Clinical Decision Support Technical Expert Panel Meeting

- March 7, 2012
- 3:00 PM - 5:00 PM Eastern Time
- Facilitator: Scott Finley

Agenda

- Welcome & Introductions
- Review of December's TEP Meeting
- From demonstrations to standard practice - part 2: who are the CDS customers and what do they want? CDSC
  - CDSC
  - GLIDES
- From the voice of the customer:
  - Regenstrief
  - The Children's Hospital of Philadelphia
- Recap & Next Steps

Welcome

Review Of December's TEP Meeting

From demonstrations to standard practice - part 2: who are the CDS customers and what do they want?

From demonstrations to standard practice - part 2:

From Demonstration to Standard Practice

Part 2: Who are the CDS customers and what do they want?

Blackford Middleton, MD, MPH, MSc
Principal Investigator
March 7, 2012

Agenda

1. Who are the CDSC customers?
2. What CDSC has to offer to the customers?
3. Will the products be ready for the customers? If not, what is needed?
4. What are the steps, challenges, and barriers involved in developing products ready for consumption?
5. How should we communicate availability and sources of products?

CDSC Customers

1. Healthcare service providers
   - Large institutions (hospitals and systems)
   - Small institutions (private practices)
2. Payers
3. EHR and content vendors

Other Stakeholders

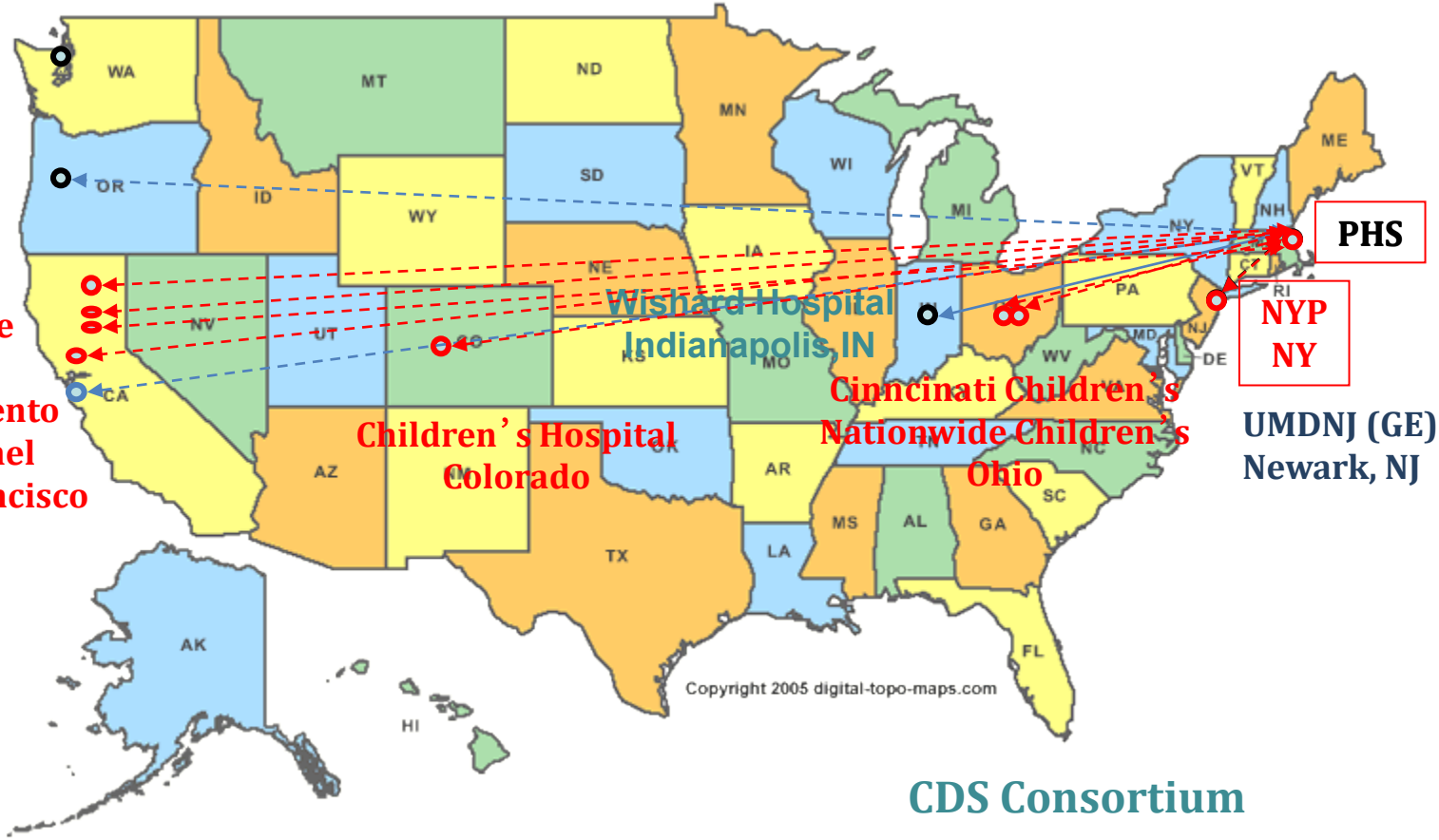
1. HIT community (guidelines developers, specialty societies)
2. Government and non-profit foundations, fulfilling their mission and supporting CDS requirements

CDSC Products, Services, Value

- Cloud-based CDS services (prototypes, pilots, clinical trial support, production support)
- KM Portal for knowledge sharing and collaboration
- *In vivo* R&D lab
- Education and consulting (consulting, site assessments, recommendations, and training)
  - Best practices for KM and CDS
  - Organization and governance
  - Policy and standards
- CDS Interventions library

Cloud-Based CDS Services

Toward a National Knowledge Sharing Service



WVP Health Authority (NextGen) Salem, OR

Kaiser Roseville
UC Davis
Kaiser Sacramento
Kaiser San Rafael
Kaiser San Francisco
California

Children's Hospital Colorado

Wishard Hospital Indianapolis, IN

Cinncinati Children's
Nationwide Children's Ohio

PHS

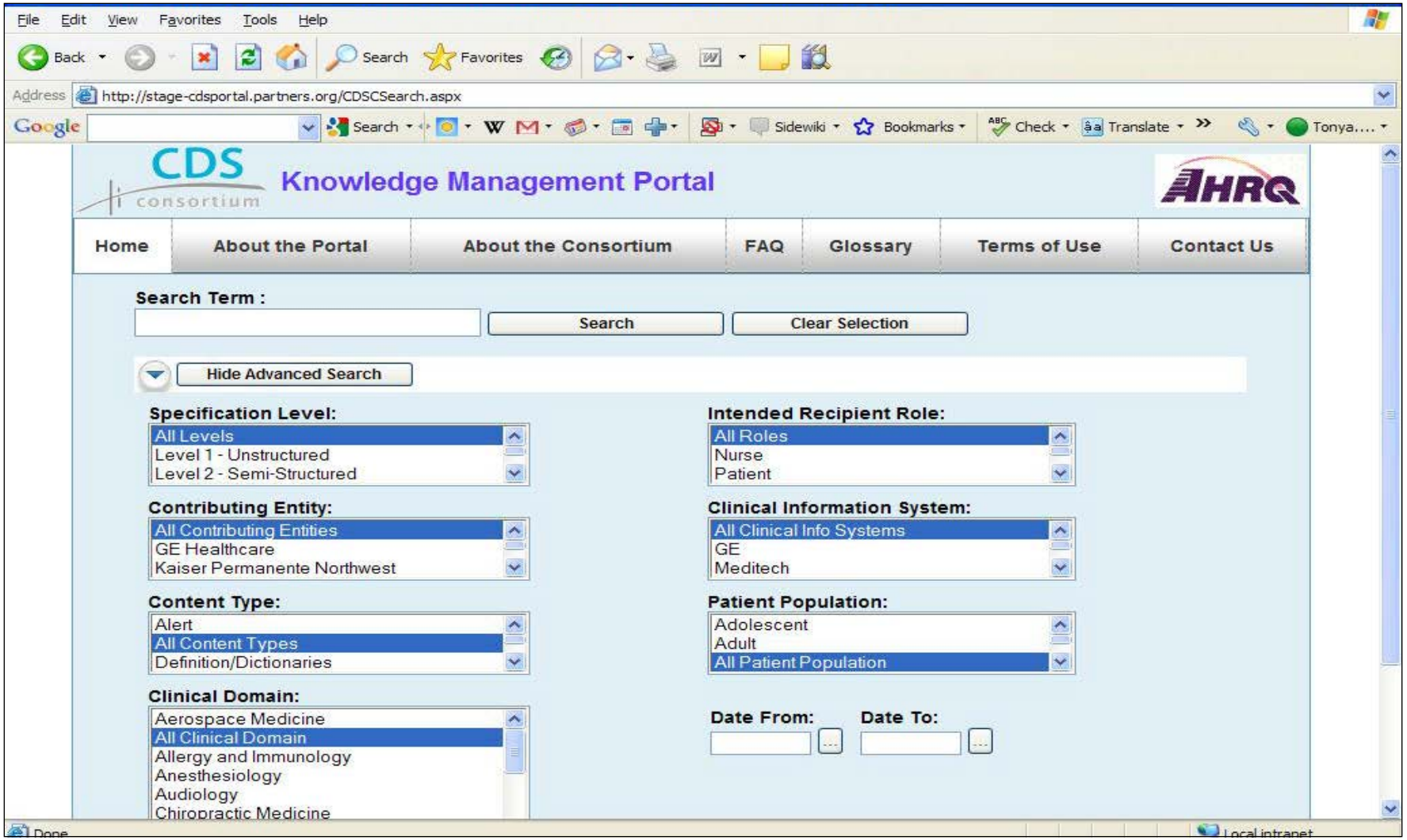
NYP NY

UMDNJ (GE) Newark, NJ

CDS Consortium

PECARN TBI CDS

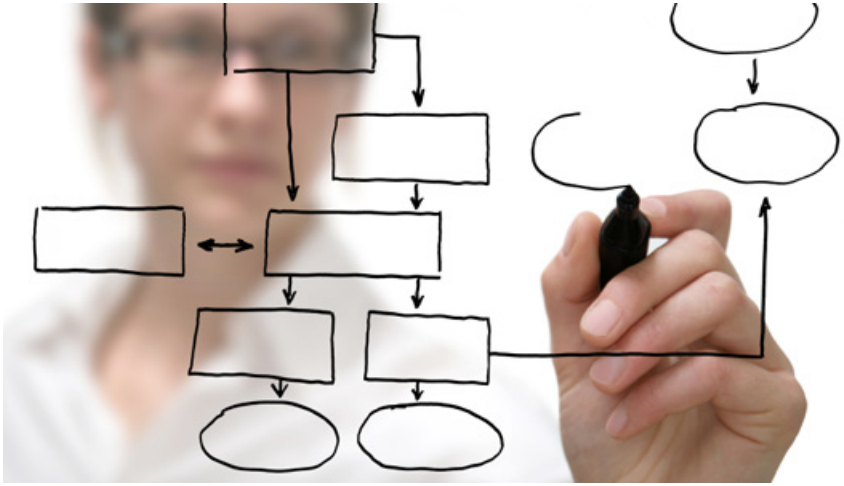
Knowledge Management Portal



In Vivo R&D Lab

CDS Consortium provides an *In Vivo* laboratory for research and analysis in fields of collaborative clinical knowledge engineering and CDS.

- Pre-competitive setting
- Unique collaborative environment
- Various stakeholders



Education and Consulting

Education:

- Educational lectures
- Tutorials
- Courses

Consultation:

- Consult all types of entities on CDS strategy and architecture
- CDS governance design
- KM and CDS best practices for design and implementation

Other:

- Site assessments
- Recommendations
- Trainings

CDS Interventions Library

Methodologies:

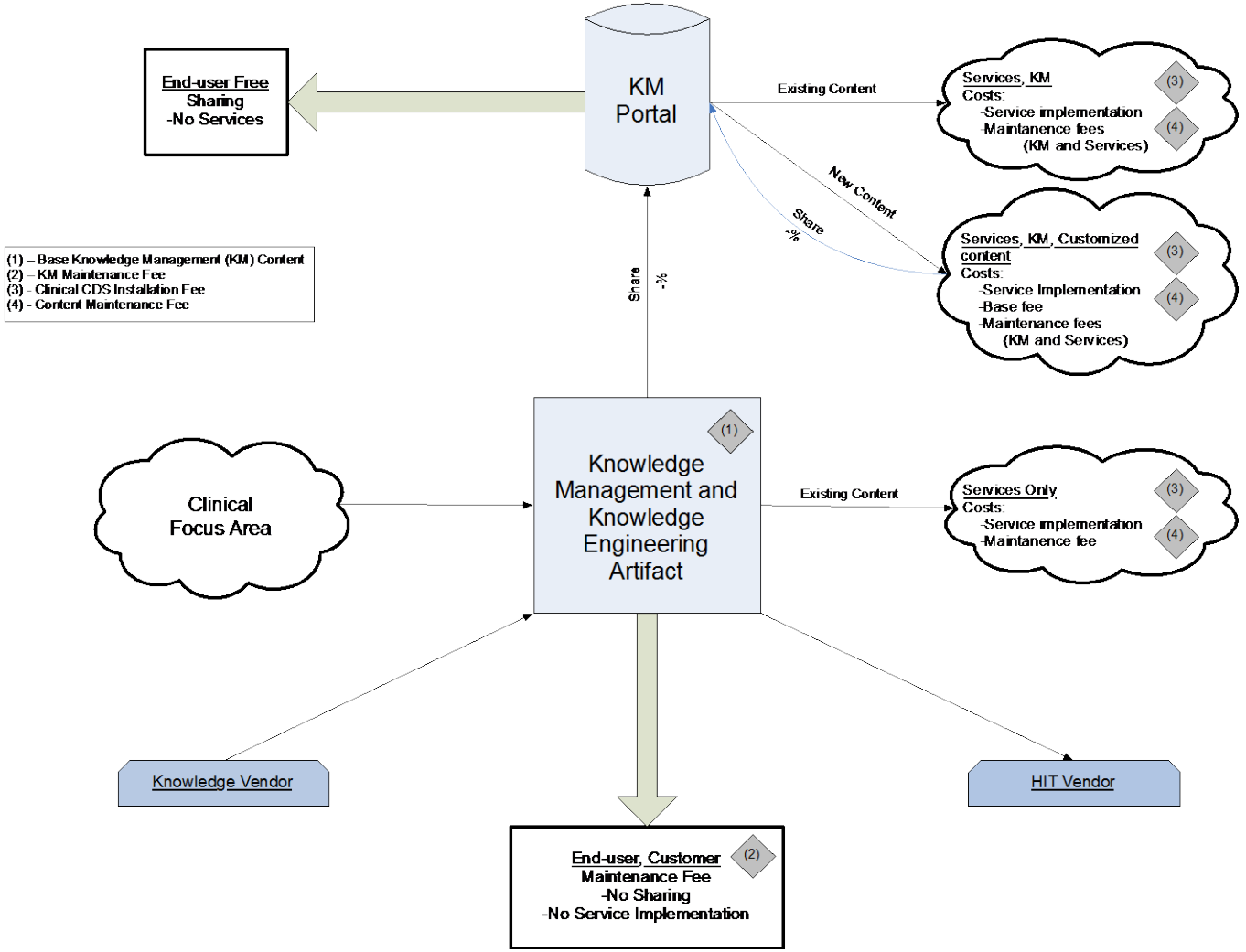
- Measuring effectiveness of CDS intervention
- CDS development processes
- Measuring impact on healthcare delivery performance

Will the products be ready for the customers? If not, what is needed?

	CDSC Values	Status	Healthcare Service Providers	Payers	EHR Vendors	Content Vendors	HIT Community	Government and Non-profit Foundations
1	Cloud-based CDS services	Ready	X		X	X		
2	KM Portal	Ready*	X			X	X	
3	*In vivo* R&D lab	Ready*	X		X	X	X	X
4	Education and consulting	Ready*	X	X	X	X	X	X
5	CDS interventions library	In progress		X			X	X

** Ready, and could be increased/extended/taken to the production level*

CDS Consortium Channels



What are the steps, challenges, and barriers involved in developing products ready for consumption?

- Funding
- Legal issues
- Human capital issues

Funding

After OY3 ends, what are the options?

- Sustainability model
  - Set of various revenue models/approaches
  - Continued federal funding
- Dismiss the CDSC
  - Look for next round of funding when such becomes available

Political and Institutional Questions

- Who owns CDSC?
- Who is responsible for CDSC?
- Who supports it?
- What if it goes down?

Challenges

- We operate in an environment in which our customers expect results – and we need results – in a relatively short period of time
  - HITECH Act gives us a timeframe for those expectations
  - The Super Committee does the same through their charge of reducing Medicare spending
  - Your patients want more affordable and high quality care
- Needs must be met or critical momentum may be lost

Challenges (cont.)

- Economic policy
- Privacy and security policy
- Technical solutions
- Governance

How should we communicate availability and sources of products?

- Website
- AHRQ
- TEP
- Marketing
- Scientific conferences and meetings
- Other?

Acknowledgements

Principal Investigator: Blackford Middleton, MD, MPH, MSc

CDSC Team Leads:

Research Management Team: Lana Tsurikova, MSc, MA

KMLA/Recommendations: Dean F. Sittig, PhD

Knowledge Translation and Specification: Aziz Boxwala, PhD

KM Portal: Tonya Hongsermeier, MD, MBA

CDS Services: Howard Goldberg, MD

CDS Demonstrations: Adam Wright, PhD

CDS Dashboards: Jonathan Einbinder, MD

Evaluation: David Bates, MD, MSc

Content Governance Committee: Saverio Maviglia, MD, MSc

AHRQ #HHSA290200810010 http://www.partners.org/cird/cdsc/

Discussion

Thank You!

From demonstrations to standard practice - part 2:

Technical Expert Panel Teleconference

March 2012

GLIDES PROJECT

GuideLines Into DEcision Support

sponsored by
The Agency for Healthcare Research and Quality

AHRQ

Yale New Haven Health

Yale School of Medicine

Nemours.

The Children's Hospital of Philadelphia

GEISINGER

American Academy of Otolaryngology–Head and Neck Surgery

ECRI Institute

American Academy of Pediatrics
Dedicated to the health of all children™

American Urological Association

ALLIANCE OF CHICAGO
Community Health Services, L3C

ASCO
American Society of Clinical Oncology

Today

- From demonstrations to standard practice:
  1. Can what has been developed be delivered to the customers?
  2. Who are the customers? What do they want?
  3. Will the products be ready for the customers?
  4. What are the steps, challenges, and barriers involved in developing products ready for consumption?
  5. How should we communicate availability and sources of products?

- Voice of a Customer (CDS implementer)
  - Dr. Robert Grundmeier, CHOP

GuideLines Into Decision Support: GLIDES Tools to Take CDS to a National Scale

Tools For Guideline Developers

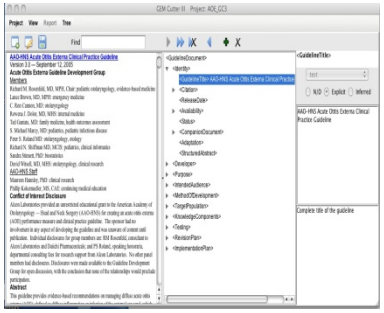
Tools For Guideline Implementers

GEM

- Guideline Elements Model
- Knowledge model for guideline documents
- XML-base
- ANSI standard (ASTM E2210-06)

GEM CUTTER

- Parses guideline text into chunks compatible with the Guideline Elements Model schema
- Preserves "audit" trail

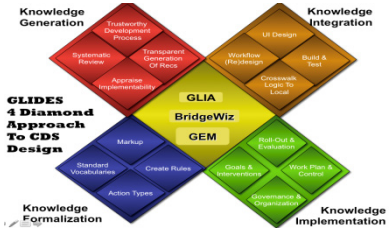


EXTRACTOR

- Creates reports and extracts information to be used as inputs to the CDS design process (logic specifications)

IMPLEMENTATION TOOLKIT

- Project methodology
- Sample work plans/checklists
- Design documents/forms
- Lessons Learned/Dos-Don'ts
- CDS System Examples



OPERATIONAL CDS SYSTEMS/DESIGNS

- Asthma Control
- Obesity Counseling
- Premie Support
- Low Back Pain
- Patient Centered Data Capture

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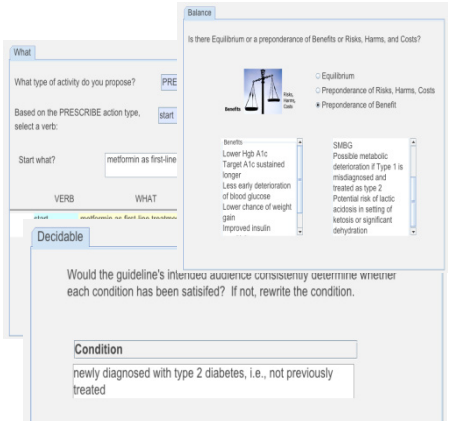
Tools For Guideline Developers

BRIDGE-Wiz

A tool for guideline authors to improve clarity, transparency, and validity



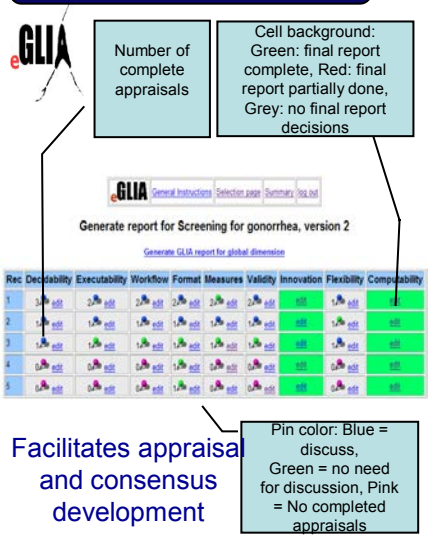
Recommendation Authors Should Be Explicit About

- **WHEN** {under what circumstances}
- **WHO** {in the Intended Audience}
- **Ought** to {with what level of obligation}
- **DO WHAT**
- {To **WHOM}** {which members of the target population}
- **HOW**
- **WHY**

GLIA

An instrument to identify obstacles to successful implementation

eGLIA



Facilitates appraisal and consensus development

Tools For Guideline Implementers

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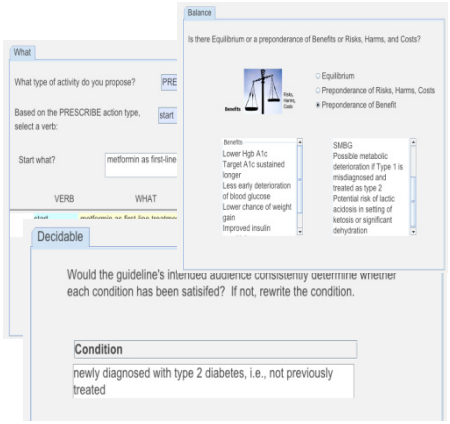

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GLIA

An instrument to identify obstacles to successful implementation

eGLIA

Number of complete appraisals

Cell background: Green: final report complete, Red: final report partially done, Grey: no final report decisions

Facilitates appraisal and consensus development

Pin color: Blue = discuss, Green = no need for discussion, Pink = No completed appraisals

Tools For Guideline Implementers

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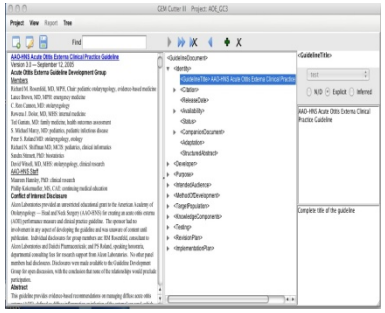

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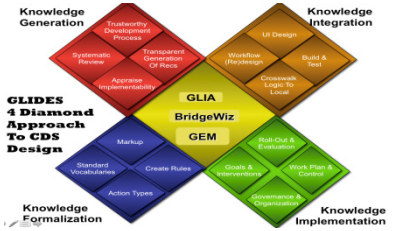

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Who Are The Customers?

	Guideline Developers	Informaticians	Guideline Implementers	End-Users
Who Are The Customers?	Professional societies and other organizations that create medical guidelines and policies	Knowledge experts engaged in transforming narrative guidelines into structured knowledge specifications for implementation as CDS in EMRs	Project Leaders and other personnel responsible for managing the design, integration, and implementation of CDS delivery projects	Clinicians who are interested in using those CDS systems created by GLIDES (Alliance of Chicago is using Yale's Asthma CDS, Geisinger may use CHOP's Premie CDS)

What Can Be Delivered To The Customers?

	Guideline Developers	Informaticians	Guideline Implementers	End-Users
What Can Be Delivered?	Guideline authoring tool: BridgeWiz Implementability appraisal tool: eGLIA	Knowledge transformation and specification tools: GEM, GEM Cutter and related tools (Version III)	Methodology, lessons learned, design forms, templates and examples: Four Diamonds Model	CDS for Asthma, Obesity, Low Back Pain, Premie Support Patient-Centered Data Collection

Will The Products Be Ready For The Customers?

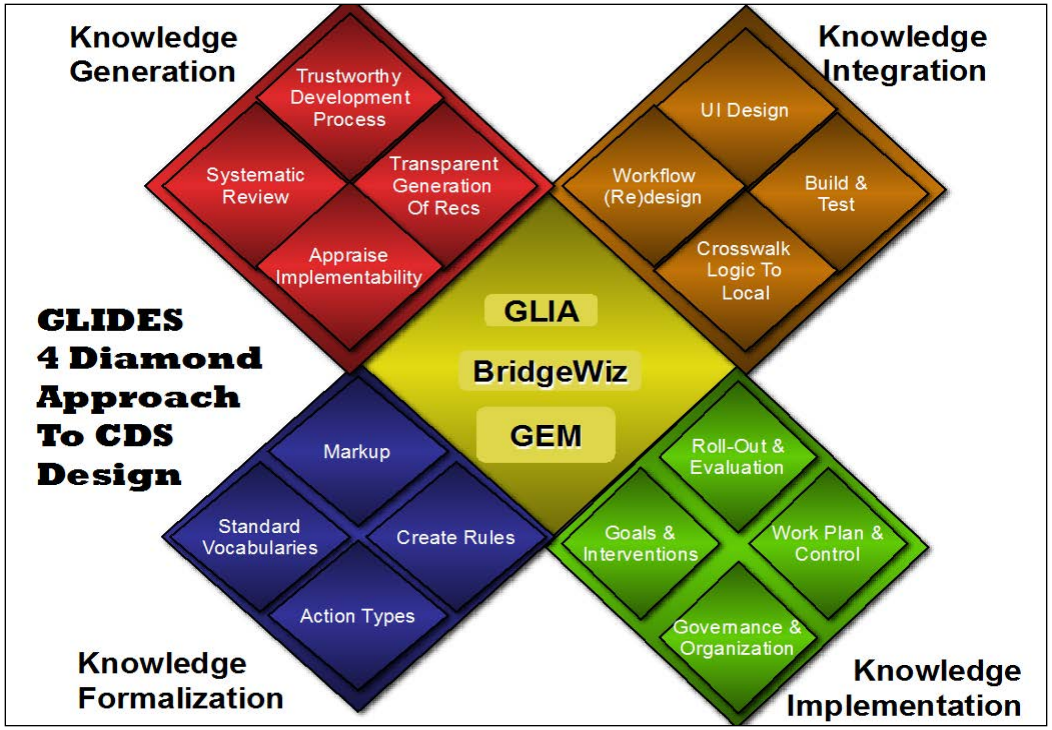
	Guideline Developers	Informaticians	Guideline Implementers	End-Users
Will The Products Be Ready?	Yes – Available now, final release planned for OY3	Yes – Available now, final release now in process of re-standardization	Artifacts repository will be delivered in OY3. Discussion underway with AHRQ on which multi-media technologies to use	Alliance currently implementing Yale Asthma CDS. Geisinger may implement CHOP Premie solution in 2012

Steps, Challenges And Barriers?

	Guideline Developers	Informaticians	Guideline Implementers	End-Users
Next Steps	Improved distribution and deployment platform (Web-based, training material)	Improved distribution/ deployment platform (downloading, training material)	Construct automated, web-based repository (OY3)	Deciding whether to make these products more broadly/formally available?

How Should We Communicate Availability And Sources?

	Guideline Developers	Informaticians	Guideline Implementers	End-Users
How To Communicate?	Deployment platform	Deployment platform	Dissemination platform	Informal (at present)



From Demonstration To Standard Practice

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From the voice of the customer

From the voice of the customer

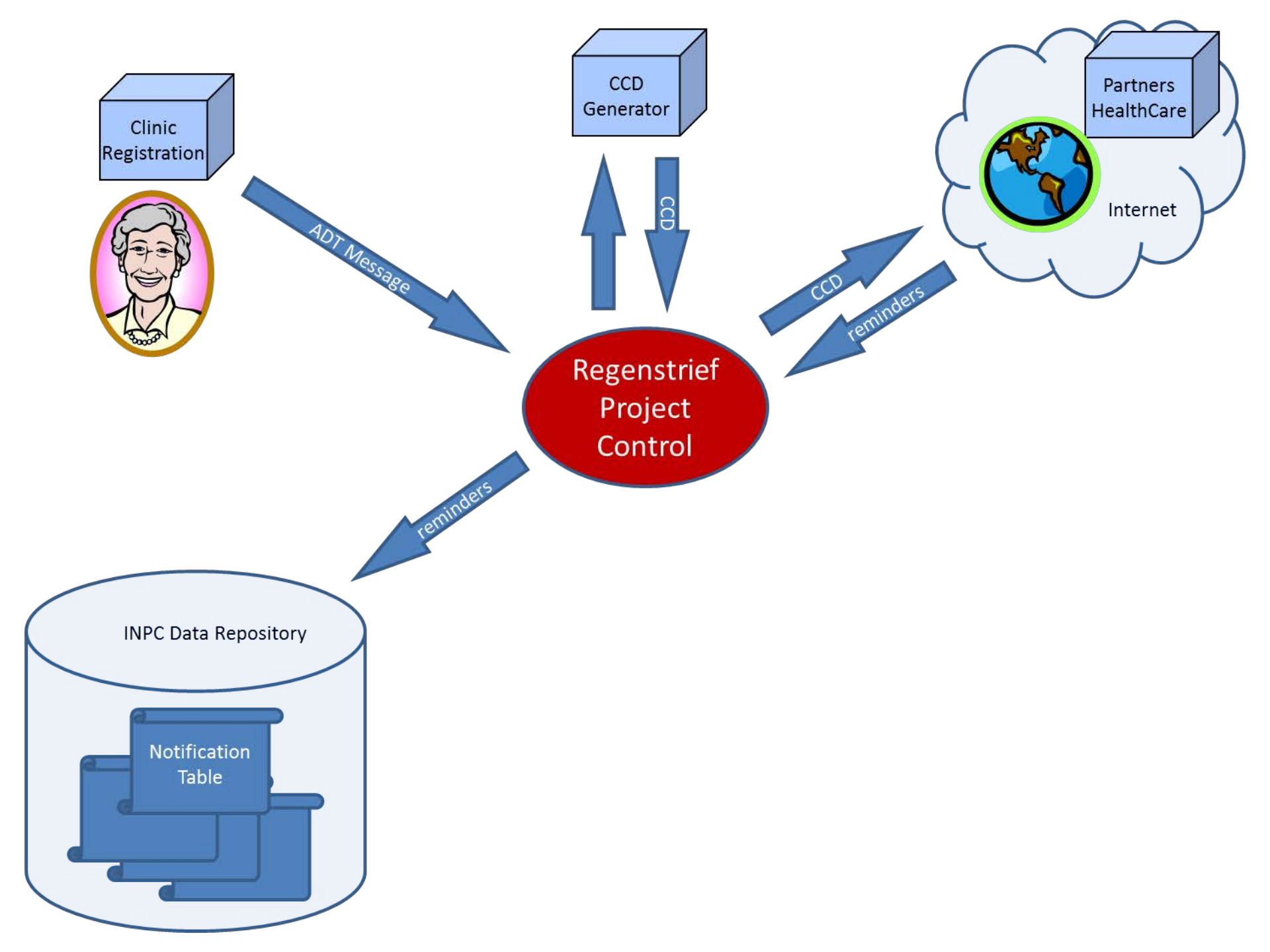
Integration of CDSC Decision Support Reminders Into the Regenstrief CareWeb Order Entry Process

Linas Simonaitis, Brian Dixon, Jon Duke

March 7, 2012

Regenstrief Medical Informatics

The Source for Medical Informatics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Partners HealthCare
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ADT Message
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Regenstrief Project Control
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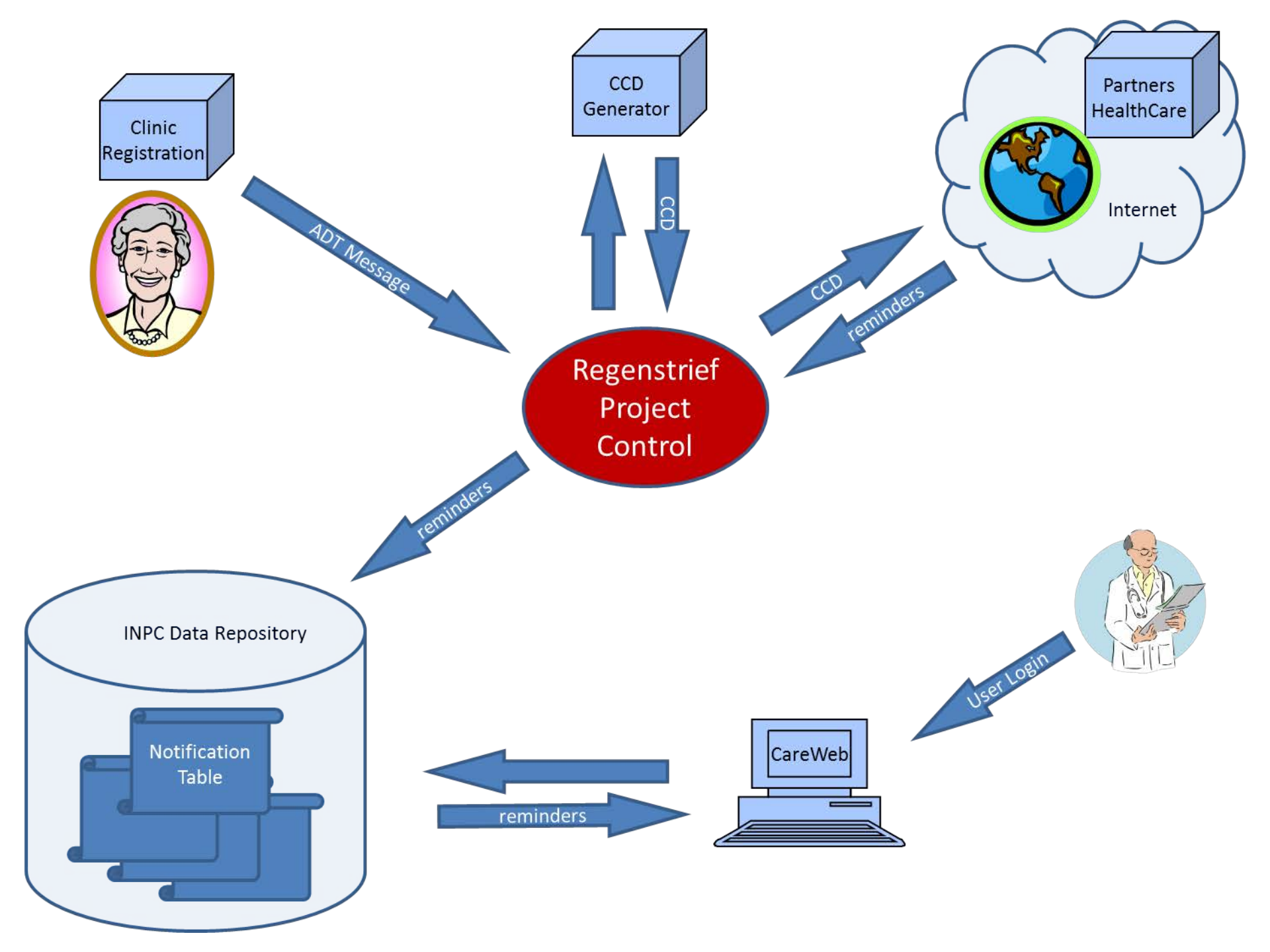
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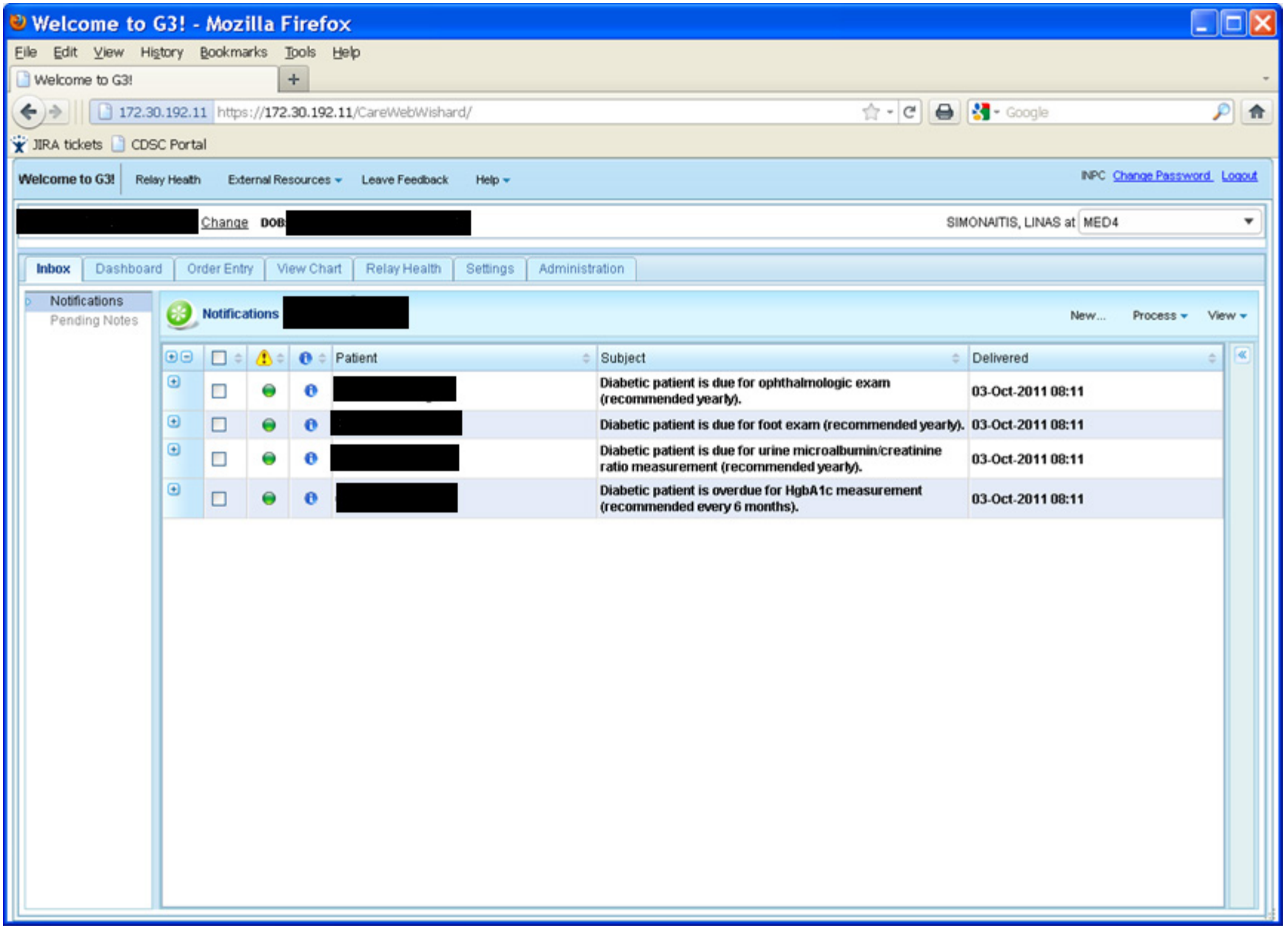
CareWeb
User Login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SIMONAITIS, LINAS at MED4
Inbox Dashboard Order Entry View Chart Relay Health Settings Administration
Notifications
Pending Notes
Notifications [redacted]
New... Process View
Patient Subject Delivered
[redacted] Diabetic patient is due for ophthalmologic exam (recommended yearly). 03-Oct-2011 08:11
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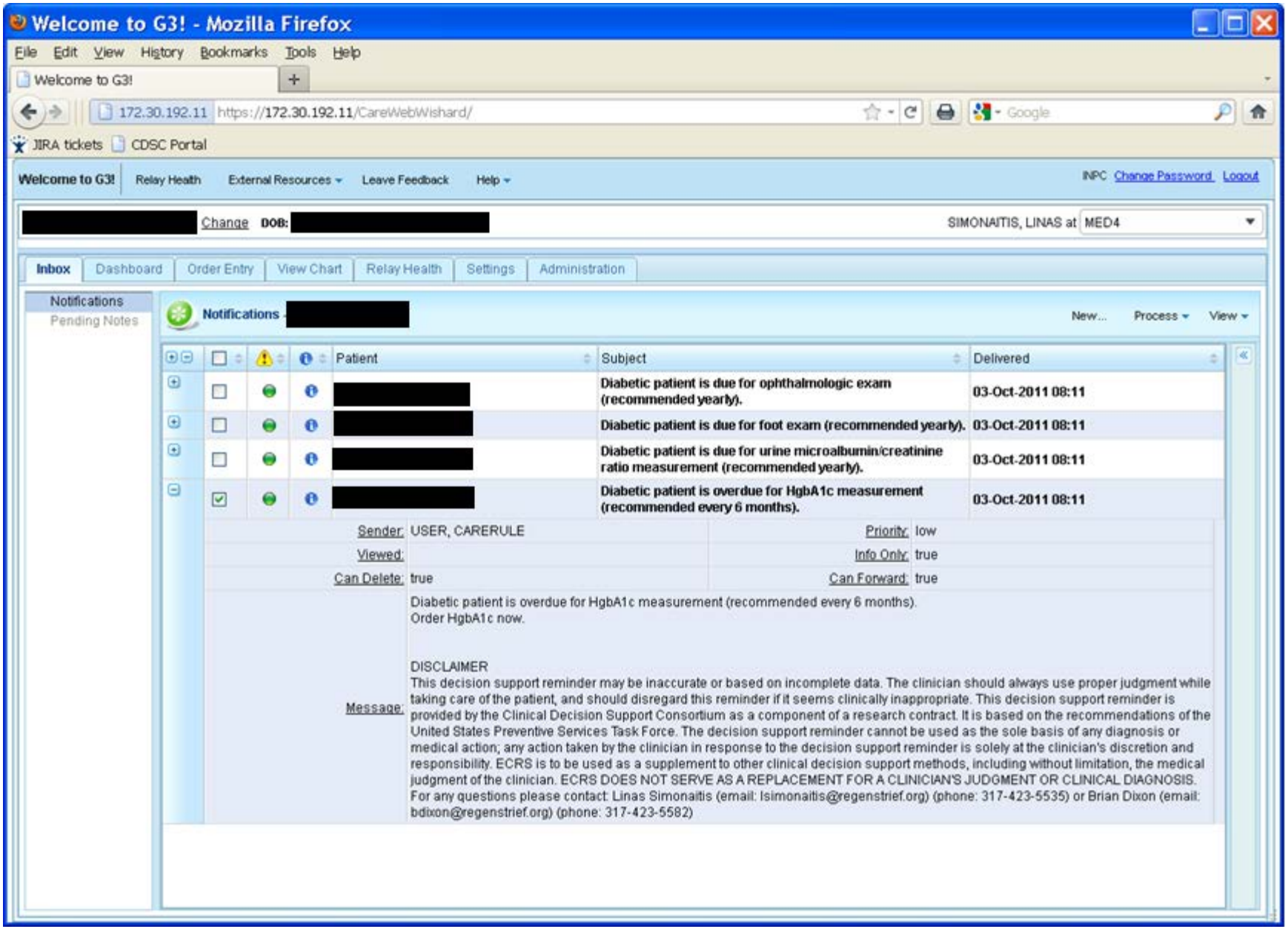
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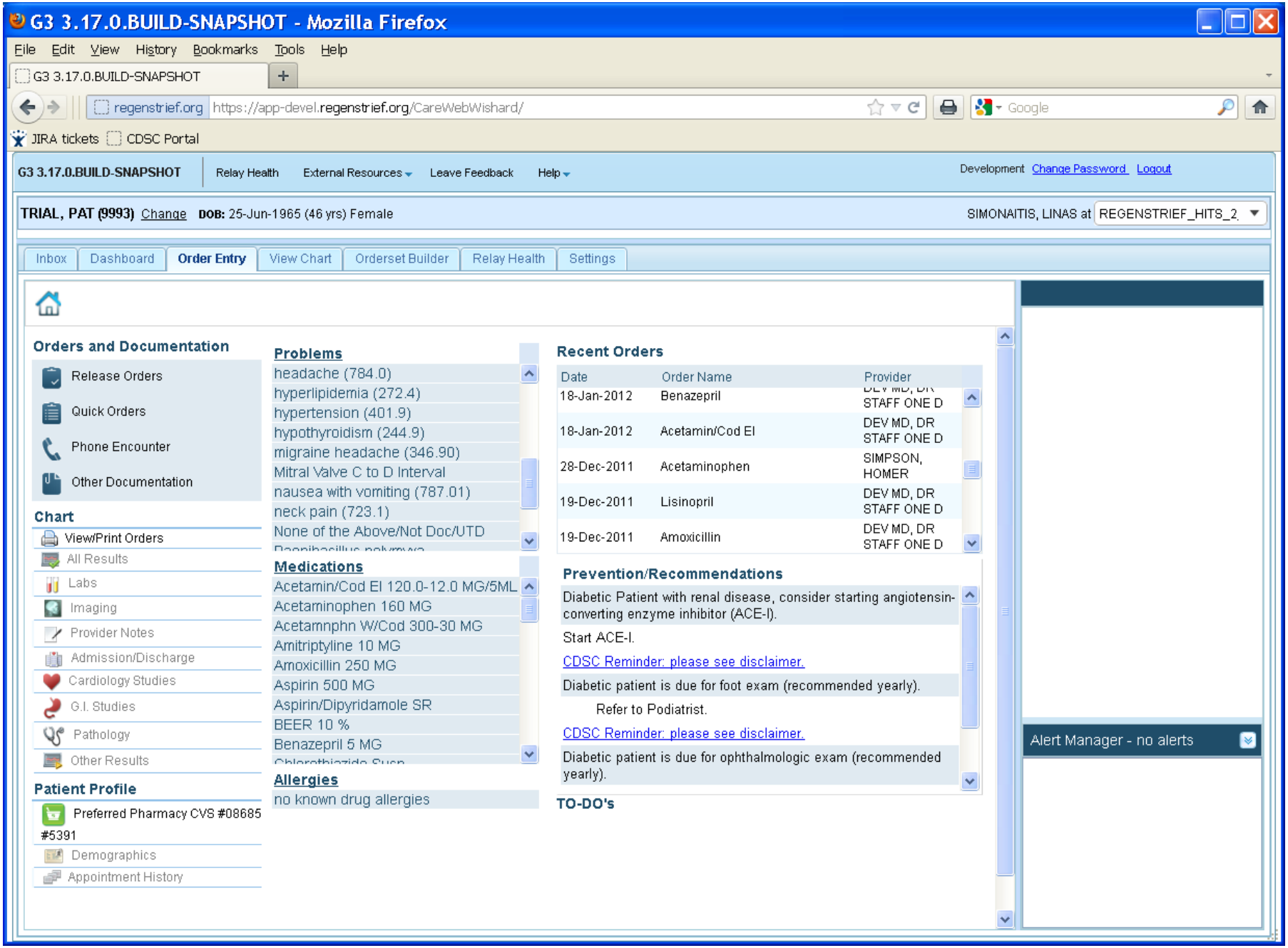
Sender: USER, CARERULE
Priority: low
Viewed:
Info Only: true
Can Delete: true
Can Forward: true
Message: Diabetic patient is overdue for HgbA1c measurement (recommended every 6 months).
Order HgbA1c now.
DISCLAIMER
This decision support reminder may be inaccurate or based on incomplete data. The clinician should always use proper judgment while taking care of the patient, and should disregard this reminder if it seems clinically inappropriate. This decision support reminder is provided by the Clinical Decision Support Consortium as a component of a research contract. It is based on the recommendations of the United States Preventive Services Task Force. The decision support reminder cannot be used as the sole basis of any diagnosis or medical action; any action taken by the clinician in response to the decision support reminder is solely at the clinician's discretion and responsibility. ECRS is to be used as a supplement to other clinical decision support methods, including without limitation, the medical judgment of the clinician. ECRS DOES NOT SERVE AS A REPLACEMENT FOR A CLINICIAN'S JUDGMENT OR CLINICAL DIAGNOSIS.
For any questions please contact: Linas Simonaitis (email: lsimonaitis@regenstrief.org) (phone: 317-423-5535) or Brian Dixon (email: bdixon@regenstrief.org) (phone: 317-423-5582)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Relay Health
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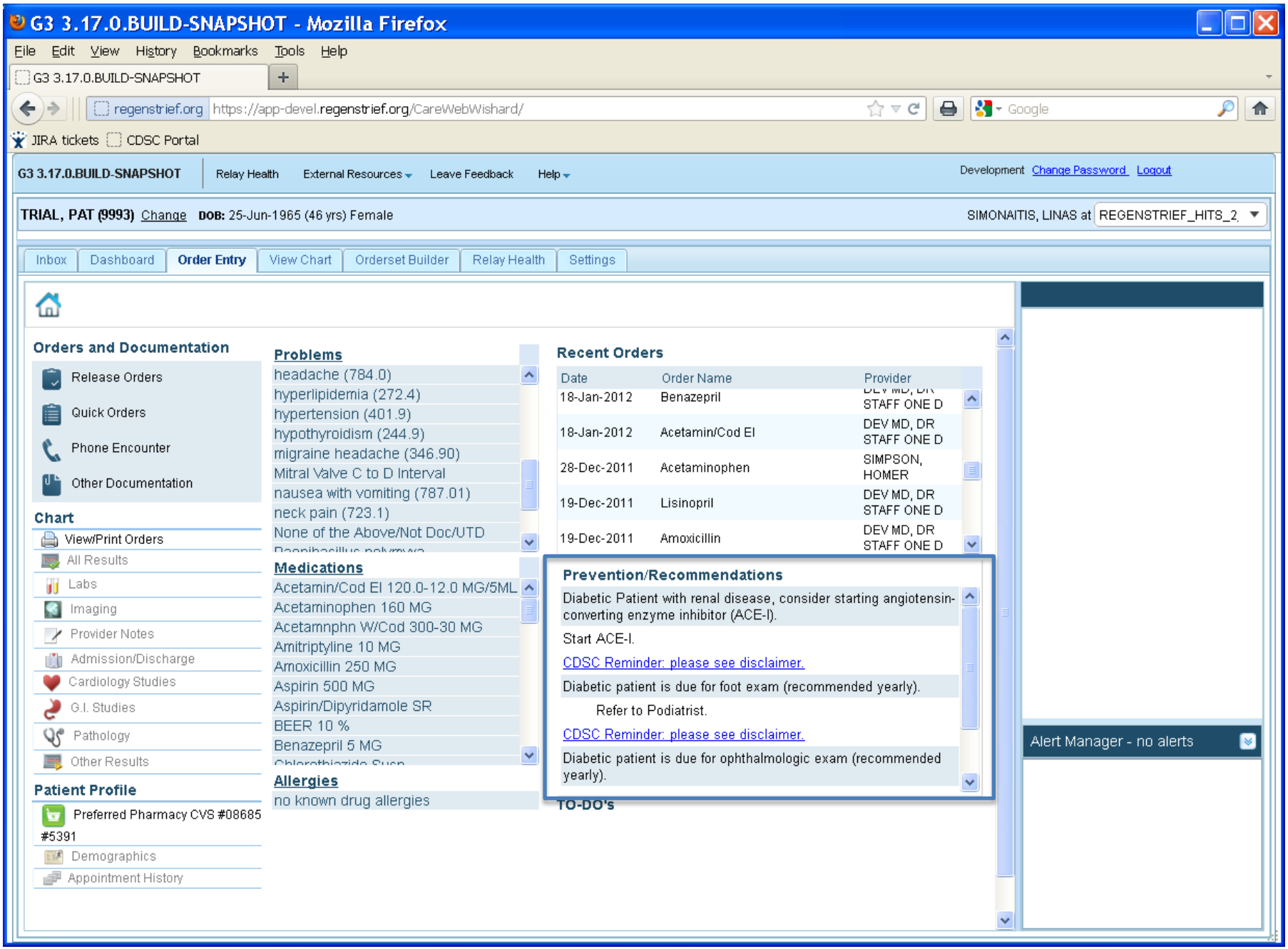
TRIAL, PAT (9993) Change DOB: 25-Jun-1965 (46 yrs) Female
SIMONAITIS, LINAS at REGENSTRIEF_HITS_2
Inbox Dashboard Order Entry View Chart Orderset Builder Relay Health Settings
Orders and Documentation
Release Orders
Quick Orders
Phone Encounter
Other Documentation
Chart
View/Print Orders
All Results
Labs
Imaging
Provider Notes
Admission/Discharge
Cardiology Studies
G.I. Studies
Pathology
Other Results
Patient Profile
Preferred Pharmacy CVS #08685 #5391
Demographics
Appointment History
Problems
headache (784.0)
hyperlipidemia (272.4)
hypertension (401.9)
hypothyroidism (244.9)
migraine headache (346.90)
Mitral Valve C to D Interval
nausea with vomiting (787.01)
neck pain (723.1)
None of the Above/Not Doc/UTD
Medications
Acetamin/Cod El 120.0-12.0 MG/5ML
Acetaminophen 160 MG
Acetamnphn W/Cod 300-30 MG
Amitriptyline 10 MG
Amoxicillin 250 MG
Aspirin 500 MG
Aspirin/Dipyridamole SR
BEER 10 %
Benazepril 5 MG
Allergies
no known drug allergies
Recent Orders
Date Order Name Provider
18-Jan-2012 Benazepril STAFF ONE D
18-Jan-2012 Acetamin/Cod El DEV MD, DR STAFF ONE D
28-Dec-2011 Acetaminophen SIMPSON, HOMER
19-Dec-2011 Lisinopril DEV MD, DR STAFF ONE D
19-Dec-2011 Amoxicillin DEV MD, DR STAFF ONE D
Prevention/Recommendations
Diabetic Patient with renal disease, consider starting angiotensin-converting enzyme inhibitor (ACE-I).
Start ACE-I.
CDSC Reminder: please see disclaimer.
Diabetic patient is due for foot exam (recommended yearly).
Refer to Podiatrist.
CDSC Reminder: please see disclaimer.
Diabetic patient is due for ophthalmologic exam (recommended yearly).
TO-DO's
Alert Manager - no alerts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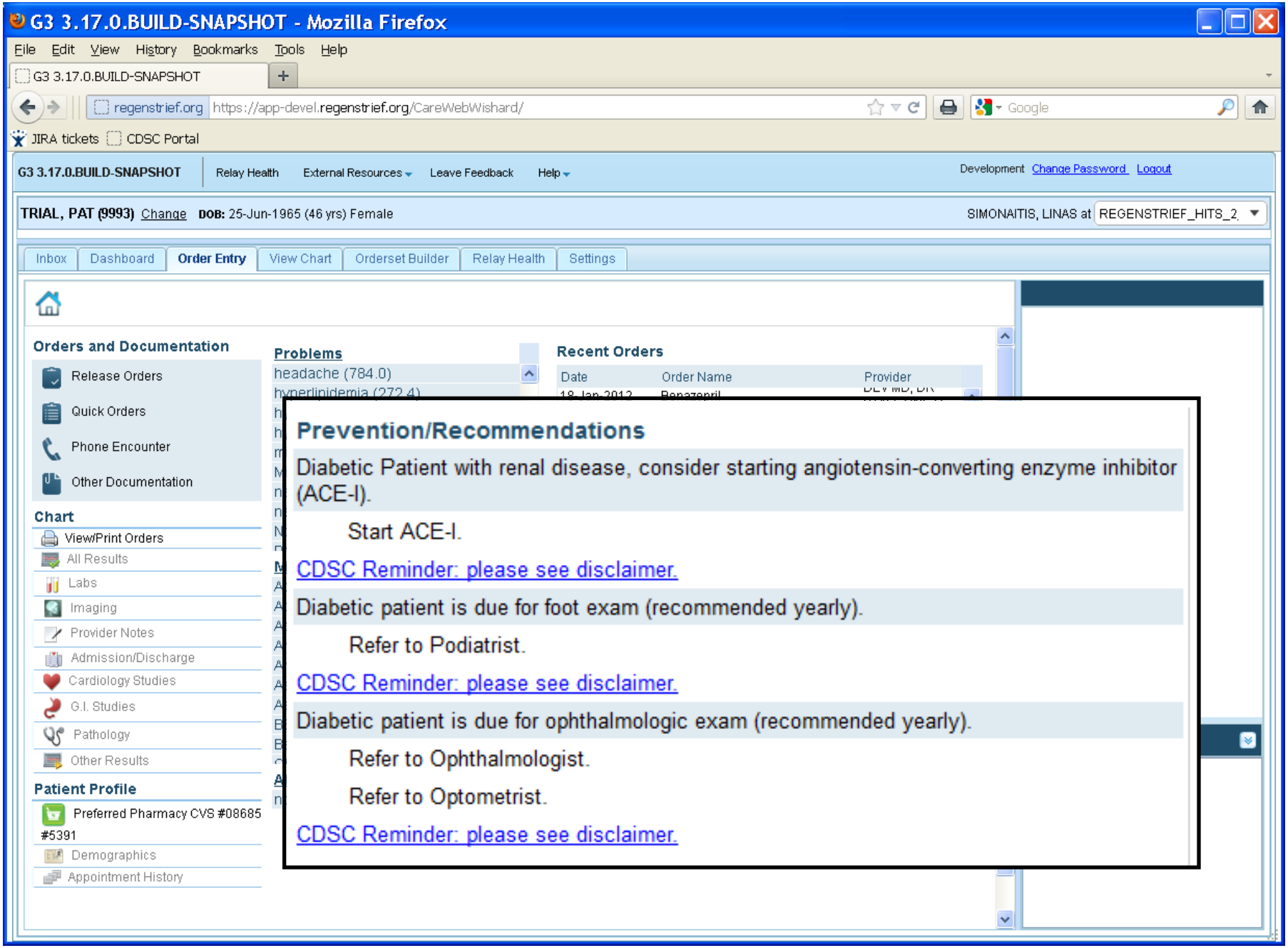
18-Jan-2012 Acetamin/Cod El DEV MD, DR STAFF ONE D
28-Dec-2011 Acetaminophen SIMPSON, HOMER
19-Dec-2011 Lisinopril DEV MD, DR STAFF ONE D
19-Dec-2011 Amoxicillin DEV MD, DR STAFF ONE D
Prevention/Recommendations
Diabetic Patient with renal disease, consider starting angiotensin-converting enzyme inhibitor (ACE-I).
Start ACE-I.
CDSC Reminder: please see disclaimer.
Diabetic patient is due for foot exam (recommended yearly).
Refer to Podiatrist.
CDSC Reminder: please see disclaimer.
Diabetic patient is due for ophthalmologic exam (recommended yearly).
TO-DO's
Alert Manager - no alerts


G3 3.17.0.BUILD-SNAPSHOT - Mozilla Firefox
File Edit View History Bookmarks Tools Help
G3 3.17.0.BUILD-SNAPSHOT
regenstrief.org https://app-devel.regenstrief.org/CareWebWishard/
JIRA tickets CDSC Portal
G3 3.17.0.BUILD-SNAPSHOT Relay Health External Resources Leave Feedback Help
Development Change Password Logout
TRIAL, PAT (9993) Change DOB: 25-Jun-1965 (46 yrs) Female
SIMONAITIS, LINAS at REGENSTRIEF_HITS_2
Inbox Dashboard Order Entry View Chart Orderset Builder Relay Health Settings
Orders and Documentation
Release Orders
Quick Orders
Phone Encounter
Other Documentation
Chart
View/Print Orders
All Results
Labs
Imaging
Provider Notes
Admission/Discharge
Cardiology Studies
G.I. Studies
Pathology
Other Results
Patient Profile
Preferred Pharmacy CVS #08685 #5391
Demographics
Appointment History
Problems
headache (784.0)
hyperlipidemia (272.4)
Recent Orders
Date
Order Name
Provider
18-Jan-2012
Benazepril
Prevention/Recommendations
Diabetic Patient with renal disease, consider starting angiotensin-converting enzyme inhibitor (ACE-I).
Start ACE-I.
CDSC Reminder: please see disclaimer.
Diabetic patient is due for foot exam (recommended yearly).
Refer to Podiatrist.
CDSC Reminder: please see disclaimer.
Diabetic patient is due for ophthalmologic exam (recommended yearly).
Refer to Ophthalmologist.
Refer to Optometrist.
CDSC Reminder: please see disclaimer.

From the voice of the customer

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Preemie/GLIDES Slides

Pediatric Research Consortium (PeRC)

Center for Biomedical Informatics

The Children's Hospital of Philadelphia

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Guideline Translation Process

Clinical Knowledge Source Document

American Academy of Pediatrics

FROM THE AMERICAN ACADEMY OF PEDIATRICS

Policy Statement—Modified Recommendations for Use of Palivizumab for Prevention of Respiratory Syncytial Virus Infections

abstract

Identify Text in Source Document

"Infants with CLD: Palivizumab prophylaxis may be considered for infants and children younger than 24 months with CLD who receive medical therapy (supplemental oxygen, bronchodilator, diuretic or chronic corticosteroid therapy) for CLD within 6 months before the start of the RSV season. These infants and young children should receive a maximum of 5 doses."

Translate Text into Simple Boolean Logic*

```
IF
{
   (Chronological Age < 24 Months)
   AND
   (Chronic Lung Disease = TRUE)
   AND
   (Receives Medical Therapy =
      TRUE)
   AND
   (Onset of RSV <= 6 Months)
}

THEN

{
May benefit from prophylaxis
Receive a maximum of 5 doses
}
```

Transpose Logic into Rules Engine Code **

```
rule "Eligible for 5 doses due to chronic lung disease"
ruleflow-group "rsv-risk-eligibility"
  when
    $p: Patient()
    $cldz: RSVChronicLungDisease()
    RSVSeason($startSeason: startDate, $endSeason:
    endDate >  ($p.getBirthDate()))
    $ageMonthsStart: Integer(intValue < 24) from
    $p.ageMonthsAt ($startSeason.minusDays(1))
    exists (Prescription(endDate == null || endDate >=
    ($startSeason.minusMonths(6)), pharmClass
    matches "(? ism).*\ \b  (?:diuretics?|
    corticosteroids?|oxygen|antiasthmatics?)\\b.*" ||
    generic matches "(?ism).*\\b(?:oxygen?)\\b.*")
    from $p.getPrescriptions())
  then
    RSVEligibleCandidate fact = new
    RSVEligibleCandidate();
    fact.setStartDate($startSeason);
    fact.setDoses((int)Math.min(5,
   $p.ageMonthsAt($endSeason)
    + 1)); fact.setReason("chronic lung disease on
   treatment"); insert(fact);
end
```

* Using GEMCutter 2.5 created by the GLIDES Project at Yale School of Medicine: http://gem.med.yale.edu/glides/

** Using DROOLS http://www.jboss.org/drools

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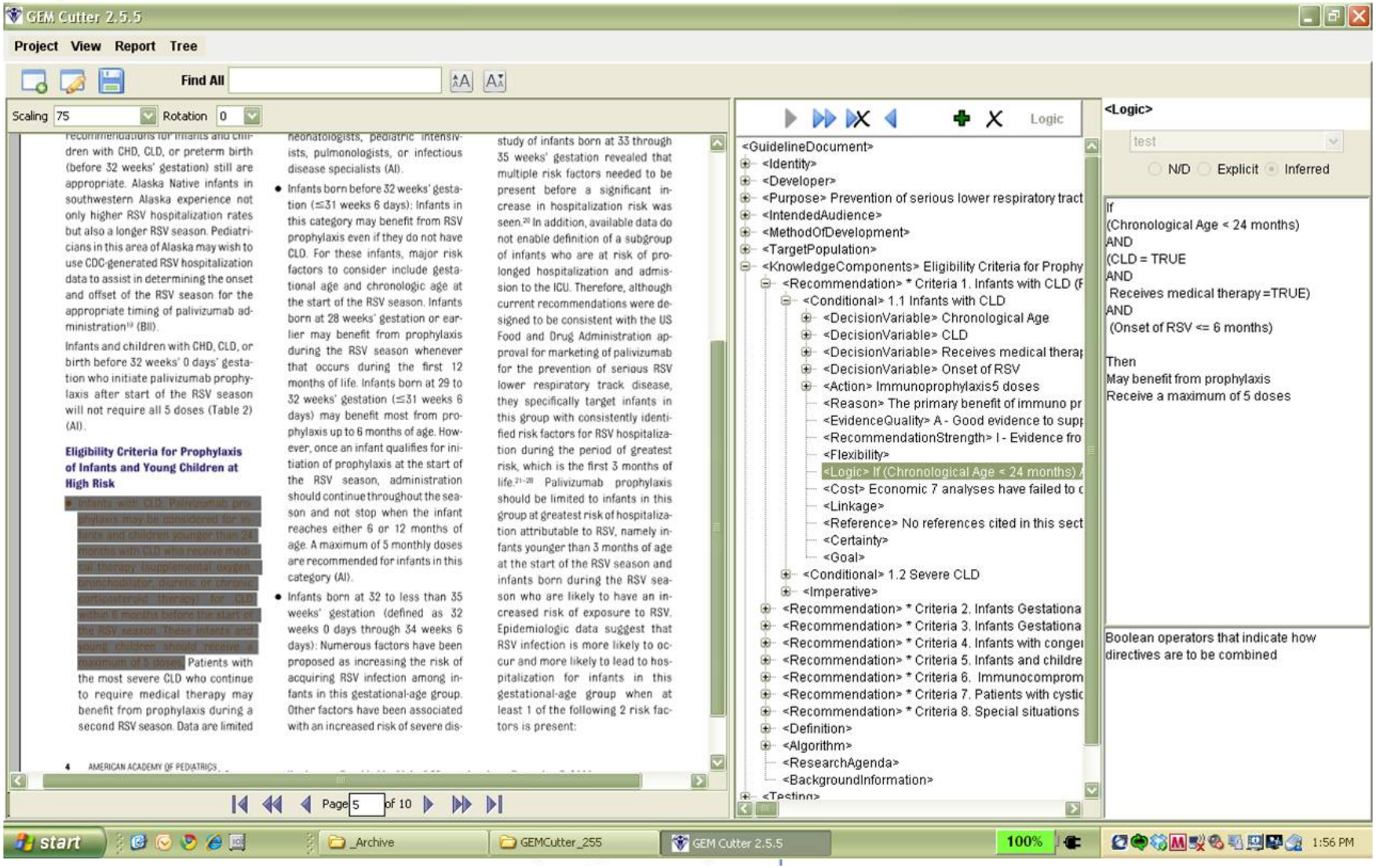
GEMCutter 2.5

- Guidelines Into Decision Support (GLIDES) http://gem.med.yale.edu/glides/default.htm



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Rules Engine

```
# Criteria 1. Infants with CLD (Page 4, Column 1, Paragraph 3) - Conditional     - 1.1 Infants with CLD
# Infants with CLDz <24 mo (at start of season)
# who received medical therapy (O2, inhaled meds or diuretics)
# for CLD within 6 mo prior to start of season Ð should receive up to up to 5 doses
rule "Eligible for 5 doses due to chronic lung disease"
    ruleflow-group "rsv-risk-eligibility"
    when
        # find patients with chronic lung disease as a risk factor
        $p: Patient()
        $cldz: RSVChronicLungDisease()
        # determine the start date for the relevant RSV season.  be sure patient was born before the season end
        RSVSeason($startSeason: startDate, $endSeason: endDate > ($p.getBirthDate()))
        # check to make sure age < 24 months at start of season
        # TODO: clarify, if child reaches 24 months during season is immunization stopped
        $ageMonthsStart: Integer(intValue < 24) from $p.ageMonthsAt($startSeason.minusDays(1))
        # check to see if at least one prescription related to chronic lung disease was active
        # within the 6 month period preceding the season
        # qualifying prescriptions: supplemental oxygen, bronchodilator, diuretic or chronic corticosteroid therapy
        exists (Prescription(endDate == null || endDate >= ($startSeason.minusMonths(6)),
                             pharmClass matches "(?ism).*\\b(?:diuretics?|corticosteroids?|oxygen|antiasthmatics?)\\b.*" ||
generic matches "(?ism).*\\b(?:oxygen?)\\b.*")
                             from $p.getPrescriptions())
    then
        # eligible for 5 doses
        RSVEligibleCandidate fact = new RSVEligibleCandidate();
        fact.setStartDate($startSeason);
        # calculate patient age in months at the end of the season to determine maximum doses possible
        fact.setDoses((int)Math.min(5, $p.ageMonthsAt($endSeason) + 1));
        fact.setReason("chronic lung disease on treatment");
        insert(fact);
end
```

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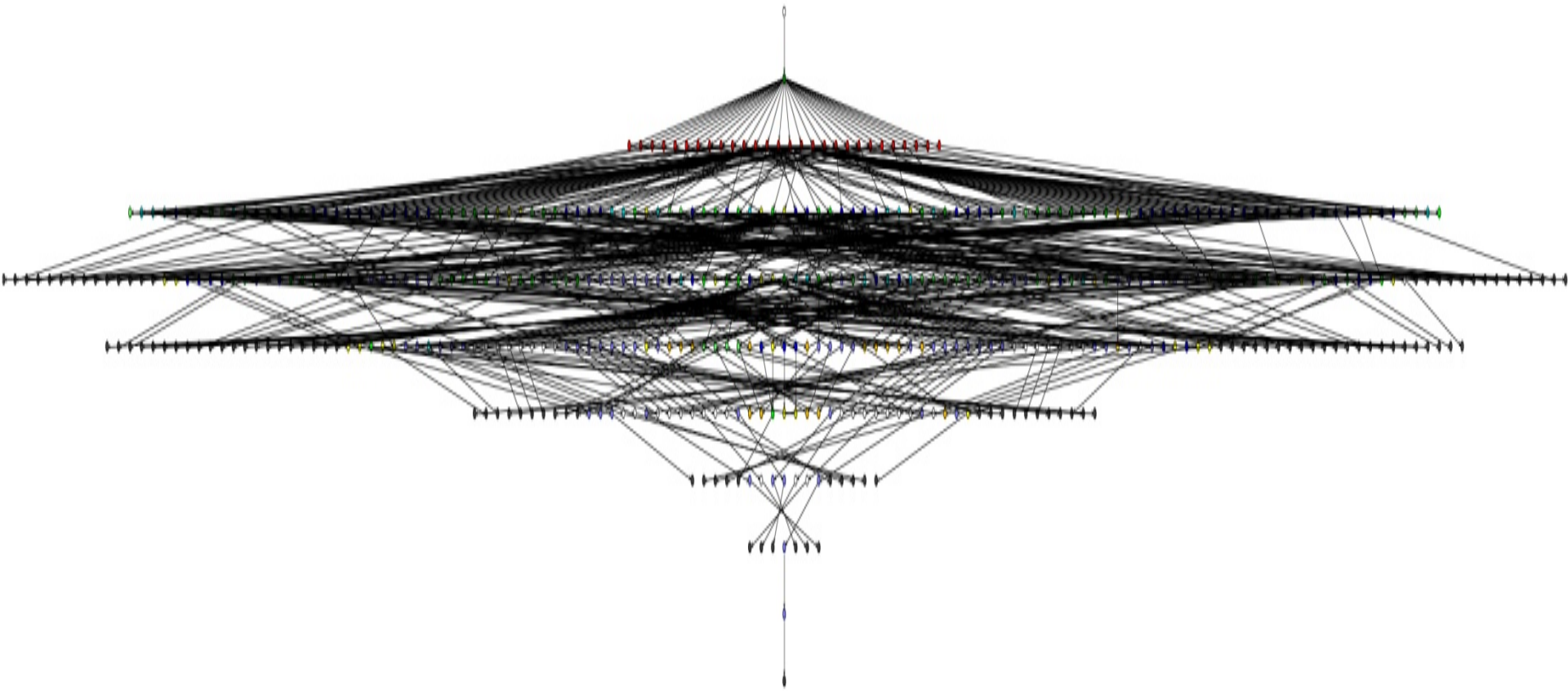
RSV Rules Visualized



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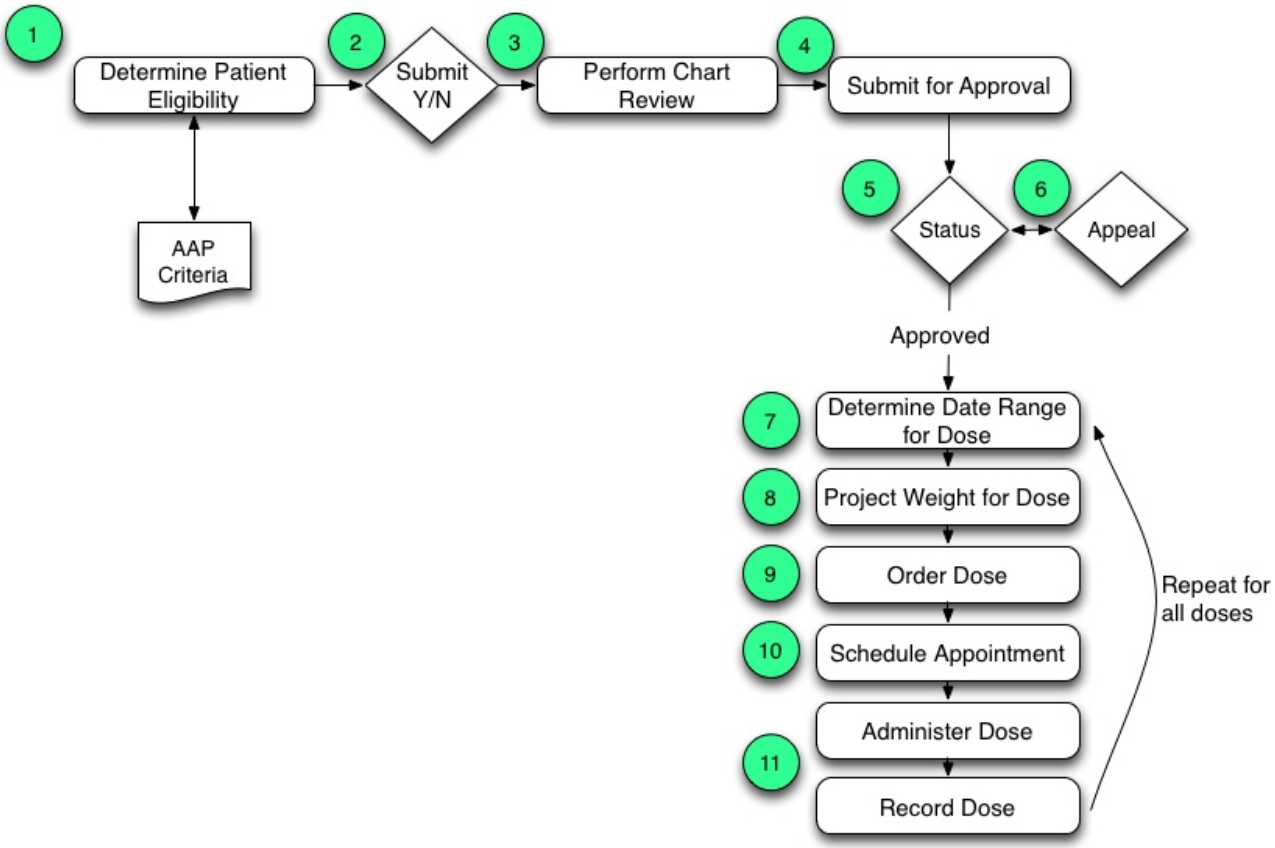
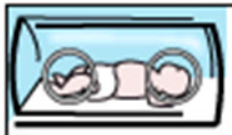
RSV Workflow

Our nurses can spend up to 20 hours per patient managing insurance approval, dose ordering and scheduling.





Preemie Assistant

Chronological Age: 8 months
Corrected Age: 5 months
Gestational Age: 30 weeks
Birth Weight: 1.899 kg

1

SV and Synagis ✓ Patient is candidate for 5 dose(s) Palivizumab (Synagis)

Criteria: chronic lung disease on treatment; gestational age 30 weeks

View AAP Policy Statement...

Run Chart Review...

2

Will submit for approval? Yes

Insurance Provider KMHP

Synagis Distributor ACRO

3

4

Initial Submission Date 10/04/2011

5

Initial Submission Response Denied

6

Will submit for appeal? Yes

Appeal Submission Date 10/14/2011

Appeal Submission Response Approved

Doses Approved 5

Dose	1	2	3	4	5
7 ate Range:	11/1/11 - 11/10/11	11/29/11 - 12/4/11	1/8/12 - 1/18/12	2/10/12 - 2/20/12	3/11/12 - 3/21/12
Status:	Given	Given	cheduled	No appointment	No appointment
8 ate:	11/4/11	11 2/14/11	10 6/12		
Weight Estimate:			4.769 kg	5.101 kg	5.377 kg
9 rder:	Received	Received	Ordered		

Comments:

Close

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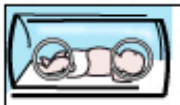
RSV Assistant for Nurses



Preemie Assistant

Chronological Age: 8 months
Corrected Age: 5 months
Gestational Age: 30 weeks
Birth Weight: 1.899 kg

RSV and Synagis ✔ Patient is candidate for 5 dose(s) Palivizumab (Synagis)

Criteria: chronic lung disease on treatment; gestational age 30 weeks

View AAP Policy Statement...

Run Chart Review...

Will submit for approval? Yes

Insurance Provider: KMHP

Synagis Distributor: ACRO

Initial Submission Date: 10/04/2011

Initial Submission Response: Denied

Will submit for appeal? Yes

Appeal Submission Date: 10/14/2011

Appeal Submission Response: Approved

Doses Approved: 5

Dose	1	2	3	4	5
Date Range:	11/1/11 - 11/10/11	11/29/11 - 12/4/11	1/8/12 - 1/18/12	2/10/12 - 2/20/12	3/11/12 - 3/21/12
Status:	Given	Given	Scheduled	No appointment	No appointment
Date:	11/4/11	12/14/11	1/16/12		
Weight Estimate:			4.769 kg	5.101 kg	5.377 kg
Order:	Received	Received	Ordered		

Comments:

Close

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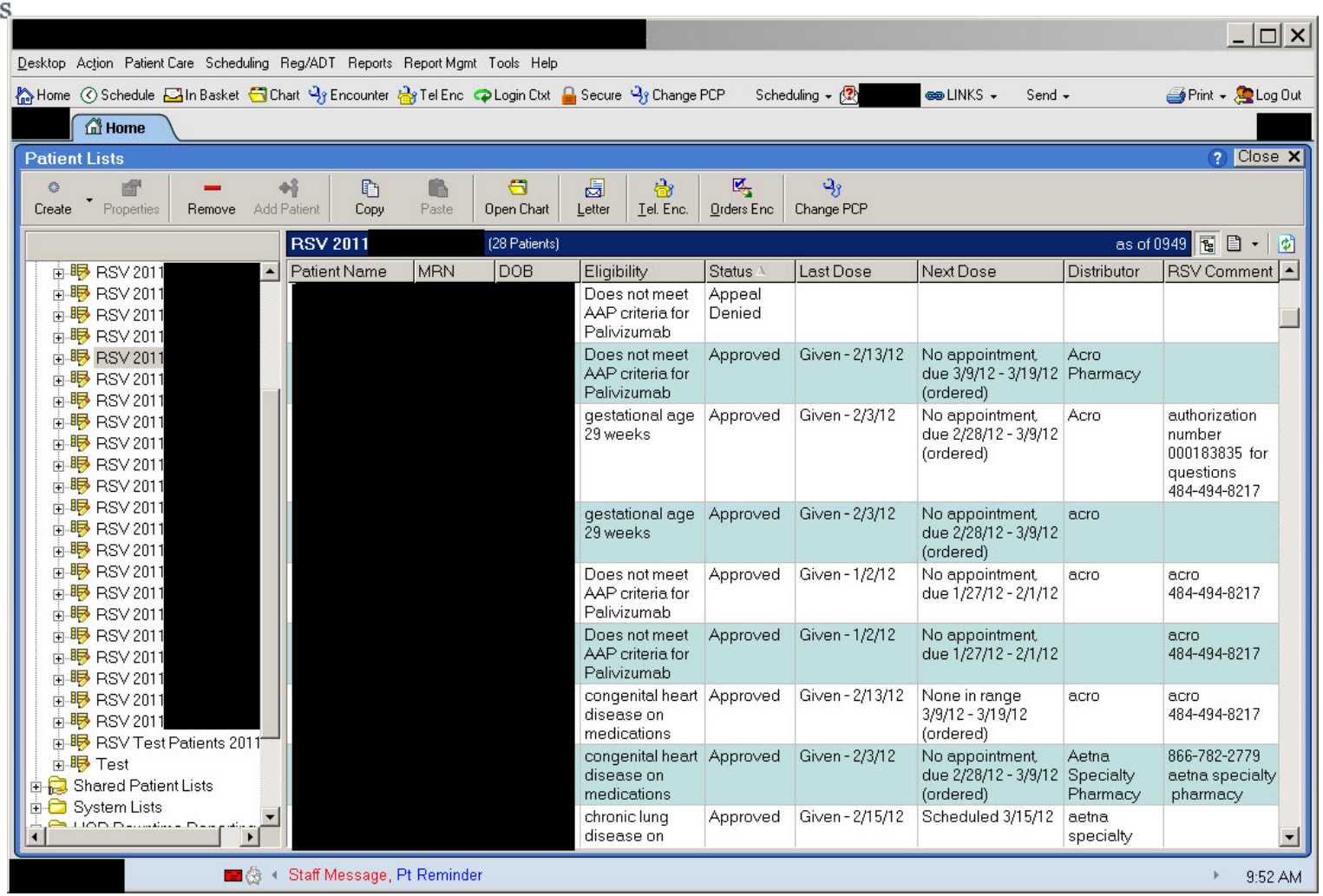
RSV Patient List



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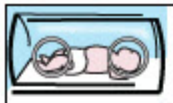
RSV for Physicians



Preemie Assistant

Chronological Age:	5 months	Gestational Age:	28 weeks
Corrected Age:	2 months	Birth Weight:	1.681 kg

Summary

Issue	Status	Resources
Growth	Weight loss	Growth & Nutrition Calculator...
Nutrition	Continue preterm formula or breast milk. No purees or cereal until 4-6 months corrected age (approximately in 6 weeks)	
Development	Not documented, use 2 month checklist today	
BP	Check blood pressure Nov 2011	
RSV	Eligible for 5 doses of Palivizumab: gestational age 28 weeks	RSV and Synagis...
NICU History	Abstracted	Open birth history...

Preemie Education Materials

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Questions?

Long-Term Deliverables for Lasting Impact and Synchronization Efforts

Discussion

Recap and Next Steps

Thank You!