

Accreditation Tracker

Client Background

Customer is one of the largest radiology service providers in USA. Customer runs multiple practices across multiple locations. Customer's outsources process of reading of radiology images and preparing reports. Such transcribed reports are then reviewed by Customer's in house radiologists and approved.

Client's Challenge

The Radiologists and technologists working for client are required to maintain compliance with ACR (American College of Radiology) Accreditation and MIPPA. Each of the accreditations has certain requirement for training, Continuous Medical Education (CME) and number of exams read per year or Continuous Experience (CE). This accreditation compliance will directly impact on medical equipment's compliance.

The ACR method of tracking CME credits is unique in that you can assign a single CME to multiple buckets. For example, a PET/CT credit can be assigned to NM, PET and CT. This was designed to reduce the burden and cost to the radiologist/technologist. However, it poses a challenge to existing CME tracking software that counts each CME only once. Client's existing

CME tracking software is insufficient in this regard.

Also existing system was not capable enough to maintain users certification, state licensing and CPR information.

For the Customer, challenge was to manually prepare reports during audit process to show credentialing details of any user that auditor asks for which it use to take months to collect the data.

There was no automated alerting system for expired or about to be expired credentialing and licensing information.

That is where the need has been identified to create a new tool and change of workflow.

The Our Approach

We identified that the requirement was to:

- Develop a secured solution that reduces manual credential processing by handful of staff which is currently prone to errors
- The individual should have the tools to enter and report the data by themselves with oversight by the credentials department or managers.
- Easy administration to manage master data of Users, practice, locations
- Easy way to import existing large data about equipment's and users continuous experience
- Provide reports to get a details about individual users credentialing, licensing, certification and CPR information for auditing purpose
- Maintain hierarchy for approval workflow within organization

We leveraged the capabilities of newer technology platforms to solve issues faced by the client.

Solution Highlights:

Dynamic Configuration: The system that we built allowed the creation of dynamic user-defined configurations within the system. Thus adding new Users/equipment's became much easier. Role based security with flexibility of defining security levels per user type.

Security: Different mechanisms were used in the design of the new system to enhance the overall security of the solution - including stronger password policies, greater resilience to most common hacking and hijacking mechanisms and common authorization management.

Email Alerts: Email alert system helps in reminding users about their fulfillment of accreditation compliance in case they are short of it. Also managers and practice heads are alerted about the same so that they can push people working under their locations or practices to take care of their short of accreditations.

Document Attachments: System also provides easy way to attach proofs for user's credits, credentialing certificates.

Integration with third party email service provider for email receipt confirmation.

Successful outcomes and results

- Use of layered development framework which provides benefits of separation, independence and reusability
- Screen level configuration facility
- Rights in the system are managed at a component or page level as well as at a view or edit level.
- Easy way to track credits and credential information at individual user level
- Easy way for various level of managers to approve credits and credential information for the radiologists, technologists under their respective locations or practices
- Graphical charts provides real time information about credentialing summary showing percentage of active and inactive licenses, certifications, CPR, national licenses
- With the alerting system, users will be reminded of their credit or credentialing backlogs
- Managers or practice heads will be able to easily track where their locations or practices stands as far as accreditations are concerned

Technology used

- ASP.NET 4.0 with C#
- Microsoft SQL Server 2008R2
- SQL Server Reporting services
- Google Charts