



# Opportunities and Challenges of the ICD-10 Transition

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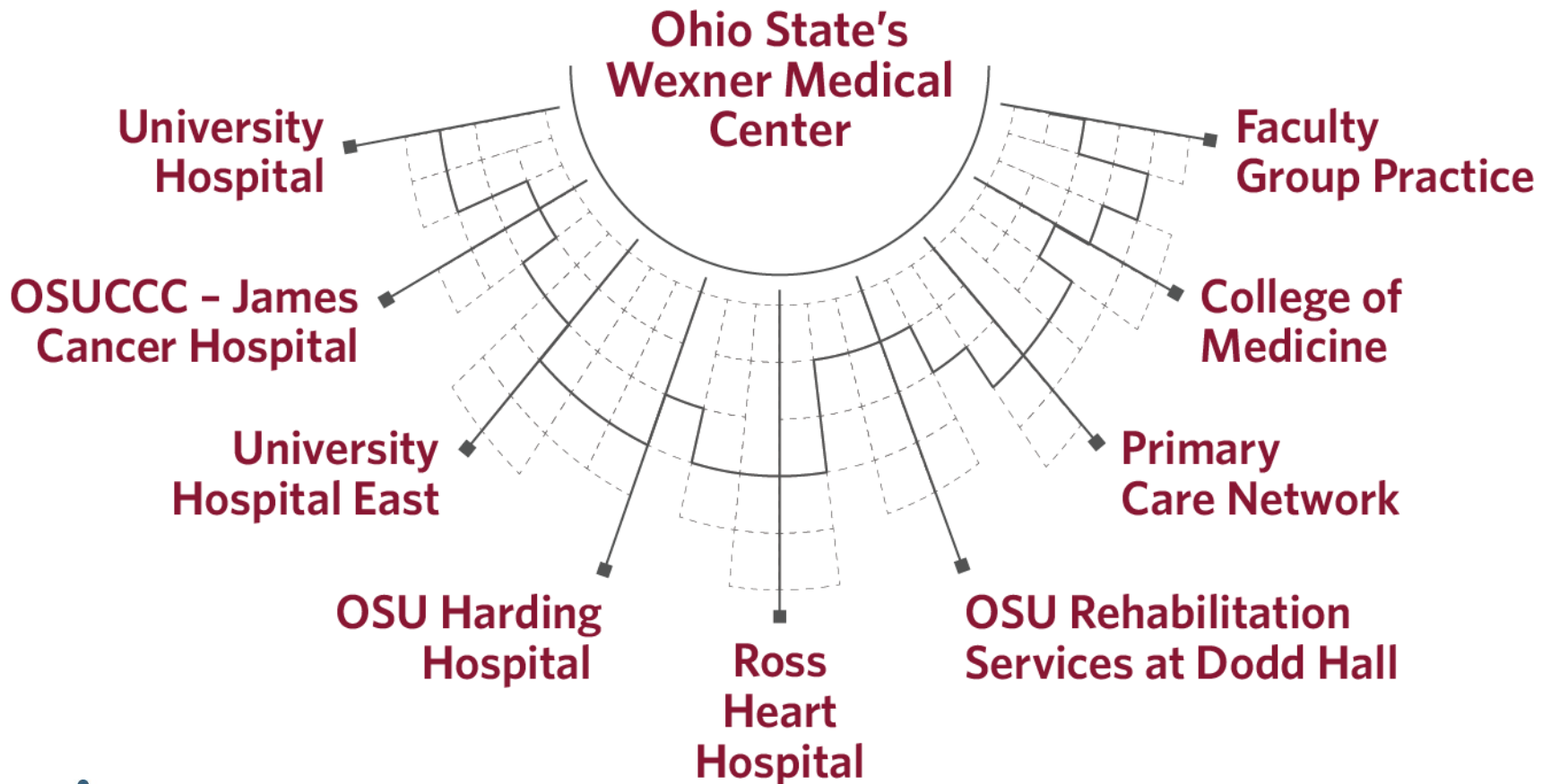
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**CENTRAL & SOUTHERN OHIO** *Chapter*

# Learning Objectives

1. Review the requirements to comply with the ICD-10 mandate
2. Provide a sample ICD-10 project plan including building, testing, and training
3. Describe suggested actions to address challenges and opportunities of the project

# Improve People's Lives Through Innovation In Research, Education And Patient Care.





The Ohio State University  
Medical Center

**A Single,  
Integrated  
Health Record**  
**RESEARCH**  
**EDUCATION**  
**PATIENT CARE**

### Quick Stats Per Year:

1.2M	Outpatient Visits
56,000	Admissions
1,400	Attending Physicians
750	Residents
24,000	End Users
55,000+	MyChart Users



CENTRAL & SOUTHERN OHIO Chapter

# ICD-10 Compliance Date

## October 1, 2014

- Single compliance date for all users
  - Date of service for ambulatory and physician reporting
  - Date of discharge for inpatient settings



# What is ICD-10?



There are 2 parts:

## 1. ICD-10-CM

International Classification of Diseases, 10<sup>th</sup> Revision, Clinical Modification (ICD-10-CM)

## 2. ICD-10-PCS

International Classification of Diseases, 10<sup>th</sup> Revision, Procedure Classification System (ICD-10-PCS)

Replaces ICD-9-CM Volumes 1,2 (Diagnoses) and 3 (Procedures)

# Why do we need to convert to ICD-10?

1. It is required
2. ICD-9-CM is over 30 years old
  - Does not provide the necessary detail
  - Has outdated and obsolete terminology
  - Has run out of space
3. The United States has not yet implemented ICD-10 for morbidity reporting.
  - Need for international data comparability

# Dramatic Increase in the Number of Codes from ICD-9 to ICD-10

## Diagnosis

- ICD-9-CM ~14,000
- ICD-10-CM ~68,000

## Procedure

- ICD-9-CM ~4,000
  - Procedure codes are related to diagnosis codes
- ICD-10-PCS ~72,000
  - Procedure codes are specific and are not related to the ICD-10-CM diagnosis codes

Studies have shown it takes more time to code in ICD-10.

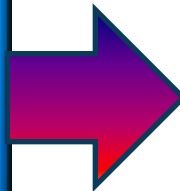


# Part One: ICD-10-CM Specificity

## ICD-9-CM

821.01 Fracture of femur, shaft, closed

One code



## ICD-10-CM

S72301A Unspecified fracture of shaft of right femur, initial encounter for closed fracture	S72322A Displaced transverse fracture of shaft of left femur, initial encounter for closed fracture	S72326A Nondisplaced transverse fracture of shaft of unspecified femur, initial encounter for closed fracture
S72301G Unspecified fracture of shaft of right femur, subsequent encounter for closed fracture with delayed healing	S72322G Displaced transverse fracture of shaft of left femur, subsequent encounter for closed fracture with delayed healing	S72326G Nondisplaced transverse fracture of shaft of unspecified femur, subsequent encounter for closed fracture with delayed healing
S72302A Unspecified fracture of shaft of left femur, initial encounter for closed fracture	S72323A Displaced transverse fracture of shaft of unspecified femur, initial encounter for closed fracture	S72331A Displaced oblique fracture of shaft of right femur, initial encounter for closed fracture
S72302G Unspecified fracture of shaft of left femur, subsequent encounter for closed fracture with delayed healing	S72323G Displaced transverse fracture of shaft of unspecified femur, subsequent encounter for closed fracture with delayed healing	S72331G Displaced oblique fracture of shaft of right femur, subsequent encounter for closed fracture with delayed healing
S72309A Unspecified fracture of shaft of unspecified femur, initial encounter for closed fracture	S72324A Nondisplaced transverse fracture of shaft of right femur, initial encounter for closed fracture	S72332A Displaced oblique fracture of shaft of left femur, initial encounter for closed fracture

Many possible codes

# Part Two: ICD-10-PCS Specificity - Angioplasty

- ICD-9-CM
- 1 code - 39.50
- ICD-10-PCS
- 854 codes
- Specifying body part, approach, and device, including
- Example:
- 047K04Z – Dilation of right femoral artery with drug-eluting intraluminal device, open approach

Character 1 Section	Character 2 Body System	Character 3 Root Operation	Character 4 Body Part	Character 5 Approach	Character 6 Device	Character 7 Qualifier
Medical and Surgical	Lower Arteries	Dilation	Femoral artery, right	Open	Drug-eluting intraluminal device	No Qualifier
0	4	7	K	0	4	Z

# ICD-10 Operational Impact



# ICD-10 Impact to the Physician

# Changes to all workflows that include diagnoses and procedures

- Diagnoses associated with orders
- Problem lists
- Inpatient progress notes
- Procedure notes
- History and physical exams
- Ambulatory progress notes

**ICD-10 impacts facility and professional billing, pre-certification and medical necessity justification**

# Selecting a Diagnosis: ICD-9-CM

## Fracture shaft of humerus: 4 codes

Database Matches

Match:  Find

ID	Name	Code
812.21A	Fracture of shaft of humerus	812.21
V54.11H	Fracture of shaft of humerus with delayed healing	V54.11
733.81CWA	Fracture of shaft of humerus with malunion	733.81
733.82CUY	Fracture of shaft of humerus with nonunion	733.82
V54.11NQ	Fracture of shaft of humerus with routine healing	V54.11
812.21Q	Fracture of shaft of humerus, closed	812.21
812.21BL	Fracture of shaft of left humerus	812.21
V54.11MD	Fracture of shaft of left humerus with delayed healing	V54.11
733.81AAL	Fracture of shaft of left humerus with malunion	733.81
733.82DMV	Fracture of shaft of left humerus with nonunion	733.82
V54.11QX	Fracture of shaft of left humerus with routine healing	V54.11
812.21BE	Fracture of shaft of right humerus	812.21
V54.11W	Fracture of shaft of right humerus with delayed healing	V54.11
733.81MV	Fracture of shaft of right humerus with malunion	733.81
733.82BAD	Fracture of shaft of right humerus with nonunion	733.82
V54.11FK	Fracture of shaft of right humerus with routine healing	V54.11
812.21	Closed fracture of shaft of humerus	812.21
812.21AA	Greenstick fracture of shaft of humerus	812.21
V54.11JM	Greenstick fracture of shaft of humerus with delayed healing	V54.11
733.81BNK	Greenstick fracture of shaft of humerus with malunion	733.81

Preference List (F5) Accept Cancel

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# Selecting a Diagnosis: ICD-10-CM

## Fracture shaft of humerus > 100 codes

Select a Diagnosis

Name/ID:

ICD-9-CM ICD-10-CM

%	ID	Name	Code
■	S42.312A	Greenstick fracture of shaft of humerus, left arm, initial encounter for closed fracture	S42.312A
■	S42.312S	Greenstick fracture of shaft of humerus, left arm, sequela	S42.312S
■	S42.312G	Greenstick fracture of shaft of humerus, left arm, subsequent encounter for fracture with delayed heal...	S42.312G
■	S42.312P	Greenstick fracture of shaft of humerus, left arm, subsequent encounter for fracture with malunion	S42.312P
■	S42.312K	Greenstick fracture of shaft of humerus, left arm, subsequent encounter for fracture with nonunion	S42.312K
■	S42.312D	Greenstick fracture of shaft of humerus, left arm, subsequent encounter for fracture with routine healing	S42.312D
■	S42.311A	Greenstick fracture of shaft of humerus, right arm, initial encounter for closed fracture	S42.311A
■	S42.311S	Greenstick fracture of shaft of humerus, right arm, sequela	S42.311S
■	S42.311G	Greenstick fracture of shaft of humerus, right arm, subsequent encounter for fracture with delayed he...	S42.311G
■	S42.311P	Greenstick fracture of shaft of humerus, right arm, subsequent encounter for fracture with malunion	S42.311P
■	S42.311K	Greenstick fracture of shaft of humerus, right arm, subsequent encounter for fracture with nonunion	S42.311K
■	S42.311D	Greenstick fracture of shaft of humerus, right arm, subsequent encounter for fracture with routine hea...	S42.311D
■	S42.319A	Greenstick fracture of shaft of humerus, unspecified arm, initial encounter for closed fracture	S42.319A
■	S42.319S	Greenstick fracture of shaft of humerus, unspecified arm, sequela	S42.319S
■	S42.319G	Greenstick fracture of shaft of humerus, unspecified arm, subsequent encounter for fracture with dela...	S42.319G
■	S42.319P	Greenstick fracture of shaft of humerus, unspecified arm, subsequent encounter for fracture with mal...	S42.319P
■	S42.319K	Greenstick fracture of shaft of humerus, unspecified arm, subsequent encounter for fracture with non...	S42.319K
■	S42.319D	Greenstick fracture of shaft of humerus, unspecified arm, subsequent encounter for fracture with routi...	S42.319D
■	S42.302A	Unspecified fracture of shaft of humerus, left arm, initial encounter for closed fracture	S42.302A
■	S42.302B	Unspecified fracture of shaft of humerus, left arm, initial encounter for open fracture	S42.302B
■	S42.302S	Unspecified fracture of shaft of humerus, left arm, sequela	S42.302S
■	S42.302G	Unspecified fracture of shaft of humerus, left arm, subsequent encounter for fracture with delayed he...	S42.302G
■	S42.302P	Unspecified fracture of shaft of humerus, left arm, subsequent encounter for fracture with malunion	S42.302P
■	S42.302K	Unspecified fracture of shaft of humerus, left arm, subsequent encounter for fracture with nonunion	S42.302K

50 matches found. More to load. Double click to select. [Get more](#)

Accept Cancel

# ICD-10 Impact to the Health Information Management Department



# Coders and Clinical Documentation Specialists

- ICD-10 training
- Results of financial and documentation gap analysis
  - Target queries for additional documentation specificity required
- Dual coding to master skills
- New software for computer assisted coding?
- New software for clinical documentation improvement?

# ICD-10 Oversight Structure

ICD-10 Steering Committee

ICD-10 Implementation Team

- EMR Build Team
- Non EMR Application Team
- ICD-10 Reporting
- Project Management
- Communication/ Awareness/Training
- Managed Care/ Finance/Rev Cycle
- Physician Practice Plan

# ICD-10 High Level Timeline

**FY 2013**

**FY 2014**

**FY 2015**



# System Analysis: Inventory all systems that need to convert to ICD-10

- Coding system
- Ancillary systems
  - RIS
  - Pathology
  - Lab
- Billing systems
  - ABN software
  - Claims scrubber
- Finance systems
  - Contract modeling
- Case Management

*Et cetera.....*

# Identify Workflow Changes

## Challenge: Specify Where Clinicians Can Use Generic or Specific Terms

- As an institution you will need to determine what level of codes will drive physician tools.
  - Will clinicians be required to enter specific diagnosis information on the problem list?
  - Will the system be configured to lead a physician to a specific code when ordering tests or entering a visit diagnosis?
- Based on your facilities rules, the system must be configured to accommodate the desired business rules.
- Examples:
  - Hybrid Workflow: Clinicians search for either a generic or specific diagnosis. If a clinician selects a generic diagnosis, the Diagnosis Calculator appears and the doctor can use it to identify a billable diagnosis.
  - Default Workflow: Clinicians search for only specific diagnoses
  - Two-Step Workflow: Clinicians always search for a generic diagnosis first and then use the Diagnosis Calculator when needed to identify a billable diagnosis

# Confirm functionality of EMR vendor and add to plan

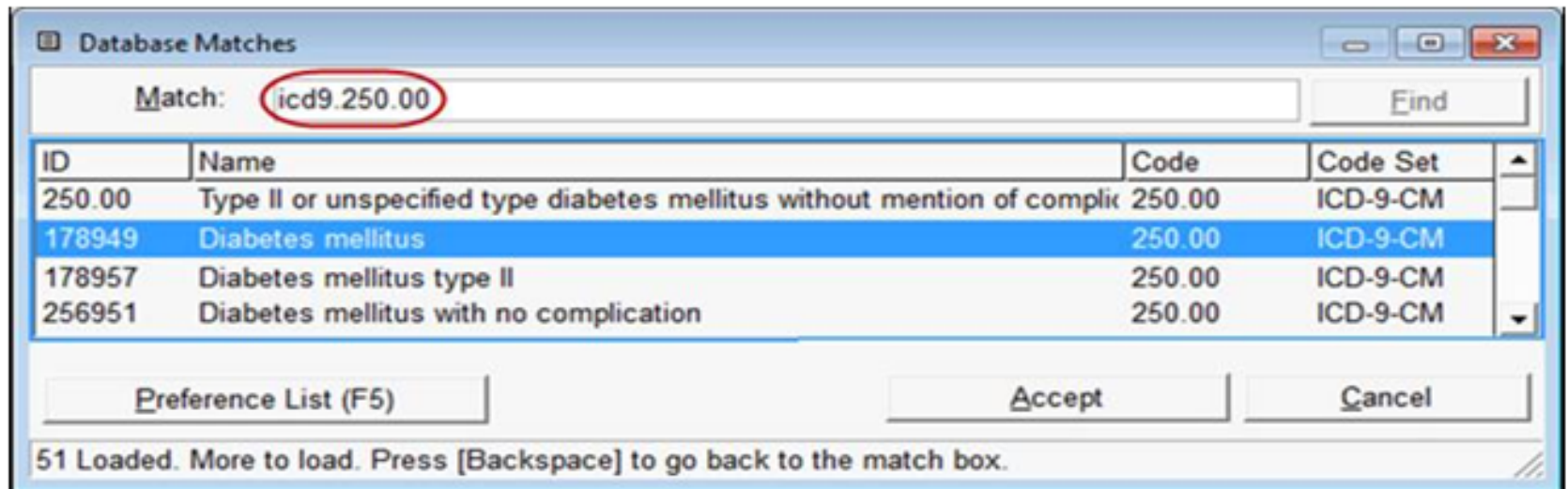
1. Determine if you can set up checks at multiple points during the revenue cycle to ensure that charges and accounts are coded using the correct code set
2. Can your system assist the clinician in selecting the most appropriate code?
3. Can billers and coding specialists switch between I-9 and I-10 code sets?
4. Plan to use CMS mappings or equivalent product to translate I-10 codes to I-9 codes during claim generation for non-compliant payors.

# EMR System Build and Testing

- Requires collaboration between builders and coding experts
  - Preference Lists
  - Smart Text
  - Diagnosis Calculator
  - Reports
  - Treatment Plans
  - Order sets
  - Future orders

# 1<sup>st</sup> Change for Clinicians: Importing Diagnosis Content into EMR

- If you search for a diagnosis using an ICD-9 code, the system might not find the code you're used to seeing because the conversion modifies the external ID so that it no longer relates directly to the ICD-9 code. **To find the correct diagnosis in these situations:**
  - If the code does not return a diagnosis description, look up the diagnosis using **clinical terms** (such as "diabetes mellitus") OR
  - To continue searching for diagnoses using ICD-9 codes, add the mnemonic shortcut **code.<code>** to the beginning of the code you enter:





# 1<sup>st</sup> Change for Clinicians: Importing Diagnosis Content into EMR

If a diagnosis you search for is associated with multiple ICD-9 codes, all of the codes will appear in the Code column. In addition, all associated codes are included in charges for the selected diagnosis. All of the codes that appear are linked to the diagnosis and can be billed. Select the term that is most clinically relevant for the patient.

ID	Name	Code	Code Set	
178949	Diabetes mellitus	250.00	ICD-9-CM	
315404	Diabetes mellitus and insipidus with optic atrophy and deafness	250.50, 253.5, 3	ICD-9-CM	
256947	Diabetes mellitus arising in pregnancy	648.80	ICD-9-CM	
178971	Diabetes mellitus associated with hormonal etiology	250.80	ICD-9-CM	
315377	Diabetes mellitus associated with pancreatic disease	250.80, 577.9	ICD-9-CM	
178974	Diabetes mellitus associated with receptor abnormality	250.80	ICD-9-CM	
719012	Diabetes mellitus complicating pregnancy	648.00	ICD-9-CM	
321932	Diabetes mellitus complicating pregnancy, antepartum	648.03	ICD-9-CM	
635781	Diabetes mellitus complicating pregnancy, childbirth, or the puerperium	648.00	ICD-9-CM	

# Partner testing

- Requires coordination between:
  - IT
  - Patient financial services
  - Billing software vendors
  - Payors
  - Health information management
- Requires sample accounts for testing



# Dual coding

- Coders have been trained in a classroom setting
- IT is updating our coding system to permit the coders to code the same accounts in both ICD-9 and ICD-10
- Critical to developing skills learned in the classroom
- Provides sample accounts to be used for testing

## ICD-10 Time Studies



- “Productivity losses expected to range from 10% to 50%”

Source: Quadramed. *Maintaining and Improving Coding Productivity in the ICD-10 Era*

- “It is reasonable to expect a serious dip in coder productivity with the ICD-10 implementation, from 25 percent to 30 percent for diagnosis coding, and much higher for the new inpatient procedure coding—up to 50 percent.”

Source: **ICD-10 Productivity** by JoAnn Jordan, MPH, RHIA, CCS-P, AHIMA ICD10-CM/PCS Trainer *HIMSS Newsletter* July 16, 2013.

- “Overall, on average it took, 17.72 minutes or 69% longer to code a record in ICD-10-CM/PCS”

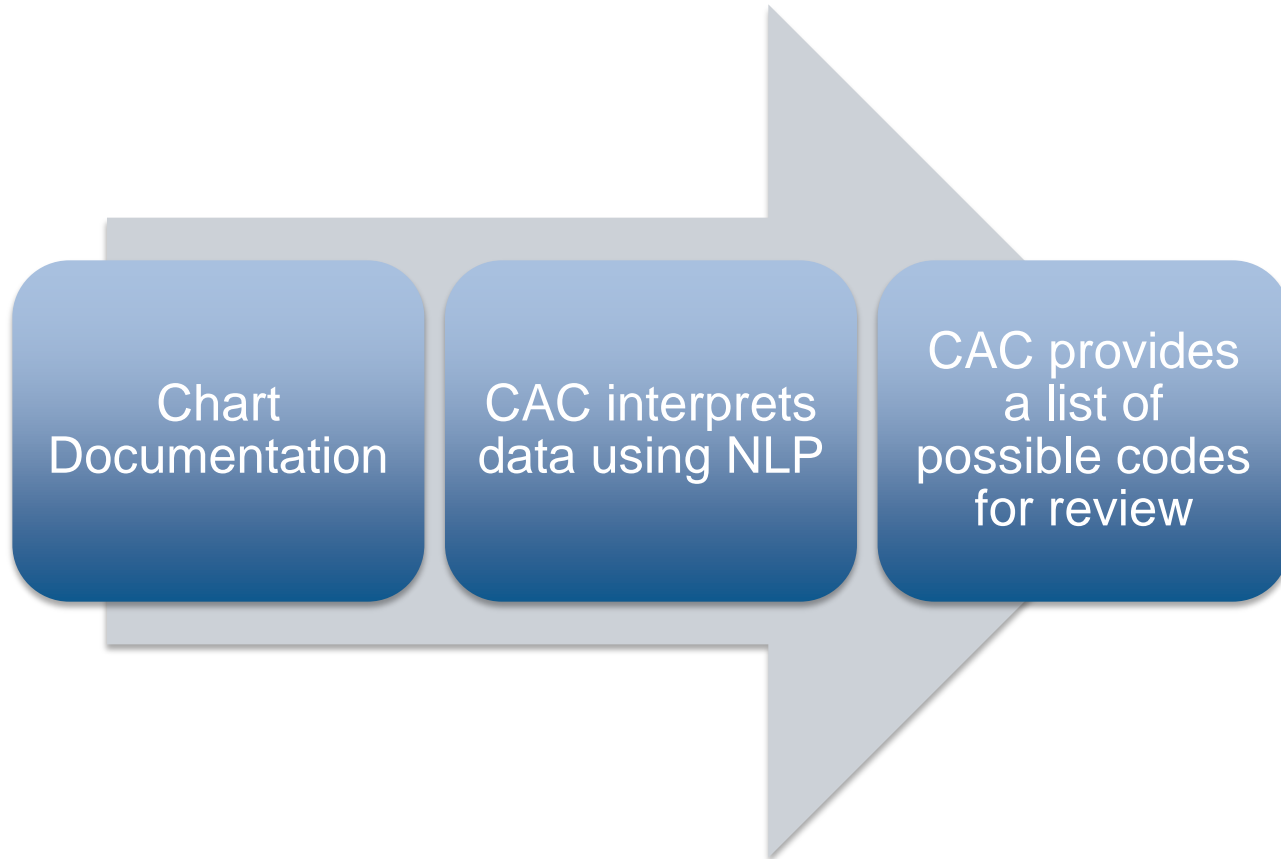
Source: Mary Stanfill. *UASI - Coder ICD-10 Productivity: a Time Study*. 2012.

# Tool to assist in conversion to ICD-10: Computer Assisted Coding (CAC)

- Addresses in part need for additional coding staff
- Software that is used to abstract data using natural language processing (NLP)
- Produces suggested codes based on information in the electronic medical record



# Workflow in CAC



# New Role for Coding Specialists



Transition to  
more of an  
auditor role

Use analytical  
skills to  
interpret  
instead of  
searching for  
details

# Advantages of Computer Assisted Coding

1. Increases productivity and efficiency in coding
2. Improves workflow
3. Captures how the codes were selected
4. Reports codes that may be missed
5. Produces more accurate and consistent results







TURN IT UP TO 10.  
ICD-10

### Training and Education Plan:

1. Materials on intranet site – *IT managed*
2. Computer-based training modules – *requires assistance from IT to assign modules to staff by title/role*
3. Meetings and presentations – *IT co-presenter*
4. Tip sheets – *IT designed*
5. Video on changes in EMR – *IT education team*
6. One-on-one review of impact on clinicians' documentation – *IT produced top diagnosis and DRG reports*
7. Concurrent review of documentation and feedback through CDI and coding staff – *IT supported coding and CDI query processes*

# Financial Challenges and Mitigation Plan

## CHALLENGES

1. Cash  and Accounts Receivable 
2. Payors not ready 
3. Systems not ready by compliance date
4. Coding specialists take longer to code and accounts awaiting coding 
5. Coding and billing edits not updated, causing claims to fail

## MITIGATION PLAN

1. Test with payors, train staff, be prepared to add staff to address decrease in productivity
2. Install computer assisted coding
3. Test and be ready to use reimburse maps to translate from I10 to I9 if necessary
4. Work with vendors to assure systems are ready
5. Update and test edits

# Training Challenges and Mitigation Plan

## CHALLENGES

1. Staff not adequately trained
2. Documentation not at the level of specificity required

## MITIGATION PLAN

1. On-line resources
2. Provide introductory training on-line
3. Provide classroom training for coders; give them time to develop their skills before the compliance date
4. Provide specialty specific education one-on-one with clinicians
5. Complete documentation gap analysis and target documentation improvement
6. Begin querying clinicians for specificity required for ICD-10 before the compliance date

*Staff will need differing levels of education on ICD-10 based on their role*

*Clinicians will need training on the detailed documentation required*

# Quality Challenges and Mitigation Plan

## CHALLENGES

- Rankings and ratings tied to coding decrease
- Inaccurate DRG or APC

## MITIGATION PLAN

- Monitor assignment of codes, SOI and ROM, DRG and APC
- Target coding and documentation improvement based on results

# Resource Allocation Challenges and Mitigation Plan

## CHALLENGES

1. Inadequate project staffing
2. Competing projects
3. Inadequate budget
4. Inadequate supply of coders nationally

## MITIGATION PLAN

1. Confirm resources assigned
2. Schedule activities to ensure all resources will be available when needed
3. Confirm budget is approved
4. Plan for additional staff in the event of unplanned vacancies, inadequate staffing, or new project work

***Does your plan include the potential costs of new hardware, software, software updates and testing, overtime, consulting assistance, agency coders and training?***



# Closing Remarks Collaboration & Inquiry