EHRs Can Place Excessive Data Entry Burden on Physicians

Required Structured Data Only Small Percentage of Typical Patient Note

JOHNSON CITY, Tenn., Oct. 7, 2014 /PRNewswire/ -- A new study by WebChartMD (www.webchartmd.com) indicates that as little as 7% of data in a typical patient note is required to be structured in order to meet Meaningful Use. The percentage rose to 9% when lab data was present.

The study analyzed one hundred de-identified orthopedic and cardiovascular patient notes obtained from MTSamples.com.

While a larger body of documents needs to be analyzed to confirm study findings, the key take-away appears to be that as much as 91% to 93% of data typically captured within EHRs in a structured format (e.g. point-and-click templates and drop-down boxes) could instead be captured as unstructured data (e.g. dictation and transcription, or free-text entry) and still meet Meaningful Use requirements.

"This study is especially relevant for physicians frustrated by the negative impact EHRs can have on their patient interactions and their productivity," said Mark Christensen, WebChartMD's CEO. "Physicians are often asked to capture more data in a structured format then Meaningful Use requires."

Data required to be structured for Meaningful Use are:

- demographics (preferred language, sex, race/ethnicity, date of birth)
- vital signs (height, weight, blood pressure, BMI)
- smoking status
- problem list
- medication list
- medication allergies
- lab tests/values
- minimum of one Family History entry

According to Elisabeth Myers, Policy and Outreach Lead at the CMS, much of the data routinely documented as part of the patient encounter – such as the History of Present Illness, Assessment, and Plan, to name a few key document sections – can be incorporated into the patient record within the EHR as unstructured data without in any way preventing the physician and clinic from meeting Meaningful Use.

"Too many physicians struggle with their EHRs when they simply don't need to be," said Christensen. "A greater use of dictation and transcription could represent a faster and easier means of documenting large portions of their patient encounters."

Adding dictation and transcription is easier than many physicians realize. "Virtually every EHR is capable of incorporating transcription into the patient note via what's called an interface," said

Nathan Mitchell, WebChartMD's Operations Manager. "Setting up an interface can take anywhere from 30 minutes to six weeks, and requires the cooperation of the EHR vendor."

For more information on how your physicians can incorporate dictation and transcription into their EHR workflow, contact Kris Girardi of 360 Transcription Corporation, at 877-360-TRAN (8726) or kris.girardi@360transcription.com.

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Has Structured Data Become Healthcare's Monster?

Increased Use of Unstructured Data Could Reduce Physician Frustration

JOHNSON CITY, TN - One of Meaningful Use's most misunderstood requirements is the extent to which data needs to be captured in a structured format. Does a physician really need to document the entire patient encounter as structured data in order to meet Meaningful Use?

The answer is no, according to The Center for Medicaid and Medicare Services (CMS) – providing the physician is capturing a select number of data points the CMS requires in a structured format within an ONC-certified EHR.

What patient data does Meaningful Use require to be captured in a structured format? Of the twenty-three Objectives of Meaningful Use, only *eight pertain* to structured data entry into the EHR. Those are:

1. Patient demographics
2. Problem list
3. Medication list
4. Medication allergy list
5. Patient Vitals
6. Smoking status
7. Family health history
8. Lab Results (LOINC format)

(One additional Meaningful Use Objective – "Record electronic notes in patient records", specifically states that the patient note ***can*** be dictated and transcribed, providing the document is in a searchable format. See list of all 23 Meaningful Use Objectives at conclusion of this article).

For the above eight Objectives, those data must be captured within the structured format of the EHR in order to meet Meaningful Use requirements.

But all other patient information routinely documented as part of the patient encounter – such as the History of Present Illness, Subjective, Objective, Review of Systems, Social History, Assessment, and Plan, to name a few – can be dictated and transcribed without in any way preventing the physician and clinic from meeting Meaningful Use.

The bottom line is that there is nothing in Meaningful Use that restricts healthcare providers from using dictation and transcription to document those sections of the patient encounter not specifically cited as needing to be structured.

Structured vs. Unstructured Data

What is the difference between structured and unstructured data? Simply put, structured data is information captured within a field or format that can be automatically identified by the EHR. The CMS requires certain data to be structured for two key reasons: first, to make it portable to other EHRs or electronic applications; and secondly, to enable it to be associated with standardized code sets and clinical terminologies like SNOMED CT. Structured data is recorded within EHRs via documentation tools, including but not limited to, drop-downs, check boxes, radial buttons, and in limited cases via text entry (such as the entry of like blood pressure measures or patient weight, height, age, etc.).

The other type of data found within EHRs is "unstructured data", so named because it is not entered in a field or format automatically recognized or identified by the EHR. Examples of unstructured data are the free text notes typed into a text box by a healthcare professional, and transcribed patient notes which are interfaced into the patient record. Unstructured data is often, but not limited to, qualitative information about the patient's health history or health context that provides additional decision-making support.

The Structured Data Monster

Since Meaningful Use requires only a limited subset of patient data to be structured, could it be that EHRs are placing an over-emphasis on structured data at the expense of physician efficiency and patient care? Have we created a monster out of the EHR-based clinical documentation workflow, placing unnecessary demands on physicians to structure data that in many ways is better captured in an unstructured, or narrative, format?

Critics of unstructured data would argue that it impedes our ability to collect and analyze the data needed to move our nation toward a more evidence-based approach to healthcare. Data is indeed the engine for driving improvements in healthcare, but wouldn't it be far easier and faster for physicians to narrate the details of the patient encounter, and then use technology to index and structure the free text for analytics and reporting purposes?

A large population of physicians – as many as 30% or more – express on-going frustration with their EHR-based clinical documentation workflow. For many of those physicians, a greater use of dictation and transcription – provided it is in a searchable text format – could represent a faster, easier and less frustrating means of documenting their patient encounters.

In sum, data remains the key to improving our healthcare system. The current emphasis on structuring all data generated via the patient encounter instead of just those data points mandated by Meaningful Use, however, may not be the optimal experience for many physicians or patients. For those physicians experiencing high levels of frustration with their EHR-based

clinical documentation tools, dictation and transcription could provide an effective alternative for documenting those parts of the patient encounter not specifically mandated for capture via the EHR's structured data capture tools.

About the author: *Mark Christensen is CEO of WebChartMD (www.webchartmd.com), a healthcare company specializing in software applications that manage the clinical documentation workflow.*

Summary Table: Meaningful Use Stage 2 Objectives

	Stage 2 Measure	Description	Impacts Transcription?
1	Use computerized physician order entry (CPOE)	Physician order labs, medication, xray, radiology orders via the EHR.	Little to none
2	Generate prescriptions electronically	Use EHR to send prescriptions to pharmacies	None
3	Record demographics as structured data	Language, gender, race, ethnicity, date of birth	Yes
4	Maintain an up to date problem list as structured data.	Maintain an up to date problem list as structured data.	Yes
5	Maintain active medication list as structured data	Maintain active medication list as structured data	Yes
6	Maintain active medication allergy list as structured data	Maintain active medication allergy list as structured data	Yes
7	Record and chart changes in vital signs as structured data	Height, weight, BP, BMI, children growth chart	Yes
8	Record smoking status as structured data	Record smoking status as structured data	Yes
9	Implementation of clinical decision support tools.	Use EHR-based applications to improve patient care.	No
10	Report Clinical Quality Measures (CQMs) to CMS.	CQMs measure "degree to which a provider *competently and safely* delivers clinical services that are *appropriate for the patient* in an *optimal timeframe."*	No
11	Provide patients with an electronic copy of their health information.	Includes online access and ability to download	No
12	Provide clinical summaries for patients.	Provide clinical summaries for patients.	No
13	Protect electronic health information with the EHR.	Protect electronic health information within the EHR	No
14	Incorporate clinical lab-test results into EHR.	Incorporate clinical lab-test results into EHR. Lab results do require some structured data in LOINC for the purposes of the CCDA in transitions of care	Yes
15	Perform medication reconciliation on new patients.	Insures that receiving physician has complete knowledge of patient's medications	No
16	Provide summary of patient care for patients transitioning to other source of care.	When transitioning a patient to a new source of care, patient documentation needs to be provided with transition. This objective incorporates the structured data into a C-CDA for transitions of care and that is fundamentally the biggest use of structured data.	Yes
17	Transmit electronic data to immunization registries	Functionality within EHR to transmit specific data	No
18 (NEW)	Use electronic messaging to communicate with patients	Use electronic messaging to communicate with patients	No
19 (NEW)	Record electronic notes in patient records.	Notes can be dictated, text must be searchable	Yes
20 (NEW)	Scans and test accessible via EHR	Scans and tests accessible via EHR	No
21 (NEW)	Record patient family health history as structured data	Indicate that first-degree family history has been reviewed or enter one structured data	Yes
22 (NEW)	Report cancer cases to a registry.	Report cancer cases to a registry	No
23 (NEW)	Report cases other than cancer to specialized registries.	Report cases other than cancer to specialized registries.	No