THE AFIX-IIS INTEGRATION PROJECT

The Good, Bad and Lessons Learned

CDC, SMaRT AFIX, Envision, DXC Technology, MCIR and Florida SHOTS

OVERVIEW

- Background
- STC, Envision, DXC Technology, MCIR and Florida SHOTS presentations and CDC AFIX-IIS Integration Team lessons learned
- Panel discussion (Q/A)
- CDC Announcements

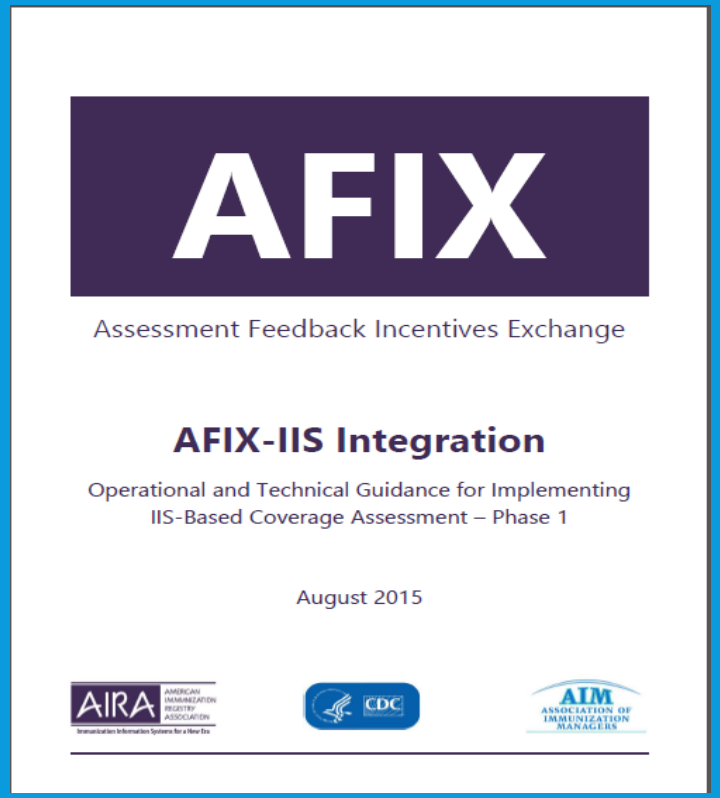
- *Note: laptops and a SME will be available to answer platform/tool specific questions*

BACKGROUND

- Joint effort between two CDC branches
- Guidance documents developed
  - Two (2) project development phases
    - Phase 1 – Required (Assessment)
    - Phase 2 – Recommended (Assessment/Feedback)
- STC competed successfully for a CDC contract to develop SMaRT AFIX
- 25 immunization awardees received PPHF funding in 2015 to the transition

AFIX SOLUTIONS

- Awardees that integrate AFIX into the IIS must follow the requirements in the AFIX/IIS Integration Phase 1 guide
- General Phase 1 Requirements
  - AFIX awardees will be required to leverage their Immunization Information Systems (IIS) to perform provider level assessment activities
  - IIS must be able to perform the minimum/mandatory reporting requirements to support the AFIX workflow
  - The IIS must apply all business rules for identifying the assessment cohort (denominator), applying the assessment criteria (numerator), and performing the calculation logic

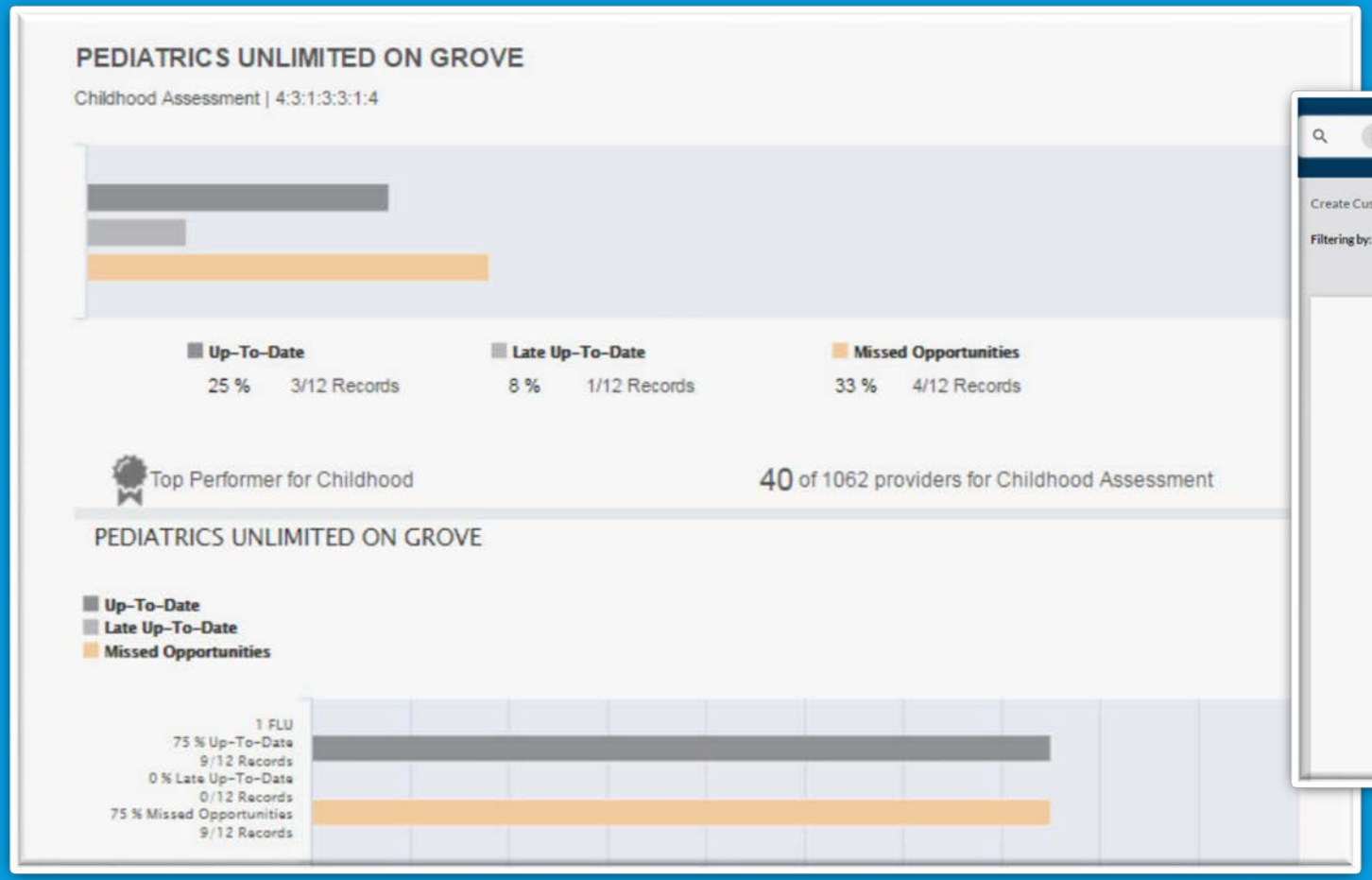


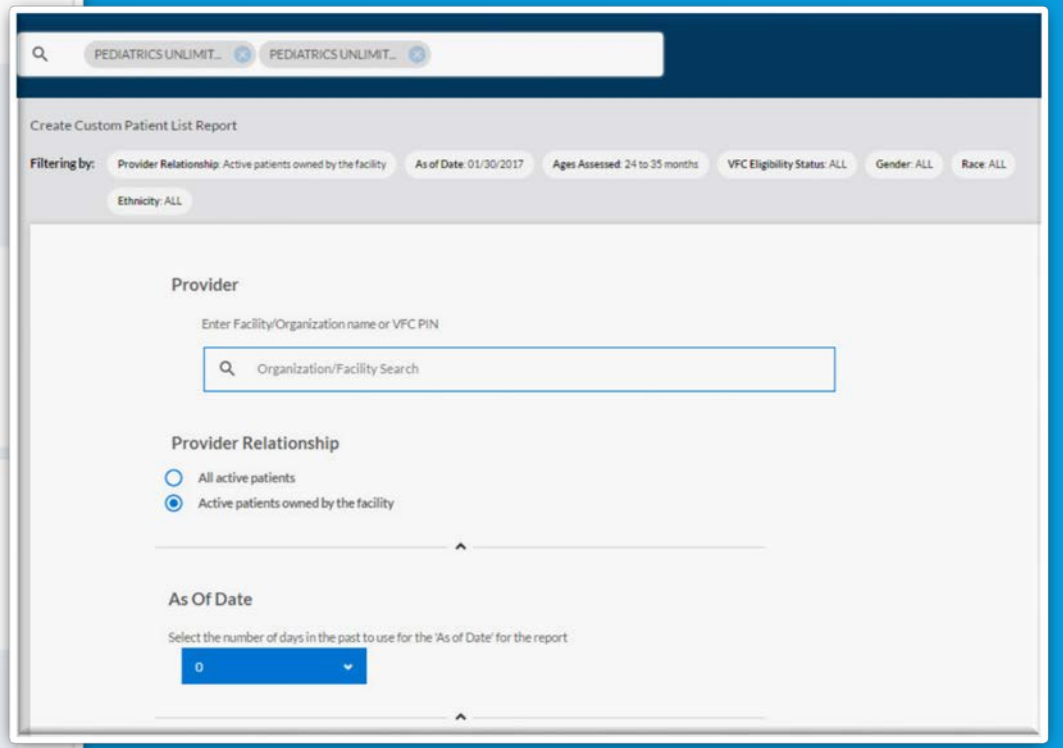
AFIX-IIS INTEGRATION PROJECT TEAM
THE GOOD, BAD AND LESSONS LEARNED

- GOOD
  - End users being included in the development of solutions
- BAD
  - Restrictions due to awardee, vendor and CDC relationships
- LESSONS LEARNED
  - Panel of SMEs from field and CDC
  - Discuss all resource needs prior to soliciting a vendor or providing PPHF funding

SMaRT AFIX
Powered by STC

SCIENTIFIC TECHNOLOGIES CORP (STC)
SMART AFIX





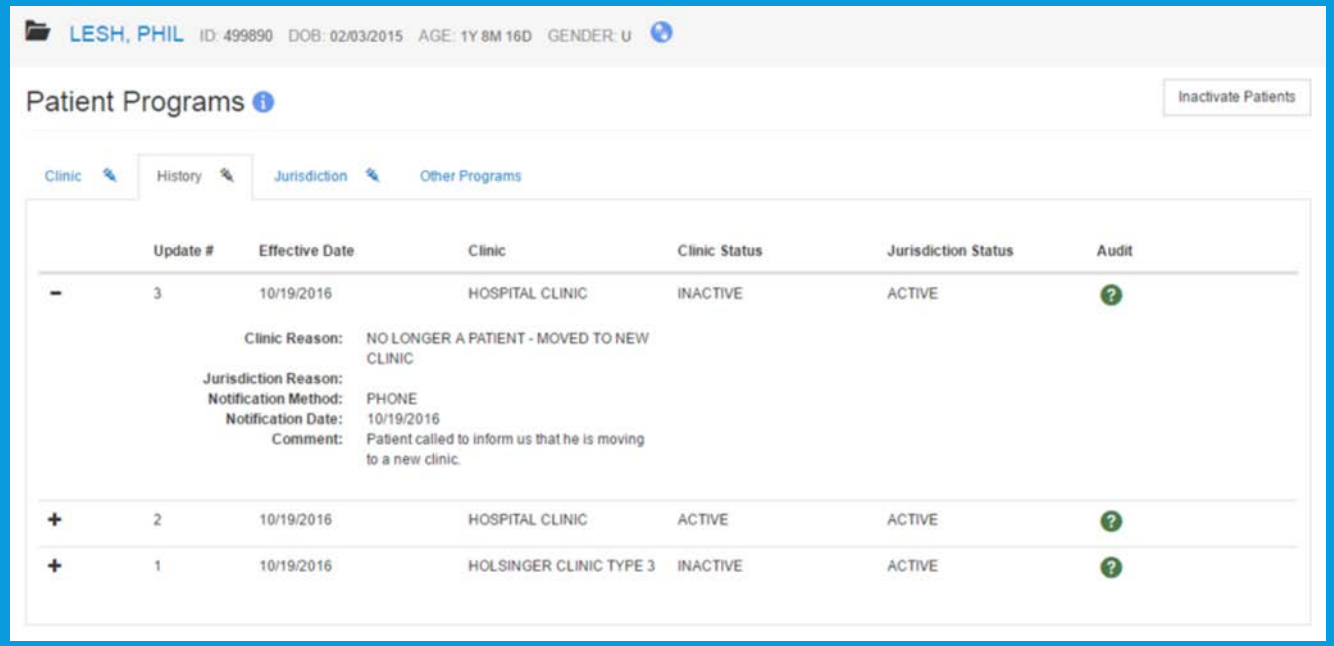
SCIENTIFIC TECHNOLOGY CORPORATION
ENHANCEMENTS

- All Phase 1 Guideline Requirements and a few "nice to have" features
  - Agnostic tool with a nightly import from any IIS
  - NIS state and national data on the landing page
  - Custom patient lists with user-defined parameters, which can be saved as reusable templates
  - Exportable provider lists to help state AFIX coordinators prioritize AFIX visits based on criteria such as coverage rates, practice size and location
  - Single sign on options for any IIS if they would like to improve the user experience
  - Updated CDSi logic to support 2 dose HPV recommendation

SCIENTIFIC TECHNOLOGIES CORPORATION
LESSONS LEARNED

- To address awardee concerns about data security and cloud hosting, it became a requirement to have the application reside in the same environment as their IIS
- Requirements lead to more of a “big data” application which *analyzes* and displays data in a meaningful way for users
- Estimated costs for hardware and hosting are challenging for a brand new application where production level data and processing are not well known yet
- Early and frequent communication to all key stakeholders and within state programs

ENVISION TECHNOLOGY PARTNERS



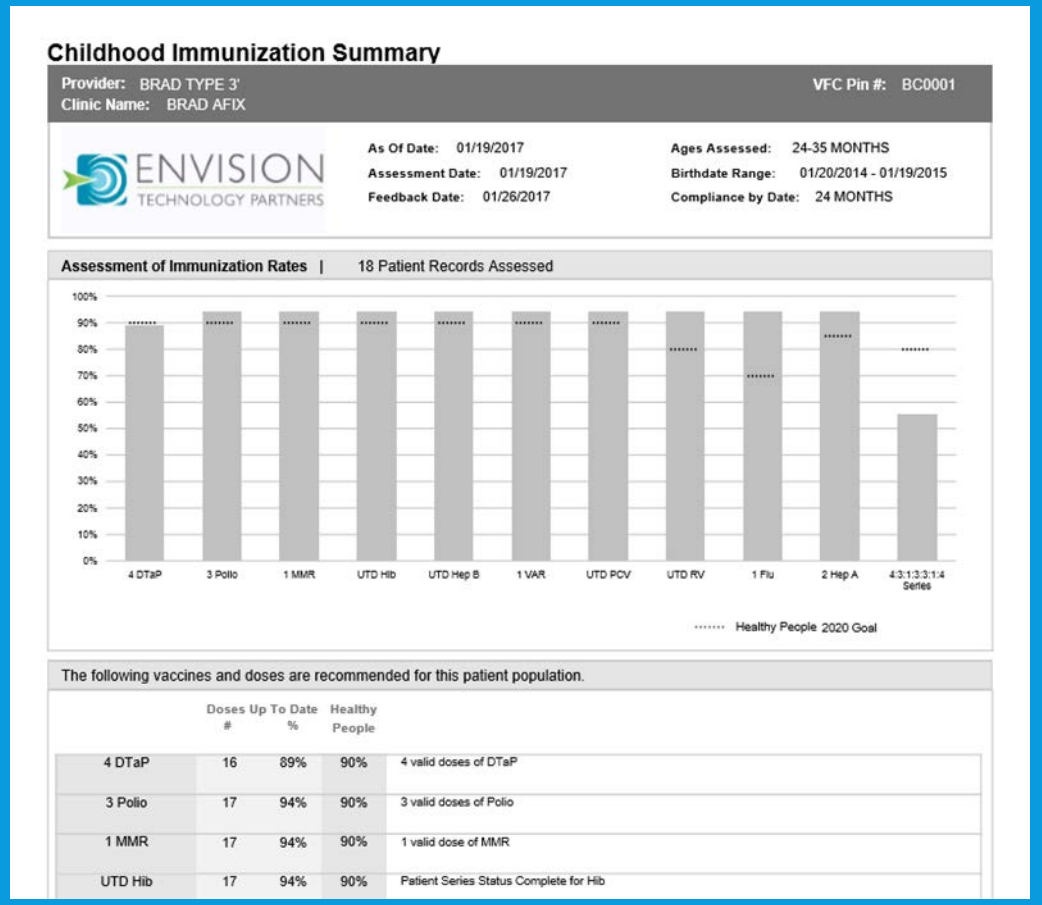
LESH, PHIL ID: 499890 DOB: 02/03/2015 AGE: 1Y 8M 16D GENDER: U

Patient Programs

Inactivate Patients

Clinic | History | Jurisdiction | Other Programs

	Update #	Effective Date	Clinic	Clinic Status	Jurisdiction Status	Audit
−	3	10/19/2016	HOSPITAL CLINIC	INACTIVE	ACTIVE	?
		Clinic Reason:	NO LONGER A PATIENT - MOVED TO NEW CLINIC			
		Jurisdiction Reason:				
		Notification Method:	PHONE			
		Notification Date:	10/19/2016			
		Comment:	Patient called to inform us that he is moving to a new clinic.			
+	2	10/19/2016	HOSPITAL CLINIC	ACTIVE	ACTIVE	?
+	1	10/19/2016	HOLSINGER CLINIC TYPE 3	INACTIVE	ACTIVE	?



Childhood Immunization Summary

Provider: BRAD TYPE 3' VFC Pin #: BC0001
Clinic Name: BRAD AFIX

ENVISION TECHNOLOGY PARTNERS

As Of Date: 01/19/2017 Ages Assessed: 24-35 MONTHS
Assessment Date: 01/19/2017 Birthdate Range: 01/20/2014 - 01/19/2015
Feedback Date: 01/26/2017 Compliance by Date: 24 MONTHS

Assessment of Immunization Rates | 18 Patient Records Assessed

The following vaccines and doses are recommended for this patient population.

	Doses #	Up To Date %	Healthy People	
4 DTaP	16	89%	90%	4 valid doses of DTaP
3 Polio	17	94%	90%	3 valid doses of Polio
1 MMR	17	94%	90%	1 valid dose of MMR
UTD Hib	17	94%	90%	Patient Series Status Complete for Hib

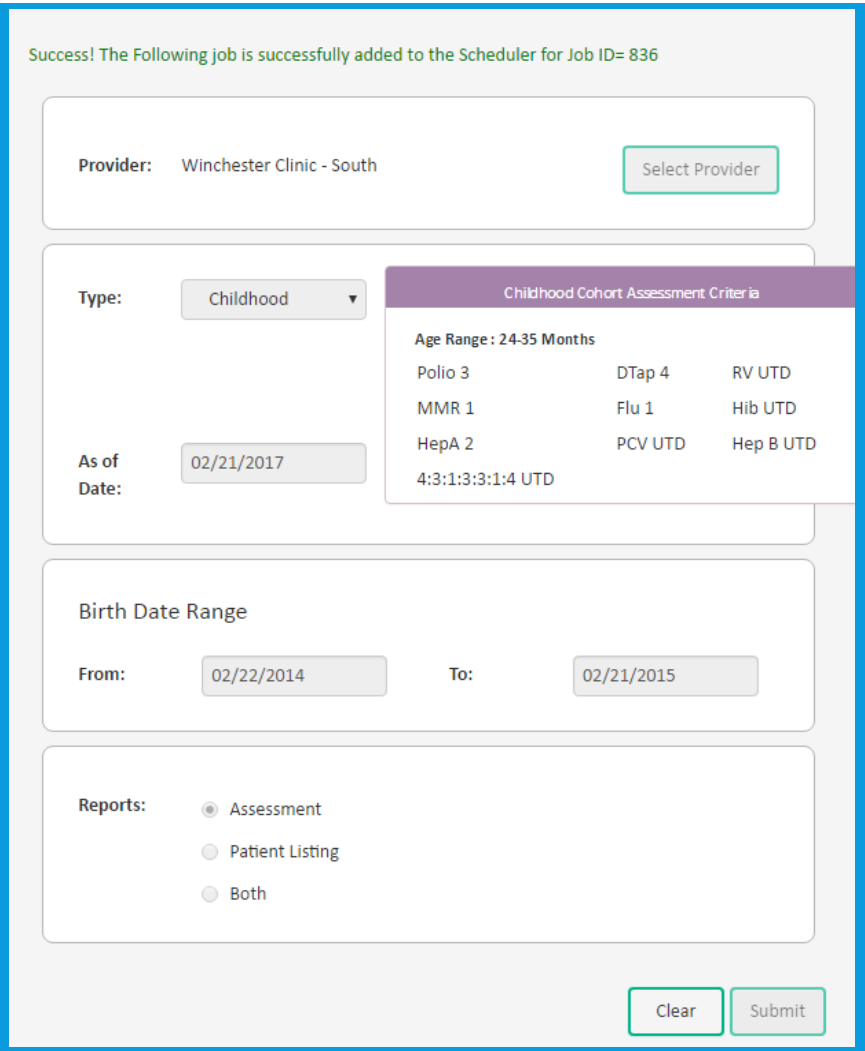
ENVISION TECHNOLOGY PARTNERS
ENHANCEMENTS

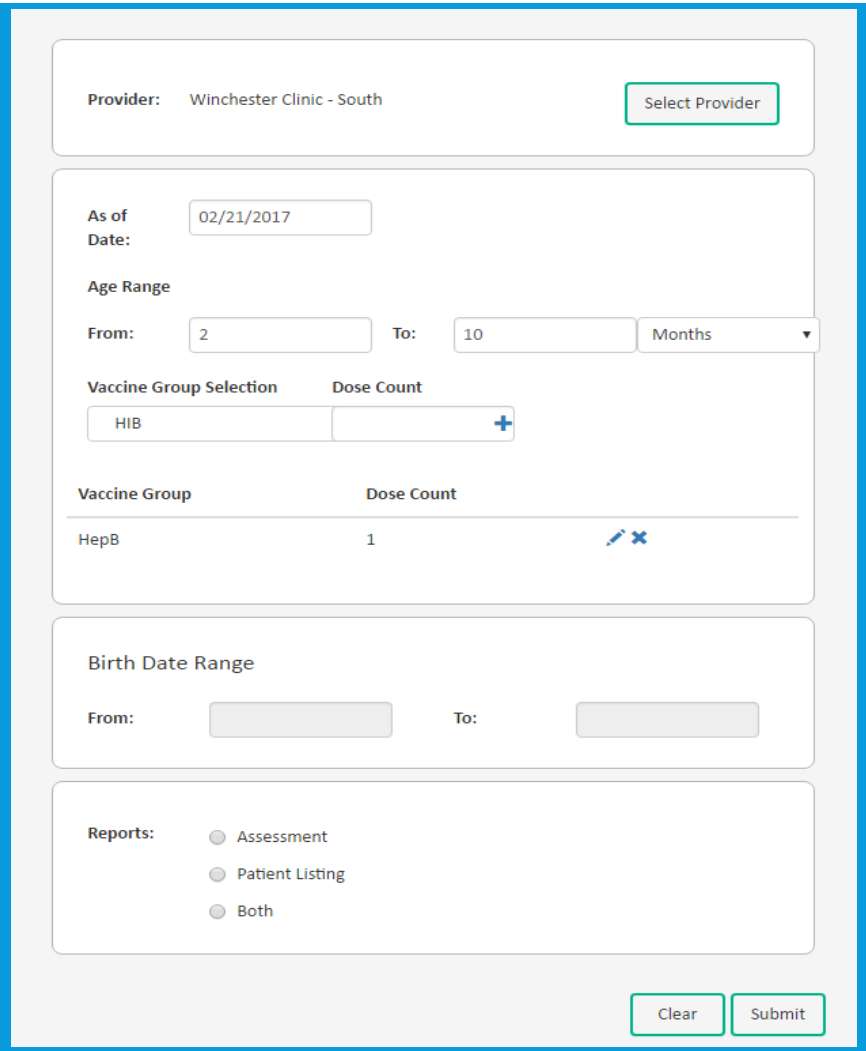
- Phased implementation of Patient Active / Inactive Status (PAIS) changes, mandatory and optional AFIX reporting, datamart components
- Fully CDSi-compliant forecaster was completed separately and provided to customers for review beginning July 2016
- Enhancements delivered over three regularly scheduled releases between September 2016 and June 2017

ENVISION TECHNOLOGY PARTNERS
LESSONS LEARNED

- Changing the fundamental architecture of patients' status and default clinic was a complex project as this data is used for numerous purposes throughout an IIS
- The AFIX assessment output that is left with the clinic must be flexible and contain graphics to efficiently highlight areas that need improvement
- It pays for awardees to request funding via multiple channels.
- Awardees that have questions about guidance should consult the AFIX-IIS Integration Project Team. AFIX IIS represents new functionality and there may be a lot of questions

DXC TECHNOLOGY
THE AFIX PRODUCT





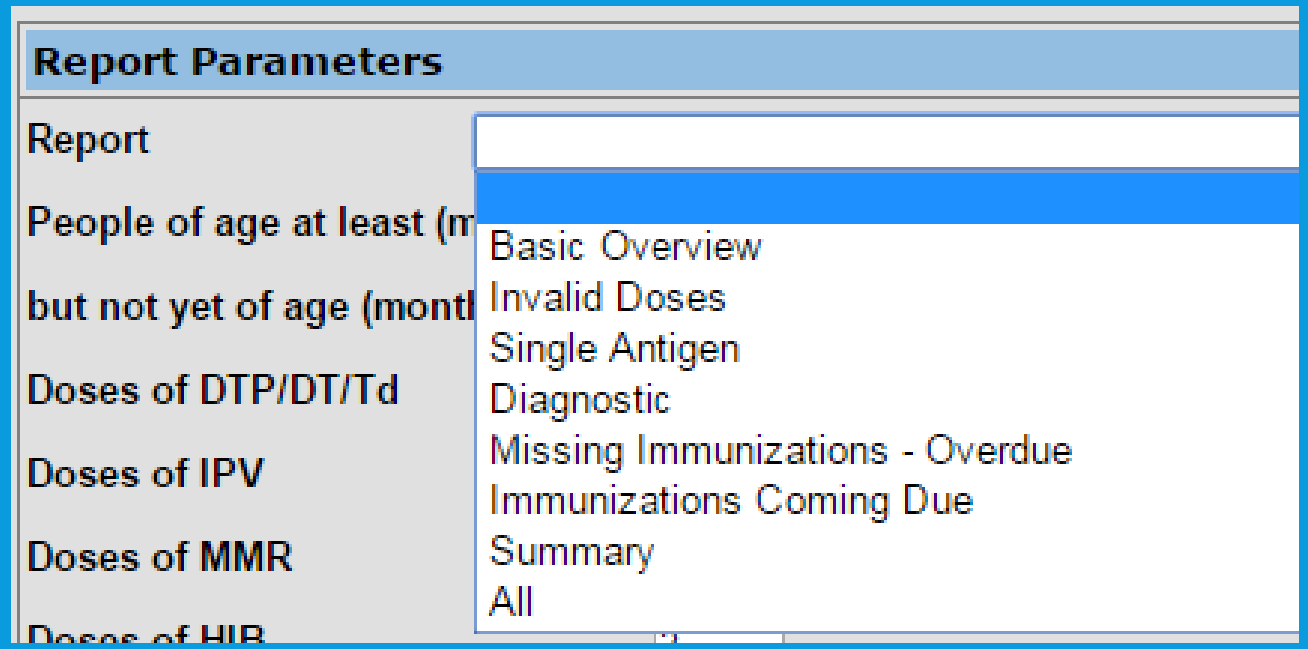
DXC TECHNOLOGY
ENHANCEMENTS

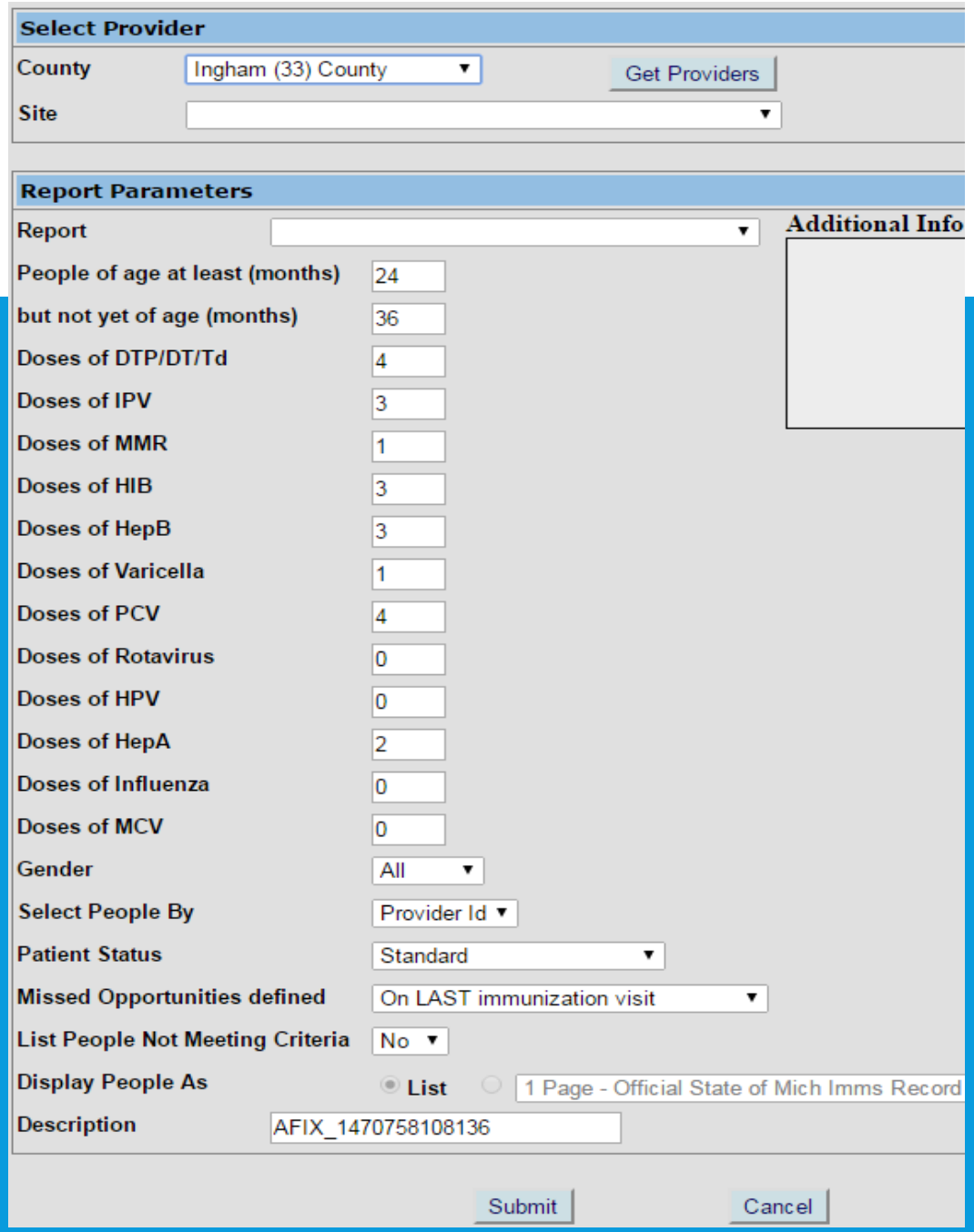
- Alignment with the Phase 1 Guidelines plus influences from Phase 2.
- Leveraging base IIS forecaster to ensure consistency
- Initial work on design currently underway with 6 states. (Idaho, Iowa, Nebraska, New York, Oregon and Virginia)
- Following Agile/Scrum Software Methodologies
- Sprints well underway with initial work products vetted with partners.
- 30 distinct user stories defined for product backlog
- Product model that will be available for all IIS
- Emphasis on developing a sustainable architecture and technology regardless of platform

DXC TECHNOLOGY
LESSONS LEARNED

- Important to recognize the world we live in, develop something simple that will work within the typical IIS environment
- Setting realistic expectations
- Merging grant requirements and complexities associated with that
- Be mindful of security policies as they are only getting tighter
  - While technology may support a more streamlined model, policies may not
- Agile moves faster than traditional development, requiring consistent patterns for dialogue and consensus
- Many from the AFIX side have not experienced software development before. It is important to have their voices heard
- Defining responsibilities between base IIS and The AFIX Product
  - Keeping lines clear and clean

MICHIGAN CARE IMPROVEMENT REGISTRY (MCIR)





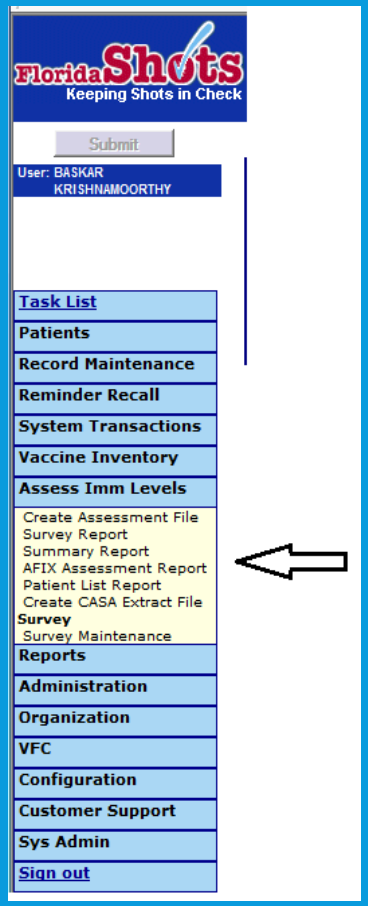
MICHIGAN CARE IMPROVEMENT REGISTRY (MCIR) ENHANCEMENTS

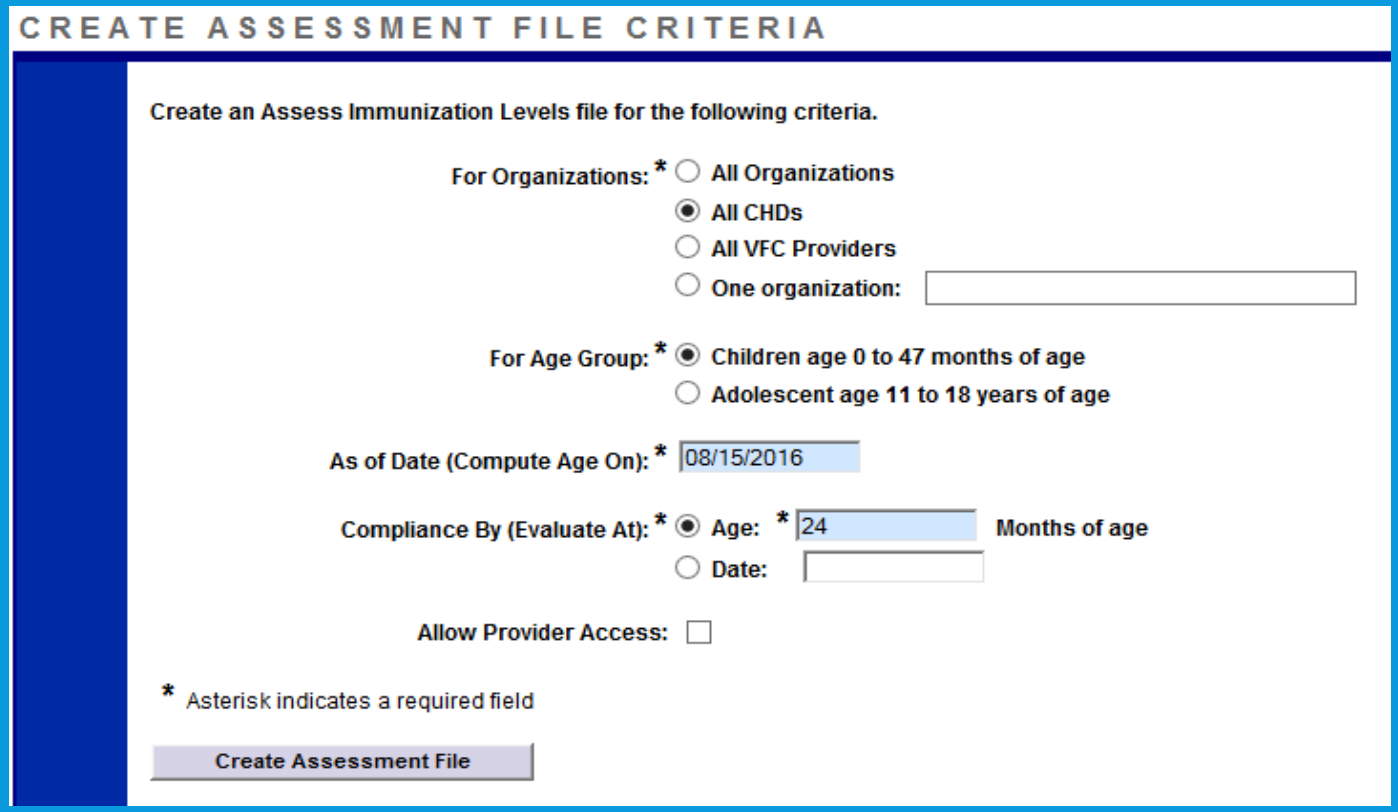
- AFIX reports (similar to those available in CoCASA) are now available to all MCIR users at pediatric and adolescent physician offices in Michigan
- Training webinars were presented to physician office staff (MCIR Users) detailing the use and efficiencies of AFIX reports.

MICHIGAN CARE IMPROVEMENT REGISTRY (MCIR)
LESSONS LEARNED

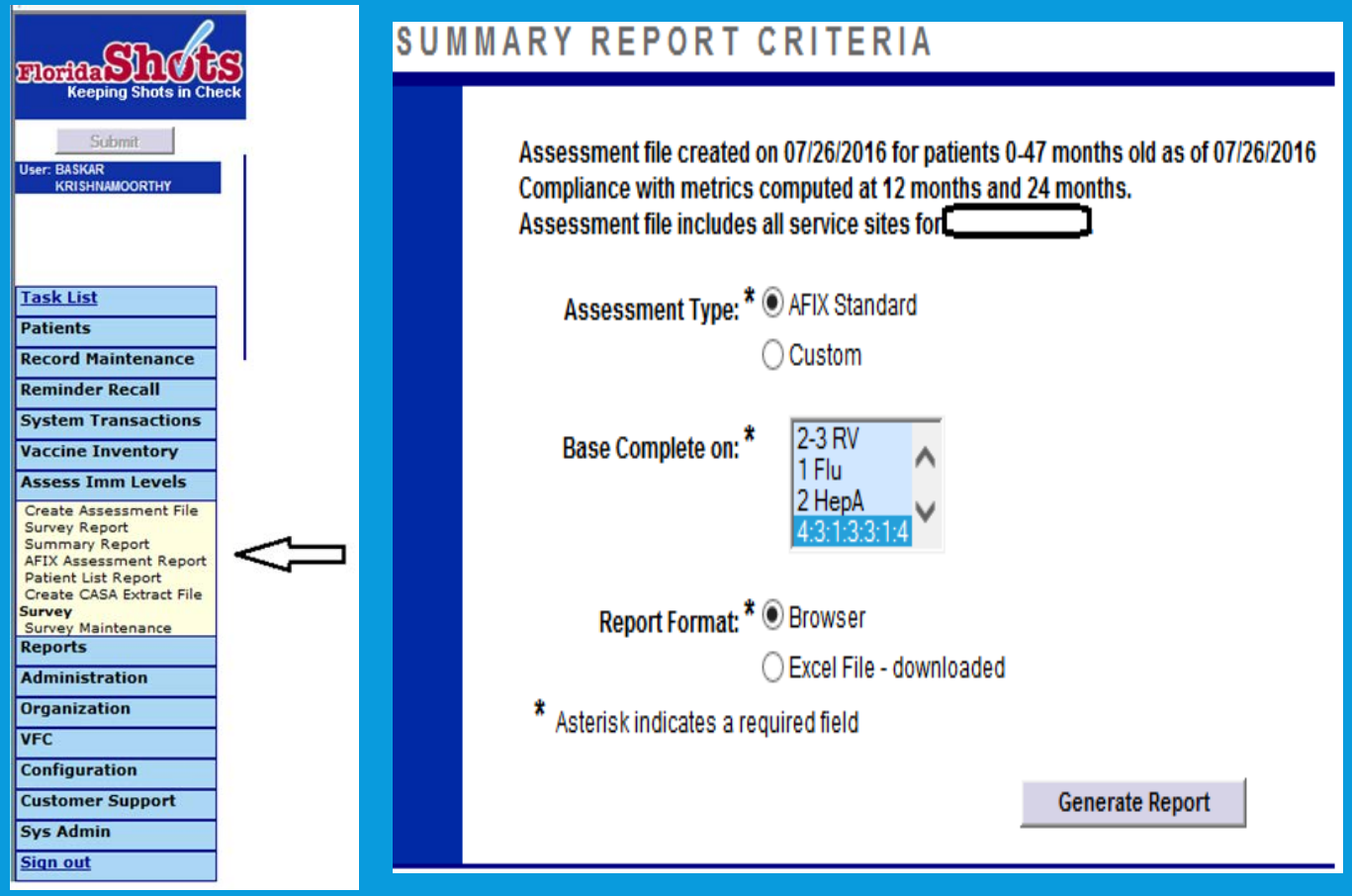
- Use of the term Quality Improvement vs. AFIX - physician offices are not familiar with "AFIX "; but they are familiar with "quality improvement" activity
- IIS programmers have multiple priorities. Funding was made available, but it takes time to design, test and implement the requested changes and enhancements to existing AFIX reports
- The buy-in of all staff is key to success

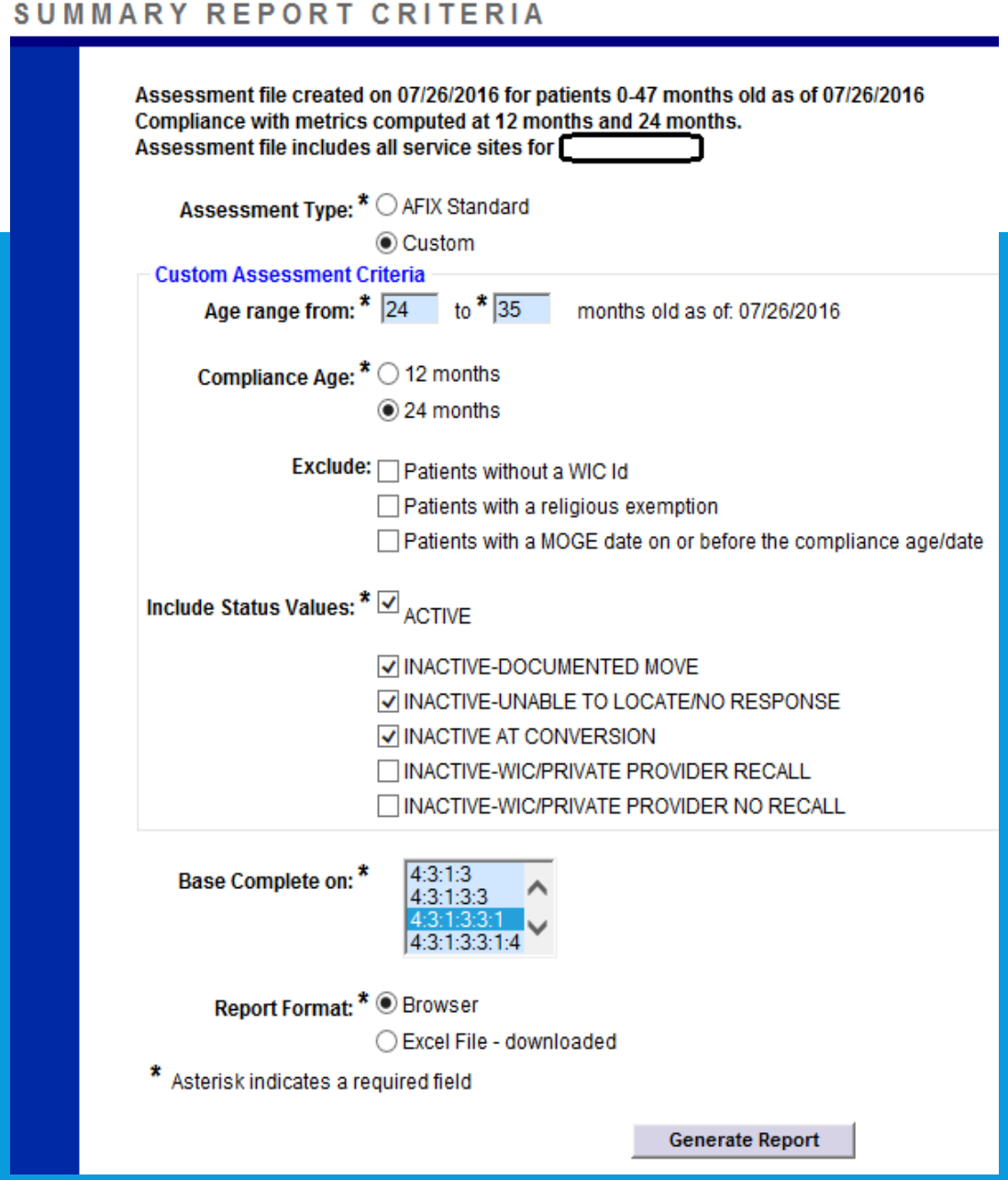
FLORIDA SHOTS



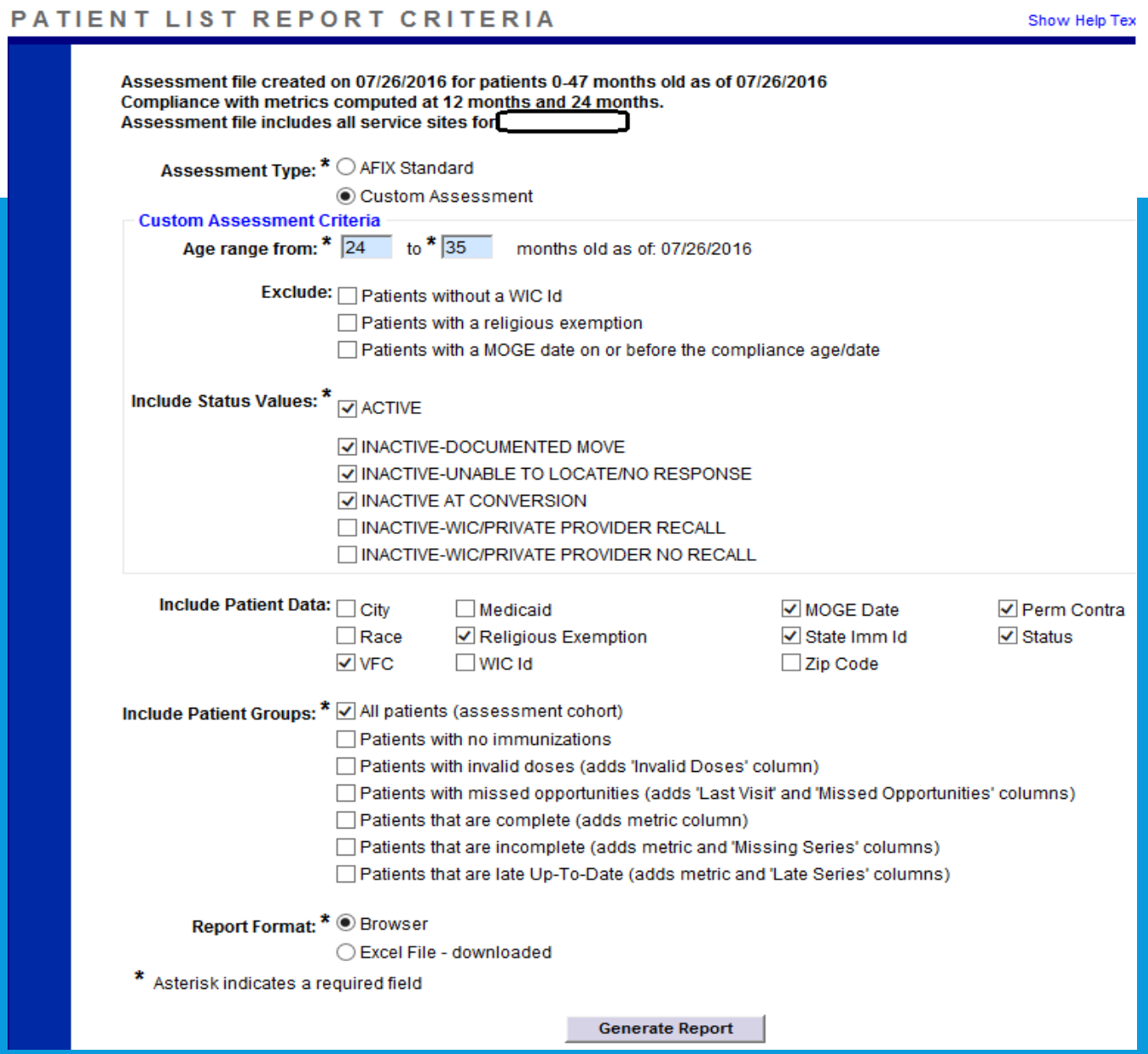


FLORIDA SHOTS





FLORIDA SHOTS



FLORIDA SHOTS
ENHANCEMENTS

- Updated the assessment functionality based on AFIX requirements in Jan 2016
  - Age cohort can be customized
  - Assessment can be run for an entire organization or for individual provider sites within that organization
- Design features
  - Creates an assessment file – a snapshot in time, with all relevant coverage metrics calculated
  - Customized Reports are generated from the snapshot file
  - Can compare assessments at different points in time to identify trends

FLORIDA SHOTS
LESSONS LEARNED

- Consistent Language/Definition for Metrics
- Not all providers use/need AFIX metrics
- Other providers need customized assessment capability to track their practice
- Assessment functionality is used by
  - AFIX team to assess VFC providers
  - non-VFC providers as self-assessment tool
- Design the functionality to include customization capabilities

CDC PROJECT ANNOUNCEMENTS

PANELIST

- CDC AFIX-IIS Integration Team
- Steve Murchie (Envision)
- Kristi Siahaya (STC)
- Katie Reed (DXC)
- Baskar Krishnamoorthy (Florida SHOTS)

QUESTIONS

CDC's AFIX IIS Integration Project Team

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