

DYNAMIC NEWS

Dynamic Health IT • New Orleans, Louisiana

Fall 2015

www.DynamicHealthIT.com



ONC Certified Solutions

- ⇒ CQMsolution
- ⇒ Patient Portal
- ⇒ ConnectEHR

Interoperability Solutions

- ⇒ HL7Connect
- ⇒ Registry Hub
- ⇒ CCDA/CCD/CCR



FHIR is an emerging set of flexible interoperability resources based on common web standards. DHIT took part in FHIR Connectathon 10 in Atlanta, sharing ideas with FHIR leadership and solving problems collaboratively with other implementers. Among other successes, we were able to calculate and generate a quality measure report for CMS 68 and CMS 126, using FHIR as a data source.

NOLA Beat

Through our work with Health Lean Logistics (HLL), DHIT staff had a backstage pass to the opening of the new University Hospital on August 1. We've been working on a mobile interface for tracking and ordering inventory.

DHIT Remembers Katrina

Ten years ago, the current site of Dynamic Health IT's headquarters was under eight feet of water. This simple fact is never far from our minds.

A decade on, as New Orleans and the country reflected on the flood, our company also looked back on those painful days that stretched into months and years. We shared evacuation stories—the “new normal” of drifting between friends’ and relatives’ homes. There was chaos, devastation and military checkpoints awaiting us on return, but also signs of New Orleans’ unbroken spirit.

Mardi Gras and the Saints gave us reasons to forget, however briefly. The storm’s aftermath caused seismic changes for our staff and for our city. Some of us found new careers, finished school and set a course for our current positions at DHIT.

New Orleans continues to rebuild and assess its readiness for a future storm. To that end, DHIT staff attended the LaHIMSS event, *Ten Years Later: How Healthcare IT has Evolved Since Hurricane Katrina*. It was clear from the proceedings that Health IT has never been more vital to disaster planning.



Going Mobile

Mobile traffic now accounts for more than half of total internet traffic. Given how crucial it is for users not to be restricted by screen real estate, DHIT developed and launched a mobile-friendly website in August. Throughout the two month site refresh, we expanded our expertise in responsive web design (RWD). RWD allows the appearance and functionality of a site to adjust to the size and orientation of a user’s screen.



Mobile Homepage

The most popular framework for responsive design is Bootstrap. With Bootstrap, individual page elements and images are resized by using

formulas that produce a percentage of the original, rather than that of equal size. Additionally, the look and format of the entire website is aware of the characteristics of the device. This dynamic programming allows content to be resized, hidden, shrunk, enlarged or moved seamlessly to the user and eliminates the need for parallel versions.

The importance of this technology is twofold at DHIT. Not only is our site now fully responsive across devices, we are expanding the use of responsive design in our products. CQMsolution, our quality measure software, already uses it and we are poised to launch a more mobile-friendly version of our Patient Portal.

New site features include: tabs linking directly to social media, rotating content on homepage, fixed menu bar as you scroll & many others.

CQMsolution: Upgrade to Version 2.6.1, Test Patients & Looking to the Future

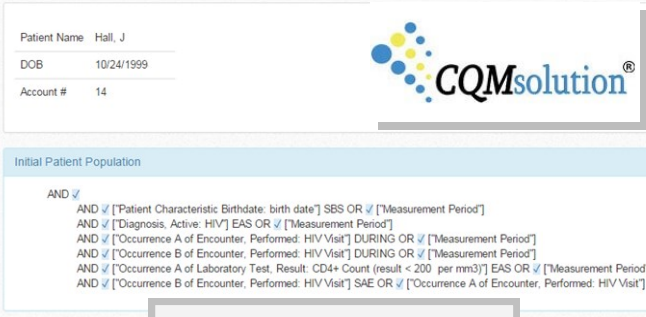
CQMsolution, DHIT's ONC-certified Quality Measure calculation and reporting software, continues to expand and improve.

In late August, CQMsolution was upgraded to version 2.1, incorporating a recent update by Cypress, the CQM validation authority. Cypress Patch Release v2.6.1 was released this summer and has more extensive validation to increase confidence in CQM submission. Version 2.6.1 will be used for the remainder of 2015 for certification, while v2.6 was phased out on October 26, 2015.

Our new version of CQMsolution also includes enhanced drilldown screens for exploring how each patient in a sample meets a given quality measure. This screen details each step in the logic by which the patient was considered for the measure. Beneath these headings, the logic tree will appear, showing a blue check mark for each condition met and red 'X' for each condition not met.

Alongside the new version, we have also ramped up our testing. Using an ONC-sponsored tool called BONNIE, DHIT has now generated or shared in over a thousand patients to stress-test our application. BONNIE is a web-based tool primarily for measure developers that allows users to load in quality measures and create patients in a user interface for testing against the measure logic.

The goal of this testing was increase testing "coverage" - finding or generating cases that touch as many distinct parts of the logic as possible. Uncovering "edge cases" has allowed us to make CQMsolution more robust—increasing confidence that it can accommodate a wide range of live patient data.



The screenshot shows a patient record for 'Hall, J' with DOB 10/24/1999 and Account # 14. Below this is a section titled 'Initial Patient Population' with a logic tree. The logic tree starts with 'AND' and lists several conditions, each with a blue checkmark indicating it is met. The conditions include: '[Patient Characteristic Birthdate: birth date] SBS OR [Measurement Period]', '[Diagnosis, Active: HIV] EAS OR [Measurement Period]', '[Occurrence A of Encounter, Performed: HIV Visit] DURING OR [Measurement Period]', '[Occurrence B of Encounter, Performed: HIV Visit] DURING OR [Measurement Period]', '[Occurrence A of Laboratory Test, Result: CD4+ Count (result < 200 per mm3)] EAS OR [Measurement Period]', and '[Occurrence B of Encounter, Performed: HIV Visit] SAE OR [Occurrence A of Encounter, Performed: HIV Visit]'. Below the logic tree is a box labeled 'CQMsolution Patient Drilldown View'.

The testing process has also sharpened our expertise in quality measures, as our staff has poured over logic trees for each of the 93 CQMs.

All of these changes keep CQMsolution an up-to-the-minute application for clients. In contrast to open source and other competing CQM applications, our code is constantly maintained and quality-controlled. We provide a straightforward, guided install process and extensive user documentation and support. The browser-based, SQL-powered implementation allows our clients to maintain and configure the application in a stable, user-friendly environment.

Looking ahead to 2016—and Cypress version 2.7—we anticipate exciting changes that will keep CQMsolution on the vanguard of quality measure software nationwide.

Registry Hub: for Immunizations

Dynamic Health IT has been broadening its coverage for state immunization registries submission. Our Registry Hub enables clients to submit immunization data to the state of their choice, sending messages through custom interfaces and web service (or sFTP), all located on a central hub server. We are currently live in Arizona, Florida, Georgia, Indiana, Louisiana, Michigan, Mississippi, New Jersey and Texas—with more states (including KY and NY) under development. Our expertise in this area allows for rapid development, message adjustment and submission to state, regardless of specs.

Dynamic Health IT



Dynamic Health IT is located in the heart of New Orleans just off the famous Canal Street streetcar line and blocks from the new University Medical Center.

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Patient Portal: New Features Abound

Patient Portals continue to evolve in response to clinical experience and changing policy initiatives. DHIT has undertaken an ambitious upgrade to the multi-entity Patient Portal product, including a host of custom features and configurations that have emerged from our client collaborations.

Our ConnectEHR + Patient Portal comes in two main flavors—client server (for single entities) and a multi-entity version. For the multi-entity version, users can log in to administer separate practices, while patients see a single, cohesive portal. We developed a unique server

architecture to increase Portal security, with a multi-server model that keeps all but the Portal from being directly exposed to the web. We added new user types to better serve our customers' workflows and continued to enhance our parsing beyond required ONC fields, including results and vitals. Other features include enhanced secure messaging and custom parsing/processing of CCDA and updating of patient data

These upgrades have made our new release of the multi-entity Portal a huge leap forward.

