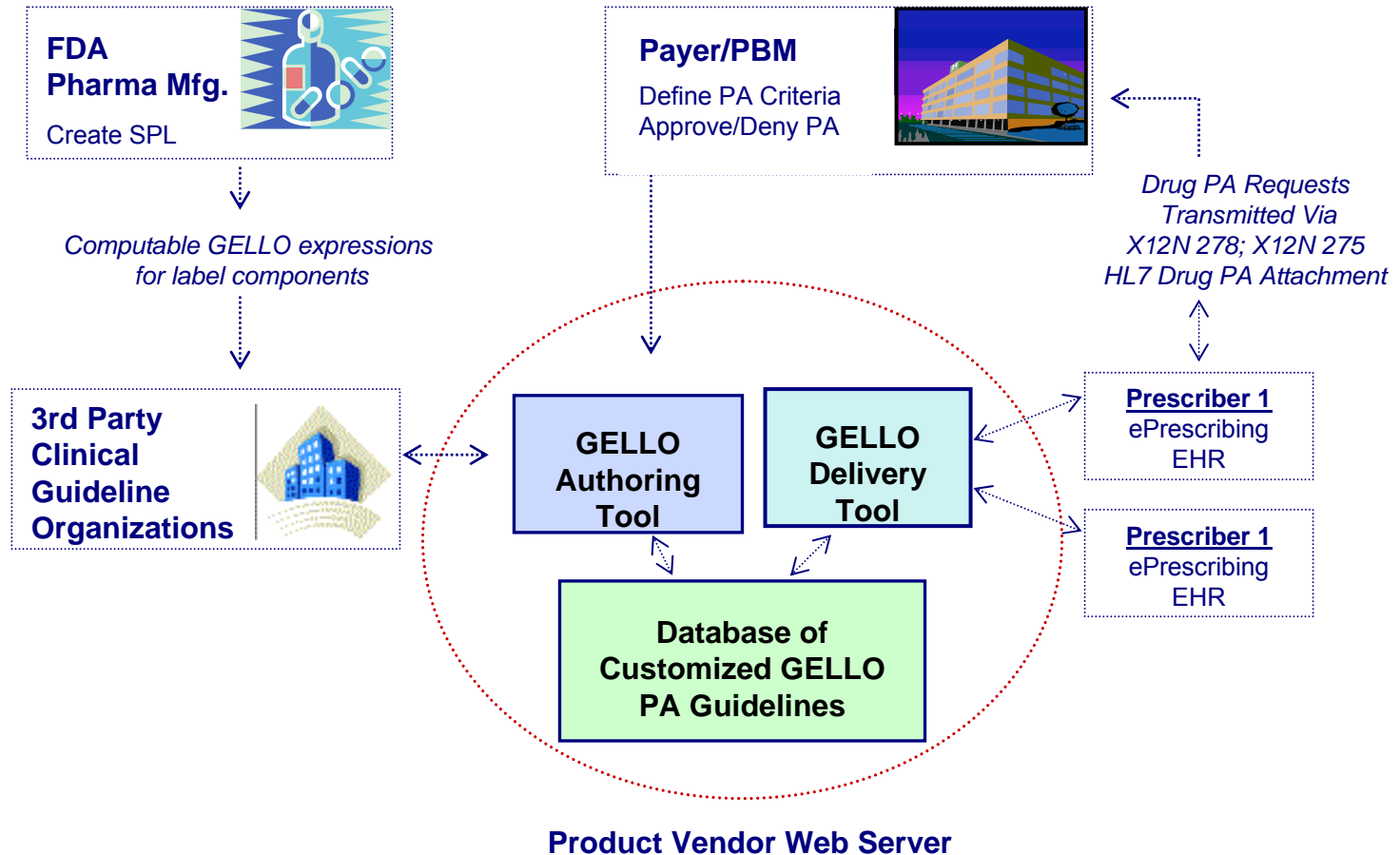
To automatically execute GELLO PA Guideline expressions to extract patient information from HL7 RIM compliant systems and present it back to the prescriber in the form of pre-filled answers to PA questions.

To download "completed" Drug PA Request information into the electronic standards that transmit requests between prescribers and health plans. These standards include X12N 278; X12N 275; and the HL7 Drug PA Attachment.:

Within the balance of this report, we will present "simulated models" of how both the GELLO Authoring and Delivery Tools might function in a real-life application.

AHRQ – GELLO/PA Project

□ "Ultimate Design of a GELLO Web Based Solution "



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- **GELLO Authoring Tool**

The purpose of the GELLO Authoring Tool would be to automate the process of coding drug PA criteria into databases of customized GELLO PA Guidelines.

The Tool would translate PA criteria into well-formed GELLO expressions, consistent, with GELLO syntax, that would provide a **normative set of GELLO PA Guidelines** that could be used across the healthcare industry to extract patient information from EHR's.

The following three (3) wizard screens will demonstrate how GELLO PA Guidelines would be developed with the use of the Authoring Tool.

Wizard Screen 1 - Create Edit, or View PA Guidelines.

Wizard Screen 2 – Define GELLO expressions for all of the topics related to a Therapeutic Category or Drug Class selected.

Wizard Screen 3 - Automatically present a list of data values, based on screen 2 selections, to complete the definition of the Therapeutic Category Topic.

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- **Wizard Screen 1** - Create Edit, or View PA Guidelines.

GELLO Authoring Tool Wizard

- Start Wizard
- New PA Guideline
- Edit PA Guideline
- View PA Guidelines
- Edit Wizard
- Export Database

Select one of the following options

New PA Guideline

Edit Existing PA Guideline

View Existing PA Guidelines

Next

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- **Wizard Screen 2** – Define GELLO expressions for all of the topics related to a Therapeutic Category or Drug Class selected.



Authoring Tool Wizard

- Start Wizard
- **New PA Guideline**
- Edit PA Guideline
- View PA Guidelines
- Edit Wizard
- Export Database

New PA Guideline

Select 1 Therapeutic Category/Class *Operator* *Selected Value*

Antifungal	▲
Erectile Dysfunction	☰
Growth Hormone	▼
NSAID's-COX2	▼

= ▼

= Antifungal

Select 1 Topic for New Expression *Operator* *Selected Value*

Patient Gender	▲
Patient Disease History	☰
Current Meds	▼
Prior Meds	▼

= ▼

= Patient Disease History

Next

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- **Wizard Screen 3** - Automatically present a list of data values, based on screen 2 selections, to complete the definition of the Therapeutic Category Topic.

Authoring Tool Wizard

- Start Wizard
- New PA Guideline**
- Edit PA Guideline
- View PA Guidelines
- Edit Wizard
- Export Database

New PA Guideline

Therapeutic Category/Class = **Antifungal**

Topic of New Expression = **Patient Disease History**

Define Topic of New Expression Operator Select All Applicable Values

Patient Disease History =
Diabetes
Immunocompromise
Neuropathy

GELLO Expression Description:

Patient Disease History contains all of the observations for concomitant diseases: circulatory disease (PVD; PAD), diabetes, immunocompromised, neuropathy.

GELLO Expression:

Let EDobservations:Observation=Factory.Observation->select(interpretationCode('code-for-diabetes')OR interpretationCode('code-for-immunocompromised')OR interpretationCode('code-for-neuropathy') ORinterpretationCode('code-for-circulatory disease'))

Save Next Therapeutic Category Topic

AHRQ – GELLO/PA Project

▫ **GELLO Delivery Tool**

The purpose of the GELLO Delivery Tool would be to automate both the process of completing a *drug prior authorization request* and the process of *electronically transmitting the request* between the prescriber and patient's health plan via electronic standards.

The Tool could initially be released as an add-on to existing ePrescribing products and eventually be fully integrated into the products.

For demonstration purposes, we have developed a series of six (6) screen shots that will walk you through how GELLO would function within the Delivery Tool.

AHRQ – GELLO/PA Project

- **Screen 1 - ePrescribing System** - The prescriber selects a drug that requires prior authorization and clicks on "PA" button to activate the Delivery Tool.

The screenshot displays the 'ePRESCRIBING SYSTEM' interface. On the left is a navigation menu with options: Write Script, Edit Script, View Scripts, View PA's, and Delivery Tool. The main area shows the 'Write Script' form with the following details:

Patient:	Smith, Sara J.	Drug Coverage:	Active
Gender:	F	Payer:	Aetna
Age:	50	Plan:	10567432

Date: 11/1/05


Drug Category: Antifungal

Drug: Oxistat, Cream, 1%, 60-g tube, NDC 0173-0423-

PA

AHRQ – GELLO/PA Project

- **Screen 2 - Delivery Tool** - Prescriber reviews answers to prior authorization questions that have been pre-filled by extracting information from the patient's EHR with coded GELLO PA Guideline expressions.



GELLO Delivery Tool

Patient: Smith, Sara J.
Gender: F
Age: 50

Drug Coverage: Active
Payer: Aetna
Plan: 10567432

Date: 1/1/05
Drug Category: Antifungal
Drug: Oxistat, Cream, 1%, 60-g tube, NDC-0173-0423-04

"Antifungal PA Criteria"


Responses Pre-Filled From EHR

PA Criteria Question	Response	Edit	Data Source
1. Diagnosis for selected drug	Tinea Pedis	Edit	EHR
2. Tests confirming diagnosis	KOH Preparation	Edit	EHR
- Test date	9/15/05	Edit	EHR
3. Type of drug therapy requested	Topical	Edit	EHR
4. Why is topical being requested	Hepatic Dysfunction	Edit	EHR
- How was condition determined	Hepatic Function Panel	Edit	EHR
- Test date	10/15/05	Edit	EHR
5. Concurrent medications related To an Anti-Retroviral; Anti-Diabetic; Immuno- Suppressive	No	Edit	EHR

- Edit PA Request
- Edit PA Attachment
- View PA Request
- ePrescribing System

AHRQ – GELLO/PA Project

- **Screen 3 - Delivery Tool** - Questions that could not be pre-filled by GELLO PA Guidelines are presented to the prescriber for completion.



GELLO Delivery Tool

Patient: Smith, Sara J. **Drug Coverage:** Active
Gender: F **Payer:** Aetna
Age: 50 **Plan:** 10567432

Date: 1/1/05
Drug Category: Antifungal
Drug: Oxistat, Cream, 1%, 60-g tube, NDC-0173-0423-04

"Antifungal PA Criteria"
Select or complete answers

5. Replacement drug therapy for	Tinactin, Cream
- Type of prior drug therapy	Topical
- Duration of prior drug therapy	90 Day
- Reason why prior drug therapy discontinued	
<input type="radio"/> Not or no longer effective	
<input type="radio"/> Side effects/intolerance	Burning
<input type="radio"/> Incompatible w/other drugs	Penlac
6. Site Location of condition?	
<input type="radio"/> Fingernail <input type="radio"/> Toenail	
<input type="radio"/> Scalp <input checked="" type="radio"/> Other	Between toes, right foot

Attach Add'l Documents **Continue**

AHRQ – GELLO/PA Project

- **Screen 4 - Delivery Tool** - If additional information is needed to support a Drug PA Request, the prescriber would select from a list of document attachments. Each attachment could be generated with the use of GELLO PA Guideline expressions to extract information from the patient's EHR.



GELLO Delivery Tool

Patient: Smith, Sara J.
Gender: F
Age: 50

Drug Coverage: Active
Payer: Aetna
Plan: 10567432

Date: 1/1/05
Drug Category: Antifungal
Drug: Oxistat, Cream, 1%, 60-g tube, NDC-0173-0423-04

**Additional Documentation to Support
"Antifungal PA Request"**


	Type of Attachment	EHR	Action
1.	Clinical chart notes	Select One ▾	Attach
2.	Lab test results	Hepatic Function ▾	Attach
3.	Test report	Select One ▾	Attach
4.	Radiology Image	Select One ▾	Attach
5.	Radiology Report	Select One ▾	Attach

Return to PA Request

- Select PA Attachment
- Edit PA Attachment
- View Drug PA Request
- ePrescribing System

AHRQ – GELLO/PA Project

- **Screen 5 - Delivery Tool** - At the completion of all required information, the prescriber would be given an opportunity to confirm all of the information on the patient's Drug PA Request before sending to the health plan for evaluation.



GELLO Delivery Tool

Patient:	Smith, Sara J.	Drug Coverage:	Active
Gender:	F	Payer:	Aetna
Age:	50	Plan:	10567432

Date:	1/1/05
Drug Category:	Antifungal
Drug:	Oxistat, Cream, 1%, 60-g tube, NDC-0173-0423-04

Final Confirmation
"Antifungal PA Criteria"

PA Criteria Question	Response	Edit	Data Source
1. Diagnosis for selected drug	Tinea Pedis	Edit	EHR
2. Tests confirming diagnosis	KOH Preparation	Edit	EHR
- Test date	9/15/05	Edit	EHR
3. Type of drug therapy requested	Topical	Edit	EHR
4. Why is topical being requested	Hepatic Dysfunction	Edit	EHR
- How was condition determined	Hepatic Function Panel	Edit	EHR
- Test date	10/15/05	Edit	EHR
5. Replacement drug therapy for	Tinactin, Cream	Edit	Keyed
- Type of prior drug therapy	Topical	Edit	Keyed
- Duration of prior drug therapy	90 days	Edit	Keyed
- Reason prior drug discontinued	Not or no longer effective	Edit	Keyed
6. Site location of condition	Between toes, right foot	Edit	Keyed
7. Concurrent medications related to an Anti-Retroviral; Anti-Diabetic; Immuno- Suppressive	No	Edit	EHR

Attach Add'l Documents
Confirm

- Edit PA Request
- Edit PA Attachment
- View PA Request
- ePrescribing System

AHRQ – GELLO/PA Project

- **Screen 6 - Delivery Tool** – At the completion of all required information, the Delivery Tool would return an assessment of the Drug PA Request and advise if additional information might be required by the health plan based on responses to prior requests.

GELLO Delivery Tool

Patient: Smith, Sara J. **Drug Coverage:** Active
Gender: F **Payer:** Aetna
Age: 50 **Plan:** 10567432

Date: 1/1/05
Drug Category: Antifungal
Drug: Oxistat, Cream, 1%, 60-g tube, NDC-0173-0423-04

Assessment Results
"Antifungal PA Request"

1. **All PA Criteria Complete**

Info Button—Not required, but health plan may request Hepatic Function lab result

[Return to PA Request](#) [Attach Add'l Documents](#) [Submit](#)

AHRQ – GELLO/PA Project

- **Screen 7 - ePrescribing System** – The health plan’s response back to the prescriber on the status of patient Drug PA Requests.



ePRESCRIBING SYSTEM

- Write Script
- Edit Script
- View Scripts
- View PA's
- Delivery Tool

Active Prior Authorization Requests

Patient: Smith, Sara J. **Drug Coverage:** Active
Gender: F **Payer:** Aetna
Age: 50 **Plan:** 10567432

<i>Patient</i>	<i>Plan</i>	<i>Drug</i>	<i>Date Sent</i>	<i>Status</i>	<i>More</i>	<i>Prescriber Actions</i>
Adams, S.	BC/BS	Prozac	10/15/05	Approved	Info	Send Script
Berry, J.	United	Viagra	10/1/05	Denied	Info	Appeal Close
Moore, B.A.	BC/BS	Coumadin	10/6/05	Approved	Info	Send Script
Smith, S. J.	Aetna	Oxistat	11/1/05	Add'l Info Required	Info	Respond
Newman, G.	Humana	Viagra	11/1/05	Awaiting Response	Info	Resend

AHRQ – GELLO/PA Project

▫ Findings:

The simulated models of the web based GELLO Authoring and Delivery Tools demonstrated a more standardized process for acquiring, representing, and maintaining clinical knowledge associated with the drug prior authorization process that does not currently exist within today's environment.

With this demonstrated process, and representation of clinical knowledge, data and information could be shared more effectively across the healthcare industry which would also lead to a more comprehensive approach to best practices.

Next Steps

- For GELLO to be successfully utilized in the prior authorization process, additional investments will need to be made in its development.
 1. Evaluate use of the HL7 Query Mechanism with GELLO.
 2. Develop an GELLO open source compiler or interpreter.
 3. Develop HL7-RIM compliant GELLO interfaces to databases, such as Oracle, SQL Server, and DB2.
 4. Test GELLO in a live clinical care setting to ensure it is capable of accurately executing clinical decision support rules and extracting information from HL7-RIM compliant systems.
 5. Develop prototypes of the Authoring & Delivery Tools.
 6. Conduct an ePrescribing prior authorization pilot, utilizing the Authoring & Delivery Tools.

- Seek both public & private stakeholders to resource and fund the above projects.