



**Private Sector
Technology Group**

Considerations for the Precertification of Medicaid Enterprise Systems (MES) Modules

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1. STATEMENT OF OBJECTIVES

This white paper explores the topic of the precertification of Medicaid Enterprise Systems (MES) modules described in the final rule 42 CFR Part 433 Subpart C, *Medicaid Program; Mechanized Claims Processing and Information Retrieval Systems (90/10)*¹ and sub-regulatory guidance in *SMDL16-010 RE: CMS-2392-F Mechanized Claims Processing and Information Retrieval Systems – Modularity*². We use the term Medicaid Management Information Systems (MMIS) throughout this document to indicate how precertification of modules will be used in the near-term, though the intent of the program is to include all modules across the Medicaid Enterprise.

This rule restructured the regulatory environment that governs the procurement, implementation and operation of MMIS. Based on the comments received in response to the Notice of Proposed Rule Making (NPRM), CMS identified a concern that many states request solutions that have been certified in other states, which presents a barrier to market entry. The development of a precertification program would help mitigate this barrier to market entry and may increase competition in the marketplace. Since identifying that concern, CMS has posited that precertification of modules will provide other benefits, such as interoperability and re-use among States.

Considerations for precertification are cultivated from researching other efforts to pre-certify technical solutions in healthcare and other industries. Our recommendations are built on best practices and lessons learned from other precertification experiences and our intimate knowledge of this market and its dynamics. The objectives of this white paper are to:

- Provide a private sector perspective for establishing a precertification process that promotes competition within the healthcare information technology (IT) industry
- Support the promotion and adoption of modular systems
- Offer recommendations to overcome barriers to implementing a timely, near term precertification process in order to support the significant number of MMIS procurements anticipated in the coming months

¹ (Centers for Medicare and Medicaid Services, 2015)

² (Centers for Medicare and Medicaid Services, 2016)



2. RESEARCH OF HEALTH CARE AND OTHER INDUSTRY CERTIFICATION PROGRAMS

This section analyzes examples of other technology initiatives that employed a certification program to identify any best practices and lessons learned to apply to the development of a precertification program for MMIS modules.

2.1 Government Sector – Health Care IT

2.1.1 Electronic Health Record Systems Certification

The Health Information Technology for Economic and Clinical Health (HITECH) Act of 2009 provided Health and Human Services (HHS) with the authority to establish programs to improve health care quality, safety and efficiency through the promotion of health IT, including Electronic Health Records (EHR) and electronic health information exchanges. Per the HITECH Act, the Office of the National Coordinator (ONC) was charged with creating the EHR Certification Program. CMS oversees the program and provides incentive payments to eligible providers and hospitals who meaningfully use certified EHR technology.

The term "meaningful use" is carefully defined and provides a foundation for the EHR Certification program. The Temporary Certification Program (TCP) was established so that certified EHR technology would be available for adoption by health care providers who sought to qualify for the EHR incentive payments beginning in 2011. The full EHR Certification Program became operational in 2012 and ONC continues to manage the overall program today.

In this program, certification and testing activities are performed by separate entities. Certification is conducted by the Office of the National Coordinator-Authorized Certification Bodies (ONC-ACB) and testing is performed by Accredited Testing Laboratories (ATL). Developers and vendors of candidate systems first test their products with an ATL. If the products meet the requirements, the test package is submitted to an ONC-ACB to certify. Once a product has been certified, all eligible providers, hospitals and critical access hospitals that choose to use certified technology in a meaningful way are eligible to apply for incentive payments under the Meaningful Use Program governed by CMS.



2.1.1.1 Best Practices

Best Practices	Description
Define “What” is to be Certified in Advance	The term “meaningful use” guided the development of the program and helped define the parameters of the product set that was to be certified.
Define Outcome of Certification in Advance	CMS offered incentive payments to hospitals and providers that implemented certified meaningful use technology, thereby providing an incentive for EHR vendors to participate.
Regulate a Structured Process	Oversight bodies are established for both testing and accreditation. The process is transparent to vendors.
Define Testing Approach and Methods for All Test Facilities	Ensure that each testing lab applies a uniform methodology. Testing facilities must demonstrate thorough understanding and show the competence of testers working in the lab.
Publish Test Results and Certifications	Ease of access and use and transparency for all stakeholders is key to the program’s success.

2.1.1.2 Lessons Learned

Lessons Learned	Opportunity for Improvement
Actively Seek Initial and Ongoing Stakeholder Input	Stakeholder engagement was less than optimal at the start of the program, which accounted, in part, for a long runway to full program implementation. Today, ONC regularly collects stakeholder feedback and uses it to plan improvements.
Carefully Consider the Separation of Testing and Certification Protocol	Several of the ATLS in the program also provide ACB services for their own testing as well as others. This adds complexity and creates the appearance, if not the fact, that a company is testing and certifying its own results.
Disconnect between Certification Participation and Provider Incentives	While vendor participation in certification was voluntary, CMS gave financial incentives to providers who implemented ‘meaningful use’ technology, which led to a market comprised of vendors that had certified systems. As a consequence, other vendors, even if they had innovative and effective systems were not viable.

2.1.2 Accrediting Advanced Diagnostic Imaging for Medicare

The Medicare Improvements for Patients and Providers Act (MIPPA) of 2008 requires suppliers of the technical component of Advanced Diagnostic Imaging (ADI) services to be accredited by a designated accrediting organization in order to receive Medicare reimbursement. ADI services include diagnostic Magnetic Resonance Imaging (MRI), Computed Tomography (CT), and nuclear medicine imaging



procedures, such as Positron Emission Tomography (PET). CMS has the statutory authority to designate accrediting organizations that accredit suppliers furnishing the technical component of ADI services.

When the act was put in place, there were three existing accrediting organizations which were designated: The American College of Radiology (ACR), Intersocietal Accreditation Commission (IAC), and The Joint Commission (TJC). In 2013, CMS designated RadSite, LLC as the fourth accrediting organization.

The overall responsibility of CMS with regard to the MIPPA program is to ensure the quality of ADI services paid under Medicare’s physician fee schedule. The plan was to accomplish this by selecting accrediting organizations, making Medicare payments to only to ADI suppliers accredited by a CMS-approved accrediting organization, overseeing the accrediting organizations and modifying the designations if necessary and optionally conducting validation audits of accredited ADI suppliers.

2.1.2.1 Best Practices

Best Practice	Description
None Identified	<p>Source: United States Government Accountability Office Report to Congressional Committees, Medicare Imaging Accreditation, Establishing Minimum National Standards and an Oversight Framework Would Help Ensure Quality and Safety of Advanced Diagnostic Imaging Services, May, 2013 http://www.gao.gov/assets/660/654971.pdf</p> <p>This PSTG Committee did not find any best practices in this program. The GOA’s most important recommendations are included as Lessons Learned, below.</p>

2.1.2.2 Lessons Learned

Lessons Learned	Opportunity for Improvement
Establish Minimum Criteria	CMS did not establish minimum national standards for ADI accreditation and instead required each accrediting organization to establish its own specific standards for quality and safety of ADI services.
Develop Certification Framework to Manage Performance	CMS has not developed a framework for evaluating accrediting organization performance. Its current guidance is insufficient to ensure that suppliers maintain compliance with standards for the duration of the accreditation cycle and that serious care problems are consistently identified and reported.
Define Governance Structure	CMS has not developed an oversight framework that would enable it to monitor and measure the performance of accrediting organizations.



2.2 Government Sector – Other IT

2.2.1 Voting Systems Certification Testing

The passage of the Help America Vote Act in 2002 created the U.S. Elections Assistance Commission (EAC). The EAC governs the testing of voting systems in cooperation with the National Institute of Standards and Technology/National Voluntary Laboratory Accreditation Program (NIST/NVLAP) and accredits Voting System Test Laboratories (VSTL). While strictly a voluntary program, many states and municipalities use federal funds to buy voting equipment and certify the equipment by using test results from accredited VSTLs. VSTLs test voting systems using a set of criteria developed by the EAC called the Voluntary Voting System Guidelines (VVSG). Most states follow the EAC guidelines and protocols. However, several states, such as New York, California and Ohio, have either amended these requirements or developed their own election testing standards and certification programs.

2.2.1.1 Best Practices

Best Practices	Description
Establish Standards for Certification	VVSGs developed by the EAC in cooperation with NIST/NVLAP serve as the criteria for certification for all voting systems across all participating jurisdictions.
Audit Test Facilities	After initial approval, test facilities are audited biannually.
Allow Test Facilities to Define Test Methods	The VSTLs define the testing methodology based on EAC criteria. This level of independence works for the program in part because the test facilities are audited on a regular basis.
Approve Test Results at the Oversight Body Level	Streamlines the approval process by allowing the governing body to accept or reject the test results.
Leverage Accreditation Organizations	Use existing accreditation bodies to define test criteria and approve testing facilities.
Publish Test Results and Certifications	Ease of access and use and transparency for all stakeholders is key to the program's success.



2.2.1.2 Lessons Learned

Lessons Learned	Opportunity for Improvement
Remove Political Barriers to Program Management	The EAC has four appointed commissioners and as people left, new appointments were not made. Without a quorum, decisions could not be made and the program stalled.
Make Certification Criteria Consistent	Some criteria were overly prescriptive while other criteria, too broad. The EAC allowed testing facilities to use their own methods, resulting in additional inconsistency.

2.3 Other Certification Examples

This Committee recognizes the differences between products and services, from the way they are designed, procured, delivered and measured, and sought to find examples in other industry sectors where services are certified. The precedence we found is for the assessment of an organization’s maturity, such as with the Software Engineering Institute’s (SEI) Capability Maturity Model Integration (CMMI). Since its founding as a software development maturity framework, it now includes numerous other frameworks, including People, Acquisition and Services. The model that may be relevant for “MMIS-as-a-Service” is called CMMI-SVC and provides a comprehensive, integrated set of guidelines for providing superior services.

Simplistically, the SEI trains appraisers to evaluate an organization’s level of maturity. When an organization wants a formal review, it engages a team of appraisers that evaluates the organization against the CMMI framework and examines supporting evidence. The appraiser assigns a level of maturity, much like a State Self-Assessment (SS-A). It is up to the entity seeking certification to engage appraisers, and post-assessment, to correct any deficiencies and improve to raise its level of maturity. Vendors voluntarily self-report their appraisals to a central repository so that interested parties, such as potential customers, can review the assessments.

As an example of how this type of precertification might apply, consider a state that pre-dominantly uses a Managed Care model to serve its Medicaid population, leaving only residual Fee for Service (FFS) claims. Suppose this state decides to procure services contracts, such as in an Administrative Services Only (ASO) model. Under this model, the state would purchase services to process claims and the ASO vendor’s system would not be subject to certification as it is part of a larger corporate infrastructure. A CMMI-SVC certification would verify that the organization meets a certain level of service standards for performing the type of work being procured and the maturity rating could substitute as a precertification “seal of approval” for service-based solutions. In short, the maturity of the vendor’s organization might be a better indicator



of quality, much like a CMMI Level 3 organization is more likely to deliver software that functions as required.

SEI's discipline around Software Product Lines would be worthwhile to consider. This discipline might offer an advantage for MMIS modularity as it, (simplistically), aggregates needs across a complete product line rather than discrete software products.

2.3.1.1 Best Practices

Best Practices	Description
Encourage Voluntary Participation	The assessment of maturity level is based on the vendor's need and readiness for a formal assessment. It allows vendors, especially new ones, to move at a pace consistent with their business's growth.
Provide Incentive for Voluntary Assessment	Government agencies may require a minimum level of maturity, thereby providing an incentive for voluntary self-assessment.
Focus on People, Procedures/Methods and Tools/Equipment	Organizations that continuously improve processes by integrating advancements in these three areas deliver quality services. Such organizations are able to demonstrate maturity, which is a strong predictor of quality.
Certify Individual Appraisers, Not Organizations	While an organization might have a cadre of certified appraisers, individuals are certified. SEI recognizes the long game of assessment and does not tie appraisers to entities.
Publish Standards with Complete Transparency	The criteria against which an organization is assessed is published and backed by extensive documentation so that organizations know what they need to do to be assessed at a specific maturity level. SEI also leverages existing, well-used standards such ISO/IEC20000 and ITIL.
Post Results for Stakeholder Review and Use	Also voluntary, vendors post their assessments so that stakeholders can inspect them.

2.3.1.2 Lessons Learned

Lessons Learned	Opportunity for Improvement
Focus on Assessors for Program Effectiveness	The SEI realized that the training and development of assessors is key to CMMI's adoption and puts a great deal of emphasis on keeping the assessor community current and objective.

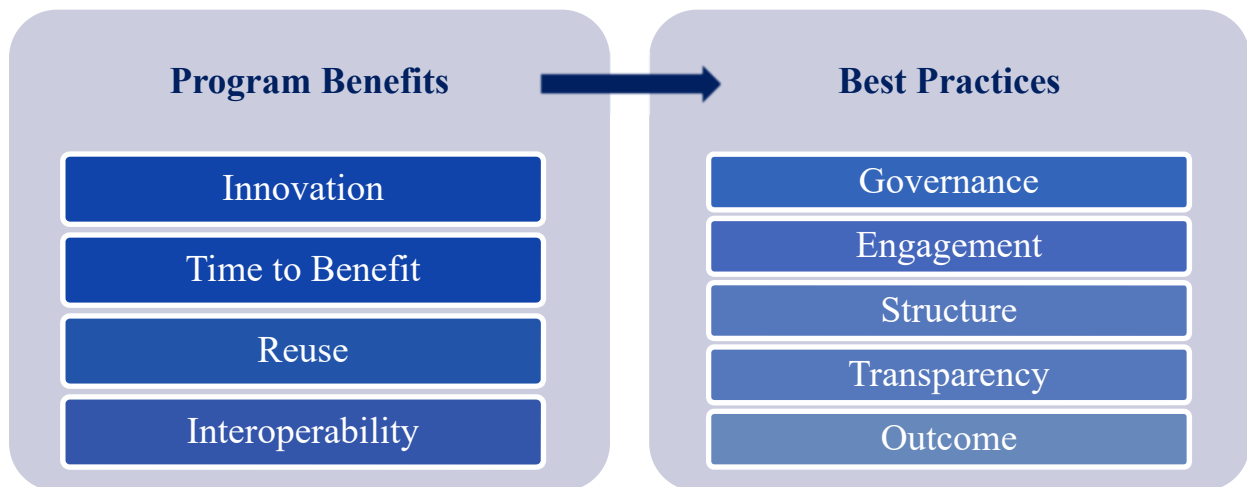


Expand Relevancy	As the CMMI expanded beyond software development, organizations have been able to use a consistent framework to raise maturity levels in other areas.
Reduce Complexity	As the CMMI grows, so does its complexity. Those “inside” the CMMI assessment process understand it very well but those outside face challenges of complexity.



3. CONSIDERATIONS AND RECOMMENDATIONS FOR ESTABLISHING A MES MODULE PRECERTIFICATION PROGRAM

In this section we provide considerations and recommendations for the development of the precertification program for MES modules. We base these recommendations on the best practices and lessons learned uncovered during the research phase of this project, as well as our in-depth knowledge of the market. The benefits CMS seeks from the precertification program and the foundational best practices we used to guide our recommendations are pictured below.



3.1 Structure for Defining Precertification Program

The structure and process for precertification must be transparent and well understood by all participants for the program to attract volunteer vendors and gain traction from the start. Our recommendation for structuring and defining the precertification program is presented in the table on the next page.



Activity	Summary	Considerations	Recommendations
<p>Define Criteria and Process for Module Pre-certification</p>	<p>CMS publishes types of modules that can be pre-certified, detailed criteria that has to be examined for each type of module, precertification thresholds and the process for precertification.</p>	<p>Product and services modules are inherently different and will require some separate definitions.</p> <p>The depth and breath of modules used by States varies and is not necessarily compatible with how the market is organized.</p> <p>The outcome of precertification and any incentives should be reflected in the criteria.</p>	<p>Use the Federal Advisory Committee Model to gain perspective from entire stakeholder community and increase potential for volunteer participation.</p> <p>Leverage existing certification entities, such as NIST for expertise to help define detailed certification processes (such as the demarkation between testing and certification).</p> <p>Make it clear and unambiguous what vendors need to do to prepare and what they will have to demonstrate and provide to the testing facility.</p>
<p>Define Requirements for Testing Facility Accreditiations</p>	<p>CMS publishes detailed specification for an entity to become an accredited testing facility and maintain accreditation.</p>	<p>Vendors should be either testing facility operators or companies seeking to have modules tested, not both.</p> <p>In as much as this will be a new vendor class, facilities will need time to ramp up, especially with respect to hiring and training staff.</p> <p>Velocity of volunteers requesting precertification may outstrip the capability of test facilities.</p>	<p>Estimate the number of requests for precertification and the type of modules that will be pre-certified, (e.g. provider management, financial management, business intelligence, administrative services only, etc.) and the number of testing facilities required for the first two years of the program.</p> <p>Provide grants to qualified organizations that wish to become accredited to configure the prescribed lab environment, recruit, hire and train staff and prepare for accreditation.</p>
<p>Define Testing Methods and Standards</p>	<p>CMS publishes test methods and standards for test facilities to follow.</p>	<p>There is no right or wrong answer about how prescriptive the test methods and standards should be. The more detailed the criteria (above), the more flexibility each facility can have to define its protocols, tools, techniques and so forth.</p>	<p>Leverage existing certification entities, such as NIST.</p> <p>Use the CMS governing body or surrogate to approve the test results.</p>



<p>Publish and Disclose</p>	<p>CMS establishes a central repository to publish precertification results.</p> <p>Vendors disclose information sufficient for states and other parties to make informed decisions.</p> <p>States use this information to make product and service selections.</p>	<p>The first vendors to pre-certify will have “first mover advantage” which could actually discourage innovation.</p> <p>Since precertification is voluntary, if a vendor does not pass, it should be allowed to decline publication. This is especially important for vendors new to the market.</p>	<p>Create a categorization scheme so that pre-certified modules are assigned to the most appropriate category of product or service.</p>
<p>Govern, Monitor and Refine</p>	<p>CMS establishes governance structure, decision-making and advisory roles, oversight and auditing protocols, escalation procedures and continuous process improvement measures.</p> <p>Define performance security and user standards, (e.g., SLAs, access levels, authorized use and disclosure).</p>	<p>Certification facilities and individual assessors are a new vendor/resource class and it will take some time to ramp up for the velocity of pre-certification requests. Initial governance must address implementation as well as long-term governance.</p> <p>The consistency of testing methods must be ensured from the start of the program to ensure acceptance. Early monitoring/auditing by the appointed oversight body is essential.</p> <p>State and vendor inclusiveness in best practices and lessons learned is critical for continuous improvement.</p>	<p>Include training, development and communications in Govern, Monitor and Refine plans to ensure knowledge is pushed down and up.</p> <p>Encourage states to adopt common requirements for commonly used modules, which will lead to standards-based vendor offerings.</p> <p>Create a stakeholder/user group and standards for selecting and acting on input from the group.</p>

3.2 Relationship to MES Final Certification (MECT V2.1) and Market Implications

To ensure consistency and transparency across certification efforts, it is important for all stakeholders to continue using the Medicaid Enterprise Certification Toolkit (MECT) checklists. While the checklists may have to be modified to allow for modular, pre- and re-certifications, the framework provides a valuable foundation for any form of certification.



3.2.1 Revised Certification Approach

The original "big bang" certification methodology for MMIS arose from the Federal Financial Participation (FFP) requirements for system implementations. States and CMS used the MECT checklists to prepare for and evaluate the system for certification during review sessions, usually one year after system go-live. The big bang was a function of the prevailing technology when the original rules were established and were carried forward even though tightly coupled, monolithic systems have become obsolete.

In 2016, CMS implemented new FFP rules and revamped the Medicaid Enterprise Certification Roadmap to be the Medicaid Enterprise Certification Lifecycle (MECL). One of the key features is the provision and incentive for modular certifications.

The updated certification process was recently piloted in West Virginia, and became the first state to receive its certification under the new model. This process involves more engagement between the states and CMS throughout the system development life cycle (SDLC). CMS and the states conduct milestone reviews toward the end of major phases throughout the system implementation, followed by a final certification review at least six months after go-live. The reviews focus on MECT checklists that the State selects and includes in its Advance Planning Documents (APD). The purpose of the reviews earlier in the life cycle are to identify certification risks early, thereby allowing ample time to correct problems and resolve issues. The Independent Verification & Validation (IV&V) vendor participates in the process by completing the MECT checklists, which CMS reviews and uses to provide feedback.

3.2.2 Integrating Precertification with Modular Certification

We recommend that if a product or service has been pre-certified and is part of a larger module that is to be certified, the checklist items that were satisfied as part of precertification carry forward to the modular certification review (with the exception of any state-specific customizations). The mechanics of this process need to be carefully considered but the premise should be that once pre-certified, the product or service gets the green light in a modular certification.

The converse is more problematic, that is, once a State-specific modular certification is completed, are the component products and services considered pre-certified? In theory, this sounds reasonable but it will most likely lead to market self-selection and domination by a handful of large vendors. For example, if a module in a particular State is defined broadly but comprised of many components that can stand-alone, by virtue of approving the larger module, all the component parts are pre-certified. The vendor delivering the larger module will have the advantage of being pre-certified for its solution. States wanting to reduce risks and improve time to benefit will favor pre-certified solutions, which will give rise to preference for a particular "package" of services because it has been pre-certified, which, in turn, will give the first vendor to deliver



this package “first mover advantage.” Vendors with more discrete solutions would likely get shut out of opportunities and hence, exit the market, leading to stagnation.

We recommend that the long view be taken with respect to integrating precertification with modular certification. The market dynamics at play have a great deal to do with equal opportunity to secure business. As it stands now, the barriers to entry are huge. Precertification could make these barriers greater if the implications are not forecast over a long time horizon. PSTG would be grateful for the opportunity to work through market issues such as these as the program is designed.

3.3 Re-certification Process

After modules are pre-certified, they will need to maintain this status in order to help ensure that outdated or obsolete products and services are kept out of State Medicaid Agencies. We envision re-certification as a specific phase of the overall certification life cycle. The PSTG envisions that specific events will trigger re-certification of modules, including:

1. *Major Software Releases* – The scope of release changes will need to be established so that re-certification is triggered only when the product is substantially and materially altered.
2. *Defined Timeline* – CMS might forgo other trigger events and opt for a re-certification based on the passage of time. Or, the time trigger could be used in combination with other triggers. If the time trigger is used, it must be relative to the pace of technical innovation and implementation in the market. For example, if the standard implementation period is three years, a three-year re-certification would not be practical.
3. *Deployment of Solution to Medicaid Enterprise* – Upon certification for a state’s MMIS, pre-certified modules included in the MMIS would automatically be pre-certified as of the new date (assuming minimal state specific customizations).
4. *Updated MECT Checklists* – If CMS releases updates to the MECT checklists that alter the requirements for modules to achieve pre- or final certification, modules that have already been pre-certified may need to be re-certified.

The potential trigger events listed above are not intended to be mutually exclusive. In fact we envision that multiple trigger events may exist within the re-certification model.

We recommend that re-certification criteria, standards, processes and so forth be put on the “Certification Program Roadmap” as a planned future enhancement. We believe it is more important to get the initial precertification in place, establish a baseline of pre-certified vendor modules and collect stakeholder input



to refine and enhance the program. If we try to address actions required years from now, we believe the program will get off to a slower start than necessary.

3.4 Other Considerations

Some considerations to consider when establishing a module precertification program unique to the Medicaid Enterprise, include:

- *Do not restrict procurements to only precertified modules* – Until a sizable baseline of pre-certified MES modules within common categories has been established, discourage states from considering only pre-certified vendor modules. If states only rely on pre-certified modules when only one or two choices exist, this may discourage new entrants and long term, limit competition and innovation in the marketplace.
- *Precertification funding* – In part, the objectives of modular procurements are to reduce cost and risks associated with system implementations, as well as encourage new entrants to the market. CMS and states currently fund the certification of systems, under 90/10 enhanced match. The anticipated cost savings should be analyzed and leveraged to fund the precertification program framework as this is improving upon existing certification processes. It is assumed that vendors bear the cost of assuring their solutions meet federal certification criteria and any costs associated with participating in the certification process.
- *Interoperability demonstration* – Module certification needs to consider not only the function of the module itself, but the interoperability of the module to work in a loosely coupled environment. Consider how this can be incorporated into the testing facilities and testing methodology. The quality of the technical documentation needs to be verified as well so that the parameters and integration points of the module are well understood.



4. CONCLUSION

Ultimately, the success of a precertification program relies on a public-private commitment to promote the adoption of modular systems with all of their intended benefits. A well-defined, structured precertification process can facilitate the achievement of these objectives. To maximize the success of the modernization of Medicaid programs, leveraging the best practices and lessons learned described herein, we recommend that CMS, states, and the private sector move forward collaboratively to take the following actions:

Governance	<i>Define the governance and organizational structure</i> – Establish a governance structure that supports the objectives of the precertification program including selection of precertification organizations/testing facilities, and ongoing monitoring of performance standards.
Engagement	<i>Engage stakeholders throughout the process</i> – Stakeholder feedback is critical to assure the precertification process considers multiple perspectives, can be implemented as designed, and is adopted successfully. Time is of the essence, so structured and timely engagement for input and feedback is important.
Structure	<p><i>Establish a process for defining categories of modules</i> – In order to establish precertification criteria, categories of modules must be defined. A module category can be defined by the functionality/utility/outcomes it provides. MECT Certification checklists can then be leveraged to establish the certification criteria which includes defining the trigger that would require re-certification of a module. It is important to note that in order to achieve maximum cost savings for CMS and states, and to promote new entrants into the market, common module definitions must be shared across states.</p> <p><i>Institute a testing methodology</i> – Define a common testing methodology that is employed by the precertification organizations/testing facilities to ensure that modules are consistently assessed and vendors are subject to the same standards regardless which precertification entity is used. The methodology should ensure that modules meet precertification criteria as well as the ability to interface with other modules with which there are dependencies.</p> <p><i>Consider a CMMI-SVC Certification for Service Contracts</i> – This may include SaaS solutions as well as Shared Services.</p>



Transparency	<i>Execute a pilot of the precertification process</i> – Select subsystems/components that currently lend themselves to modularization, such as Provider Management, Care Management, or Financial Management to execute a pilot program. Prove the concept and expand to the next set of modules. Transparency for all stakeholders is important as the precertification process evolves.
Outcome	<i>Streamline MES Certification Lifecycle Reviews for Pre-certified Modules</i> – The review of pre-certified modules during the Medicaid Enterprise Certification Lifecycle (MECL) should be limited to the interoperability/interfaces with other modules of the MMIS/MES, since pre-certified modules have already been deemed to be compliant with certification requirements.

To have the biggest impact for states that need to replace legacy MMIS functionality in the next 18 – 24 months, it is important to define a timeline for accomplishing the steps above and launching a precertification process. The PSTG looks forward to collaborating with CMS and states to design and implement a precertification program that promotes innovation, improved time to benefit, re-use, and interoperability.



5. APPENDIX 1: GLOSSARY OF ACRONYMS

Acronym	Definition
ACR	American College of Radiology
ADI	Advanced Diagnostic Imaging
ATL	Accredited Testing Laboratories
CMMI	Capability Maturity Model Integration
CMS	Centers for Medicare and Medicaid Services
COTS	Commercial Off-The-Shelf software
CT	Computed Tomography
EAC	Election Assistance Commission
EHR	Electronic Health Records
FFP	Federal Financial Participation
FFS	Fee-for-Service
HHS	Healthcare and Human Services
HITECH	Health Information Technology for Economic and Clinical Health
IAC	Intersocietal Accreditation Commission
ISO	International Organization for Standards
IV&V	Independent Verification and Validation
MECL	Medicaid Enterprise Certification Lifecycle
MECT	Medicaid Enterprise Certification Toolkit
MES	Medicaid Enterprise Systems
MCO	Managed Care Organization
MIPPA	Medicare Improvements for Patients and Providers Act
MMIS	Medicaid Management Information Systems
MRI	Magnetic Resonance Imaging
NIST	National Institute of Standards and Technology
NPRM	Notice of Proposed Rule Making
NVLAP	National Voluntary Laboratory Accreditation Program
ONC	Office of the National Coordinator
ONC-ACB	Office of the National Coordinator – Authorized Certification Bodies
PET	Positron Emission Tomography
SaaS	Software-as-a-Service
SDLC	Systems Development Life Cycle
SEI	Software Engineering Institute
TCP	Temporary Certification Program
TJC	The Joint Commission
VSTL	Voting System Test Laboratories
VVSG	Voluntary Voting System Guidelines



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