

“VDT Listening Session”

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[Microsoft HealthVault](#) is a free, worldwide, online service where consumers can collect, store, share and (most importantly) use their personal health and wellness information. In addition to our own web site and mobile apps, consumers can connect their HealthVault record to literally hundreds of third party applications, providers, data sources and personal monitoring devices --- the goal being a lifetime information “hub” that ensures family and caregivers always have the context they need to make important decisions about health and wellbeing.

Convenient connectivity to clinical information is a “must have” for a service like HealthVault --- there is ample evidence that manual data entry is simply a bridge too far for the majority of busy families. This imperative means we spend a lot of time investing in “interoperability” of all types, but most active currently is our work around Blue Button Plus and Meaningful Use Stage 2 VDT.


HealthVault is certified for the VDT, Numerator Reporting and Quality System measures for both inpatient and outpatient settings. This functionality is fully deployed; there is currently no cost for partners to use it. EHR partners are responsible for delivering a compliant C/CDA file to HealthVault using any of our integration channels, and we provide the means for patients to:

- View the information either in its original form or in context with other parts of the record,
- Download all or part of the information in C/CDA or other formats,
- Transmit all or part of the information to a third-party using Direct messaging, and
- View a history of VDT actions taken on the record.



[Your account](#) | [Sign out](#) | [Help](#)

Sean



Edit

Add a person +

Switch person v

View, download, and transmit history

Date	Action	Access by
2/11/2014 3:14:26 PM	Health information was downloaded	Sean Nolan
2/11/2014 12:33:06 PM	Health information was viewed	Sean Nolan
2/10/2014 3:08:23 PM	Health information was viewed	Sean Nolan
2/6/2014 1:32:51 PM	Health information was viewed	Sean Nolan
2/5/2014 8:21:38 PM	Health information was viewed	Sean Nolan
1/31/2014 11:13:28 AM	Health information was viewed	Sean Nolan
1/27/2014 2:07:18 PM	Health information was viewed	Sean Nolan

In addition, EHR partners are able to download for any selected time period a report containing VDT actions taken by their unique patient identifiers. Combining this report with their own denominator information enables them to report accurately their level of VDT engagement.

Technical (Non-) Issues

We have seen surprisingly few significant technical hurdles interacting with EHR systems that generate C/CDA files that validate successfully against the Stage 2 testing tools. This is a dramatic change from integration with Stage 1 certified products, which almost as a rule generate syntactically or semantically unusable CCD and CCR documents.

We do still commonly encounter subtle differences in standards interpretation that can have non-trivial impacts on interoperability. For example, if a “problem” is coded against a system other than SNOMED, minor, syntactically-valid variations in the XML representation can cause a receiving system to “miss” the textual description, leaving the patient a “problem” without a name. Amusingly, the best practice for handling this particular situation is documented only on Keith Boone’s (excellent) blog.

But as we often say on the HealthVault team, these are great problems to have --- because it means data is flowing and we’re in the last mile of working out the bugs. I am confident that increased real-world use of the standard will “burn out” these last remaining challenges in relatively short order.

Direct as an interoperable transport has been extremely robust; over the course of the last year we have onboarded dozens of exchange partners with very few truly technical issues. That is not to say that connectivity always works great the first time, but problems almost always are the result of simple configuration errors that are becoming less frequent every day.

Cultural Issues

We have yet to see widespread deployment of MU2 certified EHRs, so it is a bit early to judge how successful staff members will be at leveraging the tools. However, we have been engaged in a number of pilot programs and some early lessons are clear:

- Provider “endorsement” is the number one predictor of engagement. Patients need a trusted advisor to show enthusiasm and bring to life the benefits of emergency profiles, downstream sharing, third-party apps, and so on. Our best tool to support this dynamic is the 5% requirement, which will be critical to “force” the cultural change that has to happen. I would further encourage ONC to develop educational tools and programs to help providers understand how VDT-powered engagement can benefit them and their patients to accelerate this change.
- There are still significant gaps in the “trust fabric” underlying the “Transmit” requirement. While the clear intent of the regulation is to allow patients to choose the location where information is sent, testing does not require this ubiquity, nor is there really an officially-sanctioned mechanism to achieve it. Blue Button Plus clearly has the potential to serve this function, but for now is still at best a recommendation, leaving each health care system, or worse each vendor, to judge for themselves what destinations are “appropriate.”

Summary

Do not accept any claim that VDT is technically “hard” --- it is not. But it is only the first step in a fundamental transformation in the way providers and patients interact, and that is hard, and requires a non-trivial measure of courage. Keep the faith, and our kids and all of us will benefit from the end result.