

# Draft-Statement of Work (SOW)

## License Expansion and Custom Engineering for the National Teleradiology Program (NTP) Analytics System

Vendor shall provide the following:

### **Item 1:**

The base system must have the design capability to support 1 million cases annually and shall have a study volume license up to a minimum of 700,000 annual cases. Volume must be based on Study Instance Unique Identifier (SIUID)/NTP issued final report.

Vendor shall provide all software, service, support and custom configuration for the existing NTP Radiology Analytics System and all associated modules. The system shall provide core analytics functionality for NTP operations and provide the framework for the Revenue/Invoice and STAT case management analytics modules previously covered. The existing system is called "Foundations" from Health Level Incorporated and is hosted on VA provided hardware at the Sacramento Data Center. Vendor must have remote Virtual Private Network (VPN) access to the existing systems to provide ongoing support, maintenance, management and upgrades for the system. Vendor shall comply with applicable VA security clauses.

- Vendor shall provide remote support and maintenance for the Foundations system via VA virtual private network (VPN). E-mail and phone support provided 8 am to 6 pm pacific and emergency pager response within 2 hours, 24x7. Scheduled support to include maintenance bug fixes, feature updates and upgrades to existing modules with 99.9% uptime.
- Base system must provide a fully integrated interface to other existing modules.
- Vendor shall provide ongoing interface and data extracts from the NTP PACS version 2 system.

### **Salient Characteristics:**

The system must:

- Be a PACS appliance to assist with clinical study management and workflow analysis.
- Have capability to be integrated/interfaced to NTP's existing PACS, which is IntelPACS from Intelrad.
- Provide radiology workflow, business intelligence and analytics capabilities to assist with workload tracking, capacity planning, performance management, quality assurance and billing functions.

- Integrate disparate data sources from NTP's PACS and staffing module from Lightning Bolt.
- Have web based reporting with fully user customizable reports that can be created from scratch or modified based on an extensive preconfigured report set to be developed by the vendor.
- Provide integration of disparate data sources into a common database to enable PACS analytics and reporting for NTP's operational use. Source data formats include: HL7, DICOM, EDI, CSV, and XLS.
- Software must be compatible with VA provided server running Windows 2012, SQL 2014 with standard VA server policies, Microsoft updates and McAfee virus scanning.
- Provide unlimited user accounts with role-based user permissions (NTP customer, NTP Radiologist, Business Office, Administrator, Rad Tech and Rad AO) and a hierarchal access structure.
- The system design must be predicated on a flexible, easy-to-use and highly customizable user interface.
- Data must be exportable in an Excel format.
- Billing reports must tabulate study volume by site with assignable costs by modality, criticality, and CPT code. System must be able to calculate billable charges with 2 tiered billing based on STAT or Routine priority. Billing report must be able to segregate for rural and non-rural sites and account for printset and bilateral billing adjustments.
- Performance management module must track Radiologist productivity based on study volume, RVUs, NTP defined productivity measure and billable rate.
- Vendor must provide remote support and after hours software loading.
- Access will be through VA's approved remote access client and vendor personnel will be required to annually complete VA's security and privacy training. No VA data shall be exported off site and all data, reports, and analytics outputs remain property of VA.
- Data listed below is the baseline data that will be incorporated into the system and the system must provide the capability to add additional data inputs without added cost.
  - PACS Data Imported: Server Received Time, Report Delivered Time, Exam Status, Originating Source, Order #., Accession N#, Modality, Study Time, Study Desc, CPT Code, Body Part, Priority, Reason for Study, MRN (encrypted), # Images, Ref Phys, Reading Phys, Remarks, Follow Up Code, SIUID, Notes, Billable Rate, Rural/non-Rural
  - Peer Review & Callback Data Imported: Accession #, Date-Time Created, Contact Source, Contact Name, Time Zone, Server Time, Created By, Comments, Alert Code, Callback Time Elapsed

Physician Scheduling Program Data Imported: Reading Phys, Day of Week, Tour of Duty.

**Item 2: Staffing Capacity Management Module, Maintenance and Support**

- Capacity planning module must provide clinical workload staffing projections. Based on pre-established study volume and RVU targets along with average productivity of NTP staff per shift. System must provide an interactive tool that calculates staffing required to support volume increases based on number of studies, priority of studies, modality and time of acquisition.

**Item 3: Performance Management Module, Maintenance and Support**

- System must integrate staffing data input to adjust productivity calculations to take into account sick leave, annual leave and authorized absence.
- Management level reports must provide normalized productivity reports by physician. Individualized productivity reports must be provided for each provider that tracks their performance (volume, RVU and billable) against the mean, median and management set performance targets for the group.
- QA reporting reports must be available. These reports must identify studies not meeting established turnaround time (TAT) targets and determine the TAT percentage of studies not meeting the established thresholds per variable time window. Peer review data input must have ability to be integrated into the report associating comments from the study to the accession number in the report. TAT for critical results reporting will be accomplished in a similar fashion. TAT analysis will provide a staffing overlay showing available FTEE on service compared to study volume and periods of TAT failure.

**Item 4: Analytics Module, Maintenance and Support**

- Workload tracking must provide real-time study volume tracking for the NTP with the ability to segregate workload by site, time of day, modality and originating facility. Target thresholds will be set for expected volume.
- Workload tracking and real-time study volume tracking must have the capability of displaying (overlay) the 'modeled FTE' required to handle the volume and the 'actual FTE' scheduled for that volume. The 'modeled FTE' capacity is provided as an NTP configurable variable of number of studies by modality that a typical NTP radiologist could interpret in a given time period.

**Item 5: STAT Case Management Module, Maintenance and Support**

- Allow NTP Customers to securely upgrade or advise of STAT cases.
- Allow NTP Staff to be notified and real-time reports/work list available.
- Collaborate easily with NTP Customers.
- Integrated with Foundations analytical platform.

**Item 6: Business Management Module, Maintenance and Support**

- Allow NTP Customers to securely access invoices.
- Allow NTP Customers and NTP Staff to make apply invoice updates.
- Enable data updates to be permanently reflected into data analysis.
- Integrated with Foundations analytical platform.
- All data will be available for export to NTP text format archives.

**Support and Maintenance for line Items 2 through 6:**

- Includes maintenance, bug fixes and feature updates.
- Includes upgrades to deployed functions / modules.
- Includes email and 8AM to 6PM Pacific Time phone support.
- Includes scheduled web-based Administrator training.
- Includes emergency 24x7 pager notification for support.

**Item 7: Implementation and Customization Fees/Custom Engineering**

- On-going application and API integrations.
- Custom coding and application extensions for VA NTP V2 specific function.

**Item 8: Option for additional increments above 700K studies per year**

- System capability to expand designated studies per year up to 1.1 million.