

# ICD-10: The History, the Impact, and the Keys to Success

*White Paper*



**AAPC  
PHYSICIAN SERVICES**  
*Compliant and Profitable Practices*

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The transition to ICD-10 will be a major change to health care providers and could have a dramatic effect on revenue streams and operations.

## Executive Summary

The Health Insurance Portability and Accountability Act (HIPAA) of 1996 includes provisions for standardization of health care information (eg, standards for electronic claims submission, provider identifiers, and code sets). This began discussion and paved the way for the conversion to ICD-10-CM and PCS in the United States which will go into effect on October 1, 2013. We examine the history of ICD-10, what makes ICD-10 different, the potential impact of ICD-10, and key steps for a successful implementation with a focus on the outpatient setting. The transition to ICD-10 will be one of the largest changes to ever hit health care providers and could have a dramatic effect on revenue streams and operations. Providers who delay the implementation process and do not adequately prepare will suffer negative financial impacts. Those who make the effort to properly prepare should be able to successfully navigate the storm surrounding this change.

CMS portends ICD-10 will provide benefits such as increased specificity in clinical information that can lead to more accurate and timely reimbursements, better quality of patient care and improved disease and care management. Critics are more skeptical about what benefits will actually be gained by health care providers in the near and maybe distant future. Regardless of perceived value, the implementation of this new code set will be a major challenge and will impact the vast majority of people working in the health care field. Because ICD-10 will permeate all aspects of our health delivery system, a sound understanding of the new coding standards, coupled with effective planning, will be necessary for a successful ICD-10 transition.

## ICD-10 History

The International Classification of Diseases, Tenth Revision, (ICD-10) was endorsed by the 43<sup>rd</sup> World Health Assembly in May 1990 and came into use in World Health Organization (WHO) States in 1994. ICD-10, Clinical Modification (ICD-10-CM) was developed by the U.S. National Center for Health Statistics (NCHS) along with an advisory panel to



On October 1, 2013  
all HIPAA covered  
entities must  
comply.

ensure accuracy and utility in 1993. In the United States, we will use the clinically modified version, as we did with ICD-9.

On January 5, 2009, the U.S. Department of Health & Human Services (HHS) announced that ICD-9-CM would be replaced by the ICD-10 system (ICD-10-CM and ICD-10-PCS) on October 1, 2013. All HIPAA covered entities must comply with this date. The final rule to update the current 4010 electronic transaction standard to the new 5010 electronic transaction format for electronic health care transactions was also published with an implementation of January 1, 2012. Version 5010 provides the framework needed to support ICD-10 diagnosis and procedure codes and is the prerequisite to implementing ICD-10.

## ICD-9-CM Limitations

The ICD-9-CM system has been in use for over 30 years and has insufficient space to accommodate new procedures and disease processes. There are space limitations in ICD-9-CM as the longest code length is five digits and many categories are full. The code set can no longer expand for additional classification specificity, newly identified disease entities, and other advances in the medical field.

There is a lack of detail found in ICD-9-CM. For example, in the fracture coding with ICD-9-CM there is no laterality notated in the codes. If a patient happens to be treated for successive wrist fractures, for example, there is no way in ICD-9-CM to indicate right from left. There are also no current codes to show the episode of care for injuries (initial active treatment or subsequent treatment after initial care, etc.) in ICD-9-CM.



CMS reports proposed benefits of converting to ICD-10.

CMS reports the following benefits of converting to the ICD-10 coding system in the United States;

- Improving payment systems and reimbursement accuracy
- Measuring the quality, safety and efficacy of care
- Conducting research, epidemiological studies, and clinical trials
- Setting health policy
- Monitoring resource utilization
- Preventing and detecting healthcare fraud and abuse

The conversion to ICD-10-PCS will allow for the accommodation of new procedures and technologies without disrupting the existing coding structure. This will allow for better, more accurate payment. With the greater detail of the ICD-10 coding system, claims will be clearer and the diagnosis more precise to substantiate medical necessity. This may decrease the cases in which medical records will need to be sent to support a claim, also decreasing adjudication time.

Regardless of where stakeholders sit on the issue, our health system is about to be impacted by a major change.

The *Federal Register* made a distinction between rejected and improper claims. A rejected claim would be a claim sent back by the payer due to misunderstanding of the new codes, need for additional information, lack of medical necessity, etc. An improper claim is deliberately miscoded in an attempt to gain undue reimbursement. Due to the specificity of the new system, it should theoretically be harder to submit improper claims, and easier for payers to find them.

With the increase in specificity, ICD-10-PCS will allow for better understanding of new procedures due to the fact that they will not be lumped together as they are under ICD-9-CM Volume 3. This will allow for better study of new procedures to determine their effectiveness. With the increased level of detail in the ICD-10 coding system, payers and providers will be able to better determine outcome measures. This will improve disease management programs. For example, there are approximately 150 ICD-10-CM codes for diabetes. This kind of specificity will allow patients to be placed in the right programs and refine management of patients already in a program.



The ICD-9-CM system has been in use for more than 30 years and has insufficient space to accommodate new procedures and disease processes.

While many are hopeful that our health system will realize some of these benefits, there are many critics that question whether the cost of such a change will outweigh the received benefit. Regardless of where stakeholders sit on the issue, our health system is about to be impacted by a major change that will require a significant amount of preparation time and associated costs to be successful.

## ICD-10-CM Specifics

ICD-10 Clinical Modification (ICD-10-CM) will be used for diagnosis coding in the United States, and will replace Volumes 1 and 2 of ICD-9-CM.

Besides the sheer number of codes, there are some other major differences between ICD-9-CM and ICD-10-CM. ICD-10-CM codes are all alphanumeric, starting with an alpha character, as opposed to V and E codes in ICD-9-CM. ICD-10-CM codes include laterality to show right, left, and bilateral conditions. For example, the [guidelines](#) state that the right side is designated by a character 1, left side is always designated by a character 2, bilateral is always designated by a character 3, and unspecified is designated by a character 0 or 9, depending on the character placement.

In addition, the revisions to ICD-10-CM include expanded injury codes and the creation of combination diagnosis/symptom codes that reduce the number of codes needed to fully describe a condition.

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### Example:

- 180.01 Phlebitis and thrombophlebitis of superficial vessels of **right** lower extremity
  - 180.02 Phlebitis and thrombophlebitis of superficial vessels of **left** lower extremity
  - 180.03 Phlebitis and thrombophlebitis of superficial vessels of lower extremities, **bilateral**
  - 180.00 Phlebitis and thrombophlebitis of superficial vessels of **unspecified** lower extremity
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In ICD-10-CM there are two types of exclusion notes. **Excludes1** is considered a “pure” excludes note. It is used to indicate that the codes are mutually exclusive and should never be coded together. For example, diabetes type I and diabetes type II are Excludes1 from each other and as such could not be coded on the same encounter as the codes are mutually exclusive. **Excludes2** is used to indicate that although the excluded condition is not part of the condition from which it is excluded, there are times a patient may have both conditions simultaneously. For example, a patient may have acute and chronic tonsillitis. There are two different ICD-10-CM codes for these conditions and if the provider documents both conditions as present in the patient record, both should be coded together.

The fact that the codes are up to seven characters in length is a major difference that brings two new considerations: seventh character extenders and dummy placeholders. The seventh character extenders are usually a letter, and are used to identify the encounter type. The most common seventh character extenders used in ICD-10-CM are:

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A – Initial encounter

D – Subsequent encounter

S – Sequela

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The seventh character is required for all codes within the category, or as stated by the tabular list instructions. In ICD-10-CM, in order to allow the seventh character to remain the seventh character, a dummy placeholder “x” must be used to fill in any empty character(s).

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**Example:**

T79.1xxA – *Fat embolism, initial encounter*. The dummy placeholder x is used two times to fill in so that the A for initial encounter can remain in the seventh character place. This dummy placeholder will need to be worked into practice management and coding systems in order to maintain the meaning of the code; this could prove to be a data struggle internally for practices.



Unlike ICD-10-CM,  
*all* ICD-10-PCS  
codes are seven  
characters in  
length.

## ICD-10-PCS Specifics

The ICD-10 Procedure Coding System (ICD-10-PCS) is a procedure coding system that will be used to collect data, determine payment, and support the electronic health record for all inpatient procedures performed in the United States. It will replace ICD-9-CM, Vol. 3.

Unlike ICD-10-CM, *all* ICD-10-PCS codes are seven characters in length. They are also alphanumeric, but can lead with either an alpha or numeric character. In fact, the code sets contain the numbers 0-9 and the letters B-D and F-H, with most codes listed in the “0” Section for Medical and Surgical. The index in the front of the ICD-10-PCS procedure coding manual is used to access the tables in the back. Once the correct table is located, the code is constructed from the specified information given in the documentation to “build” the code. The letters O and I are not used in ICD-10-PCS.

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### Example:

If an excision of a sebaceous cyst on the buttock is performed, the complete code would be 0HB8XZZ. One would look under Excision, skin, buttock in the index. This would lead them to OHB in the tables for “Medical Surgical, Skin, Excision.” To complete the code, one would go across the table and choose each of the remaining characters. 0HB8XZZ reads completely *Medical and Surgical, skin, excision, buttock, external, no device, no qualifier*.

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# ICD-10 Documentation

Clinical documentation is a vital component that represents the medical condition of the patient and, therefore, has always played a vital role in medical coding and billing. Proper documentation is required to support the submission of both CPT® and ICD-9-CM codes. With the implementation of ICD-10, documentation must include a level of detail that can support the increased specificity required with the ICD-10 code set. The ICD-10 transition will require a behavioral change for many physicians who are not used to documenting with this level of specificity and could be as much of a challenge as learning the new code sets. Below is an example of an outpatient clinical note that highlights the specifics needed for proper ICD-10 coding.

**7th Character**  
Injury codes require a 7th character extender that identifies the encounter. Documentation must be clear so that the correct extender can be applied.

**Applied Specificity: Concussion**  
For a concussion documentation needs to include if the patient suffered loss of consciousness.

**Acute vs. Chronic**  
Documentation of the patient's condition must include acute or chronic to assign the most appropriate ICD-10 code.

**S:** Mrs. Finley presents today after having a new cabinet fall on her last week, suffering a concussion, as well as some cervicgia. She was cooking dinner at the home she shares with her husband. She did not seek treatment at that time. She states that the people that put in the cabinet in her kitchen missed the stud by about two inches. Her husband, who was home with her at the time, told her she was "out cold" for about two minutes. The patient continues to have cephalgias since it happened, primarily occipital, extending up into the bilateral occipital and parietal regions. The headaches come on suddenly, last for long periods of time, and occur every day. They are not relieved by Advil. She denies any vision changes, any taste changes, any smell changes. The patient has a marked amount of tenderness across the superior trapezius.

**O:** Her weight is 188 which is up 5 pounds from last time, blood pressure 144/82, pulse rate 70, respirations are 18. She has full strength in her upper extremities. DTRs in the biceps and triceps are adequate. Grip strength is adequate. Heart rate is regular and lungs are clear.

- A:**
1. Status post concussion with acute persistent headaches
  2. Cervicgia
  3. Dorsal somatic dysfunction

**P:** The plan at this time is to send her for physical therapy, three times a week for four weeks for cervical soft tissue muscle massage, as well as upper dorsal. We'll recheck her in one month, sooner if needed.

**External Cause**  
The falling cabinet is what caused the injuries. Description of the cause is required.

**Activity**  
In ICD-10 the activity of the patient needs to be documented. An activity code is only used once at the initial encounter.

**Location**  
Documentation needs to include the location of the patient at the time of injury or other condition. In ICD-10 the details include the actual room of the house the patient was in when the injury occurred.

**Relief or No Relief**  
Intractable vs. non-intractable are an inherent part of the ICD-10 code for headaches and documentation needs to be clear for the appropriate code to be assigned.

ICD-10 Coding	
S06.0x1A	Concussion with loss of consciousness of 30 minutes or less initial encounter
G44.311	Acute post traumatic headache intractable
M54.2	Cervicgia
M99.01	Segmental and somatic dysfunction of cervical region
W20.8xxA	Struck by falling object (accidentally) initial encounter
Y93.g3	Activity, cooking and baking
Y92.010	Place of occurrence, house, single family, kitchen



Becoming familiar with all the ICD-10-CA/CCI coding concepts was like learning to read Greek.

## Impact of ICD-10

The full impact of converting to the ICD-10 system for the United States is unknown. Other countries that have converted can be studied to evaluate the impact, although a true estimation cannot be performed as other countries have consisted of different payer environments and have implemented ICD-10 at different levels (eg, mortality, morbidity, procedural). What we do know from Canada's conversion to ICD-10-CA (Canada's version of ICD-10-CM) and Canadian Classification of Health Interventions, or CCI (Canada's version of PCS) is that they experienced a large learning curve and loss in productivity. Maaret Brandon, a project analyst and coordinator for the Vancouver General Hospital in British Columbia stated, "Becoming familiar with all the ICD-10-CA/CCI coding concepts was like learning to read Greek. But our coders were successful because they had a very strong fundamental knowledge of anatomy, physiology, and medical terminology." Additionally, Michelle Bamford, regional coordinator clinical information services with the Vancouver Island Health Authority stated that shortly after ICD-10 implementation, the average coding time per record went from 12–15 minutes to 33 minutes, turnaround time increased from 69 days to 139 days, and coding backlog increased from 64 days to 139 days. Subsequently productivity has improved, but never returned to pre ICD-10 levels.

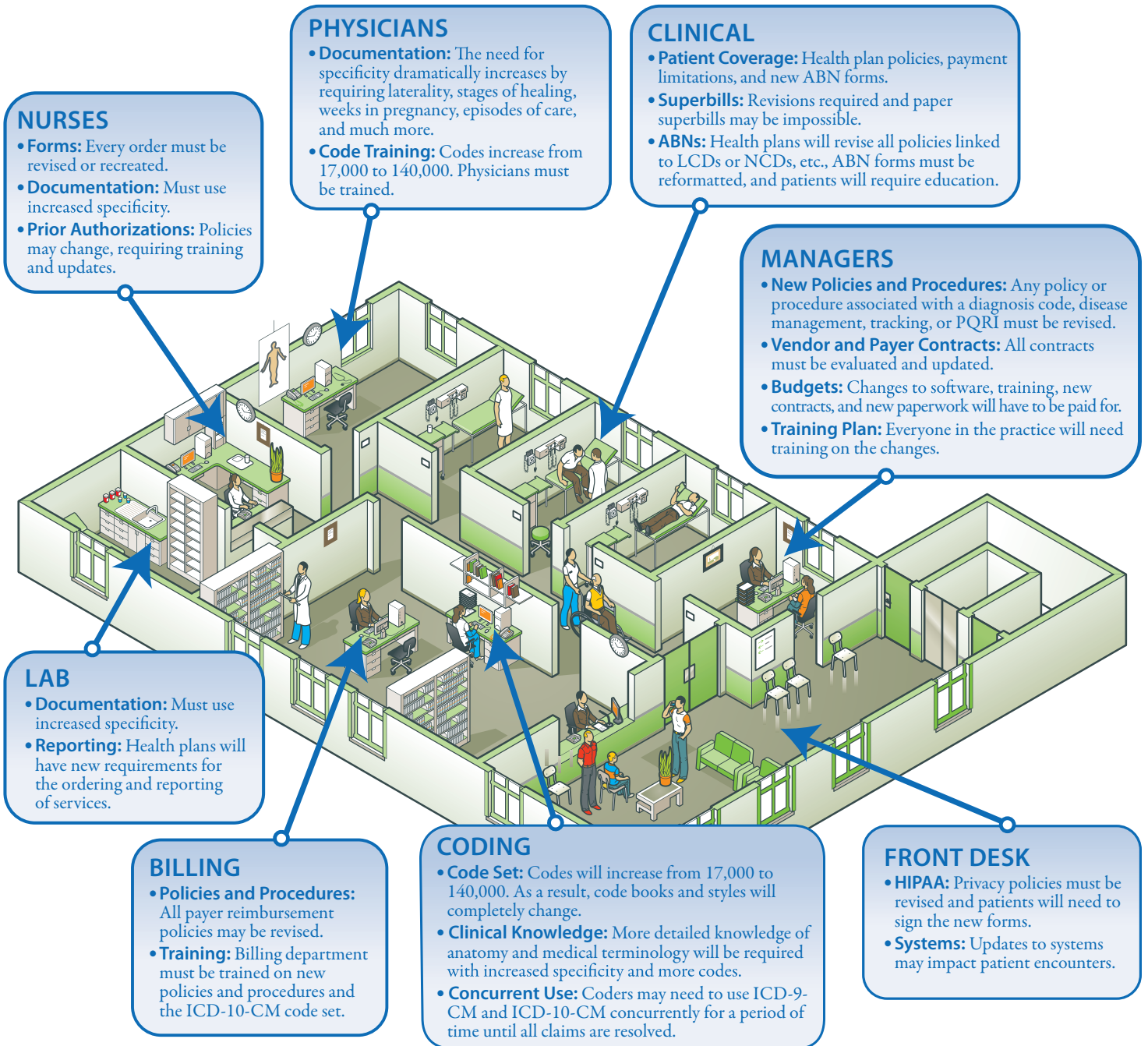
Some studies have estimated that inadequate training could result in reduced productivity levels for as long as six months due to increased re-work for denied claims, adjustments and pending claims, and coders directing an increasing amount of queries to physicians when documentation is not adequate to support the higher level of specificity required with ICD-10. Applying what we have learned from other countries and what we know about the current United States coding system, we can be confident that proper preparation will mitigate many of these negative outcomes and there will be many practices and systems who navigate the transition with success.



One thing is certain—ICD-10 will impact nearly everyone in the health care field including: providers, nurses, coders, billers, IT personnel, claims adjudicators, managers, HR personnel, researchers, data managers, auditors, compliance officers, fraud and abuse investigators, and—last but not least—the patient. A look at the impact these changes will have on a medical practice provides a good example of how ICD-10 will permeate so many different aspects of health care operations.

Rhonda Buckholtz, Vice President of ICD-10 Training and Education at AAPC, states, “Practices that take a strategic approach to ICD-10 implementation will not have the productivity struggles as those who do not take ICD-10 seriously. With careful planning and education, practices will be prepared for the change with fewer disruptions to revenue streams.”





## Successful ICD-10 Transition

The degree of success a practice will have transitioning to the new ICD-10 code set will largely be determined by how well they prepare themselves prior to October 2013. Preparation can be a fairly simple process if key components are addressed. The problem many groups will have is procrastination or insufficient preparation. Below are some key components that should be considered as groups prepare for a successful transition.

### ICD-10 Impact Assessments

Organizational impact assessments focus on an in-depth review of each business area within the organization to identify impacts resulting from ICD-10 transition. The impact assessment includes developing a strategy focused on mitigating identified risks and deficiencies and formulating implementation plans and timelines.

### ICD-10 Implementation Training

ICD-10 implementation training should cover all aspects of the ICD-10 implementation process, including organizing implementation efforts, impact analysis, IT and, cross walking and mapping. In addition, ICD-10-CM format and structure as well as the differences between ICD-9-CM and ICD-10-CM are discussed with a focus on hands on documentation challenges and assessments. Different boot camp tracks are offered, including those for providers and others for payers.

### ICD-10-CM Documentation Evaluations

Documentation evaluations identify documentation deficiencies and provide training on required specificity. A real challenge for coders will be documentation insufficient to support the specificity required for the new ICD-10 code sets. If the office is fully prepared for the transition, but clinical documentation has not improved, accurate coding and proper payment will not be possible. A behavioral change in documentation habits for many providers and clinical personnel will be necessary to address the specificity requirements of ICD-10-CM.



## ICD-10-CM Anatomy and Pathophysiology Training

Due to the specific clinical nature of ICD-10-CM, a strong understanding of anatomy and physiology will be important for coders. Effective training covers all body systems and blends on-line multimedia presentations with downloadable manuals and evaluation quizzes to ensure your comprehension of the material.

## ICD-10-CM Code Set Training and Specialty Code Set Training

General and specialty code set training with advanced hands-on coding of real world cases that provides an in-depth understanding of how to apply the new code set for proper coding and billing.

## 9-Step Implementation Plan

For many groups, a formal implementation plan will be an important component for success. AAPC Physician Services utilizes a nine-step approach for successful ICD-10 implementation. The steps for this approach are highlighted below, realizing that the size and complexity of a practice will determine the depth of investment in a formal plan.

<b>Step 1: Inform</b>	Give practice decision makers a high-level overview of ICD-10 and get buy-in to begin implementation preparation.
<b>Step 2: Assign</b>	Assign individuals or teams to oversee the implementation effort including available internal resources and any outsourced resources needed.
<b>Step 3: Assess</b>	Assess all areas of practice and determine what has to change with an in-depth impact analysis including documentation evaluations.
<b>Step 4: Plan</b>	Plan the implementation of ICD-10 including budgets, staff training, vendor communication and policy and document changes with scheduled timetables.
<b>Step 5: Prepare</b>	Prepare the changes for ICD-10 by updating processes and policies and creating needed training materials. Begin changes with all vendors and outside partners.



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<b>Step 6: Train</b>	Train staff and providers on the changes made for ICD-10 including new policies and processes, code set training, software upgrades, anatomy & pathophysiology for ICD-10 and specificity requirements.
<b>Step 7: Test</b>	Test all changes for ICD-10 prior to implementation and verify at least 90 percent accuracy in documentation and coding.
<b>Step 8: Implement (Oct. 1, 2013)</b>	Implement ICD-10.
<b>Step 9: Evaluate</b>	Evaluate the implementation results including review of denied claims and documentation and coding accuracy. Analyze all changes and look for gaps between expectations and actual results to determine areas that need additional adjustments, then implement adjustments.

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**Resources:** <http://edocket.access.gpo.gov/2009/pdf/E9-743.pdf>

[http://www.cms.gov/ICD10/Downloads/7\\_Guidelines10cm2010.pdf](http://www.cms.gov/ICD10/Downloads/7_Guidelines10cm2010.pdf)

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UMNO News, September 22, 2002

“ICD-10 A Strategy for Hospital Implementation”, Nicole Mair, *Casemix Quarterly*, Vol. 1, No 2, June 30, 1999

*AAPC ICD-10 Implementation for Providers* resource manual

“Replacing ICD-9-CM with ICD-10-CM and ICD-10-PCS Challenges, Estimated Costs, and Potential Benefits” Robert E. Nolan Company

“The Costs and Benefits of Moving to the ICD-10 Code Sets” Rand Science and Technology

## For More Information

Contact AAPC Physician Services:

2500 South 3850 West, Suite D

Salt Lake City, Utah 84120

Phone: 866-200-4157

Fax: 801-236-2258



## AAPC Physician Services

As an affiliated company of the AAPC, the largest medical coding certification body in the world, we have over 25 years of experience providing education to hundreds of thousands of medical professionals. AAPC Physician Services has a team of professionals with expertise in coding and documentation, compliance, practice management, revenue cycle improvement, ICD-10 readiness and EMR efficiency. We understand the complex health care industry and are ready to help you maximize revenue, achieve full compliance, and manage your business with confidence. We are taking an active role with physician practices, health systems, and insurance companies around the country to prepare for the coding reformation. Our ICD-10 readiness evaluations focus on diagnosis identification. Because diagnosis codes must be more specific with ICD-10, we focus on current documentation and coding practices to identify how well they will support ICD-10 requirements. With ICD-10, increased specificity and accuracy will be essential for proper payment.

### The Benefits of Preparation

- Understand the impact of ICD-10 on revenue and operations.
- Identify ICD-10 documentation deficiencies.
- Identify ICD-10 training specific to your needs.
- Avoid an increase in denied or unbillable claims.
- Prevent an interruption in revenue.
- Realize value from the transition to ICD-10.

Dixon Davis  
Vice President, AAPC Physician Services

2500 South 3850 West, Suite D  
Salt Lake City, Utah 84120  
Phone: 866-200-4157 ext. 307  
Email: [dixon.davis@aapcps.com](mailto:dixon.davis@aapcps.com)

