

Proposed Technical Concept: Distributed Data Processing

Centers for Medicare & Medicaid Services
Department of Health and Human Services



May 8, 2012

CONTEXT

The contents of this presentation represent preliminary information with the purpose of soliciting stakeholder feedback. Proposed policies for the risk adjustment program will be announced in the draft HHS notice of benefit and payment parameters, which will be subject to comment before finalized. More information on the HHS proposed operational approach when operating risk adjustment on behalf of non-electing States can be found in the Risk Adjustment Bulletin at <http://cciio.cms.gov/resources/files/ppfm-risk-adj-bul.pdf>.

Proposed HHS Risk Adjustment Distributed Data Goals

- To ensure that issuer proprietary data remains within the issuer environment.
- To minimize data transfers to minimize privacy and data security risks
- To ensure an audit sample is controlled and maintained
- To standardize software processes, timing and rules in order to apply risk adjustment uniformly across issuers and ensure a level playing field.

Proposed Operational Model: Distributed Data Processing

- Issuer houses the claims information
- HHS invokes the distributed data processing function on claims information without requiring a copy to be sent to HHS
- Claims information will be stored in a secure system within the issuer's technology environment (e.g., hosting facility/data center or secure cloud environment)
- Through the distributed data processing model, HHS would obtain and retain plan-level summarized results via data analysis and access to de-identified individual-level risk scores
- Proposed distributed data processing model does not centrally store any proprietary or individually identifiable data

Proposed Distributed Data Processing: Technical Approach

- Secure, technical design using a stand-alone (or segregated physical/virtualized) set of dedicated system components and services to ensure a stable operational environment with performance efficiencies
- Dedicated environment operates independently of other operational processes and supports risk adjustment processing with no impact to issuer production systems, but does require coordination of operational schedules
- Design partitions environment to ensure adequate “firewall” separation of Issuer data and HHS summarized/aggregate data and provides for security and privacy safeguards
- Dedicated environment restricts access to only designated, authenticated users with the proper roles and permissions
- Current plan is to maximize the use of ‘open source’ software

Proposed Deployment Timeline

Development Phase	Task Item	Responsible Party	Target Date
Development	Edge Server / RA process development	HHS	SUMMER 2012
Quality Assurance	System & Integration Test	HHS	SEP 2012
Quality Assurance	Select Sample Issuers for Beta	HHS	SEP 2012
Quality Assurance	Beta Test	Issuers / HHS	DEC 2012
Issuer Instructions	Develop Instruction Guides	HHS	DEC 2012
Issuer Instructions	Publish for Issuers	HHS	JAN 2013
Implementation	Acquire Servers	Issuer	JAN 2013
Implementation	Establish server connectivity	Issuer	JUN 2013
Implementation	Training and Support	HHS	JAN 2013 ¹

¹Training and support to be ongoing for issuers