GLIDES Project – Technical Expert Panel

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association of clinicians for the underserved

Yale School of Medicine

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Overview

- Background/Overview of the Alliance of Chicago
- History of EHRS Adoption and Clinical Decision Support
- GLIDES Asthma Project Overview and lessons learned

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OVERVIEW OF ALLIANCE OF CHICAGO

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Alliance Overview

- HRSA funded **network/collaborative of Community Health Centers**
- Essentially a joint venture organizations with the desire and ability to work together on building some **common infrastructure to improve service delivery** and health status
- Dedication to **quality** and **use of data** to improve care
- Ability to access higher quality, efficiency and **economy of scale**
- Desire to ultimately **share with others**

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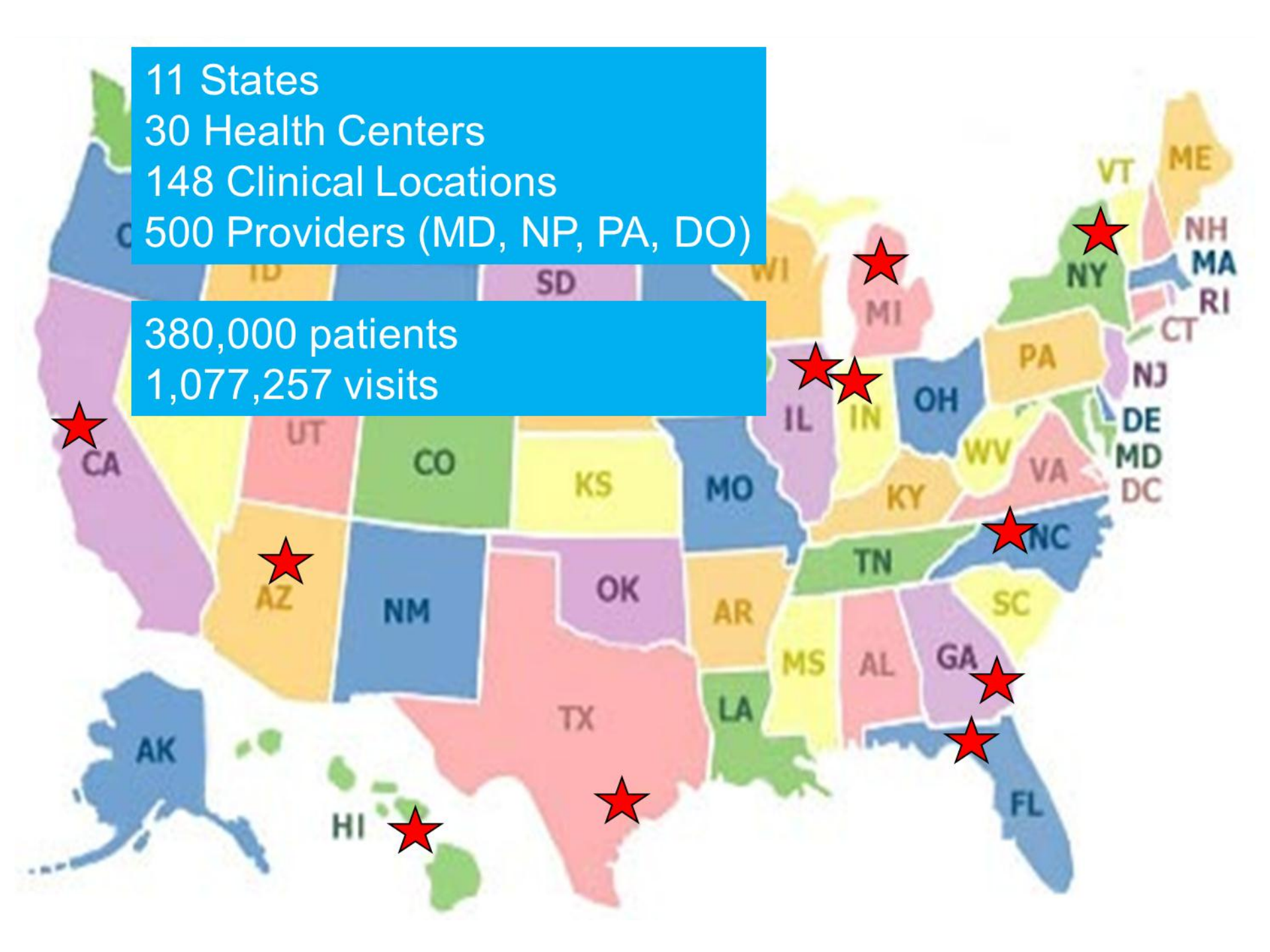
11 States
30 Health Centers
148 Clinical Locations
500 Providers (MD, NP, PA, DO)
380,000 patients
1,077,257 visits
CA
AZ
NM
CO
UT
KS
OK
TX
MO
AR
LA
IL
IN
MI
WI
SD
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MD
DC
AK
HI

Alliance Programs

Electronic Medical Records & HIT	Quality Improvement & Research	Consulting & Technical Assistance	Technology Innovations & Partnerships

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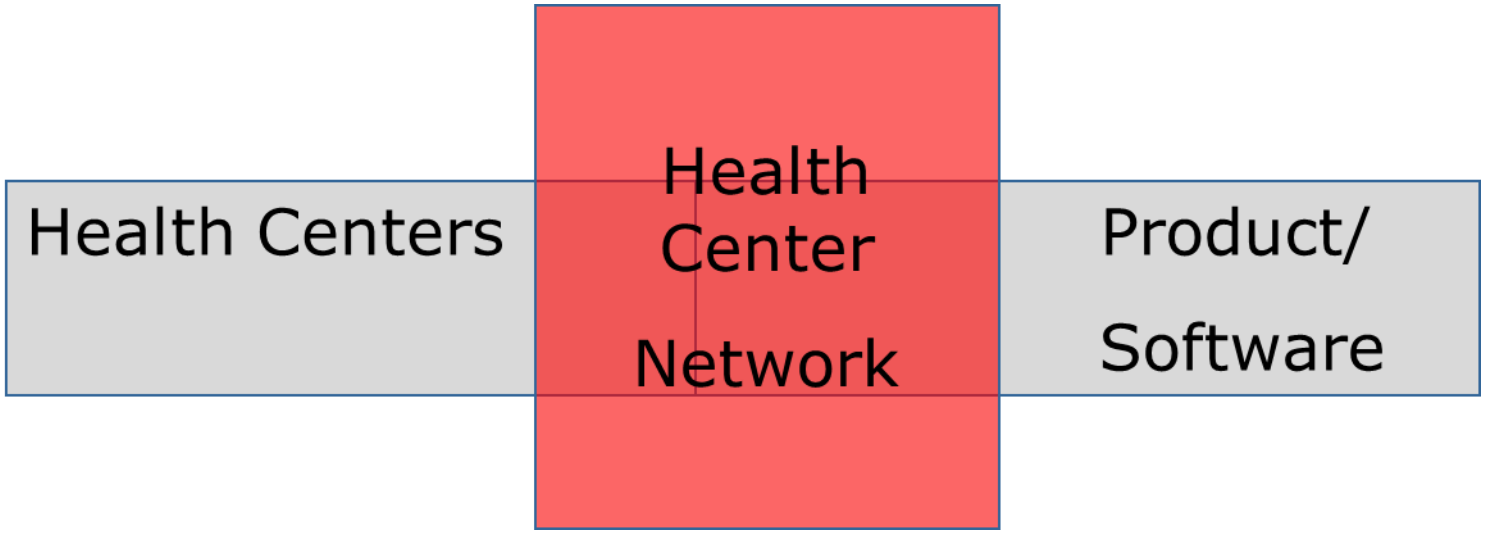
Network Role in HIT Implementation and Support



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Health Centers Working Independently

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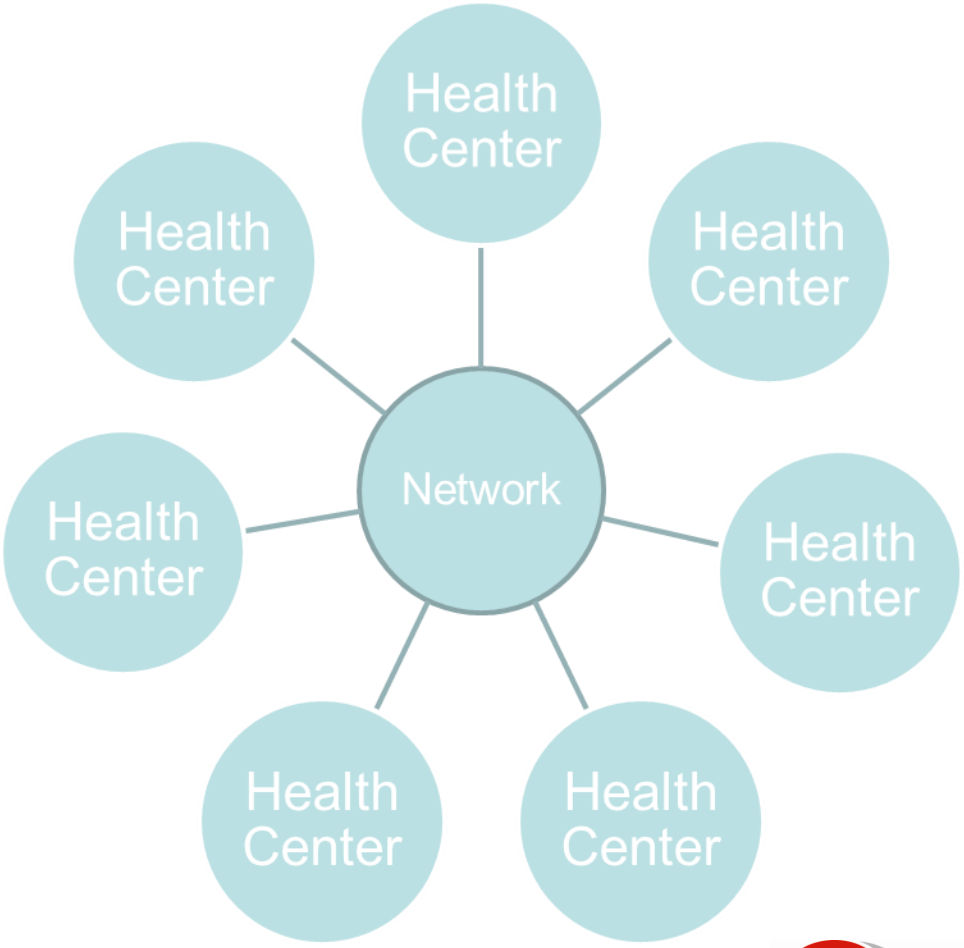
A Learning Community



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2012 Goals

- Provide HIT support to member health centers with a particular focus on achieving Meaningful Use and Patient Centered Medical Home Certification
- Strength the collaborative learning model to foster/promote use of evidenced-based care, improved financial sustainability, and overall excellence
- Implement HIT tools to support patient engagement
- Implement shared infrastructure to enable multi-institutional, patient-centered research
- Support member health center readiness to leverage the EHR, Data Analytics Platform, and Patient Engagement technologies for participation in Accountable Care.

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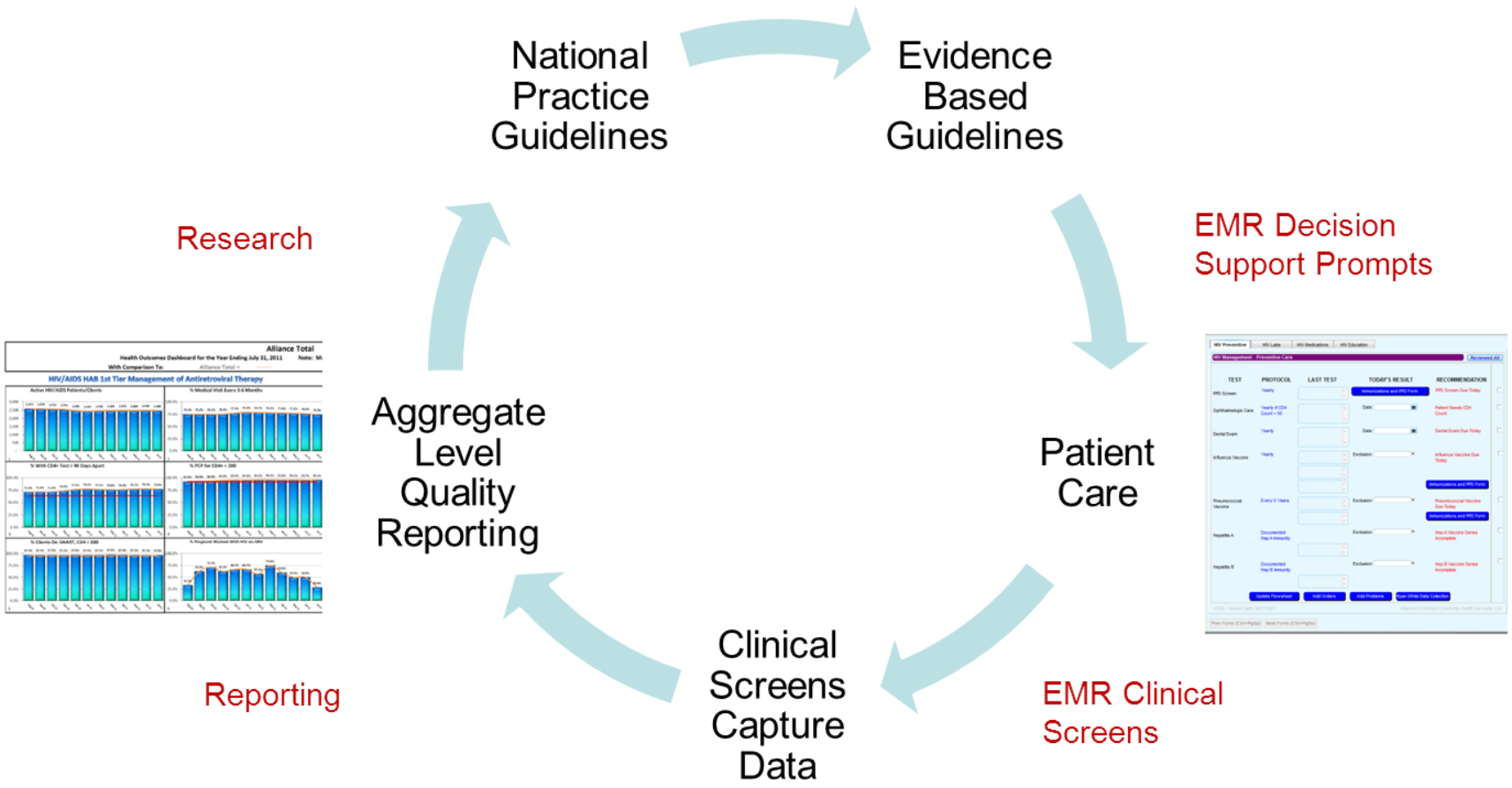
HISTORY OF EHRS ADOPTION AND CDS

Link between EMR Adoption and Quality



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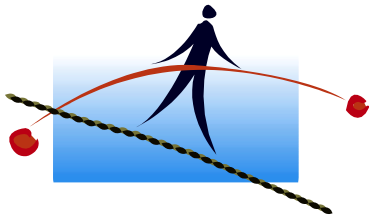
Clinical Content Development

- **Benefit**
  - Directly address CHC needs that affect us all
  - Structured, standardized data mapping for reporting needs



- **Challenge**
  - Consistently meeting the needs across all Alliance Health Centers
  - Keeping up with the volume of requests for clinical content development

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Mission & Vision

- Create clinical content that can be used for safe, quality patient care at Alliance Health Centers.
- Design content with the full patient workflow in mind, not just a singular task.
- Foster efficient, effective operations.
- Facilitate real-time EHRS documentation.
- Promote best-practice and evidence-based guidelines for clinical care.
- Facilitate data extraction and review.

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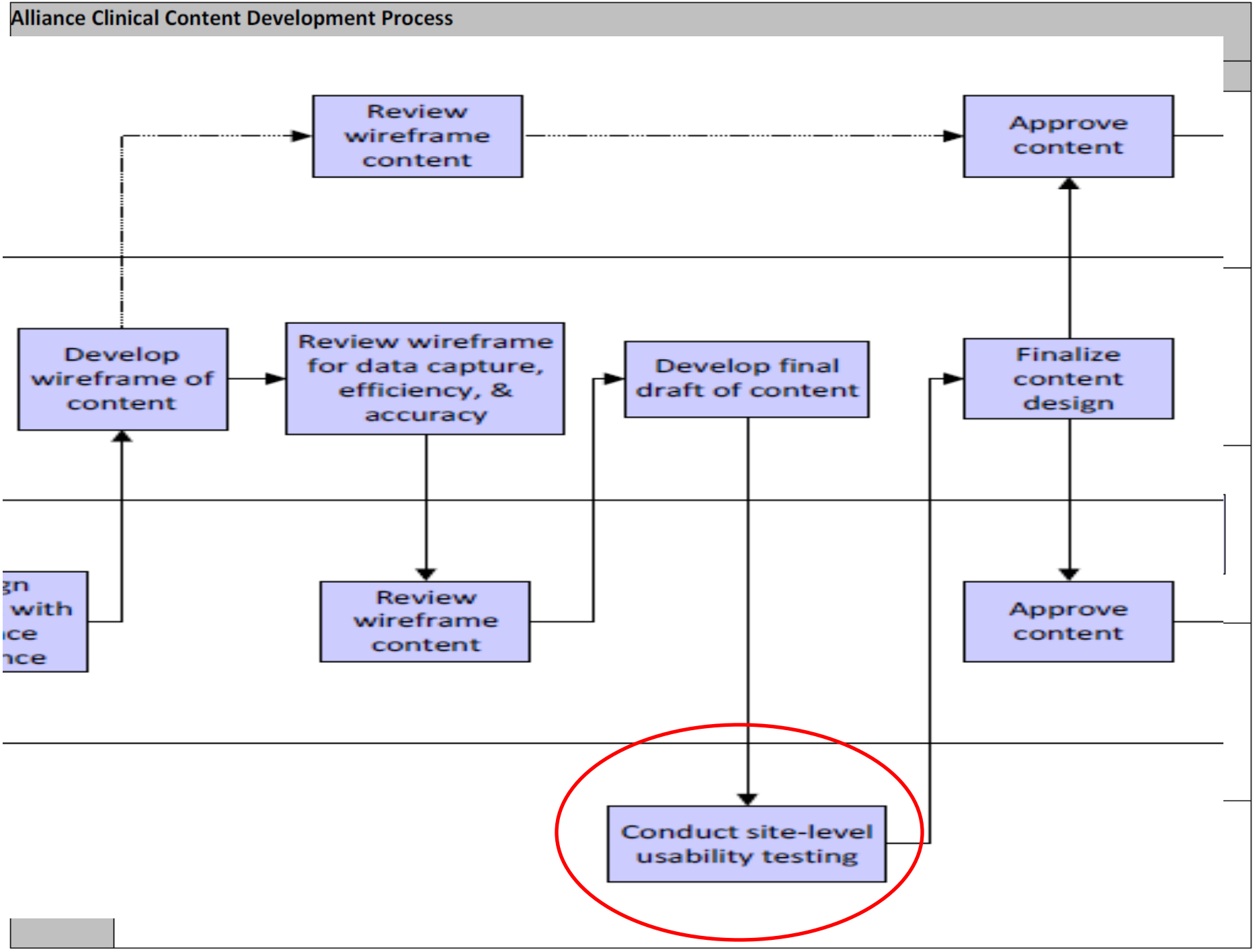
Alliance Clinical Content Development Process
Review wireframe content
Approve content
Develop wireframe of content
Review wireframe for data capture, efficiency, & accuracy
Develop final draft of content
Finalize content design
with
Review wireframe content
Approve content
Conduct site-level usability testing

Usability Survey

2. Simplicity

Simplicity

Does information presented seem uniform and organized, or chaotic? Simplicity refers to having a lack of visual clutter and concise information display. Simplicity is difficult to achieve as the more complex a task becomes, the more important it is to maintain a sense of simplicity. Think of a "less is more" philosophy while assessing this principle.

Please answer/rate the following questions on a 1-5 scale.

1 - Terrible
2 - Poor
3 - Fair
4 - Good
5 - Excellent

1. Please rate how well visual clutter is minimized:

◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5

2. Please rate the degree of ease in visually following onscreen formatting to move from one topic/option to the next:

◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5

3. With respect to simplicity as a whole, please rate the Patient History form:

◯ 1 ◯ 2 ◯ 3 ◯ 4 ◯ 5

4. Additional comments on simplicity:

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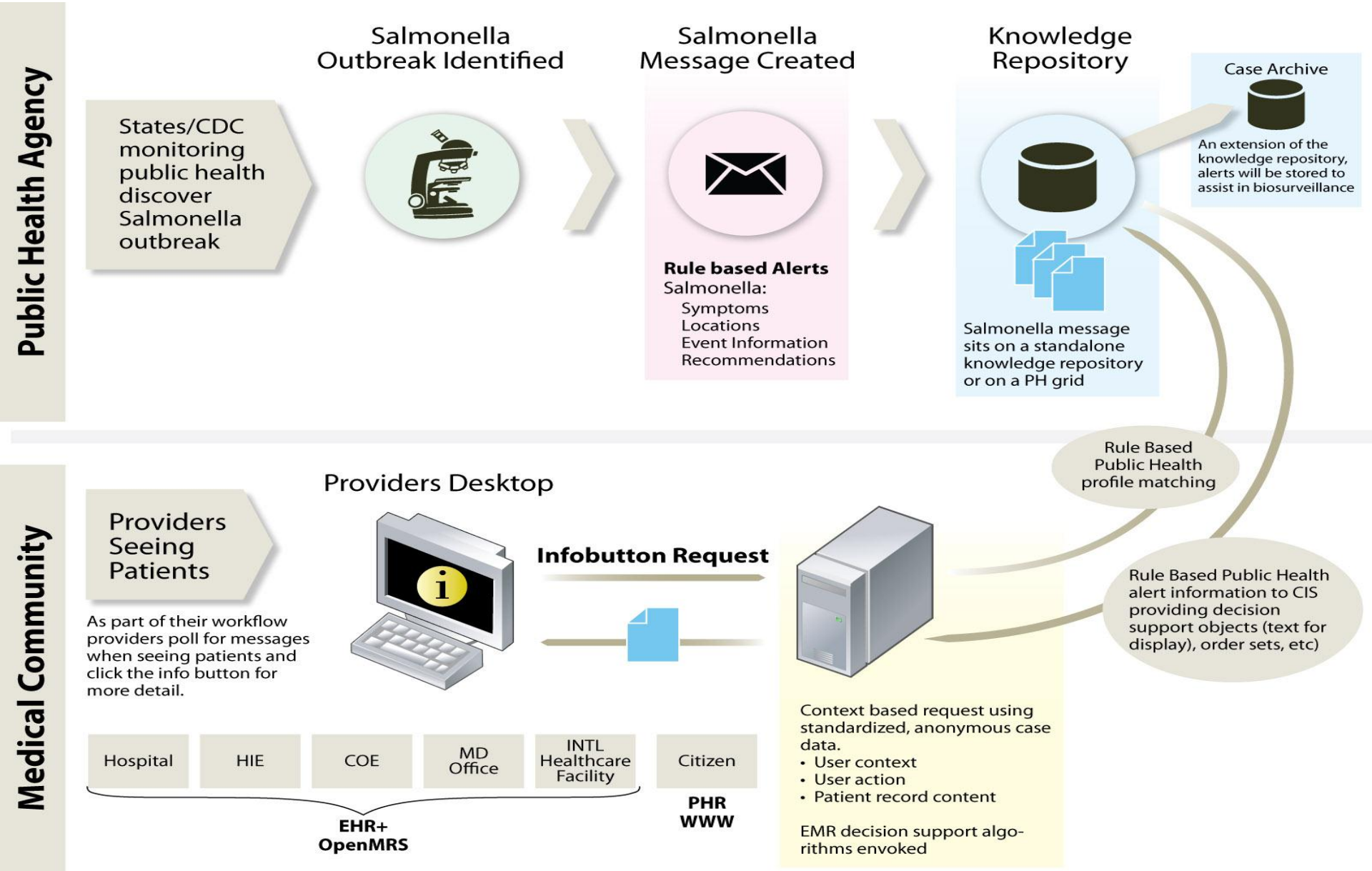
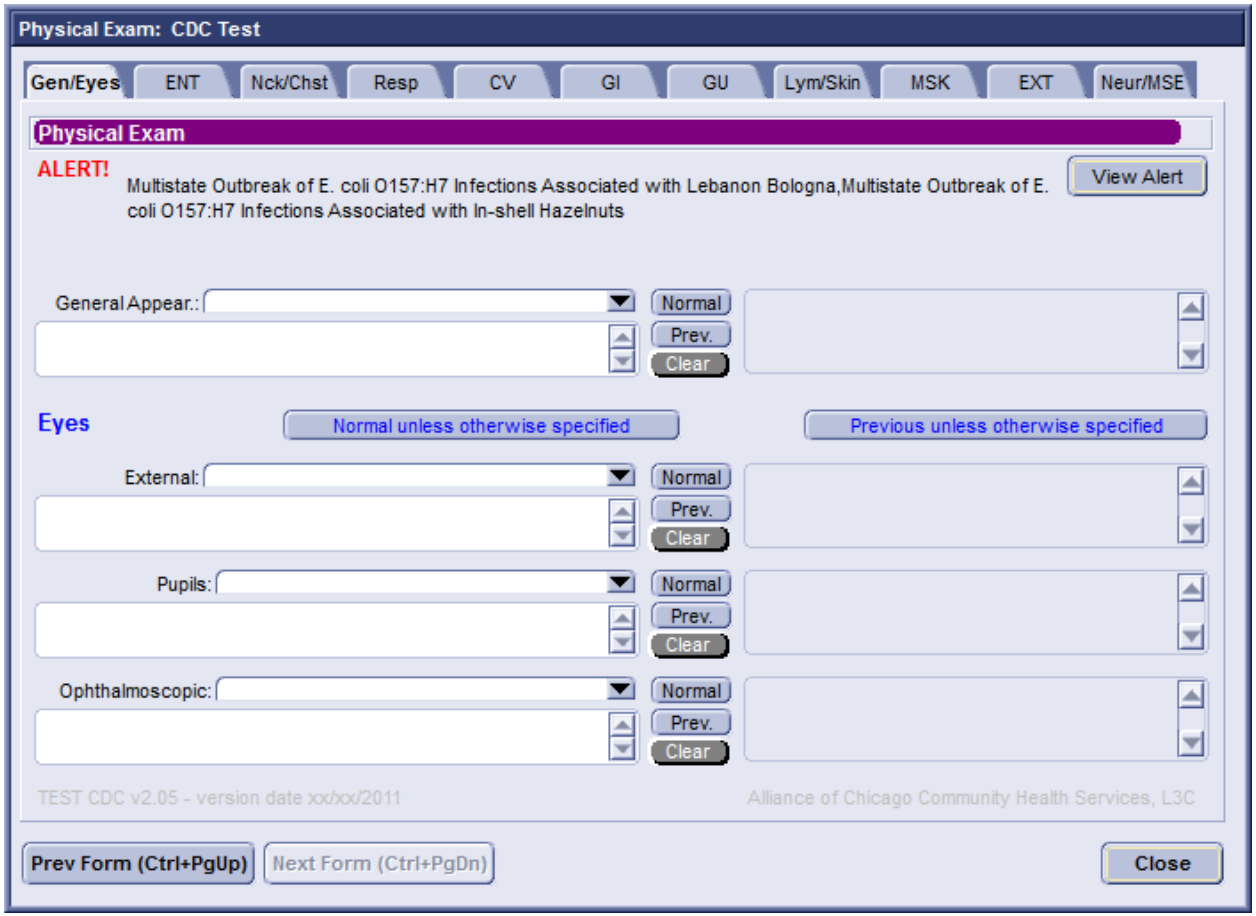
Measuring Usability

- The brief survey that is distributed to all clinicians selected to evaluate content usability
- The results of the survey are reviewed with clinical sponsor and SMEs
- Changes based on user feedback are incorporated into the revised content
- The survey is redistributed at 3-6 months to evaluate impact of changes

Testing Cloud Based CDS
Salmonella Outbreak Scenario



Physical Exam Form with ALERT



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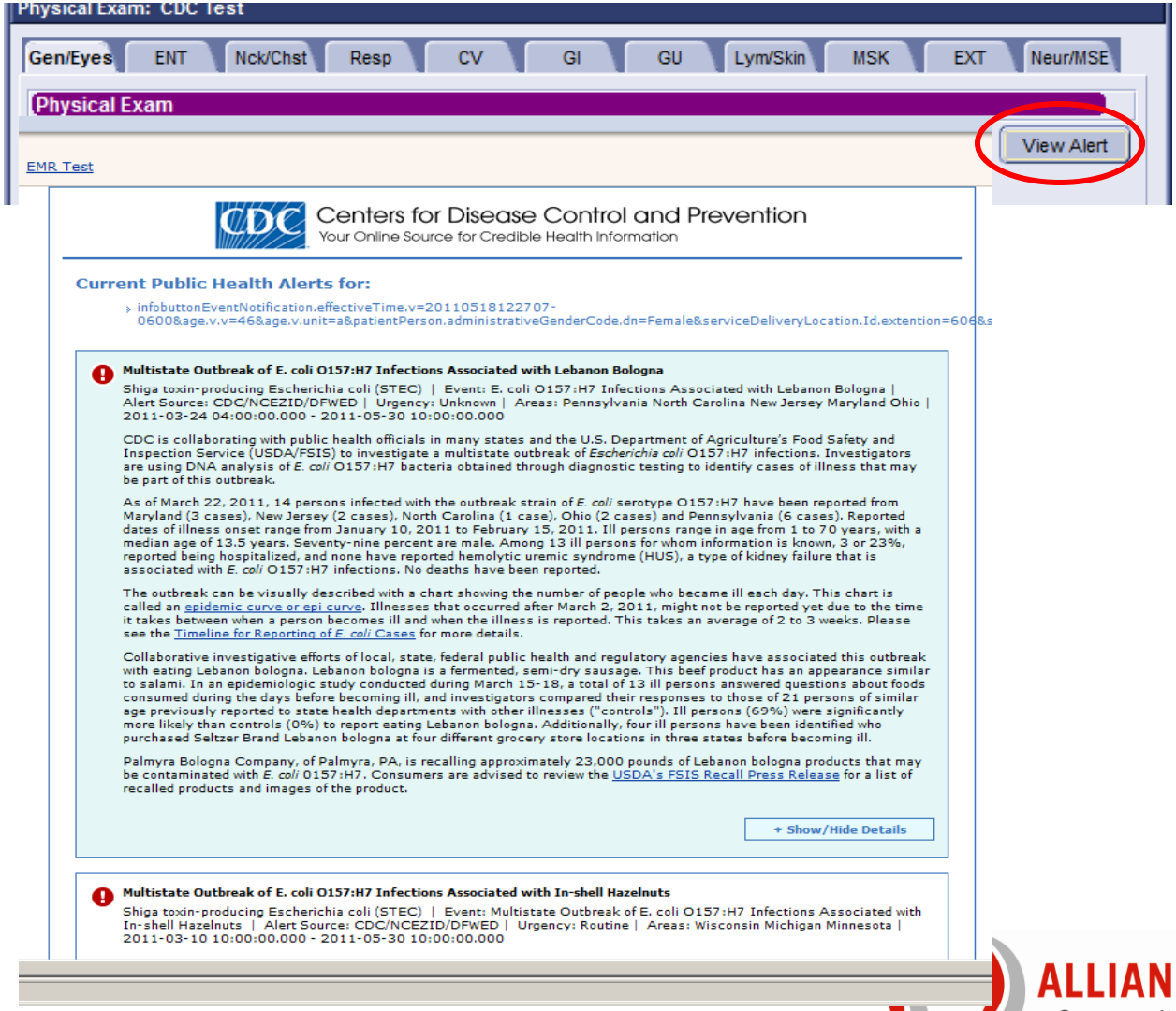
Info Button



Overview of GLIDES Project

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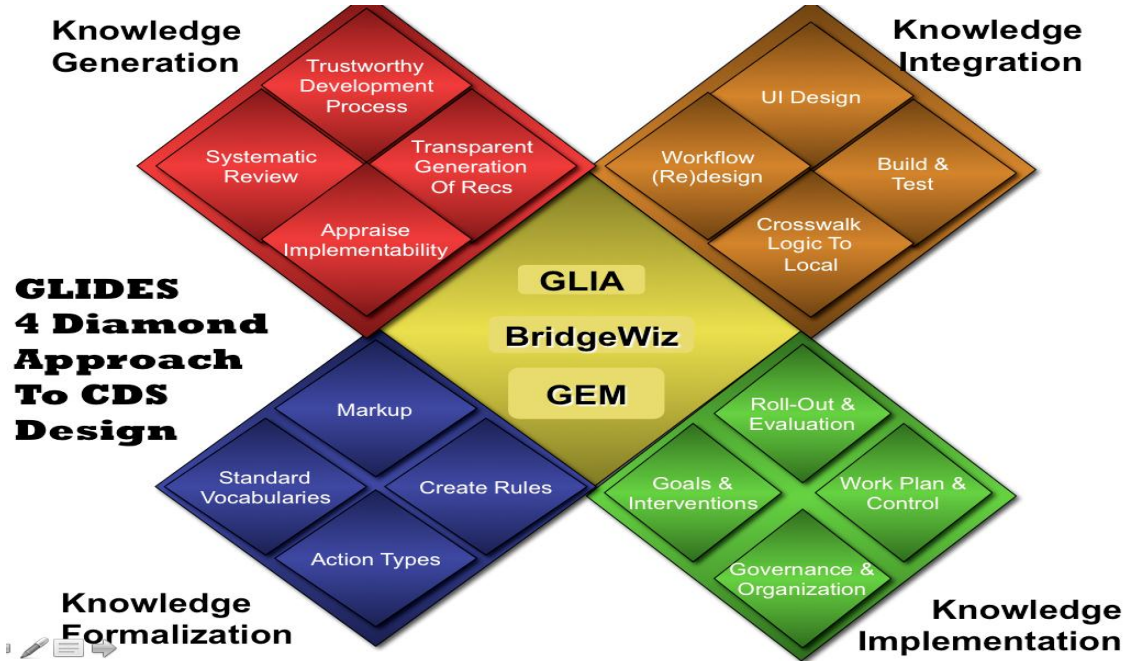
Expected Outcomes

- Update EMR based CDS for Asthma Management to reflect most current NHLBI Guidelines
- Incorporate EPA standards related to collecting asthma trigger data and developing interventions, (eg, large scale education programs)
- Demonstrate the use of GLIDES based CDS Implementation Toolkit



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Phase 1: Building Revised Content

- Reviewed the Asthma CDS available from GLIDES
- Incorporated GLIDES CDS into Alliance Content
- Expanded GLIDES content to include EPA Standards for documenting and managing Asthma Triggers

- Key Deliverables:
  - Revised Asthma Content & CDS
  - Documentation of the lessons learned and key challenges associated with incorporating CDS developed “externally”

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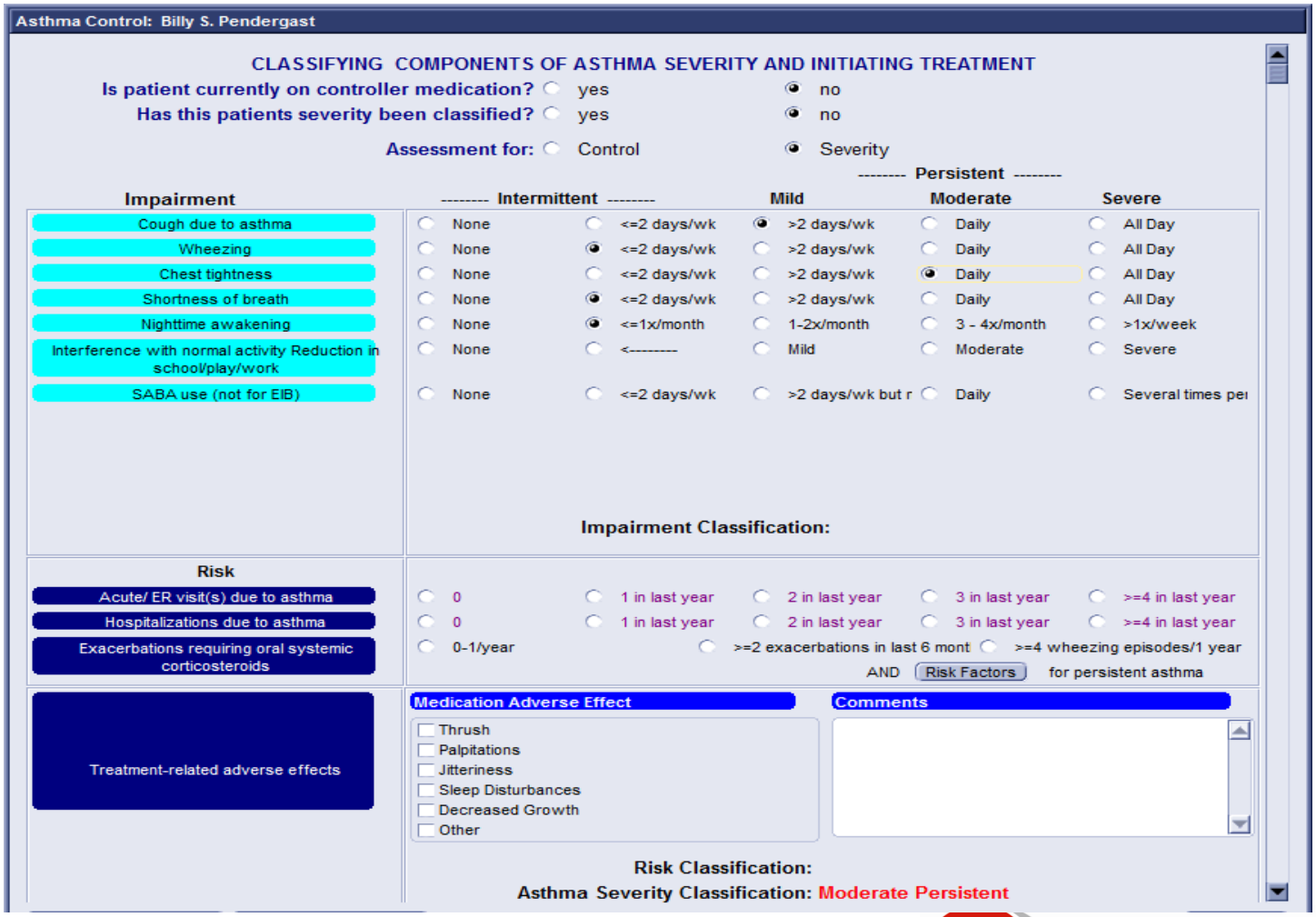
Assessment of Asthma Severity

Pediatric



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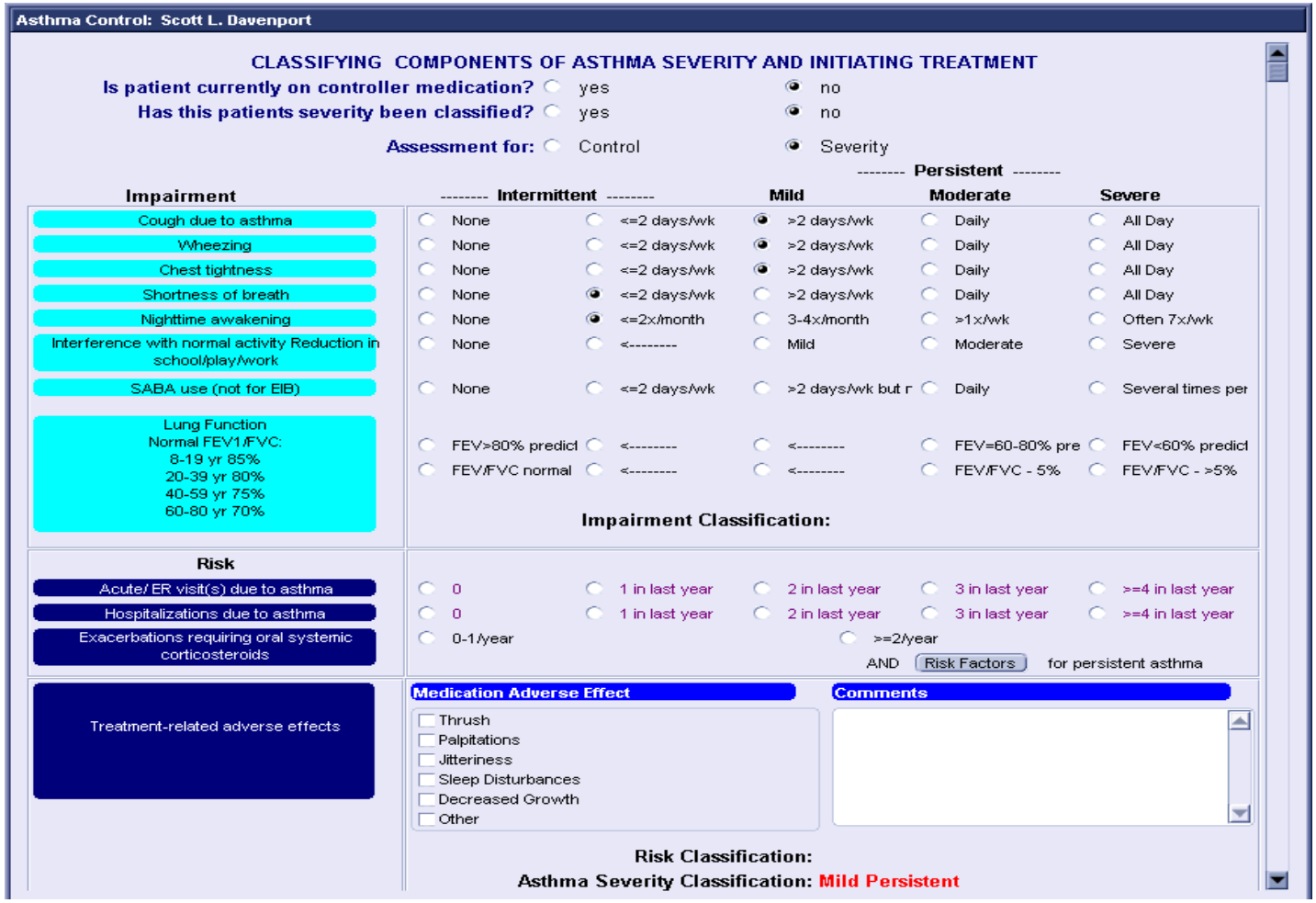
Adult Severity



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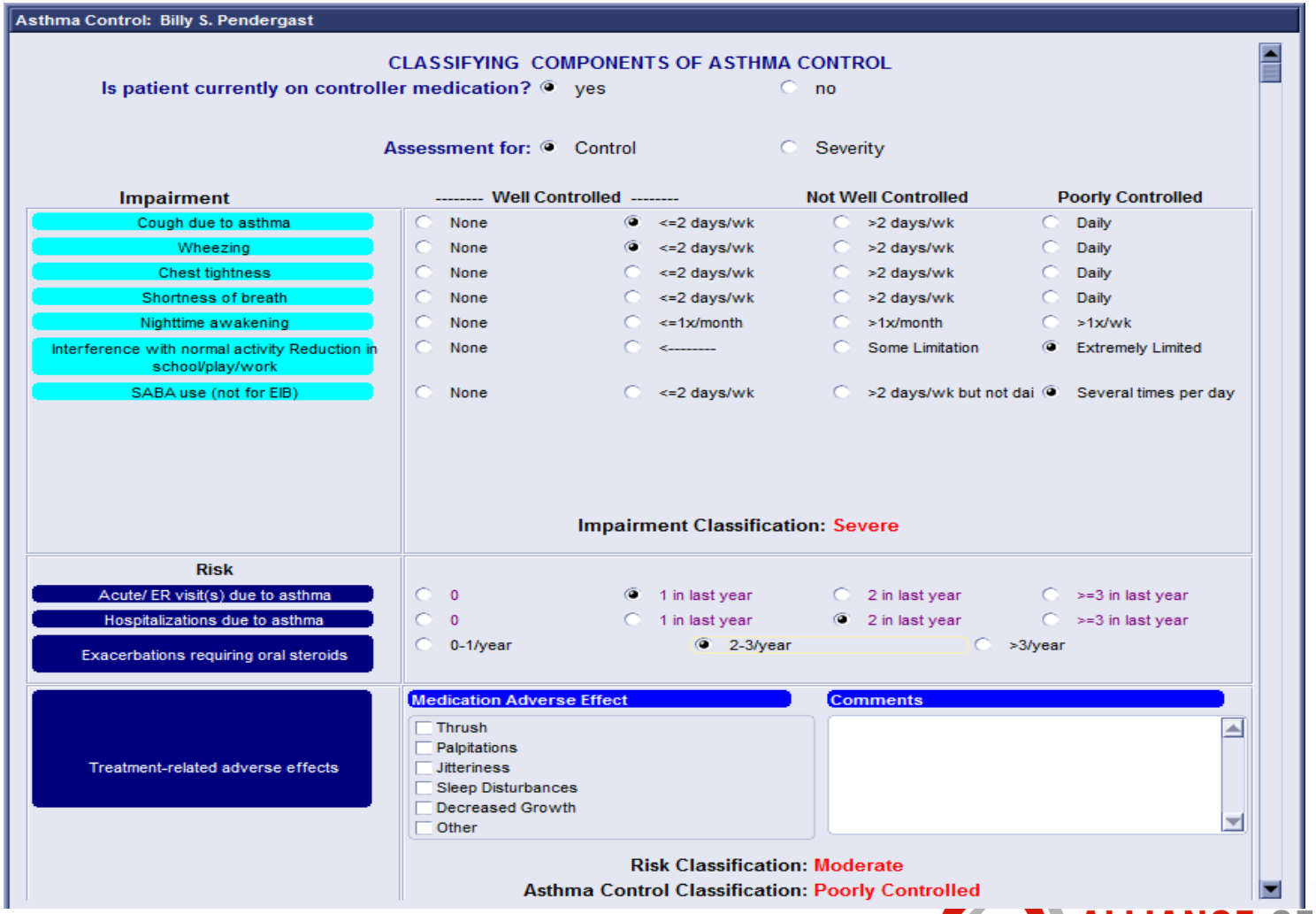
Assessment of Asthma Control

Pediatric



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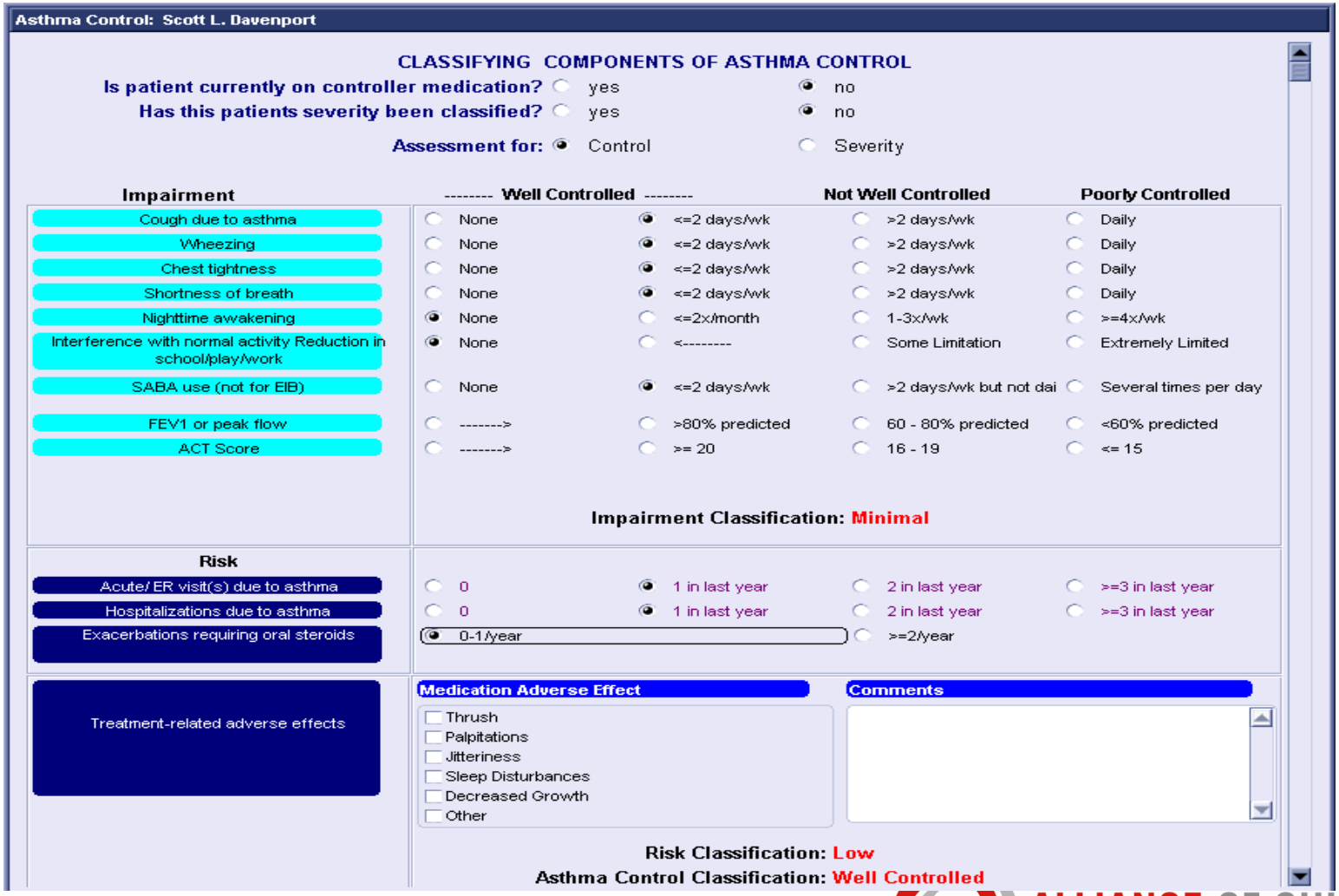
Adult Control



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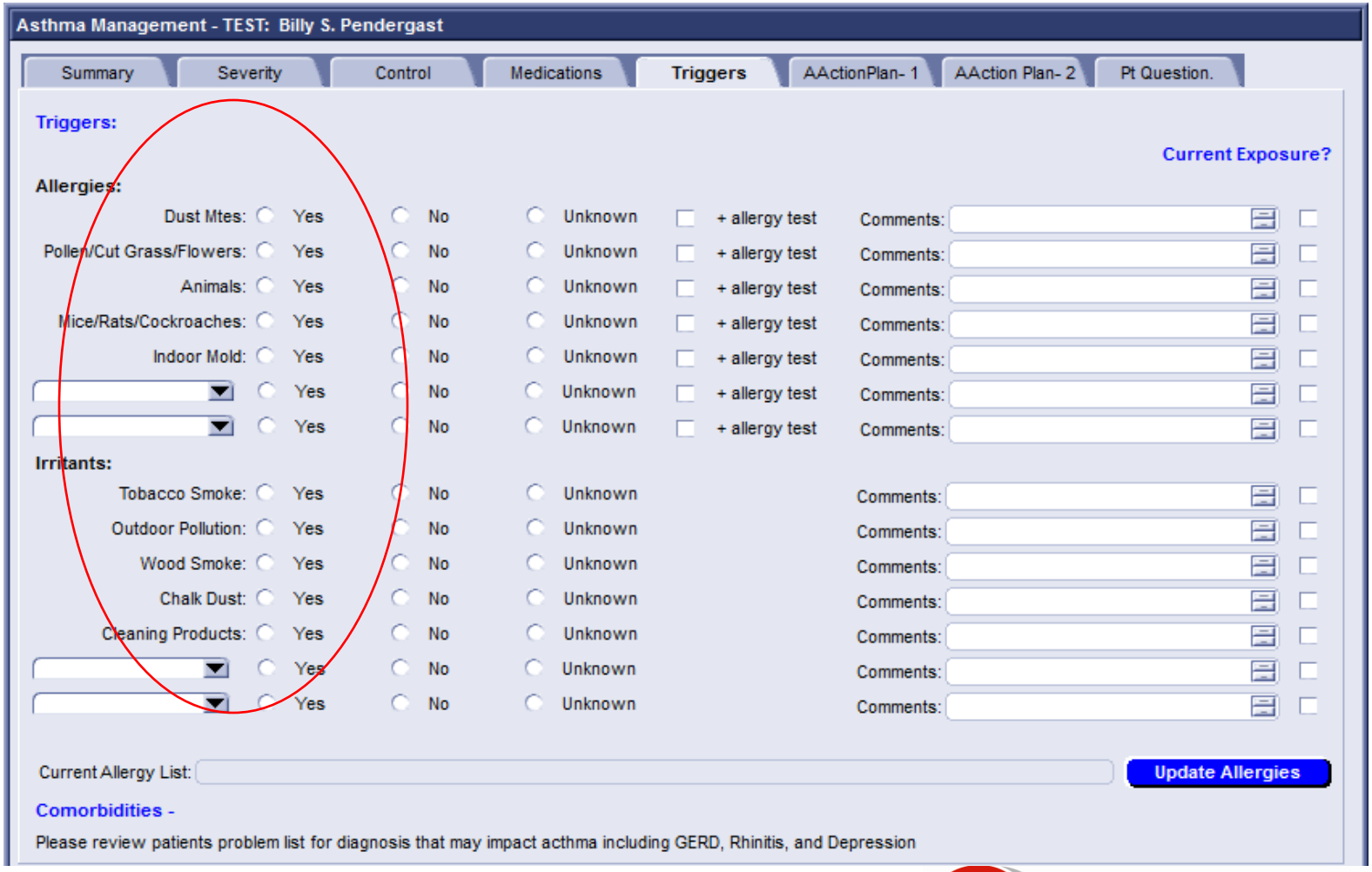
Assessment of Triggers



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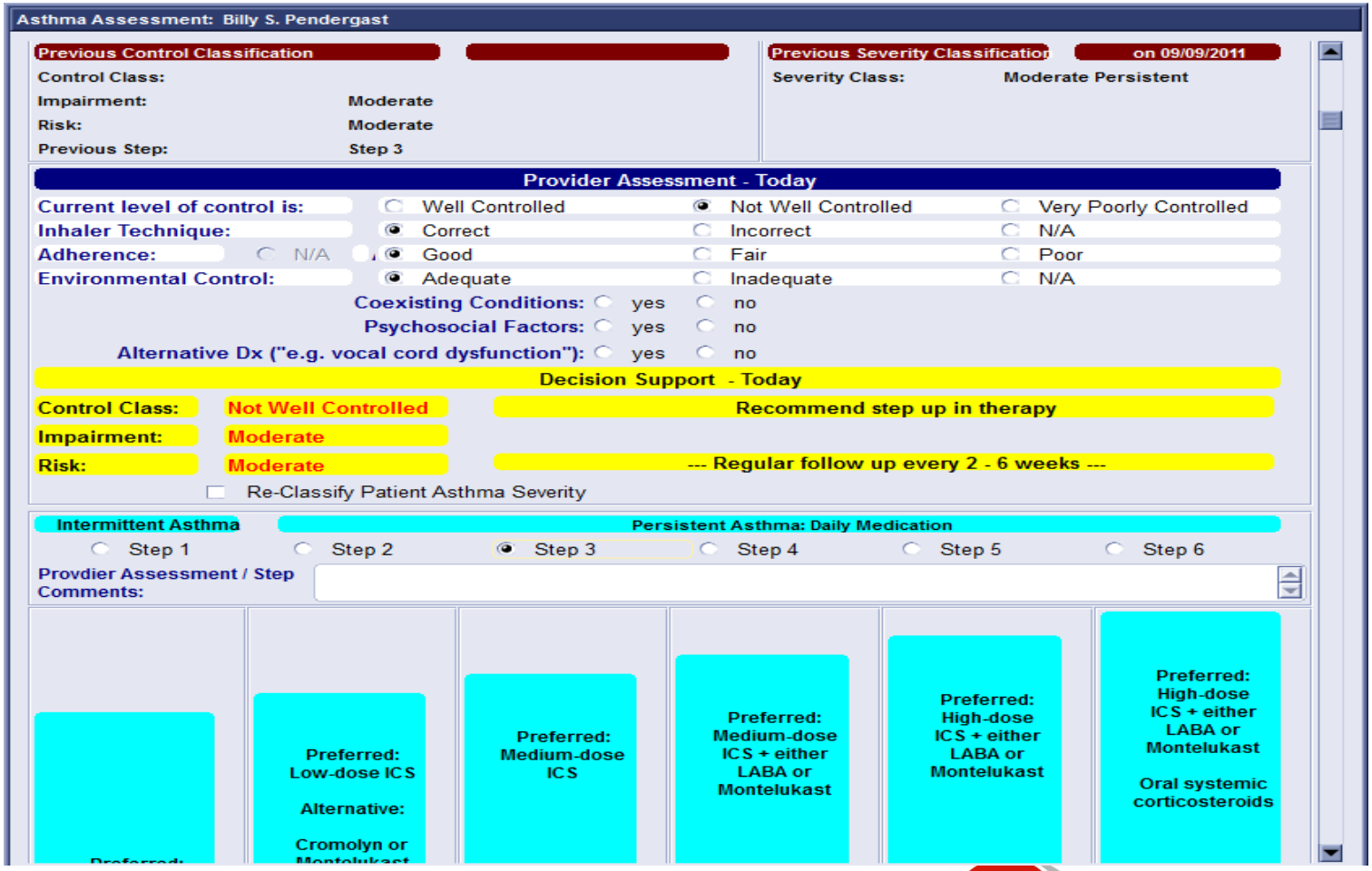
Asthma Assessment



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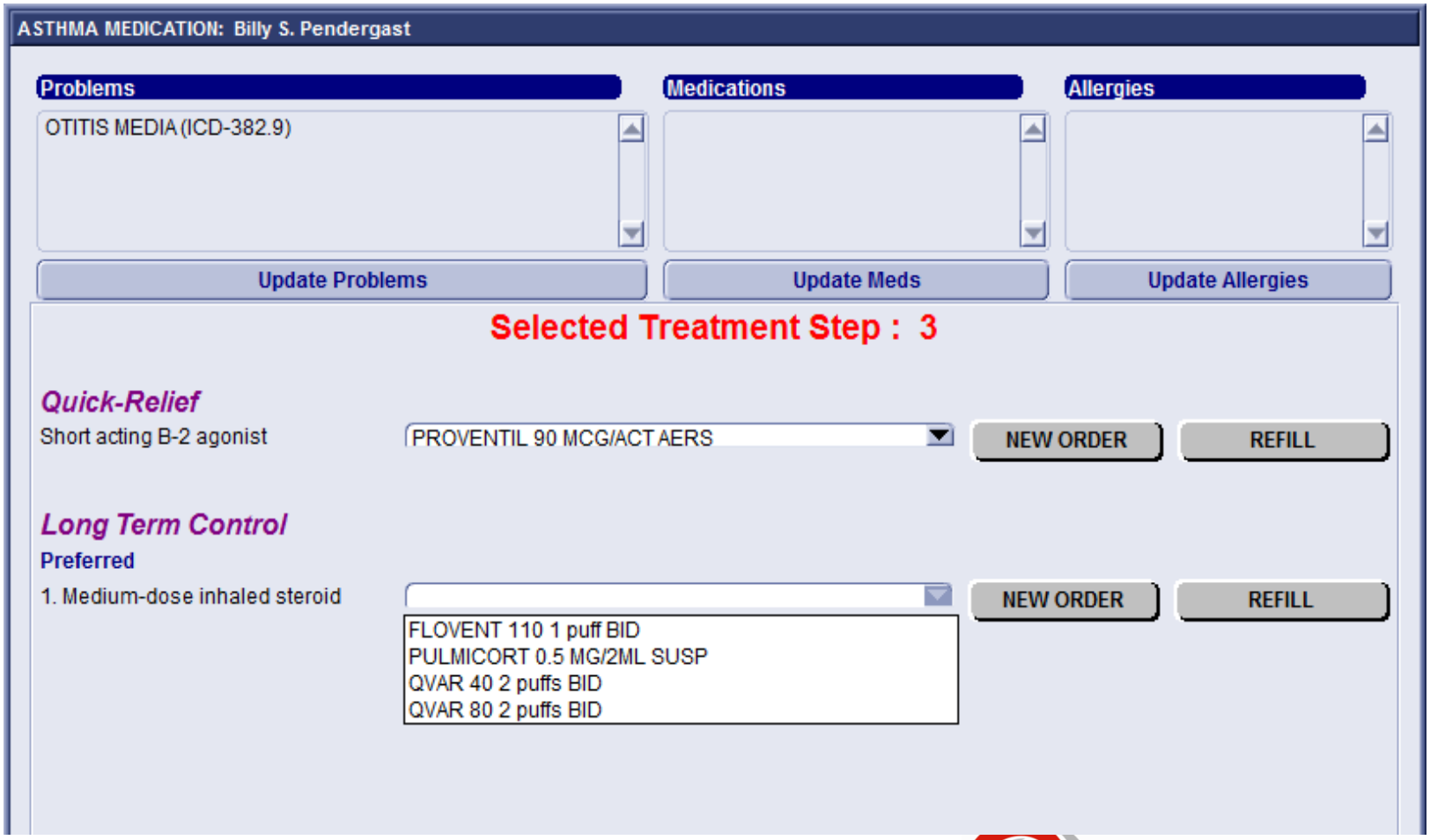
Asthma Medication Management



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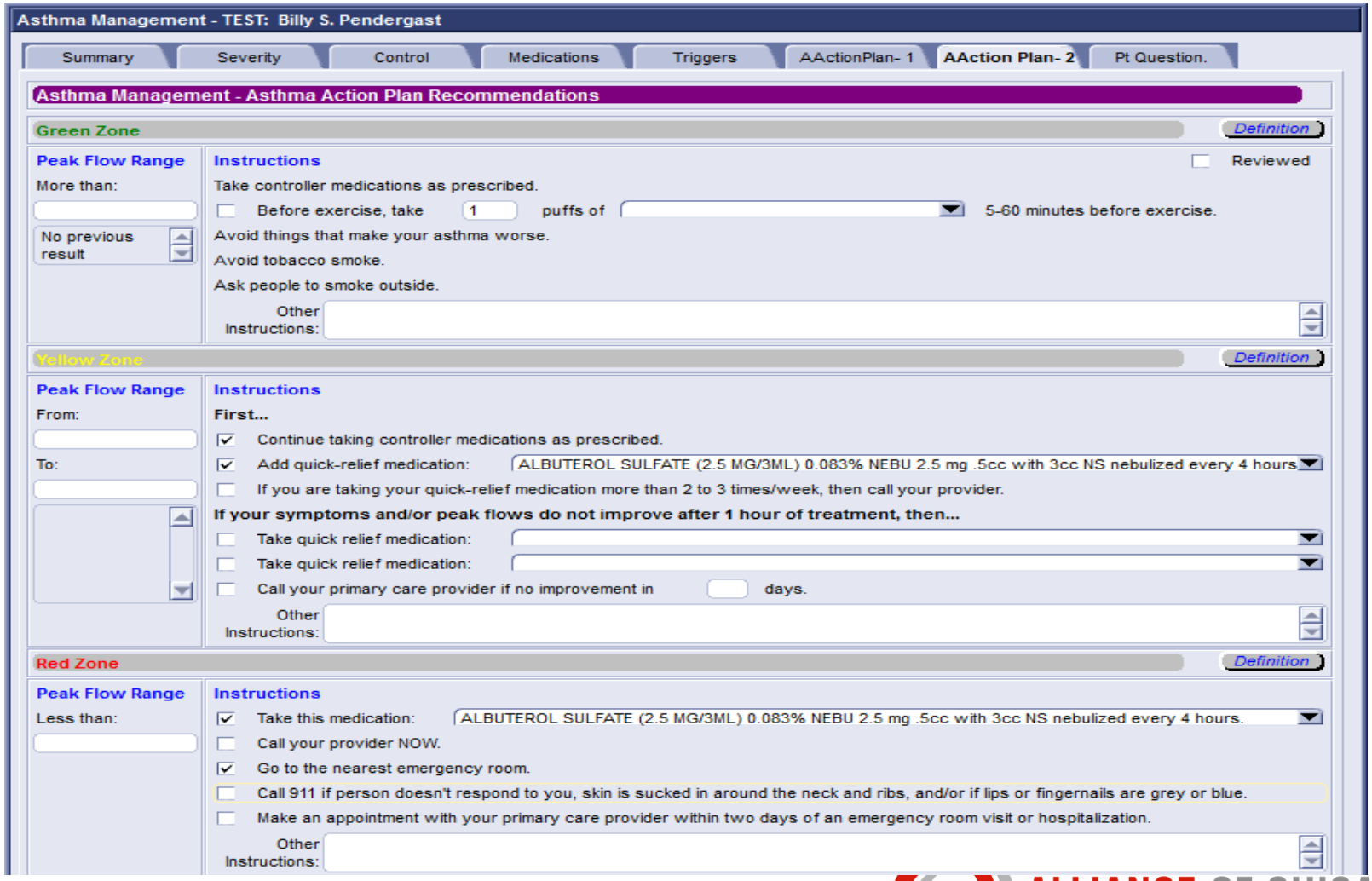
Asthma Action Plan



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Phase 2: Evaluating Results

- Conduct Usability Testing
- Incorporate SME Feedback into revised CDS
- Train Key Staff on New Asthma CDS
- Support implementation of New Asthma CDS
- Evaluate Clinician Adoption and Satisfaction with Revised CDS

Key Deliverables

  - Documentation of Usability Testing Results
  - Synthesize results of CDS Satisfaction survey and Adoption Measures
  - Correlate system use with quality

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Key Lessons Learned

- Exchange of content required HIT vendor involvement – to coordinate customized data element usage
- Technical limitations/capacity of the EHRS to support complex CDS
- Maintained underlying “programming” however adjusted content/CDS to meet “local” workflows and system preferences
- Incorporated changes based on user feedback to increase usability of content
- Lack of alignment of data standards (value sets) between CDS and Quality Reporting

Thank You

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