



HEALTHCARE

ICD-10: Much more than a Regulatory Mandate

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KPMG LLP



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An Overview of ICD-10 – What is it?

ICD-10 is the **world standard for classifying diseases** for the clinical and epidemiological storage and retrieval of diagnostic information, health services payments, standardized health records, and public health assessments, and it includes compilations of national mortality and morbidity statistics.

The United States is the last of the developed nations to adopt ICD-10. Because **ICD-10 compliance** will be **required for claims submission and payment**, the **U.S. implementation effort will be far more complex** than it was for other countries.

ICD-10 must be implemented by October 1, 2013.

ICD-10 represents the biggest change in the standard healthcare coding systems in decades. ICD-10 and its transaction precursor, **Version 5010**, will **impact every system, process, and transaction** that contains or uses a diagnosis code.

Gartner Research predicts “**the effect of ICD-10 on the health care industry will be greater than that of HIPPA and Y2K combined.**”

The **Rand Corporation** estimated the **cost of implementing ICD-10** at **\$425 million to \$1.15 billion** in one-time costs and **potential benefits** to the industry of **\$7.7billion** over ten years.

*Gartner, U.S. Health Insurers Should Start Planning Now for ICD-10 Adoption, 28 June 2007, G00149538, Robert H. Booz.
The Rand Corporation, Costs and Benefits of Moving to the ICD-10 Code Sets, 2004*

Comparison of ICD-9 and ICD-10

The following is a comparison between ICD-9 and ICD-10 as well as potential benefits:

ICD-9

- Implemented over 30 years ago

- Approximately 24,000 diagnosis and procedure codes that are insufficient to continue to allow for addition of new codes
- Number of characters is 3–5 numeric
- Limitations of underlying data used for patient care improvement, institutional quality reviews, medical research, and reimbursement can become increasingly unreliable

ICD-10

- Compliance date for implementation by October 1, 2013

- Approximately 155,000 diagnosis and procedure codes
- Number of characters is 3–7 alphanumeric
- Flexible coding convention that allows new procedures, diagnosis, and technologies to help in being easily incorporated
- Greater specificity of diagnosis and treatment information that can improve quality measurements and patient safety, the evaluation of medical processes and outcomes, and enhance the accuracy of payments for services rendered
- Precise codes to differentiate body parts, surgical approaches, and devices used
- Use of more robust ICD-10 codes will help support Electronic Health Record's more detailed information requirements

Why ICD-10?

ICD-10 Clinical Modification

**ICD-10
Procedure
Coding System
(ICD-10-PCS)**

**Does not
replace CPT
codes for
outpatient**

Complete Restructuring of Diagnosis and Procedure Codes

**ICD-9-CM
(Diagnosis)
5 digits numeric
14,025 unique codes**



**ICD-10-CM
7 alphanumeric
characters
69,101 unique codes**

**ICD-9-CM
(Procedure)
5 digits
3,824 unique codes**



**ICD-10-PCS
(In Patient)
7 alphanumeric
characters
71,957 unique codes**

Who Must Be Compliant?

The following organizations must become compliant by 2013:

Providers

- Hospitals
- Physicians
- Outpatient facilities
- Home health agencies
- Nursing homes

Health Plans or Payors

- Third-party administrators

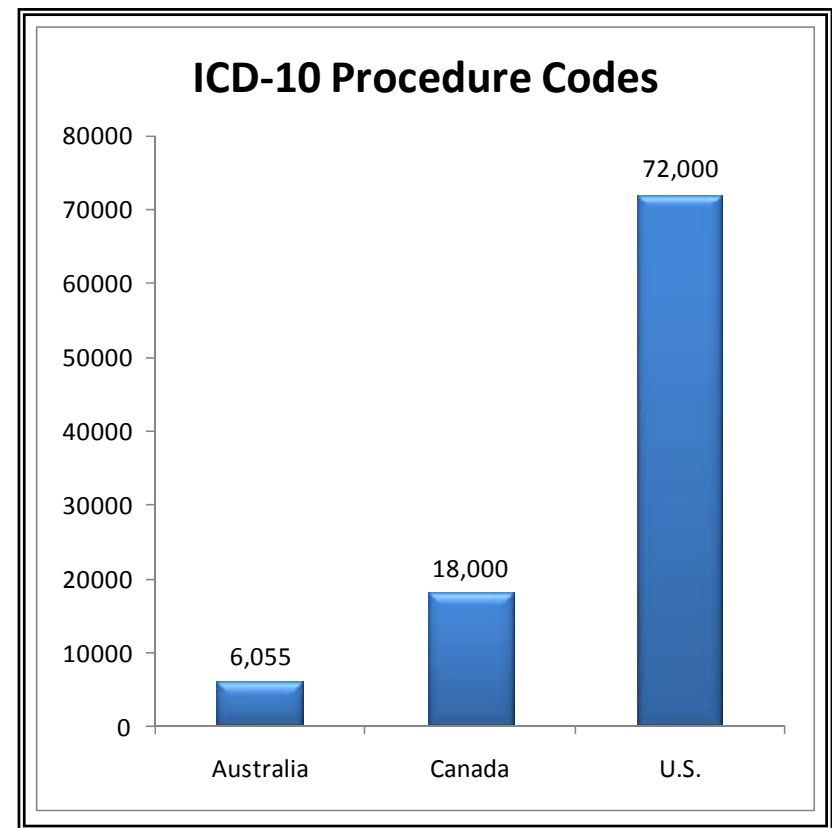
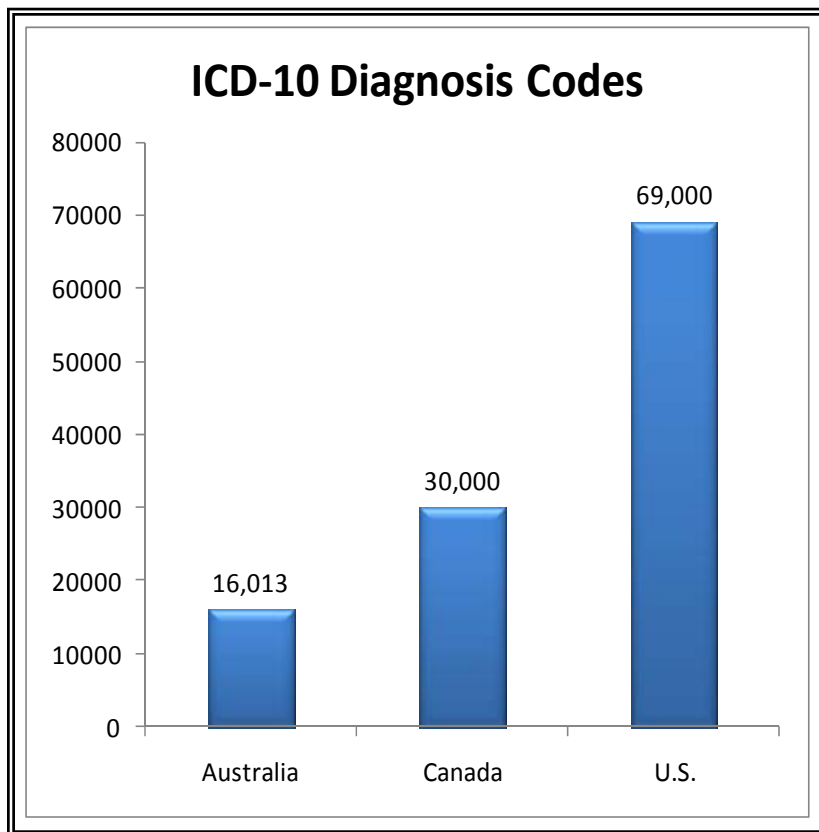
Federal and State Agencies

- State Medicaid departments
- Centers for Disease Control



ICD-10 Complexity

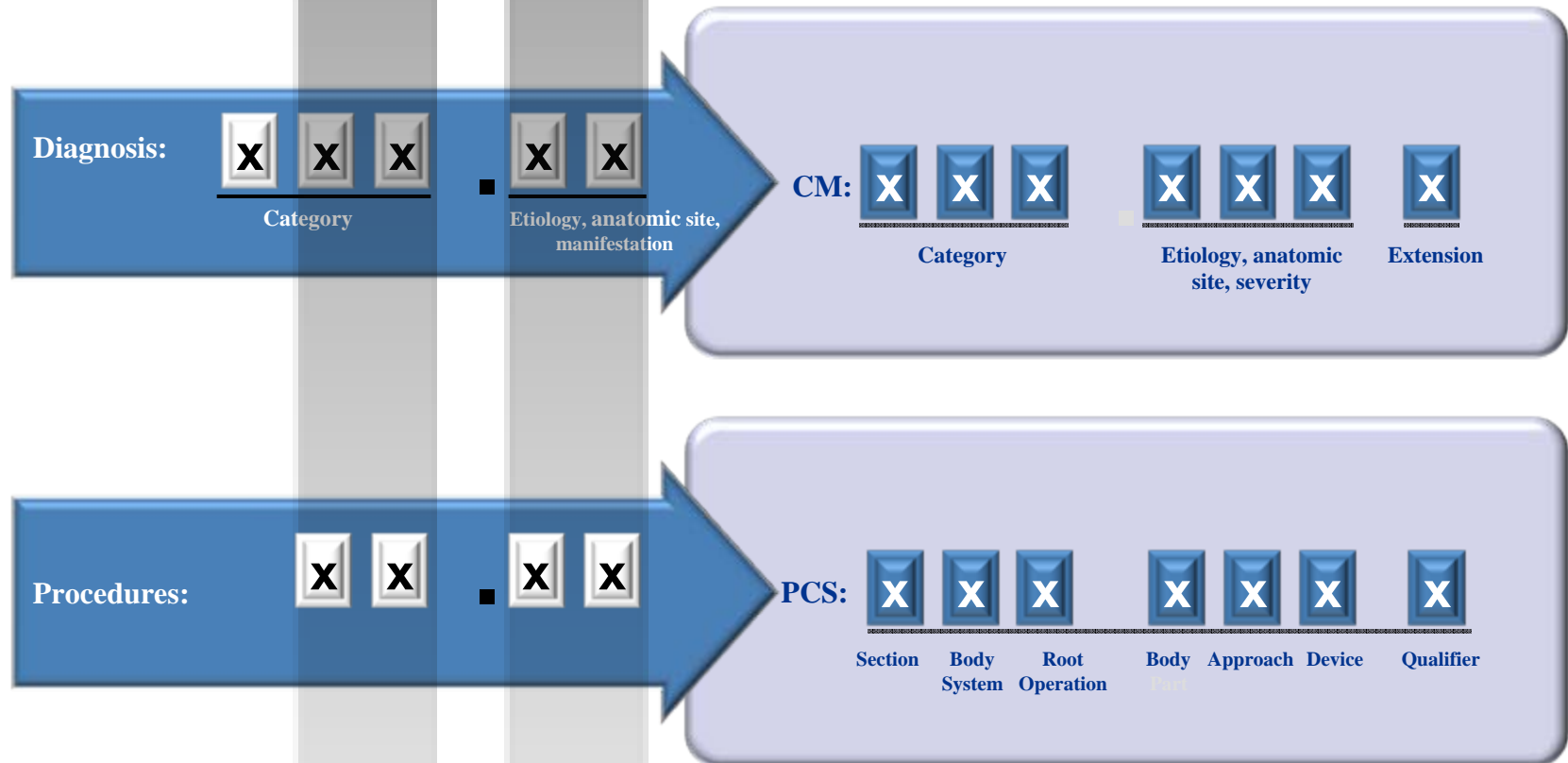
The US ICD-10 classifications are far more complex than those that have been deployed in other countries:



ICD-10 Structural Change

ICD-9-CM

ICD-10



Complexity of Mapping Codes

Approximate Matches: Example of and ICD-9-PCS code with multiple valid translations

0 2 . 1 1
Simple suture of dura mater of brain

OR

0 0 Q 2 0 Z Z

Repair of dura mater, open approach

OR

0 0 Q 2 3 Z Z

Repair of dura mater, percutaneous approach

0 0 Q 2 4 Z Z

Repair of dura mater, percutaneous endoscopic approach

Complexity of Mapping Codes (continued)

Combination Matches: An Example of One ICD-10-PCS code that must be linked to multiple ICD-9-CM codes

0 2 7 1 3 D Z

Dilation of coronary artery, two sites using intraluminal device, percutaneous approach

AND

0 0 . 6 6

PTCA or coronary atherectomy

AND

0 0 . 4 1

Procedure on two vessels

AND

0 0 . 4 6

Insertion of two vascular stents

3 0 . 0 6

Insertion of non-drug-eluting coronary artery stents

One-to-Many Relationship

4 ICD-9 Codes

845.00 Sprain and strain of ankle unspecified site

845.01 Sprain and strain of ankle, Deltoid ligament/ Internal collateral ligament

845.02 Sprain and strain of ankle, Calcaneofibular (ligament)

845.03 Sprain and strain of ankle, Tibiofibular (ligament) distal

S93.401A Sprain of unspecified ligament of right ankle – initial encounter
S93.401D Sprain of unspecified ligament of right ankle – subsequent encounter
S93.401S Sprain of unspecified ligament of right ankle – sequela
S93.402A Sprain of unspecified ligament of left ankle – initial encounter
S93.402D Sprain of unspecified ligament of left ankle – subsequent encounter
S93.402S Sprain of unspecified ligament of left ankle – sequela
S93.409A Sprain of unspecified ligament of unspecified ankle – initial encounter
S93.409D Sprain of unspecified ligament of unspecified ankle – subsequent encounter
S93.409S Sprain of unspecified ligament of unspecified ankle – sequela
S93.421a Sprain of deltoid ligament of right ankle – initial encounter
S93.421d Sprain of deltoid ligament of right ankle – subsequent encounter
S93.421q Sprain of deltoid ligament of right ankle – Sequela
S93.422a Sprain of deltoid ligament of left ankle – initial encounter
S93.422d Sprain of deltoid ligament of left ankle – subsequent encounter
S93.422q Sprain of deltoid ligament of left ankle – sequela
S93.429a Sprain of deltoid ligament of ankle unspecified – initial encounter
S93.429d Sprain of deltoid ligament of unspecified ankle – subsequent encounter
S93.429q Sprain of deltoid ligament of unspecified ankle – sequela
S93.411A Sprain of calcaneofibular ligament of right ankle – initial encounter
S93.411D Sprain of calcaneofibular ligament of right ankle – subsequent encounter

S93.411S Sprain of calcaneofibular ligament of right ankle – sequela
S93.412A Sprain of calcaneofibular ligament of left ankle – initial encounter
S93.412D Sprain of calcaneofibular ligament of left ankle – subsequent encounter
S93.412S Sprain of calcaneofibular ligament of left ankle – sequela
S93.419A Sprain of calcaneofibular ligament of unspecified ankle – initial encounter
S93.419D Sprain of calcaneofibular ligament of unspecified ankle – subsequent encounter
S93.419S Sprain of calcaneofibular ligament of unspecified ankle – sequela
S93.431A Sprain of tibiofibular ligament of right ankle – initial encounter
S93.431D Sprain of tibiofibular ligament of right ankle – subsequent encounter
S93.431S Sprain of tibiofibular ligament of right ankle – sequela
S93.432A Sprain of tibiofibular ligament of left ankle – initial encounter
S93.432D Sprain of tibiofibular ligament of left ankle – subsequent encounter
S93.432S Sprain of tibiofibular ligament of left ankle – sequela
S93.439A Sprain of tibiofibular ligament of unspecified ankle – initial encounter
S93.439D Sprain of tibiofibular ligament of unspecified ankle – subsequent encounter
S93.439S Sprain of tibiofibular ligament of unspecified ankle – sequela
S93.491A Sprain of other ligament of right ankle (Internal collateral/talofibular) initial encounter
S93.491D Sprain of other ligament of right ankle (Internal collateral/talofibular) subsequent encounter

72 ICD-10 Codes

S93.491S Sprain of other ligament of right ankle (Internal collateral/talofibular) sequela
S93.492A Sprain of other ligament of left ankle, initial encounter
S93.492D Sprain of other ligament of left ankle subsequent encounter
S93.492S Sprain of other ligament of left ankle sequela
S93.499A Sprain of other ligament of unspecified ankle initial encounter
S93.499D Sprain of other ligament of unspecified ankle subs encounter
S93.499S Sprain of other ligament of unspecified ankle (Internal collateral/talofibular) sequela
S96.211A Strain of intrinsic muscle and tendon at right ankle and foot level initial encounter
S96.211D Strain of intrinsic muscle and tendon at right ankle and foot level subsequent encounter
S96.211S Strain of intrinsic muscle and tendon at right ankle and foot level sequela
S96.212A Strain of intrinsic muscle and tendon at left ankle and foot level initial encounter
S96.212D Strain of intrinsic muscle and tendon at left ankle and foot level subsequent encounter
S96.212S Strain of intrinsic muscle and tendon at left ankle and foot level sequela
S96.219A Strain of intrinsic muscle and tendon at ankle and foot level, unspecified side initial encounter
S96.219D Strain of intrinsic muscle and tendon at ankle and foot level, unspecified side subs encounter
S96.219S Strain of intrinsic muscle and tendon at ankle and foot level, unspecified side
S96.811A Strain of other muscles and tendons at right ankle and foot level initial encounter
S96.811D Strain of other muscles and tendons at right ankle and foot level subsequent encounter

S96.811S Strain of other muscles and tendons at right ankle and foot level sequela
S96.812A Strain of other muscles and tendons at left ankle and foot level initial encounter
S96.812D Strain of other muscles and tendons at left ankle and foot level subsequent encounter
S96.812S Strain of other muscles and tendons at left ankle and foot level sequela
S96.819A Strain of other muscles and tendons at ankle and foot level, unspecified side initial encounter
S96.819D Strain of other muscles and tendons at ankle and foot level, unspecified side subs encounter
S96.819S Strain of other muscles and tendons at ankle and foot level, unspecified side sequela
S96.911A Strain of unspecified muscle and tendon at right ankle and foot level initial encounter
S96.911D Strain of unspecified muscle and tendon at right ankle and foot level subs encounter
S96.911S Strain of unspecified muscle and tendon at right ankle and foot level sequela
S96.912A Strain of unspecified muscle and tendon at left ankle and foot level initial encounter
S96.912D Strain of unspecified muscle and tendon at left ankle and foot level subs encounter
S96.912S Strain of unspecified muscle and tendon at left ankle and foot level sequela
S96.919A Strain of unspecified muscle and tendon at ankle and foot level, unspec. side initial encounter
S96.919D Strain of unspecified muscle and tendon at ankle and foot level, unspec. side subs encounter
S96.919S Strain of unspecified muscle and tendon at ankle and foot level, unspec. side sequela



CMS GEMs and CMS Reimbursement Mappings

- General Equivalence Mappings (GEMs) have been created by CMS and CDC with input from both AHA and the AHIMA.
- The GEMs are forward and backward mappings between the ICD-9-CM and the ICD-10 coding system, also referred to as “crosswalks.”
- GEMs are redesigned to go both directions similar to a Spanish--English and English--Spanish dictionary.
- There is not a one-to-one match between ICD-9-CM and ICD-10 for the following reasons:
 - There are new concepts in ICD-10 that are not present in ICD-9-CM
 - For a small number of codes, there is no matching code in the GEM
 - There may be multiple ICD-9-CM codes for a single ICD-10 code
 - There may be multiple ICD-10 codes for a single ICD-9 code

Source: CMS Second Series “General Equivalent Mappings”

CMS GEMs and CMS Reimbursement Mappings (continued)



- Crosswalks are a complex but necessary solution.
- Crosswalks require a significant level of validation.
- Mutual agreement with key business partners on mapping logic will be required.
- Different crosswalks will create different impacts on reimbursement.

ICD-10 Has Far-Reaching Impacts Within the Payor Organization

ICD-10 is not an IT or vendor solution event.

Rather...

Many business areas, systems, processes, and tools are affected

Billing and Claim Payment

Trend Analysis

External Reporting

Medical Policies

Financial Reporting

Provider Contracting

Pricing/Underwriting

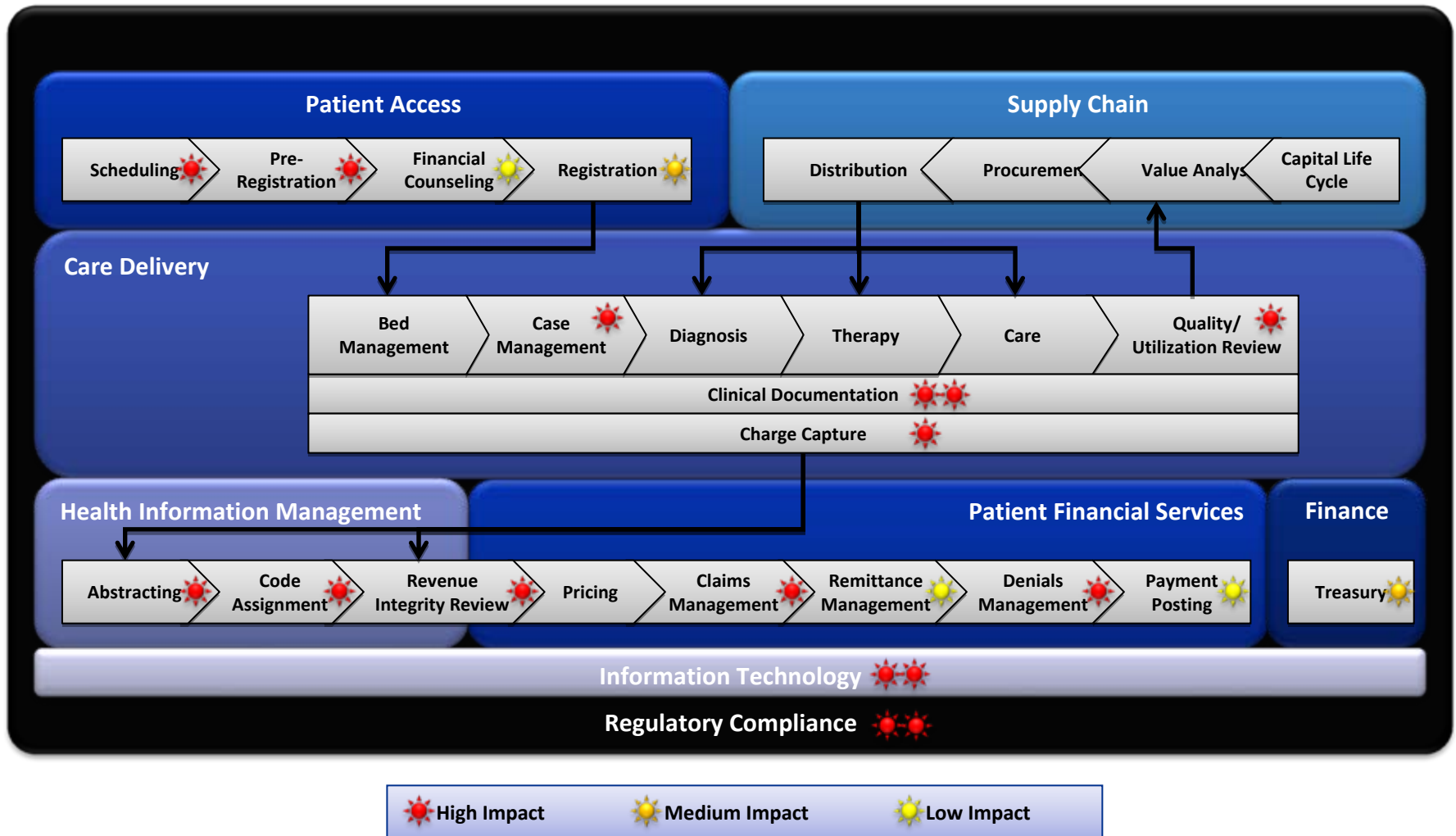
Disease Management

Outcomes Reporting

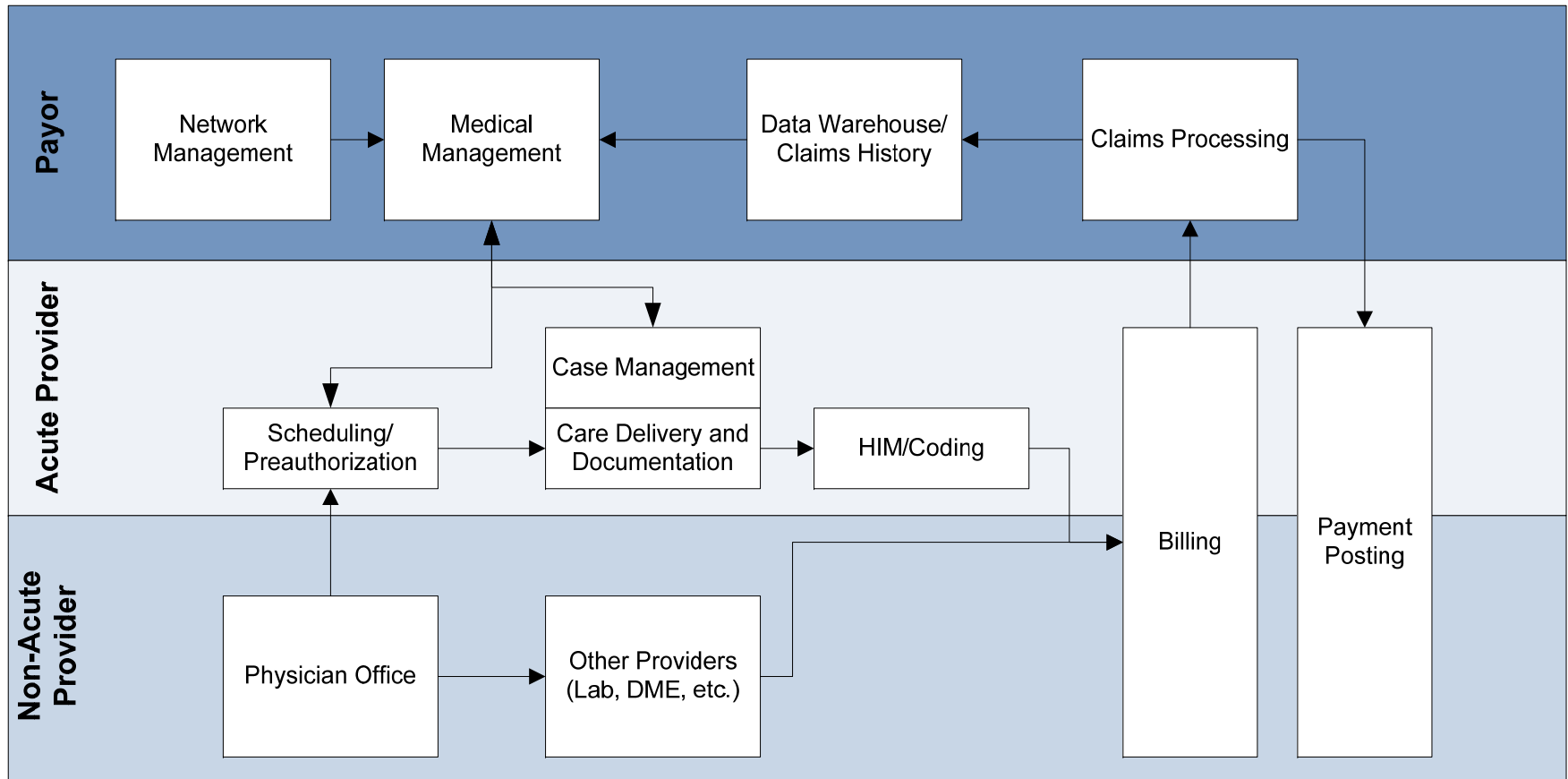
Benefits
Reporting

A comprehensive assessment that identifies all affected business areas will result in a successful and optimized remediation

The Likely Business Process Impacts of ICD-10 for Providers



Business Partner Collaboration



Potential Architectural Approach

ILLUSTRATIVE

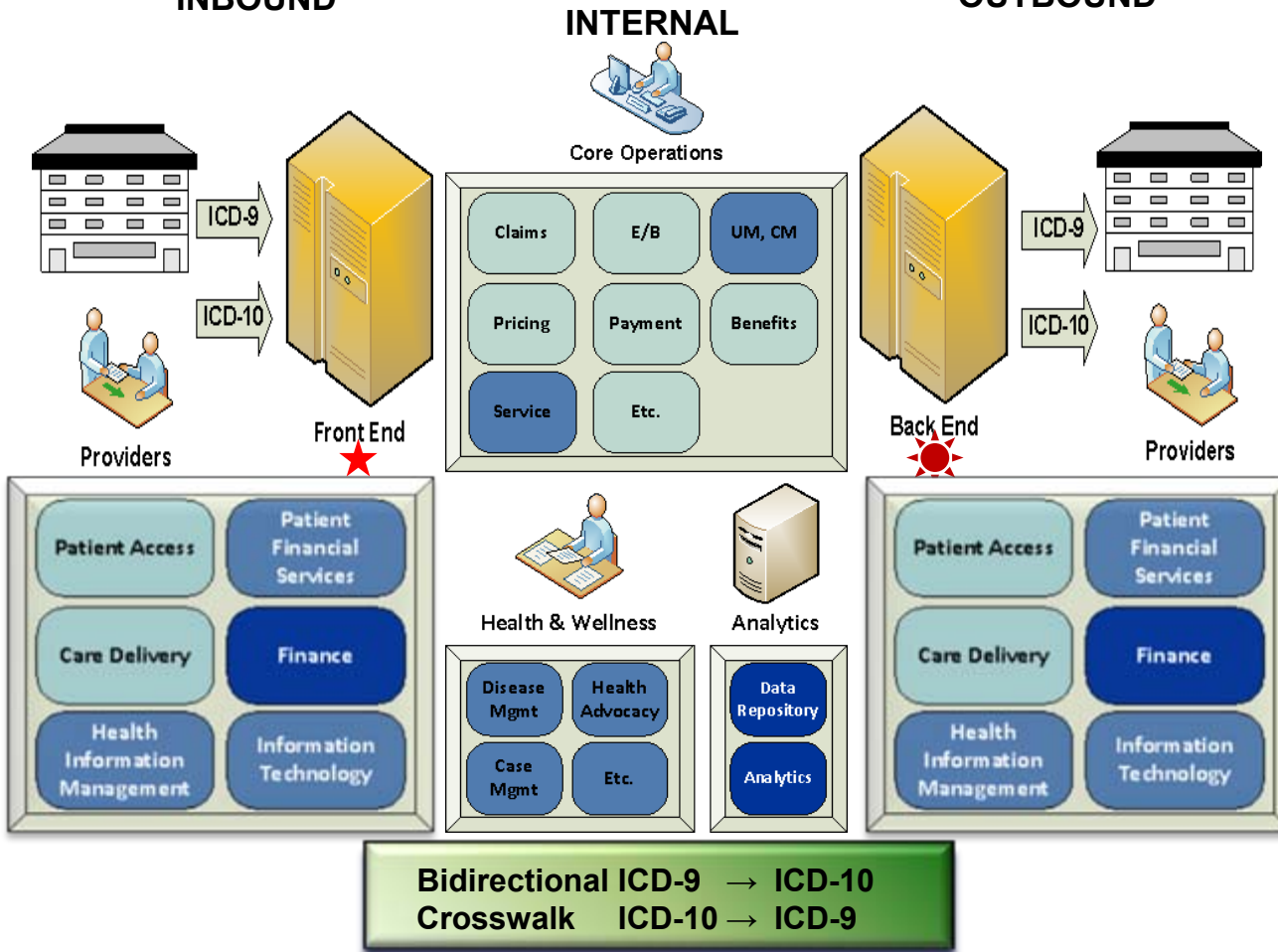
INBOUND

INTERNAL

OUTBOUND

Legend:

- Systems function based on ICD-9 rules and logic and insulated from ICD-10 codes
- Systems remediated to support ICD-10 codes
- Some systems remain ICD-9 based, some support ICD-10 codes
- Crosswalk translates ICD-9 codes to ICD-10 codes and vice versa
- Middleware systems transform and/or "thread" ICD-10 data as necessary
- The decision engine determines if the ICD-9 or ICD-10 coded transaction needs conversion based on the ICD-10 readiness of each operational area
- Boundary accepts and transmits in the format the external partner uses



Where Does ICD-10 Fit In?

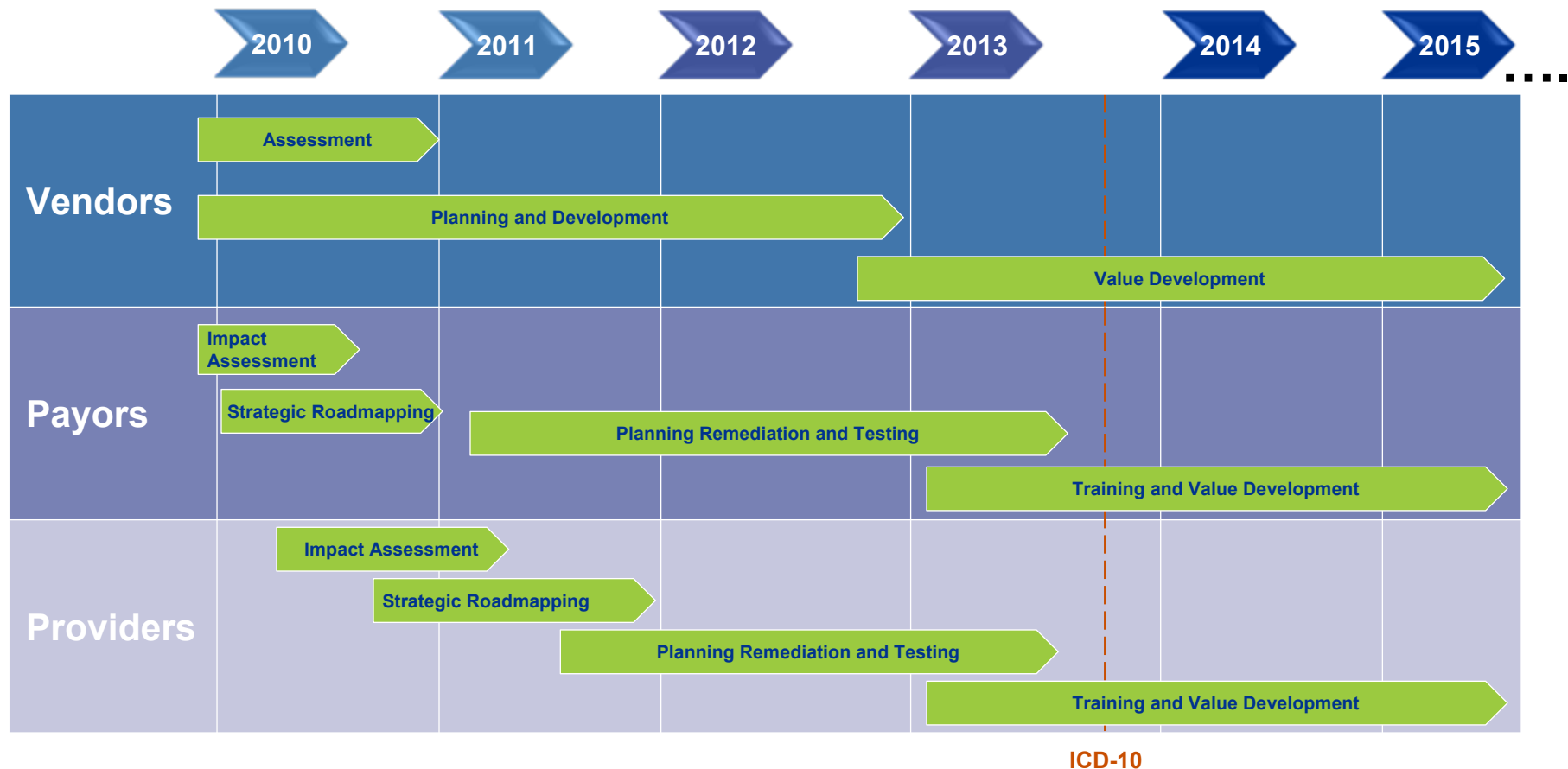
The Final Rule, issued by the Department of Health and Human Services (DHHS) on January 16, 2009, identifies seven benefits that are anticipated to result from the transition to ICD-10:

- More accurate payments for new procedures
- Fewer rejected claims
- Fewer improper claims
- Better understanding of new procedures
- Improved disease management
- Better understanding of health conditions and healthcare outcomes
- Harmonization of disease monitoring and reporting worldwide



KPMG's Perception of the ICD-10 Implementation Time Line

The focus of ICD-10 within each segment of the healthcare industry will evolve over the next five years.



ICD10 – Assess Impact



Areas for Consideration Regarding ICD-10 Compliance Strategy

**Business Process
Impacts –
Optimizing
Business
Processes**

**Accurately Adjust
Contractual,
Analytical, and
Projections**

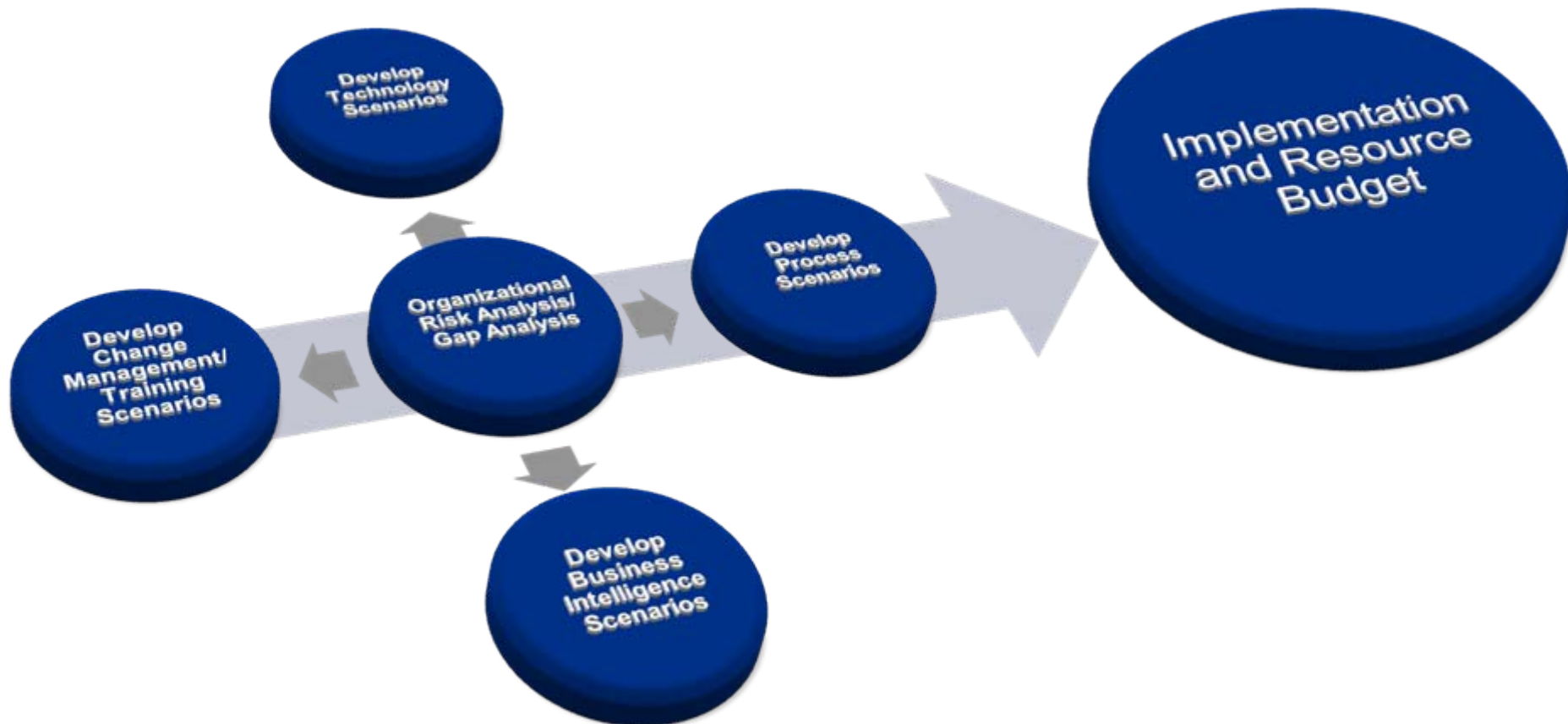
**Successful
ICD-10
Compliance**

**Architectural/IT
Solutions/Testing**

**Vendor/Third-
Party Compliance**

Training, Education, Communication, Change Management, Issue Resolution

ICD10 – Identify Strategic Options



Varying Strategies of Compliance

	Minimum	Moderate	Optimized
Return	<ul style="list-style-type: none">• Achieve basic compliance• Lower level of investment	<ul style="list-style-type: none">• Achieve compliance• Enhance business processes• Achieve some positive returns	<ul style="list-style-type: none">• Achieve larger savings• Realize improved accuracy of reporting, processing, and trending• Implement ICD-10 throughout the entire organization
Example Activities	<ul style="list-style-type: none">• High reliance on crosswalks with limited native ICD-10 processing• Minimal strategic benefits achieved• Minimal to no process improvement	<ul style="list-style-type: none">• Utilize ICD-10 to enhance operations, reporting and analytical tools• Advance IT systems and capabilities	<ul style="list-style-type: none">• Achieve accuracy of data reporting and pricing• Evaluate new and emerging strategic relationships



ICD-10 Business Challenges

Industry stakeholders should have a full understanding of the business impacts of ICD-10, such as:

- Business Unit level:
 - Key business processes
 - Current and future operating models
 - Change management and training requirements
 - Resource deployment
 - Financial and budgetary (opportunity costs)
- Enterprise level:
 - Impact to an organizations 2010 business strategy objectives and beyond
 - The development of multiyear plans and budgets to accommodate the ICD-10 capital requirements
 - Potential new capabilities that provide added strategic opportunity and value to the company
 - Clear understanding of the ICD-10 enterprise risks to the organization
 - Multiyear impacts to current and future budgeted projects
- Finance level:
 - Financial statement, balance sheet, and EPS
 - Cash flow and reserve requirements



Success = Transformation Sustainability

Reform and transformation should fundamentally inform strategy and execution

Exceptional execution across current mandates is a requirement

- ◆ Meaningful use
- ◆ ICD-10
- ◆ Market consolidation exposures
- ◆ Other transformation drivers

In parallel, working to develop and/or refine a strategy of “transformation sustainability”

- Opportunity cost for not moving in parallel may be material



QUESTIONS?



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