Objectives

At the end of this presentation, you will be provided with tools an information enabling you to:

• Explain what ICD-10 codes are and how they are different from ICD-9 codes
• Identify the impacts, challenges, and benefits of ICD-10 across the different service areas inside a typical health system
• Describe the impacts of ICD-10 on coding centralization, clinical documentation excellence and physician training
• Understand lessons learned at other organizations
• Explain the ways in which compliance is integrated with ICD-10
ICD-10 overview

ICD-10 sits among the top issues the industry has to weigh

Natural inertia

Counter force allows for success

Careful planning and balancing of resources

Given the challenges and trends, it will be difficult to achieve uniform adoption of ICD-10 by October 2013
The expected benefits of transitioning to ICD-10

Today’s data needs are dramatically different than they were 30 years ago when ICD-9 was introduced. Expected benefits accrue cross five major categories.

• Quality Measurement
  – Data availability to assess quality standards, patient safety goals, mandates and compliance
• Public Health
  – Improved disease and outbreak information
• Research
  – Better data mining for increased analysis of diagnosis, treatment efficacy, prevention, etc.
• Organizational Monitoring and Performance
  – Enhanced ability to identify and resolve problems and ability to differentiate payment based on performance
• Reimbursement
  – More accurate claims, fewer denials and underpayments, less inefficiencies in the billing and reimbursement processes, ability to differentiate reimbursement based on complexity and outcomes

Quality — Challenges leading to opportunities

Challenges

• Need for transition planning and increased oversight during conversion to ensure that the medical coding is accurate across the organization
• Comprehensive, large-scale overhaul of technologies, business and clinical processes and staff training requiring extensive planning and fine-grained change management and quality control
• Difficulties in synchronizing conversion and testing changes with the large number of external systems that the hospital information systems need to integrate with
• Substantial investment burdens and organizational change demands from healthcare reform that would increase the complexity of ICD-10 conversion

Opportunity

• Provision of higher-quality data due to improved medical coding accuracy and granularity
• Improved utilization management by the appropriate application of ICD-10-CM/PCS codes, which leads to increasing efficiency in the exchange of patient profile information, treatments across the care process and hospital resource management.
• Enhanced efficiency of granular drug data to improve patient care and safety by observing usage trends and analysis of harmful side effects
• Expanded use of data granularity for diagnosis, procedure and case mix groups (CMGs) to profile a patient’s condition or track length of stay related to improving utilization management
• Improved patient safety and care from sharing among health plans, providers and life sciences companies the ICD-10 data related to drug side effects and usage
How is ICD-10 not overwhelming?

- PCS coding only required for Inpatients
- Increased number of codes are concentrated in select areas of classification, for example:
  - Injury and Poisoning Chapter: ICD-9 = 2,572 codes, ICD-10 = 39,675 codes
    - (Accounts for over half the total number of diagnoses codes)
  - Musculoskeletal System Chapter: ICD-9 = 892 codes, ICD-10 = 6,327 codes
  - Neoplasm Chapter: ICD-9 = 958 codes, ICD-10 = 1,551 codes
  - Gastrointestinal Chapter: ICD-9 = 529 codes, ICD-10 = 691 codes
  - Respiratory System Chapter: ICD-9 = 230 codes, ICD-10 = 329 codes
- For physician coders, only the diagnosis codes will change, CPT will continue
- Begin educating physicians NOW to seek greater specificity in their documentation so not so overwhelming, particularly surgeons

AMA and AHIMA at odds on ICD-10

**AMA**
American Medical Association

On January 17, 2012, AMA sent letter to Congress urging them to halt ICD-10 implementation, citing the number of codes as problematic, costly and seeking a suitable replacement for ICD-9

"The implementation of ICD-10 will create significant burdens on the practice of medicine with no direct benefit to individual patients' care."

- AMA President Peter W. Carmel, MD

**AHIMA**
Quality Healthcare Through Quality Information

AHIMA continues to advocate for the implementation of ICD-10
AMA and AHIMA at odds on ICD-10

On February 16, 2012, the U.S. Department of Health and Human Services (HHS) Secretary Kathleen Sebelius announced the Department’s intent to initiate a process to postpone the date by which certain health care entities have to comply with ICD-10

What Should You Do?
• HHS has not made a formal announcement yet regarding the delay
• DO NOT stop your assessment and implementation efforts…
• ICD-11 (aka: ICD-2015) on the horizon
  – WHO will engage interested stakeholders to participate in the ICD-11 revision process as early as May 2012
  – ICD-10 is a stepping stone to ICD-11

ICD-10 timeline delay perspective

• Transition to the ICD-10 coding set presents opportunities, benefits and challenges that providers will have to address whether the implementation date is set for 2013, 2014 or beyond
• Timeline extension may enable many organizations to enhance training programs, improve clinical documentation and better plan testing scenarios. Additionally, the extension may enable the implementation and testing of tools such as computer assisted coding to assist in the coding process
• Most providers, where assessments have been completed, are asking about timeline scenarios and considering strategic options, such as the ability to early adopt at least one year prior to any new implementation deadline
• Many organizations have spent significant funding already on ICD-10. Depending upon the timeline delay, organizations may re-purpose funding for ICD-10 to other initiatives
• Some providers may focus on areas that can help to enable a better ICD-10 transition such as shared services solutions and process standardization
How is the market progressing?

While health plans are in front of providers and State government, the health care industry is still lagging in preparations for the ICD-10 transition.

Provider organizations such as academic medical centers, multi-facility hospital systems, and some community hospitals are assessing the impact of ICD10, while several have begun remediation efforts.

Even with this trend, we expect an overall lag across the provider segment (particularly in outpatient settings) toward October 2013 readiness.

Other countries with less complex health care systems required five years to implement ICD-10.

ICD-10 basics
**The ICD-10 Mandate**

The primary driver for the move to the ICD-10 coding structure is to provide increased accuracy in specifying medical conditions – and consistency with WHO international disease standards.

Simply stated, the science of medicine has outgrown the ICD-9 code set.

### Code set changes

Hospitals and physicians

<table>
<thead>
<tr>
<th>Code Set Change</th>
<th>ICD-9-CM (Diagnosis)</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 5 characters</td>
<td>~14,000 codes</td>
<td>7 characters</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code Set Change</th>
<th>ICD-9-CM (Procedure)</th>
<th>ICD-10-PCS (Inpatient)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 4 characters</td>
<td>~4,000 codes</td>
<td>7 characters</td>
</tr>
</tbody>
</table>

- More codes: ICD-10 is nearly 5 times larger
- More clinical specificity in the code structure
- Technical changes to the code set

---

**The basics of the ICD-10-CM change**

The ICD-10-CM diagnosis code set is a full replacement of the ICD-9 code set that will provide additional granularity for diagnosis and procedure codes. This additional granularity is the primary driver of value.

### An Example of Structural Change

<table>
<thead>
<tr>
<th>ICD-9</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Etiology, anatomic site, manifestation</td>
</tr>
<tr>
<td>X X X</td>
<td>X X X</td>
</tr>
</tbody>
</table>

### An Example of One ICD-9 code being Represented by Multiple ICD-10 Codes

<table>
<thead>
<tr>
<th>ICD-9</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 5 0 6 1</td>
<td>E 1 0 4 0</td>
</tr>
<tr>
<td>Diabetes mellitus with neurological manifestations type I not stated as uncontrolled</td>
<td>Type 1 diabetes mellitus with diabetic neuropathy, unspecified</td>
</tr>
</tbody>
</table>

- E 1 0 4 1 | Type 1 diabetes mellitus with diabetic mononeuropathy
- E 1 0 4 4 | Type 1 diabetes mellitus with diabetic arthropathy
- E 1 0 4 9 | Type 1 diabetes mellitus with other diabetic neurological complication

The industry expects that mapping ICD-9 and ICD-10 codes will be a complex task.
### How are diagnosis codes changing?

<table>
<thead>
<tr>
<th>ICD-9-CM Volume 1 and 2</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>13,677 diagnosis codes</td>
<td>68,065 diagnosis</td>
</tr>
<tr>
<td>3–5 characters in length</td>
<td>3–7 characters in length</td>
</tr>
<tr>
<td>First digit may be alpha (E or V) or numeric; digits 2–5 are numeric</td>
<td>First digit is alpha; digits 2 and 3 are numeric; digits 4–7 are alpha or numeric</td>
</tr>
<tr>
<td>Difficult to analyze data due to non specific codes</td>
<td>Flexible for adding new codes</td>
</tr>
<tr>
<td>Does not support interoperability</td>
<td>Specificity improves coding accuracy and richness of data analysis</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ICD-9-CM Volume 3</th>
<th>ICD-10-PCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,768 procedure codes</td>
<td>72,600 procedures</td>
</tr>
<tr>
<td>Numeric code structure (up to 4 digits) — no embedded meaning in characters or digits</td>
<td>Alphanumeric code structure (up to 7 characters) — semantic meaning within characters</td>
</tr>
<tr>
<td>Procedure codes based upon name of procedure</td>
<td>Intervention codes based upon intent of procedure</td>
</tr>
<tr>
<td>Use of generic terms for body parts with little detail for procedure types and approaches</td>
<td>Provides detailed descriptions on procedural methods, approaches, body parts, devices</td>
</tr>
<tr>
<td>Limited capacity to add new codes</td>
<td>Flexible for adding new codes</td>
</tr>
<tr>
<td>Reflects outdated technology and medical/surgical techniques</td>
<td>Reflects current usage of medical terminology and devices</td>
</tr>
</tbody>
</table>

### CMS GEMs vs. CMS reimbursement mappings

CMS reimbursement mappings, which can be thought of as a crosswalk, eliminate alternative paths for ICD-10 to ICD-9 mappings to enable such scenarios as accepting ICD-10 claims but adjudicating internally against ICD-9.

<table>
<thead>
<tr>
<th>Mapping terminology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ICD-9</strong></td>
</tr>
<tr>
<td>Forward mapping</td>
</tr>
</tbody>
</table>

**GEMs**

<table>
<thead>
<tr>
<th>ICD-9 CM</th>
<th>ICD-10 PCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3179</td>
<td>Dilation of Trachea with Intraluminal Device, Via Natural or Artificial Opening</td>
</tr>
<tr>
<td>9605</td>
<td>Other Intubation of Respiratory Tract</td>
</tr>
<tr>
<td><strong>GEMs</strong></td>
<td><strong>Reimbursement mapping</strong></td>
</tr>
<tr>
<td>3179</td>
<td>Dilation of Trachea with Intraluminal Device, Via Natural or Artificial Opening</td>
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</tr>
</tbody>
</table>

In situations where there are alternative mappings, the CMS Reimbursement Mappings provide the most common conversion based on real world data; plans may need to validate these mappings.
GEMs mapping types

There are 5 different GEM mapping types. The effort required to map a specific I-10 code will depend on the type of mapping for that code. Examples below for backward mapping:

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exact</td>
<td>The I-10 maps to a single I-9 and both codes have the exact same meaning</td>
</tr>
<tr>
<td>Approximate</td>
<td>The I-10 maps to a single I-9 and the two codes have similar meanings although the definitions are not exactly the same</td>
</tr>
<tr>
<td>Combination</td>
<td>The I-10 maps to a group of I-9 codes which must be taken together in order to have a similar meaning to the I-10</td>
</tr>
<tr>
<td>Alternatives</td>
<td>The I-10 maps to multiple I-9 codes, however only one of these I-9 codes is required</td>
</tr>
<tr>
<td>Complex</td>
<td>The I-10 to I-9 mapping consists of both combinations and alternative mappings</td>
</tr>
</tbody>
</table>

The concerns about cross-walking

In addition to the disparity in DRGs produced between ICD-9 and ICD-10, further complexity can be introduced by a cross walk.

Today

<table>
<thead>
<tr>
<th>ICD-9</th>
<th>Current DRG grouping for 'dilation of tracheal' ICD-9 procedure code</th>
</tr>
</thead>
<tbody>
<tr>
<td>31.99</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other operations on trachea</td>
</tr>
</tbody>
</table>

Tomorrow

<table>
<thead>
<tr>
<th>ICD-10</th>
<th>CMS’s ICD-10-PCS to MS-DRG v26.0 grouping</th>
</tr>
</thead>
<tbody>
<tr>
<td>0B717DZ or 0B718DZ</td>
<td></td>
</tr>
</tbody>
</table>

Tomorrow in a “Crosswalked World”

<table>
<thead>
<tr>
<th>ICD-9</th>
<th>DRG grouping for ‘other intubation respiratory tract’</th>
</tr>
</thead>
<tbody>
<tr>
<td>96.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ICD-10 to ICD-9 cross walk</td>
</tr>
</tbody>
</table>

DRG 168 Other Respiratory System O.R. Procedures W/O CC/MCC

- CMS Weight 1.3026
- Pays: $56513

DRG 165 Major Chest Procedures W/O CC/MCC

- CMS Weight 1.7662
- Pays: $8831

DRG 203 Bronchitis & Asthma W/O CC/MCC

- CMS Weight 0.6055
- Pays: $3927

*Note: 96.05 is a non-surgical procedure code and requires an appropriate DX to group to DRG203
Polling Questions

PARTICIPANT CONSENT

I understand that any data or information provided by me as part of this survey may be used by Deloitte in connection with this survey, other studies, or analyses performed by Deloitte or in connection with services provided by Deloitte, or otherwise.

I understand that this survey and the survey results are the proprietary property of Deloitte.

I understand that any such data or information may be disclosed by Deloitte to related entities or other third parties, including, without limitation, in publications, in connection with this survey or such studies, analyses, or services, provided that such data or information does not contain any information that identifies me or associates me with the responses I have provided to this survey.

I understand disclosure of such data or information may be required by law, in which case Deloitte will endeavor to notify me.

By participating in this survey, I agree to the statements above. If you do not agree with the statements above, do not participate in this survey.


Does your facility assign ICD-9 procedure codes on outpatient procedures today?

Polling question #1
If your facility assigns ICD-9 procedure codes on outpatient procedures today, will your facility assign ICD-10-PCS codes on outpatient procedures?

Polling question #2

If your facility is going to assign ICD-10-PCS codes on outpatient procedures, is it because your state’s hospital association requires it?

Polling question #3
Critical success factors

What are the impacts and who is impacted?

Stakeholders throughout the healthcare value chain will be impacted

- Business operations
  - Procedures
  - Policies

- Care management
  - Medical and treatment policy
  - Medical management
  - Reimbursements

- Technical
  - Software upgrades — in-house and purchased applications
  - Electronic transactions

- Transition
  - Change management
  - Training

Laboratories | Clearinghouses | Payers | Software Vendors | 3rd Party Administrators
---|---|---|---|---
Employers | Suppliers | Providers | Members | National Organizations

Significant technology and process changes in addition to industry adoption will be required to achieve the intended benefits of ICD-10
Our perspective — The provider market view

Approximately 40–50% of the provider market has initiated ICD-10 planning, training, and preparation efforts.

Provider challenges
1) Limited organizational awareness/understanding
2) Compliance dates concurrent with meaningful use
3) Concerns about payor readiness/reimbursement impact

What providers should be focused on today

Road Map Development
- Completing Gap Analysis Assessments
- Developing comprehensive action plan, timelines, and budget expectations
- Long-term value plays

Mapping, Crosswalks, and Reporting
- Identifying Reporting challenges and future state crosswalk needs
- Identifying impact to analytics, research, and decision support

Resources, Training, and Education Plans
- Human resource needs current and future state
- Training and education needs throughout timeline for coders, clinicians, other staff
- Awareness sessions

Technology Requirements/Vendor Agreements
- Technology vendor readiness evaluation
- External vendor trade agreements
- System upgrade and replacement needs
- Testing plans

Financial Preparation
- Budget preparation
- Ability to model reimbursement
- Impact on A/R
- Financial reporting

Focus areas — Operations

Revenue cycle
Scheduling, financial clearance/counseling, registration, claims processing, and contracting
- Identify key revenue cycle functions that are currently using ICD-9 (i.e., scheduling, financial clearance, claims processing, denials management) across all service lines (i.e. hospitals, physician practices, home health, etc.)
  - Outline ICD-10 action steps and implementation approach, including:
    - Staffing/Training
    - Process/Policy and procedure redesign
    - Communications
    - Compliance concerns

Operational processes
- Identify current clinical use of ICD-9 (i.e., problem lists, EHR documentation)
- Engage leadership in impacted functional areas
  - Identify data users impacted (i.e., case management, clinical documentation improvement, quality marketing, decision support)
  - Document operational gaps, heat map, and identify linkages to technology and finance requirements
  - Determine ownership for readiness activities
  - Evaluate current policies and procedures
  - Identify relevant management reports
- Develop list of external service providers (i.e., physician groups, coders/abstractors, billing)
- Develop practice session approaches
- Develop training awareness material and a quick reference guide to be deployed across the health system
- Identify necessary updates to clinical documentation practices such as templates for EHRs, CAPD, paper medical records and public health reporting documents
- Identify tools needed to enhance I-10 workflow - CAC
Workload impact to physicians
The move to the ICD-10-CM will result in a permanent increase in clinical documentation activities, not just an implementation or learning curve increase:

- Documentation activities for providers will increase from 15% to 20%. A permanent increase of 3% - 5% of physician time will be spent on medical record documentation.
- Electronic health record systems will not be able to eliminate the extra time requirement.

Example: The patient has a "fracture of the wrist", fracturing the left wrist. A month later, the patient comes in with a fracture of the right wrist.

Current Scenario: The ICD-9-CM diagnosis codes do not currently identify left vs. right for wrist fractures or for any other part of the body, so additional documentation is required to show the location.

Future Scenario: ICD-10-CM diagnosis codes are much more descriptive (e.g., left vs. right, initial vs. subsequent encounter, routine healing, delayed healing, nonunion, or malunion).

Medical record documentation
ICD-10-CM codes are more robust, with up to seven digits of specificity, requiring numerous changes to current state practice.

Example changes that a provider will need to implement with ICD-10-CM include:

- **Laterality:** ICD-10 introduces laterality to diagnosis coding
- **Combination codes:** ICD-10 greatly expands the use of combination codes, where a single code is used to classify 2 diagnoses or a diagnosis with an associated secondary process
- **Episode of care:** ICD-10 relies heavily on categorizing the episode of care as initial or subsequent
- **Greater specificity:** ICD-10 is much more specific in identifying disease and conditions and the documentation will need to reflect the exact diagnosis to take advantage of the improved granularity
### ICD-10 impact to staff education

Extensive training will be required for Coding and for Pre-Authorization / Billing staff to understand the changes from ICD-9 to ICD-10. Due to these changes, productivity could be impacted. There will be an increased need for coding audits to catch errors early.

#### Potential Issue | Example
--- | ---
High potential for data entry errors | ICD-10-CM Diagnosis Codes:  
• Can begin with an I or O (but not 1 or 0)  
• Other characters can be 1 or 0 (but not I or O)  
ICD-10-PCS Procedure Codes:  
• Include T’s and U’s (but not I or O)

Need for additional Anatomy & Physiology education | A physician documents ‘a Billroth II procedure performed’  
• In ICD-9, the coder codes ‘Billroth II procedure’  
• In ICD-10, the coder codes an ‘Excision of stomach’ AND ‘Bypass stomach to jejunum’

Common procedure names not used in ICD-10 PCS | ICD-9: 45.23 – Colonoscopy  
ICD-10: EJD09ZZ – Inspection of Lower Intestinal Tract, Via Natural or Artificial Opening; Endoscopic

One ICD-9 translates to multiple ICD-10 codes | ICD-9: 81.08 Lumbar and lumbosacral fusion, posterior technique  
ICD-10: 444 different codes for this procedure in ICD-10

Preparation should begin early | There are 32 root procedures in ICD-10 PCS  
• Need to understand definitions  
• Need to identify root procedure(s) from documentation

Such issues will have an impact on clinical documentation improvement programs and query processes and coding productivity

### Focus areas – Finance

<table>
<thead>
<tr>
<th>Payor contracting</th>
<th>A/R management</th>
<th>Financial management</th>
<th>Financial forecasting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reimbursement, coverage, and contracts</td>
<td></td>
<td>Working capital, debt covenants, and budgeting</td>
<td>Forecasting financial results, and net revenue</td>
</tr>
<tr>
<td>Financial reporting: financial results and reporting, and decision support / cost accounting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payor contracting</td>
<td></td>
<td>Financial management</td>
<td></td>
</tr>
</tbody>
</table>
| • Understand payor approach to code mapping and impact to reimbursement  
  – Evaluate potential changes to reimbursement formulas, contracts, etc.  
  – Understand change in net reimbursement based on changes in acuity and new codes  
  – Identify tools to enable payment modeling with new codes  
  – Understand current payment monitoring and compliance tools and practices  
  – Define future state under payment monitoring approaches and tools  
  – Develop contracting/negotiation plan  
  – Develop and prioritize list of payors (contracted and non-contracted)  
  – Confirm payors ability for reimbursement under ICD-9 and ICD-10  
  – Confirm payor assumptions regarding cash flow during transition and long term |                      |                      |                      |
| A/R management |                |                      |                      |
| • Determine potential impact to coding productivity and DNFB/billing/payment changes  
  – Estimate potential impact to cash flow during transition and long term  
  – Identify dual processes and related reporting  
  – Receiving payable claims during the transition period from ICD-9 and ICD-10 codes  
  – Matching referrals that contain ICD-9 and ICD-10 codes  
  – Backlog management |                      |                      |                      |
| Financial management |                |                      |                      |
| • Determine impact to cash flow and working capital  
  – Establishing additional reserves (if applicable)  
  – Managing working capital  
  – Capital and Operations Budgeting for next three years  
  – Identify dual processes and related reporting  
  – Determine financial reporting and forecasting requirements during transition period from ICD-9 and ICD-10 codes  
  – Determine opportunities to improve cost accounting  
  • Determine financial impact to Research and/or Intellectual Property |                      |                      |                      |
| Financial forecasting: Forecasting financial results, and net revenue |                |                      |                      |
Financial impacts to clinical documentation
Because reimbursement is tied to the linkage of CPT procedure and ICD-9-CM diagnosis coding, provider’s finances could be affected by the transition. It is important to distinguish which payers have fully transitioned to ICD-10-CM and which have not, so billing can be performed accordingly to ensure accurate and full reimbursement.

Example:

- After ICD-10 go-live, an insurance carrier may not be able to accept ICD-10-CM codes, and may not reimburse on ICD-10 codes, but only on ICD-9 codes. This may disrupt the cash flow to providers.
- Providers will need to review the current reporting for procedures and services using ICD-9-CM and compare them to ICD-10-CM codes because professional services are paid based on CPT procedure code, but the diagnosis code supports medical necessity — the driving factor in payment for all medical procedures and services
- Reports tied to diagnosis codes, such as the accounts receivable analysis, pending claims reports, analysis by provider type, and collection reports also may be affected

Financial impacts to documentation – Post ICD-10

The impact of the ICD-10-CM transition on providers will not end on October 1, 2013. Because pended or denied claims are expensive and are generally dealt with through a manual process, any increase in the number of claims not processed or paid will have 2 key outcomes:

1. First, provider cash flow will likely decrease
2. Second, there will likely be an increase to both provider workload and plan workload to process the denials/appeals

To reduce the risk of reduced cash flow, providers and staff need to know and understand the changes in clinical documentation and coverage requirements well ahead of time to adapt in time for implementation.

Productivity decreases short term when people are training or learning a new skill. These slowdowns result in loss of productivity, including charge capture and reimbursement, and can affect the financial health of a provider. Anticipate a decrease in productivity by measuring and analyzing the impact of the transition prior to beginning the training process.

Planning ahead also allows you to try a staggered training approach, where providers and staff can be trained at various intervals, helping to limit the impact on productivity. Planning ahead also allows you to develop super users or team leads.
Where is ICD-9 data in use currently?
• Identify impacted applications
• Determine affected data repositories
• Determine data sources and flow (source, target, interfacing transformations, etc.)
• Identify reporting implications

What is the technology remediation plan?
• Initiate communication with vendors to assess remediation plans and technical/vendor risks
• Identify trading partners and status/risks
• Evaluate vendor readiness/contracting implications
• Determine ability/effort to update in-house (non vendor maintained) systems
• Define systems at risk for ICD-10/dual ICD-9 capabilities
• Determine replace vs. remediate strategies

What will it take to transition to ICD-10?
• Estimate level of effort for in-house programmed systems, standalone databases, and reports
• Estimate level of effort for upgrading vendor systems
• Estimate level of effort for interface updates
• Develop workplan and timeline for IT components
• Develop estimated budget

Focus areas — Information technology

<table>
<thead>
<tr>
<th>Core financial systems</th>
<th>Clinical systems</th>
<th>Revenue cycle systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>GL, financial reporting, and forecasting systems</td>
<td>EMR, ancillary systems, coding and computer assisted coding solutions</td>
<td>Patient access, coding, billing, and reimbursement processing</td>
</tr>
</tbody>
</table>

Enterprise analytics/data warehouse systems: Business intelligence, operational reporting

How to determine benefits

Providers need to consider how the significant business and technology investment in the ICD-10 transition can demonstrate benefits to the organization.

<table>
<thead>
<tr>
<th>Current operations</th>
<th>Technology / Innovations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical</strong></td>
<td></td>
</tr>
<tr>
<td>• Enhanced clinical documentation and coding accuracy to enhance the assessment and monitoring of patient safety and quality indicators, as well as compliance with third-party payer coding and billing rules and regulations</td>
<td>• Become ICD-10 early adopter using ICD-10 data through mapping tools earlier than the compliance date to enable longer trend timelines</td>
</tr>
<tr>
<td>• Provision of higher-quality data due to improved medical coding accuracy and granularity</td>
<td>• Include clinical documentation requirements related to ICD-10 in the EHR build and preparing for meaningful use</td>
</tr>
<tr>
<td>• Expanded use of data granularity for diagnosis, procedure and case mix groups to profile a patient’s condition or track length of stay related to improving utilization management</td>
<td>• Enhance clinical documentation programs now to begin having clinical discussions with physicians about documentation elements required for ICD-10 without starting stand and deliver education programs</td>
</tr>
<tr>
<td><strong>Financial</strong></td>
<td></td>
</tr>
<tr>
<td>• Improved claims adjudication and provider reimbursement rates between provider and health plans due to appropriate payments for new procedures, and fewer miscoded and rejected claims due to greater specificity in ICD-10 codes</td>
<td>• Conduct financial model analysis to determine impact of mapping on current state reimbursement</td>
</tr>
<tr>
<td>• Increased cost savings through effective infrastructure planning; cost savings can be realized by correctly predicting resource utilization, appropriate use of site of service, and improved care delivery team communication</td>
<td>• Use ICD-10 data to assess growth and strategy analysis prior to October 1, 2013</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Understand potential payer business rule, eligibility, medical management and product changes</td>
</tr>
<tr>
<td></td>
<td>• Develop models to use ICD-10 to further evaluate costs and potential savings opportunities</td>
</tr>
</tbody>
</table>
Coding centralization, clinical documentation and physician training

Centura Health’s journey — “Centuratized” coding model

- Executive Council approved recommendation in mid-January 2010
  - ICD-10 and coding quality driving force
- Communication to stakeholders occurred end of January 2010
- Implemented a phased-in strategy: July 9 – Sept 4, 2010
- Engaged stakeholders (i.e. design “standardized” processes) at beginning and throughout transition
- Move quickly, but do it right
- Hire the right people in the right positions
- Change management
  - Communicate! Communicate! Communicate!
  - On-boarding
  - Quality vs. Productivity
  - Celebrate accomplishments
Centura Health’s accomplishments — “Centuratized coding model”

- 20% of coding associates in new positions *(20 associates)*
- Nearly all associates telestaffing *(100+ associates)*
- Replaced computer equipment to upgrade to minimum IT specifications and optimize performance
  - $131K, 92 associates *(73 replaced; 19 new)*
  - New communication methods with coding associates
    - LIVE Meeting, Instant Messaging (Communicator)
    - Coding helpline email box – 287 questions
- Designed and implemented new Coding Service Center (CSC) intranet site – MVW
  - Blog “Room of Coding Knowledge”
Centura Health’s accomplishments —
“Centuratized coding model”

• For facilities, implemented Coding Helpline: Toll-free number
  – Average 3-5 calls per week from facilities, physician offices and patients with 50% of the
calls coding questions and 50% billing questions
• Standardized processes and implemented electronic work queues
• Established productivity standards, tracking tool and dashboard report
• 10 CEUs of educational offerings & 7 coding “specialty” tip sheets created and
offered to coding associates
• Centura Health’s “Coding University” – In process
• Reduced contract labor costs ~$213K (1st half of FY12)
• Reduced weekly HIM DNFB by 0.4 day equating to $6.9 million post
implementation of new coding structure through January 2012
Centura Health’s accomplishments — “Centuratized coding model”

**Graph:**
- **Data:** HIM DNFB (in Days) Trend FY11 and FY12 YTD (HIM DNFB & HIM SSI Combined)
- **Legend:**
  - FY11 Centura Avg - 1.1 days
  - FY12 Centura Avg - Post Transition - 0.7 day
  - FY12 Goal - 0.8 day

*Transition to new coding structure implemented July 8 - Sept 9, 2011
**Thanksgiving, Christmas, New Year weeks

CHRISTUS Health’s Journey

**CHRISTUS Mission:** To extend the healing ministry of Jesus Christ.

**REALITY:** No Margin, No Mission.

**Planning for ICD-10 – Phase I**

**System Assessment**
- **System composition**
  - 23 Short-term Acute Care Facilities
  - 76 CHRISTUS Provider Network Sites
  - 20 Home Health Facilities
  - 15 Long-term Acute Care Facilities

**3 year budget project (training, technology & staff augmentation)**
- Training costs – education of CHRISTUS stakeholders
- IT investment – Computer Assisted Coding (CAC)
- Labor Costs
  - Remediation & upgrade in IT
  - To accommodate productivity decline (coder and CDI)
  - Increase in billing transactions (payor disputes/appeals)
### CHRISTUS Health’s Journey

<table>
<thead>
<tr>
<th>CURRENT ENVIRONMENT</th>
<th>FUTURE ENVIRONMENT (ICD-10)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decentralized Coding / Site-Based</td>
<td>Centralized Coding</td>
</tr>
<tr>
<td>Coding</td>
<td></td>
</tr>
<tr>
<td>Various stages of EHR adoption</td>
<td>Standardized EHR or Document</td>
</tr>
<tr>
<td>Content Management System</td>
<td></td>
</tr>
<tr>
<td>Rolling out CDI program</td>
<td>Mature CDI program</td>
</tr>
<tr>
<td>Minimal system education resources</td>
<td>Standardized education approach for</td>
</tr>
<tr>
<td>all stakeholders; Super Users in</td>
<td>each Region for local support</td>
</tr>
<tr>
<td>Facility Level Management with</td>
<td></td>
</tr>
<tr>
<td>System Coordination</td>
<td>Top down policy driven processes</td>
</tr>
<tr>
<td>Check points throughout billing</td>
<td>Increased check points throughout the</td>
</tr>
<tr>
<td>process</td>
<td>billing process</td>
</tr>
<tr>
<td>No automated coding capabilities</td>
<td>Computer Assisted Coding</td>
</tr>
</tbody>
</table>

### Christus ICD-10 training program components

Almost all associates will require Level 1 General Awareness education. An enterprise-wide training strategy will be developed to address all training needs. The following is a snapshot of the training plan.

<table>
<thead>
<tr>
<th>Level 1: Awareness</th>
<th>Level 2: ICD-10 data analytics and usage</th>
<th>Level 3: Clinical documentation and provider education</th>
<th>Level 4: Code application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical and</td>
<td>Staff responsible for identifying</td>
<td>Physicians, non-physician providers, and clinical</td>
<td>Coding specialists who</td>
</tr>
<tr>
<td>business support</td>
<td>specific ICD-10 codes, direct processing,</td>
<td>documentation specialists</td>
<td>assign ICD diagnosis and</td>
</tr>
<tr>
<td>leadership and</td>
<td>analyzing and/or reporting ICD data</td>
<td></td>
<td>procedure codes based on</td>
</tr>
<tr>
<td>staff</td>
<td>(e.g., Patient Access, Research, Quality,</td>
<td></td>
<td>medical record</td>
</tr>
<tr>
<td></td>
<td>Decision Support, Case Management, Therapists, etc.)</td>
<td></td>
<td>documentation</td>
</tr>
<tr>
<td>Description</td>
<td>Focused ICD-10 training relevant to the</td>
<td>Training focused on complexity of ICD-10; increased</td>
<td>Intensive training in ICD-10 code application with an</td>
</tr>
<tr>
<td></td>
<td>audience’s specific job requirements.</td>
<td>specificity in clinical documentation required to</td>
<td>ICD-10 Certified Trainer</td>
</tr>
<tr>
<td></td>
<td></td>
<td>support granularity of ICD-10 codes, specialty</td>
<td>that involves applying the</td>
</tr>
<tr>
<td></td>
<td></td>
<td>specific coding changes for providers</td>
<td>new coding guidelines</td>
</tr>
<tr>
<td>Delivery</td>
<td>On-line and/or ICD-10 Awareness Day</td>
<td>On-line and/or internal trainer (CDI Specialists –</td>
<td>On-line and internal trainer</td>
</tr>
<tr>
<td></td>
<td>meetings at each facility (0.5 – 1 hour)</td>
<td>(1 – 4 hours depending on specific training needs)</td>
<td>(40 – 80 hours over one</td>
</tr>
<tr>
<td></td>
<td></td>
<td>On-line and/or internal trainer (1 – 4 hours</td>
<td>year, including practice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(1 – 4 hours depending on specific training needs)</td>
<td>sessions, depending on</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PCS training requirements)</td>
</tr>
</tbody>
</table>

Almost all associates will require Level 1 General Awareness education. An enterprise-wide training strategy will be developed to address all training needs. The following is a snapshot of the training plan.
Clinical Documentation Assessment (CDA)

A review of clinical documentation across facilities and/or medical groups may be completed. In this example, the work effort included the review of approximately 125 inpatient and 160 physician office medical charts, in which records were evaluated against applicable ICD-10 documentation requirements. Records were randomly selected based on high volume specialties and most commonly selected diagnoses.

Inpatient Chart review findings

- Approximately 30% of the codes analyzed were assigned an unspecified code in ICD-10
- 15% of the cases reviewed had a DRG impact when translated to ICD-10, usually resulting from the lack of physician documentation specificity
- In 85% of the cases, the translation to ICD-10 did not impact the MS-DRG assignment

Inpatient Chart review findings

- Total claims with 1-to-many affecting DRG
- Translation does not affect DRG

85%

Mismatches in MS-DRG Assignment

Based on the chart reviews, the Orthopedic and Cardiology service lines would be most impacted by the ICD coding set transition: 21% and 25%, respectively, of those cases resulted in a mismatched DRG. Together, these two services lines comprise over a third of all records reviewed.

Common clinical documentation gaps

Throughout the Clinical Documentation Assessment, it was evident that the current level of specificity may support ICD-9 coding today, however, additional documentation would be required for ICD-10 coding.

Common Scenario

- Patient presents to the ED with a wound to the ear from a fall; patient is experiencing palpitations due to under-dosing of Digoxin as his prescription ran out last week
- Patient placed on IV Digoxin and sutures were necessary

**Illustrative purposes only**

<table>
<thead>
<tr>
<th>Code</th>
<th>Code description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICD-9</td>
<td></td>
</tr>
<tr>
<td>872.00</td>
<td>Open Wound of External Ear</td>
</tr>
<tr>
<td>785.1</td>
<td>Palpitations</td>
</tr>
<tr>
<td>E885.9</td>
<td>Fall on Same Level</td>
</tr>
<tr>
<td>184</td>
<td>Suture of Ear</td>
</tr>
<tr>
<td>ICD-10</td>
<td></td>
</tr>
<tr>
<td>S01.311A</td>
<td>Laceration of the right ear w/o foreign body, initial encounter</td>
</tr>
<tr>
<td>T45.526A</td>
<td>Under-dosing of anti-arrhythm, initial encounter</td>
</tr>
<tr>
<td>R00.2</td>
<td>Palpitations</td>
</tr>
<tr>
<td>Z91.138</td>
<td>Under-dosing unintentional</td>
</tr>
<tr>
<td>W1849xA</td>
<td>Fall from same level, initial encounter</td>
</tr>
<tr>
<td>09Q0XZZ</td>
<td>Repair of the right external ear, external approach</td>
</tr>
</tbody>
</table>

Common Scenario

- Type of wound injury
- Foreign body or not
- Laterality of ear injury
- Episode of care
- Under-dosing
- Under-dosing intentional or not
- Anatomical site of procedure
- Approach for procedure

Additional specificity needed for ICD-10
How is clinical documentation affected?

The physician/clinician will need to provide clinical documentation of sufficient depth and detail for the coder to discern the nuances of ICD-10, such as:

- **Laterality:** ICD-10 introduces laterality to diagnosis coding
- **Episode of care:** ICD-10 relies heavily on categorizing the episode of care as initial or subsequent
- **Greater specificity:** ICD-10 is much more specific in identifying disease and conditions and the documentation will need to reflect the exact diagnosis to take advantage of the improved granularity

**Example**

- ICD-9-CM: "Torus fracture of radius" (813.45)
- ICD-10-CM: "Torus fracture of lower end of right radius, initial encounter for closed fracture" (S52.521A)

Clinical focus: How can you address clinical documentation gaps?

**Key questions:**

- What are the specific electronic form design principles, guidelines, and elements that need to be considered to enable physicians and clinicians in ICD-10 compliant documentation standards?
- Can your EMR be improved to assist in clinical documentation support?

**Straw man approach:**

1. Analyze top diagnosis codes (by claims volume and major medical specialties) to determine the extent of additional specificity required for ICD-10
2. Conduct chart audits to evaluate the quality of existing documentation and the extent by which it meets the ICD-10 requirements
3. Derive from the gap analysis of current documentation the potential design elements that clinical documentation templates can incorporate to promote ICD-10 compliance
4. Review preliminary findings with hospital leaders and collaboratively determine extent that these findings would be formally translated into design principles and guidelines for impacted solutions (ex: electronic medical record) or to be addressed through enhanced documentation training
5. Strategize with physicians as to the most efficient way to deliver knowledge transfer.
Clinical Documentation Improvement (CDI) program

- Provides support and arms length education to physicians on improving clinical documentation at the point of inpatient services
- CDI program benefits:
  - Accurately reflects severity of illness, risk of mortality, length of stay, case mix index, etc.
  - Supports proper assignment of ICD-9 and ICD-10 codes
  - Physicians “Pay for Performance”
  - Reduces delays in billing (i.e. retrospective queries)
- Critical success factors:
  - Physician champions
  - Physicians understand the benefits to them
  - CDI system
  - Alignment with Coding
  - Clinical Documentation Specialists (CDSs) NOT pulled to perform other duties (i.e. Case Management functions)

Do you have an “effective” Clinical Documentation Improvement (CDI) program at your facility today to support your physicians for ICD-10?

Polling question #4
If you have a CDI Program at your facility today, where does it report to?

- HIM
- Case management
- IT
- Other

Polling Question #4 A

Training / Education programs for ICD-10 stakeholders

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Training component</th>
</tr>
</thead>
</table>
| Physicians                   | • Physicians must be able to accurately represent the intensity of service and severity of illness provided with a new level of detail as required for consistent and accurate mapping to ICD-10 codes as compared with ICD-9 codes  
  • As the content of ICD-9 codes is no longer clinically accurate with current medical science and US-adopted national / state ICD-10 mortality data, it is necessary that physicians become familiar with ICD-10  
  • Delivery method: From prior experience, physicians will likely respond most positively to training in small group sessions, peer lead by a physician; can incorporate a combination of seminars, classroom workshops, and other communication materials |
| Clinical documentation specialists | • Clinical Documentation specialists must be aware of the level of detail required for consistent and accurate mapping to ICD-10 codes in order to accurately represent the intensity of service and severity of illness provided in clinical settings  
  • Providers will need to understand ICD-10 classification methodology changes and details of clinical documentation required to appropriately assign ICD-10 diagnosis and procedure codes  
  • Delivery method: Classroom or e-learning sessions to educate CDSs on ICD-10, as well as provide supplemental written materials |
### Training / Education programs for ICD-10 stakeholders (cont’d.)

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Training component</th>
</tr>
</thead>
</table>
| **Coders**           | - Coders are responsible for accurately translating clinical services into a format that can be utilized for many purposes through the use of the ICD-10 coding system  
- Because coding is utilized for statistical tracking, planning and facility management as well as reimbursement, coders must have a complete understanding of ICD-10, a much more complex scheme of classifying diseases that reflects recent medical advances  
- **Delivery method:** Live workshops, coding round tables / discussion groups, and one-on-one coder training                                                                                                                                                                                                                                                                 |
| **Revenue cycle**    | - As diagnosis and procedure codes are utilized at every stage of the revenue cycle process, revenue cycle staff will need to be aware of the differences between the ICD-9 vs. ICD-10 coding systems, especially during initial stages of transition  
- Diagnosis and procedure codes are used to support medical necessity, are used by case management during the course of working with payors to obtain authorization for treatment, and by the business office for submission of claims for services for reimbursement; as such, it is paramount that all charge entry and billing systems are ICD-10 compliant  
- Providers, charge-capture personnel, as well as IT and business office staff will require ICD-10 education  
- **Delivery method:** E-learning sessions, written materials, or classroom sessions to facilitate understanding of ICD-10 requirements                                                                                                                                                                                                 |
| **Finance**          | - Finance staff should obtain a high-level understanding of the implications of the ICD-10 transition as the migration may cause delayed billing and/or reimbursement time  
- Like ICD-9 codes, ICD-10 codes will drive the MS-DRG assignment; therefore, it will be important for finance staff to be familiar with these codes as part of monitoring case mix index. ICD-10 information may also benefit in tracking types of patients treated and used to strategize growth in certain service lines or development of a new service line  
- **Delivery method:** E-learning sessions, virtual classroom sessions, and written reference material on major changes resulting from the ICD-10 transition                                                                                                                                                           |
| **Executive management** | - The pivotal role of leadership to guide the organization through the ICD-10 implementation means that Executive Management must articulate a model of care for the organization that outlines guiding principles and sets expectations  
- Executive Management should be made aware on the impacts of ICD-10 to patient safety and clinician competency  
- **Delivery method:** One-on-one sessions with executive management, small group discussions, as well as supplementary reference materials                                                                                                                                                                                                                     |
| **External constituents (i.e., patients)** | - Although patients are not directly affected by the migration from ICD-9 to ICD-10, they should be informed of the change to help caregivers contextualize conversations with patients, and educating them on their care plan and diagnoses  
- **Delivery method:** An informative high-level overview of the ICD-10 transition and impacts can be delivered via the organization emails or paper-based communication (e.g., newsletters, pamphlets, brochures)                                                                                     |
Provider training and education framework for considerations

Physicians, residents and mid-level providers will require an understanding of the new ICD-10 clinical documentation requirement; training and remediation activities will need to be coordinated with existing initiatives to the multiple groups of providers.

Physician clinical documentation and ICD-10 integration considerations

As a component of the ICD-10 remediation planning, physician clinical documentation integration can create value to physicians, hospitals and other providers by enhancing an organization’s ability to achieve:

- Consistency in documenting patient’s clinical condition resulting in decreased variability across enterprise
- Economy of scales, knowledge sharing, resource retention, EMR optimization and customized clinician training materials
- Standard approach to template design, query forms, training, internal controls and payor requirements
- Ability to capitalize on existing ICD-9 opportunities, alignment with EMR and quality initiatives, and create standard reporting and measurement

The granularity and specificity for ICD-10 will require more focus on complete and accurate documentation to describe the condition of the patient being treated.
Physician training framework is a critical success factor

1. Develop a physician advisors committee for determining the appropriate strategy for physician training including tools and modalities.
2. Design a variety of training options ranging from focused class room sessions during quarterly meetings to 1:1 sessions. Coordinate with physician leaders by specialty to determine the most appropriate training and tools. Typically providers are budgeting 16 hours of training per physician.
3. Providers are identifying creative ways to train physicians; understanding the strain on physician’s time. (ex: webcasts and podcasts).
4. Use clinical documentation tools to benchmark individual physician performance and educate on clinical documentation gaps and leading practices.
5. Engage physician champions and medical directors to lead and facilitate the education process – formalize the roles and responsibilities of champions.
6. Providers are examining how to utilize technology to facilitate better clinical documentation (ex: EMR templates).

Lessons learned
Who has gone before us in ICD-10 implementation?

ICD-10 has been rolled in other countries in various forms:

- **Canada**
  - Began adopting in 2001
  - Over 4-year implementation
  - ICD-10-CA for morbidity
  - Coding is used for statistical purposes rather than for billing

- **United Kingdom**
  - Adopted in 1995

- **Brazil**
  - Adopted in 1998

- **South Africa**
  - Adopted in 1999

- **Germany**
  - Adopted in 1990
  - ICD-10-All for mortality
  - Implementation took 3 years

- **Russia**
  - Adopted in 1999

- **France**
  - Adopted in 1999

- **Australia**
  - Adopted in 1996
  - Implementation took 2 years
  - 2 years from decision to change to global implementation was insufficient and they had to pull the classification and revise codes

---

Example — Differences between Canada and the U.S.

<table>
<thead>
<tr>
<th></th>
<th>Canada</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Implementation</strong></td>
<td>4 years = Started 2001- Staged</td>
<td>Big bang</td>
</tr>
<tr>
<td></td>
<td>Implementation</td>
<td></td>
</tr>
<tr>
<td><strong>Setting</strong></td>
<td>Hospital (ICD-10 CA/CCI)</td>
<td>Healthcare (ICD-10-CM)</td>
</tr>
<tr>
<td></td>
<td>Hospital Inpt (ICD-10-PCS)</td>
<td>Hospital Inpt (ICD-10-PCS)</td>
</tr>
<tr>
<td><strong>Pilot program</strong></td>
<td>Test pilot program</td>
<td>No test pilot program</td>
</tr>
<tr>
<td><strong>Testing cycle</strong></td>
<td>12 months</td>
<td></td>
</tr>
<tr>
<td><strong>Software</strong></td>
<td>No encoder software system</td>
<td>Yes, encoder software</td>
</tr>
<tr>
<td></td>
<td>DOS to Windows</td>
<td>Windows</td>
</tr>
<tr>
<td><strong>Code set expansion</strong></td>
<td>Increase from 3,500 codes to 20,000 codes (ICD-10-CCI)</td>
<td>Increase from 4,000 codes to 72,000 codes (ICD-10-PCS)</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td>Paid by government</td>
<td>Paid by private sector</td>
</tr>
<tr>
<td><strong>Change factor</strong></td>
<td>Resistance to relearning previously</td>
<td>Resistance to relearning previously</td>
</tr>
<tr>
<td></td>
<td>memorized codes</td>
<td>memorized codes</td>
</tr>
<tr>
<td><strong>Language system</strong></td>
<td>French &amp; English</td>
<td>English</td>
</tr>
<tr>
<td><strong>Human capital</strong></td>
<td>Coder shortage</td>
<td>Coder shortage</td>
</tr>
<tr>
<td><strong>Roll out strategy</strong></td>
<td>Individual countries at a time</td>
<td>All at once</td>
</tr>
<tr>
<td><strong>Diagnosis count</strong></td>
<td>ICD-10-CA 17,000</td>
<td>ICD-10-CM 68,000</td>
</tr>
<tr>
<td><strong>Procedure count</strong></td>
<td>ICD-10-CA 0</td>
<td>ICD-10-CM 3,824</td>
</tr>
</tbody>
</table>
Compliance integration: Previous adoption trends

Canada developed a geographically phased approach to adoption that began in 2002 and completed in 2006 — 4 years (Considered less complex due nationalized health — fewer players)

Australia paid particular attention to the on-going maintenance and production of code sets

<table>
<thead>
<tr>
<th>Key Challenges</th>
<th>Trends</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Full Adoption from 2002</td>
<td>• Productivity: Adjustment to new business processes and technology impacted coding productivity. Productivity returned to same levels experienced prior to implementation in 6 months on average. Resources with prior Windows based experience were able to make the transition quicker.</td>
</tr>
<tr>
<td>• Resistance to change: Health professionals with 20+ years of experience allows coding to be done from memory at a high rate with a high degree of accuracy. Adoption of technology within this group also cited.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Shortage of health record professionals: National shortage of resources existed prior to implementation and continue to create staffing challenges.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>Increased comprehensive scope of codes provides greater specificity for trend analysis.</td>
<td></td>
</tr>
<tr>
<td>• Shortage of professionals and health record coders: Adoption brought to light the lack of knowledgeable medical and technical resources experienced industry wide.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Increase in cost: Funding for the adoption of code set from both a national an industry perspective were difficult to forecast and acquire.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• On-going Support Tool: Realizing the need for efficient maintenance and production of the classification system, a database of the code set content was developed. Tool allows for ease of on-going maintenance to code set content as well as efficient publication in varying format; hard copy, electronic and now eBooks.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Increased the appreciation for an international standard and the awareness within the country</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Developed strong relationship with WHO team responsible for on-going maintenance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Extended institutional knowledge of the coding standard and how it applies to industry</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Status as per information available in September 2006

How did ICD-10 help other countries

Over 25 countries, including Australia, UK, China, Korea, France, Sweden and Canada, currently use ICD-10 for diagnosis, reimbursement and resource allocation. These prior implementations have yielded several benefits and can serve as valuable case studies in conversion.

<table>
<thead>
<tr>
<th>Benefits of ICD-10 conversion in Canada</th>
<th>Benefits of ICD-10 conversion in Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>• The richness of the data provided value added benefits</td>
<td>• The ICD-10 morbidity and mortality data is now comparable at a national level as well as internationally</td>
</tr>
<tr>
<td>‒ Increased level of specificity for clinical, case costing, and decision support reporting</td>
<td>‒ ICD-10 provided a better ability to describe new diseases and capture new understanding of diseases</td>
</tr>
<tr>
<td>‒ Provided more relevant data for epidemiological, research and other secondary uses of data for population health management</td>
<td>‒ The Australian health care system is developing expertise in clinical classification and terminology that would help the country transition to use of clinical terminology in EHRs</td>
</tr>
<tr>
<td>‒ This mitigated the necessary costs, system and process changes and change management practices</td>
<td>‒ The Australian Institute of Health and Welfare publishes &quot;Australian Hospital Statistics&quot; annually using ICD-10 data, which allows for more accurate monitoring of disease patterns and utilization of health services</td>
</tr>
<tr>
<td>• ICD-10 allowed for opportunities for clinical data comparisons (diagnoses, outcomes) to advance service delivery and system efficiencies and effectiveness</td>
<td></td>
</tr>
</tbody>
</table>
Strategies for success from Canada and Australia

- Anticipate extensive training – Every HIM professional was trained by Canadian Institute for Health Information
- Increased communication between coders and physician
- Early commitment from a broad range of stakeholders
- Communication was key
- Get physicians involved early
- Consider resistance to change – many codes are currently memorized
- Deal early with risk mitigation plan for coder shortage
- Conduct a coding pilot program to determine how productivity will impact your organization
- Anticipate coding productivity never rebounding to current levels
- Use pre-defined coding lists within ambulatory care settings

Lessons learned: Assessment and implementation challenges

The magnitude of ICD-10 and its aggressive compliance timeline require an understanding of ICD-10 implementation challenges and early remediation planning.

<table>
<thead>
<tr>
<th>Focus areas</th>
<th>Non-for-Profit Academic Medical Center (3 hospitals, 30 health centers, serving 1.2M residents)</th>
<th>Non-for-Profit Integrated Delivery System (23 hospitals, serving residents in multiple states)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operations</td>
<td>• Potential disruptions in cash collection</td>
<td>• Prioritization of resources / funding required</td>
</tr>
<tr>
<td></td>
<td>• Need for significant enhancement in clinical documentation</td>
<td>• Complex and extensive training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Outreach required for training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Human resources needs to be part of the project team</td>
</tr>
<tr>
<td></td>
<td></td>
<td>to develop recruiting, retention, and remote solution alternatives</td>
</tr>
<tr>
<td>Technology</td>
<td>• Research databases exist housing ICD-9 data</td>
<td>• 43% of reviewed applications and over 500 interfaces need ICD-10 remediation</td>
</tr>
<tr>
<td></td>
<td>• Over 2,600 reports require remediation</td>
<td>• Over 1,000 reports require changes</td>
</tr>
<tr>
<td></td>
<td>• Over 60 applications (20%) require remediation or replacement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Technology solutions, such as computer assisted coding and physician assistive tools,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>to be selected</td>
<td></td>
</tr>
<tr>
<td>Finance</td>
<td>• Process for claims testing with trading partners necessary</td>
<td>• Inconsistency in GEMS maps limits ability to model and predict reimbursement impacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Process for claims testing with trading partners required</td>
</tr>
</tbody>
</table>


Lessons learned: Key implementation strategic elements

- Pre-go-live and post implementation performance monitoring and indicators for discharge not final billed, accounts receivables, and documentation queries
- Analyzing and monitoring plans for coding accuracy, underpayment management, denials, and clinical documentation requirements
- Deep knowledge of ICD-10 code set to enable collaboration with partners and early data evaluation
- Budget planning and resource identification for successful remediation and capture of benefits
- Engaging owners of informatics, technology, and business in strategy sessions using process redesign information, vendor readiness, and trading partner information to develop the overall strategy for technology changes related to ICD-10
- Scheduling early meetings with the top 5 payers in which the organization is reimbursed through DRG, AP/APR DRG or other payment models impacted by ICD coding
- Gaining insight into clinical documentation improvement through enhanced use of technology and testing options
- Determine computer assisted coding tool options as solution to improved coding and documentation quality and productivity impact
- Analyzing ICD-10 data gathered through early adoption to evaluate trends, data variation, case mix changes, and detailed data impact
- Taking an enterprise data management approach to create and maintain consistent, structured data that can be used in a more meaningful and efficient manner
- Decide on the use of crosswalks versus native coding to address dual-processing challenges including ICD-9, ICD-10, SNOMED, and CPT solutions
- Use ICD-10 compliance to further market agendas, business models, and clinical capabilities and derive strategic value from the remediation effort

ICD-10 lessons learned: High-level assessment findings

- Need to develop solutions to accommodate dual processing of ICD-9 and ICD-10 codes for extended period of time with impacts on people, process, and technology
- Data remediation is needed across significant numbers of systems and applications (examples ranging from 50 to over 400 systems)
- High volume of reports will require remediation to support continual strategy development to address trending reports and garner benefits from the granular data set (some organizations have over 3,000 reports)
- Implementation/remediation is complicated by external trading partners, payors, and vendors regarding their ICD-10 preparedness and testing timeframes
- Organizational budgets have ranged from ~$7M to over $100M for ICD-10 implementation, depending on organizational size and complexity
- Participation will be required from a cross-functional team to design an efficient work plan that addresses impacts to electronic health record/documentation, productivity, training, A/R, managed care contracting, resource needs, and remediation costs
- Research data, financial reports, trending tools, and comparative analyses will need to be evaluated related to multi-year trending with both ICD-9 and 10 codes
ICD-10 lessons learned: High-level assessment findings (cont’d.)

• Need to develop a talent management plan to include remote coding solutions, salary solutions, national recruiting capabilities enabled through the use of electronic health records, and potential incentives for retaining staff who have received ICD-10 training
  – Competitive coding pay rates
  – Retention and recruitment bonuses
  – Tuition reimbursement
  – Interstate employment
  – Commitment Letter
• Coding leadership will need to determine the overall future state staffing requirements for coders, coding quality monitoring staff, and clerical support teams to enable successful ICD-10 implementation
• Certified ICD-10 contract coding vendors will be in very high demand, so coding leadership should proactively contract with coding vendors in order to plan for applicable staff augmentation with the ICD-10 transition; additionally, coding leadership will need to develop contingency plans to secure adequate number of backfill staff throughout the next two years as the ICD-10 training processes occur
• Coder’s role may evolve into more of a validation / quality checking role through the use of computer assisted coding (CAC) tools, which will require a change management plan to assist coders in this transition

Has your facility established an ICD-10 retention/incentive bonus for coders?

Polling question #5
ICD-10 lessons learned: High-level assessment findings (cont’d.)

Clinical Documentation

- Coding query forms will need to be updated to include new ICD-10 codes and ICD-10 coding guidelines; there may be a period when both ICD-9 and ICD-10 query forms will be in use
- Clinical documentation specialists will need to be trained early on regarding the ICD-10 clinical documentation requirements, which will enable early discussions with providers about the new ICD-10-CM "terms" for improving the specificity of clinical documentation
- Coding and clinical documentation improvement program leadership will need to participate in enhancing electronic documentation tools and templates to improve documentation specificity, professional fee code selection, and enhance the problem list solutions
- Coding and clinical documentation improvement program leadership will need to provide advice to technology applications such as order entry screens, operating room preference cards, and others that may contain ICD-9 codes

ICD-10 lessons learned: High-level assessment findings (cont’d.)

Coding

- Coding productivity is expected to decrease by as much as 50% in the initial six to nine months following the ICD-10 go-live and then recover to approximately 85% of pre-ICD-10 implementation levels; use this available data and current coding productivity to determine the need for additional resources
- Consider technology solutions such as Computer Assisted Coding (CAC) tools to reduce the impact on coding productivity and assist providers with code selections; CAC tools may improve coding productivity by approximately 18-20%; coding and technology leadership will need to collaborate and define the requirements of a CAC solution to include interoperability with current coding tools and processes, as well as enterprise professional and technical coding functions
- Non-covered entities (e.g., Workers Compensation) are not required to transition to ICD-10; coding leadership will need to understand whether non-covered entities will be ready to accept / process ICD-10 codes by October 1, 2013 and develop a contingency plan for assigning both ICD-9 and ICD-10 codes
- Crossmapping analysis with the CMS GEMs demonstrates variances in approximately 12-15% of ICD-9 to ICD-10 forward mapping scenarios and 5-8% in backward mapping scenarios; these variances will need to be considered if the CMS GEMs will be used to develop the ICD-9 and ICD-10 crosswalk
- Coding quality monitoring staff may need to review 100% of the coded medical records during the initial transition period; coding leadership will need to establish a quality plan in conjunction with Discharged Not Final Billed management action plan
ICD-10 lessons learned: High-level assessment findings (cont’d.)

Education

• Complete an education needs assessment for functional areas across the organization
• Develop a system-wide comprehensive ICD-10 change management and training plan, which incorporates multiple training delivery methods and details the approaches, training concepts, and end-user training needs
• Establish a working team to encourage collaboration and leading practice sharing for ICD-10 education across entities (e.g., hospitals, physician groups, home health, referral labs)
• Explore creative solutions, such as partnerships with educational institutions, web-based training, vended / contracted education, and formal AHIMA certification
• Most organizations are planning to offer comprehensive ICD-10 training to coders and clinical documentation specialists in early 2012

ICD-10 branding

• Develop a facility logo and theme message for ICD-10 implementation
• Integrate branding in all ICD-10 communications and activities
  – Create an “ICD-10 Logo and Theme Contest”
  – Engage stakeholders
  – Award the winner
• Associates will see brand message and KNOW to read the communication…IMPORTANT!
• Centura Health’s ICD-10 Branding Message
Compliance integration

Compliance integration: Key implementation strategic value elements

It is predicted that a majority of health care organizations will meet or moderately exceed CMS core ICD-10 mandates; while others will drive ICD-10 into all essential administrative and clinical functions.

- **Pragmatists**
  - Achieve “Basic Compliance” (~60% of Health Entities)

- **Collaborators**
  - Achieve “Successful Compliance” (~20-25% of Health Entities)

- **Innovators**
  - Achieve “Strategic Value” (~15-20% of Health Entities)

**Negative ROI**

= CMS Mandates
  - Basic Coding
  - EDI Transactions
  - Government Reporting
  - Core Administrative & Revenue Cycle Process

**Break even**

= CMS Mandates + Remediation of internal Reporting

**Value realization**

= CMS Mandates + Break Even +
  - Advanced Analytics
  - Payment Monitoring

**Benefit**

= CMS Mandates + Value Realization
  - Transformed HCM, Contracting, & Business Acquisition
  - Advanced Training, Outcome Management & Physician Score Cards
ICD-10 dashboard “sample” report – Centura Health’s Program Milestones Supporting Schedule Information

<table>
<thead>
<tr>
<th>Status</th>
<th>Project Phase</th>
<th>Start Date</th>
<th>Finish Date</th>
<th>Percent Complete</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Target</td>
<td>Clinical Documentation Improvement Program Evaluation</td>
<td>9/1/2011</td>
<td>1/31/2012</td>
<td>95%</td>
<td>Evaluation complete, pending Service Center Board approval</td>
</tr>
<tr>
<td>On Target</td>
<td>FY 2013 Project Budget Preparation</td>
<td>1/1/2012</td>
<td>1/30/2012</td>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>On Target</td>
<td>ICD-10 Training Plan Development</td>
<td>7/1/2011</td>
<td>3/31/2012</td>
<td>90%</td>
<td></td>
</tr>
<tr>
<td>Complete</td>
<td>2010 Implementation</td>
<td>8/1/2011</td>
<td>1/31/2012</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>On Target</td>
<td>Computer-Assisted Coding Implementation</td>
<td>1/1/2012</td>
<td>6/30/2012</td>
<td>3%</td>
<td>Project kick-off scheduled for ICD-10/13</td>
</tr>
<tr>
<td>Not Started</td>
<td>FY 2012 ICD-10 Training Requirements Completed</td>
<td>2/1/2012</td>
<td>6/30/2012</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

Program Metrics

- Net (Gross) Days in Accounts Receivable
- Physician (other Bill Hold)
- Case Mix Index
- Coding Accuracy

Accomplishments

FY 2012 survey complete and results are being analyzed for budgetary purposes.

Planned Activities for Next Reporting Period

<table>
<thead>
<tr>
<th>2012 Project Title</th>
<th>Issue Description</th>
<th>Issue Status</th>
<th>Issue Owner</th>
<th>Issue Number</th>
<th>Issue History</th>
<th>Issue Updated Date</th>
<th>Issue Related Date</th>
<th>Issue Revised Date</th>
<th>Issue History</th>
</tr>
</thead>
</table>

Compliance integration: ICD-10 key impact areas

ICD-10 is expected to surpass Y2K and HIPAA compliance due to the time requirements, financial investments and technological conversions needed to be in full compliance by October 1, 2013.

| Patient Scheduling | Registration | Charge Capture | Coding | Pricing | Claims Processing | Payment | Billing & Financial Systems |
|---------------------|--------------|----------------|--------|---------|------------------|---------|----------------------------|---|
| Patient Accounting  | Clinical Care| Physician      |        |         | Clinical Research & Registry Reporting |        | • Health Plan Contracting  |
|                     |              | • Disease & Case Management |        |         | • Charge Capture    |         | • Payment Policies         |
|                     |              | • Case Mix & DRG Groupers  |        |         | • Utilization Review |         | • Reimbursement Management|
|                     |              | • Care guidelines/protocols |        |         |                  |         |                             |
| Nursing             |              | Nursing        |        |         | Pharmacology      |         |                             |
|                     |              | • Clinical Documentation & Coding |        |         | Pharmacy          |         |                             |
|                     |              | • Pharmacy Information Systems |        |         | • Support to P4P and Bio-surveillance |        |                             |
|                     |              | • Health Plan Contracting |        |         |                   |         |                             |
|                     |              | • Charge Capture |        |         |                   |         |                             |
|                     |              | • Payment Policies |        |         |                   |         |                             |
|                     |              | • Utilization Review |        |         |                   |         |                             |
|                     |              | • Reimbursement Management |        |         |                   |         |                             |

Health Information Systems

- Clinical Documentation & Coding
- EMR Workflow –CPOE
- E-Pix Pharmacy & Radiology Systems
- Integration RHIO Support Processes

Performance & Reporting

- Clinical Research & Registry Reporting
- Quality Measures & P4P
- Regulatory Compliance
- Epidemiology & Public Health Reporting

Information Technology

- Compatibility and transition
- Data Repositories
- Software Interfaces
Systems requiring assessment for ICD-10 compliance

<table>
<thead>
<tr>
<th>Accounting systems</th>
<th>Clinical systems</th>
<th>Physician practice management system</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregate data</td>
<td>Decision-support systems</td>
<td>Quality management</td>
</tr>
<tr>
<td>Billing systems</td>
<td>Disease Management systems</td>
<td>Quality Measuring systems</td>
</tr>
<tr>
<td>Case Management</td>
<td>Encoding software</td>
<td>Registration and scheduling systems</td>
</tr>
<tr>
<td>Case-mix systems</td>
<td>Medical necessity</td>
<td>Test-ordering systems</td>
</tr>
<tr>
<td>Clearinghouse EDI systems</td>
<td>Medical record abstracting</td>
<td>Utilization management</td>
</tr>
<tr>
<td>Clinical protocols</td>
<td>Payer claims adjudication systems</td>
<td>All custom reporting systems, interface engine coding, data extract &amp; custom databases</td>
</tr>
<tr>
<td>Clinical reminder systems</td>
<td>Performance-measurement systems</td>
<td>All system sending and receiving clinical information to/from external resources</td>
</tr>
</tbody>
</table>

What role does compliance/internal audit play in ICD-10

- Participate in the implementation steering committees so that you understand how systems and processes are being modified.
- Assess the risk across your organization as to how ICD-10 is progressing. Make sure that the appropriate executives are aware of the risks. Keep a matrix of risks and develop a risk mitigation plan. Communicate with senior executives.
- IT Controls – With the number of impacts across systems, it is important that the controls related to system changes are assessed prior to “go live” implementation. Work with users to be a part of the business case testing process so you can understand how the changes are impacting the system.
What role does compliance/internal audit play in ICD-10

- Business processes may change as part of ICD-10. Understand how those changes may impact internal controls that are currently in place.
- Many providers are anticipating that additional coding audits will be completed during the first year of “go live”. Some organizations are assuming monthly and quarterly audits to determine if ICD-10 coding is accurate.
- Consider auditing the query process after the ICD-10 go live.
- Payor contracts may change – consider audits of payor contract payments.
- Consider that analytics and related reports may be impacted between the pre and post ICD-10 execution. How will this impact audits?

Wrap up and questions
Wrap-up 10 important points to consider

- Focus on the benefits of ICD-10
- Ensure corporate sponsorship
- Have an active ICD-10 implementation steering committee
- Communicate often
- Have strong physician support
- Train physicians to their specialty and start early
- Consider multiple modalities to train physicians
- Keep a “living budget for ICD-10 costs” and keep management apprised.
- Consider opportunities to centralize where appropriate
- Develop/refresh clinical documentation program

Questions/contact information

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