The advent of electronic health records (EHRs) brings to mind a story I like to tell. I was developing a ruleset for an automated underwriting rules engine 20 years ago when the IT director brought up a point during dinner. He said, “You underwriters really like your medical records. Well, I need them in an electronic data format with a dedicated field containing diagnostic codes. Then I can use those codes to assign an automated risk class.” I told him, “I know. It will happen, in our lifetime, but it will not be due to what we are doing with automated life insurance underwriting.” Here we are all these years later and due to such factors as the Affordable Care Act, automation, the focus on patient rights and wellness, we are almost there. EHRs can provide what my IT friend was looking for, and will be a huge leap forward for our industry as we look to improve the customer experience, reduce costs, and increase efficiency.

This paper will define important terms related to EHRs, provide insight into components and content, and identify the steps needed so we can best leverage this data for faster and better risk assessment.

What are EHRs and what information do they contain?

Electronic health records are, “a real-time patient health record with access to evidence-based decision support tools that can be used to aid clinicians in decision making,” according to the Office of the National Coordinator for Health Information Technology.

Implementation of EHRs by health care providers serves a dual purpose: to improve the level of care provided to the patient and to better manage the reimbursement for services rendered.

EHRs contain patient vitals, doctor’s notes, diagnoses and treatment plan. The EHR may include medical test images (CT, X-ray, MRI), pathology reports or lab results. EHRs only contain information generated after the system started. Previous medical history will not be back-coded into the medical record unless it is noted as past medical history by the physician.

Sensitive medical information such as psychiatric notes and drug or alcohol histories may not be included. A separate order and authorization may be required in order to obtain this information.

Patient portals, designed for ease of patient access, are websites that provide access to a patient’s medical history. There are vendors offering services which obtain EHR data for insurers by logging into a patient portal and providing an electronic authorization. The amount of information available on the portal is often less than the full EHR.

Ownership of the EHR is murky at best. While the information is owned by the patient, the media itself is owned by the providers and the electronic platform is owned by the vendor. All have a vested interest, including a financial stake.

Hit rates, provider perception and the current status of EHRs

The health care provider perspective is very interesting in that 63 percent of doctors believe EHRs improve documentation, 70 percent say EHRs decrease face-to-face time with patients, 39 percent state they improve collections for doctor services, and 38 percent feel they “worsen patient services.”
Hit rates on EHRs for applicants looking to buy life or disability insurance are increasing as more providers implement platforms, but rates are currently low. Rates can be less than 10 percent of applicants, with location of the patient an important factor. Major metropolitan areas have higher hit rates than rural areas.

**Interoperability** is an important term that describes the extent to which systems and devices can exchange data and interpret that shared data. In order for two systems to be interoperable, they must be able to exchange data and subsequently present that data in a way that can be understood by the user ([HIMSS.org](http://HIMSS.org)). Interoperability is important since it improves the delivery of health care by making the right data available at the right time to the right people. It allows data transfer among EHR systems and health care stakeholders ([HealthIT.gov](http://HealthIT.gov)). Interoperability has not yet been achieved and is an ongoing process. The need is apparent to health care providers, IT platform vendors, and the federal government, which is monitoring this issue to improve levels and vendor acceptance.

**Meaningful use** is another important term defined by the federal government and is required for providers to qualify for reimbursement for their EHR systems. Roughly, the goals are improved quality of patient care, patient history transparency, improved care coordination, and maintaining privacy and security of the data. There were three stages for implementation, with the first due date for compliance in 2012 on data capture and sharing, the second in 2014 for advanced clinical processes, and the third in 2016 for improved outcomes.\(^3\)

EHRs do not have a standardized format or template required by the government. Many vendors have developed their own platform, content and user interfaces.

**How will EHRs benefit life and disability insurance carriers?**

Wide adoption of EHRs will provide a significant improvement in turnaround times compared to traditional attending physician statements (APS). IT vendors believe health records could be available in real-time rather than in weeks for traditional APSs.

Life and disability insurance underwriters will want to focus on diagnostic codes. For providers, these codes document patient history and are used to bill the patient’s health insurance plan for services rendered. The most widely used formats include ICD-10, SNOMED, and LOINC. Codes may not match the proper underwriting risk class, so care must be exercised in using them for automated underwriting programs. Codes do have value and can be used with both full or automated underwriting.

The format of electronic structured data can be leveraged for automated risk assessment and business analytics in order to increase efficiency (the previously mentioned turnaround times going from weeks to seconds), improve key performance indicators and improve the customer experience.

**Likely cost for carriers looking to obtain EHRs**

The cost to a carrier to pilot an EHR program can be significant. One leading vendor is charging over $100,000, and others are asking for even higher amounts for interested carriers to obtain and analyze records. This cost needs to be taken in context with the notion that, again, the primary customers for EHRs are hospitals, physicians and their patients.

Implementation costs for life and disability insurance carriers to use EHRs in their underwriting is yet to be determined. Adoption is in the early stages with several insurance-specific vendors actively working on this.

IT integration is required for both the direct carrier and the IT platform provider in order for EHRs to be sent automatically from the provider site to the insurance carrier.

An applicant’s EHR cost has no set market rate. Costs to a carrier will vary depending upon the vendor used and volume. Vendors are stating that EHR fees will be approximately the same as APS fees. Vendors using patient portals are quoting significantly lower EHR prices since this information is required by the federal government to be free; however, patient portal information can also contain less than the doctor’s entire record and may be redacted by the patient.

**Leading EHR vendors**

There are over 750 vendors supplying EHRs to health care providers. Some of the leaders include Epic, Cerner, Allscripts, Athena, Meditech, InterSystems, eClinical Works, and NextGen.

Several vendors specific to the life insurance industry are also exploring EHRs, including EMSI and MIB.
How is an EHR obtained?

The federal government requires that patients be given free access to their own medical records and have the right to forward the data. This is a significant benefit to the life and disability insurance industry as we look to leverage EHRs.

The Veteran's Administration’s Blue Button platform allows health care providers outside the system to access and print patient records. The program is intended to promote patient engagement and portability of records. Other private health insurers are beginning to incorporate this concept for their patients.

Authorizations are currently an issue, with many vendors requiring special authorizations for access to EHRs. Insurance vendors are working, with limited success, to obtain EHR records with paper authorizations.

How can carriers begin using EHRs for underwriting?

For carriers to determine how to appropriately use EHRs in life and disability insurance underwriting, they will need to establish pilot programs with a vendor supplying EHRs on the carrier’s in-force or pending new business. Remember, current hit rates are low, so many applicants may need to be checked in order to obtain a sufficient number of EHRs to analyze. Authorizations on pending cases may be sufficient to obtain EHRs, but new authorizations are likely to be required in order to obtain them on existing business. EHR vendors assert that turnaround times are much faster than on traditional APSs, but EHRs are not yet available in real-time. The pilot will allow a carrier to assess not only turnaround times, hit rates, and costs, but also the actual content of the EHRs.

For fully underwritten business, EHRs serve as a replacement for the traditional APS. However, if they are to be used in lieu of fluids, parameds, APSs, part 2s, or tele-interviews, carriers will need to compare EHR’s content with specific traditional underwriting requirements in order to assess appropriateness and accuracy of using them to replace traditional underwriting requirements.

For automated underwriting, the structured data format with diagnostic and billing codes can be utilized for underwriting through a rules engine. Clear uninsurable risks and preferred best cases are to be automated for initial phases to improve efficiency and consistency and provide a better customer experience. Future iterations may use automated risk assessment on higher complexity and impaired risk business.

Underwriting workflows need to be developed

There are several workflow processes that will need to be developed and implemented in order to leverage EHRs including:

- Applicant/patient steps, including special authorizations, with a focus on customer experience, reducing costs and turnaround times, and legal requirements.
- IT processes for the direct carrier, reinsurer, and IT vendor.
- Underwriting processes for both traditional fully underwritten and automated streamlined programs.
- Administration, including in-force management, wellness programs, and wearables programs.
- The claims department can look to leverage EHRs to increase efficiency, reduce costs, provide a better customer experience, and reduce processing times.

Do EHRs have a pricing or mortality impact?

To measure the protective value and pricing impact of EHRs, carriers will need to conduct studies that compare their traditional fully underwritten decisions with the results that would have been obtained if EHRs had been used to assess applicants. This exercise can be broken down by traditional individual underwriting requirement to assess whether the protective value justifies the cost, time and customer experience to retain it in the new underwriting process and to determine the completeness and value of EHRs.

As additional non-traditional tools, such as new database checks, become available, these can also be compared to the new underwriting requirements in order to determine whether they should be integrated into the risk assessment process.

Proximate future best practices for underwriting life and disability insurance could easily consist of items that either are not in use today or may not even exist. Real-time database checks have only recently become available, and “selfies” was not even a word before 2005. Now both are being used for automated risk assessment.
EHRs: Holy Grail or just hype?

Some view EHRs as the Holy Grail for underwriting while others see them as a lot of hype with little payoff. The truth is currently somewhere in the middle. Vendor hit rates on insurance applicants will go up. Turnaround times will continue to go down, as will costs. We must start now to develop and implement programs that leverage EHRs for our benefit or others outside the industry will exploit the opportunity and leave traditional carriers behind. The benefits of EHRs are apparent and must be leveraged for the applicant, distributor and carrier alike.

References

1 Department of Health and Human Services – Office of the National Coordinator
3 https://www.healthIT.gov/providers-professionals/meaningful-use-definition-objectives

Ron Schaber, FALU, FLMI
Second Vice President, Integrated Underwriting Solutions, Munich Re, U.S. (Life)