Statement of Work

Independently, and not as an agent of the Government, the contractor shall furnish the necessary services, personnel, materials, equipment and facilities, not otherwise provided by the Government, as needed to perform this contract.

1. Provider Compliance Reporting System

The Centers for Medicare & Medicaid Services (CMS) is seeking a contractor to build and maintain and continuously improve a "Provider Compliance Reporting System" (PCRS). PCRS will be an application designed to provide CMS a single source of information about Medicare review programs from a provider perspective. Users can access the system via a web-based user interface or in a system-to-system manner through Health Information Handlers (HIHs).

2. Background

One of CMS' most important services is to protect the Medicare trust fund by reviewing claims and medical documentation submitted by Medicare providers and checking for compliance with Medicare rules. CMS does this by contracting with a number of private companies known as Medicare Administrative Contractors (MACs), Recovery Audit Contractors (RACs), and Supplemental Medical Review Contactors (SMRCs), Zone Program Integrity Contractors (ZPICs), and Quality Improvements Organizations (QIOs). In the future, CMS may interact with other review entities not listed here. Throughout this Statement of Work, these organizations will be referred to as 'review contractors'. CMS also contracts with a number of additional contractors involved in other aspects of supporting the provider compliance activities and related functions. These contractors include, but are not limited to, the Comprehensive Error Rate Testing (CERT) Review contractors, CERT documentation contractors, CERT statistical contractors, Comparative Billing Report (CBR) contractors, and accuracy review contractors. Finally, CMS utilizes several systems to support its provider compliance work, including the RAC Data warehouse (RAC-DW), Unified Case Management (UCM) system, Medicare Appeals System (MAS) and Electronic Submission of Medical Document (esMD).

Currently, CMS claim review information and gathers reports from its review contractors via email, uploads to the RAC-DW and other mechanisms. However, none of the existing reporting mechanisms allows for a comprehensive view of Medicare's activity with CMS and its contractors. CMS needs a system that will allow Medicare review contractors and CMS staff to view a provider profile. The provider profile will show when a provider received one-on-one education, which claims were reviewed by the MAC, RAC, or SMRC, and when a provider was referred for ZPIC review. Currently, the RAC-DW is designed to prevent the same claim from being reviewed by two review contractors. CMS needs the new system to help ensure the same topic is not being review by two review contractors for the same provider at the same time. In addition, MACRA 505(a) requires CMS to share certain information with providers. The new system will help provide this content.

In addition to continually improving its improper payment detection and prevention effectiveness, CMS also strives to improve its customer service to the provider community.

CMS must adapt to changes to the Medicare landscape brought on by new initiatives such as the new prior authorization demonstrations, new technology, such as DIRECT messaging, digital signing certificates, etc. MAC portals and RAC portals have been established to provide many provider-facing customer service functions. However, a provider who was reviewed by three different contractors would have to visit three different websites to get a full picture of their review and education activity with Medicare. CMS needs a system that will allow providers to view their review and education activities with Medicare at one Web location.

3. Objectives

The PCRS will be used by:

- All MAC MR departments to report provider review activities and 1:1 education activities;

- The CBR contractor to upload all CBRs;
- The SMRC to report provider review activities; and
- Other CMS contractors.

Table 1:

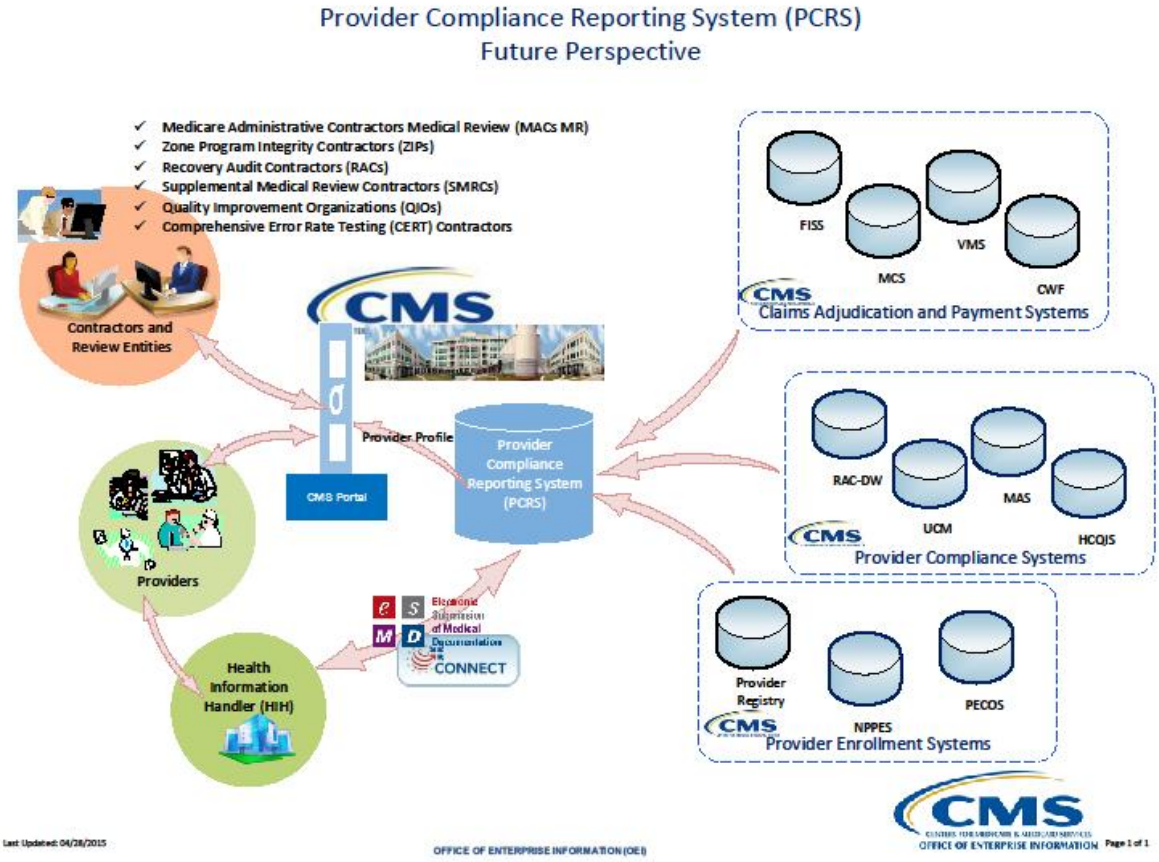
Summarizes the types of entities with which the PCRS contractor will work.

Entities with which the PCRS will connect				
	Review Contractors	Support Contractors	Systems	Federal agencies
Initial release (60 days after contract award)	• MACs (19) • RACs (9) • SMRC (1)	• CBR Contractor (1) • CERT Documentation contractor (1)	• RAC-DW	• Users from various CMS components
Future releases		• CERT Statistical Contractor (1) • Accuracy Contractors (2)	• esMD • MAS • PECOS • UCM	• Users from approved other federal agencies (look up provider contact info only)
Optional (only if invoked)	• QIOs (1-3)		• Settlement/MOU • Provider Self-Audit Review Entities systems	• Federal agencies

The PCRS will provide for improvements to CMS' improper payment activities by continuing to optimize and improve communication and workflow between: CMS, Medicare review contractors, and the provider community. Future releases of the PCRS will allow providers to access certain provider-visible data via:

- A CMS provider portal; and
- esMD Health Information Handlers (HIHs).

Note: Throughout this document, the contractor providing these services will be called the "PCRS contractor." The CMS provider portal will be called "ProviderMedicare.gov."



4. Scope

The contractor shall provide to CMS:

- A database and workflow system that resides on the CMSnet and is connected to all MACs, RACs, and SMRC via the CMSnet (see task 1 below);

- DIRECT HISP servers and a tight integration between the PCRS and the DIRECT HISP services (see task 2 below);

- A connection to the RAC-DW and ingest of RAC-DW information (see task 3);

- A "landing zone" for documents being submitted via the esMD gateway where the intended recipient is marked "CMS." (see task 4); and

The PCRS shall leverage an existing case management or reporting system that is currently connected to the CMSnet and holds a current CMS ATO.

It is important for the selected Contractor to have a strong understanding of:

- CMS current infrastructure (especially the CMSnet and how contractors can get access to it); and

- CMS system lifecycle development process and TRB approval procedures.

The initial release of the PCRS will include connectivity only to the MAC VDC, SMRC, RAC-DW, and CMS. Future releases will include connectivity to some or all entities listed in Table 1.

The PCRS contractor shall be responsible for the secure operation, maintenance, enhancement, and performance of the PCRS application and other identified integration systems and backup supporting applications. The contractor shall:

- Maintain all existing operational environments for PCRS (unless system is being hosted at by an existing CMS ATO'd data center where these activities are handled by a different contractor), the backup Contingency Database (CDB) systems at each data center and all environments supporting ProviderMedicare.gov;

- Work with CMS to identify system modifications and additional functionality, which the contractor shall develop and deploy to PCRS;

- Maintain and develop integration of PCRS with external systems;

- Identify opportunities for greater efficiencies within the PCRS operating environment;

- Deliver thorough and detailed documentation on all system configurations; and

- Perform unit, performance, integration, connectivity testing per CMS' instruction.

The PCRS contractor is responsible for development, testing, training, user acceptance testing, functional test, fix test (hot fixes),. In future releases, the PCRS production systems shall be available to external systems dependent on PCRS data, such as ProviderMedicare.gov and esMD HIHs and others as specified by CMS.

The contractor shall work with external systems owners to provide CMS an estimated timeline for PCRS connections to external systems. CMS reserves the right to modify the timeline as necessary and reasonable.

CMS has included an optional future task for the PCRS contractor to connect the PCRS to a provider portal. CMS may require the PCRS contractor to build that provider portal. The PCRS contractor shall be

prepared for such a requirement and shall be able to coordinate the provider portal build without any downtime of the PCRS. CMS will issue a change order if and when this requirement to build a provider portal arises. Although the initial release and several other releases will be devoted to perform provider compliance functions, in the future, the PCRS could interface with MAS or other appeal related systems.

5. General Requirements

5.1 Project Kickoff

The contractor shall participate in a kickoff meeting within 3 days of contract award. The contractor shall work with CMS to define key staff's roles and responsibilities, assess and validate the current PCRS business requirements, and describe the project approach and scope. The contractor shall provide CMS with the detailed methodology and tool(s) to be used to develop, coordinate, and manage project schedules, milestones, and deliverables. The contractor shall also establish a development methodology, communication processes, status reporting procedures, and an issues escalation and resolution strategy.

5.2 Systems Development Management Plan

The contractor shall develop a System Development Management Plan (SDMP) for the PCRS project which addresses, the following:

- Management Approach – to include project assumptions and constraints and the overall approach to PCRS project management;
- Project Plan - to include the comprehensive methodology for implementing the PCRS in a phased approach and detailed project schedule. The project plan shall include task descriptions, task dependencies, task durations, milestones, resources and deliverables for each near-term and long-term phase, and identification of the critical path;
- Staffing Approach – to include the roles, responsibilities and allocations of each resource assigned to the effort; the approach for transitioning staff between each life cycle phase; and the approach for estimating levels of resources required;
- Communication Approach – to include the methodology for identifying CMS stakeholders and needs, and communicating status, issues, risks, and risk mitigation strategies to CMS stakeholders;
- Risk Management Approach – to include the process, methods, tools, and resources that will be applied to the project for risk management. The contractor shall describe how risks shall be identified and analyzed, the basis for prioritizing risks, how risk responses shall be developed and implemented, and how the success of those responses shall be measured;
- Configuration Management Approach – to include the responsibilities and authorities for accomplishing identified configuration management activities performed during the project's life cycle and coordination with other project activities across all PCRS contractor project stakeholders;
- Change Management Approach – to include the process for requesting, analyzing, prioritizing, and reviewing the impact of changes to established baselines, priorities, and documenting changes through their implementation. CMS requires the contractor to utilize an agile development approach with new enhancements being released every 2 weeks;

- Development Approach – to include the methodology for requirements management, system/software development, and establishment of the contractor's software development and integration facility;

- Quality Assurance Approach – to include the methods, standards, measurements, reviews, documentation of findings and schedule used to ensure the quality of the development process and products by PCRS lifecycle phase including all 508 compliance and 508 usability testing; or

- Transition Approach – to includethe plans for transitioning the business and technical processes, infrastructure, connectivity, and operations and maintenance of the PCRS. At a minimum the contractor shall provide roles, responsibilities, timelines, dependencies, risks, risk mitigation strategies, and milestones.

The contractor shall update and maintain the System Development Management Plan (SDMP) throughout the life of the contract.

The contractor shall also prepare a Technical Assessment document that includes a technical gap analysis between existing hardware, software, and network components currently implemented for the PCRS and components needed for future operations. The analysis shall fully document the current PCRS infrastructure, recommend improvements and enhancements, and outline licensing and budget considerations to implement recommendations.

5.3 General Requirements

The contractor shall maintain the full application infrastructure (software, hardware, and local network) supporting Web Chat operations. The contractor shall develop and follow a planned systems maintenance schedule for Web Chat. Any unapproved variance from this schedule will be considered an unplanned outage.

The PCRS contractor shall review the applications, infrastructure, network, security, and other system components on a regular basis, to be proposed by the contractor, and provide CMS with recommendations for potential upgrades or component decommissioning. Examples of upgrades may include: Operating System, system applications, and hardware components such as CPUs, memory, disk space, and network connectivity. Recommendations shall include several potential options, and their costs, benefits, and drawbacks for CMS to consider. The PCRS contractor shall submit a Web Chat Architecture document concurrent with the review and recommended system changes. It shall be the responsibility of the contractor to ensure appropriate recommendations are made in a timely manner.

The contractor shall propose solutions which improve efficiencies with hardware, software, required resources, management of environments necessary to support operations, etc.

The contractor shall maintain an inventory of all hardware, software, licenses, and maintenance and support agreements which are used to operate the Web Chat environments. The hardware inventory shall include, but not be limited to, manufacturer, model, hostname, serial number, specifications (CPU, memory, capacity, throughput, etc. as appropriate), operating system, applications, purpose/description, CMS asset tag information, physical location, and assigned environment. The software inventory shall include, but not be limited to, application, license type, number of licenses available, number of licenses in use, purpose/description, and assigned environment. The maintenance and support agreement inventory shall include, but not be limited to, description of support, item(s) supported (equipment, software, etc.), dates of support, and support vendor.

At time of changes to any information captured by the inventory documentation or on a quarterly basis, whichever is less, the contractor shall provide an update to the appropriate inventory documentation

which shall indicate which items have been added, removed, or modified, and the purpose for the change.

If the contractor is utilizing an existing CMS ATO'd data center, many (if not all) of these activities would be inherited controls from that CMS data center.

5.4 Capacity Planning

The contractor shall provide adequate infrastructure, application, network, security, and integrated capacity planning capabilities as well as any other capacity planning capability required by CMS. The contractor shall actively participate as part of an integrated ASM team comprised of the PCRS contractor, CMS, and any other party identified by CMS. The responsibilities of the contractor within this team shall be to provide any additional instrumentation of the Web Chat architecture as well as provide any data and/or accompanying analysis requested by CMS. The contractor shall also provide load testing capabilities along with the capacity planning support of Web Chat. Capacity analyses shall be conducted at regular, pre-determined intervals and additionally on an as-needed basis when significant changes are made to Web Chat.

The contractor shall utilize these capacity planning exercises when making recommendations to CMS for necessary upgrades or modifications, as described in the System Maintenance section.

The contractor shall provide adequate infrastructure, application, network, security, and integrated capacity planning capabilities as well as any other capacity planning capability required by CMS. The PCRS contractor shall actively participate as part of an integrated ASM team comprised of the PCRS contractor, CMS, and any other party identified by CMS. The responsibilities of the contractor within this team shall be to provide any additional instrumentation of the ProviderMedicare.gov architecture as well as provide any data and/or accompanying analysis requested by CMS. The contractor shall also provide load testing capabilities along with the capacity planning support of ProviderMedicare.gov. Capacity analyses shall be conducted at regular, pre-determined intervals and additionally on an as-needed basis when significant changes are made to ProviderMedicare.gov.

The contractor shall provide adequate infrastructure, application, network, security, and integrated capacity planning capabilities as well as any other capacity planning capability required by CMS. The contractor shall actively participate as part of an integrated ASM team comprised of the PCRS contractor, CMS, and any other party identified by CMS. The responsibilities of the contractor within this team shall be to provide any additional instrumentation of the ProviderCompliance.gov architecture as well as provide any data and/or accompanying analysis requested by CMS. The contractor shall also provide load testing capabilities along with the capacity planning support of ProviderCompliance.gov. Capacity analyses shall be conducted at regular, pre-determined intervals and additionally on an as-needed basis when significant changes are made to ProviderCompliance.gov.

The contractor shall utilize these capacity planning exercises when making recommendations to CMS for necessary upgrades or modifications, as described in the System Maintenance section.

5.5 System Development and Testing

The contractor shall follow and comply with the CMS System Lifecycle Framework in all system development and testing activities and produce certain work products based on the Framework located at http://www.cms.gov/Research-Statistics-Data-and-Systems/CMS-Information-Technology/XLC/index.html. Should the contractor utilize a Systems Development Life Cycle which expands upon the CMS Framework, any additional work products the contractor proposes may be considered by CMS.

The contractor shall provide the necessary documentation for and participate in CMS required reviews of the project throughout its life cycle.

Additional artifacts and/or activities may be identified within a particular requirement or may be proposed by the contractor.

The contractor shall define their process for all testing prior to the User Acceptance Testing phase, including any anticipated reviews and deliverables. For changes affecting any user interface, CMS anticipates the final iteration of testing prior to deployment to a production environment to be User Acceptance Testing (UAT).

5.6 Functional Requirements

The PCRS contractor shall support CMS efforts by providing access to systems, data, documentation, code, infrastructure, or other items and information as requested by CMS or their designated contact.
The contractor shall provide a PCRS certified program manager to develop and maintain program oversight to ensure that all PCRS related projects follows all CMS processes for a program of this size.
The program manager shall also be responsible for communicating with
CMS the status of all related projects and identify all deliverables that will be required.
The contractor shall support and abide by CMS Office of Technology Services (OTS) system security standards in all activities located at: http://www.cms.gov/Research-Statistics-Data-and-Systems/CMS-Information-Technology/InformationSecurity/index.html.

The contractor shall provide a detailed methodology and tool(s) to be used to systematically manage requirements definition focused on gaining a detailed understanding of the strategic and operational objectives and identifying specific goals for the PCRS. The contractor's approach to requirements gathering shall establish a common understanding of CMS requirements and shall provide the basis for planning and managing the PCRS project.

The requirements management tool at CMS is the Dynamic Object-Oriented Requirements System (DOORS). CMS requires the use of DOORS for storing and managing new and updated requirements. Contractors shall use DOORS to maintain requirements and establish traceability or provide an extract of their CMS approved requirements system in a format that is readily imported into CMS's DOORS repository. All applicable links between requirements shall be established.

The contractor shall also provide and maintain a matrix that shows traceability between the higher-level requirements and the associated lower-level requirements. The matrix shall also define the relationship(s) between the requirement types. The matrix additionally shall trace how requirements are fulfilled throughout the systems lifecycle.

For activities requiring the development of initial requirements definition, the contractor shall:

- Conduct Requirements Gathering Interviews (During the first 3 months following contract awarded, this should include weekly meetings with CMS staff and weekly meetings with MAC / RAC / SMRC / RAC-DW staff, UCM staff);

- Document and Publish a Concept of Operations (ConOps) – The contractor shall work closely with CMS to define and record the business goals and operational concept for the PCRS;

- Document and Publish Requirements – The results of the requirement gathering sessions shall be thoroughly documented and provided to CMS and any interview participants for review and feedback;

- Prioritize Requirements and Update Project Plan – The contractor shall work closely with CMS to prioritize the defined requirements and determine the level of effort for future phases. The approved updated project plan shall be shared with CMS and contractor project stakeholders;

- Document, maintain, and publish a Business Risk Assessment – The contractor shall define and record the security risk, particularly as it relates to the business functions associated with the security/vulnerability of the PCRS system, information and networks, risk of intrusions and connectivity to other (vulnerable) systems, and risk associated with the misuse (criminal/fraudulent) of PCRS information; and

- Define and Maintain System Security Plan (SSP), Information Security Risk Assessment (IS RA) and Data Use Agreement (DUA) – The contractor shall define the security strategy to ensure that all components of the PCRS meet the guidelines as stated by CMS' Office of Technology Solutions (OIS). Those guidelines publicly available are currently located at http://www.cms.gov/InformationSecurity. The SSP and/or IS RA shall clearly define user roles, and ensure that each contractor's data is protected, and access is closely monitored. The contractor shall also complete the DUA to ensure that the disclosure of data complies with the requirements of the Privacy Act, the Privacy Rule, and CMS data release policies.

The contractor shall maintain and update these documents as systems mature and additional requirements are defined beyond the initial activity. At the conclusion of the activity, the contractor shall provide a final project report includinga summary of activities, accomplishments, lessons learned, recommendations, and final budget report.

While the contractor shall identify additional functionality enhancements and defect fixes for inclusion in each release, the final scope of each release shall be at the discretion of CMS. Government approval of the release scope shall be required prior to the start of development activity for each release.

The contractor shall implement best practices such as adherence to standards, interoperability with external systems, and utilizing COTS native functionality where possible (i.e., functionality inherent in the COTS products out-of-the-box that requires minimal if any customization). The contractor shall also conduct and document a Preliminary Design Review, Detailed Design Review, and Code Walkthrough with CMS during the development cycle for each release. Refer to the section entitled User Interface Improvements, for specific requirements regarding design review sessions for changes impacting the user interface.

The contractor shall be responsible for planning and conducting unit and system testing for all functional releases to validate that the system operates as planned. The contractor shall utilize automated testing software that minimizes the need for manual testing. The contractor shall develop, implement, revise, and maintain a comprehensive testing program to ensure consistency in system evaluation and validation across releases. The contractor shall access the shared systems to validate successful testing. The contractor shall support the evaluation of performance, capacity, and load testing with initiatives integrated with and impacting PCRS performance and functionality.

5.7 Systems Development Lifecycle

The contractor shall be responsible for updating all relevant Systems Development Life Cycle (SDLC) documentation. In addition to the minimum required systems development activities and artifacts defined in the above section, and release project plan and scope definition, the following documentation shall be delivered for each release:

- Use Case Specification
- Functional Requirements Traceability Matrix
- Application Design Documentation
- Database Design Documentation
- Interface Control Documentation
- Release Manifest
- All Functional and Performance Test Results

Contractor shall support data loads as necessary, including:

- CBR and PEPPER uploads;
- RAC-DW data;
- Purge cached mainframe job;
- WebLoad job;
- Zip code updates;
- Partner Directory Load; and
- Mainframe Codes load.

5.8 Other Systems Release Management

The contractor shall be responsible for managing and executing changes to the PCRS application resulting from the releases of the RAC-DW and esMD, PECOS, UCM and MAS. At a minimum, the contractor shall provide a project plan for work executed within the PCRS system against each RAC-DW, esMD, PECOS/UCM and MAS release. This plan shall detail the tasks required to coordinate the PCRS changes with the existing RAC-DW, esMD, PECOS, UCM and MAS release deployment schedule.

The contractor shall be responsible for evaluating the RAC-DW, esMD, PECOS, UCM and MAS system release changes for impacts to the PCRS and for documenting the necessary software and/or integration layer changes identified.

The contractor shall be responsible for planning and conducting unit, system, and quality assurance testing of the PCRS for all RAC-DW, esMD, PECOS, UCM and MAS releases to validate that the system operates as planned. The contractor shall access the RAC-DW, esMD, PECOS, UCM and MAS to validate successful testing. The contractor shall utilize automated testing software that minimizes the need for manual testing. Testing of the PCRS for the RAC-DW, esMD, PECOS, UCM and MAS releases shall be included in the contractor's comprehensive testing program.

The contractor shall be responsible for updating all relevant SDLC documentation as necessary.

5.9 Transactional Interface to RAC-DW and esMD

The contractor shall continue the design, implementation, and maintenance of a queue-based interface to the back-end systems used to store review data.

- Maintain consistency with CMS enterprise architecture standards;
- Provide a solution leveraging that will support the use of messages and message queues to provide communication between all distributed mainframe applications used by PCRS;
- Design to service-orientated architecture standards and principles to provide the most flexible solution with low maintenance cost and efforts; and
- End to end security for all transactions transmitted electronically through the CMS data network.

5.10 User Interface Improvements

The contractor shall continually improve the PCRS application to support the business processes introduced with the Continuum of Compliance Initiative. User Interface design activities are expected to both take advantage of existing system strengths and expand the desktop's capabilities through incorporation of inherent COTS functionality. The contractor shall incorporate system intelligence within the user interface that reduces keystrokes or user think time and guides the user through the application.

The contractor shall be responsible for developing project plans for managing and scheduling all user interface design efforts. Implementation of user interface improvements shall comply with the requirements for PCRS Systems Development and Functional Release Management. In addition to the required SDLC documentation updates, the contractor shall be responsible for conducting user interface design review sessions with CMS, the IV&V contractor, and other designated parties for design approval. Refer to Deliverable and Reporting Requirements for further information regarding expected deliverables.

5.11 ProviderMedicare.gov Operational Requirements

If CMS opts to invoke the optional future tasks, CMS will issue a change order. Within 60 days of change order award, the PCRS shall design and go live with ProviderMedicare.gov.

The ProviderMedicare.gov environment shall be available as described in the Performance Measurement section, namely an uptime of 99.0%, 24x7x365. System availability shall be defined as all hours less any scheduled maintenance required for the upkeep of ProviderMedicare.gov.

The contractor shall provide the ability to monitor, provide capacity planning and be able to scale ProviderMedicare.gov to meet the growing needs of CMS.

ProviderMedicare.gov shall operate under all OIS stated security standards. CMS specific implementations of National Institutes of Standards and Technology (NIST) security details can be found in CMS' Information Security Acceptable Risk Safeguards (ARS) Version 2.0 (ARS 5.0 was renamed 1.0) and CMS' Technical Reference Architecture (TRA) 2.0 including all applicable TRA supplements. All latest security documentation is maintained in the Information security and privacy library at http://www.cms.gov/Research-Statistics-Data-and-Systems/CMS-Information-Technology/InformationSecurity/Information-Security-Library.html.

The PCRS contractor is responsible for registering, managing, etc., the external domain name on behalf of CMS. The PCRS contractor is also responsible for implementing Domain Name Server (DNS) changes

and renewing Secure Socket Layer (SSL) certificates on behalf of CMS and the incumbent contractor. The third party contractor is answerable for the routing of Internet traffic to the Production 1 and Production 2 data centers in support of PCRS.

The PCRS contractor is responsible for managing all internal CMS DNS changes supporting ProviderMedicare.gov.

5.12 System Maintenance

The contractor shall perform system maintenance to ensure ProviderMedicare.gov is operating in an efficient manner. This includes but is not limited to: maintaining the infrastructure to support the functionality, capacity planning to accommodate planned future usage levels, and performance tuning to ensure data access, processing, and delivery activities are being completed within timeframes acceptable to CMS. The contractor shall install all security patches on a monthly basis on all Internet-facing .NET servers. The contractor shall coordinate changes to external systems required to support operations with the appropriate parties, e.g., CMS Intranet (CMSnet) Wide Area Network (WAN) changes.

The contractor shall maintain the full application infrastructure (software, hardware, and local network) supporting ProviderMedicare.gov operations. The contractor shall develop and follow a planned systems maintenance schedule for ProviderMedicare.gov. Any unapproved variance from this schedule will be considered an unplanned outage.

The PCRS contractor shall review the applications, infrastructure, network, security, and other system components on a regular basis, to be proposed by the contractor, and provide CMS with recommendations for potential upgrades or component decommissioning. Examples of upgrades may include: Operating System, system applications, and hardware components such as CPUs, memory, disk space, and network connectivity. Recommendations shall include several potential options, and their costs, benefits, and drawbacks for CMS to consider. The PCRS contractor shall submit a ProviderMedicare.gov Architecture document concurrent with the review and recommended system changes. It shall be the responsibility of the contractor to ensure appropriate recommendations are made in a timely manner. Negative impacts to system performance which were not adequately anticipated by the contractor shall be the responsibility of the contractor.

The contractor shall propose solutions which improve efficiencies with hardware, software, required resources, and management of environments necessary to support operations.

The contractor shall maintain an inventory of all hardware, software, licenses, and maintenance and support agreements which are used to operate the MyMedicare.gov environments. The hardware inventory shall include, but not be limited to, manufacturer, model, hostname, serial number, specifications (CPU, memory, capacity, throughput, etc. as appropriate), operating system, applications, purpose/description, CMS asset tag information, physical location, and assigned environment. The software inventory shall include, but not be limited to, application, license type, number of licenses available, number of licenses in use, purpose/description, and assigned environment. The maintenance and support agreement inventory shall include, but not be limited to, description of support, item(s) supported (equipment, software, etc.), dates of support, and support vendor.

At time of changes to any information captured by the inventory documentation or on a quarterly basis, whichever is less, the contractor shall provide an update to the appropriate inventory documentation which shall indicate which items have been added, removed, or modified, and the purpose for the change.

5.13 User Acceptance Testing

The PCRS contractor is responsible for system testing required for all PCRS releases, Scheduling of user acceptance testing shall be coordinated with the CMS COR as part of the PCRS release management process and included in the release project plan.

The contractor shall also support the testing efforts for all interfacing applications, including the RAC-DW, esMD, PECOS, UCR, and ProviderMedicare.gov and any future applications as directed by CMS. This support shall include the establishment and maintenance of test data and test cases as specified by the contractor responsible for developing the interfacing application.

Dedicated representation to the UAT community from the contractor's testing staff shall be allocated for every release. Tasks shall include:

- Communicating environment and software build readiness;
- Maintaining tester access IDs;
- Routing of integration layer change requests (for the UAT environment);
- Data mining for release validation activities;
- Maintain and support of the PCRS Test Mainframes; and
- Participating on all pre-UAT coordination calls and on the daily UAT status conference calls conducted during each validation and user acceptance testing cycle.

The contractor's UAT representative shall serve as the primary point of contact for all change requests resulting from UAT activities.

5.14 Contingency Database

The contractor shall maintain the Contingency Database application which is used in the event that the PCRS Desktop (PCRS) is unavailable to one or more of the PCRS connecting systems.

The PCRS may be unavailable for several different reasons including PCRS system issues, network issues between PCRS, or network issues between one system and PCRS.

The PCRS contractor shall perform a daily "push" from the master server to all of the servers at the back up location.

The master server shall deploy updates to the Contingency Database applications at all of the backup locations.

The master server shall retrieve all data elements from PCRS that it needs to populate the Contingency Database.

A daily "pull" of the following shall be performed to the master server from all of the servers at the back up locations. If no activity has been logged on a Contingency database server then no data is pulled. This data is imported into the PCRS in an automated fashion so inquiries recorded in the Contingency database are merged with those in the PCRS.

The contractor shall incorporate the Contingency Database release management plan into the PCRS functional release management plan. The contractor shall include in the project plan for each release details outlining the tasks and timeframes for the completion of each release. Timeframes for each

functional release shall be scheduled so they coincide with the PCRS functional release schedule. The contractor shall include changes to the Contingency Database interface to keep the Contingency Database in sync with changes to the PCRS interface.

The contractor shall host each Contingency Database on a server that will reside at each back up location. The contractor shall host a master at an alternative datacenter. The master server shall deploy and govern all of the servers at the BCC locations. The master server shall be synchronized with PCRS on a daily basis. Contingency Database support also includes Development, Training, User Acceptance Testing, and Test environments.

5.15 Project Management

The contractor shall provide a PMP certified project manager to develop and maintain a project plan and ensure that the project follows all CMS processes for a project of this size. The project manager shall also be responsible for communicating with CMS the status of the project and identify all deliverables that will be required.

The contractor shall perform all project management activities, including technical and business management functions, in order to plan, implement, track, report, and deliver the required elements stated in this contract. The contractor shall establish a Systems Development Management Plan (SDMP) to maintain a project management approach with clearly defined project management processes, organizational/responsibilities, and approaches to manage the successful execution of the program. The contractor's program management approach shall be structured to satisfy the following aspects of effective program management:

- Centrally manage the overall contract to promote responsiveness and minimize costs;
- Provide a single point-of contact for each functional area of the SOW services;
- Establish direct, simple lines of communication between the contractor management staff and their CMS counterparts;
- Empower each level of the project organization with appropriate authorities and responsibilities; specifically, authorize decision-making at the lowest possible level of the organization, for effective, operationally sound solutions;
- Apply best practices for managing large-scale programs. These include both project management and Medicare management processes, supplemented by appropriate tools to streamline procedures and provide visibility on progress and risk; and
- Respond efficiently to fluctuating workloads to provide timely and appropriate alignment of critical resources to meet individual project objectives.

The contractor shall subscribe to sound principles as identified by the federal government, agency standards such as the CMS SDLC, and industry standards (e.g., Project Management Institute, IT Information Library). The contractor project management shall be responsible for developing project charters, managing project milestones, posting all required deliverables to designated resource libraries, and communicating project status, both orally and in writing, on a regular basis. The contractor shall conduct a weekly status dashboard review with CMS.

The contractor shall coordinate with project teams for other systems initiatives, such as esMD, RAC-DW and Provider Enrollment, Chain and Ownership System (PECOS). Although not specifically responsible for these other initiatives, the contractor shall be responsible for maintaining awareness of project

activities impacting Medicare systems, understand the significance and points of intersection, and participate in discussions with representatives from other project teams.

5.16 Requirements Validation

CMS and the contractor shall meet to jointly agree on the requirements once they have been defined before beginning the development phase of the project. They should include all necessary changes related to Medicare, FFM and any other as deemed necessary to maintain support for all user communities.

5.17 System Integration

The PCRS contractor shall maintain and develop current PCRS integration with external systems. As needed, system and network access, documentation, and support to CMS or their designated contacts shall be provided to maintain systems integration. The PCRS contractor shall identify opportunities and propose efficiencies to the architecture, logic, code, access methods, etc. of the existing integration model. The PCRS contractor shall provide documentation and conduct review checkpoints consistent with this SOW.
Some interface requirements include:

- Daily RAC-DW claim files and esMD Accepting incoming Content files from MACs education information, SMRC review information, and MAC/RAC/CERT review information;
- Batch integration interface with PECOS and/or NPPES;
- Export of DIRECT files to external data center;
- Provide web services for ProviderProviderCompliance.gov to provide provider information to that website;
- Real-time web service interfaces with ProviderMedicare.gov to provide application information and website user maintenance (password reset and account unlock); and
- Federation with Healthcare.gov and TQC Content Viewer to provide seamless integration between PCRS and those applications, not requiring CSR agents to re-authenticate.

5.18 Performance Optimization

5.18.1 PCRS Screen/View Optimization

As the CMS vision for the Provider compliance evolves, the PCRS must continue to adapt to users' needs. The contractor shall support the ongoing evolution of Provider compliance operations by conducting a thorough analysis of PCRS architecture, code, and supporting business processes with the goal of reducing redundancy, eliminating unnecessary components, and cleansing non-value-added data.

The analysis shall focus on ways that the PCRS can further support CMS goals of reducing cost of beneficiary service, and reducing handle time for all CSR channels. An additional component of the analysis shall include the review of legacy functionality no longer needed to support the CMS VCS strategy. Upon completion of this analysis, contractor shall implement appropriate changes in support of this optimization. Areas for review shall include but not be limited to: Call flow optimization and the

elimination of redundant data fields, cleanup of “Contact” records, and development of a plan for improving data quality on Non-Beneficiary call types.

The Contractor shall review and implement procedures to ensure maximum efficiency and flexibility within the PCRS architecture across all development, test, and production environments.

5.18.2 Integration Layer (IL)

The IL is the focal point of data gathering for the PCRS. The contractor shall perform an analysis of how the IL is being used by each of these systems. The contractor shall present this information to each channel’s contractor with recommendations for optimizing their use of methods available in the IL. In addition, the contractor shall provide CMS with their results including recommendations for changes to the IL such as new methods for retrieving data. The focus of this analysis shall be to reduce the overall IL server utilization thus expanding the capabilities of the IL hardware.

The Contractor shall review and implement procedures to ensure maximum efficiency and flexibility within the PCRS architecture across all development, test, and production environments.

5.19 External Source Systems

PCRS currently accesses data from numerous external systems to display to users. The contractor shall be responsible for the operation, enhancement, and maintenance of the PCRS-based access methods which connect to these systems, and to identify, troubleshoot, and resolve any issues which may arise. Examples of current and planned systems are: RAC-DW, esMD, PECOS, UCM, and MAS.

Over the course of this SOW, the external systems with which PCRS interfaces may move between Virtual Data Centers (VDC) or split or merge CICS regions. The PCRS contractor shall support these efforts and deliver a VDC Transition Plan which identifies the changes necessary to the PCRS application to accommodate this change, takes advantage of opportunities, avoids potential risks, and provides a risk mitigation strategy. The PCRS contractor shall demonstrate successful past performance working closely with one of the approved CMS VDC contractors in this effort.

The contractor shall be responsible for the operations and maintenance of the PCRS-based access methods which provide connectivity to the PCRS Source systems, and to identify, troubleshoot, and resolve any PCRS-based issues which may arise with these systems connecting to PCRS:

- RAC-DW;
- esMD;
- / ProviderMedicare.gov;
- DIRECT;
- Web Chat;
- Print Fulfillment; and
- MAS.

The contractor shall be responsible for the accuracy, timeliness, and completeness of PCRS data provided and/or made available to these systems.

5.20 System Operations

The PCRS contractor shall maintain an operational system, providing the necessary access, information, and assistance to CMS and other CMS contractors utilizing the system.

The PCRS shall be available for all end users 24 hours a day, 7 days a week.

PCRS shall be available as described in the Performance Measurement section. System availability shall be defined as hours PCRS is operational less any scheduled maintenance required for the upkeep of the PCRS.

The PCRS shall provide the ability to scale to the needs of CMS in the event of business needs or call spikes in usage.

The PCRS shall operate under all OTS stated security standards. Security details can be found in CMS' Information Security Acceptable Risk Safeguards (ARS) Version 2.0 and CMS' Core Set of Security Requirements Version 3.1.

The following documents shall be developed and maintained throughout the project lifecycle. These documents shall be delivered to CMS and stored in a centrally accessible version control document management system. System Development Lifecycle (SDLC) documents and review checkpoints include, but are not limited to:

- System Disposition Plan;
- Change Requests; and
- Problem Report.

5.21 Deployment

The contractor shall be responsible for supporting future PCRS deployment activities includingcontact center transitions or expansions, legacy system relocations, and expanded business services within CMS that require access to the PCRS The contractor shall plan, manage, coordinate, and execute all deployment activities.

Deployment plans shall be flexible and coordinated with all CMS components (e.g., OIS) and call center operations teams. Tasks within the scope of deployment efforts include site and data center connectivity, hardware and software procurement, communication procedures, initial set-up of site administrators, capacity and performance planning, upgrade and/or back-out planning, system roll-out scheduling, and pre/post-deployment data metrics collection. The contractor shall be responsible for maintaining the deployment plan, scheduling all relevant conference calls, and developing the written materials for communicating roles, responsibilities, and tasks within the deployment process to all deploying contractors/call center sites. The PCRS contractor shall support the learning and development contractor's deployment-related activities through knowledge transfer and environment support.

5.22 Help Desk Function

The PCRS contractor shall provide a Help function that provides multi-tiered support. The help desk generally considers any local site help desk as tier I and the cross-initiative help desk as tier II with appropriate escalation criteria and procedures. The cross-initiative help desk utilizes a service management application from the CMS standard software list to centralize help desk requests and route issues to tier III help desks, which have been identified as development teams, administrators, and other

technicians involved in the implementation and maintenance of the beneficiary service applications. The contractor shall be responsible for providing continuous tier III help desk support (24 hours a day, 7 days a week for Severity Level 1 and 2 tickets only) specializing in PCRS operations and maintenance. The contractor (tier III) shall utilize a service management application that is from the CMS standard software list, approved by CMS, and shall be required to utilize the cross-initiative help desk application at the discretion of CMS.

The contractor shall be responsible for developing help desk procedures that support integration with the cross-initiative help desk but that are flexible enough to operate with direct interaction with tier I help desks if necessary. A plan for implementing the expected help desk support is required and shall include descriptions of the necessary data points for the escalation of issues from either tier I or tier II to support timely resolution at tier III, definition of the expected notification and resolution timeframes, and the help desk staffing/communication model. The help desk support plan shall also consider the requirement to support configuration management and communicate identified change requests to the PCRS Change Control Board. The contractor shall maintain Help Desk Service Level Agreements (SLAs) established with CMS.

Continuous support shall be defined as the contractor being available to provide tier III support to all CMS designated sites 24 hours a day 7 days a week. This availability requires multiple people as key points of contact who are available 24x7x365. The contacts are responsible for initiating appropriate action immediately in response to the issue. While contact is mainly made by the VCS Help Desk, the contractor shall make these resources available to other VCS contractors who are authorized to communicate directly between contractors when there are issues which affect the availability or performance of any related system. In instances where the issue is not related to or the responsibility of the PCRS contractor, the contractor is expected to participate fully until the issue is resolved. There are approximately 100 tier III routine issues and 120 change request tickets per month.

5.23 National Training, Quality, and Content (TQC) Support

The contractor shall provide access to the appropriate PCRS Test, DIRECT User Acceptance Testing (UAT), Functional Test (FunTest), Training and Production environments as determined by capacity and availability. The training environment shall be available 24x7 with a maintenance window of Tuesday from 7:30-9:30 PM. The contractor shall coordinate any outages in the training environment whether they occur within or outside of the maintenance window.

The contractor shall communicate release information with the CMS test team, HIHs and others with a need to know designated TQC management team. Release information includes the schedule timeline, any associated tickets and the meeting schedule for coordination of activities. PCRS releases include agile (every 2 weeks) releases, major releases, quarterly mainframe releases, Interim releases/patches, and changes in contractor information resulting from new HIH onboarding, MAC/RAC/SMRC/CERT transitions.

The contractor shall coordinate with TQC in the following areas:

- Design sessions
- Sub-teams
- Use case reviews
- Project plan
- Release Management

The contractor shall coordinate 'content drop zones' with the esMD system where they can be automatically swept to the appropriate review contractor following the agreed upon process. The contractor shall maintain the jobs that will sweep all reports, CBRs, documentation cases and other content placed in the drop zones to the appropriate PCRS environment.

While HIHs are responsible for ensuring all documents are properly formed through the esMD gateway to the PCRS and free of any malicious code before they are moved to the drop zones, the PCRS contractor shall maintain a policy tester that scans all of the content (scripts and reference materials) every push. This policy tester scans content with the help of a White List. The White List of URLs contains an inventory of allowable Web site URLs. The contractor shall coordinate updates to the White List.

The contractor shall send notification that the policy tester rejected a file via an automated e-mail to the HIH

5.24 Knowledge Transfer

The PCRS contractor shall provide all documentation required for successful knowledge transfer. At a minimum, the Release Manifest shall be available. The Release Manifest shall contain, at a minimum, a summary of the changes being implemented and a detailed list and description of changes being implemented. The changes shall be identified by the change management system and Change Control Board identification number, and be distinguished between enhancements/new system functionality and defects. The Release Manifest shall identify all change requests closed through the current release.

5.25 System Maintenance

The PCRS contractor shall perform system maintenance to ensure the PCRS system is operating in an efficient manner. This includes but is not limited to: maintaining the infrastructure to support the functionality, capacity planning to accommodate planned future usage levels, and performance tuning to ensure data access, processing, and delivery activities are being completed within timeframes acceptable to CMS. The PCRS contractor shall coordinate changes to external systems required to support PCRS operations with the appropriate parties (e.g., CMSnet WAN changes).

The contractor shall ensure that the PCRS system is fully operational at all times. This includes ensuring all hardware and software is up to date with the proper maintenance patches and service packs. Additionally, spare parts shall be deliverable to the site within 4 hours of an emergency as determined by the government. The contractor shall keep the PCRS in sync will all systems it interacts with. With approval from CMS, the contractor shall implement new software technologies as they become available.

The changes outlined in this section are not included in the functional or quarterly system releases outlined elsewhere in the statement of work as they vary depending on the release cycles of hardware and software vendors and the changes enacted by systems with which the PCRS interacts. The list is provided to give historical context to the type of work required. Actual changes necessary during the period of performance named in this statement of work may differ, but will be similar in nature.

The PCRS contractor shall maintain the full application infrastructure (software, hardware, and local network) and PCRS data supporting PCRS operations. Included in this infrastructure is the equipment necessary to provide PCRS desktop functionality, ProviderCompliance.gov functionality, FFM desktop functionality and all supporting PCRS environments including development, testing, training, disaster recovery, and the PCRS Data Repository. The contractor shall procure annual maintenance agreements for all government owned hardware and software, and maintenance costs will be reimbursable under this contract. The contractor will not be responsible for the ProviderCompliance.gov Internet connectivity, web server hosting for Medicare.gov, or the physical desktop computer used by the CSRs at the contact center. The PCRS contractor shall develop and follow a planned systems maintenance schedule.

Currently the maintenance window is 1:00 am to 7:00 am Saturday morning as needed. Any unapproved variance from this schedule will be considered an unplanned outage. Additionally, the contractor shall perform a daily system health check of the PCRS Production system and report daily status of the major system components including backend systems accessed by the PCRS.

The PCRS contractor shall review the applications, infrastructure, network, security, and other system components on a regular basis, to be proposed by the contractor, and provide CMS with recommendations for potential upgrades or component decommissioning. Examples of upgrades may include: Operating System, system applications, and hardware components such as CPUs, memory, disk space, and network connectivity. Recommendations shall include several potential options, and their costs, benefits, and drawbacks for CMS to consider. The PCRS contractor shall submit a PCRS System Architecture document concurrent with the review and recommended system changes. It shall be the responsibility of the contractor to ensure appropriate recommendations are made in a timely manner. Requests and recommendations made outside of this cycle may not be considered by CMS.

The contractor shall propose solutions which improve efficiencies with hardware, software, required resources, software code, management of environments necessary to support operations, etc.

The contractor shall provide continuity in the build and deployment of quarterly integration layer (IL) releases and emergency functional releases. These additional IL and emergency releases are required to support business operations in parallel with the infrastructure upgrades.

The upgrades shall be performed with overlapping schedules to mitigate the risk of impact business operations or forecasted call center spike periods. Dependencies on specific classes of resources will require incremental dedicated resources during this period.

The contractor shall maintain an inventory of all hardware, software, licenses, and maintenance and support agreements which are used to operate the PCRS environments. The hardware inventory shall include, but not be limited to, manufacturer, model, hostname, serial number, specifications (CPU, memory, capacity, throughput, etc. as appropriate), operating system, applications, purpose/description, CMS asset tag information, physical location, and assigned environment. The software inventory shall include, but not be limited to, application, license type, number of licenses available, number of licenses in use, purpose/description, and assigned environment. The maintenance and support agreement inventory shall include, but not be limited to, description of support, item(s) supported (equipment, software, etc.), dates of support, and support vendor.

At time of changes to any information captured by the inventory documentation or on a quarterly basis, whichever is less, the contractor shall provide an update to the appropriate inventory documentation which shall indicate which items have been added, removed, or modified, and the purpose for the change.

The contractor shall maintain the National Profile Matrix of all PCRS views/roles/responsibilities, expected to be updated during quarterly releases.

5.26 Performance Tuning

The contractor shall support the collection of metrics with regard to the response time of PCRS and provide the response times for any PCRS transactions, or other metrics, as requested by CMS.

As part of the Application Service Management (ASM) team, the contractor shall support the ongoing development of Service Level Objectives. These Service Level Objectives will determine one measure of performance for the PCRS contractor with regard to the components of PCRS under their control. The contractor shall be responsible for the performance improvement initiatives with regard to these components. The contractor is not responsible for, but shall support the performance improvement of

those components of PCRS outside of the contractor's control. The contractor shall provide status of these initiatives to CMS upon request.

5.27 Application Monitoring

The ASM team shall monitor both the PCRS application performance and the performance of the discrete interconnected systems that comprise PCRS. Monitoring Agents are deployed onto the PCRS servers at various architectural and network layers. These agents monitor the server in terms of operating system and application performance metrics. Performance thresholds shall be customized to notify system administrators when the servers or application components have the potential to affect PCRS performance. Each monitoring agent maintains history for one year to support historical reporting and trending. Application performance scripts shall be run from various locations to monitor the end-to-end performance of PCRS. These scripts provide data regarding Oracle Database, Web server, and Integration Layer performance by measuring the time for discrete functions to take place within a PCRS user session.

The contractor shall support the trending and modeling of the PCRS. Data resulting from monitoring activities shall be stored and archived both on the local agent and in a central repository maintained in the Prod2 environment. System metrics reports shall be developed on a daily basis based on the past days data. These metrics shall then be modeled to show how these systems metrics will perform under many different scenarios including:

- Growth of PCRS, ProviderMedicare.gov, Web Chat & users;
- Capacity planning for projected upgrade of server hardware (CPU, memory, network, etc.); and
- Impact based on release metrics.

Application performance trending shall be collected, stored with past data and organized by timeframe. The data shall be contrasted with implementation baseline performance or trended across a period of interest. Transaction metrics shall consist of common PCRS functions as well as location specific functions. A web trace function shall be utilized (where allowed) to isolate network performance across the CMS.Net and to identify network performance issues within the local call center infrastructure. Some common PCRS function transactions, such as time to reach the web server, can be used for high-level network analysis. The contractor shall:

- Monitor all aspects of the PCRS systems (PCRS, Data Repository, DIRECT, Medicare Direct Registry etc.) 24x7x365 and be available immediately as needed. This includes all processes such as file transfers and data replication which are part of the production operating environment. All files received as part of PCRS Production support shall be loaded within 24 hours;
- Make monitoring dashboards available to CMS Helpdesk 24x7x365 through a browser based solution;
- Install, test, and deploy to production all operating system patches on a quarterly cycle or more frequently as needed based on the severity of the issues in the patch;
- Be responsible for developing joint operating agreements (JOA) with other VCS contractors RAC-DW, PECOS, etc.);
- Host a weekly change control, change management call with all VCS parties to exchange information on upcoming changes in the PCRS environment;

- Provide functional and regression testing for all development The contractor shall provide Performance/Load test all development changes;

- Support and maintain revisions to BCC Local System Administrators (LSA) Training materials for PCRS functional releases, Contingency Data Base functional releases, and any additional interim releases impacting LSA roles/responsibilities. This is to include support and communication daily, weekly, monthly inquiries from LSAs regarding system functionality/changes;

- Own and maintain a National Profile Matrix of all PCRS views/responsibilities as needed;

- Fully support all source system changes to include the PCRS MAC test mainframes; and

- Fully support all audits.

5.28 Transition

5.28.1 PCRS Contractor and Infrastructure Transition

The contractor shall plan a low-risk approach to transitioning all of the PCRS activities and infrastructure environments to the contractor selected for the new contract. The plan shall contain all the necessary detail to implement a transition that will be transparent to the PCRS user community. This plan shall be submitted to CMS for approval within 30 days of the effective date of the contract.
CMS is committed to ensuring that the transition is seamless and non-disruptive to the public, beneficiaries, PCRS user community, and to other applications and contractors required to integrate with the PCRS. It is critical that the PCRS contractor propose a realistic transition plan that identifies and addresses all factors and risks, and includes contingency plans for missed milestones or other impacts to the schedule. In no case can a production environment (Prod 1 or Prod 2) be unavailable for more than 72 hours.

Successful transition is defined as handling 100% of PCRS system workload, documented acceptance testing of all operational and technology components of the PCRS system, and full engagement in PCRS project management.

The contractor shall work in cooperation with other CMS contractors to ensure a smooth and seamless transition to full operations. During the transition period and ongoing operations, the contractor shall coordinate and support regular status meetings with CMS. The incoming contractor will be required to coordinate all aspects of the transition with the incumbent contractor.

If determined to be necessary by CMS at a future date, an additional transition plan shall be developed to migrate the PCRS, Data Repository, and ProviderCompliance.gov production and/or disaster recovery system infrastructure to a designated CMS Enterprise Data Center (EDC). The contractor shall coordinate efforts with CMS and the EDC hosting contractor to perform the transition and shall be responsible to define and implement the appropriate SOPs and SLAs with the EDC contractor to maintain the infrastructure. Such a transition will be initiated via a change order as applicable.

5.28.2 Non-PCRS Transitions

The PCRS contractor shall support contractor, system, and infrastructure transitions that occur outside the scope of the PCRS application environment, but effect the PCRS application, PCRS users, or an application integrated with PCRS.

The PCRS contractor shall support these efforts and deliver a plan which identifies the changes necessary to the PCRS application and/or architecture to accommodate these changes, potential risks, and a risk mitigation strategy. The PCRS contractor shall work closely with CMS and any additional contractors in these efforts.

5.29 System Quality Assurance

Standardized software quality assurance policies are an integral part of CMS's systems development life cycle (SDLC). Sound quality assurance processes have been found to reduce the number of errors and the cost of rework associated with new systems. The contractor shall adhere to CMS' quality assurance standards and meet all policy requirements as contained in the following references:

- The Contractor shall perform all work under this contract in accordance with International Organization for Standardization (ISO) 9001:2008 standards; and
- CCS IDIQ requirement C.3.1, stating "The Contractor shall perform all work under this contract in accordance with CMMI Level 3, Carnegie-Mellon Software Engineering Institute's capability Maturity Model Integration framework, staged representation."

The contractor shall support all major and minor development releases, infrastructure hardware changes, major and minor software upgrades, all operating system patches and data base patches. This support shall include all Next Generation Desktop (NDG), IL, Oracle Service Bus, Web Chat, Contingency Data Base and Data Repository (DR) environments such as:

- Production 1 – Primary PCRS operating environment;
- Production 2 – Full copy, secondary instance of the PCRS operating environment;
- Functional Test – Where all changes and defects are tested for major and minor releases;
- Test – Where all performance testing and tuning is conducted for releases, upgrades and patching;
- UAT – Used for User acceptance testing;
- Training – Used for training associates on new functional changes; and
- Fix Test – Used to test emergency interim changes outside major releases.

This testing support shall include thorough analysis of all changes and defects, an all-inclusive test strategy, a comprehensive test plan that shows all evidence of testing outcomes for each test executed, coordination and retesting of defects found in development and User Acceptance Testing (UAT), deployment checkouts on all non-production and production environments, and performance testing and tuning associated with applicable changes.

The types of testing conducted for PCRS shall include:

- New function and defect testing – Manually test all functional and defect changes;

- Regression testing - Use automated tools and manual exploratory testing methods to review areas of interest to make sure that new defect and functional changes do not disrupt other necessary functionality;

- Load testing – Use automated testing tools to apply a simulated user load on the environmental hardware to make sure it can handle the changes made during release, upgrades, patches and hardware exchanges;

- Performance testing/tuning - Use automated testing tools to apply a simulated user load on the environmental hardware to make sure the changes made during release, upgrades, patches and hardware exchanges don't reduce response times and introduce heavy system capacity. The goal is to determine how fast some aspect of a system or its supporting hardware and software, performs under a specified workload. The idea is to identify the level of acceptable system performance (e.g., CPU, memory use, response time etc.) and run a series of tests using usual workloads and identify if the system remains in an acceptable range of performance;

- Stress testing - Subjecting a system to an unreasonable load while denying it the resources (e.g., RAM, disc, CPU, interrupts, etc.) needed to process that load. The idea is to stress a system to the breaking point in order to find bugs that will make that break potentially harmful;

- Back out Testing – The contractor shall utilize the non-production PCRS environment to conduct release back out testing to ensure that all new code can be successfully backed out of the production environment without causing any interruption after the environment is brought back online; and

- 508 Compliance and Usability testing – Use the JAWS application to make sure that all views, screens and tabs work for users that use JAWS so the PCRS and Contingency Database applications can identify all compliance tags, navigation features, screen data, and screen layout options.

In addition, the contractor shall identify and share Quality Assurance best practices.

5.30 System Configuration Management

The Contractor shall conduct Configuration Management (CM) on all projects and releases in accordance with CMS-approved CM policies, procedures, government and industry standards. The Contractor shall develop and maintain comprehensive configuration management plans for identifying, tracking, and recording changes to the various components of the desktop platform and submit it to the Government for approval prior to any design, development, or modeling. This includes changes resulting from the various initiatives that impact the PCRS (e.g., ProviderCompliance.gov Beneficiary Web Portal, CTI, Application Service Management, IVR, etc.), changes to PCRS content (CSR scripting, reference materials, web templates, etc.), and changes identified by the Change Control Board (CCB).

The PCRS Change Control Board, utilizing the processes outlined in approved Change Management procedures, shall govern all proposed software changes that are within the scope of this contract. The CCB is comprised of representatives from several contact centers' operations teams, training and content teams, independent quality assurance, and other VCS initiative teams. The CCB reviews all items identified within the configuration management plan, with special emphasis on change requests identified in relation to call center help desk requests. The contractor shall be responsible for supporting the CCB through active representation and participation in all meetings and functional workgroup JAD sessions.

The Contractor shall provide visibility into the change management system by delivering a complete list of open change requests (system defects, planned improvements, identified enhancements, etc.) to the Change Control Board on a monthly basis or as requested for review by the participants. The contractor

shall also notify the CCB of any closure or change in status of any change requests previously reviewed and prioritized by the CCB.

The Contractor shall:

- Provide fundamental Configuration Management services to include configuration identification, control, auditing and status accounting;

- Provide and support a process of identifying the configuration items that comprise the product being delivered to the government. A configuration item is a product (hardware and/or software) that has an end-user purpose. These attributes are recorded in configuration documentation and base lined;

- Perform Configuration audits. Configuration Audits are broken into functional and physical configuration audits. Physical Audits of configuration Items occur prior to the provisioning of a software or hardware change. Functional configuration audits ensure that functional and performance attributes of the configuration item are achieved during a test phase prior to provisioning to a production environment;

- Perform Build Request Peer Reviews to ensure the stakeholders of a change to a production system have reviewed the change for accuracy and deployment prior to implementation;

- Maintain systems for automated discovery and reporting of drift to Systems Configuration Items. Systems Configuration Items include but are not limited to operating system, database, network, consumer off the shelf software, custom scripts, custom batch jobs and application configurable parameters;

- Utilize a process and tools to manage an appropriate level of approvals for changes to test and production environments;

- Utilize tools for managing and reporting the current baseline(s) being utilized in any test or production environment;

- Have a back out plan in place for any production impacting change provisioned to a production environment;

- Be able to recover any environment to a previously deployed software baseline;

- Have systems and processes for the objective analysis and auditing of the effectiveness of the configuration management process and tools;

- Conduct routine Status Accounting Audits of both software and systems administration tasks to all environments;

- Ensure changes made in maintenance are incorporated and included in the next release (Parallel and Concurrent Development);

- Provide a process for insuring defects and enhancements delivered in concurrent and parallel releases are included and tested in the current release while in development, aka. Cloning;

- Enable branching and merging of source code to enable parallel development;

- Provide Configuration Management processes and a plan to provide a high-availability deployment mechanism to minimize customer outage time;

- Provide an expedited Production Support process to address emergency deployments while not compromising Configuration Management best practices;
- Provide user administrative support for Configuration Management systems;
- Utilize a systematic approach for the acquisition of access to Configuration Management tools and systems;
- Create roles and responsibilities within the systems for Configuration Management that will provide only the information necessary for the designated user profile;
- Provide training on the systems for Configuration Management to the program stakeholders; and
- Provide access to external business partners at CMS discretion for collaboration and coordination between stakeholder groups;
- Provide systems administration support for the Configuration Management systems;
- Keep application and systems software supporting the Configuration Management system on supported patch levels that are supported by other components of the system;
- Upgrade the application and systems software to keep the Configuration Management system on a supported platform;
- Maintain current licensing on Configuration Management systems and software components and communicate needs for revisions to licensing;
- Provide UNIX, Windows, Database and Network systems administration in support of Configuration Management systems;
- Provide for the security of access to the Configuration Management systems; and
- Provide for the security of the systems supporting the Configuration Management systems.

The Contractor shall provide Configuration Management Tools administration and technical support to support the delivery of services in a manner consistent with CMS policies and government and industry best practices. Configuration management processes include but are not limited to defect tracking, change management, version control, code merging and branching, parallel and concurrent development, system monitoring and environment management. The Contractor shall:

- Provide a system for managing requirements;
- Provide a system for managing defects and enhancement requests;
- Provide a system for version controlling, branching, merging, base lining and auditing source code;
- Generate release manifests from the systems managing defects and enhancements;
- Maintain a system of Root Cause Analysis for Severity 1 Production issues;
- Provide a system for discovering, reporting and remediating systems drift against a baseline;

- Provide both a thin and thick client access to systems for Configuration Management;
- Make the systems for supporting Configuration Management available to multiple contractors as required by CMS;
- Provide incremental improvements to the tools and processes supporting the Configuration Management systems for all process stakeholders;
- Provide training on the systems for Configuration Management; and
- Provide technical support for the tools that support the Configuration Management Process.

The Contractor shall have a Change Management process and maintain records of changes to both Test and Production Environments. The Contractor shall:

- Provide a process and tools to manage Changes Requests to Test, Training, and Production environments;
- Maintain records of the she status of requested changes;
- Trace requested software changes to tests performed prior to their implementation in production;
- Institutionalize a process of incrementally improving the Change Management Process;
- Provide role-based approvals in the Change Management process;
- Provide reports on pending proposals in support of the Change Control Board;
- Generate Release Manifests for all software releases from the systems of record;
- Provide a means of rapidly re-purposing an environment without requiring a full software build;
- Define and support a process to remediate changes across environments for the purpose of maintaining consistency of software baselines;
- Perform back out testing on major software releases;
- Be able to back out an environment to a previously deployed software baseline;
- Be able to discover, report and remediate system changes on production environments;
- Maintain a process for managing changes to individual configuration items which are external to baselines for emergency situations requiring rapid response;
- Maintain a Process for the Systematic Identification of Process Improvement opportunities and track them to resolution;
- Tailor Change Management processes as required to enhance productivity and efficiency of response time to the customer;
- Expeditiously repurpose environments to support multiple and concurrent software releases while maintaining support for the current production environment; and
- Keep the Prod-2 Data Center environment up to date with the Prod-1 Data Center deployed software changes so that the environment can be utilized in the event of disaster recovery or

maintenance scenarios affecting Production such as patching and operating system maintenance.

5.30.1 PCRS Functional Release Management

The contractor shall define a release management plan by which they shall manage and schedule all PCRS functional releases for the desktop application and supporting applications (e.g., integration, security, etc.). At a minimum, the contractor shall provide a project plan for each release detailing the tasks and timeframes for the completion of each release.

The PCRS Contractor shall facilitate communication with CMS and other Contractors by hosting conference calls, web meetings (using an iPad friendly technology such as GoTo Meetings or WebEx), obtaining conference lines, collaboration space, etc. The PCRS Contractor shall establish and maintain a secure SharePoint site (or section of the PCRS) that can be accessed by CMS and other contractors involved in the development of the PCRS System.

5.31 Business Continuity

The Business continuity strategy shall include the processes and procedures that PCRS must put in place to ensure that essential functions can continue during and after a disaster. This shall not be limited to information systems, but extend to include all aspects of PCRS system business operations. It shall be an integrated set of formalized procedures and resource information that CMS can use to recover from a disaster that causes a disruption to business operations. The plan shall also seek to prevent interruption of mission-critical services, and to reestablish full functionality as swiftly and smoothly as possible.

The contractor shall develop and implement a plan for identifying, controlling, and mitigating risk. The plan shall describe the complete recovery plan in a step-by-step scenario for recovering from a disaster and catastrophic failure. In addition, the contractor shall provide, at a minimum, the following items as part of their Business Continuity plan:

- Risk Management Plan – A document that outlines specific risks and possible mitigation strategies relating to lack of resources, lack of information, or lack of control over the process, shall also include any service level agreements that may be needed during the project life cycle. The plan shall also address the use of CMS-purchased Application Service Management (ASM) tools to proactively identify and mitigate network and infrastructure problems and outages before they occur;

- IT Disaster Recovery Plan - This plan shall incorporate the redundancy provided by a system and data recovery strategy, as directed by CMS. The contractor shall provide the details of their system recovery strategy (e.g., dual production sites, outlining critical business functions supported by PCRS and when these functions will be restored. Recovery Time Objectives (RTO) shall be detailed in this plan and Service Level Agreements shall be based on the agreed upon RTO. The PCRS contractor shall recommend the data recovery strategy, and tools to implement the strategy, that will be employed at the disaster recovery site. Recovery Point Objectives (RPO) shall be defined and Service Level Agreements will be developed based upon the defined RPO. System recovery strategies, which could potentially be used during planned maintenance outages, shall be given a higher level priority than data recovery strategies due to the nature of business functions of CCOG; and

- Testing Plan – This plan refines the steps developed in the Business Continuity Plan and the IT Disaster Recovery Plan. The PCRS contractor shall define milestones and test dates from guidance provided by CMS to test and prove system and data recovery. This plan shall be executed twice annually at a minimum to ensure the overall viability of the business continuity plans.

5.31.1 PCRS Disaster Recovery

The contractor shall maintain an IT Disaster Recovery Strategy for PCRS and ProviderCompliance.gov. The strategy shall include both system recovery and data recovery sections, for planned and unplanned events. The contractor shall leverage the current PCRS Prod 2 hardware and software in place at the CMS Data Center in Baltimore, MD. The contractor may propose alternate solutions for Disaster Recovery, accounting for cost, recovery time, and flexibility of environment usage. The Disaster Recovery Prod 2 site must have sufficient geographical separation (minimum of 450 airline miles) from the primary production site Prod 1 so as to avoid the impact of geographical disaster (e.g. earth quake, major weather event or terrorist act). The proposal shall account for transitioning any infrastructure.

For system and data recovery, the contractor shall create and implement a strategy in the event of a disaster or other outage, planned or unplanned.

In the case of unplanned outages, the PCRS and ProviderCompliance.gov systems shall be offline for no more than four (4) hours. In the case of planned outages, the PCRS and ProviderCompliance.gov systems shall be offline for no more than four (4) hours. The contractor shall create and implement a strategy for data recovery in the event of a disaster or other outage, planned or unplanned. The PCRS shall experience no data loss for planned outages.

The contractor may pursue a technology they believe will meet or exceed the system and data time recovery requirements set forth by CMS. CMS expects a secondary, off-site, environment that will continue to perform PCRS functionality should PCRS production not be available.

The PCRS contractor shall ensure that the Disaster Recovery (DR) environment is up-to-date with the PCRS Production environment. A plan shall be required which will detail the process for maintaining the PCRS DR environment and keeping it current with PCRS Production data, builds, integration layer changes, and infrastructure upgrades. This plan will be contingent on what strategy the PCRS contractor implements for an IT Disaster Recovery Strategy. The contractor shall maintain the system implemented for Disaster Recovery; this system shall 'mirror' production. This includes being current with all patches and upgrades made to the production system.

In support of disaster recovery, the contractor shall conduct the following:

- Maintain up-to-date data for all PCRS systems;
- Apply all PCRS patches, updates, and builds as available;
- Apply all PCRS integration layer patches, updates, and builds as available;
- Maintain the infrastructure by providing and maintaining the equipment necessary to implement the Disaster Recovery plan;
- Create and maintain standard operating procedures (SOP) that includes roles, responsibilities, and contact information for individuals involved with the SOP; and

  Develop communication plans that identify PCRS contractor participants, CMS participants, and any other relevant business stakeholders. The communications plan will outline SOP(s) for migrating to and from the disaster recovery solution and decision points with the required participating individuals.

5.32 Document / Imaging Management / Capture System

The contractor shall support the Document Imaging solution by integrating the PCRS with the CMS Enterprise Content Management (ECM) system. The ECM allows CMS users in any location to view the imaged inbound documents and refer or manage the case using PCRS tools. The contractor shall develop a solution that allows simple, efficient scanning of documents hard copy from the 3rd floor of the CMS central building directly into the PCRS, for example this requirement could be met if the contractor requested permission to and was approved. Connect the networked scanner in C3 -- -- to the PCRS system. This requirement could also be met by purchasing, installing and configuring a scanner with a Kno2 button configured to allow the scanner to populate the PCRS. For the purpose of this SOW, this solution shall be called the "CMS Capture System".

The contractor shall ensure PCRS is enhanced to incorporate changes and updates to ECM, and provide the following services in support of the PCRS/ECM integration:

- Development of PCRS Integration to the ECM;
- Development of PCRS Integration to the IACS security system;
- Unit and system testing;
- Performance and volume testing;
- Support of User Acceptance Testing;
- Production roll-out support to the BCC Contractor inbound correspondence scanning site, to the CMS users working on cases correspondence and to the BCC Contractor call centers where Tier II users will be able to view inbound documents as part of answering later telephone inquiries as changes to the BCC site occur;
- Ongoing maintenance of hardware and software for the Capture systems and IBM Content Manager environments needed to support development, testing, training and on-going release support; and
- Maintenance of components in the integrated test environment to allow capacity and volume testing of a full complement of 250 inbound correspondence CSR's (350 for expansion purposes) and 1000 telephone CSR's viewing documents (1500 for expansion purposes).

5.33 PCG Provider Profile and Referrals to PCG

To improve the current process of each contractor tracking and managing their contracts/services, the PCRS contractor shall create a formal referral process for users to follow. The referrals shall be created in such a manner that no further processing is needed in the PCRS. The contractor shall initiate the process for hospital and home health education with a given provider in such a manner that other categories of issues beyond Telemarketing and Medicaid Fraud can be added without requiring a software release. The output of the process must be created in such a manner that the data is sent to the National Data Warehouse for reporting to PCG.

The contractor shall create a read-only Provider view for PCG users. The view will allow PCG users to search for a Beneficiary without starting a new call. The view shall ensure that

- No activity records are created;
- No updates to beneficiary data are made; and

- No orders (MSNs, replacement Medicare card, etc.) are placed.

The new view shall be assignable via responsibility changes.

5.34 PCRS Training

The contractor shall deliver up to 4 training classes per year specific to the functionality of the PCRS application. This training shall provide enough background on the (PCRS) for a new user to be able to perform research in the PCRS. In addition, the training shall include all Provider functionality included in the PCRS for PCG. At a minimum the training shall include the following topics:

- Introduction to and Overview of the PCRS;
- Basic PCRS Navigation;
- How to locate Provider screens;
- How Provider screens can be used;
- How to Search for Providers;
- How to Search for Claims by Provider; and
- Password Self Service (PSS) training.

The contractor shall provide instructor lead training at PCG's discretion. The training shall take place at locations determined by PCG based on their needs. Webinar based training shall be considered by the contractor in such a manner that protected/secure information of any kind is not compromised. In addition to the webinar, but subject to revisions, the contractor shall offer classes in Baltimore, Maryland and Washington D.C.

As functionality used by PCG changes in the PCRS, the contractor shall update the course materials to keep them in sync with the current production release of the PCRS. The contractor shall provide updated materials electronically to PCG. At the discretion of PCG, the contractor shall provide instructor lead training (face to face or via webinar if possible) which explains the impact of the changes in PCRS functionality.

5.35 ProviderMedicare.gov Hosting

The PCRS contractor shall maintain an approved CMS EDC or demonstrate a past performance successfully working closely with the Enterprise Data Center contractor in this effort to host the .NET environment of ProviderMedicare.gov, providing the necessary access, information, and assistance to CMS and other CMS contractors utilizing the system.

The environment splits the presentation and application layers from their original to a stand-alone environment. This allows for more flexibility in the changing of the user interface. The contractor shall support all releases to the .NET environment as needed by the ProviderCompliance.gov contractor.

In conjunction with CMS and the ProviderCompliance.gov development team, the contractor shall maintain eight ProviderCompliance.gov environments: Production 1, Production 2, and Test 1, Test 2, UAT, Fix Test, Functional Test 1 and Functional Test 2.

The contractor shall continue to support all existing environments for which ProviderCompliance.gov integrates with via web services. Certain components of these environments are necessary to fully support ProviderCompliance.gov. The contractor shall make recommendations to CMS on how the environments can be optimized to best support the new ProviderCompliance.gov architecture.

5.35.1 Operational Requirements

The ProviderCompliance.gov and MyMedicare.gov environments shall be available as described in the Performance Measurement section, namely an uptime of 99.0%, 24x7x365. System availability shall be defined as all hours less any scheduled maintenance required for the upkeep of ProviderCompliance.gov and MyMedicare.gov.

The contractor shall provide the ability to scale ProviderCompliance.gov and MyMedicare.gov to meet the needs of CMS.

The contractor shall provide primary and backup Internet circuits and services at both the Production 1 and the Production 2 Data Centers.

ProviderCompliance.gov shall operate under all CMS security standards. Security details can be found in CMS' Information Security Acceptable Risk Safeguards (ARS) Version 1.0 (ARS 5.0 was renamed 1.0) and CMS' Technical Reference Architecture (TRA) 2.0 including all applicable TRA supplements.

Note: A third Party contractor is responsible for registering, managing, etc., all external domain names on behalf of CMS. That contractor is also responsible for implementing Domain Name Server (DNS) changes and renewing Secure Socket Layer (SSL) certificates on behalf of CMS OEABS and NGS. They are also subsequently answerable for the routing of MyMedicare.gov Internet traffic to the Prod 1 and Prod 2 data centers in support of MBP.

The National Data Warehouse contractor is responsible for managing all internal CMS DNS changes supporting ProviderCompliance.gov.

5.36 Web Chat

When a provider or other user of ProviderMedicare.gov Web site, is using one of these systems, he or she will be given the chance to chat with a CSR at various points in the system.

When a web chat session is requested, the interaction shall be routed to the routing engine that will have visibility to the CSRs who are available to answer web chat queries. The routing engine shall connect the provider with a CSR who meets the routing criteria as soon as an appropriate CSR becomes available. The PCRS shall allow BCC supervisors and Workforce managers to set up each CSR with the ability to handle one or multiple sessions as their training and experience permits.

Web Chat activities shall be handled as a separate channel within the PCRS. When a connection is made between a web chat user and a CSR, the PCRS shall create an activity record to serve as the basic documentation of this interaction. Specific actions taken during a Web Chat session shall be stored in the PCRS to record each interaction between user and CSR. A CSR shall be

able to use the other research tools within PCRS to find and submit answers to the web chat user. Sub-activities shall be created to reflect and to document these actions. All Web Chat interactions shall be available for all CSRs and PCRS users to see a complete picture of the interactions for a beneficiary across channels. Activities and sub-activities created during Web Chat sessions shall be include in the files sent to the PCRS.

The PCRS contractor shall design, procure, build, implement and support four Web Chat environments: Production 1, Production 2, Dev and Test. The PCRS shall support all hardware, software, and system changes to integrate Web Chat functionality within the architecture. The contractor shall be required to employ personnel with advanced knowledge of routing capabilities within their support team that has 5-7 years of experience with current CMS platforms who are able to design, support and deliver on all Web Chat activities and capabilities.

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5.37 Government Property

CMS will not be providing workspace, computers, or any office equipment. Conference rooms at CMS may be available as needed and will be scheduled by the CMS Contracting Officer's Representative (COR). The PCRS contractor or one of its subsidiaries shall have a physical presence within 50 miles of the CMS building at 7500 Security Blvd. The PCRS contractor shall make a conference room available to CMS staff and other contractor staff. This contractor will also need to facilitate conference calls, web meetings, obtain conference lines, etc.

5.38 Communications

The contractor's Program Manager or designee shall be on-call during business hours for coordination with the Government's Contracting Officer, Project Officer, CORs, other designated representative, and/or representatives of contractor-awarded work under this IDIQ contract. The program manager or qualified designee shall be available and accessible 24 hours a day, seven days a week to discuss operational issues with the Project Officer or COR.

CMS emphasizes the importance that the contractor be proactive in notifying CMS of any developing situation that may impact operations, service to callers, or any other contractual issue. Contractor shall advise CMS, in advance whenever possible, of any indication that a potential problem may be developing. In the case of a known impending problem, contractor shall be forthcoming with CMS to address the risks and to identify mitigation strategies.

5.39 Coordination and Cooperation

This PCRS contract requires cooperation, coordination, and integration among contractors, CMS, and companies that have other contractual relationships with CMS. This may include contact center operations contractors, as well as systems integrators, and quality assurance, national training, and network telecommunication contractors, among others. The contractor shall also communicate and coordinate with CMS staff, such as the Medicare Beneficiary Ombudsman, management, and staff. CMS may designate other contractors with which the contractor shall fully cooperate.

5.40 Collaboration

In the multi-contractor environment, the contractor may be required by CMS to collaborate with other contractors to fulfill the objectives of the government. This may include, but not be limited to, contact center operations contractors, systems integrators, quality assurance contractors, training and content providers, and network telecommunication contractors.

5.41 Joint Operating Agreements

When necessary, CMS will work with the contractor to execute a Joint Operating Agreement (JOA) with CMS designated contractors that defines the roles and responsibilities and creates mutually agreed upon and cost effective methods to work with and support CMS' mission. At a minimum, JOAs shall be established for PCRS relationships with the following: transitioning contact center contractors, independent quality assurance contractors, data warehouse contractors, network contractors, and others as specified by CMS.

A JOA describes the work that needs to be accomplished, and the roles and responsibilities of each signatory for the success of the task or project. It includes specifics about who shall do what, when, and for whom. The JOA also spells out the process the parties shall follow if either believes that the other is not following the agreement. CMS will provide a draft framework for the JOA to the contractor at contract award.

The JOA shall be updated on a quarterly basis for the first year, by 15 days following the end of each calendar quarter: January 15th, April 15th, July 15th, and October 15th. After the first year, updates shall occur semi-annually, by January 15th and July 15th. The Contractor shall perform the roles and responsibilities in the updated JOA. The contractor shall identify and negotiate any changes required to appropriately address the roles and responsibilities of the parties of the JOA.

5.42 Correct Deficiencies

The contractor shall correct any security deficiencies, conditions, weaknesses, findings, or gaps identified by all audits, reviews, evaluations, tests and assessments, including the Statement on Auditing Standards (SAS) -70 Reviews, Inspector General Audits, self-assessments, and Vulnerability Assessments in a timely manner.

The contractor shall develop corrective action plans for all identified weaknesses, findings, gaps, or other deficiencies in accordance with the BPSSM or as otherwise directed by CMS.

The contractor shall correct weaknesses, findings, gaps, or other deficiencies within 90 calendar days of receipt of the final audit or evaluation report, unless authorized by CMS otherwise.

The contractor shall validate and document that corrective actions are implemented, tested and effective. Contractor shall provide attestation and documentation of corrective actions to CMS upon request.

The contractor shall provide corrective action plans and quarterly progress reports to CMS in accordance to the BPSSM or otherwise as directed by CMS.

5.43 Section 508 Compliance

This Statement of Work is subject to the requirements of Section H.9 of the CCS IDIQ Statement of Work and the standards, policies, and procedures below. In the event of conflicts between the referenced documents below and this Contract, the Contract shall take precedence.

5.44 Rehabilitation Act, Section 508 Accessibility Standards

- 29 U.S.C. 794d (Rehabilitation Act as amended);
- 36 CFR 1194 (508 Standards);
- www.access-board.gov/sec508/508standards.htm (508 standards);
- FAR 39.2 (Section 508); and
- CMS/HHS Standards, policies and procedures (Section 508).

Regardless of format, all Web content or communications materials produced, including text, audio or video - must conform to applicable Section 508 standards to allow federal employees and members of the public with disabilities to access information that is comparable to information provided to persons without disabilities. All contractors (including subcontractors) or consultants responsible for preparing or posting content must comply with applicable Section 508 accessibility standards, and where applicable, those set forth in the referenced policy or standards documents above. Remediation of any materials that do not comply with the applicable provisions of 36 CFR Part 1194 as set forth in the Contract, shall be the responsibility of the contractor or consultant. The specific 508 standards applicable to this requirement are as follows: (See **Attachment 7**)

- Section 1194.21 – Software Applications and Operating Systems;
- Section 1194.22 – Web-based Intranet and Internet Information;
- Section 1194.31 – Functional Performance Criteria; and
- Section 1194.41 – Information, Documentation and Support.

5.45 Other

For applications and interface that use internet protocol, the PCRS contractor shall:

- Meet all Internet Protocol compliance requirements specified in FAR 11.002(g); and
- Comply with all HHS, Office of the Chief Information Officer (OCIO) standards for security configurations and encryption.

The contractor must meet all FISMA Requirements for sharing PHI with a provider. This may require a provider be registered in the DIRECT Register.

The PCRS contractor shall comply with all CMS records management requirements in accordance with HHS/OCIO's policy on records management at http://www.hhs.gov/ocio/policy/2007-0004.001.html.

When building the ProviderMedicare.gov site, PCRS contractor shall comply with all applicable Section 508 accessibility standards from the United States Access Board (36 CFR Part 1194)[1]. The contractor will be required to provide a 1 Page HHS Section 508 Annual Report to the COR.

6. Specific Tasks

6.1 Task 1 - Build, Host, and Maintain PCRS

The contractor shall build, host, and maintain a Provider Compliance Reporting System (PCRS) as a module or add-on feature to an *existing* documentation database or workflow management tool that:

-
- Is on the CMSnet; and
- Is easily configurable.

The contractor shall support numerous instances including: production-1, development, testing, training, user acceptance testing, functional test, fix test (hot fixes), and others.

Unless the system is hosted at the Baltimore Data Center,the contractor shall be responsible for all aspects of this data center such asphysical security, power, climate control, power backup, and fire suppression to ensure the proper operating environment. The contractor shall implement and maintain all network infrastructures from the first point of entry of CMSnet. The contractor shall monitor and report on all aspects of their data center 24x7x365.

The contractor shall support a contingency database center environment. This data center is referred to as Production-2 site (Prod 2) with full replication between the current primary Production site (Prod 1) and Prod-2.

Both PCRS environments shall be available with an uptime of 99.0%, 24x7x365. System availability shall be defined as all hours less any scheduled maintenance required for the upkeep of the PCRS.

6.1.1 Agile Development Process

Within ***10 days of contract award***, the PCRS contractor must:

- Begin holding periodic meetings with CMS staff, the RAC-DW contractor and the PCRS Requirements Contractor to begin understanding the current workflow and reporting needs of CMS; and
- Begin the first monthly build cycle of the PCRS. Each monthly build cycle involves:
  - 1 week of discussing the requirements (which will be developed by another contractor);
  - 2 weeks of code development;
  - 5 days of testing;
  - On or before the 28th day of the cycle, the PCRS contractor communicating to the COR in writing (via email) that build is completed and ready for deployment;
  - On or before the 29th day of the cycle, the CMS COR communicating to the PCRS contractor in writing (via email) that the build is approved for deployment; and

[1] See HHSAR 311.70 and Part III (b) (5), EIT Accessibility Standards, of the AP.

- On or before the 30th day of the cycle, the PCRS contractor deploying the release and communicating to the COR in writing (via email) the date/time the build was deployed.

6.1.2 Initial Release of PCRS (The First Build)

Within ***60 days of contract award***, the PCRS shall:

- Assign userids and passwords to up to 100 staff at CMS, MACs and SMRC; and
- Begin testing of Release 1.1.

Within ***90 days of contract award***, the PCRS contractor shall deploy Release 1.1 which:

- Allows staff from CMS, MACs, and SMRC (up to 100 concurrent users) to visualize all review and education information that has been entered into the PCRS in 2 views;
- A contractor view (a summary of all the data that has been entered by a MAC or SMRC is visible only to the contractor who entered it and CMS). This includes submission dates;
- A provider profile view:
    - For hospitals and home health agencies only; and
    - That displays:
        - Claims reviewed by the MAC during round 1 and round 2 of the hospital Probe & Educate process; and
        - Claims reviewed by the SMRC during the Home Health Special Study;
- **General Information** – This section could include high level provider information that may be pulled from NPPES and/or PECOS;
- **Activity Status** – This section could include information entered by contractors (i.e. RACs, MACs, DMACs, SMRC, ZPICs) and CPI;
- **Provider Education** – This section could include information entered by our PCG contractors (i.e. MACs, DMACs, CBR);
- **Claims Data** – This section could include high level expenditure and service data that would represent a snapshot in time (i.e. end of each CY). This data could possibly be imported from the IDR or queried through STARS/Business Objects; and
- **Peer Comparison Statistics & Score** – This section could include scores showing how a given provider compares to their peers based on several metrics. A purpose of this section could be to determine providers that may require additional reviews, education, oversight or referrals.

The PCRS contractor shall offer PCRS user training to up to 100 users at CMS, MACs, and SMRC.

- Allows MACs and SMRC data-entry of corrections;
- Connect to the RAC Data Warehouse (RAC-DW) to access claim level information about RAC-conducted reviews of hospitals and home health agencies;
- Support the system-to-system uploading of:

- Hospital data from MACs and the RAC-DW; and
- Home health data from SMRC and MACs;

- Support Fax-Capture:
  - Inform the CMS COR as to what fax number to give out to a individuals from which CMS wishes to receive a fax; and
  - Place all incoming faxed images in an "incoming documents" location in the PCRS;

- Provide a workflow that allows CMS staff to assign a case to a particular contractor or a particular CMS staff member.

6.1.3 Release 1.2 of PCRS (The Second Build)

Within ***120 days of contract award***, the PCRS contractor shall deploy Release 1.2 which:

- Allows MACs to enter all 1:1 education provided by the MAC including date, topic, and documents discussed with the provider;

- Allows the CBR Contractor to upload the title and date of any CBR sent to the provider including a hyperlink to the actual PDF of the CBR;

- A provider profile view:
  - For hospitals, home health agencies, referring practitioner of home health services; and
  - That displays:
    - All hospital and home health claims reviewed by the MAC;
    - All hospital and home health claims reviewed by the SMRC;
    - For referring physicians/practitioners, a list of items/services ordered by this provider including list of those paid, list of those denied, % paid; and
    - For hospitals and home health agencies, all claims billed by referring provider (e.g.: Dr. Smith – 99% paid, Dr. Jones – 78% paid);

- Workflow module that includes, folders, viewer, work Queues;

- Allow MACs/RACs/SMRC/Lewin/CMS staff to input "Issue Profiles", MR Strategies, and error rate reduction plans;

- Allow cases to be referred from one contractor/user to another within the PCRS system (e.g. SMRC to MAC; MAC to RAC); and

- Allow documents to be sent from one contractor/user in the system to another. Allow one contractor/user to request documents from another contractor/user.

6.1.4 Release 1.3 of PCRS (The Third Build)

Within ***180 days of contract award***, the PCRS contractor shall deploy Release 1.3 which contains the functionality developed during the requirements gathering process for the Third Build.

6.1.5 Future Releases of PCRS

Every 60 days, the PCRS contractor shall deploy a new release which contains the functionality developed during the requirements gathering process for that build. Future functionality MIGHT include, but is not limited to:

- The ability to view several NPIs on one provider profile (e.g., a hospital chain); and
- Interactive features that allow the user to:
    - view information (claims/education/CBRs) by date range;
    - sort by ordering providers;
    - sort by reason for denial; and
    - sort by denial rate.

The PCRS environment will rapidly become more complex. It is critical for the PCRS contractor to rapidly improve and enhance the system in order to respond to the needs of CMS Review Contractors and Providers.

The contractor shall assume a total of 1000 hours per functional release for development and testing of each release. It is anticipated this number will grow annually at a rate of 5% due to the increasing complexity of the PCRS over time. These hours will allow the contractor to be responsive to the evolving requirements of CMS, Review Contractors and of providers and changes in the Medicare Program.

The contractor shall include all System Development Life Cycle activities necessary to make functional changes to the PCRS application in the hours for each functional release.

6.2 Task 2 - Provide DIRECT HISP services to CMS

Background on the DIRECT project can be found in Attachment X.

The DIRECT solution provided by the PCRS contractor shall meet all FIPS, FISMA, federal bridge, FHA and ONC requirements. The PKI requirements, analysis, and design process will be based upon the Federal Bridge Common Authority (FBCA) interoperability X.509 Certificate Policies and the certificates must be issued by FBCA cross-certified CAs. The HISP must be ENAC accredited under the appropriate DirectTrust policies. As such, the selected Contractor must adhere to all applicable policies, procedures and best practices as defined by the FBCA, NIST, OASIS, IETF, etc., when developing all of the security solution components in this solicitation. In the event the selected Contractor finds policies, procedures, and best practices that are in conflict with one another or with our specific requirements, the selected Contractor will raise the question to the CMS COR for resolution.

The PCRS contractor shall provide a tight integration between the PCRS and the CMS DIRECT HISP.

6.2.1 Within 130 days of contract award

Within *130 days of contract award*, the PCRS contractor shall:

- Be capable of receiving DIRECT messages from all esMD HIHs; and
- Allow CMS and CMS review contractors to send unsolicited documents containing PHI ***via an HIH*** to a provider with a DIRECT address in PECOS who is properly registered in the Medicare

DIRECT Registry (see Task 3). (NOTE: See Section D below for requirements related to sending unsolicited documents containing PHI by ***bypassing the esMD HIH*** and going directly to the provider).

6.2.2 In future releases

Every 30 days, the PCRS contractor shall deploy a new DIRECT functionality developed during the requirements gathering process for that build. Future functionality MIGHT include, but is not limited to:

- Accept "Review Status Requests" that are:
    - Sent via a properly formatted DIRECT message;
    - Sent from a valid esMD HIH; and
    - Sent on behalf of a provider with a DIRECT address in PECOS who is properly registered (See Task 3);
- Respond to valid "Review Status Requests" in accordance with the requirements developed by CMS and the PCRS Requirements Contractor. By connecting with esMD HIHs, PCRS will be a source of valuable information for Medicare providers.
- Accepting DIRECT transactions from any provider with a DIRECT address in PECOS and who is properly registered (see Task 3) and passing along the content to the intended recipient – a MAC, RAC, the SMRC, etc:
    - If this involves providing DIRECT accounts to review contractors and support contractors, the CMS PCRS contractor shall work with the COR to establish a mutually acceptable naming convention for DIRECT addresses for review contractors and support contractors (e.g., MAC-J1@direct.cms.gov, Ad-QIC@direct.cms.gov, CBR-contractor@direct.cms.gov); and
    - The PCRS contractor shall consider phasing in this functionality. For example, the PCRS contractor could limit this functionality at first only to those incoming messages where the TO line contains the DIRECT address of a review contractor, and the FROM line contains the DIRECT address of an HIH;
- Acting as a landing zone for transactions from any esMD HIH where the intended recipient is CMS; and
- Provide a platform for secure virtual meeting services including the ability for CMS staff to "share" their screen with the CMS contractor staff and provider staff who are participating in the virtual meeting.

6.3 Task 3 - Medicare DIRECT Registry

The PCRS contractor shall develop and maintain a Medicare DIRECT Registry. The PCRS contractor shall accept DIRECT registration forms sent in a manner that meets CMS requirements. For each provider that submits an acceptable registration form/transaction, the PCRS contractor shall validate that the DIRECT X.509 Certificate meets the following criteria:

- Issued by an FBCA cross-certified CA;
- Includes the validated NPI of the identity proofed individual or organization in the Certificate based on appropriate DirectTrust or FBCA certificate policies;
- The HISP is ENAC certified under the applicable DirectTrust Policies;

- Provides a Direct address API, consumable Webservice, or other “lookup service”; and
- Meets all criterial for inclusion in the Federal Trust Bundle.

Upon CMS request, the contractor shall expand the Registry to include esMD registration information.

The PCRS contractor shall design, procure, build, implement and support four Web Chat environments: Production 1, Production 2, Dev and Test. The PCRS contractor shall support all hardware, software, and system changes to integrate Web Chat functionality within the architecture. The contractor shall employ personnel with advanced knowledge of routing capabilities within their support team that has 5-7 years of experience who are able to design, support and deliver on all Web Chat activities and capabilities.

6.4 Task 4 - Facilitate Quarterly “Show and Tell” meetings

The PCRS contractor shall hold quarterly meetings at a CMS or PCRS contractor’s location. The PCRS contractor shall work closely with their COR to set an agenda and determine invitees. For bid submission purposes bidders shall assure the meeting lasts 4 hours and has 50 attendees who are HIHs, other payers, or other federal agencies. The purpose of the meetings is for CMS and the PCRS contractor to show other payers, agencies, and HIHs what CMS is doing in terms of displaying to a provider their continuum of transaction with Medicare and learn from other payers, agencies what they are displaying to their providers and other HIHs.

6.5 Task 5 - Public Outreach and Outreach Materials about PCRS

The contractor shall create a folder in the PCRS that contain information about the PCRS Outreach for example, slide decks, talking points etc.

The PCRS contractor shall designate 2 staffers as public relations coordinators. The public relations coordinator shall attend meetings as directed by the COR. For the purposes of pricing its bid, bidders shall assume one public relations coordinator shall attend one in-person meeting per month in the in the Washington/Baltimore area, and one in-person meeting in the western U.S. per quarter. The PRC shall clear all public materials with the COR before releasing the materials.

The public relations coordinator shall develop and maintain a public website that contains information about the PCRS, DIRECT, and the Medicare DIRECT Registry. The website go live date shall be approved by the COR. Throughout this document, this website will be called the Provider Compliance Outreach Website.

6.6 Optional Future Task A: Build, Host and Maintain a Provider Medicare Portal; Integrate with PCRS

If this task is awarded, the contractor shall build and host all components of operational environment for a Provider Medicare Portal. This portal does not currently exist. Within 10 days of contract award, the PCRS contractor shall reserve the URL “ProviderMedicare.gov” (and any other URL as directed by the COR). Throughout this document, the term ProviderMedicare.gov will be used to refer to this provider portal.

The contractor shall provide the necessary access, information, and assistance to CMS and other CMS contractors utilizing the ProviderMedicare.gov portal. The PCRS contractor shall utilize CMS’ EIDM to assign user IDs and passwords to providers. If possible, ProviderMedicare.gov shall allow a provider to use the same user ID and password they use for PECOS/NPESS login.

The PCRS contractor shall split the ProviderMedicare.gov environment between a presentation and application layers from their original environment to a stand-alone environment. The contractor shall support all releases as needed by the ProviderMedicare.gov.

The PCRS contractor shall design, procure, build, and implement seven ProviderMedicare.gov environments: Production 1, Production 2, and Test 1, Test 2, UAT, Fix Test, Functional Test 1

ProviderMedicare.gov will enable providers to access their claim review information (claim review status, prior authorization information, list of outstanding Additional Documentation Requests) through a secure Internet connection available 24 hours a day, 7 days a week. ProviderMedicare.gov shall accesses this information via the PCRS infrastructure to further improve operational efficiency and expand the channels used to provide information to Medicare providers.

When complete, it needs to support more than 3800 concurrent sessions. The goals of the ProviderMedicare.gov are to:

- Increase customer service by offering providers alternative channels, while reducing the average cost per inquiry by answering questions via self-serve Internet access; and

- Encourage provider behavior change by displaying to a provider where they are non-complaint with Medicare billing rules.

Once a provider has been authenticated in the CMS provider portal, the provider will have visibility into SOME of the data in the PCRS. Other data in the PCRS will remain visible only to CMS/contractor users. Data that CMS has deemed acceptable for a provider to see will be called “Provider-visible” data with this SOW. In addition to making provider-visible data available via the CMS portal, the PCRS contractor shall make data available to the esMD HIHs.

If this task is awarded, the PCRS contractor shall build and maintain the web chat functionality and the customer service representatives (CSRs) to operationalize it. When a provider or other user accesses the ProviderMedicare.gov portal, the PCRS contractor shall give the user the chance to chat with a CSR at various points in the system.

When a web chat session is requested, the interaction shall be routed to the routing engine that will have visibility to the CSRs who are available to answer web chat queries. The routing engine shall connect with a CSR who meets the routing criteria as soon as an appropriate CSR becomes available. The PCRS shall allow supervisors and Workforce managers to set up each CSR with the ability to handle one or multiple sessions as their training and experience permits.

Web Chat activities shall be handled as a separate channel within the PCRS. When a connection is made between a web chat user and a CSR, the PCRS shall create an activity record to serve as the basic documentation of this interaction. Specific actions taken during a Web Chat session shall be stored in the PCRS to record each interaction between user and CSR. A CSR shall be able to use the other research tools within PCRS to find and submit answers to the web chat user. Sub-activities shall be created to reflect and to document these actions. All Web Chat interactions shall be available for all CSRs and PCRS users to see a complete picture of the interactions for a beneficiary across channels. Activities and sub-activities created during Web Chat sessions shall be include in the files sent to the National Data Warehouse.

The PCRS contractor shall be responsible for procuring and renewing support on the Web Chat Software.

6.7 Optional Future Task C: Migrate PCRS Infrastructure

CMS may require the PCRS contractor to migrate all PCRS production infrastructure to a CMS Enterprise Data Center. The PCRS contractor shall be prepared for such a requirement and shall be able to coordinate the transition of the infrastructure with hosting EDC contractor without any downtime. CMS will issue a change order if and when this requirement arises.

6.8 Optional Future Task D: Provider Print/Mail Function

If this task is invoked, the contractor shall build the capability to print and mail documents to the provider at the postal address listed in PECOS. If more than one postal address is listed in PECOS, the contractor shall use the "Medical Records" address.

The PCRS shall allow CMS or a review contractor to print/mail to a provider at the address the provider has on file in PECOS.

The ProviderMedicare.gov/PCRS shall allow a provider to order a printed document that is mailed to the address they have on file in PECOS.

Print fulfillment shall be available for CBRs, ADRs, and other documents as determined by CMS.

6.9 Optional Future Task E: Integrate the PCRS to QICs, AdQIC, and or MAS, or Settlement Support Contractor

Once MAS data is linked to the PCRS system, the PCRS contractor shall revise the "Provider Profile" report to display provider claim information updated through all possible levels of appeal. In addition, the PCRS contractor shall revise the provider profile report to back out appealed claims from a provider denial rates.

7. Contract Type

The PCRS contract will be cost-plus-fixed-fee.

8. Place of Performance

The PCRS contractor or one of its subsidiaries shall have a physical presence within 50 miles of the CMS building at 7500 Security Blvd. The majority of the work shall be conducted at the contractor's facility with additional tasks being performed at CMS in Baltimore, MD and other locations as prescribed by CMS. The PCRS contractor shall make a conference room available to CMS staff and other contractor staff. This contractor will also need to facilitate conference calls, web meetings, obtaining conference lines etc.

9. Period of Performance

The period of performance for the PCRS contract shall be one 365 calendar days base period, with one 365 calendar days option period. The majority of the work shall be conducted at the contractor's facility with additional tasks being performed at CMS in Baltimore, MD and other locations as prescribed by CMS.

10. Deliverables/Delivery Schedule

At a minimum, the contractor shall adhere to the reporting requirements described below. CMS reserves the right to require additional reporting at a future date. One electronic and hardcopy copy of each deliverable shall be provided to the Contracting Officer's Representative (COR).

The PCRS contractor shall build a SharePoint site that will be used to upload reports and CMS staffs, HIHs and other's requiring access will have an access to the link.

The PCRS contractor shall propose additional deliverables they feel will be beneficial to CMS.

CMS will review and return all draft deliverables to the contractor for incorporation of comments within ten (10) business days. CMS' failure to notify contractor within 30 calendar days constitutes acceptance and approval of the submitted deliverable. In situations where final approvals are not granted per agreed project schedules, project milestones and key deliverables may be impacted and could result in project slippage, negatively impacting contractor performance.

10.1 Weekly Reports

Weekly reports for each previous week shall be made available to CMS each Tuesday by 5:00 P.M. Eastern Standard Time unless otherwise indicated in Section 5. CMS expects a weekly progress summary report on PCRS system activities. The contractor shall recommend additional reports.

The contractor shall also deliver additional weekly reporting requirements to support call volume spike, ad campaigns, Medicare Reform Legislation initiatives, or other key pilots and activities as required by CMS.

10.2 Monthly Reports

Monthly reports for each previous month shall be made available to CMS by the 10th calendar day of each month, including a progress summary report on PCRS system activities, unless otherwise indicated in Section 5. The contractor shall recommend additional reports.

10.3 Monthly Status Report

The contractor shall provide a status report each month. This report shall summarize the contractor's successes and challenges during the month, key activities performed, and status of performance metrics. The status report shall identify any proactive steps that were taken to improve services, as well as any risk mitigation steps that were implemented, and a statement of activity anticipated for the next monthly reporting period. Also include any proposed changes of key personnel associated with the Contract and/or contract effort. A financial graph depicting budgeted costs, actual costs, and projected costs to completion shall also be included.

10.4 Ad-hoc Report Requests

The contractor shall support ad-hoc reporting requests from CMS and CMS contractors.

Examples of current ad-hoc reports are daily and weekly database reports which convey user usage information.

Ad-hoc report requests received from selected CMS stakeholders shall be made top priority and fulfilled within the timeframe stated by CMS. If deadlines for other work efforts slip in order to meet the ad-hoc report request, this information shall be shared with CMS.

10.5 Distribution

One copy of each of the deliverables below must be submitted to the COR with one copy of the monthly progress report also submitted to the Contract Specialist.

Deliverables below refer to specific PCRS requirements which call for their submission. For some activities, it may benefit CMS to have additional deliverables, which may be proposed by the contractor. Delivery dates are calendar days. Refer to ***PCRS SOW SDLC Definitions*** document for descriptions of SDLC documents.

#	Deliverable / Report	PCRS Requirement(s)	Delivery Date
1.	Concept of Operations (ConOps)	5.6	14 days after contract award
2.	Requirements Document	Attachment C	30 calendar days prior to implementation of each build release cycle
3.	Project Plan	5.2	14 days after contract award, monthly updates
4.	Business Risk Assessment	5.6	30 days after contract award
5.	System Security Plan (SSP)	5.6	Annually, on the first business day of January

#	Deliverable / Report	PCRS Requirement(s)	Delivery Date
6.	Information Security Risk Assessment (IS RA)	5.6	Annually, on the first business day of January
7.	Data Use Agreement (DUA)	5.6	30 days after contract award
8.	System Development Management Plan (SDMP)	5.2, 5.15	30 days after contract award
9.	Technical Assessment	5.2	30 days after contract award; semi-annual updates due on the first business day of March and August
10.	Business Process Models	5.10	60 days after contract award, quarterly updates
11.	Requirements Traceability Matrix (RTM)	5.6	30 calendar days prior to implementation of each build release cycle
12.	Database Design Document	5.7	30 days after contract award; ongoing updates
13.	Release Project Plan	5.7, 5.13	30 calendar days after initiation of each build release cycle
14.	Service Level Agreements	5.22, 5.31	Ongoing updates
15.	Security Test Plan / Cases	5.6	Annually, on the first business day of January
16.	Security Test Results	5.6	30 calendar days following each security test
17.	Test Plan	3.2, 3.27	14 calendar days prior to system test execution
18.	Test Summary Report	3.2	14 calendar days following test execution for each new build release
19.	Code (source and executables)	3.2, 3.3, 3.4, 3.15, 3.16	Within 10 business days of CMS request
20.	Version Description Document (VDD)	3.2	Ongoing updates
21.	Validation Readiness Review (VRR)	3.2	30 calendar days prior to implementation of new build release
22.	Implementation Readiness Review (IRR)	3.2	30 calendar days prior to implementation of new build release
23.	User Manual		30 calendar days prior to implementation of new build release
24.	Operator Manuals (Standard Operating Procedures)		Ongoing updates
25.	User Interface Design Review	3.7	30 calendar days prior to implementation of new build release

#	Deliverable / Report	PCRS Requirement(s)	Delivery Date
26.	Release Manifest	3.4, 3.5, 3.22, 3.29	60 calendar days prior to implementation of new build release for draft; 30 calendar days prior to implementation of new build release for final
27.	System Disposition Plan	3.18	
28.	Change Requests	3.11, 3.18, 3.20, 3.22, 3.29	Ongoing as needed
29.	Problem Reports		Monthly Summary due by the 10th day of the month for previous months activities
30.	Deployment Plan	3.19	15 days prior to deployment
31.	Help Desk Support Plan	3.20	Ongoing updates
32.	System Maintenance Schedule		weekly outlining the coming weeks changes
33.	National Profile Matrix	3.23, 3.25	10 days before each Quarterly release
34.	Capacity Planning Analysis		and quarterly on a calendar year basis and due on the first business day of the quarter
35.	PCRS Transition Plan		By
36.	Test Plan	5.29	5 days prior to UAT validation
37.	Configuration Management Plan	5.2	Ongoing updates
38.	Business Continuity Plan	5.31	Ongoing updates
39.	Performance Measurement Report	5.11	Monthly by the 15th calendar day
40.			
41.			
42.	Final Project Report	5.6	Within 14 calendar days of project activity conclusion
43.	Meeting Notes	As needed	Within 3 calendar days of meeting
44.			
45.			
46.	Weekly Reports Progress Summary Reports (Dashboard updates)	10.1	Weekly by 10 AM each Tuesday
47.	Monthly Reports	10.2	Monthly by the 10th day of month for the previous months activities
48.	Ad-hoc Reports		As requested by CMS
49.	Joint Operating Agreements	5.27, 5.42	15 days after each calendar quarter for year one (i.e., Jan 15, April 15, July 15 and Oct 15) thereafter updates semi-annually on the 15th of January and July

#	Deliverable / Report	PCRS Requirement(s)	Delivery Date
50.	System Health Report Status of the major system components including backend systems accessed by the PCRS.	5.25	Daily by 10 AM

The contractor shall identify opportunities to improve any and all functions identified in this Contract. As value-engineering opportunities are identified, the contractor shall document the current state, the opportunity for improvement and related performance metrics, implementation timeline and operational impact and provide this documentation to CMS.

11. Security

Will get standard security language from OAGM.

12. Government Furnished Equipment (GFE)/ Government Furnished Information (GFI)

CMS will not be providing workspace, computers, or any office equipment. Conference rooms at CMS may be available as needed and will be scheduled by the CMS Contracting Officer's Representative (COR).

13. Other Pertinent Information or Special Considerations

Potential spot for TRA comp

liance

14. Key Personnel

The contractor shall submit resumes for each resource considered Key. All key personnel are subject to HHSAR Clause 352.270-5 Key Personnel (APR 1984) and the following:

- Replacement is subject to the prior written approval of CMS;
- Requests for replacement shall include a detailed resume containing a description of position duties and qualifications, as well as information about the qualifications of the individual(s) proposed; and
- Contractor proposals to move any key personnel off the contract shall be submitted in writing at least 15 calendar days in advance of the proposed move.

A. Project Manager

The contractor shall provide a Project Management Professional (PMP®) Project Manager, who shall act as the central point of contact with CMS for all program-wide and event-specific issues. The Project Manager shall be responsible for all issue resolution and program management. The Project Manager shall provide comprehensive account support for the PCRS contract and have full authority to act for the

contractor in performing all contract requirements. The Project Manager shall notify the Contracting Officer whenever it is believed that s/he is receiving direction that deviates from the scope or terms of this contract.

B. Application Architect

The PCRS Architect shall manage all activities related to the design and structure of the PCRS. S/he shall lead all tasks related to the definition of the overall PCRS architecture and standards, and definition of the PCRS logical and physical data models. The PCRS Architect shall have experience with a minimum of 5 full lifecycle application implementations, preferably contact center Customer Relationship Management systems and 3-5 years working with current CMS systems.

C. Requirements Manager

The Requirements Manager shall be responsible for the collection, documentation, analysis, and reporting of all system requirements for the PCRS system. The Requirements Manager shall have experience with a minimum of 3 full lifecycle application implementations, preferably contact center Customer Relationship Management systems.

D. Infrastructure Manager

The Infrastructure Manager shall be responsible for the performance, maintenance, scalability, availability, reliability, and operations of the infrastructure supporting the PCRS application. This includes, but is not limited to, the hardware and software components providing PCRS functionality such as: applications, databases, integration, and local network.

15. Government Personnel

The following individuals are designated as the points of contact on this work effort. Only the Contracting Officer may provide contractual direction or interpretations on any work performed under this Contract.

Contracting Officer's Representative (COR)	Lisa Jarvis-Durham
Phone	410-786-1168
Email	Lisa.Jarvis-Durham@cms.hhs.gov
Address	CMS 7500 Security Blvd. Woodlawn, MD 21244
Government Task Leaders (GTLs)	Kevin Young
Phone	410-786-6133
Email	kevin.young2@cms.hhs.gov
Address	CMS 7500 Security Blvd. Woodlawn, MD 21244
Contracting Officer	Lyandra Emmanuel
Phone	410-786-5130
Email	Lyandra.Emmanuel@cms.hhs.gov
Address	CMS 7500 Security Blvd. Woodlawn, MD 21244
Contract Specialist	Tiara Freeman
Phone	410-786-2291
Email	Tiara.Freeman@cms.hhs.gov
Address	CMS 7500 Security Blvd. Woodlawn, MD 21244

16. Attachments to the Statement of Work

Attachment A: Background on DIRECT

Attachment B: Sample Report

Attachment C: Referral Requirements Document

Attachment D: Probe and educate Tracking system Workflow (Draft)
PCRS

Attachment E: CMS Information Security Requirements

17. Attachment A

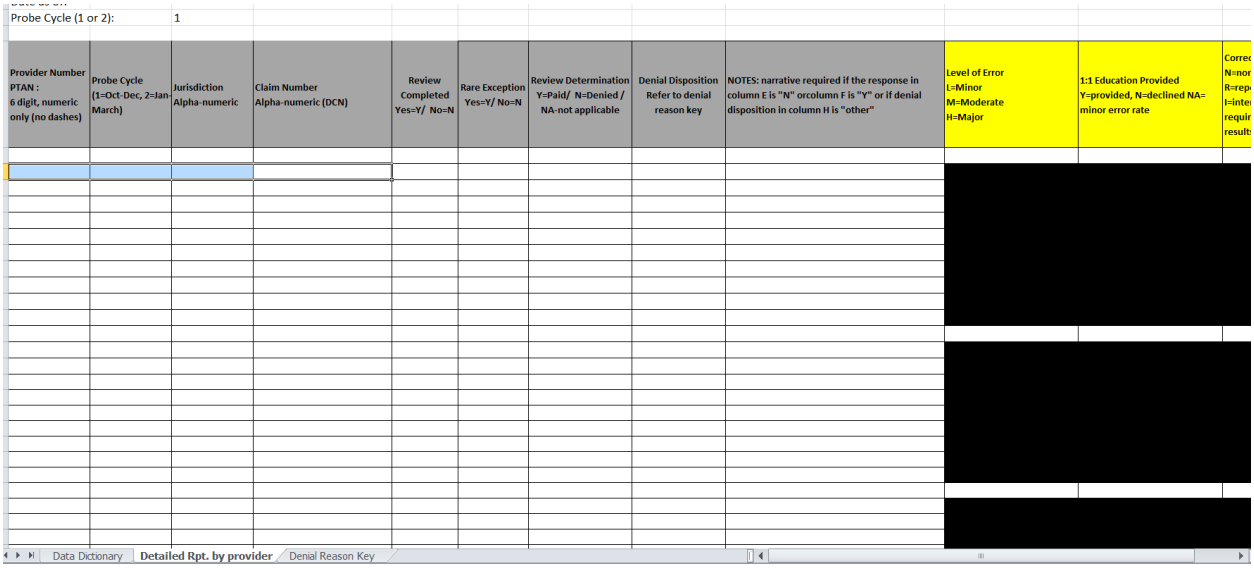
Background on DIRECT.
Health information exchange or HIE is the electronic movement of health related information among unaffiliated organizations according to nationally recognized standards. PCG's use of HIE provides the opportunity to improve efficiency, reduce costs and reduce provider burden. HIE is not a new idea and has been worked on at the federal, state and regional levels since at least the mid-1990s.

The American Recovery and Reinvestment Act (ARRA) of 2009 dedicated federal funds to assist providers in achieving "meaningful use" of Electronic Health Records (EHRs). CMS' Meaningful Use program offers incentives to providers to adopt EHR technology with the goals of improved care, quality and efficiency, and reduced healthcare costs. To qualify for the incentive payment, a provider must have the ability to communicate securely with other providers.

The Office of the National Coordinator for Health Information Technology (ONC) suggests that providers use DIRECT standards to communicate securely with other providers. The DIRECT Project specifies a simple and secure way for participants to send authenticated, encrypted health information directly to known, trusted recipients over the internet in the form of a secure email. For the purposes of this document, the term DIRECT will be used to describe this technology.

Many providers have chosen DIRECT as their method to communicate securely with other providers. To utilize DIRECT, a user must obtain the services of a health information service provider (HISP). A HISP is a private company that routes DIRECT messages between two parties who need to share sensitive information, Personally Identifiable Information (PII) or Protected Health Information (PHI). ONC encourages HISPs to comply with the DIRECT protocol and accompanying policies for trusted, secure data exchange. CMS has many potential use cases for DIERCT.

18. Attachment B



Probe Cycle (1 or 2): 1

Provider Number PTAN : 6 digit, numeric only (no dashes)	Probe Cycle (1=Oct-Dec, 2=Jan-March)	Jurisdiction Alpha-numeric	Claim Number Alpha-numeric (DCN)	Review Completed Yes=Y/ No=N	Rare Exception Yes=Y/ No=N	Review Determination Y=Paid/ N=Denied / NA-not applicable	Denial Disposition Refer to denial reason key	NOTES: narrative required if the response in column E is "N" orcolumn F is "Y" or if denial disposition in column H is "other"	Level of Error L=Minor M=Moderate H=Major	1:1 Education Provided Y=provided, N=declined NA= minor error rate	Corre N=nor R=rep I=inte requir result
									[redacted]		
									[redacted]		
									[redacted]		

Data Dictionary | Detailed Rpt. by provider | Denial Reason Key

Centers for Medicare & Medicaid Services
Office of Financial Management
Provider Compliance Group
7500 Security Blvd
Baltimore, MD 21244-1850

UCM Referrals Module
PCRS Referrals Module
Draft Requirements Document

Version: 1.0
Last Modified: April 09, 2015

APPROVALS

Submitting Organization's Approving Authority:

Signature	Printed Name	Date
Phone Number		

Project Manager

CMS' Approving Authority:

Signature	Printed Name	Date
Phone Number		

Government Task Leader

CMS Business Owner:

Signature	Printed Name	Date
Phone Number		

CMS

REVISION HISTORY

Version	Date	Organization/Point of Contact	Description of Changes

TABLE OF CONTENTS

37. INTRODUCTION

This document defines the electronic exchange of unstructured content related to referrals of potential fraud, or overpayment, or education between contractors to the Centers for Medicare and Medicaid Services (CMS).

CMS/CPI is currently building a Unified Case Management (UCM) system that allows ZPICs to work cases. From time to time, ZPICs need to refer cases to Medicare Administrative Contractors (MACs), Recovery Audit Contractors (RACs), or the Supplemental Medical Review Contractors (SMRC).

CMS/OFM is currently in the process of building a Provider Compliance Reporting and Referral System (PCRS). This system will allow the MACs, RACs, SMRCs and the Comparative Billing Report Contractors to report information about their education and review of providers. From time to time, MACs, RACs, and the SMRCs need to refer cases to the ZPIC.

The term “Medicare Referral Initiative” will be used to describe the referral module of the UCM, the referral module of the PCRS and how the two will work together.

a. Purpose

This document provides all requirements that the UCM Referral Module and the PCRS Referral Module will be responsible for implementing. This document lists the business requirements, business rules, user requirements, and functional/nonfunctional requirements for the project. It also contains use case scenarios to help clarify the process required for the project.

b. Document Management

The requirements in this Requirements Document shall be traced to the appropriate deliverables in the development and testing phases to ensure that all requirements are properly implemented and tested.

c. Intended Audience

The target audience for this Requirements Document includes business, technical, governance and project management stakeholders. Specific users shall include software or system developers and testers.

38. REFERENCE DOCUMENTS

Table 1: Referenced Documents

Document Name	Document Number	Issuance Date
CMS Technical Reference Architecture	Version 1.0	May 1, 2008
CMS Information Security Acceptable Risk Safeguards (ARS)	Version 3.1 *[refer to* http://www.cms.hhs.gov/InformationSecurity/14_Standards.asp#TopOfPage *for current Document Number and Issuance Date]*	August 24, 2008
Electronic and Information Technology Accessibility Standards (Section 508)	http://www.access-board.gov/sec508/standards.htm	December 21, 2000
Medicare Referral Project Charter	1	October 10, 2010

39. OVERVIEW

The objective of the Medicare Referral Initiative is to provide CMS with coordinated system that will facilitate the exchange of data between and among CMS contractors and CMS.

a. Business Purpose

The Department of Health and Human Services' Office of Inspector General (OIG) recently released a report titled "Recovery Audit Contractors' Fraud Referrals".

In the Report, the OIG examined the extent to which recovery audit contractors (RAC) referred cases of potential fraud to the Centers for Medicare & Medicaid Services (CMS) during the 3-year Recovery Auditor's demonstration project. According to the Report, the Recovery Auditor only referred 2 cases of potential fraud to CMS.

As reflected in the Report, the Recovery Auditors are charged with identifying improper Medicare payments and not responsible for reviewing claims for fraudulent activity. However, the Recovery Auditors are responsible for referring to CMS any instances of potential fraud that they identify during claim reviews.

The Medicare Referral Initiative will allow the UCM and PCRS to enable;

(1) Recovery Auditors, MACs, SMRCs and CMS staff to refer potential fraud and recalcitrant providers to the ZPIC.
(2) ZPICs to refer improper payment cases to MACs, Recovery Auditors, and CBR Contractors

b. Functional Purpose

Contractors to CMS and departments within CMS are charged with referring issues and potential fraud to the appropriate entity. The Medicare Referral initiative will provide the related entities the ability to electronic refer an issue or potential fraud or recalcitrant providers to the appropriate entity or department. In addition, the contractors or CMS departments using the system will be able to attach the required documentation to review the issue or potential fraud or recalcitrant providers in order to determine the appropriate corrective action. The system will also enable the recordation of the proposed corrective action.

c. Measures of Success

All requirements listed in this Requirements Document are included and fully functional in the UCM and or PCRS

d. Stakeholders

Table 2: System Stakeholders

Stakeholder	Description
OFM/PCG	Office of Financial Management/ Provider Compliance Group – PCRS Business Owners' Office and Group
CPI	Center for Program Integrity -- UCM Business Owners' Office
US Tax Payers	Increase transparency of Medicare financial information
Providers	Need to be assured that various Medicare contractors are coordinated in their approach to a provider
PCG Review Contractors	Medicare Administrative Contractor (MAC), Recovery Auditors, Supplemental Medical Review Contractor (SMRC). These contractors will use PCRS to record information about provider activity.
Zone Program Integrity Contractors	ZPICs
_____	Firm contracted to design and implement the UCM
_____	Firm contracted to design and implement the PCRS

e. Approval Authority

OFM/PCG (Melanie Combs-Dyer) for the PCRS.
CPI/____ (Ray Wedgeworth) for the UCM system.

f. Project Priorities

There is always an inherent conflict between scope, budget available, schedule and allowable defects. The following project priorities have been established by OFM/PCG and CPI/___ to help the project team determine what is most important, should a choice need to be made.

Table 3: Project Priorities

Product Quality Dimension	Priority Level (High, Medium, Low)
Scope (features)	High
Schedule	Medium
Defects	High
Resources (manpower, budget)	Medium

Scope is the most important dimension with a limited budget.

g. Project Diagrams

N/A

i. Work Context Diagram

The figure below shows the work context diagram for the Medicare Referral. The work context diagram shows all entities that will have knowledge of the Medicare Referral and that will interact with it. The direction of the arrows indicates which entity will initiate the event. After an event is initiated, there is usually two-way communication. The work context diagram's arrows simply show who begins the events.

ii. System Diagram – Figure 1

iii. Other Diagrams/Artifacts

N/A

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40. ASSUMPTIONS/CONSTRAINTS/RISKS

a. Assumptions

Listed below are the assumptions that guided the identification and development of the requirements stated in this document. These assumptions are intended to promote mutual understanding, partnership, and quality communication between CMS and the project team.

General Assumptions

- Funding will be available for the UCM referral module
- Funding will be available for the PCRS referral module

Technical Assumptions

- The Medicare Referral Initiative will utilize existing CMS hardware and software where possible

- Medicare Referral system integration points and design issues to be engineered/resolved in phase one consist of:
    - Web Services
    - Storage of Unstructured Data received from disparate remote sites
    - Basic Report and Query Capabilities
    - User Management
    - Connectivity Management
    - Data Model Definitions and Coordination with CMS DA Team

Development, Test and Production Assumptions

- Development of the solution will be performed off-site.
- Test and Production will be performed on-site at the BDC (Baltimore Data Center) for the UCM and at the contractor site for PCRS.

b. Constraints

Listed below are the constraints that exist for this project. These constraints may prevent or restrict reaching the desired results (e.g., satisfying requirements, meeting project goals and priorities, achieving measures of success) stated in this document.

c. Risks

Listed below are the risks that can create issues for the project. These risks may create issues that have an uncertain effect on the project which in turn effect achieving the desired results (e.g., satisfying requirements, meeting project goals and priorities, achieving measures of success) stated in this document.

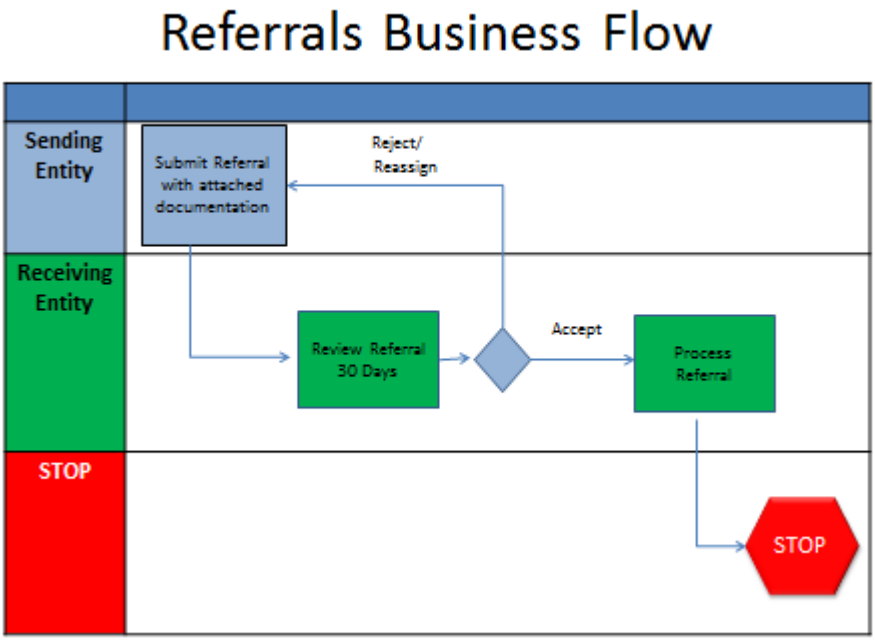
Table 4: Risks and Associated Mitigation

ID	Risk	Magnitude (H,M,L)	Probability (H,M,L)	Description	Action Steps To Mitigate
1.	Appropriate stakeholders and points of contact not identified or engaged resulting in incomplete or inaccurate requirements	**H**	**L**	Stakeholders either not appropriately identified or engaged	Coordinate with Project Sponsor to identify initial list of stakeholders and establish scheduled requirements solicitation meetings. Solicit input from initial stakeholders to draw out all relevant points of contact
2.	Limited stakeholder buy-in to identified requirements and associated prioritization resulting in scope creep	**H**	**M**	Proposed requirements supported by stakeholders	Identify stakeholders and individual concerns upfront
3.	User acceptance of the system is low due to perceived limitations in usability and functionality resulting in increased handle time	**H**	**L**	Limited user acceptance	Conduct pilot to identify areas of improvement and implement full release
4.	Referral workload is underestimated, resulting in increased backlog	**H**	**M**	Increased backlog	Coordinate transition discussions between appropriate parties involved with Referrals
5.	TRB determines that UCM and PCRS are not the best solution for the Medicare Referral Initiative after reviewing the Solution	**H**	**L**	Proceeding with the ECM solution prior to that determination is a risk.	Submit Solution Analysis document to TRB with recommendation that ECM is the best solution for the business problem and TRB agrees.

	Analysis document.				

Business Requirements & Rules

d. Business Process: Figure 2



i. Business Process: Education Referrals Processing

BPE -001	If the sending entity is a ZPIC, they will initiate the education referral in the UCM. If the sending entity is a MAC/RAC/SMRC, they will initiate the education referral in the PCRS.
BPE-002	The sending entity should have the ability to specify the type of education (1:1 education, Probe & Educate, etc.) through a drop down selection.
BPE-003	The sending entity should have the ability to enter notes about the referral in a text box
BPE-004	The sending entity should have the ability to select the receiving entity through a drop down box or by specifying the state, and type of provider (A/B, DME, HH/H)
BPE-005	The Referral Module will check the RAC Data Warehouse to validate the Provider status for exclusions and suppressions.
BPE -006	After the sending entity attaches the files pertaining to the referral, the first task in the business should to transfer the case to the receiving entity and create an **Acceptance Review process**. The PCRS will assign the incoming referral to one or more ZPICs for acceptance review. The PCRS will record the receiving entity's decision (to accept or reject the referral).
BPE -007	If the referral is rejected by the receiving entity, the referral should be sent back to the sending entity explaining why the referral was rejected.

ii. Business Process: Improper Payment (Non-Fraud) Referrals Processing

BPI -001	A business process should be started when a referral is submitted.
BPI -002	The sending entity should have the ability to specify the type of fraud through a drop down selection
BPI -003	The sending entity should have the ability to enter notes about the referral in a text box
BPI -004	The sending entity should have the ability to select the receiving entity through a drop down box
BPI -005	The Referral System will check the RAC Data Warehouse to validate the Provider status for exclusions and suppressions.
BPI-006	If the Provider is excluded or Suppressed then the Referral will STOP
BPI -007	After the sending entity attaches the files pertaining to the referral, the first task in the business should be the **Acceptance Review**. The receiving entity will accept or reject the referral.
BPI -008	If the referral is rejected by the receiving entity, the referral

	should be sent back to the sending entity explaining why the referral was rejected.

iii. Business Process: Overpayment Collection Referrals Processing

BPO -001	A business process should be started when a referral is submitted.
BPO -002	The sending entity should have the ability to specify the type of overpayment (OIG-identified, RAC-identified, SMRC-identified, etc.) through a drop down selection
BPO -003	The sending entity should have the ability to enter notes about the referral in a text box
BPO -004	The sending entity should have the ability to select the receiving entity through a drop down box or by specifying the state and type of provider (AB, DMEPOS, HH/H)
BPO -005	The Referral Module will check the RAC Data Warehouse to validate the Provider status for exclusions and suppressions.
BPO-006	If the Provider is excluded or Suppressed then the Referral will be routed to the UCM for review. A UCM user may place the case on HOLD or may APPROVES the overpayment collection.
BPO -007	After the sending entity attaches the files pertaining to the referral, the first task in the business should be the **Acceptance Review**. The receiving entity will accept or reject the referral. The only valid reason for rejection is: - Not my jurisdiction
BPO -008	If the referral is rejected by the receiving entity, the referral should be sent back to the sending entity explaining why the referral was rejected.

iv. Business Process: Potential Fraud Referrals Processing

BPF -001	The sending entity will initiate the referral in the PCRS. A business process should be started in the PCRS when a referral is initiated.
BPF-002	The sending entity should have the ability to specify the type of fraud (or recalcitrant provider) through a drop down selection (in PCRS)
BPF-003	The sending entity should have the ability to enter notes about the referral in a text box (in PCRS)
BPF-004	The sending entity should have the ability to select the receiving entity (UCM) through a drop down box (in PCRS)
BPF-005	The Referral Module in PCRS will check the RAC Data Warehouse

	to validate the Provider status for exclusions and suppressions.
BPF -006	After the sending entity attaches the files pertaining to the referral, the first task in the business should to transfer the case to the UCM and create an **Acceptance Review process**. The UCM will assign the incoming referral to one or more ZPICs for acceptance review. The UCM will record the receiving entity's decision (to accept or reject the referral).
BPF -007	If the referral is rejected by the receiving entity, the referral should be sent back (bu UCM) back to the sending entity in PCRS explaining why the referral was rejected.

e. Routing

Type of Referral	Possible Senders	Possible Receivers	Examples
Education Referrals	CMS, using PCRS MAC, using PCRS RAC, using PCRS SMRC, using PCRS ZPIC, using UCM	MAC, using PCRS	Example 1: A DME MAC detects a pattern whereby a bed supplier has a higher denial rate from when the bed is ordered by Dr. Smith. The DME MAC logs into the PCRS and completes an education referral for Dr. Smith. The DME lists the intended recipient as the MAC for "Alabama Part B." PCRS notifies the A/B MAC for Alabama that they have a referral. The A/B MAC performs an acceptance review and decides to accept. The PCRS system records the referral in history.
Improper Payment Referrals	CMS, using PCRS MAC, using PCRS RAC, using PCRS SMRC, using PCRS ZPIC, using UCM	MAC, using PCRS RAC, using PCRS SMRC, using PCRS	Example 2: A ZPIC determines that a case they have been investigating for 2 months does NOT represent potential fraud. Yet, it appears the provider may be submitting claims that contain improper payments. The ZPIC logs into the UCM and completes an Improper Payment referral. The UCM hands the case to PCRS. PCRS notifies the relevant

Overpayment Collection Referrals	MAC, using PCRS RAC, using PCRS SMRC, using PCRS ZPIC, using UCM	MAC, using PCRS	MACs and RACs The RAC performs an acceptance review and decides to accept. The PCRS system records the referral in history. Example 3: An SMRC identifies an overpayment. The SMRC logs into the PCRS and completes an Overpayment Collection referral. PCRS notifies the relevant MACs. The MAC performs an acceptance review and decides to accept. The PCRS system records the referral in history.
Potential Fraud Referrals	MAC, using PCRS RAC, using PCRS SMRC, using PCRS ZPIC, using UCM	ZPIC, using UCM	Example 4: A RAC identifies a case involving potential fraud. The RAC logs into PCRS and completes a Potential Fraud referral. PCRS notifies the UCM which notifies the appropriate ZPIC. The ZPIC performs an acceptance review and decides to reject the case. The UCM and PCRS system records the referral and the rejection in history.

41. GLOBAL REQUIREMENTS

a. Global Standards: Potential Fraud Referrals

i. Design

Table 6: Design Requirements

Requirement No.	Requirement Description
D-001	The ability to maintain lists of values, document types, document image categories, and user roles and rights.
D-002	The ability to **update** the list through an administration screen.
D-003	The ability to **Retract/Delete** a submitted Referral.
D-004	External Sender and Receiver entities will be provided with both a graphical web interface and a Web Service

ii. Performance

Table 7: Performance Requirements

Requirement No.	Requirement Description
P-001	

iii. Security

Table 8: Security Requirements

Requirement No.	Requirement Description
S-001	

iv. Privacy

v. Section 508

vi. User Requirement Summary

See section 7.1 below

42. USER REQUIREMENTS

a. User Requirement Summary: Potential Fraud Referrals

i. Associated Business Requirement

1. Potential Fraud Referrals Submittal Form

The following lists the data elements manually captured as part of the Potential Fraud Referrals Process submittal.

Name	Data Entry Type	Single/Multiple (#?)	Description/Notes
Referral Type	Selection	Single	Education Improper Payment Overpayment Collection Potential Fraud
Referral Sub Type	Selection	Single	Education: - Request for 1:1 education - Request for Probe&Educate Improper Payment - N/A (no subtypes) Overpayment Collection - N/A (no subtypes) Potential Fraud - Evidence of possible fraud - Recalcitrant provider
Provider Type	Selection	Single	Inpatient Hospital, Outpatient Hospital, Physician, DME Non-Physician, DME Physician, Lab, Ambulance, Other Part B Biller, SNF, HHA, Hospice, Other Part A Biller, Unspecified [enterprise source location for this data???]

Provider Sub type (if applicable based upon selected Provider Type)	Selection (only applicable if Provider Type contains a Provider Sub Type)	Single	Inpatient Hospital - Acute Care, Critical Access, IRF, Inpatient Psych Outpatient Hospital - ASC, Unspecified DME Non-Physician - Orthotics, Prosthetics, Supplies DME Physician - Orthotics, Prosthetics, Supplies
State where problem/potential fraud occurred	Multiple Selection Box	Multiple	States in which the potential fraud case occurred. (I.e. Maryland, Pennsylvania, Florida, Alaska,..) This list should include other US Territories - need to create list of territories. (Only one state can be chosen per referral??? Ask Joann/Manny)
Receiver (group or individual)	Automatically selected via business rules. Allows for manual override. Kathy to provide business rules - because of ZPIC separation, the rule will be directly associated by state.	Single (Multiple receivers = Multiple Referrals)	By default the receiver value is automatically determined through a rules evaluation - based solely on state for Potential Fraud for ZPIC (geographic location). After determination, a user may manually override this value. The system will only assign the Receiver to a group CMS Department or RAC, Subcontractor. For CMS - Name, Telephone, Department, email For RAC/External Prime Contractor - Name, Address, Telephone Number, Website address (if applicable), email (if applicable), Title For Subcontractors - Must keep this information for the RAC and the subcontractor (Name, Address, Telephone Number, Website address, Email), Title. Note - Most of this information should not be stored in this system and will be requested when needed. Track who (CM account) started the process. Additionally - since the work may be assigned to a Receiver group, all the specific information will be tracked as the person selects the item to process.
Medicare Provider Number (NPI)	Text box (comma delimited or *potentially multiple*	Multiple	NPI will only be validated for length.

	dynamic entry boxes)		
List of Items or Services (Medical Coverage Database)	Text box (comma delimited)	Multiple	Service Category from CPT (AMA CPT Category I codes) or HCPCS. Like to validate the values entered are correct. Require some form of display showing the code and medical description. For ease of use, would like the ability to drill down and lookup/select the codes from a list. Select category, then select code then description would display. Another button would allow the lookup of another (add another).
Type of Scheme	Multiple Selection Box	Multiple	The possible types are as follows: Billing for Services Not Rendered, Upcoding, Misrepresentation, Medically Unnecessary Services, Quality of Care, Drug Diversion & Pharmaceutical Services
Amount Paid (for the attached claims)	Text Box	Single	The total amount paid for the attached claims as part of this Referral.
Estimated Number of Claims	Text Box (optional field?)	Single	The estimated number of claims for this type of Potential Fraud. 5-27-2010 - this field will be optional.
Estimated Amount Paid	Text Box (optional field)	Single	The estimated amount paid as part of this Potential Fraud. 5-27-2010 - this field will be optional.
Estimated date period	Radio box - other to enable another text box where a custom range can be entered.	Single	Periods include - Month, Quarter, Year, Other. Other to include a free entry text box. 5-27-2010 - this field will be optional.
Claims Processing Contractor (CPC) Involved in Original Decision to Pay	Text box (to many CPC's to list)	Single	This is the Workload Contractor ID. 5 digits in length..
Case Description (complaint/matter)	Text Area (120 character limit)	Single	The Title of the Referral.
Date of Service Start	Calendar entry	Single	Start when service was rendered.
Date of Service End	Calendar entry	Single	Completion of rendered service
Date of Discovery	Calendar entry	Single	Date in which the potential fraud was

			discovered by the Sender
Congressional Interest	Checkbox	Single	Does Congress have any interest in this Case/Referral?
Press Interest	Checkbox	Single	Does Press have any interest in this Case/Referral?
Other PR Concerns	Checkbox	Single	Does Other PR Concerns have any interest in this Case/Referral?
Relevant Documentation	Attached Documents	Multiple	Relevant documents are attached to the case. This item is in reference to documentation submitted at the time the Referral was created. During the requirements meeting, the need for Claims data needs to be submitted as Relevant documentation. At this time we questioned the format of the attached information - structured information displayed by another application or a TIFF/PDF. The relevant documentation includes claim documentation plus structured information about the claim. (Case by case referral.)

2. Potential Fraud Referrals System Elements

The following elements will be automatically entered/maintained by the system.

Name	Where data was captured from	Single/Multiple	Description
Referral Submitted Date	Internal System Info (Workflow solution)	Single	Date when Potential Fraud Process was initiated (event occurs after form is filled out and submitted).
Origin of the Referral (aka - Sender)	Based upon system login information. Requires system to call out to another system for this information	Single	CMS Department or Contractor/ Subcontractor. **For CMS -** Name, Telephone, Department, email **For RAC/External Prime Contractor** - Name, Address, Telephone Number, Website address (if applicable), email (if applicable), Title **For Subcontractors** - Must keep this information for the RAC and the subcontractor (Name, Address, Telephone Number, Website address, Email), Title. Note, most of this information should not be stored in this system and will be requested when needed. Track who

			(CM account) started the process.
Date Closed	Fraud Referral process end	Single	This requires a post processing historical record (all the referral meta data after process completion will be maintained)
Provider Name	NPI Feed	Multiple (based upon NPI's)	The provider/supplier name.
Provider Address	NPI Feed	Multiple (base upon NPI's	The Providers address on record.
Specialty (for each NPI?)	NPI Feed	Multiple (based upon NPI's listed)	Specialty of the provider. When the NPI is entered (see above table), the specialty will be retrieved and displayed to the end user.
SSN, EIN, Tax ID (for each NPI?)	NPI Feed	Multiple (based upon the NPI's listed)	When the NPI is entered (see above table), the Tax ID will be retrieved and displayed to the end user.
DOB (for each NPI?)	NPI Feed	Multiple (based upon the NPI's listed)	Probably will not have. When the NPI is entered (see above table), the DOB (if available) will be retrieved and displayed to the end user.
Procedure Code Description	From feed #3 - Category 1 CPT codes or HCPCS	Multiple - based upon the codes entered in the checkbox.	Most likely these codes will not be maintained in the system but will be available via access from the feed. The only reasons to keep these codes in the system are for update frequency or feed performance.
Procedure Code Layperson's definition	Manually entered and maintained	Multiple - based upon the List of Items or Services	Definition of pertinent media terms and procedures in layperson's terms.
Number of Claims attached	Based upon number of claims attached to the Referral (automatically calculated)	Single	The number of claims in which this Referral directly effects/contains. A calculated value based upon the number of claims submitted when the Referral was created. (How a claim documents is stored depends if the documents is being identified separately or simply part of a referral package.)

3. Potential Fraud Referrals Process Elements

The following elements are updated as the Referral proceeds through the process.

Name	Data Type	Description
Action	Textual Note?	N/A
Brief Explanation of Findings/Summary	Single (Textual note - 120 characters??)	Brief Explanation of Findings/Summary of RAC Actions. Whether it warrants OIG investigation.
Date Referral Sent to OIG	System Field - Date	(This process is manually entered by the user who generates the report. OIG is not a receiver, they have no access to eREF, CMS OFM/PCG users will generate reports manually and deliver via their internal process.)
OIG Response	Textual Note?	N/A
Supporting Documentation (document attachments)	Documents stored in ECM	Supporting documentation.

4. Enterprise Data Sources

1)NPI Lookup - Require the ability to lookup/validate a NPI and display information about that Provider. (There aren't any feeds. NPI will only be validated for length.)

2) Service Category/AMA CPT Category 1 Codes/HCPCS - Ability to fetch categories and codes for both CPT Category 1 and HCPCS codes (may be two different locations). Instead of a direct feed, this may be simply a database table. Currently we are perusing this via Eileen.Davidson@cms.hhs.gov.

3) Under Investigation Lookup - This feed should provide the ability to lookup a NPI to see if the provider is currently undergoing a fraud investigation. (There aren't any feeds. NPI will only be validated for length.) This may be closely related to lookup #1.

4) CMS/CMS Contractor/CMS SubContractor Employee Information (for detailed Sender/Receiver information) - For the sender and receiver information, the system requires the ability to call out to another system that maintains user information. This system must contain all the information as needed in the sender and receiver sections.

5) State/Contractor matrix database - used to identify which receiver based upon state.

6) Provider Type/Sub-type enterprise source - Need a classification for the provider types and potential sub-classifications used for this flow.

5. Milestone Dates

The following lists the important dates maintained within the system.

Table 12: Milestone Dates Requirements

Occurrence	Manual / Auto	Description
Process Start/Date Submitted	A	The date in which the Potential Fraud process was started
Process End/Date Closed	A	The date in which the Potential Fraud case was closed/ended.
Date of Discovery	M	The date in which the sender discovered the Potential Fraud case.
Date of Service start	M	The date in which the sender discovered the Date of Service
Date of Service end	M	The date in which the sender discovered the Date of Service end
Date Accepted by Receiver (complete of "Review Referral")	A	The date in which the Receiver has accepted the Potential Fraud referral.
Date when Submission was rejected by Receiver (complete of "Review Referral")	A	The date in which the Receiver has rejected the referral. (Due to the circular nature, this event may occur more than once.)
Date when Referral was complete from Receiver. (Completion of "Process Referral")	A	The date when the receiver completes any work and sends the item back to the sender. At this point and time, some conclusion should have been drawn from the referral. Since this part of the process is circular, there may be multiple events of this type.
Date when Sender accepts or rejects the Receivers conclusion.	A	The date in which the sender reviews the conclusion of the receivers processing and determines whether or not the sender accepts (agrees) or rejects (disagrees) with the receivers conclusion. Since this part of the process is circular, there may be multiple events of this type.
Date Referral Sent to OIG???	M	(OIG is not a receiver, they have no access to eREF, CMS OFM/PCG users will generate reports manually and deliver

via their internal process.)

6. Future Enhancements

1. Validation of the CPC (Workload Contractor ID) (feed #2).
2. Maintain a text laypersons description database for the CPT Category 1 and HCPCS codes. Allow text analytics to describe/convert medical language into laypersons terms (for OIG usage).
    a. HCPCS codes are found at:
        i. https://www2.cms.gov/apps/ama/license.asp?file=/HCPCSReleaseCodeSets/Downloads/10anweb.zip
    b. Provide text analytics to select on a medical term and have an explanation / laypersons description of the term/procedure.
3. QA/IV&V/Oversight/Accuracy - This will be handled via an eRAC enhancement.
4. Quality Referral - Future initiative.

7. Outstanding Items

ii. Requirement Source

N/A

iii. Priority

N/A

iv. Purpose

N/A

v. Requirement Context Diagram

N/A

vi. Event Diagram

N/A

vii. User Level Requirements

N/A

viii. Functional Scenario Name

a. N/A

1. Scenario Flowchart / Use Case Diagram

N/A

2. Precondition

N/A

3. Trigger

N/A

4. Expected Result

N/A

5. Steps

N/A

Table 13: *N/A - Scenario/Use Case Name* - Scenario Steps

Step	Description
1.	*N/A*
2.	*N/A*
3.	*N/A*
4.	*N/A*
5.	*N/A*
6.	*N/A*
7.	*N/A*
8.	*N/A*
9.	*N/A*

6. Scenario/Use Case Functional & Nonfunctional Requirements

N/A

ix. Alternate Scenario/Use Case #1

N/A

1. Precondition

N/A

2. Trigger

N/A

3. Expected Result

N/A

4. Steps

N/A

b. User Requirement Summary: Improper Payment (Non-Fraud) Referrals

i. Associated Business Requirement

1. Improper Payment (Non-Fraud) Referrals Submittal Form

As of 5-27-2010, the requirements for Improper Payment Referrals Processing are yet to be determined. Most likely many of the data elements identified in the above section will be carried over to this process type.
The following lists the data elements captured as part of the Improper Payment Referrals Process submittal.

Table 14: Improper Payment (Non-Fraud) Referrals Submittal Form Requirements

Name	Entered/System	Single/Multiple (#?)	Description/Notes	Reference
Referral Type	Selection	Single	**Case** or Issue/Major Finding/Vulnerability	Mtg
Sub Type	Selection	Single	Type of Referral - Potential Fraud, **Non-Fraud** (term shall change => Improper Payment - Kathy TBD), Quality Referral. For the purposes of this section, this assumes the selected type is 'Non-Fraud'.	Mtg
Provider Type	Selection	Single	Provider types include - Inpatient Hospital, Outpatient Hospital, Physician, DME Non-Physician, DME Physician, Lab, Ambulance, Other Carrier Biller, SNF, HHA, Hospice, Other FI Biller, Unspecified	Mtg / Kathy, T3e
Provider Sub type (if applicable based upon selected Provider Type)	Selection (only applicable if Provider Type contains a Provider Sub Type)	Single	Sub Types related to the Provider Type: Inpatient Hospital - Acute Care, Critical Access, IRF, Inpatient Psych Outpatient Hospital - ASC, Unspecified DME Non-Physician - Orthotics, Prosthetics, Supplies DME Physician - Orthotics, Prosthetics, Supplies	Mtg
State where problem occurred	Multiple Selection Box	Multiple	States in which the non-fraud case occurred. (i.e. Maryland, Pennsylvania, Florida, Alaska,..)	Mtg; T3g
Receiver (group or individual)	Automatically selected via business rules. Allows for manual override. Kathy to provide business rules.	Single	This value is defaulted from rules however it allows it to be manually overridden. Need to review the possibilities for assignment.	Mtg; T-2a,2b,2c

			CMS Department or RAC, Subcontractor. **For CMS -** Name, Telephone, Department, email **For RAC/External Prime Contractor** - Name, Address, Telephone Number, Website address (if applicable), email (if applicable), Title **For Subcontractors** - Must keep this information for the RAC <u>and</u> the subcontractor (Name, Address, Telephone Number, Website address, Email), Title. Note - Most of this information should not be stored in this system and will be requested when needed. Track who (CM account) started the process. Additionally - since the work may be assigned to a **Receiver group**, all the specific information will be tracked as the person selects the item to process.	
Medicare Provider Number (NPI, UPIN, PIN)	Text box (comma delimited or potentially dynamic entry boxes)	Multiple	(There aren't any feeds; NPI will only be validated for length.)	Mtg; Kathy; T3f
List of Items or Services	Text Box (comma delimited)	Multiple	Service Category from CPT (AMA CPT Category I codes) or HCPCS Like to validate the values entered are correct. Popup display showing the code and the description.	Mtg / Kathy; T11c
Type of Scheme???	Drop-Down	Multiple	Type of menu	
Potential Number of Claims	Text Box	Single	The estimated number of claims for this type of Potential Fraud.	Kathy; T11c
Estimated Amount Paid	Text Box	Single	The estimated amount paid as part of this Potential Fraud.	Kathy; T11c
Estimated date period	Radio box - other to enable another text box where a custom range can be entered.	Single	Periods include - Month, Quarter, Year, Other. Other to include a text box	

Claims Processing Contractor (CPC) Involved in Original Decision to Pay	Text box (to many CPC's to list)	Single	This is the Workload Contractor ID within the eRAC system. 5 digits in length, sometimes receive 3 digits in eRAC.	Kathy
Case Description (complaint/matter)	Text Area (120 character limit)	Single	Description of referral	T11?
Date of Service Start	Calendar entry	Single	Start when service was rendered.	Kathy
Date of Service End	Calendar entry	Single	Completion of rendered service	Kathy
Date of Discovery	Calendar entry	Single	Date in which the potential fraud was discovered.	T6
Congressional Interest	Checkbox	Single	Check mark in which the potential fraud was Congressional Interest	Kathy; T10
Press Interest	Checkbox	Single	Check mark in which the potential fraud was Press Interest	Kathy; T10
Other PR Concerns	Checkbox	Single	Check mark in which the potential fraud was Congres	Kathy; T10
Relevant Documentation	Attached Documents	Multiple	Relevant documents are attached to the case. This item is in reference to documentation submitted at the time the Referral was created.	Kathy; T5; T12a-h; T13
Referral Type	Selection	Single	Case or Issue/Major Finding/Vulnerability	Mtg
Sub Type	Selection	Single	Type of Referral - Potential Fraud, Non-Fraud (term shall change => Improper Payment - Kathy TBD), Quality Referral. For the purposes of this section, this assumes the selected type is 'Potential Fraud'.	Mtg

2. Improper Payment (Non-Fraud) Referrals System Elements

The following elements will be automatically entered by the system as part of the workflow processing.

Table 15: Improper Payment (Non-Fraud) Referrals System Element Requirements

Name	Where data was captured from	Single/Multiple	Description
Date Submitted	System Info	Single	Date when Fraud Process was started.
Origin of the Referral	Based upon system login information. Requires	Single	CMS Department or RAC ,Subcontractor. **For CMS -** Name, Telephone, Department,

	system to call out to another system for this information		email **For RAC/External Prime Contractor** - Name, Address, Telephone Number, Website address (if applicable), email (if applicable), Title **For Subcontractors** - Must keep this information for the RAC and the subcontractor (Name, Address, Telephone Number, Website address, Email), Title. Note, most of this information should not be stored in this system and will be requested when needed. Track who (CM account) started the process.
Receiver (automatically selected or manually chosen from above).	Based upon system login information. Requires system to call out to another system for this information	Single	The Receiver for all Fraud cases (per ESMD Referral requirements section 5.3) is a PCS/ZPIC. Note, most of this information should not be stored in this system and will be requested when needed. Track who (CM account) started the process.
Date Closed	Fraud Referral process end	single	(This does not require a post processing historical record. We are maintaining all the referral meta data after process completion)
Specialty (for each NPI?)	NPI Feed	Multiple (based upon NPI's listed?)	Specialty of the provider. When the NPI is entered (see above table), the specialty will be retrieved and displayed to the end user.
SSN, EIN, Tax ID (for each NPI?)	NPI Feed	Multiple (based upon the NPI's listed?)	When the NPI is entered (see above table), the Tax ID will be retrieved and displayed to the end user.
DOB (for each NPI?)	NPI Feed	Multiple (based upon the NPI's listed?)	Probably will not have. When the NPI is entered (see above table), the DOB (if available) will be retrieved and displayed to the end user.
Procedure Code Description	From feed #3 - Category 1 CPT codes or HCPCS	Multiple - based upon the codes entered in the checkbox.	Most likely these codes will not be maintained in the system but will be available via access from the feed. The only reasons to keep these codes in the system are for update frequency or feed performance.

3. Improper Payment (Non-Fraud) Referrals Process Elements

The following elements are updated as the Case proceeds through the process.

Table 16: Improper Payment (Non-Fraud) Referrals Process Element Requirements

Name	Data Type	Description
Action	Textual Note?	
Brief Explanation of Findings/Summary	Single (Textual note - 120 characters??)	Brief Explanation of Findings/Summary of RAC Actions. Whether it warrants OIG investigation.
Date Referral Sent to OIG	System Field - Date	Date Referral sent

4. Data Feeds

1) NPI Lookup - Require the ability to lookup/validate a NPI and display information about that Provider. (There is no feed, NPI will only be validated for length.)
2) Claims Processing Contractor - Require the ability to lookup/validate a CPC (see eRAC Workload Contractor ID). (No validation/lookup to outside systems)
3) Service Category/AMA CPT Category 1 Codes/HCPCS - Ability to fetch categories and codes for both CPT Category 1 and HCPCS codes (may be two different locations). Instead of a direct feed, this may be simply a database table.

5. Milestone Dates

The following lists the important dates maintained within the system.

Table 17: Milestone Date Requirements

Occurrence	Description	Reference
Process Start/Date Submitted	The date in which the Potential Fraud process was started	
Process End/Date Closed	The date in which the Potential Fraud case was closed/ended.	
Date of Discovery	The date in which the sender discovered the Potential Fraud case.	
Date of Service start?	Date of service started	
Date of Service end?	Date of service ended	
Date Accepted by Receiver (complete of "Review Referral")	The date in which the Receiver has accepted the Potential Fraud referral.	
Date when Submission was rejected by Receiver	The date in which the Receiver has rejected the referral. (Due to the circular nature, this event may occur more than	

(complete of "Review Referral")	once.)
Date when Referral was complete from Receiver. (Completion of "Process Referral")	The date when the receiver completes any work and sends the item back to the sender. At this point and time, some conclusion should have been drawn from the referral. Since this part of the process is circular, there may be multiple events of this type.
Date when Sender accepts or rejects the Receivers conclusion.	The date in which the sender reviews the conclusion of the receivers processing and determines whether or not the sender accepts (agrees) or rejects (disagrees) with the receivers conclusion. Since this part of the process is circular, there may be multiple events of this type.
Date Referral Sent to OIG???	(OIG is not a receiver, they have no access to eREF, CMS OFM/PCG users will generate reports manually and deliver via their internal process.)

ii. Alternate Scenario/Use Case #1 – N/A -Name of Alternate Scenario/Use Case

N/A

1. Precondition

N/A

2. Trigger

N/A

3. Expected Result

N/A

4. Steps

N/A

Table 18: *N/A - Scenario/Use Case Name* - Alternate Scenario/Use Case Steps

Step	Description
1.	*N/A*
2.	*N/A*
3.	*N/A*
4.	*N/A*
5.	*N/A*
6.	*N/A*
7.	*N/A*
8.	*N/A*
9.	*N/A*

5. Scenario/Use Case Functional & Nonfunctional Requirements

43. USER REQUIREMENTS

a. <User Requirement Summary>

N/A

44. GLOSSARY

N/A

Business Requirement (BR)

A BR is a statement of the functions needed in order to accomplish the business objectives. It is the highest level of requirement, developed through the dictation of policy and process by the business owner.

Business Rule (RU)

An RU is a statement that defines or constrains some aspect of the business. It is intended to assert business structure, or to control or influence the behavior of the business. The RUs that concern the project are atomic in that they cannot be further decomposed and they are not process-dependent, so that they apply at all times. Business rules typically fall into one of five categories: terms, facts, derivations, assertions or action enablers.

Functional Requirement (FR)

An FR is a statement of an action or expectation of what the system will take or do. It is measured by concrete means like data values, decision making logic and algorithms.

Nonfunctional Requirement (NR)

An NR is a low-level requirement that focuses on the specific characteristics that must be addressed in order to be acceptable as an end product. NRs have a focus on messaging, security, and system interaction.

Scenario

A scenario is a sequence of steps taken to complete a user requirement, similar to a use case.

Use Case

A use case is a description of a system's behavior as it responds to a request that originates from outside of that system. The use case is made up of a set of possible sequences of interactions between systems and users in a particular environment and related to a particular goal. The use case should contain all system activities that have significance to the users. Use cases typically avoid technical jargon, preferring instead the language of the subject matter expert.

User Requirement (UR)

A UR is a statement of what users need to accomplish. It is a mid-level requirement describing specific operations for a user (e.g., a business user, system administrator, or the system itself). They are usually written in the user's language and define what the user expects from the end product.

45. ACRONYMS

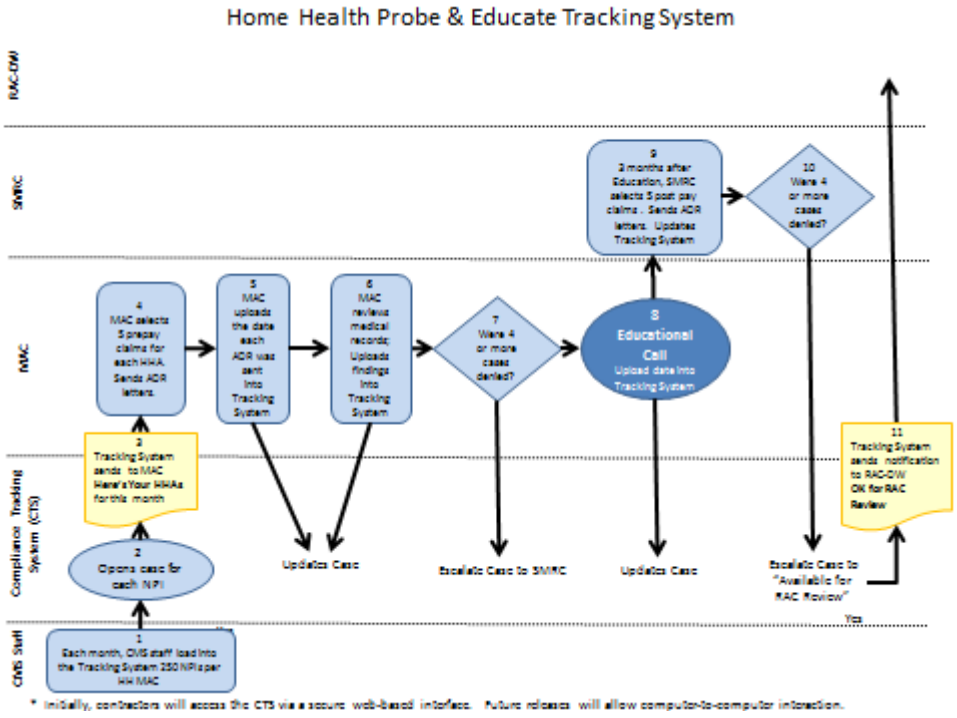
ARS	Acceptable Risk Safeguards
BR	Business Requirement
CMS	Centers for Medicare & Medicaid Services
FR	Functional Requirement
NR	Nonfunctional Requirement
RU	Business Rule

UR	User Requirement

46. APPENDICES

N/A

20. Attachment D



21. Attachment E

CMS_Information_Security_Requirements.