ICD-10 Essential for Healthcare Registries

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When ICD-10-CM is officially implemented, its code set will not only be used for primary care purposes but also as an invaluable secondary data source used by many types of healthcare registries in the US. A registry can be defined as "an organized system that uses observational study methods to collect uniform data (clinical and other) to evaluate specified outcomes for a population defined by a particular disease, condition, or exposure, and that serves one or more predetermined scientific, clinical, or policy purposes."[1]

One of the main sources of aggregated, non-patient identifier data collected by registries is the electronic health record (EHR), which provides clinical diagnoses and procedures data based on physician documentation. ICD-10-CM data will be invaluable to registries and other professionals when evaluating patient and safety outcomes, disease processes, adverse event reporting, public health surveillance, allocation of resources, development of educational programs, benchmarking, and analysis of treatment regimens.

Cancer Registries Meet HIM

Cancer registries maintain large databases of patients that have been diagnosed with malignant or neoplastic cancer. In the US, there are two major types of registries that provide specific geographical statistical data about cancer: hospital-based and central registries, also known as population-based registries. Cancer registries use ICD-9-CM codes to assist in their case-finding. Hospitals use the case-finding list to ensure that all the cancer patients that have been diagnosed and treated at their facility, or receive treatment and follow-up information through the organization, are captured in the registry. Typically centralized registries are responsible for a large area where they use the data discharge sets from the hospitals within their state or region to verify receipt of all cancer cases diagnosed in that geographic area.

When registries discover that data for a case is missing, staff must follow up with the appropriate hospital to locate and retrieve the information. In addition, hospital registries accredited by the Commission on Cancer (CoC) collect comorbidities and complications using ICD-9-CM codes. Some of the larger institutions may do research on cancer patients with specific complications or comorbidities. Examples of research may include lung cancer patients with COPD or emphysema, or prostate cancer patients with hematuria or BPH. Some patients do not receive treatment due to other complicating diseases, such as renal failure or diabetes. It is important for cancer registrars to be familiar with neoplasm codes as well as typical procedure codes associated with treatment, including surgery, chemotherapy, and radiation. ICD-10 procedure codes will be much more descriptive and will help registrars to determine exactly what procedure was done. This extra information will in turn help them to choose the appropriate code(s) from the registry treatment codes.

The largest central population-based registry in the US is the Surveillance, Epidemiology and End Results (SEER) Program of the National Cancer Institute (NCI). The validated data provided by the registries consists of tumor site (topography), morphology, stage, and initial treatment details. The NCI is responsible for sending this data to researchers as well as making it available to the general public through specific databases. NCI also has a division that does point of care studies, collecting all disease and treatment information on Medicare patients with a specific cancer.

Registrars Leverage ICD-10 Specificity

Specialty registrars are responsible for tracking specific types of cancers, such as national childhood cancer registries, familial cancers (i.e., ovarian, pancreatic, lung), or central brain tumor cancers. Cancer registrars will benefit greatly from the greater specificity of neoplasm codes that will come with the transition to ICD-10-CM. The change will help improve clinical documentation and aid the capture of correct diagnosis codes.

The greater detail that ICD-10-CM provides will help these registries-especially those focused on pediatric data-in terms of collecting hematopoietic diseases. In ICD-9-CM, there are very few codes for the forms of lymphoma and leukemia, with many of the current hematopoietic histologies being collected in "NOS" or "Other" categories.

Due to the restrictions in the ICD-9-CM coding system, there are very few categories for lymphoma and leukemia. ICD-10-CM does not have this problem. Examples of specific codes include the follicular lymphomas. In ICD-9-CM, these lymphomas are coded to 202.0_ (with a fifth digit depending on the site) for nodular lymphoma. In ICD-10-CM, there are seven different codes for follicular lymphoma, several of them specifying the grade (I, II, IIIA, IIIB). In the Leukemia section, several new codes have been added to the acute myeloid leukemia section. Some of the specific diseases include: chronic myeloid leukemia, BCR/ABL positive or negative, and adult T-cell leukemia/lymphoma, HTLV associated. In ICD-9-CM, these diseases would have been coded to a NOS category. As medical research continues to incorporate specific genetic markers into the diagnosis of leukemia, it will be very helpful to have a coding system that is able to incorporate the new histologies.

In 2008, the World Health Organization (WHO) released over 20 new hematopoietic diseases. Registry data will be enhanced through the use of ICD-10-CM codes that provide additional detail such as laterality and gender. For example, the code C50.621 for malignant neoplasm of auxiliary tail of right male breast provides considerably more information than the ICD-9-CM counterpart-175.9, Malignant neoplasm of other and unspecified sites of male breast. In addition, enhanced public health data using ICD-10-CM can be obtained from abstracting patients' health risks such as smoking, dietary issues, exercise regime, and other factors that may affect cancer outcomes.

ICD-10 Resources for Registrars

The North American Association of Central Cancer Registries (NAACCR) has created an ICD-10-CM Implementation Team for Cancer Registrars. The sole purpose of this committee was to prepare the cancer registry field for the implementation of ICD-10-CM. Most training for ICD-10-CM is focusing on learning all of the codes, while cancer registrars are specifically most concerned with neoplasm codes and any other codes related to neoplasm.

Conversions have been provided to the cancer registry field between ICD-9-CM and ICD-10-CM. The conversion tables, which used the 2012 general equivalence mappings provided by the Centers for Medicare and Medicaid Services, covered all the codes that are in the 2012 case-finding list. These conversions will be updated until ICD-10-CM is implemented. The US has been using ICD-10 for cause of death codes since 1999, and the SEER program has also done conversions between ICD-10 cause of death codes and ICD-10-CM. These conversion tables, along with the case-finding list, can be found on the SEER website at http://www.seer.cancer.gov.

Three presentations have been developed by the NAACCR committee for the cancer registry field. The first presentation focuses on all the "C" codes (except for hematopoietic). The second presentation focuses on the hematopoietic codes (leukemias, lymphomas, myeloproliferative disorders, and myelodysplastic disorders). The final presentation focuses on the "D" codes (excluding the myeloproliferative and myelodysplastic disorders). Registries don't collect all the diseases in the D category. They are mostly concerned with the in situ codes and the benign, unspecified, or undetermined brain codes. Benign brain tumors became reportable in 2004. The remaining benign, unspecified, and undetermined codes are provided as additional codes to review if time is available. The final presentation's last section includes codes that are closely associated with cancer, such as anemia in neoplastic disease, cancer-related fatigue, and several other precursors to cancer. A complete listing of these codes can be found on the case-finding list.

The remaining codes in the presentation were the most common comorbidities coded by the CoC hospital registries. The top 20 were listed, along with the current ICD-9-CM code and the corresponding ICD-10-CM code(s). Additionally, the NAACCR committee is working on a top 100 list of complications and comorbidities collected by the CoC hospital registries. This reference will help registrars recognize the ICD-10-CM codes for the diseases that are currently coded in ICD-9-CM. Although the intention of the NAACCR committee is not to teach cancer registrars how to code ICD-10-CM, they felt that providing cancer registrars with this information will help them become familiar with the codes.

Note

1. Gliklich R.E., N.A. Dreyer, ed. 2010. *Registries for Evaluating Patient Outcomes: A User's Guide.* 2nd edition. Rockville, MD: Agency for Healthcare Research and Quality.

Resources

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