ICD-10 Implementation Guide for Large Practices
# Table of Contents

1. Introduction to ICD-10 ................................................................. 1

2. About ICD-10 .................................................................................. 3

3. Limitations of ICD-9 ...................................................................... 4

4. Benefits of ICD-10 .......................................................................... 5

5. Comparing ICD-9 and ICD-10 ......................................................... 6

6. Implementing ICD-10 ...................................................................... 8
   
   **Planning Phase** ........................................................................ 9
   - Implementation Timeline ......................................................... 10
   - Project Management Process ................................................. 13
   - Risk and Issue Management .................................................. 16

   **Communication and Awareness Phase** ..................................... 18
   - Resource Management and Training (Internal and External) .. 20
   - Assess Training Needs (Internal and External) .................... 20
   - Initiate a Training Plan ............................................................ 21

   **Assessment Phase** .................................................................... 23
   - Business Processes Affected by ICD-10 ............................... 23
   - ICD-10 Effect on Clinical Documentation ............................. 27
   - How ICD-10-CM Affects Clinical Documentation .................. 27
   - ICD-10 Effects on Physician Reimbursements ..................... 29
   - Criteria for Evaluating ICD-10 Vendors ............................... 30
   - Methodology to Evaluate ICD-10 Vendors and/or Tools ......... 32
   - Assessing Vendor Functional Capabilities ............................ 33
   - Scenario-Based Vendor Assessment ..................................... 37

   **Implementation Phase** ............................................................... 38
   - Operational Implementation Activities .................................. 38
   - Resources Available to Ease ICD-10 Transition .................... 39
   - General Equivalency Mappings (GEMs) ............................... 40
ICD-10 Implementation Guide for Large Practices

Testing Phase
- Test Plan Implications
- Test Case Implications
- Test Data Implications
- Error Testing
- Internal Testing
- External Testing

Transition Phase
- Go-Live
- Ongoing Support
- Potential Ongoing Support Issues with Vendors
- Post-Implementation Audit Processes and Procedures

7. Next Steps

8. Appendix: Relevant Templates

Figures
Figure 1: ICD-10 Implementation Phases

Tables
Table 1: Diagnosis Code Comparison
Table 2: Inpatient Procedure Code Comparison
Table 3: Large Provider Practice Implementation Timeline
Table 4: Project Management Recommended Actions and Resources
Table 5: Physician Practice Risks
Table 6: Communication Plan Components
Table 7: Training Preparation and Needs Assessment
Table 8: Training Topics, Purpose, and Audience
Table 9: Business Process Definitions and ICD-10 Effects
Table 10: Sample Documentation Requirements for Fractures of the Radius
Table 11: ICD-10 Effects on Physician Reimbursements
Table 12: Physician Vendor Evaluation Criteria and Key Considerations
Table 13: Tools for the ICD-10 Transition
Table 14: ICD-10 Testing Types
Table 15: Operational Impacts and Strategies for Monitoring
Table 16: Key Considerations for Transition Phase
Table 17: Go-Live Tasks and Associated Actions
Introduction to ICD-10

On October 1, 2013 a key element of the data foundation of the United States’ health care system will undergo a major transformation. We will transition from the decades-old Ninth Edition of the International Classification of Diseases (ICD-9) set of diagnosis and inpatient procedure codes to the far more contemporary, vastly larger, and much more detailed Tenth Edition of those code sets—or ICD-10—used by most developed countries throughout the world.

This transition will have a major impact on anyone who uses health care information that contains a diagnosis and/or in-patient procedure code, including:

- Hospitals
- Health care practitioners and institutions
- Health insurers and other third-party payers
- Electronic-transaction clearinghouses
- Hardware and software manufacturers and vendors
- Billing and practice-management service providers
- Health care administrative and oversight agencies
- Public and private health care research institutions

**Making the transition to ICD-10 is not optional.**

All “covered entities”—as defined by the Health Insurance Portability and Accountability Act of 1996 (HIPAA)—are required to adopt ICD-10 codes for use in all HIPAA transactions with dates of service on or after the October 1, 2013 compliance date. For HIPAA inpatient claims, ICD-10 diagnosis and procedure codes are required for all inpatient stays with discharge dates on or after October 1, 2013.

Please note that the transition to ICD-10 does not directly affect provider use of the Current Procedural Terminology (CPT) and Healthcare Common Procedure Coding System (HCPCS) codes.
About Version 5010

To process ICD-10 claims or other transactions, providers, payers and vendors must first implement the “Version 5010” electronic health care transaction standards mandated by HIPAA. The existing HIPAA “Version 4010/4010A1” transaction standards do not support the use of the ICD-10 codes.

Everyone covered by HIPAA must install Version 5010 in their practice management or other billing systems and test with all payers and trading partners by January 1, 2012. It is important to know that though the 5010 transaction will be in use before October 1, 2013, covered entities are not to use the ICD-10 codes in production (outside of a testing environment) prior to that date.

Please note: your organization must coordinate the Version 5010 and ICD-10 implementations to identify affected transactions and systems. For more information on Version 5010, go to the CMS website at [http://www.cms.gov/ICD10](http://www.cms.gov/ICD10) and click on “Version 5010” on the menu on the left side of the page.
About ICD-10

The World Health Organization (WHO) publishes the International Classification of Diseases (ICD) code set, which defines diseases, signs, symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or disease. The ICD-10 is copyrighted by the WHO (http://www.who.int/whosis/icd10/index.html). The WHO authorized a US adaptation of the code set for government purposes. As agreed, all modifications to the ICD-10 must conform to WHO conventions for the ICD.

Currently, the United States uses the ICD code set, Ninth Edition (ICD-9), originally published in 1977, in the following forms:

- ICD-9-CM (Clinical Modification), used in all health care settings
- ICD-9-PCS (Procedure Coding System), used only in inpatient hospital settings

In 1990, the WHO updated its international version of the ICD-10 (Tenth Edition, Clinical Modification) code set for mortality reporting. Other countries began adopting ICD-10 in 1994, but the United States only partially adopted ICD-10 in 1999 for mortality reporting.

The National Center for Health Statistics (NCHS), the federal agency responsible for the United States’ use of ICD-10, developed ICD-10-CM, a clinical modification of the classification for morbidity reporting purposes, to replace our ICD-9-CM Codes, Volumes 1 and 2. The NCHS developed ICD-10-CM following a thorough evaluation by a technical advisory panel and extensive consultation with physician groups, clinical coders, and others to ensure clinical accuracy and usefulness.
Limitations of ICD-9

ICD-9 has several limitations that prevent complete and precise coding and billing of health conditions and treatments, including:

- The 30-year old code set contains outdated terminology and is inconsistent with current medical practice.
- The code length and alphanumeric structure limit the number of new code sets that can be created, and many ICD-9 categories are already full.
- The codes themselves lack specificity and detail to support the following:
  - Accurate anatomical descriptions
  - Differentiation of risk and severity
  - Key parameters to differentiate disease manifestations
  - Optimal claim reimbursement
  - Value-based purchasing methodologies
- The lack of detail limits the ability of payers and others to analyze information such as health care utilization, costs and outcomes, resource use and allocation, and performance measurement.
- The codes do not provide the level of detail necessary to further streamline automated claim processing, which would result in fewer payer-physician inquiries and potential claim-payment delays or denials.

ICD-9-CM limits operations, reporting, and analytics processes because it:

- Follows a 1970s outdated medical coding system
- Lacks clinical specificity to process claims and reimbursement accurately
- Fails to capture detailed health care data analytics
- Limits the characters available (3-5) to account for complexity and severity
Benefits of ICD-10

By contrast, ICD-10 provides more specific data than ICD-9 and better reflects current medical practice. The added detail embedded within ICD-10 codes informs health care providers and health plans of patient incidence and history, which improves the effectiveness of case-management and care-coordination functions. Accurate coding also reduces the volume of claims rejected due to ambiguity. Here the new code sets will:

- Improve operational processes across the health care industry by classifying detail within codes to accurately process payments and reimbursements.
- Update the terminology and disease classifications to be consistent with current clinical practice and medical and technological advances.
- Increase flexibility for future updates as necessary.
- Enhance coding accuracy and specificity to classify anatomic site, etiology, and severity.
- Support refined reimbursement models to provide equitable payment for more complex conditions.
- Streamline payment operations by allowing for greater automation and fewer payer-physician inquiries, decreasing delays and inappropriate denials.
- Provide more detailed data to better analyze disease patterns and track and respond to public health outbreaks.
- Provide opportunities to develop and implement new pricing and reimbursement structures including fee schedules and hospital and ancillary pricing scenarios based on greater diagnostic specificity.
- Provide payers, program integrity contractors, and oversight agencies with opportunities for more effective detection and investigation of potential fraud or abuse and proof of intentional fraud.

ICD-10 codes refine and improve operational capabilities and processing, including:

- Detailed health reporting and analytics: cost, utilization, and outcomes;
- Detailed information on condition, severity, comorbidities, complications, and location;
- Expanded coding flexibility by increasing code length to seven characters; and
- Improved operational processes across health care industry by classifying detail within codes to accurately process payments and reimbursements.
Comparing ICD-9 and ICD-10

There are several structural differences between ICD-9-CM codes and ICD-10 codes. Table 1 illustrates the difference between ICD-9-CM (Volumes 1 and 2), and ICD-10-CM. Table 2 illustrates the difference between ICD-9-CM, (Volume 3) and ICD-10-PCS.

Table 1: Diagnosis Code Comparison

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>ICD-9-CM (VOLS. 1 &amp; 2)</th>
<th>ICD-10-CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field length</td>
<td>3-5 characters</td>
<td>3-7 characters</td>
</tr>
<tr>
<td>Available codes</td>
<td>Approximately 13,000 codes</td>
<td>Approximately 68,000 codes</td>
</tr>
<tr>
<td>Code composition (numeric or alpha)</td>
<td>Digit 1 = alpha or numeric Digit 2-5 = numeric</td>
<td>Digit 1 = alpha Digit 2 = numeric Digits 3-7 = alpha or numeric</td>
</tr>
<tr>
<td>Available space for new codes</td>
<td>Limited</td>
<td>Flexible</td>
</tr>
<tr>
<td>Overall detail embedded within codes</td>
<td>Ambiguous</td>
<td>Very specific (Allows description of comorbidities, manifestations, etiology/causation, complications, detailed anatomical location, sequelae, degree of functional impairment, biologic and chemical agents, phase/stage, lymph node involvement, lateralization and localization, procedure or implant related, age related, or joint involvement)</td>
</tr>
<tr>
<td>Laterality</td>
<td>Does not identify right versus left</td>
<td>Often identifies right versus left</td>
</tr>
<tr>
<td>Sample code²</td>
<td>813.15, Open fracture of head of radius</td>
<td>S52123C, Displaced fracture of head of unspecified radius, initial encounter for open fracture type IIIA, IIIB, or IIIC</td>
</tr>
</tbody>
</table>

Table 2: Inpatient Procedure Code Comparison

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>ICD-9-CM (VOL. 3)</th>
<th>ICD-10-PCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Field length</td>
<td>3-4 characters</td>
<td>7 alpha-numeric characters; all are required</td>
</tr>
<tr>
<td>Available codes</td>
<td>Approximately 3,000</td>
<td>Approximately 72,081</td>
</tr>
<tr>
<td>Available space for new codes</td>
<td>Limited</td>
<td>Flexible</td>
</tr>
<tr>
<td>Overall detail embedded within</td>
<td>Ambiguous</td>
<td>Precise definition regarding anatomic site, approach,</td>
</tr>
<tr>
<td>codes</td>
<td></td>
<td>device used, and qualifying information</td>
</tr>
<tr>
<td>Laterality</td>
<td>Code does not identify right versus left</td>
<td>Code identifies right versus left</td>
</tr>
<tr>
<td>Terminology for body parts</td>
<td>Generic description</td>
<td>Detailed description</td>
</tr>
<tr>
<td>Procedure description</td>
<td>Lacks description of procedure approach</td>
<td>Detailed description of procedure approach. Precise</td>
</tr>
<tr>
<td>Character position within code</td>
<td>N/A</td>
<td>definition of anatomic site, approach, device used,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>qualifying information</td>
</tr>
<tr>
<td>Example code</td>
<td>3924, Aorta-renal Bypass</td>
<td>04104J3, Bypass Abdominal Aorta to Right Renal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Artery with Synthetic Substitute, Percutaneous Endoscopic Approach</td>
</tr>
</tbody>
</table>
Implementing ICD-10

The ICD-10 Implementation Guide for Large Provider Practices applies to outpatient practices that may have more than 25 physicians and may have an independent administrative infrastructure to support billing and verify patient eligibility. Medical clinics run by a government agency for health services or a private partnership of physicians will also find this guide useful.

Physician practices must understand, anticipate, and effectively address the impact of the ICD-10 transition on their full range of clinical and management systems and functions including, but not limited to:

- Coverage determinations
- Payment determinations
- Medical review policies
- Plan structures
- Statistical reporting
- Actuarial projections
- Fraud and abuse monitoring
- Quality measurements

This ICD-10 Implementation Guide for Large Provider Practices provides you and your organization with a useful framework to help you plan and execute a timely and smooth transition to the ICD-10 code sets on October 1, 2013.

Implementation milestones and tasks are grouped into six phases:

1. **Planning**
2. **Communication and Awareness**
3. **Assessment**
4. **Operational Implementation**
5. **Testing**
6. **Transition**
In order to achieve a smooth ICD-10 transition, your practice will need to create and follow a variety of plans tailored to your unique needs and culture, including plans for:

- Project management
- Communication
- Assessment
- Implementation
- Testing
- Post-transition operations

**Figure 1** shows these recommended ICD-10 implementation phases and high-level steps. For additional, more detailed tasks please refer to the ICD-10 Implementation Timeline.

**Planning Phase**

A successful transition from ICD-9 codes to ICD-10 codes on October 1, 2013, will require significant planning. At a minimum, your practice should consider the following activities:

- **Ensure top leadership understands the breadth and significance of the ICD-10 change.** Download free, authoritative ICD-10 fact sheets and background information from the CMS website at http://www.cms.gov/ICD10 and share trade publication articles on the transition.

- **Assign overall responsibility and decision-making authority** for managing the transition. This can be one person or a committee depending on the size of your practice.

- **Plan a comprehensive and realistic budget.** This should include costs such as software upgrades and training needs.

- **Ensure involvement and commitment of all internal and external stakeholders.** Contact vendors, physicians, affiliated hospitals, clearinghouses (electronic billing and claims services), and others to determine their plans for ICD-10 transition.

- **Adhere to a well-defined timeline** that makes sense for your practice (See Table 3 Implementation Timeline).
Implementation Timeline

Using the ICD-10 Implementation Timeline as a guide, your practice should:

- Identify any additional tasks based on your practice’s specific business processes, systems, and policies
- Identify critical dependencies and predecessors
- Identify resources and task owners
- Estimate start dates and end dates
- Identify entry and exit criteria between phases
- Continue to update the plan throughout ICD-10 implementation and afterwards

Table 3 indicates a high-level ICD-10 implementation timeline. Your practice may use this table to estimate practice-specific start and end dates based on systems and vendor relationships.

**Table 3: Large Provider Practice Implementation Timeline**

*Note: This table only addresses the ICD-10 implementation. You will also need to implement Version 5010 simultaneously if your organization has not done so yet. The Version 5010 compliance date is January 1, 2012.*

<table>
<thead>
<tr>
<th>ACTION STEPS</th>
<th>START DATE</th>
<th>END DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actions to Take Immediately</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inform core group and senior management of upcoming changes (1 month)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Create a governance structure, such as project management team, interdisciplinary steering committee, executive sponsor, and/or ICD-10 coordination manager (1 month)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perform an impact assessment and identify potential changes to existing work flow and business processes (6 months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Collect information from each department on current use of ICD-9 and the number of staff members who need ICD-10 resources and training. Staff training will most likely involve billing and other financial personnel, coding staff, clinicians, management, and IT staff</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Evaluate the effect of ICD-10 on other planned or on-going projects (e.g., Version 5010 transition, EHR adoption and Meaningful Use)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Determine business and technical implementation strategy (1 month)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop and complete implementation plan, including a communications plan (3 months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimate and secure budget, including all costs associated with implementation such as software and software license costs, hardware procurement, and staff training costs (2 months)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 3: Large Provider Practice Implementation Timeline

<table>
<thead>
<tr>
<th>ACTION STEPS</th>
<th>START DATE</th>
<th>END DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Actions to Take Immediately</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Contact systems vendors, clearinghouses, and/or billing services to assess their readiness for ICD-10 and evaluate current contracts (2 months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Determine if systems vendors and/or clearinghouses/billing services will support changes to systems, a timeline and costs for implementation changes, and identify when testing will occur</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Determine anticipated testing time and schedule (when they will start, how long they will need, and what will be needed for testing)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• If vendor(s) provide solution, then engage immediately</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Begin internal system design and development, if not started already</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educate staff on changes in documentation requirements from health plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Winter 2012</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete system design and development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue to educate staff on changes in documentation requirements from health plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Start to conduct internal testing. This must be a coordinated effort with internal coding, billing and technical resources and vendor resources (9 months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data managers should start to collaborate with IT to begin implementing the ICD-10 project plan throughout 2012 until ICD-10 implementation. Action steps include reviewing the sample data reports, testing, and evaluating data for accuracy (11 months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring 2012</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue to educate staff on changes in documentation requirements from health plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data managers should collaborate with IT to continue implementing the ICD-10 project plan throughout 2012 until ICD-10 implementation. Action steps include reviewing the sample data reports, testing, and evaluating data for accuracy</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Summer 2012</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue internal testing and vendor code deployment (3 months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data managers should collaborate with IT to continue implementing the ICD-10 project plan throughout 2012 until ICD-10 implementation. Action steps include reviewing the sample data reports, testing, and evaluating data for accuracy</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall 2012</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete educating staff on changes in documentation requirements from health plans</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Begin external testing (10 months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data managers should collaborate with IT to continue implementing the ICD-10 project plan throughout 2012 until ICD-10 implementation. Action steps include reviewing the sample data reports, testing, and evaluating data for accuracy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table 3: Large Provider Practice Implementation Timeline

<table>
<thead>
<tr>
<th>ACTION STEPS</th>
<th>START DATE</th>
<th>END DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Winter 2013</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue external testing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data managers should collaborate with IT to continue implementing the ICD-10 project plan until ICD-10 implementation. Action steps include reviewing the sample data reports, testing, and evaluating data for accuracy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spring 2013</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue external testing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct intensive training for coders on day-to-day basis (6 months)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data managers should collaborate with IT to begin implementing the ICD-10 project plan until ICD-10 implementation. Action steps include reviewing the sample data reports, testing, and evaluating data for accuracy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Summer 2013</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete external testing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transition ICD-10 systems to production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continue intensive training for coders on day-to-day basis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data managers should collaborate with IT to begin implementing the ICD-10 project plan until ICD-10 implementation. Action steps include reviewing the sample data reports, testing, and evaluating data for accuracy.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fall 2013</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete transition of ICD-10 systems to production</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Complete intensive training for coders on day-to-day basis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>October 1, 2013: ICD-10 system implementation for full compliance. ICD-9 codes will continue to be used for services provided before October 1, 2013.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CMS consulted resources from the American Medical Association (AMA), the American Health Information Management Association (AHIMA), the North Carolina Healthcare Information & Communications Alliance (NCHICA) and the Workgroup for Electronic Data Interchange (WEDI) in developing this timeline.
Project Management Process
Consider these recommended actions to help your practice achieve a smooth ICD-10 implementation.

Table 4 includes the following elements:

- **Component**: Core parts of a project management structure
- **Recommended Actions**: Best practices your practice should employ to support a smooth transition
- **Resources**: References practices may use to carry out the best practices

<table>
<thead>
<tr>
<th>COMPONENT/GOAL</th>
<th>RECOMMENDED ACTIONS</th>
<th>RESOURCES</th>
</tr>
</thead>
</table>
| Governance and project management structure/Establish accountability across ICD-10 implementation team structure | • Create a governance structure, such as project management team, interdisciplinary steering committee, executive sponsor, and/or ICD-10 coordination manager. Include staff from different areas of the practice such as clinical, claims processing, billing, IT or health information management.  
• Appoint an ICD-10 coordination manager (often the practice manager) who will be responsible for making decisions about the transition. They should:  
  — Define roles and responsibilities, and assign tasks  
  — Coordinate with the implementation team  
• Assemble an implementation team, establish a formal project management structure and designate authority for different aspects of the transition, including change management, risk management, communications, training, testing, and vendor management.  
• Define a process and provide a forum for team members to escalate issues, risks, and changes relevant to the scope, schedule and cost of the project. | • Implementation Timeline to identify detailed ICD-10 implementation dates and milestones  
• Responsible, Accountable, Support, Consulted, Informed (RASCI) template |
| Assessment/Identify readiness for ICD-10 transition and determine the level of support needed | • Assess the readiness of your practice for the transition  
• Perform an impact analysis to identify processes and systems that will require changes due to the transition to ICD-10  
  — Ask your staff where they use and/or see these codes appear such as manuals, superbills, practice management software, and billing software  
• Identify and assess readiness of vendors, clearinghouses, and other business associates whose involvement is essential to ICD-10 implementation; review contracts and Service Level Agreements  
• Document and communicate impact analysis findings | • Business Processes Affected by ICD-10 for information identifying ICD-10 impacts for providers business processes and systems  
• Criteria for Evaluating ICD-10 Vendors  
• Methodology to Evaluate ICD-10 Vendors |
Table 4: Project Management Recommended Actions and Resources

<table>
<thead>
<tr>
<th>COMPONENT/GOAL</th>
<th>RECOMMENDED ACTIONS</th>
<th>RESOURCES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transition plan and budget / Use cost-benefit analysis to inform decision-making</td>
<td>- Establish strategies, tasks and goals for the ICD-10 transition.</td>
<td>• Criteria for Evaluating ICD-10 Vendors</td>
</tr>
<tr>
<td></td>
<td>- Select appropriate vendors by evaluating the costs and benefits associated with ICD-10 changes in your practice business process and system upgrades. Compare this with your current vendors and/or potential vendors offerings.</td>
<td>• Methodology to Evaluate ICD-10 Vendors</td>
</tr>
<tr>
<td></td>
<td>- Coordinate with internal and external resources (including vendors and other parties) required to support ICD-10 implementation across your business processes, policies, and systems.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Document an inventory of the tasks involved in meeting the October 1, 2013, deadline. Establish the sequence, work effort, and duration for each task within the inventory, including:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Policy, procedures, and system updates</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Staff training needs to support all business processes, policies, and technology</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Vendor tasks essential to ICD-10 implementation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Vendor and third-party planning and delivery monitoring</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Distribute the implementation timeline internally and externally. Anticipate the potential need to refine the ICD-10 implementation timeline as internal or external factors warrant.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Plan to regularly communicate the status of the transition based on the timeline with internal and external contacts.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Identify available funding for ICD-10 implementation; plan and approve a budget for expenses related to the transition like training and system upgrades.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Obtain project cost estimates from project leaders, vendors, providers and other stakeholders</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Formulate final baseline budget</td>
<td></td>
</tr>
<tr>
<td>Communication plan/Maintain and share knowledge across the team</td>
<td>- Establish awareness and understanding of scope among practice leadership and secure their support for strategy, budget, and implementation plan</td>
<td>• Communications and Awareness section for methods to communicate ICD-10 awareness and planning with internal staff and external vendors and partners</td>
</tr>
<tr>
<td></td>
<td>- Develop a comprehensive communication plan with internal staff, vendors, and other stakeholders</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Provide ongoing status updates to maintain focus on the project and upcoming initiatives that require staff involvement</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Provide regular updates to senior leadership and those most directly affected by the changes, including coders, clinicians, physicians, and practice staff</td>
<td></td>
</tr>
<tr>
<td>Risk management plan/Proactively identify risks both internally and externally for ICD-10 implementation</td>
<td>- Identify possible implementation issues and risks</td>
<td>• Business Processes Affected by ICD-10 for information identifying ICD-10 impacts for provider business processes and systems</td>
</tr>
<tr>
<td></td>
<td>- Coordinate between governance team and implementation team to review and address associated risks across the various departments of your practice</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Determine clear decision making process and establish accountability and authority for resolving issues</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Develop timely strategies to address issues and risks</td>
<td></td>
</tr>
</tbody>
</table>
Table 4: Project Management Recommended Actions and Resources

<table>
<thead>
<tr>
<th>COMPONENT/GOAL</th>
<th>RECOMMENDED ACTIONS</th>
<th>RESOURCES</th>
</tr>
</thead>
</table>
| Operational implementation/ Manage the implementation process                | • Establish points of contact with all vendors and build clear communications channels  
• Create a grid to track and manage both internal and external implementation activities  
• Assign responsibility for developing and executing the ICD-10 implementation plan  
• Communicate progress and compare to the ICD-10 implementation timeline  
• Establish mechanisms for early identification of implementation problems and corrective actions with internal and external parties  
  — Track issues and risks and work with existing vendors and third parties to plan mitigation strategies  
  — Monitor vendor and third-party relationships  
  — Monitor and coordinate with external groups including hospitals, State Medicaid Agencies, Medicare entities, and clearinghouses | • Implementation section  
• Consider creating a Responsible, Accountable, Support, Consulted, Informed (RASCI) template                                                                            |
| Training/ Develop the skills necessary to support ICD-10 implementation within your practice | • Educate practice staff on:  
  — Scope and impact of ICD-10 conversion  
  — Importance of ICD-10 readiness  
  — Training needs  
• Provide training to appropriate staff on the ICD-10 code sets, associated coding guidelines and General Equivalence Mappings (GEMs) or other preferred ICD mapping tools  
• Relay the importance of accurate coding and maintain awareness of the ICD-10 implementation  
• Identify knowledge- and training-champions to serve as contacts for your ICD-10 staff  
• Recognize staff accomplishments related to ICD-10 implementation and key milestones  
  — Consider providing incentives to staff for accomplishments related to the ICD-10 implementation | • Training section  
• Communication and Awareness section                                                                                                |
| Testing/Ensure readiness for go-live                                          | • Create comprehensive testing strategy  
• Monitor and work with vendor(s) to develop test plans and data  
• Test internal systems (Level I)  
• Test external systems (Level II)  
• Resolve any outstanding problems from testing failures | • Testing section                                                                                                                               |
| Post-implementation/ Achieve 100 percent compliance                            | • Transmit electronic claims and other transactions successfully using ICD-10 for claims with dates of service on or after October 1, 2013  
• Monitor actual progress versus planned progress  
• Provide post-transition support to practice staff  
• Monitor the impact on reimbursements, claims denials and rejections, coding accuracy and productivity, fraud and abuse detection, and investigations  
• Resolve post-implementation issues as quickly as possible; create plan for full problem resolution as needed | • ICD-10 Implementation Timeline                                                                                                                 |
Risk and Issue Management

Your practice’s ICD-10 coordination manager will need to work with vendors and third parties to anticipate implementation issues and risks and develop strategies to streamline ICD-10 implementation.

To do this effectively, consider creating a risk inventory for your practice that:

- Identifies risks by departments or key internal/external functions
- Identifies the chance a risk will occur, its degree of potential impact, and relevant ways to avoid risk like offering training, identifying alternate vendors, and building up cash reserves or increased lines of credit
- Assigns responsibility for risk reduction action, including when to involve management through channels appropriate for your practice structure
- Continuously monitors impact on scope, schedule, and cost

Table 5 identifies a preliminary list of some fundamental risks your practice should be aware of and manage and includes the following elements:

- **Risk:** Broad categorization of various specific risks
- **Risk Description:** Specific risk examples within the broad category
- **Risk Mitigation Plan:** Steps to manage and address the risk

<table>
<thead>
<tr>
<th>RISK</th>
<th>RISK DESCRIPTION</th>
<th>RISK MITIGATION PLAN</th>
</tr>
</thead>
</table>
| Internal or external parties fail to remain on the ICD-10 schedule | If your practice’s implementation planning effort does not coordinate with trading partners, vendors, consultants, and other stakeholders, then the ICD-10 master implementation plan may not be realistic and could affect your practice’s ability to complete the necessary system changes to meet the October 1, 2013, deadline. Specific risks that may occur include:  
  - Inadequate or untimely staff training  
  - Lack of vendor preparation  
  - Loss of key vendors  
  - Loss of key staff  
  - Loss of payer readiness  
  - Budget limitations | • Evaluate your existing vendors’ past performance with project deadlines to help identify and address potential problems  
• Identify and evaluate alternative vendors  
• Provide training to key staff members  
• Coordinate with payers to ensure schedule alignment  
• Budget realistically, and include cushion for risk-related overruns |
### Table 5: Physician Practice Risks continued

<table>
<thead>
<tr>
<th>RISK</th>
<th>RISK DESCRIPTION</th>
<th>RISK MITIGATION PLAN</th>
</tr>
</thead>
</table>
| Adverse short-term affect on practice revenue stream | The transition between coding systems might adversely affect your practice's revenue stream. The following risks will affect revenue streams:  
  - Lack of payer readiness and resulting disruption or increased delays and denials in payers’ claims processing  
  - Increased payer scrutiny to identify potential duplicate billings and/or payments for service dates pre- and post-October 1, 2013 (i.e., one under ICD-9 and one under ICD-10)  
  - Increased payer requests for medical records related to specific claims  
  For more information, see ICD-10 Effect on Physician Reimbursements |  
  - Increase the practice’s cash reserves and/or secure increased lines of credit.  
  - Monitor claim submittals immediately pre- and post-October 1, 2013 to prevent submittal of duplicates  
  - Run both ICD-9 and ICD-10 in tandem for a specified period post-implementation.  
  - Identify or conduct mappings between ICD-9 and ICD-10 codes, as applicable. Identify ICD-10-CM codes that your practice may inadvertently double bill and take steps to prevent. |
| Exposure to fraud and abuse allegations | Private payers and government program integrity agencies and contractors may focus additional attention on opportunities for fraud and abuse related to the transition to ICD-10 codes.  
  Coding practices will likely be subject to increased audit scrutiny for an indefinite period following the October 1, 2013, compliance date.  
  Coding discrepancies that materially affect payment amounts will be subject to routine overpayment recovery actions. If there is significant financial impact, they may undergo more severe enforcement actions, including formal investigations and referrals for administrative sanctions or other penalties. |  
  - Emphasize the critical importance of proper clinician documentation and periodically audit sample records for completeness, accuracy, and consistency  
  - Emphasize in staff training and to external vendors the critical importance of ensuring that all coding is consistent with the clinical record and the risks to your practice if team members fail to code accurately  
  - Audit claim submittals, both pre-payment and post-payment, to identify and address incorrect coding  
  - Identify and evaluate experienced health care fraud and abuse counsel as resources for addressing potential problems  
  - Review Health and Human Services Office of Inspector General (HHS-OIG) Voluntary Disclosure Guidelines as a basis for preventing problems  
  - Monitor and perform your own internal audits in clinical areas targeted for audits by Medicare and Medicaid Recovery Audit Contractors |
| Adverse effect on relationships with payers and patients | Expect that staff will need to follow up with payers more often about claim payment delays, denials, referrals, and other administrative activities affecting claim payments during and after the transition period. Your office may experience higher call volumes from patients and payers to report and resolve claim/authorization rejections due to incorrect coding. |  
  - Train staff members how to manage patients’ concerns related to denied/pended authorizations, claims, and referrals  
  - Establish an internal mechanism for your practice to document and track patient complaints and payer issues related to ICD-10 coded claims  
  - Provide front office tools for billing and coding to help staff members identify potential code matches and rationales to bridge the learning curve quickly  
  - Train staff on how to address potential transition issues with old and new codes, to lessen incorrect coding and rejected claims |
Table 5: Physician Practice Risks continued

<table>
<thead>
<tr>
<th>RISK</th>
<th>RISK DESCRIPTION</th>
<th>RISK MITIGATION PLAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implications for care, disease, and case management</td>
<td>ICD-10 implementation will have a significant impact on care management including case management, disease management, wellness, and authorizations (including medical necessity and coverage determination). Historically, payers carry out these functions. However, with the advent of Accountable Care Organizations (ACOs), your practice should anticipate the need to institute these functions as well. In the short term, your practice staff should become familiar with new ICD-10-related payer requirements regarding provider documentation and/or reporting.</td>
<td>• Identify and train clinicians on ICD-10 requirements for clinical documentation. Coordinate with external payers and hospitals as needed. • Educate and train your staff on ICD-10-related medical policies, benefit determination, and eligibility for special programs.</td>
</tr>
<tr>
<td>Long-term implications for payers’ network contracts, fee schedules and capitation levels</td>
<td>ICD-10 codes are far more detailed, which will provide payers with opportunities to develop and implement new pricing and reimbursement structures. This includes fee schedules and/or capitation levels and hospital and ancillary pricing scenarios that could take into account greater diagnosis-specificity.</td>
<td>• Urge your regional and national professional associations to monitor and report on ICD-10-related reimbursement initiatives. • Research, understand, and document the impact of ICD-10 coding on your practice’s costs. This will give you a basis for evaluating and responding to any related payer initiatives to alter pricing structures and reimbursement schedules.</td>
</tr>
</tbody>
</table>

Communication and Awareness Phase

A communication and awareness plan ensures that all your internal and external stakeholders understand their responsibilities for ICD-10 implementation. The communication plan should identify stakeholders, audiences, messages, issues, roles and responsibilities, timelines, communication methods, and evaluation techniques. The degree of planning and documentation in this process will depend on the size of your practice.

Table 6 identifies the core components of a large physician practice communication and awareness plan and includes the following elements:

- **Component:** References the structure of the communication plan, includes content, best practices, and tools
- **Key Points:** Identifies considerations to evaluate and potentially reference in the communication plan
<table>
<thead>
<tr>
<th>KEY POINTS</th>
<th>COMPONENT</th>
</tr>
</thead>
</table>
| Definition of project purpose      | • Provide ICD-10 background information to your practice’s staff and stakeholders  
• Describe current state of ICD-10 progress within your practice  
• Ensure practice-wide awareness of ICD-10 implementation  
• Identify goals for the communication and awareness plan  
• Define the messages regarding the purpose and expected outcomes of the transition to ICD-10 |
| Audience and stakeholders          | • Identify all stakeholders and parties involved in your ICD-10 transition  
  **Internal**  
  — Establish a process to communicate governance issues to executive sponsors and program leads  
  — Assess staff training needs around ICD-10-CM  
  **External**  
  — Identify an internal contact to manage and monitor progress with external audiences, including hospitals, clearinghouses, state agencies, contractors, and others. Report progress and concerns regularly to the ICD-10 coordination manager.  
  — Coordinate with vendors on updates, and changes to be implemented into your software system prior to October 1, 2013  
• Identify communication channels and ways to collaborate throughout the transition  
• Anticipate communication gaps and frequently asked questions regarding organization, operating structure, roles, and responsibilities  
• Identify and communicate with external stakeholders on ICD-10 readiness |
| Project plan                        | • Document your planning assumptions, decisions, and approved scope, cost, and schedule baselines  
• Define expectations and provide important benchmarks for communicating milestones and progress  
• Facilitate communication among stakeholders and audiences |
| Timeline                            | • Identify your project milestones and compliance dates  
• Identify tasks, milestones, and deadlines for your project teams |
| Identify communication vehicles     | • Create communication channels to monitor progress, such as status reports, team meetings, and project reviews  
• Define and schedule how and how often you will communicate  
• Identify ways you can integrate timely ICD-10-related messages with established channels and forums  
• Define plans that address your requirements for internal and external communications and common goals  
• Structure communications methods that address the differing needs of your internal and external audiences |
### Table 6: Communication Plan Components continued

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>KEY POINTS</th>
</tr>
</thead>
</table>
| Assign roles and responsibilities for communication activities | • Assign communication roles and responsibilities to executive sponsors, steering committee members, project management team, and user group leaders/team members  
• Define roles with clear accountability and authority to make and act on decisions on communication issues  
• Assign responsibility for identifying communications risks and solutions taking into consider your intended audience |
| Convey the message to the audience | • Identify opportunities to reinforce essential messages to target audiences and receive feedback  
• Create targeted communication toward smaller groups as necessary |
| Identify issues to overcome | • Raise implementation issues and create plans to correct them |
| Evaluate the effectiveness of the communication plan | • Use different ways to evaluate your communications such as feedback forms  
• Review lessons learned from previous programs and implementations to create optimal communications  
• Communicate the plan’s effectiveness and feedback to stakeholders |

**Resource Management and Training (Internal and External)**

To prepare for ICD-10, your practice must identify available resources, assess training needs, build a training plan, and manage productivity during the transition process.

**Assess Training Needs (Internal and External)**

The ICD-10 coordination manager should prepare a training needs assessment to identify:

- Affected staff members, including physicians, nurse practitioners, physician assistants, medical technicians, administrative staff/coders, and vendors
- Staff competence and skill gaps, and how to tailor trainings to individuals or business user groups
- Optimal timing to receive training/certification
- Best approach training methods for your practice, including webinars, certification courses, and community courses

Consider a variety of factors when conducting a training needs assessment. Using the practice self-assessment questions outlined below, your ICD-10 coordination manager may identify factors that indicate internal and external training needs.

**Table 7** includes self-assessment questions that can help identify training needs.
**Table 7: Training Preparation and Needs Assessment**

<table>
<thead>
<tr>
<th>SELF ASSESSMENT QUESTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Who must receive training on the ICD-10 code set?</td>
</tr>
<tr>
<td>What options are available to train staff (onsite training, vendor training, community courses, webinars, or certification courses)?</td>
</tr>
<tr>
<td>Are there gaps in your staff’s knowledge of medical procedures and anatomy? Are there certification opportunities in ICD-10 coding that staff can take advantage of to improve accuracy and build “ICD-10 know-how” throughout the organization?</td>
</tr>
<tr>
<td>When should your staff complete the training?</td>
</tr>
<tr>
<td>How long will it take to train your staff?</td>
</tr>
<tr>
<td>Which training formats will work best for your staff (for example, classroom training, web-based training, or self-guided materials)?</td>
</tr>
<tr>
<td>How much will the training cost?</td>
</tr>
<tr>
<td>What resources will staff need after training to resolve questions as they come up (for example, manuals, system prompts, troubleshooting guides, or FAQ lists)?</td>
</tr>
<tr>
<td>Depending on the length of training, how will your staff maintain operations and reduce productivity loss during training? What is the current staffing level?</td>
</tr>
<tr>
<td>• Is there a business need for additional experienced coding staff to support your team during the ICD-10 transition period? Do you need to outsource some operations? Outsourcing additional coding expertise during the preparatory stage can allow for just-in-time training and reduce the burden of the transition on staff.</td>
</tr>
</tbody>
</table>

**Initiate a Training Plan**

The training plan’s purpose is to ensure that your staff and external partners acquire the necessary skills and knowledge on the processes, procedures, policies, and system updates particular to your practice’s ICD-10 implementation. The ICD-10 coordination manager should consider the following factors when evaluating and determining training content for internal staff and external partners for ICD-10 implementation:

- Different training formats work in different situations. Potential training sources include: traditional classroom training, distance education, or webinars. Your practice can also search for local ICD-10 train-the-trainer seminars or boot camps that provide sessions in a classroom-style setting.
- Check with CMS, the American Academy of Professional Coders (AAPC), American Health Information Management Association (AHIMA), and Workgroup for Electronic Data Interchange (WEDI) to identify webinars available for physician practices. Some webinars are free; others have fees attached.
- AAPC hosts an ICD-10-CM Implementation two-day boot camp for employees who are responsible for their practice’s coding, health information management, and/or ICD-10 implementation (i.e., the ICD-10 Coordination Manager). The course provides a general overview of:
  - ICD-10-CM structure
  - Implementation planning, finance and budgeting
  - Optimization of business processes
— Information technology
— Working with vendors, crosswalking and General Equivalency Mappings (GEMs)

• For larger organizations, AAPC provides an onsite Implementation Training with a live, in-person trainer. Curriculum and training is customized to organizational needs and delivered over a minimum of three days onsite.

• The American Health Information Management Association (AHIMA) estimates that coding staff working outside the hospital inpatient setting will require 16 hours of ICD-10 education. This training should focus on ICD-10-CM and not ICD-10-PCS. (Hospital inpatient coding staff require an estimated 50 hours of ICD-10 education because they will need to learn both ICD-10-CM and ICD-10-PCS3)

• All coding staff should complete their comprehensive ICD-10 education not more than six to nine months before the compliance date.

• Assess your staff for ICD-10 proficiency after training and provide additional training to address weaknesses. To do this, the ICD-10 coordination manager should identify common inaccurate code decision-making, clinical documentation errors, and productivity lags.

• To address proficiency issues, identify needs to assist with frequently asked questions about coding, category quick reference sheets, system user prompts, or refresher courses.

• Not all coding staff will require the same type or amount of ICD-10 education. Training for coding staff that work for your practice’s medical specialty area or specialty clinic should focus on the code categories most applicable to the particular patient mix.

Pre-implementation action steps:
— Plan for intensive education prior to the ICD-10 transition
— Appropriate staff should complete comprehensive ICD-10 education not more than six to nine months before the compliance date (October 1, 2013)

Post-implementation action steps:
— Assess your staff’s ICD-10 proficiency after they complete training and provide additional training to address identified areas of weakness. Identify common inaccurate code-review decision-making, claim processing errors, and productivity lags.

Table 8 identifies training topics and includes the following:

• Training Topic: Name of the subject area referenced for training
• Purpose of the Training: Identifies the element to evaluate when identifying ICD-10 training needs
• Audience: Identifies audience appropriate to receive training


ICD-10 Implementation Guide for Large Practices 22
### Table 8: Training Topics, Purpose, and Audience

<table>
<thead>
<tr>
<th>TRAINING TOPIC</th>
<th>PURPOSE OF TRAINING</th>
<th>AUDIENCE</th>
</tr>
</thead>
</table>
| Basic understanding of the ICD-10 code set and implementation | • Understand the differences between ICD-9 and ICD-10  
• Understand rationale for ICD-10 adoption  
• Understand existing tools, risks, and industry updates  
• Clarify roles and responsibilities | Physicians, nurse practitioners, physician assistants, clinical technicians, clinical researchers, administrative staff, coders, and vendors |
| Clinical definitions and terms in ICD-10: ICD-10-CM and ICD-10-PCS | • Explain ICD-10 terminology  
• Emphasize clinical terms and meanings | Physicians, nurse practitioners, physician assistants, clinical technicians, clinical research, administrative staff, coders, and vendors |
| ICD-10 coding                                       | • Review ICD-10 coding knowledge of medical procedures and anatomy, including clinical specificity of the new code sets  
• Refresh anatomy knowledge, if needed | Coders and administrative staff |
| ICD-10 effects on clinical documentation            | • Describe how ICD-10 affects business processes  
• Describe clinical documentation requirements as a result of ICD-10 adoption | Physicians, nurse practitioners, physician assistants, clinical technicians, finance, compliance and administrative staff, coders, and vendors |
| Partner and contractor                              | • Explain roles and responsibilities in ICD-10 implementation process | Partners and contractors |
| Using systems updated for ICD-10                    | • Review how ICD-10 affects systems  
• Review system updates | IT staff, physician practice staff, and compliance |

**Assessment Phase**

The sections below identify common areas ICD-10 affects across physician practice business processes and systems functions.

**Business Processes Affected by ICD-10**

The conversion to ICD-10 will affect many of your business process.

Table 9 includes the following elements:

- **Business Process**: Structured activities or tasks comprising operations
- **Definition**: Description of the business process
- **Action Steps to Address Impact**: Description of the ICD-10 influence on the business process and next steps in resolving for ICD-10
### Table 9: Business Process Definitions and ICD-10 Effects

<table>
<thead>
<tr>
<th>BUSINESS PROCESS</th>
<th>DEFINITION</th>
<th>NEXT ACTION STEPS TO ADDRESS ICD-10 EFFECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Referrals</strong></td>
<td>Recommendation from a primary care physician or other physician(s) to see any practitioner or specialist</td>
<td>• Update referral processes and forms to use ICD-10 diagnosis and procedure codes</td>
</tr>
<tr>
<td><strong>Authorization/pre-certification</strong></td>
<td>Process of obtaining authorization from a managed health plan for routine inpatient hospital admission or outpatient therapy</td>
<td>• Update authorization forms to indicate the proper ICD-10 diagnosis and procedure codes and to allow for medical necessity review and determination of coverage</td>
</tr>
<tr>
<td><strong>Patient practice intake</strong></td>
<td>Process of registering new or existing patients with the physician practice, including scheduling, registration, and initial health history</td>
<td>• Update registration and patient history forms to accommodate additional documentation of patients’ health states or conditions to support accurate coding in ICD-10</td>
</tr>
<tr>
<td><strong>Patient practice intake</strong></td>
<td><strong>Patient Practice Scheduling:</strong> process of planning appointments and processing a referral</td>
<td>• Update decision support system business rules to be consistent with ICD-10 codes</td>
</tr>
<tr>
<td><strong>Patient practice intake</strong></td>
<td><strong>Patient Registration:</strong> process of receiving forms from patient</td>
<td>• Update existing business policies to determine coverage (remember to consider the impact on deductibles and copays)</td>
</tr>
<tr>
<td><strong>Patient practice intake</strong></td>
<td><strong>Initial Health History:</strong> includes a patient’s previous medical visits and any patient observations provided to the physician</td>
<td>• Update business policies to determine if patient is eligible for dual insurance/Supplemental Security Income/Coordination of Benefits for special clinical programs like end stage renal disease and black lung disease</td>
</tr>
<tr>
<td><strong>Patient clinic encounter, including entry, clinical, and exit</strong></td>
<td>Entry: Setting up appointments, resolving insurance issues, and determining eligibility</td>
<td>• Verify service benefits and eligibility using ICD-10 codes</td>
</tr>
<tr>
<td><strong>Patient clinic encounter, including entry, clinical, and exit</strong></td>
<td>Clinical interaction: Assessment and care of patient health</td>
<td>• Update clinical documentation to support ICD-10 coding</td>
</tr>
<tr>
<td><strong>Patient clinic encounter, including entry, clinical, and exit</strong></td>
<td>Exit: Billing, collecting co-pay or payment, and scheduling</td>
<td>• Update existing billing systems, processes, and forms to accommodate ICD-10</td>
</tr>
<tr>
<td><strong>Patient hospital encounter and hospital admission scheduling</strong></td>
<td>Administrative interaction between the patient and the front-office staff such as scheduling outpatient, surgical center, or full-stay hospital appointments and resolving insurance and eligibility issues</td>
<td>• Verify service benefits and eligibility using ICD-10 codes</td>
</tr>
<tr>
<td><strong>Patient hospital encounter and hospital admission scheduling</strong></td>
<td>Similarly, the practice schedule and plan for outpatient admission procedures, surgical center short-stay admissions, or full-stay admissions</td>
<td>• Verify the process for communicating the patient’s condition and intended procedures for hospital registration and scheduling</td>
</tr>
<tr>
<td><strong>Patient hospital encounter and hospital admission scheduling</strong></td>
<td>• Update pre-admission/pre-certification process documentation</td>
<td></td>
</tr>
<tr>
<td><strong>Physician orders</strong></td>
<td>A physician must document orders of goods or services on behalf of the patient, including necessary care practices, labs, tests, or other medical procedures</td>
<td>• Update any coding on the physician order and business rules sheets to capture ICD-10 specifics</td>
</tr>
<tr>
<td><strong>Medical record</strong></td>
<td>Systematic documentation of a single patient’s long-term individual medical history and care, including medical encounters, surgical history, obstetric history, medications and allergies, family history, social history, habits, immunizations, and patient/provider interactions</td>
<td>• Update physician medical records system including supporting forms, templates, interfaces and decision support system</td>
</tr>
<tr>
<td><strong>Medical record</strong></td>
<td>• Identify process to meet ICD-10 clinical documentation requirements</td>
<td></td>
</tr>
<tr>
<td><strong>Medical record</strong></td>
<td>• Expect changes in productivity levels for four to six months following ICD-10 implementation</td>
<td></td>
</tr>
<tr>
<td>BUSINESS PROCESS</td>
<td>DEFINITION</td>
<td>NEXT ACTION STEPS TO ADDRESS ICD-10 EFFECTS</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Analytics            | Reports delivered by data warehouses (a database used to store and report information from operational systems) for accounting and receiving, prescription volume, categories of illness and treatment, malpractice | • Update existing data warehouse interfaces and reports containing ICD-10 codes  
• Modify report business rules to support ICD-10                                                                                     |
| Contracting          | Any agreed upon set of rules for doing business with an outside company or individual                                                                                                                      | • Identify which contracts and service level agreements reference ICD-10-CM and PCS                                              |
| Research participation| Internal research: drug company contracts to administer medications or perform procedures and report on patient responses  
External research: practice clinicians who are part of a university- or hospital-based research project | • Identify all areas where ICD-10 may impact study inclusion criteria, study decision rules, or categorization and analysis of study outputs |
| Public health reporting| Reporting diseases, infections, immunizations, or other conditions to local, state, and/or national boards of public health or delivering public health information to patients | • Update business rules for data warehouses to store and report on ICD-10 codes (e.g., immunization) often ICD codes are used to support patient population reportable conditions |
| Risk management      | Issues associated with patient safety, patient rights, and protecting health care providers against malpractice and abuse                                                                                  | • Update business practices to reduce the risk of exposure to allegations of coding fraud and abuse  
• Update processes to identify patient safety issues associated with ICD-10 codes, such as under-dosing or over-dosing patients |
| Financial operations | Functions include billing service contracts, accounts payable, accounts receivable, and capitation                                                                                                       | • Update existing processes to identify and forecast reimbursement payments and investigate variances between ICD-9 and ICD-10 revenue  
• Modify auditing process to manage and track claim payment delays or increased denials or authorizations that result from the ICD-10 transition  
• Identify ICD updates to further refine and support pay-for-performance models  
• Identify impacts to case rates, capitation and risk-based payment models as a result of ICD-10 codes and Affordable Care Act implementation |
| Value                | Refers to the quality and efficiency of services considering the cost of the service provided                                                                                                               | • Update logic for quality reporting under ICD-10 and evaluate the impact of the transition from ICD-9 to ICD-10 on performance trending  
• Identify actions aimed at improving the quality measures or obtaining scores in line with or above the industry standard, including ACOs, evidence-based measurement reporting, and pay-for-performance |

Table 9: Business Process Definitions and ICD-10 Effects continued
<table>
<thead>
<tr>
<th>BUSINESS PROCESS</th>
<th>DEFINITION</th>
<th>NEXT ACTION STEPS TO ADDRESS ICD-10 EFFECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance management</td>
<td>Refers to the act of conforming to a rule, such as a specification, policy, standard, or law, including accreditation and regulatory and contractual compliance. Accreditation is a process of presenting certification of competency, authority, or credibility. Regulatory compliance ensures that personnel are aware of and take steps to comply with relevant laws and regulations. Contractual compliance means adhering to contracts with payers and/or hospital networks in order to perform services.</td>
<td>• Investigate ICD-10 impacts within contractual reporting requirements. • Evaluate business rules supporting case coverage, case rates, and capitation based on ICD-10-CM. • Update business policies using ICD-10/Common Procedure Terminology (CPT) codes, including correct coding initiatives.</td>
</tr>
<tr>
<td>Clearinghouse relationship</td>
<td>Any entity that converts a nonstandard HIPAA transaction to a HIPAA transaction or a HIPAA standard transaction to a nonstandard transaction on behalf of a covered entity.</td>
<td>• Update HIPAA transactions affected: 270/271 Healthcare Eligibility Inquiry and Response, 278 Healthcare Services Review, 834 Benefit Enrollment Transaction, 837 Professional Claim, Institutional Claim and Dental Claim. • Look for opportunities for clearinghouses to provide translation/crosswalk accountability: store original ICD-9 code submitted; maintain crosswalk ICD-9 to ICD-10 and ICD-10 to ICD-9; and specific edits related to ICD-10-CM and HCPC, CPT, modifier code services.</td>
</tr>
<tr>
<td>management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Payer relationship management</td>
<td>Entities that finance or reimburse the cost of health services. In most cases, this term refers to insurance carriers, other third-party payers, or health plan sponsors like employers or unions that process claims as self-insured entities.</td>
<td>• Contracts/reimbursement models: Modify pricing and reimbursement structures, fee schedules, and hospital and ancillary reimbursement/pricing scenarios to take into account greater diagnosis-specificity. • Care management functions: Update business rules using ICD-10 codes for case management, disease management, and medical review (pre-authorization, concurrent review, and post-payment review). • Documentation to support billing: See ICD-10 Effect on Clinical Documentation. • Post-payment review: Modify logic in targeted post-payment review. • Billing manuals/rate structures/fee schedules/Diagnosis Related Group (DRG) structures: Align existing structures to ICD-10 categories. • Quality measures: Modify interface between state and payer performance reporting within the network referencing ICD codes, including quality, services and consumer scoring for practices. • Fraud and abuse: Modify edits to support correct coding and detect fraud and abuse with greater sensitivity and specificity. • Credentialing: Determine if ICD-9 codes are referenced in current vendor-supported credentialing software and modify to ICD-10.</td>
</tr>
</tbody>
</table>
ICD-10 Effect on Clinical Documentation

The ICD-10 implementation will affect clinical documentation for providers. ICD-10 coding provides an accurate representation of health care services through complete and precise reporting of diagnoses and procedures. ICD-10 will also yield more thorough data for clinical decision-making, performance reporting, managed care contracting, and financial analysis.

How ICD-10-CM Affects Clinical Documentation

Increased code detail contained in ICD-10-CM means that required documentation will change substantially. ICD-CM includes a more robust definition of severity, comorbidities, complications, sequelae, manifestations, causes and a variety of other important parameters that characterize the patient’s condition.

A large number of ICD-10-CM codes only differ in one parameter. For example, nearly 25 percent of the ICD-10-CM codes are the same except for indicating the right side of the patient’s body versus the left. Another 25 percent of the codes differ only in the way they distinguish among “initial encounter,” versus “subsequent encounter,” versus “sequelae.”

For example, even though there are more than 1,800 available codes for coding fractures of the radius, there are only approximately 50 distinct recurring concepts. Table 11 shows the type of documentation the ICD-10-CM will require for a fracture of the radius.

Table 10 includes the following:

- **Category:** The category for the medical concepts that will need documentation
- **Documentation Requirements:** The list of individual concepts that should be considered in documentation to support accurate coding of the patient conditions

<table>
<thead>
<tr>
<th>Fracture type</th>
<th>Documentation Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td></td>
</tr>
<tr>
<td>Closed</td>
<td></td>
</tr>
<tr>
<td>Pathologic</td>
<td></td>
</tr>
<tr>
<td>Physeal (Growth Plate) Fractures</td>
<td></td>
</tr>
<tr>
<td>Neoplastic Disease</td>
<td></td>
</tr>
<tr>
<td>Torus (Buckle) Fractures</td>
<td></td>
</tr>
<tr>
<td>Green Stick Fractures</td>
<td></td>
</tr>
<tr>
<td>Stress Fractures</td>
<td></td>
</tr>
<tr>
<td>Orthopedic Implant (fractures associated with)</td>
<td></td>
</tr>
<tr>
<td>Bent Bone</td>
<td></td>
</tr>
</tbody>
</table>

Table 10: Sample Documentation Requirements for Fractures of the Radius
<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>DOCUMENTATION REQUIREMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healing</td>
<td>• Routine</td>
</tr>
<tr>
<td></td>
<td>• Delayed</td>
</tr>
<tr>
<td></td>
<td>• Nonunion</td>
</tr>
<tr>
<td></td>
<td>• Malunion</td>
</tr>
<tr>
<td>Localization</td>
<td>• Shaft</td>
</tr>
<tr>
<td></td>
<td>• Lower End</td>
</tr>
<tr>
<td></td>
<td>• Upper End</td>
</tr>
<tr>
<td></td>
<td>• Head</td>
</tr>
<tr>
<td></td>
<td>• Neck</td>
</tr>
<tr>
<td></td>
<td>• Styloid Process</td>
</tr>
<tr>
<td>Encounter</td>
<td>• Initial</td>
</tr>
<tr>
<td></td>
<td>• Subsequent</td>
</tr>
<tr>
<td></td>
<td>• Sequelae</td>
</tr>
<tr>
<td>Displacement</td>
<td>• Displaced</td>
</tr>
<tr>
<td></td>
<td>• Nondisplaced</td>
</tr>
<tr>
<td>Classification</td>
<td>• Salter Harris I</td>
</tr>
<tr>
<td></td>
<td>• Salter Harris II</td>
</tr>
<tr>
<td></td>
<td>• Salter Harris III</td>
</tr>
<tr>
<td></td>
<td>• Salter Harris IV</td>
</tr>
<tr>
<td></td>
<td>• Gustilo Type I or II</td>
</tr>
<tr>
<td></td>
<td>• Gustilo Type IIIA, IIIB, or IIIC</td>
</tr>
<tr>
<td>Laterality</td>
<td>• Right</td>
</tr>
<tr>
<td></td>
<td>• Left</td>
</tr>
<tr>
<td></td>
<td>• Unspecified Side</td>
</tr>
<tr>
<td></td>
<td>• Unilateral</td>
</tr>
<tr>
<td></td>
<td>• Bilateral</td>
</tr>
<tr>
<td>Joint Involvement</td>
<td>• Intra-articular</td>
</tr>
<tr>
<td></td>
<td>• Extra-articular</td>
</tr>
<tr>
<td>Fracture Pattern</td>
<td>• Transverse</td>
</tr>
<tr>
<td></td>
<td>• Oblique</td>
</tr>
<tr>
<td></td>
<td>• Spiral</td>
</tr>
<tr>
<td></td>
<td>• Comminuted (many pieces)</td>
</tr>
<tr>
<td></td>
<td>• Segmental</td>
</tr>
<tr>
<td>Named Fractures</td>
<td>• Colles’</td>
</tr>
<tr>
<td></td>
<td>• Galleazzi’s</td>
</tr>
<tr>
<td></td>
<td>• Barton’s</td>
</tr>
<tr>
<td></td>
<td>• Smith’s</td>
</tr>
</tbody>
</table>
ICD-10 Effect on Physician Reimbursements

The transition to ICD-10 will result in changes to most physician reimbursement models. The nature of these changes will vary based on each practice’s individual contracting arrangements. Physician groups should include ICD-10 in their payer contract negotiation discussions during the next two years through 2013 to decrease the risk of compliance errors and claims denials. During the transition period following ICD-10 implementation, payers will have little choice but to continue prior reimbursement policies. However, as implications of expanded, more detailed code sets become apparent, so too will the possibility for larger payments for greater complexity and smaller payments for lesser complexity.

To address potential cash flow reductions based on changing reimbursement models, claims processing and re-processing, staff learning curve and the long-term financial effects of ICD-10, consider getting a line of credit to cover cash flow disruptions.

Table 11 identifies potential impacts to physician reimbursement that should be considered depending on existing contracting and reimbursement models and the potential for future reimbursement changes under accountable care and value based purchasing. The table identifies potential ICD-10 impacts on physician reimbursements.

<table>
<thead>
<tr>
<th>COMMON REIMBURSEMENT ARRANGEMENTS</th>
<th>ICD-10 IMPLEMENTATION POTENTIAL IMPACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fee-for-service payments</td>
<td>Traditional CPT-and HCPC-based reimbursements will not be directly affected since these codes are not part of the ICD-10 change. Indirectly, fee-for-service payments may potentially be affected for the following reasons:</td>
</tr>
<tr>
<td></td>
<td>• Increased denials because of incomplete or inaccurate translation of existing policies, benefit and payment rules in payer systems as they attempt to migrate these rules to ICD-10</td>
</tr>
<tr>
<td></td>
<td>• Delays in payments because of challenges in claim processing in the ICD-10 environment</td>
</tr>
<tr>
<td>Capitation, case rates and other risk-based models</td>
<td>For those physician practices with some level of reimbursement in capitated or case-based payments, there will be substantial impacts since the reimbursement funds will be defined differently in ICD-10. Reimbursements and risk adjustment models will be different and untested. ICD-10 will provide a better insight into risk and severity over time, if the provider is able to capture accurate ICD-10 data.</td>
</tr>
<tr>
<td>Audit-based reimbursement recovery</td>
<td>New clinical documentation requirements will increase the risk of audit failure if documentation cannot support the new ICD-10 detail. If audits reveal that payments were tied to inappropriate services based on ICD-10’s new definitions and rules, payers may require recovery of payments from providers.</td>
</tr>
</tbody>
</table>
Table 11: ICD-10 Effects on Physician Reimbursements continued

<table>
<thead>
<tr>
<th>COMMON REIMBURSEMENT ARRANGEMENTS</th>
<th>ICD-10 IMPLEMENTATION POTENTIAL IMPACTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evolving models such as episode- and performance-based reimbursement and accountable care</td>
<td>The effect of ICD-10 on evolving reimbursement models, such as episode- and performance-based and accountable care organization models is still unclear. Since there is no historical data or benchmarks yet for ICD-10, there is little basis for making episode-based or performance baselines for cost projections. Practices should keep in mind:</td>
</tr>
<tr>
<td>• Changes in logic of existing episode grouper software will be complex and early adoption may result in unanticipated results</td>
<td></td>
</tr>
<tr>
<td>• The lack of coding familiarity in ICD-10 and the changes in coding definitions may affect coding quality during the first year or more of transition</td>
<td></td>
</tr>
<tr>
<td>• Changes in the meaning of key concepts within codes could result in significant variance in the values for key quality metrics</td>
<td></td>
</tr>
<tr>
<td>• With accountable care models, there will be increased demand for visibility and demonstrated service value and efficiency. This will result in models that consider:</td>
<td></td>
</tr>
<tr>
<td>— The complexity and risk of service delivery based on severity and other key parameters of the conditions for which services are being delivered. This could result in service-based payments being adjusted either positively or negatively based on the complexity and risk assessment.</td>
<td></td>
</tr>
<tr>
<td>— Outcomes as a consideration in the payment model based on a precise definition of the patient's condition and the institutional procedures to maintain or improve those conditions.</td>
<td></td>
</tr>
</tbody>
</table>

Criteria for Evaluating ICD-10 Vendors

Any outside vendor your practice uses plays an important role in a smooth transition to ICD-10. Practices depend on vendors to upgrade their systems, modify their existing programs, or provide support during the ICD-10 transition. Take time to evaluate upfront the impact of ICD-10 on your vendors, their performance capabilities, and their plans to update systems for ICD-10.

Table 12 highlights vendor evaluation criteria and the associated key considerations.
Table 12: Physician Vendor Evaluation Criteria and Key Considerations

<table>
<thead>
<tr>
<th>EVALUATION CRITERIA</th>
<th>KEY CONSIDERATIONS</th>
</tr>
</thead>
</table>
| Identify vendors and their purpose                      | • Determine which existing vendors will be affected by the ICD-10 transition  
• Define requirements you will need from vendors to support your ICD-10 implementation (will vary by vendor)  
• Determine areas in your practice’s critical business paths that depend on vendor support  
• Determine how vendors will be involved in your ICD-10 implementation project  
• Establish a vendor communication plan  
• Confirm that vendors understand your business requirements and develop an accountable delivery plan  
• Identify the need for any new contracts                                                                                                                                                                                                                                             |
| Processing performance                                  | • Conduct vendor product(s) gap analysis  
• Evaluate pros and cons of vendor(s) system alternatives  
• Obtain compliance commitment from vendors in line with defined requirements and project plan milestones  
• Review vendor evaluation to assure alignment with defined requirements  
• Determine options for retiring system(s) and the impact on ICD-10 implementation for systems  
• Develop scenarios to test key vulnerabilities such as volume capacity and other performance parameters  
• Create test data                                                                                                                                                                                                                                                                 |
| Evaluating budgetary considerations                     | • Create criteria for determining how your practice will evaluate if you will build or buy a system—establish a strategic build plan that includes interim versus long-term solutions  
• Determine additional cost pass-throughs resulting from ICD-10 updates                                                                                                                                                                                                                  |
| Monitoring and oversight                                | • Review the vendor’s compliance plan in order to incorporate that perspective into your practice’s contract agreements or RFP and monitoring  
• Create and follow a plan to monitor whether vendor products are meeting key functions:  
  – Identify measures of risk for vendor in meeting key functions  
  – Create key performance indicators to measure success  
  – Include provisions to handle situations in which vendors do not meet key performance requirements                                                                                                                  |
Methodology to Evaluate ICD-10 Vendors and/or Tools

You will need to maintain relationships with both existing and new vendors to ensure that they meet the functional needs outlined below.

Follow these steps when selecting new vendors as well as evaluating existing vendor capabilities in light of the ICD-10 transition:

1. **Create an inventory** of existing vendors, tools, and possible vendor candidates. The inventory should include the following components:
   - Unique identifier for the vendor
   - Vendor corporate name
   - Vendor products names
   - Description of the products offered
   - Type of products offered, including coding applications, search engine, and crosswalking tool
   - Products’ underlying logic, including GEM and terminology engines
   - List of customers for each product
   - Vendor contact information

2. **Establish a tracking system** to ensure that you address and monitor key questions, concerns, and that the vendor meets project timelines.

3. **Identify “Plan B” options** in case your vendor does not progress fast enough, including operational work-arounds and vendor replacement alternatives.

4. **Review contracts** to clarify existing vendor contractual requirements, and factor key requirements into contracts with new vendors.

5. **Analyze interfaces or dependencies between systems** to avoid failures from cross-system dependencies.

6. **Define acceptance criteria** to measure vendor performance. These may include the following:
   - Features matched to your business needs (this assumes a process to prioritize these features to meet the organization’s specific functional priorities)
   - Appropriate customer lists and references
   - Comparable industry experience
   - Vendor financial and longevity stability
   - System architecture that supports integration with other systems and provides easy access
   - Alignment of workflow interfaces with organizational workflow
   - Expected results to testing against defined business and data test scenarios
   - Acceptable ongoing support commitments
7. **Ensure that vendor capabilities** meet your organization’s expectations. Your contracting processes should consider:

- Functions of all required features
- System performance requirements
  - Concurrent users
  - Throughput
  - Processing time
  - Reporting time
- Upgrade policies (number of versions supported or latest version supported, along with number of upgrades per year)
- Error remediation and new feature response requirements
- Support requirements
  - Degree of support
- Expected response time clear and acceptable licensing agreements
  - Favored Nation status
  - Business associate and data use agreements
  - Coverage for federal mandate changes
  - Updates for standards version changes
- Remedies in the event of failure
  - Remediation requirements
  - Penalties
  - Disaster recovery requirements
  - Data and concept ownership

**Assessing Vendor Functional Capabilities**

After you have assessed the functional needs of your practice, it is important to match those needs with vendor capabilities. The list below identifies key functions to consider when evaluating vendors as well as key questions for vendors in the evaluation process.

- **Code set maintenance:** Notification of updates, maintain valid begin and end dates and change maintenance, and value add fields
- **Ability to search for codes**
  - **Robust term-based search:** The ability to search for codes based on terms defined within the code description. Includes the ability to search for multiple terms, partial strings with wild card and nested ‘and,’ ‘or’ and ‘not’ logic.
Code-based search: This includes the ability to search by multiple code ranges as well as multiple individual codes. It should also support partial code searches or searches for characters in different positions. For example, the ability to search for codes with the first three characters = ‘nnn’ and the 7th character = ‘n.’

Tabular-based search: The ability to search for codes based on the published tabular index.

Alphabetical index search: The ability to search for codes based on the published alphabetical index.

Concept-based search (evolving vendor capability): The ability to search based on clinical concepts, for example, the concepts of “fracture,” “distal,” and “radius” and identify codes for “Colles,” “Smith’s,” and “Barton’s” fractures since these are fractures of the distal radius. This search ability requires considerable sophistication in the underlying data engine. Current vendor ability to support this level of concept searching appears limited.

Code Crosswalking – Crosswalks provide important information that help link codes of one system (ICD-9) with another (ICD-10). Vendor systems should have features to develop, maintain, and document crosswalk specification development, including the following:

- Workflow: The ability to support the workflow involved with defining the crosswalk, approval, output, maintenance, and governance. The workflow should support the selection of one or more codes in the crosswalk from any search method or from candidate codes from either GEMs or reimbursement maps.

- A robust search engine: The ability to effectively search for a code based on a robust set of search criteria. A level of search engine sophistication is needed to provide support to independent research of crosswalk candidates.

- Reimbursement map support: The ability to demonstrate mapping as defined from ICD-10 to ICD-9 in the reimbursement files. This will provide a comparison in ICD-10 to ICD-9 mapping to those crosswalks reported to maintain revenue neutrality.

- GEMs support: The ability to identify GEMs-based matches in both directions. This should include the ability to identify codes where ICD-9 or ICD-10 codes are either the ‘source’ or ‘target’ of the crosswalk, or both.

- Crosswalking quality (ideal vendor capability): The ability to provide measures of the quality of the match based on concepts that are lost or assumed in the match. Currently there do not appear to be any vendors that can rate the quality of the match in definitive terms.

- Crosswalking financial modeling (evolving vendor capability): The ability to test the financial implications of the crosswalked code on payment as well as the volume and extent of claim impacted by the crosswalk.

Definition of code set aggregation or grouping – Most policies, rules, and analytics are based on groups or categories of codes. These groups of codes are critical to drive business intelligence and business decision algorithms for many health care information systems. Features necessary to support this effort of redefining code based policies, rules, and categories include the following:

- Code set aggregation database system: The ability to support an unlimited number of aggregation schemes and ad hoc aggregation sets for selected purposes. The database must support appropriate metadata for each aggregation set and scheme. In other words,
once you create and define groups of codes, there must be a way to manage and retrieve those groups for any number of purposes. The metadata needed to accomplish this include:

- A name for the aggregation or set of codes
- A definition of the intent of the code set
- A unique identifier for the code set
- Data about versioning, modification, access, and approval
- Other metadata as needed that will help manage create, read, update, and delete function for the code set files

**Workflow:** Workflow capabilities should include research and identification of the appropriate grouping of codes, an approval process and maintenance interface, and the ability to name, date, and apply other metadata to the set of codes for use in downstream analysis and algorithms. Some basic workflow steps might include:

- Definition of the purpose and intended uses of the code set
- Searching for the appropriate codes to include or exclude in the data set by terms, concepts, tabular listings, index listings, code value searches, or any number of other parameters
- Naming and cataloging the code set for use in rules, policies, and analytic categories
- Creating the link between these defined codes and rules, policies, and categories
- Retrieval and modification of existing code sets
- Approval processes

**Analytics:** Analytics that use ICD procedure and/or diagnosis codes will change dramatically under ICD-10. Any software vendors that provide business intelligence solutions should support ICD-9 and ICD-10 codes simultaneously during the transition. Additionally, business intelligence schemas should support ‘n’ number of ICD codes per record with a definition of code type (ICD-9 or ICD-10). Any defined reporting models such as quality (HEDIS), efficiency (episode groupers), population risk models or other aggregation schemes should be fully remediated to support native ICD-10 as well as native ICD-9 codes.

- Considerable research will be required to ensure that defined categorization models are appropriate for both the ICD-9 and ICD-10 environments. There should be a clear definition of the plan for fully using ICD-10 analytic capabilities in future releases.

**Database structural requirements:**

- Will the database support the increased number of codes supported in the 5010 claims transition?
- Will the database support both ICD-9 and ICD-10 codes simultaneously?
- Does the database include a “Code Type” field that can distinguish between ICD-9 and ICD-10 codes?
- How will code set updates be managed? (An initial code freeze will be effective until October 1, 2014, but updates will occur after this date.)
— **User interfaces:**
  - Have captions and field validations been updated to support ICD-10?
  - Have user interface data sources for ICD-9 and ICD-10 been updated?
  - Are there prompts and edits for date of service-based validation of ICD-9 and ICD-10 codes?
  - Will user interfaces support lookup and entry of both ICD-9 and ICD-10 codes?
  - How will user interfaces support the new documentation required for ICD-10 coding?

— **Inbound and outbound transactions:**
  - Has the vendor updated system support for outbound claims and other outbound transactions consistent with 5010 and ICD-10 standards, including date of service-based validation?
  - What is the vendor’s plan for transaction testing across payers and other trading partners?

— **Internal system interfaces:**
  - Have interfaces between systems been updated to support ICD-10?

— **Clinical decision support (CDS) and business rules:**
  - If clinical decision support systems are in place, what is the plan to update CDS logic?
  - Which other rules and edits are driven by ICD-9 and what is the plan for remediating those rules?

— **Measures and reporting:**
  - Which reports are affected by ICD-10 and what are the plans for updating reporting logic code-related categories?
  - If clinical reporting systems are used, how will vendors update these systems?
  - How will vendors update logic for quality and efficiency measures?
  - How will vendors handle reporting on historical data over the transition period?

• **Other key questions for your vendor:**
  — Beyond assessing functional capabilities, there are some additional questions to ask your vendor:
    - Will there be a charge for ICD-10-related updates?
    - Will training be provided for new ICD-10-related functionality?
    - How can issues be logged and how will they be addressed?
    - How often will code set updates occur and how will they be delivered?
    - Will you continue to support applications or are you discontinuing some products in the wake of the ICD-10 transition?
    - What is your roadmap for helping us extract the increased information capabilities of ICD-10?
Scenario-Based Vendor Assessment

Simply asking your vendors about implementation planning and execution is not enough to prevent system failures during the ICD-10 transition. As a practice, you need to develop clinical test scenarios to see how the system will work and to ensure that you get the results you need for your quality-of-care and business-efficiency standards.

Steps in developing scenarios for vendor assessment:

1. Review existing practice data to identify high-volume and high-revenue clinical areas. For example, if your practice sees a high volume of patients with renal conditions, look at the typical procedures and activities associated with those patients.

2. Review the relevant codes in these common clinical areas to identify significant changes between ICD-9 and ICD-10 that could result in issues with coding or translation.

3. Create fictitious patient encounters in these areas. Include sufficient documentation to code and create claims for these encounters.

4. Based on these defined scenarios, walk through all typical system operations, including:
   - Patient assessment
   - Documentation
   - Patient communications
   - Clinical decision processes
   - Referrals
   - Authorizations
   - Diagnostic and treatment orders
   - Internal and external scheduling
   - Eligibility
   - Data sharing
   - Billing - Claims
   - Payment
   - Reconciliation
   - Analysis
   - Quality measures
   - Other important functions of your practice's operations

5. Identify all of the areas where the transition from ICD-9 to ICD-10 has implications and the document requirements for successful transition.

6. Run these scenarios using documentation, codes, claims, and other artifacts to test each of your vendor's abilities to support your practice.
Implementation Phase

Once you have completed the assessment of your practice’s ICD-10 transition needs and you have planned for the tasks required to complete this transition, the next step is to determine what changes you need to make to your operations and systems in order to limit business risks and take advantage of opportunities.

Most physician practices depend on their vendors to provide support for the ICD-10 transition. However, you should not assume that your vendors would address the effects of the ICD-10 implementation on key functional areas, including:

- Patient registration
- Clinical documentation/health records
- Referrals and authorization
- Coding
- Order entry
- Billing
- Reporting and analysis
- Other diagnosis-related functions, depending on the nature of the practice

You must verify that the vendors you depend on are prepared to meet your critical ICD-10 transition needs.

Operational Implementation Activities

The operational implementation strategy developed earlier during the assessment phase should guide the ICD-10 implementation in your practice, including the methodology for mapping ICD-9 codes to ICD-10 codes and the reverse.

The operational implementation phase of the ICD-10 transition process includes the following key activities:

- Determine if/how your practice will work with vendors for implementation
- Coordinate with vendor the update of the internal policies affected by ICD-10
- Coordinate with vendor the update of internal processes affected by ICD-10, including clinical, financial, actuarial, and reporting functions
- Finalize system/technical requirements
- Identify test data requirements as outlined in the Scenario-Based Vendor Assessment section
- Update approved code design to remediate system changes and updates
- Coordinate update of code with vendor to remediate system changes/updates
- Coordinate and conduct testing with partners based on updated system logic
Resources Available to Ease ICD-10 Transition

Table 13 below identifies some of the industry tools available to the provider community. Please note that the list is not exhaustive, nor does it indicate a partnership between CMS and any particular vendor. The table contains the following:

- **Resource Name**: The entity providing the tool (e.g., AHIMA, WEDI)
- **Services Provided**: The services the tool or vendor provides
- **Stakeholders**: Stakeholders within the physician practice that might benefit from utilizing the tool

<table>
<thead>
<tr>
<th>RESOURCE</th>
<th>SERVICE(S) PROVIDED</th>
<th>STAKEHOLDERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthcare Information &amp; Management Systems Society (HIMSS) ICD-10 Cost Prediction Modeling Tool</td>
<td>• Assists users in predicting the financial impact of the ICD-10 transition.</td>
<td>Health care providers and payer organizations</td>
</tr>
<tr>
<td></td>
<td>• Developed in Excel. Helps users understand the impact of ICD-10 in four key areas: coding, revenue cycle, project management, and information technology.</td>
<td></td>
</tr>
<tr>
<td>HIMSS ICD-10 Playbook</td>
<td>• Provides a rich, well-structured index to a variety of white papers and other resources from a variety of organizations.</td>
<td>All stakeholders</td>
</tr>
</tbody>
</table>
| American Medical Association (AMA) – Educational Resources               | • A series of resources/artifacts to help physicians implement ICD-10-CM into their practices:  
  — ICD-10 Fact Sheets  
  — ICD-10 Project Plan Template  
  — ICD-10 Checklist  
  • Provides links to other associations and specific resources tailored to physicians’ needs. | Physician practices, payer organizations           |
| American Academy of Professional Coders (AAPC) ICD-10 Code Translator   | • Compares ICD-9 to ICD-10 codes. (Note: this tool only converts ICD-10-CM codes, not ICD-10-PCS) | Medical coders                                    |
| Workgroup for Electronic Data Interchange (WEDI) – Vendor Resource Directory and Other Resources | • Provides an assortment of white papers related to ICD-10.  
  • Listservs and conference calls by various subject areas allow collaboration among different parts of the industry. | All stakeholders                                    |
General Equivalency Mappings (GEMs)

General Equivalence Mappings (GEMs) attempt to include all valid relationships between the codes in the ICD-9-CM diagnosis classification and the ICD-10-CM diagnosis classification. The tool allows coders to look up an ICD-9 code and be provided with the most appropriate ICD-10 matches and vice versa. Although, GEMs are not a “crosswalk” and are merely meant to be a guide. Users should exercise clinical judgment when choosing the appropriate code or codes to map between ICD-9 and ICD-10 in either direction. GEMs are a very useful tool, but it is not a substitute for a complete system change over to ICD-10.

For most physician practices, GEMs will be of limited use and may not be appropriate since coding should occur directly to ICD-10 based on actual clinical documentation, rather than a mapping from existing ICD-9 codes. In some instances, GEMs can be helpful in validating your coding practices to help identify some codes in ICD-10 relative to existing ICD-9 for the purpose of training and validation. The ICD-10 codes will be increasing from approximately 15,000 ICD-9 codes to 150,000 ICD-10 codes, although coders will not need to know every code. GEMs can be compared to a phone book, coders will not use every number, but it is nice to know they are all there. Visit the CMS website at, http://www.cms.gov for more information on GEMs.

Testing Phase

Testing—the process of proving that a system or process meets requirements and produces consistent and correct results—is critical to successful implementation of ICD-10. Testing will ensure ICD-10 compliance across internal policies, processes, and systems, as well as external trading partners and vendors.

After making ICD-10 changes to systems, your practice will need to complete several types of tests. First, you may decide to complete individual components unit testing, system testing, and performance testing. Many of these tests will be similar to ones performed for other IT changes.

Second, you will need to complete specific ICD-10 end-to-end testing as described in the ICD-10 Final Rule. Table 14 provides a description of each type of testing and considerations for ICD-10.
### Table 14: ICD-10 Testing Types

<table>
<thead>
<tr>
<th>TESTING TYPE</th>
<th>DESCRIPTION</th>
<th>KEY ICD-10 CONSIDERATIONS</th>
</tr>
</thead>
</table>
| Unit testing/basic component testing    | Confirms that updates meet the requirements of each individual component in a system. Providers will first need to test each component updated for ICD-10.                                                      | • Unit testing should verify that:  
  – Expanded data structures can store the longer ICD-10 codes and their qualifiers  
  – Edits and business rules based on ICD-9-CM codes work correctly with ICD-10  
  – Since reports frequently use diagnosis and procedure codes, testing report updates are critical. Critical report elements to evaluate include:  
    – *Input filters*: Do all filters produce the anticipated outcome?  
    – *Categorization*: Do categories represent the user's intent as defined by aggregations of codes?  
    – *Calculations*: Do all calculations balance and result in the anticipated values considering the filter applied and the definition of categories?  
    – *Consistency*: Do similar concepts across reports or analytic models remain consistent given a new definition of code aggregations? |
| System testing                          | Verifies that an integrated system meets requirements for the ICD-10 transition. After completing unit testing, providers will need to integrate related components and ensure that ICD-10 functionality produces the desired results. | • Plan to test ICD-based business rules and edits that are shared between multiple system components  
  • Identify, update, and test all system interfaces that include ICD codes                                                                                                                                                  |
| Regression testing                      | Focuses on identifying potential unintended consequences of ICD-10 changes. Test modified system components to ensure that ICD-10 changes do not cause faults in other system functionality.                                    | • The complexity of ICD-9-CM to ICD-10 code translation may result in unintended consequences to business processes. Identify these unintended consequences through varied testing scenarios that anticipate risk areas. |
Table 14: ICD-10 Testing Types continued

<table>
<thead>
<tr>
<th>TESTING TYPE</th>
<th>DESCRIPTION</th>
<th>KEY ICD-10 CONSIDERATIONS</th>
</tr>
</thead>
</table>
| Nonfunctional testing – performance | Performance testing includes an evaluation of nonfunctional requirements such as transaction throughput, system capacity, processing rate, and similar requirements.                                                                                                                                                                                                                                                                 | • A number of changes related to ICD-10 may result in significant impact on system performance, including increased:  
  – Number of available diagnosis and procedure codes  
  – Number of codes submitted per claim  
  – Complexity of rules logic  
  – Volume of re-submission due to rejected claims, at least initially  
  – Storage capacity requirements                                                                                                                                                                                                                                                                   |
| Nonfunctional testing – privacy/security | Federal and state legislation defines specific requirements for data handling related to conditions associated with mental illness, substance abuse, and other privacy-sensitive conditions. To identify these sensitive data components or conditions, payers often use ICD-9-CM codes.                                                                                                                                                                                                                       | • Update the definition of these sensitive components or conditions based on ICD-10-CM  
  • The definition of certain institutional procedures that may fall under these sensitive requirements will be significantly different under ICD-10-PCS                                                                                                                                                             |
| Internal testing (Level I)   | The ICD-10 Final Rule requires Level I compliance testing.                                                                                                                                                                                                                                                                                                                                                                     | • Transactions should maintain the integrity of content as they move through systems and processes  
  • Transformations, translations, or other changes in data can be tracked and audited                                                                                                                                                                                                                       |
| External testing (Level II)  | The ICD-10 Final Rule requires Level II compliance testing. Level II compliance indicates that a covered entity has completed comprehensive testing with each of its external trading partners and is prepared to move into production mode with the new versions of the standards by the end of that period.                                                                                                                                                       | • Establish trading partners testing portals  
  • Define and communicate transaction specification changes  
  • Determine the need for inbound and outbound transaction training  
  • Determine the need for a certification process for inbound transactions  
  • Determine the process for rejections and re-submissions related to invalid codes at the transaction level  
  • Determine if parallel testing systems need to be created to test external transactions                                                                                                                                                                                                               |

4. [http://www.csee.umbc.edu/courses/undergraduate/345/spring04/mitchell/nfr.html](http://www.csee.umbc.edu/courses/undergraduate/345/spring04/mitchell/nfr.html)
5. [http://www.dshs.state.tx.us/hipaa/privacynoticesmh.shtm](http://www.dshs.state.tx.us/hipaa/privacynoticesmh.shtm)
Test Plan Implications
Your practice may use a test plan to document the strategy and verify that a business process and system meet future design specifications. The test plan should:

- Identify acceptance criteria based on the business and system functional requirements that were defined during the analysis and design phase
- Determine the business sponsor responsible for approving the scope of test plans

Test Case Implications
Define test cases to ensure that the system updates meet your business requirements and that the system components function efficiently. Test case design should include both anticipated and unexpected outcomes. Test cases should also include high-risk scenarios.

Test Data Implications
Test data ensures that several key system functions are producing data as expected and include data to:

- Validate (data validation)
- Trigger errors
- Test high risk scenarios
- Test volume
- Test all types of domains and categories
- Simulate a standard environmental model over time
- Test comparisons, ranking, trending variation, and other key analytic models

Error Testing
All testing will result in errors. Correcting the errors before the go-live date is the objective of the testing phase. Providers should include the following in their error-testing plan:

- Multiple testing layers to support various iterations of re-testing in parallel tracks
- Effective detection and repair of blocking errors that limit testing activities
- An error-tracking system with standard alerts to report to stakeholders
- Prioritization model for error remediation designed to focus on business-critical requirements
- Set of acceptance criteria
- Model for reporting known issues
- Developing a schedule for fixing known issues in the future
Internal Testing

Some larger physician practices develop and maintain internal systems that are not traditional commercial, off-the-shelf products (COTS). In these cases, the practice takes on the ICD-10 implementation responsibility. Practices that choose COTS products should work directly with their vendor to monitor the testing process for their system. When creating testing scenarios, consider all of the usual testing requirements for any internal system undergoing significant architectural and system logic changes and focus on testing key business risks. Evaluate each technical area individually as well as integration testing across components including:

- Database architecture
- User interfaces
- Algorithms based on diagnosis or institutional procedure codes
- Code aggregations (grouping) models
- Key metrics related to diagnosis or institutional procedure codes. All reporting logic based on diagnosis or institutional procedure codes
- Coordinate with your vendors as necessary to support testing execution and issue resolution
- Identify testing workflows and scenarios for your practice that apply including use cases, test cases, test reports, and test data
- Identify a target date when your practice will be able to run test claims using ICD-10
- Develop a project plan that recognizes dependencies on tasks and resources and prioritizes and sequences efforts to support critical paths

External Testing

Your practice should create an inventory of external entities with whom you exchange data and the testing you will need to coordinate with each to ensure timely, accurate ICD-10 implementation. Examples of external testing areas include:

- **Payers:** Payers are critical to the financial viability of your practice. Denials or payment delays may result in a substantial decline in revenues or cash flow. Payers may struggle with the ICD-10 transition due to the significant system changes needed to support policies, benefit/coverage rules, risk analysis, operations, and other critical business functions impacted by this change. Payer testing should identify and resolve any issues prior to go-live.
  
  — Determine if the payer has educational programs and collaboration efforts to support providers through the transition
  
  — Use the high-dollar, high-volume, high-risk scenarios that your practice has created to produce test claims
  
  — Work with payers to develop test scenarios to conduct end-to-end testing, specifically identifying payment results
  
  — Communicate coding practices and scenarios to payers to build better relationships throughout the testing and transition process
  
  — Identify communication processes to identify and correct issues early with payers
• **Hospitals:*** Test information exchanges with hospitals to ensure appropriate handling.

• **Health Information Exchanges:** Test all information exchanges for critical operations to meet inoperability standards.

• **Outsourced billing or coding:** Test outsourced coding and billing operations with defined clinical scenarios to make sure these business operations continue as expected.

• **Government entities:** Local and national government entities may require reporting for a variety of purposes including:
  - Public health reporting
  - Quality and other metric reporting related to meaningful use
  - Medicare and Medicaid reporting and data exchange
  - Other mandated or contractually require exchange of information around services and patient conditions

**Transition Phase**

During the transition period, monitor the impact of ICD-10 on your business operations and revenue. As a precaution, physicians should monitor the impact to their business and be prepared to take corrective action.

Table 15 includes the following elements:

• **Operational Impact:** ICD-10 business impact or consideration

• **Description and Strategy:** Explanation of the impact and opportunities to monitor and alleviate the impact

**Table 15: Operational Impacts and Strategies for Monitoring**

<table>
<thead>
<tr>
<th>OPERATIONAL IMPACTS</th>
<th>DESCRIPTION AND STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems with authorization and referrals/Claim delays or denials</td>
<td>Triggers and rules for evaluating prior authorizations and referrals are based on ICD-9 procedure and diagnosis codes. After the ICD-10 implementation, expect changes in payers’ prior authorizations/referrals trigger or approvals as they refine medical policies. Physicians may also see a significant increase in denials as a result of coding challenges the ICD-10 transition will present to physician offices. These denials may result from changes in payer remediation of medical policies. They may also occur after the transition due to refinements in processing rules based on the increased data ICD-10-CM codes provide. If payers rely on crosswalks to convert submitted ICD-10 codes to ICD-9 codes, there might be unintended consequences in processing those claims. Your practice may be denied service payments or approval due to policy or rule misinterpretation because of code translation errors. To alleviate this risk, your practice must coordinate and communicate with payers to understand their implementation strategies and identify workarounds for clinical scenarios.</td>
</tr>
<tr>
<td>Auditing, fraud and abuse</td>
<td>Audits of all types are increasing in depth and breadth, including Recovery Audit Contractors (RAC), Hierarchical Condition Categories (HCC), fraud, abuse, and others. After the transition to ICD-10, the specificity and detailed information levels will result in greater documentation scrutiny. To address these concerns, your practice should perform regular audits on clinical documentation during the post-implementation stabilization period.</td>
</tr>
</tbody>
</table>
### Table 15: Operational Impacts and Strategies for Monitoring continued

<table>
<thead>
<tr>
<th>OPERATIONAL IMPACTS</th>
<th>DESCRIPTION AND STRATEGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pay-for-performance</td>
<td>Value-based purchasing and overall trends in quality measurement and performance-based payment have considerable impact on the delivery system, and are expected to be an even bigger factor on payment in the future. Changes in the definition of these measures (specifically ICD-10-CM related measures) will significantly affect both quality measurement results and target benchmarks. Physicians will need to communicate directly with payers and clearinghouses to understand and identify trends in their clinical behavior because of ICD-10 implementation. This may also help reduce the consequences of failing to achieve performance-based payment goals.</td>
</tr>
<tr>
<td>Case rates, capitation, and other payment methods</td>
<td>Physicians’ participation in case rates, case mix adjustment, risk-adjusted or condition-related capitation, and other payment models may affect payment associated with the ICD-10 migration. Currently, there is little information to predict the extent of these impacts and whether they will be positive or negative. Nevertheless, physician practices will need to work with payers and clearinghouses directly to identify trends during the ICD-10 transition.</td>
</tr>
<tr>
<td>Accountable Care Organization (ACO) model</td>
<td>Accountable care requires disciplined spending management to ensure that payment is for the correct service for the correct conditions. ICD-10 will play a critical role in aligning the definitions of service and conditions because of the added detail of the ICD-10 codes. ICD-10 is critically important to the success of accountable care for a number of reasons: • ICD-10 codes are a mandated standard across the health care industry for reporting patient conditions and institutional procedures. The increased detail of ICD-10 codes will lead to the ability to identify and accurately predict risk, based on severity, comorbidities, complications, sequelae, and other parameters. • ICD-10-CM will provide better analysis of disease patterns and the burden on public health. • ICD-10-CM will increase the ability to assign resources based on more detailed utilization analysis. In an effort to prepare for ICD-10 implementation and report on accountable care measures, physicians will need to work with industry players to identify and align measures to ICD-10.</td>
</tr>
<tr>
<td>Value measurements</td>
<td>Measures of quality, efficiency, comparative effectiveness, and other care components will differ significantly in the ICD-10 environment. The definition of the measures may change significantly based on the nature of the new ICD-10 codes and the new parameters of diseases and services that these provide. During the transition period, measures that look over multiyear windows may be significantly affected due to the mix of ICD-9 and ICD-10 codes in those historical data sets. In an effort to prepare for ICD-10 implementation and report on value measures, physicians will need to work with industry leaders.</td>
</tr>
</tbody>
</table>
Table 16 includes several considerations to plan for transition and includes the following elements:

- **Component**: Subject for consideration
- **Transition Action**: Tasks your practice may consider

### Table 16: Key Considerations for Transition Phase

<table>
<thead>
<tr>
<th>COMPONENT</th>
<th>TRANSITION ACTION</th>
</tr>
</thead>
</table>
| **Coding productivity**          | • Assess the effect of decreased coding productivity on your practice’s accounts receivable status:  
  - How long do you expect the decline in coding productivity to last?  
  - What steps can you take to reduce the effect of decreased coding productivity?  
    - Eliminate coding backlogs before ICD-10 implementation.  
    - Prioritize medical records for coding.  
    - Provide coding staff with adequate ICD-10 education and provide refresher training immediately before the compliance date to improve confidence levels and minimize productivity declines.  
    - Assess medical record documentation and implement any necessary improvement strategies before the ICD-10 transition.  
    - Use electronic tools to support the coding process.  
    - Use outsourced coding personnel to assist during the initial period after ICD-10 implementation.  
    - Identify areas of weakness by evaluating productivity across coding, billing, and reporting functions. Consider training refresher courses to boost skill sets or build particular clinical scenarios that are limiting productivity. |
| **Coding accuracy**              | • Assess the impact of decreased coding accuracy:  
  - What is the anticipated effect on coding accuracy?  
  - How long will it take coding staff to achieve a level of proficiency comparable to that with ICD-9?  
  - What steps can your practice take to improve coding accuracy?  
    - Assess coding knowledge and skills and provide an appropriate level of education.  
    - Monitor coding accuracy closely during the initial implementation period and provide additional education as needed.  
    - Identify areas of weakness by evaluating productivity across coding, billing, and reporting functions. Consider training refresher courses to boost skill sets or build particular clinical scenarios that are limiting productivity. |
| **Go-live production problems**  | • Develop strategies to minimize transition problems and maximize opportunities for success.  
  • Identify potential problems or challenges during the transition and implement strategies aimed at reducing the potential negative effects. For example, develop a process to manage errors and resolve vendor issues as necessary. |
| **Contingency planning**         | • Develop a contingency plan for continuing operations if issues or other problems occur when the ICD-10 implementation goes live. Define and rank risks based on the likelihood and outcome if each event occurred. |
| **Impact of potential reimbursement** | • Evaluate potential diagnosis-related group (DRG) shifts.  
  • Evaluate changes in the case mix index.  
  • Communicate with payers about anticipated changes in reimbursement schedules or payment policies. |
| **Contracted coding staff training needs** | • Communicate with companies supplying contracted coding staff to ensure they have received the necessary education. Ask for documentation confirming the extent of education and the qualifications or certifications of the educator. |
Go-Live
This section identifies the process you will use to prepare for going live, including:

- Confirming with system vendors
- Testing the baseline
- Identifying financial targets (taking into consideration revenue losses due to anticipated bill rejections)
- Preparing for productivity declines
- Continuing to assess quality

Table 17 includes the following elements:

- **Task**: Subject for consideration
- **Actions**: Steps your practice may consider

### Table 17: Go-Live Tasks and Associated Actions

<table>
<thead>
<tr>
<th>TASK</th>
<th>ACTIONS</th>
</tr>
</thead>
</table>
| Communicate go-live plans to stakeholders | • Outline steps for how to report an issue once the system goes live, including whom to contact. Also:  
  – Keep key stakeholders informed of issue identification and resolution status through regular updates or use of electronic communication tools such as a web-based issue tracking system accessible to all stakeholders  
  – Steering committee should continue to meet regularly to share information regarding issues including a high number of claims denials and rejections, unexpected coding backlogs, lower-than-expected coding accuracy rate, systems glitches; the status of unresolved issues, lessons learned, and best practices identified as part of the ICD-10 implementation experience |
| Confirm with system vendors               | • Identify and resolve issues as early as possible:  
  – Identify the plan to report and resolve ICD-10 issues prior to production/go-live, begin monitoring one year before go-live  
  – Report resolution of system changes and upgrades  
  – Determine the appropriate level of ongoing-support  
  – Identify the point of contact should issues arise  
  • Resolve any identified problems, including testing failures or identification of business processes or systems applications affected by the ICD-10 transition but missed during impact assessment |
| Test baseline                             | • Establish a test baseline for ICD-10 data during the transition period to evaluate changes across financial areas like reimbursement, rate setting and contracting |
| Identify financial targets               | • Determine goals for:  
  – Days not billed  
  – Claims delayed  
  – Claims denied |
### Table 17: Go-Live Tasks and Associated Actions continued

<table>
<thead>
<tr>
<th>TASK</th>
<th>ACTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepare for productivity declines</td>
<td>• Identify process to track financials/budget&lt;br&gt;• Establish trending information for performance tracking across staff for coding and billing&lt;br&gt;• Identify performance targets where possible as well as incentives to keep morale and productivity high&lt;br&gt;• Evaluate staff for retraining and additional communications and reminders</td>
</tr>
<tr>
<td>Continue to assess quality</td>
<td>• Assess medical record documentation quality with respect to demands for increased detail&lt;br&gt;• Establish processes to ensure necessary documentation&lt;br&gt;• Implement documentation improvement strategies as needed&lt;br&gt;• Monitor the effect of documentation improvement strategies</td>
</tr>
</tbody>
</table>

**Ongoing Support**

During transition, vendors will be expected to monitor ICD-10 implementation and assist in troubleshooting and resolving post-implementation issues and problems promptly. Your practice may also use vendors to perform evaluations to identify areas to enhance and recommend for improving data quality.

**Potential Ongoing Support Issues with Vendors**

The following list of anticipated and potential vendor issues can be used to help your practice monitor and manage vendor(s) during go-live.

- Identify problems or errors, and take steps to address them
- Monitor coding accuracy and productivity and implement strategies to address identified problems, such as:
  - Additional education on the ICD-10 code sets, biomedical sciences, pharmacology, or medical terminology
  - Additional efforts to improve the quality of medical record documentation
  - Additional coding professionals to assist with coding backlogs or reviewing claims denials and rejections
- Monitor payers for possible interaction issues:
  - Assess reimbursement impact of the ICD-10 transition, monitor case mix and reimbursement group assignment (e.g., DRGs, Home Health Resource Groups), and provide appropriate education to staff members about reimbursement issues
  - Work closely with payers to resolve payment issues (e.g., claims denials and rejections)
  - Analyze changes in reimbursement index
  - Concurrently review reimbursement groups and diagnosis and procedure code assignments
  - Analyze shifts in reimbursement groups
— Communicate with payers about anticipated changes in reimbursement schedules or payment policies
— Provide education and feedback regarding reimbursement issues to appropriate personnel
• Monitor the ICD-10 transition’s impact on reimbursement, claims denials and rejections, coding productivity and accuracy
• Monitor systems function and correct errors or other identified problems as quickly as possible; implement contingency plan if needed
• Resolve post-implementation problems as expeditiously as possible
  — Follow up promptly on significant post-implementation problems, such as claims denials and rejections or coding backlogs
  — Work with other staff or external entities as appropriate until the identified problem is resolved

Post-Implementation Audit Processes and Procedures
After the ICD-10 implementation, your practice should review processes to confirm their effectiveness and sustainability. These include:
• Clinical documentation changes
• Coding practices and processes
• Revenue cycle processes and changes
• Other organization adaptations made during the transition
Next Steps

Using this ICD-10 implementation handbook as a guide, your practice should now be ready to take the following next steps.

1. Establish awareness among your administrative and physician leadership involved in ICD-10 implementation. This awareness should focus on the breadth of ICD-10 impact across the industry and communicate a solid understanding of how this will affect business process, policy, and processes for your physician practice. Attention should be directed toward implementation costs, budget available, staff training needs and affected vendor tools.

2. Identify an ICD-10 coordination manager who will create an inventory of key tasks for ICD-10 implementation and be in charge of monitoring the daily activities associated with the ICD-10 implementation including:
   - Developing an implementation plan and timeline
   - Conducting vendor evaluations, monitoring and communication
   - Communication and awareness activities both internally and externally
   - Training needs assessment and identification

3. Identify vendor support needs for the ICD-10 implementation from vendors and health associations. In addition, identify other physician practices and agencies from which your practice may seek advice, assistance, or materials.
Appendix: Relevant Templates

The following files are available on the CMS ICD-10 website http://www.cms.gov/ICD10.

The Appendix table includes the following:

- **Template**: Name of the template
- **Purpose**: Description of contents specifically around how this template will assist physicians

### Appendix: Relevant Templates

<table>
<thead>
<tr>
<th>TEMPLATE</th>
<th>PURPOSE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project Plan Task List</strong></td>
<td>List of both high-level and detailed tasks that practices can use to customize to their unique business processes, policies, and systems. Practices can use this template to identify start and end dates, predecessor tasks, task owners, estimated work effort, resources, and dependencies.</td>
</tr>
<tr>
<td><strong>Responsible, Accountable, Support, Consulted, and Informed (RASCI) Matrix</strong></td>
<td>Useful in clarifying roles and responsibilities in cross functional projects and processes.</td>
</tr>
<tr>
<td><strong>Vendor and Business Case Template</strong></td>
<td>Tool to assess vendor readiness and plans for ICD-10 implementation. The template will allow practices to weigh vendor options and assist in identifying the right vendor for the practice.</td>
</tr>
</tbody>
</table>
This Implementation Guide was prepared as a service to the health care industry and is not intended to grant rights or impose obligations. The information provided is only intended to be a general summary. It is not intended to take the place of either the written law or regulations. We encourage readers to review the specific statutes, regulations, and other interpretive materials for a full and accurate statement of their contents.