

Control your destiny by
customizing your EMR



Interoperability Solutions & Specialty EMR Customization

March 2018



Customer Background

Academic Medical Center

One of the top Ivy league Academic Medical Centers [AMC] that provides international leadership in clinical research, in medical education, and in patient care. At AMC, education, research, and clinical care are combined to provide the best possible clinical care. AMC uses cutting-edge technologies, resources and therapies other community hospitals may not have available. The Specialty Department at the AMC is a world leader in the treatment of diseases of the nervous system, and one of the leading academic departments of neurology in the United States for its outstanding contributions to patient care, teaching, and research.

Affiliated Teaching Hospital

The affiliated Teaching Hospital is consistently ranked among the best academic medical institutions in the nation with thousands of beds. The Hospital has millions of inpatient and outpatient visits in a year, including thousand visits to its emergency departments. The Hospital has state-of-the-art inpatient, ambulatory and preventive care in all areas of medicine at their centers.

Business Problem

Neurology IT department was challenged with a task of providing a Continuous EEG monitoring for their physicians. They also challenged with calculating the provider task compensation, target and performance of provider which involved complex formulae that makes the result often erroneous. The available off the shelf products reviewed did not meet the requirements of the physicians and faculty, so the department knew that a customizable solution was necessary. The second challenge is to integrate the new functionality with the existing hospital health care system along with other customization works.

Solution

With the help of ViSolve, customer selected OpenEMR, a leading Open Source EMR and customized OpenEMR to provide a **Continuous EEG monitoring, Task compensation estimation, Target achievement functionality**. With the new customized OpenEMR, ViSolve has also integrated the new solution with the existing hospital's commercial EMR system for billing and other tasks.

Benefits

Continuous EEG monitoring

The Neurology IT department was capable of getting Continuous EEG monitoring, which resulted in providing **efficient healthcare** to the patient. The report include details such as patient details, Start Date, Diagnosis, Clinical history, Medication, technical notes, Abbreviations etc.

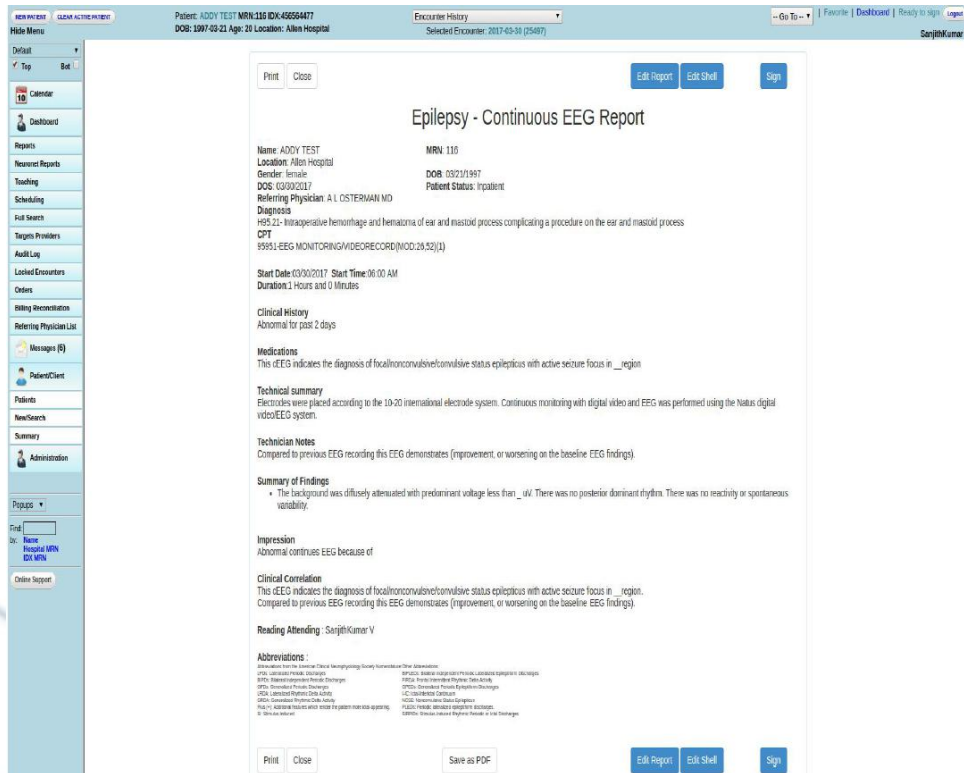


Figure 1: Epilepsy CEEG Report

Task Compensation Estimator (TCE)

Task Compensation Estimator (TCE) was used to calculate the performance of the neurologist based on Work Related Value Unit (wRVU) assigned by an outside entity CMS (Centers for Medicare and Medicaid Services).

To keep track of **productivity**, each faculty member gets wRVU credits for the tasks they perform. These include Administrative Tasks, Billable work, non-billable work, Research, etc.

The screenshot shows the 'BENCHMARK' section of the TCE interface. At the top, there is a navigation bar with links: Dashboard, Clinical Billable, Clinical CPT, Clinical NB, Admin, and Others. Below this is a 'BENCHMARK' header and an 'Add wRVU' button. The main form contains the following fields:

- User Name: Williams Alex
- Division: Epilepsy and sleep
- wRVU Target Defaults: 4560
- Neuro wRVU Target: 4000
- Quarter/Year: Q1 2018

There are 'Add' and 'Reset' buttons. Below the form is a table with columns: User Name, Division, Quarter/Year, wRVU Target Defaults, Neuro wRVU Target, and Action. The table contains 5 entries:

User Name	Division	Quarter/Year	wRVU Target Defaults	Neuro wRVU Target	Action
Ravi Robert	Aging and Dementia Research	Q4 2017	2500	1000	✕
raina samsudeen	Child Neurology	Q4 2017	5500	4000	✕
Ravi Robert	Child Neurology	Q4 2017	5500	4000	✕
one test1	NeuroCORPS(Clinical Outcomes Research and Population Science)	Q3 2017	8800	8000	✕
Gregory Adrian	Child Neurology	Q1 2018	5500	5000	✕

At the bottom, it says 'Showing 1 to 5 of 5 entries (filtered from 9 total entries)' and has 'Previous', '1', and 'Next' navigation buttons.

Figure 2: Adding Benchmark for faculty

Targets

Providers are given target as certain amount of appointments, which includes different types such as new patients, follow-ups etc. Appointments may also be assigned based on various divisions. Performance of the provider was verified manually which may not be accurate. So Customer/Visolve selected OpenEMR. Based on the target and achieved appointments result was calculated with the help of CTP Code. It is used to **check the performance** of provider. The customized OpenEMR solution resulted in improved workflow and processes.

Targets

Dashboard Division View Targets Default Scheduling Mapping

Dashboard PDF

Search

Achieved Results based on DOS
July 2017 - June 2018

Show 25 entries

Provider	Target New	Target EST	Target Overall	New	EST	Procedure	Overall	% Achieved
Chief, Division	360	360	720	423	0	0	428	59.44
Division Chief, local	240	180	300	157	3	0	167	55.67
Lname, Fname	240	180	360	218	15	7	269	74.72
Lname1, Fname1	420	480	840	247	6	1	265	31.55
Lname2, Fname2	900	600	1,500	7	0	0	7	0.47
Lname3, Fname3	1,200	1,200	2,400	32	0	0	32	1.33
Roby, Robert	420	420	900	210	13	1	243	27.00

Showing 1 to 7 of 7 entries

Previous 1 Next

Figure 3: Targets

About Us

Visolve is a niche software product development and consulting organization with high value onshore and remote teams with years of experience in Healthcare, Cloud, Web stack and Open Source Technologies. Established in 1995, Visolve is headquartered in San Jose, California with an offshore development center in India with 50+ Engineers and led by a group of Industry Veterans and Seasoned Professionals.

Why Visolve

- ✓ With 15+ years of experience in Open Source solutions customization, development and support, ViSolve is one of the leading contributors to the open source community. It has built, released and supported over 60 Open Source products for a leading system vendor in the world.
- ✓ ViSolve has strong relationship with HP/ VMWare's product development, QA, Performance, Global pre-sales teams and specializes in Product development, Build, Performance, QA and support of applications and kernel modules on VMware, HP-UX, Linux platforms.
- ✓ As the Chairman of OpenEMR Board (a leading clinical solution), ViSolve continues to contribute significantly to OpenEMR code and serve several clinics/hospitals across the globe.

- ✓ Has migrated over 160 healthcare practices to Amazon Cloud (AWS), with no business downtime for customer. Further, ViSolve enabled a popular chain of Physical Therapy clinics based in the Bay Area, with 7x24 Business Continuity through High Availability/Disaster Recovery solutions.

To know how ViSolve Healthcare Solutions and Services can help you solve your Business Challenges, please visit our website hc.visolve.com or email services@visolve.com or call +1 (408) 850 2243.

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