It's Your Move: Using Gaming and Simulation Exercises in ICD-10 Planning

Save to myBoK

By Allison Viola, MBA, RHIA

From diagnoses coding, software development and deployment, and payment change the transition to ICD-10-CM/PCS will revolutionize healthcare and health information. Each sector within the industry is coming to understand the scale of the change, but many have yet to fully understand and appreciate how all the elements are linked together and how they must integrate across the industry. The different sectors continue to work in silos.

Gaming and simulation exercises can help organizations determine the tasks they must accomplish in implementing ICD-10 and who they must engage. They help prioritize tasks and narrow the focus on vital actions that must be taken first.

Based on modeling and simulation, gaming and simulation exercises have evolved from their military roots to support a wide range of industries such as the sciences and healthcare.

A model is a simplified representation of a system at a particular point in time to promote understanding of the real system. A simulation is the manipulation of a model in such a way that it operates on time or space to compress it, thus enabling one to perceive the interactions that would not otherwise be apparent because of their separation in time or space. Modeling and simulation is a discipline for developing a level of understanding of the interaction of the parts of a system and of the system as a whole.[1]

Key Action Prioritization

The group scored a list of imperatives for relative importance based on the level of impact each activity would have on the identified business imperatives. The key action steps fell into one of three major category areas: process and workflow improvement, technology (systems and automation), and education and training.

Major Activity Categories	Key Action Steps	% Max
Process	Streamline physician documentation process	93%
Technology	Install clinical documentation tools	91%
Training	Conduct broad awareness	86%
Technology	Ensure vendors are ready	80%
Technology	Upgrade or replace internal IT	80%
Training	Conduct ICD-10 training for clinicians	80%

Process	Streamline clinical data reporting	78%
Training	Conduct ICD-10 training for HIM	75%
Technology	Integrate systems (interoperability)	73%
Technology	Deliver rules, alerts, editing capability	73%
Technology	Test systems	61%
Process	Streamline (pre-)registration workflow	61%
Process	Streamline coding workflow (IP, OP)	53%
Process	Streamline clinical documentation improvement workflow	53%
Process	Streamline billing workflow	52%
Technology	Assess payer and associate status	46%
Process	Streamline claims adjudication and resubmission process	46%
Technology	Rewrite reports	46%
Technology	Obtain longitudinal patient data analysis capability	37%

Identifying and Sorting the Imperatives

Shown in the figures here are sample results from a gaming and simulation exercise held during the AHIMA 2011 annual convention. The exercise was intended both to gain a better understanding of an organization's business imperatives in transitioning to ICD-10 and to demonstrate the critical nature of working in concert with other key stakeholders. Two facilitators and several AHIMA members represented the coding, compliance, physician, revenue cycle and billing, systems, operations, clinical documentation improvement, and ICD-10 expert disciplines.

For a setting and scenario, participants selected an acute care hospital and the filing of a claim for a coronary artery bypass graft. The team believed the denial or challenge to such a claim would create significant cash flow issues for the organization.

To set the stage, participants identified external and internal environmental drivers acting on organizations, such as pressures from other initiatives and stress from growth in areas where coding takes place without coding professionals.

To further drive the discussion participants then identified key business imperatives in achieving the ICD-10 transition, such as meeting regulatory requirements, generating clean claims, supporting clinical decision making, and generating accurate internal

and external quality and safety reports.

The group scored the imperatives comparatively on the level of impact each activity would have. The key action steps fell into one of three major category areas: process and workflow improvement, technology (systems and automation), and education and training (see "Key Action Prioritization" above).

The list was further broken out into a rake chart that displayed the imperatives in descending order within each of the major activity categories, as shown below.

ICD-10 Rake Chart

The prioritization list was further broken out into a rake chart that listed the business imperatives in descending order within each of the major activity categories.

ICD-10 Preparation			
Planning	Process and Workflow Improvement	Technology (Systems and Automation)	Education and Training
• Not addressed in prioritization	• Streamline physician documentation and process • Streamline clinical data reporting • Streamline (pre-)registration workflow • Streamline coding workflow (IP, OP) • Streamline clinical documentation improvement workflow • Streamline billing workflow • Streamline claims adjudication and resubmission process	• Install clinical documentation tools • Ensure vendors are ready • Upgrade or replace internal IT • Integrate systems (interoperability) • Deliver rules, alerts, editing capability • Test systems • Assess payer and associate status • Rewrite reports • Obtain longitudinal patient data analysis capability	• Conduct broad awareness education • Conduct ICD-10 training for clinicians • Conduct ICD-10 training for HIM

Note

1. Bellinger, Gene. "Modeling & Simulation." www.systems-thinking.org/modsim/modsim.htm.

Allison Viola (allison.viola@ahima.org) is director of federal relations at AHIMA.

Article citation:
Viola, Allison F.. "It's Your Move: Using Gaming and Simulation Exercises in ICD-10 Planning"
Journal of AHIMA 83, no.4 (April 2012): 38-39.

Driving the Power of Knowledge