

PUBH5310 HEALTHCARE INFORMATICS Spring 2021
Week 10: Final Project- Information Governance Plan and Data Dictionary
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Information Governance Charter : Oncology Practice Center

Purpose

Cancer care is one of the most momentous, high-powered and energetic field of medicine and healthcare system. Given the strong focus on developing a wide range of treatment options offered by the cancer system, design goes by storm. At the same time, cancer programs are not immune to the major trends affecting the healthcare industry - in particular, the ongoing decline in reimbursement and anticipation of improved clinical outcomes. In general, the forces that transform the landscape of the cancer market can be organized into two pillars: current issues and next level issues.

The **current issues** include: Balance of reimbursement pressures and rising costs and redefined access to competition and increased drug procurement in cancer care.

Problems at the **next level** include: Adapting to new products and changing cancer treatment and preparing for a future based on value.

The adoption and implementation of information technology radically redesigns healthcare services around the world, leading to an unstoppable and sometimes extremist process. After introducing the key elements of electronic health records and an explanation of which cancer care specialist should be familiar with, the following review focuses on the current use of computer clinical knowledge and decision-making systems in an Oncology Practice Center.

After a detailed analysis of the many desirable goals achieved by oncologists while embracing the advancement of informatics, there are some suggestions on how they can overcome the major barriers to full physician involvement and the adoption of full information technology and try to predict the future.

Scope and Responsibilities

The Oncology Practice Center should operate effectively and efficiently when the HIM professionals have access to the correct information at the time when they need it.

Information management and governance is about the practices of maturity and building a culture that ensures that a proper governance is in place to effectively manage and preserve their information assets.

The Vision for information management and governance is to:

- Treat information in accordance with legal and administrative obligations
- Make sure the Data management strategies supports and aligns with the healthcare professionals, the needs of the Center and strategic objectives
- Data management and supervision is improved

- Information ability to be used and rated as an operational and strategic asset
- Information is managed according to its purpose and the associated risk profile
- There are appropriate controls to protect their information.

The Principles that are obligatory:

- Information is treated as an asset.
- Information can be obtained and made available.
- Information is suitable for all its functions.
- Information is always compliant.
- Privacy, confidentiality and security details are guaranteed.

Membership and Reporting Structure

Local growth is focused on improving market share within the established service area. As mentioned, detailed planning (strategies and tactics) should be developed with a site-specific plan for those programs identified for development.

The commonly accepted strategies for a local growth framework fall into six categories:

Physicians: Skills-based recruitment to grow the program, usually from a leadership, medical, and /or research perspective.

Staff and Support: Identify specific requirements to allow for greater division of the system, which may include administrative leadership, patient support services, sailors, or other personnel.

Technology and Resources: Make some money to make the program more modern (in line with community standards) or to differentiate it from its competitors, whether from a clinical or aesthetic perspective.

Program: Improve construction to better plan and manage the program while at the same time improving physician involvement.

Funding: Identify and obtain additional funding (within or outside the program) to empower other strategies.

Integration: Improve communication and communication between care team members and between the care team and patients (e.g., safe messaging, better navigation procedures, various clinics or conferences).

When choosing growth support strategies, it is important to consider not only the competitive environment but also the patient's perspective. As illustrated by recent patient research specialized clinical skills and differentiated outcomes are particularly important for patients when choosing a cancer service provider. Therefore, hiring service providers who often go above and beyond the list of key strategies to be used.

When developing an oncology organization's strategic plan, there are a number of areas in the topic that need to be explored and, where necessary, addressed in developing strategies and strategies. These include:

- **Physician leadership and expertise.**
 - Chief Information Officer who supports the consistent application of Information Governance across the organization.
 - Cancer Leadership (Clinical and administrative)
 - Dedicated and subspecialized surgeons
 - Oncologists for tumor sites
 - Physician champions for tumor sites
- **Quality improvement.**
 - Tumor specific reporting
 - Real-time data that actively informs program redesign
 - National quality initiative participation
 - Preparation for value-based care
- **Research efforts.**
 - “critical mass” of research studies, scientist and grants
 - Dedicated research staff
 - Collaboration with other entities
- **Supportive care resources.**
 - Dedicated navigators
 - Social work, psychosocial, nutritional and financial counseling, etc.
 - Integrated palliative care
 - Seamless transition to survivorship
- **Screening, education, and prevention.**
 - Adherence to national guidelines
 - genetic counseling services
 - formalized community outreach
 - integration with primary care/other specialties
- **Diagnosis capabilities.**
 - Seamless evaluation
 - Pathology expertise
 - Access to advanced diagnostics
- **Treatment resources.**
 - Multidisciplinary care teams
 - Prospective tumor boards
 - Clinical pathways utilized in 90% of applicable cases
- **Facilities and technology.**
 - Electromagnetic technology

- Interventional oncology
- Pharmacogenetics
- Dedicated and updated space

Because these factors will lead to the development of strategic plans and procedures, they should be developed at a specific program level. However, before embarking on this detailed project, the organization should determine the site-specific plans to focus on, so that detailed planning is not required for all.

Physiology of Health Information Technology in Oncology

EHRs are a sophisticated tool that contains important information such as past medical history, diagnosis, treatment, treatment plans and algorithms that help physicians provide appropriate medical care with improved quality of care and safety.

From a clinical point of view, the main components of EHR are

Results Reporting Information System (RRIS):

Includes important patient information such as clinics, laboratory, and radiological examination results, aimed at achieving continuous care regardless of the disease and patient planning (inpatient, outpatient, acute or incurable disease).

Computerized provider order entry (CPOE) System:

A tool that allows for the execution and transfer of orders throughout the health system.

Clinical decision support systems (CDSS) -rules, warnings, and workflow tools:

contain warnings and workflow tools that help physicians develop an effective decision-making process and thus improve patient safety.

In order to achieve the full use of EHRs, “semantic interoperability” that is, a the most agreed language for data exchange, is mandatory. It is disputed by co-operation related to data format, the semantic interaction is based on shared availability information presentations.

These pronouns traditionally consider the composition in moderation of terminology and classification (e.g. international disease classification [ICD] defined diseases), but more recently efforts have been made to represent those with so-called ontologies.

Ontology can be considered as a clear representation of **conceptualization**; in other words, it logically describes the concepts and relationships appropriate to modeling a biomedical, conceptual-based environment.

Among the key players in health informatics, we can mention **HL7** (set of international standards for transfer of clinical and administrative data) and **DICOM**(Digital Imaging and Communications in Medicine Standard), which work in partnership with companies, education professionals, doctors and other stakeholders.

The two most important standards offered by HL7 are a set of messaging systems between complex systems and systems and formats of clinical texts known as Clinical Data CDA templates are made up of working groups dedicated to specific topics, Architecture (CDA) and can provide semantic interaction by linking structure and content with terms from terms, categories, and ontologies

To ensure the validity of the principles of chemotherapy, some of the available decision-making tools are available online like Adjuvant! Online (www.adjuvant-online.com) and the **Cancer Profiler** tool provided by Live-STRONG and NexCURA (www.nexprofiler.nexcura.com): depending on the clinical and clinical symptoms of the disease, can actually suggest appropriate treatment options. In addition, the adoption of EHRs allows us to adequately register and maintain medical records and documentation of chemotherapy orders, improving user satisfaction.

CPOE and CDSS not only play an important role in the uploading, prescribing, and management of standard cancer treatment procedures, but are also helpful in performing **administrative tasks** such as booking appointments, patient information sharing, and toxicity monitoring.

An important function of HIT is the management of cancer care. If validated tools allow to reduce human error and help physicians monitor patient safety, HIT can ensure better management of oncology services, saving time and costs.

The analysis of the data collected enables us to monitor random visits and identify improper hospital admissions or preventable disruptions to the work program.

Finally, **mobile-enabled mobile devices or free internet access** will facilitate communication between physicians and improve patient-physician relationships. Depending on the equipment, laptops, tablets, or online platforms available for downloading **patient-reported outcomes (PROs)** will soon play an important role. Such devices will ensure continuous care and perhaps home management, real-time management of symptoms.

Reporting:

HIT Governance Committee should be informed and reported about any **modifications** in the policies, procedures and rules to manage information and data across the lifecycle (P) that is approved by the information trustee.

Also, they should be reported about the **Collection, management, use and disposal** of Centers information and data.

They should approve the **release of information** and data external to the Care Center.

They should approve the **retention and destruction** of Health records.

Quorum:

Quorum shall be satisfied when at least **75% members** of the Committee are present.

Meetings:

Meetings shall be held no less than **thrice** a month.

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References:

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<https://healthstandards.com/blog/2006/10/11/what-are-the-different-standards-in-healthcare/>

<https://www.ncbi.nlm.nih.gov/books/NBK343637/>

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