State Medicaid
ICD-10 Implementation Assistance Handbook

Health Innovation

Prepared by
the Centers for Medicare & Medicaid Services (CMS), Center for Medicaid, Children's Health Insurance Program (CHIP) and Survey & Certification (CMCS)

Version 3.1
January 4, 2011
Reference: GSA Contract No. GS-10F-0189T
Task Order No. HHSM-500-2009-00058G

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1. Executive Summary

By October 1, 2013, the Centers for Medicare & Medicaid Services (CMS), including the Center for Medicaid, Children's Health Insurance Program (CHIP) and Survey & Certification (CMCS)[1], must transition to the International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) and the International Classification of Diseases, Tenth Revision, Procedure Coding System (ICD-10-PCS) code sets from the current International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) code set. Hereinafter ICD-10-CM and ICD-10-PCS will be referred to as ICD-10. References to ICD-9-CM include diagnosis and procedures codes unless otherwise specified. As entities covered under the Health Insurance Portability and Accountability Act (HIPAA) of 1996, State Medicaid Agencies (SMAs) are also required to transition to ICD-10 for use on all transactions for services and discharges dates occurring on and after October 1, 2013.[2]

In addition to the adoption of ICD-10, the Secretary of HHS also adopted the new versions of the HIPAA electronic transactions standards (Version 5010, D.0, and 3.0), which must be implemented by January 1, 2012.[3] Implementation of 5010 is a prerequisite to process ICD-10 claims as the current HIPAA transaction standards (i.e., 4010) cannot support the ICD-10 code formats. Coordination is necessary between the 5010 and ICD-10 implementations to effectively identify impacted transactions, systems, trading partners and data mapping.

The transition to ICD-10 will impact every system, process, and transaction that contains or uses a diagnosis or procedure code. Direct effects to state Medicaid plans include, but are not limited to the following:

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

In an effort to assist SMAs with the transition from the ICD-9-CM code set to the ICD-10 code set, CMCS and Noblis developed this Implementation Assistance Handbook as an explanatory document to provide SMAs with the tools and knowledge to support ICD-10 implementation. This document provides guidelines around the recommended activities to meet the

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1 Please refer to Appendix A for a complete list of acronyms used in this report.

2 For the purposes of this document, ICD-10 is used throughout the document to refer to the Clinical Modification (ICD-10 CM) and Procedure Code System (ICD-10 PCS).

3 Health Insurance Reform; Modifications to the Health Insurance Portability and Accountability Act (HIPAA) Electronic Transaction Standards [74 FR 3296]

implementation milestone dates, compliance deadlines, and start-to-finish dates according to the Medicaid ICD-10 Implementation Schedule.

Purpose

The purpose of this handbook is to do the following:

1) Identify the limitations of the current ICD-9-CM code set and to highlight the benefits of implementing ICD-10;
2) Organize the actions associated with the ICD-10 transition into manageable phases of: awareness, assessment, remediation, testing, and transition;
3) Outline strategies and activities to consider for each phase;
4) Provide a timeline with milestones, key activities, inputs, and outputs outlined in the implementation schedule; and
5) Recommend next steps for CMS/CMCS, Regional Offices (ROs), and SMAs.

Limitations of ICD-9-CM

ICD-9-CM has significant, impactful limitations[4]:

- Character length does not accommodate all necessary code additions and proposals;
- Diagnosis codes lack clinical specificity;
- Fails to define healthcare data analytics accurately;
- Inhibits the interoperability of health data exchange; and
- Contains insufficient information for claims reimbursement and the use of value-based purchasing methodologies.

Benefits of ICD-10

In 1990, the World Health Organization (WHO) revised the ICD classification system based on opportunities to improve upon ICD-9-CM limitations. ICD-10 has several desirable benefits[5]:

- Updates terminology and disease classifications consistent with current clinical practices, medical, and technological advances;
- Expands flexibility for future updates to the codes as necessary;
- Enhances coding accuracy and specificity to classify anatomic site, etiology, and severity;
- Provides detailed clinical information in a single ICD-10 procedure code;
- Improves operational processes across healthcare industry; and
- ICD 10-CM may improve the ability of policy makers to compare and contrast the morbidity of various countries' populations and the performance of their health systems.[6]

[4] http://library.ahima.org/xpedio/groups/public/documents/ahima/bok3_005426.hcsp?dDocName=bok3_005426
[5] http://library.ahima.org/xpedio/groups/public/documents/ahima/bok3_005426.hcsp?dDocName=bok3_005426

Transitioning to ICD-10

Table 1 presents the high-level elements and actions required to complete the transition from ICD-9-CM to ICD-10.

Table 1: Strategic Actions to Transition to ICD-10

Strategic Element	Recommended Actions
Collaborative Governance	• Establish a governance structure with multi-stakeholder engagement • Provide administrative oversight • Administer budget and manage fund utilization for ICD-10 planning and implementation
Comprehensive Project Management	• Establish an ICD-10 Project Management Office (PMO) • Assign responsibility for developing and executing an ICD-10 Implementation plan • Ensure coordination among planning and implementation groups (i.e., ROs, SMAs, and 3rd Parties)
Critical Infrastructure	• Continue to advance MMIS (Medicaid Management Information System) along the Medicaid Maturity Model (MMM) to accommodate ICD-10 code requirements, enhance interoperability, and improve functionality
Core Processes and Policies	• Redesign business processes and workflows impacted by ICD-10 • Update impacted policies prior to ICD-10 implementation
Knowledge Repository	• Establish a knowledge repository • Use knowledge gained from existing initiatives to improve future implementations • Share information with states that have similar programs and systems
Resource Allocation	• Develop a resource allocation plan • Leverage subject matter expert (SME) resources across business areas

[6] Note: ICD-10 is often tailored to the specific needs of individual countries; however its diagnosis codes are often comparable at a higher (category) level. While the US ICD-10 CM codes are not the same as the WHO international standard, they do share many points of commonality at a higher code level.

Strategic Element	Recommended Actions
Funding	• Prepare and submit Advance Planning documents to CMS in a timely manner
Risk Mitigation Strategies	• Anticipate implementation issues and risks • Develop timely risk mitigation strategies to reduce barriers to implementation • Develop decision making framework with clear accountability and authority

Medicaid ICD-10 Implementation Timeline

Figure 1 presents the Medicaid ICD-10 Implementation Schedule (or timeline) with the details for each milestone and task at a level applicable to all SMAs. Each SMA will need to detail the supporting tasks needed to complete milestones and key deliverables. The SMA should identify the tasks and work effort required to remediate their unique business processes, systems, and policies for ICD-10.

Figure 1: Medicaid ICD-10 Implementation Schedule/Project Plan

State Medicaid Agency ICD-10 Timeline

ID	Task Name	Duration	Start	Finish
1	**State Medicaid Agency ICD-10 Implementation**	**933.94 days**	**Wed 9/1/10**	**Sun 3/30/14**
2	**Critical Dependencies**	**0 days**	**Sat 1/1/11**	**Sat 1/1/11**
3	*Track 5010 (Compliance Date: January 1, 2012)*	0 days	Sat 1/1/11	Sat 1/1/11
5	**Awareness**	**923 days**	**Wed 9/1/10**	**Fri 3/14/14**
6	**Internal Awareness, Communication, and Education/Training**	**923 days**	**Wed 9/1/10**	**Fri 3/14/14**
7	Provide Awareness Training to ICD-10 Leadership and ICD-10 Team	3 emons	Wed 9/1/10	Tue 11/30/10
8	Educate and Train Staff (including training during transition and implementation)	40 emons	Tue 11/30/10	Fri 3/14/14
9	**External Awareness, Communications, and Outreach**	**859 days**	**Tue 11/30/10**	**Fri 3/14/14**
10	Conduct Communications with State Entities/Trading Partners/Providers/Contractors/Vendors	40 emons	Tue 11/30/10	Fri 3/14/14
11	Monitor Trading Partner ICD-10 Transition Status	39 emons	Thu 12/30/10	Fri 3/14/14
12	Identify and Leverage Partnering/Outreach Opportunities (with providers, advisory boards, etc.)	40 emons	Tue 11/30/10	Fri 3/14/14
13	**Assessment**	**193.94 days**	**Wed 9/1/10**	**Sun 5/29/11**
14	**High-level planning for ICD-10 activities**	**42.94 days**	**Wed 9/1/10**	**Sun 10/31/10**
15	Establish an Executive Sponsorship, ICD-10 Steering Committee, ICD-10 Point of Contact	1 emon	Wed 9/1/10	Fri 10/1/10
16	Establish and Organize Impact Assessment Team	1 emon	Wed 9/1/10	Fri 10/1/10
17	Review/Establish Program Management Office and Governance Structure	1 emon	Fri 10/1/10	Sun 10/31/10
18	Develop Tools/Processes to Facilitate Assessment Activities	3 emons	Wed 9/1/10	Tue 11/30/10
19	**Perform Impact Assessment**	**64 days**	**Fri 10/1/10**	**Thu 12/30/10**
20	Identify Policies Impacted by ICD-10	3 emons	Fri 10/1/10	Thu 12/30/10
21	Identify Processes Impacted by ICD-10	3 emons	Fri 10/1/10	Thu 12/30/10
22	Identify Systems Impacted by ICD-10	3 emons	Fri 10/1/10	Thu 12/30/10
23	Identify Impacts of ICD-10 on Trading Partners/Providers/Contractors/Vendors Relations	3 emons	Fri 10/1/10	Thu 12/30/10
24	Document and Communicate Impact Assessment Findings	1 emon	Tue 11/30/10	Thu 12/30/10
26	Determine Administrative Budget for DDI and O&M	1 emon	Tue 11/30/10	Thu 12/30/10
27	**Develop Remediation Strategy/Plan**	**107.94 days**	**Thu 12/30/10**	**Sun 5/29/11**
28	Create and Receive Approval of Remediation Strategy for Policies, Processes, and Systems (including Cross-Walking and Mapping Strategies)	3 emons	Thu 12/30/10	Wed 3/30/11
29	Create End-to-End Testing Strategy	1 emon	Mon 2/28/11	Wed 3/30/11
31	**Develop Financial Plans**	**64.94 days**	**Mon 2/28/11**	**Sun 5/29/11**
32	Forecast Claims Payments with ICD-10 Codes	1 emon	Mon 2/28/11	Wed 3/30/11
33	Develop and Execute Resource Acquisition Plan	3 emons	Mon 2/28/11	Sun 5/29/11
34	Develop Advanced Planning Documents (APDs), and Coordinate APD Approvals	3 emons	Mon 2/28/11	Sun 5/29/11
35	Establish and Organize Remediation Team	1 emon	Mon 2/28/11	Wed 3/30/11
36	Develop Detailed Implementation Plans	2 emons	Wed 3/30/11	Sun 5/29/11
37	**Remediation**	**257.06 days**	**Sun 5/29/11**	**Wed 5/23/12**
38	Develop Updates to Policies	3 emons	Sun 5/29/11	Sat 8/27/11
39	Develop Updates to Processes	3 emons	Sun 5/29/11	Sat 8/27/11
40	**IT Changes**	**257.06 days**	**Sun 5/29/11**	**Wed 5/23/12**
41	Develop System Requirements and Change Requests	3 emons	Sun 5/29/11	Sat 8/27/11
42	Design System Changes	2 emons	Sat 8/27/11	Wed 10/26/11
43	Develop System Changes	6 emons	Wed 10/26/11	Mon 4/23/12
44	Perform System Tests for Each System	2 emons	Sat 3/24/12	Wed 5/23/12
46	**End-to-End Testing**	**353 days**	**Thu 2/23/12**	**Tue 7/2/13**
47	Develop Test Plans and Test Data	2 emons	Thu 2/23/12	Mon 4/23/12
48	Test Internally: End-to-End - Level I Testing	6 emons	Mon 4/23/12	Sat 10/20/12
49	Test Externally: Partner End-to-End - Level II Testing	9 emons	Fri 10/5/12	Tue 7/2/13
51	**Transition**	**256.94 days**	**Thu 4/4/13**	**Sun 3/30/14**
52	Publish Final Rule and Sub-regulatory Policy Updates	6 emons	Thu 4/4/13	Tue 10/1/13
53	Publish Final Rule and Sub-regulatory Process Updates	6 emons	Thu 4/4/13	Tue 10/1/13
54	Transition and Implement System Changes	3 emons	Wed 7/3/13	Tue 10/1/13
56	**Post Transition Support**	**192.94 days**	**Wed 7/3/13**	**Sun 3/30/14**
57	Provide Customer Support	6 emons	Wed 7/3/13	Mon 12/30/13
58	Monitor Operations	9 emons	Wed 7/3/13	Sun 3/30/14

Next Steps

To execute the schedule and plan for ICD-10 implementation effectively, this handbook recommends the following actions:

CMS/CMCS

1) Update and distribute the Implementation Assistance Handbook and supplemental materials to ROs;
2) Assist ROs with ICD-10 implementation support requests; and
3) Assist SMAs with ICD-10 implementation support requests.

RO

1) Distribute any updates to this Implementation Assistance Handbook or supplemental materials to SMAs;
2) Assist SMAs with ICD-10 implementation support requests; and
3) Assist SMAs with removal of implementation barriers.

SMA

- Customize this Implementation Assistance Handbook and supplemental materials to develop and execute their ICD-10 implementation plans;
- Report ICD-10 implementation progress to the relevant RO and to CMCS on a quarterly basis; and
- Collaborate internally with State entities affected by ICD-10 and externally with SMAs experiencing similar barriers.

2. Introduction

The World Health Organization (WHO) publishes the ICD, which defines codes to classify diseases, signs, symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or disease. In 1977, the WHO published the ICD-9-CM code set.

In 1990, the WHO updated to the international version of the ICD-10 code set for mortality reporting. Other countries began adopting ICD-10 in 1994; the United States (US) only partially adopted ICD-10 in 1999 for mortality reporting. At present, however, the US is in the process of fully implementing ICD-10.

Implementation of 5010 is a prerequisite to processing ICD-10 claims as the current HIPAA transaction standards (i.e., 4010) cannot support the ICD-10 code formats. Coordination is necessary between the 5010 and ICD-10 implementations to effectively identify impacted transactions, systems, trading partners, and data mapping to support 5010 and ICD-10. The compliance deadline for ICD-10 implementation in the US is October 1, 2013 and all HIPAA covered entities are required to adopt ICD-10 for use in all HIPAA transactions for services provided on or after the compliance date.

2.1 Purpose of Document

An ICD-10 Medicaid Online Self Assessment administered by CMS in April of 2010 indicated that many SMAs are at high risk for not being able to complete ICD-10 implementation by the compliance date. CMCS and Noblis are assisting SMAs reach the ICD-10 implementation compliance deadline of October 1, 2013. As part of this effort, CMCS engaged Noblis to prepare an Implementation Assistance Handbook to assist the SMAs through the actions required to implement ICD-10. In the fall of 2010, CMCS conducted conference calls with all SMAs to assess what their technical assistance needs are for implementation. This handbook addresses some technical assistance needs requested during those calls.

2.2 Document Scope

This section identifies the in scope and out of scope topics for this handbook.

2.2.1 In Scope

The topics that are in scope for this handbook include:

- The limitations of the current ICD-9-CM state and the benefits of implementing the future ICD-10 state;
- The actions required for each phase (awareness, assessment, remediation, testing, and transition) of the ICD-10 implementation;
- Awareness, assessment, remediation, testing, and transition strategies for ICD-10; and

- A timeline with milestones, key activities, inputs, and outputs outlined in the implementation plan.

2.2.2 Out of Scope

The following topics are out of scope for this report:

- Processes or tasks that are outside of the direct responsibility and control of the SMA;
- Developing SMA-specific implementation plans.

2.3 Methodology

CMCS and Noblis relied on industry-wide implementation timelines and educational materials from CMS, public workgroups, the private sector, internal project subject matter expertise and the results of the ICD-10 online self assessment to develop the content of the implementation guidance.

2.4 Related Documents

The following artifacts are relevant to this handbook:

- The **ICD-10 Medicaid Online Self Assessment** references the raw data collected from all SMA participants in the first administration of the ICD-10 Readiness Assessment;
- The **National, ROs, and SMAs Reports** contain detailed results of the ICD-10 Medicaid Online Self Assessment from a national, regional, and state perspective;
- The **MITA Business Process ICD-10 Impact Analysis Report** details the global impact of implementing ICD-10 on SMA business processes; and
- The **CMS ICD-10 Impact Analysis** describes the ICD-10 impact on Medicare.[7]

2.5 Document Organization

The remainder of this handbook consists of the following sections:
Section 3: The ICD-9-CM Environment – describes the problems with the current state of ICD-9-CM and limitations.

Section 4: The Future ICD-10 Environment – identifies ICD-10 potential benefits and opportunities to improve from the ICD-9-CM code set.

Section 5: Medicaid ICD-10 Implementation Steps and Actions – describes the actions, steps, and processes to complete the five ICD-10 implementation phases: awareness, assessment, remediation, testing and transition.

Section 6: Medicaid ICD-10 Implementation Timeline – provides guidance around the ICD-10 implementation plan, milestone tasks, key activities, inputs, outputs and start-finish dates for the ICD-10 implementation by the SMAs.

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[7] *http://www.cms.gov/ICD10/04_CMSImplementationPlanning.asp*

Section 7: Next Steps – identifies the SMA's immediate next steps for the states to plan for ICD-10 implementation.

3. The ICD-9-CM Environment

This section explains the limitations of the ICD-9-CM classification system.

3.1 Current ICD-9-CM State

The National Center for Health Statistics (NCHS), the Federal agency responsible for use of the International Statistical Classification of Diseases and Related Health Problems, developed ICD-9-CM in the 1970s to assign diagnosis codes attributed to inpatient, outpatient, and physician care. The ICD is copyrighted by the World Health Organization (WHO), which owns, publishes the classification and enforces modifications conform to WHO conventions for ICD. The ICD-9-CM consists of three volumes: Volumes I and II classify medical diagnosis codes and Volume III defines inpatient procedure codes. [8] The ICD-9-CM is updated periodically to incorporate code modifications that improve coding accuracy, support international interoperability to classify morbidity and mortality statistics, and identify updated medical knowledge and technical advances.

3.2 Limitations of ICD-9-CM

The following bullets highlight specific limitations of ICD-9-CM[9]:

- The ICD-9-CM code set does not have the character length to accommodate all necessary code additions and proposals to reflect a medical procedure, condition or diagnosis accurately. As a result, billing coders have a difficult time identifying the appropriate code for rendered healthcare services.
- Due to the limitations of the number of characters supported by ICD-9-CM, the detail of the condition of the diagnosis or condition is not defined.

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8 *http://www.acep.org/practres.aspx?id=30476*

9 http://library.ahima.org/xpedio/groups/public/documents/ahima/bok3_005426.hcsp?dDocName=bok3_005426

- ICD-9-CM diagnosis codes lack clinical specificity to account for complexity or severity of medical diseases/diagnoses and conditions.
- Due to code ambiguity, ICD-9-CM codes fail to define healthcare data analytics accurately such as healthcare utilization, costs and outcomes, resource use and allocation, and performance measurement.
- The delay in the United States (US) adoption of ICD-10 has inhibited the interoperability of health data exchange and comparability between the US and other industrialized nations that have adopted ICD-10. Note: ICD-10-CM may not be interoperable at the detailed level.
- ICD-9-CM codes are insufficient for claim reimbursement and the use of value-based purchasing methodologies due to the lack of code specificity and detail

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

- Follows a 1970s outdated medical coding system;
- Lacks clinical specificity to process claims and reimbursement accurately;
- Fails to capture detailed healthcare data analytics; and
- Limits the characters available (3-5) to account for complexity and severity.

4. The Future ICD-10 Environment

This section identifies ICD-10 potential benefits and opportunities to improve the existing ICD-9-CM coding system.

4.1 Benefits of ICD-10

In 1997 the NCHS revised the ICD-10 classification system to improve upon ICD-9-CM identified limitations. The list below identifies specific benefits of ICD-10[10]:

- Expands flexibility to update the codes as necessary due to the increase from a maximum of 4 or 5 characters to 7 characters.
- Enhances coding accuracy and specificity to classify anatomic site, etiology, and severity.
- Provides detailed information about the nature of a procedure performed in a hospital setting. Each character in the 7 character ICD-10-PCS code identifies some aspect of the procedure such as 'body system', 'root operation', 'body part', or 'surgical approach.'
- Provides detailed information about the location of the condition, severity, co-morbidities, complications, sequelae, and a variety of other important clinical parameters of conditions that are not supported in ICD-9-CM diagnosis codes.
- Improves operational processes across healthcare industry by classifying detail within codes to accurately process payments and reimbursements. In effect, accurate coding reduces the volume of rejected claims due to ambiguity. In addition, the detail embedded within ICD-10 codes informs healthcare providers and health plans of patient incidence and history, improving case management and care coordination.
- Allows the U.S. to compare health data across international borders to track and monitor the incidence and spread of disease and treatment outcomes at a higher category level.

ICD-10 codes refine and improve SMA operational capabilities and processing. ICD-10 benefits include:

- Detailed health reporting and analytics: cost, utilization, and outcomes;
- Detailed information on condition, severity, co-morbidities, complications, and location;
- Expanded coding flexibility by increasing code length to seven characters; and
- Improves operational processes across healthcare industry by classifying detail within codes to accurately process payments and reimbursements. The detail embedded in the ICD-10 codes informs healthcare providers and health plans of patient incidence and history, improving case management and care coordination.

[10] http://library.ahima.org/xpedio/groups/public/documents/ahima/bok3_005426.hcsp?dDocName=bok3_005426

4.2 ICD-10 Opportunities in MITA Business Areas

ICD-10 codes may improve the effectiveness and efficiency of several MITA business areas.[11] The table below includes five different MITA Business Areas and their corresponding ICD-10 opportunities. The information provided was extracted from the MITA ICD-10 Impact Analysis. For template information refer to Appendix B – Templates and Artifacts.

[11] This document refers to the MITA 2.01 Framework.

Table 2: ICD-10 Opportunities in MITA Business Areas

MITA Business Area	ICD-10 Code Usage	ICD-10 Opportunities
Operations Management	The Operations Management business processes use ICD-10 codes for processing claims, service authorization, and premium preparation, to check recipient lifetime limits, verify clinical appropriateness of services, and suspend claim encounters.	• Improve the accuracy and efficiency of claim payments and processing due to greater coding specificity • Enhance and improve accuracy of data analytics and reporting (i.e., utilization and reimbursement trending) • Improve health plan and provider relationships by reducing disputes related to granular coding and payment structure
Program Management	Program Management activities include adding new codes, adjusting rates associated with codes, and adding and updating existing rates, benefits, provider information, and drug formulary information.	• Improve specificity for beneficiary programs to better meet the needs of the population • Improve clarity in benefit packages • Increase accuracy in accounting processes utilizing decision support system • Ability to improve process to identify fraud and abuse • Flexibility to improve quality of care utilizing healthcare data analytics, including cost of care and medical management • Increase accuracy in benefit packages due to greater granularity of ICD-10

MITA Business Area	ICD-10 Code Usage	ICD-10 Opportunities
Provider Management	Provider Management activities include provider enrollment and disenrollment. As providers enroll in Medicaid with specialty/taxonomy, it is possible that they could be limited in some way to treatment of the diseases that fit within their specialty. If the diseases they treat fall outside of their specialty, this could be a program integrity issue. As some providers limit their own practice (e.g., OB/GYN providers quit delivering babies), those diagnoses could be removed from the provider profile. As a result of a provider disenrolling, members may be notified and/or reassigned to a provider with similar allowed services. Provider management tracks, logs, and governs the provider appeals process, which references ICD-10 codes.	• Decrease the number of appeals and grievances due to greater accuracy in record keeping and claims processing • The increased detail in ICD-10-CM offers the ability to provide contracting more appropriate to the level of severity and condition
Contractor Management	Contractor Management business area processes include Requests For Proposals (RFP), reviews of content against an RFP, designates contractor/vendor, handles the protest process, negotiates contracts, and notifies parties.	• Decrease grievances and protests due to greater accuracy, fairness, and understanding of RFP and contract requirements

MITA Business Area	ICD-10 Code Usage	ICD-10 Opportunities
Member Management	Member Management Processes determine eligibility, enroll members, disenroll members, manage member information, and manage member appeals and grievances. ICD-10-CM codes are used to determine eligibility qualifications and verify disenrollment from state.	• Improve ability to understand and respond to the health of the population • Improve appeal process since ICD-10codes are specific, allowing for appeals to contain refined information on medical condition and needs

4.2.1 ICD-9-CM and ICD-10-CM & PCS Comparison

This section shows the differences between ICD-9-CM diagnosis and procedure codes and ICD-10 diagnosis and procedure codes[12]. Table 3 illustrates the difference between ICD-9-CM and ICD-10-CM, and Table 4 illustrates the difference between ICD-9-CM and ICD-10-PCS.

Table 3: Diagnosis Code Comparison

Characteristic	ICD-9-CM	ICD-10-CM
Field Length	3-5 characters	3-7 characters
Available Codes	Approximately 13,000 codes	Approximately 68,000 codes
Code Composition (i.e., Numeric, Alpha)	Digit 1 = alpha or numeric Digits 2-5 = numeric	Digit 1= alpha Digit 2= numeric Digits 3-7 = alpha or numeric
Character Position within Code[13]	Characters 1-3 = Category Characters 4-5 = Anatomic site, etiology, manifestation* (*Not always the case for ICD-9-CM)	Characters 1-3 = Category Character 4-6 = Anatomic site, etiology, severity, or clinical detail* (*Not always the case for ICD-10) Character 7 = Extension
Available Space for New Codes	Limited	Flexible
Overall Detail Embedded within Codes	Ambiguous	Very Specific
Laterality	Does not identify right vs. left	Often identifies right versus left

12 http://www.ama-assn.org/ama1/pub/upload/mm/399/icd10-icd9-differences-fact-sheet.pdf

13 http://library.ahima.org/xpedio/groups/public/documents/ahima/bok1_038084.hcsp?dDocName=bok1_038084

Characteristic	ICD-9-CM	ICD-10-CM
Sample Code[14]	**438.11**, Late effect of cerebrovascular disease, speech and language deficits, aphasia	**I69.320**, Speech and language deficits following cerebral infarction, aphasia following cerebral infarction

Table 4: Procedure Code Comparison

Characteristic	ICD-9-CM	ICD-10-PCS
Field Length	3-4 characters	7 alpha-numeric characters; all are required
Available Codes	Approximately 3,000	Approximately 72,081
Technology	Based on outdated systems	Consistent with current medical technology and advances
Available Space for New Codes	Limited	Flexible
Overall Detail Embedded Within Codes	Ambiguous	Very Specific Precisely defines procedures with detail regarding anatomic site, approach, device used, and qualifying information
Laterality	Code does not identify right vs. left	Code identifies right versus left
Terminology for Body Parts	Generic description	Detailed description
Procedure Description	Lacks description of approach for procedures	Detailed description of approach for procedures. Precisely defines procedures with detail regarding anatomic site, approach, device used, and qualifying information

14 http://library.ahima.org/xpedio/groups/public/documents/ahima/bok3_005568.hcsp?dDocName=bok3_005568

Characteristic	ICD-9-CM	ICD-10-PCS
Character Position within Code	N/A	There are 16 PCS sections that identify procedures in a variety of classifications (e.g., medical surgical, mental health, etc.). Between these sections, there may be variations in the meaning of various character positions, though the meaning is consistent within each section. For example, in the Medical Surgical section, Character 1 = Name of Section* Character 2 = Body System* Character 3 = Root Operation* Character 4 = Body Part* Character 5 = Approach* Character 6 = Device* Character 7 = Qualifier* (*For the "Medical Surgical" codes)
Example Code: Laparoscopic Appendectomy	47.01	ODTJ4ZZ

4.2.2 Transitioning to ICD-10

This section lists high-level strategic actions required to complete the transition from ICD-9-CM to ICD-10 by October 1, 2013. Table 5 lists the high-level actions required to complete the transition from ICD-9-CM to ICD-10.

Table 5: Strategic Actions to Transition to ICD-10

Strategic Element	Recommended Actions
Collaborative Governance	• Establish a governance structure with multi-stakeholder engagement • Provide administrative oversight • Administer budget and manage fund utilization for ICD-10 planning and implementation
Comprehensive Project Management	• Establish an ICD-10 Project Management Office (PMO) • Assign responsibility for developing and executing an ICD-10 Implementation plan • Ensure coordination among planning and implementation groups (i.e., ROs, SMAs, and 3rd Parties)
Critical Infrastructure	• Continue to advance MMIS infrastructure along the Medicaid Maturity Model (MMM) to accommodate ICD-10 code requirements, enhance interoperability, and improve functionality
Core Processes and Policies	• Redesign business processes and workflows impacted by ICD-10 • Revise business requirements and update to inform technical requirements/changes as needed per impacted policies prior to ICD-10 implementation
Knowledge Repository	• Establish a knowledge repository • Use knowledge gained from existing initiatives to improve future implementations • Share information with states that have similar programs and systems
Resource Allocation	• Develop a resource allocation plan • Leverage subject matter expert (SME) resources across business areas
Funding	• Prepare and submit Advance Planning documents to CMS in a timely manner
Risk Mitigation Strategies	• Anticipate implementation issues and risks • Develop timely risk mitigation strategies to reduce barriers to implementation • Develop decision making framework with clear accountability and authority

5. Medicaid ICD-10 Implementation Steps and Actions

This section describes a functional and process-driven approach to implement ICD-10 successfully.

The Medicaid ICD-10 Implementation Schedule/Project Plan includes milestone tasks, key activities, start-to-finish dates, predecessors, and task owners for the ICD-10 implementation.

CMCS purposefully keeps the details for each milestone and task at a level applicable to all SMAs. The SMA should update the Medicaid ICD-10 Implementation Schedule/Project Plan in order to do the following:

- Evolve the plan into a detailed and comprehensive description of tasks and activities associated with implementing ICD-10 across the SMA's business processes, systems, and policies
- Continue to update the plan throughout ICD-10 Implementation, specifically during exit/entry to new ICD-10 implementation phases, as indicated in this handbook.

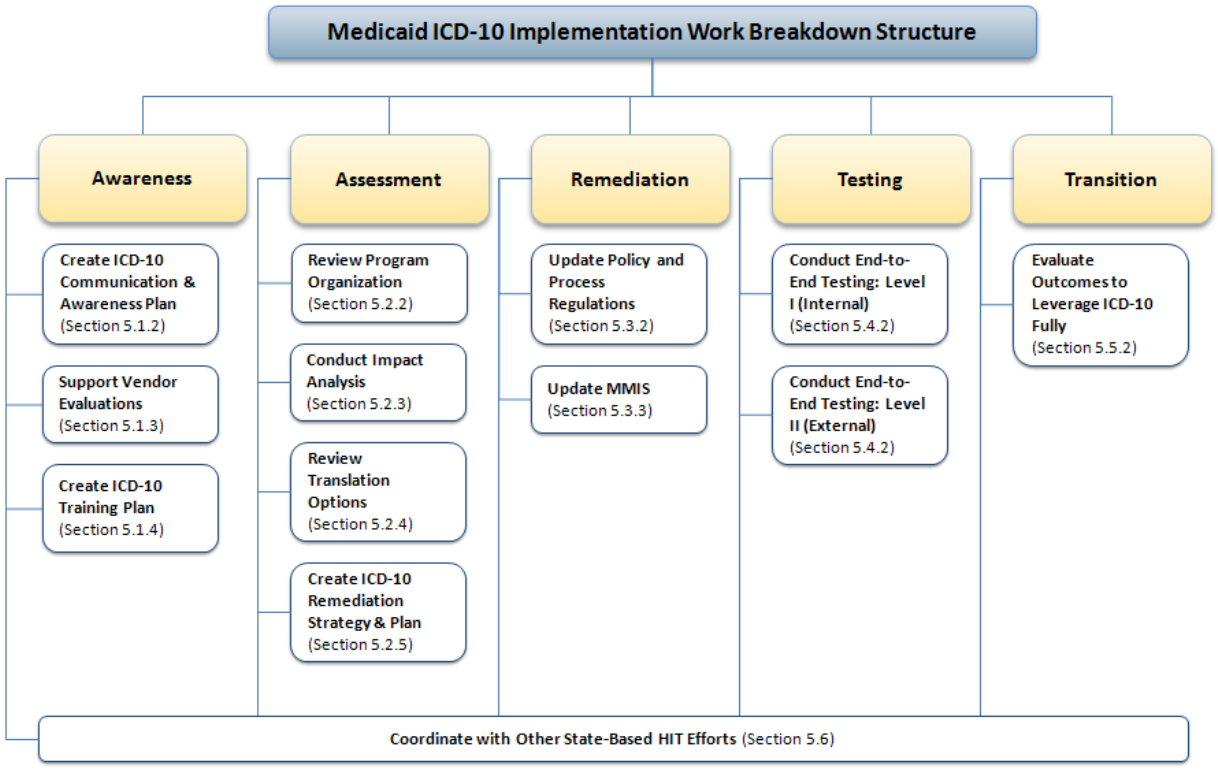
Reference Appendix B – Templates and Artifacts for the Medicaid ICD-10 Implementation Schedule/Project Plan template (available in excel or Microsoft Project). Refer to Figure 1: Medicaid ICD-10 Implementation Schedule/Project Plan.

The Medicaid ICD-10 Project Schedule groups the milestones and tasks into the standard five phases for Medicaid Implementations:

1. **Awareness Phase**
2. **Assessment Phase**
3. **Remediation Phase**
4. **Testing Phase**
5. **Transition Phase**

Figure 2 provides a high level work breakdown structure for the ICD-10 Medicaid Implementation.

Figure 2: Medicaid ICD-10 Implementation Work Breakdown Structure



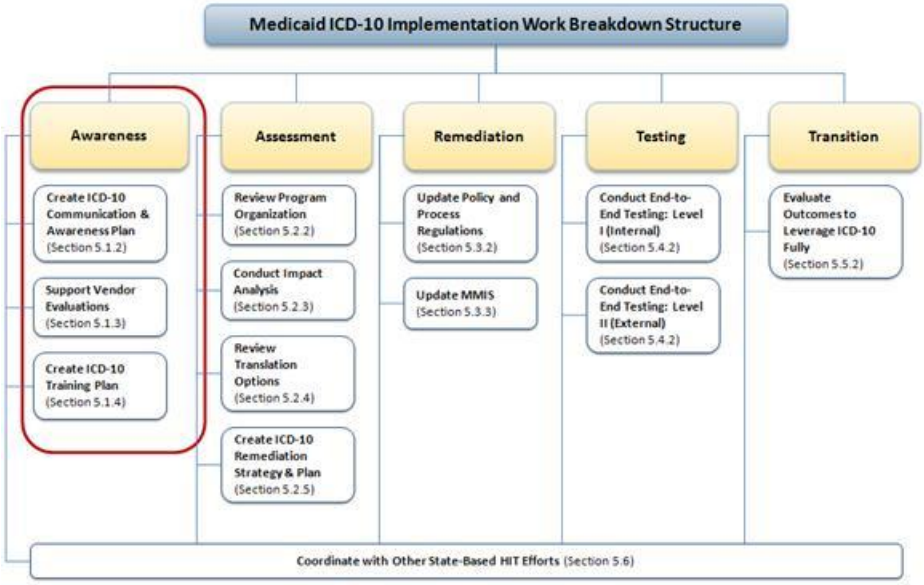
5.1 Awareness Phase Overview

This section provides an overview and introduction of the Awareness Phase and the major activities involved in this phase. The high level timeline and associated activities below are based on CMCS's most current knowledge around SMAs ICD-10 Awareness and Readiness.

5.1.1 Phase Overview and Introduction

The Awareness Phase is the first phase in the ICD-10 implementation, as highlighted in Figure 3.

Figure 3: Medicaid ICD-10 Implementation Awareness Phase



5.1.2 Awareness Phase Milestones

This section includes the milestones in the Awareness Phase per the Medicaid ICD-10 Implementation Schedule/Project Plan.

Table 6 explains the phase purpose, inputs, activities, outcomes, and supporting tools and templates.

Table 6: Awareness Phase Information

Awareness
Phase Purpose:
The purpose of the Awareness Phase is to ensure that key stakeholders understand ICD-10 and are prepared to support the implementation program.
Key Inputs to Phase and/or Predecessors:
• **Input: Internal Stakeholder List** • **Input: External Stakeholder List** • **Predecessor: Review of Program Organization**

Awareness
Major Activities:
1. **Create ICD-10 Communication and Awareness Plan** 2. **Perform Contractor Evaluations** 3. **Create ICD-10 Training Plan**
Key Outcomes from Phase:
• **Communication and Awareness Plan** • **Training Plan** • **Updated Medicaid ICD-10 Implementation Schedule/Project Plan**
Supporting Tools and Templates:
• **Medicaid ICD-10 Implementation Schedule/Project Plan;** • **Communication/Awareness Plan Template;** • **Training Plan Template: Training Needs Assessment, Training Approach, and Training Evaluation; and** • **Test Plan.**

Table 7 references the milestones associated with the Awareness phase of the Medicaid ICD-10 Implementation Schedule. The SMA should build into their SMA specific Medicaid ICD-10 Implementation Schedule/Project Plan supporting tasks needed to remediate their unique business processes, policies, and systems. The table includes the following columns:

- **ID**: SMA Timeline milestone identification number
- **Milestone Description:** Provides high level detail around milestone activities
- **Inputs:** Key documents/deliverables and inputs into the milestone activities
- **Key Activities:** Actions associated with completion of each milestone activity
- **Outputs:** Key documents/deliverables associated with each milestone activity
- **Start-to-Finish Dates:** SMA Timeline milestone date

Table 7: Awareness Phase Milestone Details

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
7	**Internal Awareness, Communication, and Education/Training:** Provide Awareness Training to ICD-10 Leadership and ICD-10 Team The awareness training includes educating participants on why the industry is transitioning from ICD-9-CM to ICD-10 and what the ICD-10 implementation entails for the SMA.	• Governance • Leadership Structure • Workgroup Structure • Medicaid ICD-10 Implementation Schedule/Project Plan	• Identify key leadership and governance structure • Identify ICD-10 workgroups and team structure including roles and responsibilities • Conduct interviews with governance committee to identify training and communication strategy • Conduct interviews with user groups • Identify training champions • Create training materials including instructor led, webinar, and self-guided materials • Identify trainer(s) • Conduct awareness training and communication • Draft and distribute awareness communication • Determine training frequency	• Roles and Responsibilities Matrix- Responsible, Accountable, Support, Consulted, Informed • Training Plan: Training Needs, Training Approach and Training Evaluation • Communication and Awareness Plan • Training Materials • Drafted Communications • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	09/01/10 – 11/30/10

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
8	**Internal Awareness, Communication, and Education/Training:** Educate and Train Staff (including training during transition and implementation) The training includes educating staff on why the industry is transitioning from ICD-9-CM to ICD-10 and what the ICD-10 implementation entails for the SMA.	• Training Plan: Training Needs, Training Approach and Training Evaluation • Communication and Awareness Plan • Training Materials • Medicaid ICD-10 Implementation Schedule/Project Plan	• Execute Training Program • Conduct Training Evaluation • Empower Training Champions • Distribute Internal Communication	• Training Plan: Training Needs, Training Approach and Training Evaluation • Internal Communications • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	11/30/10-03/14/14

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
10	**External Awareness, Communications, and Outreach:** Conduct Communications with State Entities/ Trading Partners/ Providers/ Contractors/ Vendors Communicating with the listed entities includes sharing important SMA ICD-10 implementation, such as End-to-End testing strategies and plans, and educating any entities on ICD-10 implications, impacts, etc.	• Communication and Awareness Plan • Medicaid ICD-10 Implementation Schedule/Project Plan	• Draft external communications • Distribute communications	• External Communications • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	11/30/10-03/14/14

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
11	**External Awareness, Communications, and Outreach:** Monitor Trading Partner ICD-10 Transition Status Communicating with the listed entities includes sharing important SMA ICD-10 implementation, such as End-to-End testing strategies and plans, and educating any entities on ICD-10 implications, impacts, etc.	• MMIS ICD-10 Certification Checklist • Test Plan: End-to-End External (Level II) • Training Plan: Training Needs, Training Approach and Training Evaluation • Medicaid ICD-10 Schedule • Medicaid ICD-10 Implementation Schedule/Project Plan	• Identify and communicate checkpoints with trading partners • Evaluate trading partner progress	• MMIS ICD-10 Progress Report • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	12/30/10-03/14/14

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
12	**External Awareness, Communications, and Outreach:** Identify and Leverage Partnering/Outreach Opportunities (with providers, advisory boards, etc.) Identifying and leveraging opportunities means the SMA should partner with as many organizations as possible that would help make the transition to ICD-10 easier and that the SMA should leverage as much existing ICD-10 information and templates as the SMA can obtain.	• Communication and Awareness Plan • External Communication • Medicaid ICD-10 Implementation Schedule/Project Plan	• Identify opportunities to streamline and coordinate communications (i.e., newsletters, mailings) across Trading Partners • Distribute communications as needed	• External Communications • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	11/30/10-03/14/14

5.1.3 Create ICD-10 Communication and Awareness Plan

This section explains the key components of a Communication and Awareness Plan.

The objective of the Communication and Awareness Plan is to ensure communication and awareness with all parties involved in the ICD-10 implementation. The scope and scale of ICD-10 requires clear and consistent communications with internal and external stakeholders. Each party must understand the initiative and their role and responsibilities. The communication and awareness plan should identify stakeholders, audiences, messages, issues, roles and responsibilities, timelines, communication methods, and evaluation techniques.

Table 8 identifies the key components the Communication and Awareness Plan must encompass. For template information, refer to Appendix B – Templates and Artifacts.

Table 8: Communication and Awareness Plan Key Components and Details

Component	Details
Purpose	• Provide ICD-10 background information • Describe current state of ICD-10 within the SMA • Ensure agency-wide awareness of ICD-10 implementation • Identify end goals for the Communication and Awareness Plan
Audience and Stakeholders	• Identify the intended audience including stakeholders, SMA staff, external partners, contractors, and vendors • Anticipate communication gaps and frequently asked questions regarding organization, operating structure, roles and responsibilities
Convey the Message to the Audience	• Audience must clearly understand the intended purpose and outcomes • Create targeted communication toward smaller groups as necessary
Identify Issues to Overcome	• Work collaboratively with CMCS, RO, and the SMA • Raise implementation issues • Create remediation plans

Component	Details
Identify Communication Vehicle	• Create communication vehicles to monitor progress including status reports, team meetings, and project reviews • Define the purpose and expected outcome
Assign Roles and Responsibilities for the Communication Activities	• Identify the governance structure • Communicate roles, responsibilities, and titles for executive sponsors, steering committee, governance, and user groups • Define roles with clear accountability and authority to make and act on decisions within any communication • Consider the intended audience and responsible party for issue/risk identification, resolution, and mitigation
Timeline	• Identify project milestones and compliance dates • Identify tasks, milestones, and deadlines for project teams
Method of communication and distribution	• Distribute as written, oral, visual, electronic, or in person communication • Identify distribution method for communication
Internal versus external communication	• Define plans for communicating internally versus externally • Account for inherent differences between internal and external audiences
Evaluating the effectiveness of the communication plan	• Evaluate communications based on feedback and performance measurement metrics • Review lessons learned from previous programs and implementations to create the most effective communication • Communicate effectiveness and feedback to stakeholders

Table 9 presents example communications, options for distribution method, and key ICD-10 considerations. This table is not all-encompassing; CMCS encourages SMAs to develop communications that allow the SMA to communicate information effectively.

Table 9: Example Methods of Communication Utilized in a Communication and Awareness Plan

Communication	Distribution Method	Key Considerations
Newsletters	Written Electronic Hard copy	• Ability to produce in electronic and hard copy to distribute to different audiences
Meetings	In-person Oral Visual	• Participants can be interactive with leadership • Staff dedicate more time to a meeting than reading an email or newsletter • Meetings may have limited attendance • Allows for simultaneous oral and visual information delivery
Emails	Written Electronic	• Opportunity to confirm receipt • Cannot ensure recipients read and understand the communication • Fast and easy information delivery
Intranet News Flash	Written Electronic	• Employees will see the information repeatedly • Limited to internal staff • Staff may acknowledge the alert but not read the details
Webinar	Written Oral Electronic	• Ability to reach remote and larger audiences • Allows for real-time questions • Flexibility in scheduling (ability to post session after the fact)

Communication	Distribution Method	Key Considerations
System Notifications/Prompts	Written	• Real-time feedback to users while working in the system • Instructive while preventing data entry errors

5.1.4 Perform Contractor Evaluations

This section reviews the responsibilities of the SMA to track contractor actions related to ICD-10.

To ensure that SMAs can transition smoothly to ICD-10, SMA contractors must upgrade and continue to support the SMA operationally. SMAs are dependent on contractors to perform functions that address an SMA's business, process, or system needs. An SMA contractor evaluation will assess contractors, ICD-10 impacts, processing performance capabilities, and plans to remediate their system for ICD-10. In addition, the assessment will identify if there are budgetary needs to upgrade the contractor system and any system fail points. Table 10 below highlights the four primary contractor evaluation criteria and the associated key considerations.

Table 10: Contractor Evaluation Criteria and Key Considerations

Evaluation Criteria	Key Considerations
Identify Contractors and their Purpose	• Identify the need for any new contract(s) • Determine which existing contractor(s) will be impacted by the ICD-10 transition • Define contractor(s) requirements to support implementation of ICD-10 (will vary by contractor) • Determine contractor(s) dependencies in critical business paths • Determine how contractor(s) will be involved in the ICD-10 implementation project • Establish a contractor(s) communication plan • Confirm contractor(s) understands business requirements and has an accountable plan for delivering

Evaluation Criteria	Key Considerations
Processing Performance	• Conduct contractor(s) gap analysis • Evaluate pros and cons of contractor(s) system alternatives • Receive compliance commitment from contractor(s) in line with defined requirements and project plan milestones • Review Contractor Evaluation to assure alignment with defined requirements • Determine options for retiring system(s) and the impact on ICD-10 implementation for systems (include details in Medicaid ICD-10 Implementation Schedule/Project Plan) • Determine test scenarios to test key vulnerabilities such as volume capacity and other performance parameters • Create test data
Evaluating Budgetary Considerations	• Create criteria for build vs. buy evaluations – establish a strategic build plan that includes interim vs. long term (include details in Medicaid ICD-10 Implementation Schedule/Project Plan) • Create P-APDs and I-APD to receive federal funding for any new contracts

Monitoring and Oversight	• Determine the SMA compliance plan in order to focus that perspective into contractor RFP requirements or amendments and monitoring
	• Create/follow a plan to monitor contractor is meeting key functions (utilize mind-mapping applications to facilitate this process):
	  ○ Identify measures of risk for contractor is meeting key functions
	  ○ Create key performance indicators to measure success in meeting key functions
	  ○ Include how to handle situations when contractors do not meet key functions

5.1.5 Create ICD-10 Training Plan

This section addresses the need to create a training plan for the ICD-10 implementation and provides examples the SMA may use to train staff and external partners.

The first step in developing an ICD-10 Training Plan includes conducting a training needs assessment to properly assess the skills/gap and training needs for internal staff, external partners, and contractors. This includes identifying impacted operational users, identifying the appropriate training sequence, and the best approach to deliver training.

Once the training needs have been identified, the SMA should create a training plan to address gaps in skills/knowledge. Within the training plan, the SMA should account for various factors such as the sequencing of training topics, training topics, training purpose, presenter, audience, attendees, and schedule. Refer to the Appendix B – Templates and Artifacts for template information. The Training Plan is a living document (intended to be maintained), as ICD-10 Implementation progresses the training plan and training materials must align with the most up-to-date information regarding the activities and knowledge to remediate business processes, policies, and systems.

SMAs need to create and implement a training plan.

Ensure that all staff and external partners acquire the necessary skills and knowledge for the ICD-10 implementation for:

- Processes;
- Procedures;
- Policies; and
- System updates.

Many training resources are available to prepare the SMAs for transition to ICD-10 through the web and at nationwide workshops. Refer to the following websites periodically for useful ICD-10 training materials: www.cms.gov, www.ahima.org, www.wedi.org. In particular, CMS provides a set of high level ICD-10 implementation training materials called the ICD-10 Training Segments; SMAs may retrieve these trainings on the CMS website at http://www.cms.gov/MedicaidInfoTechArch/07_ICD-10TrainingSegments.asp. In addition, CMS may also provide "Train the Trainer" sessions to help SMAs build an ICD-10 knowledge base. SMAs should work with their RO to identify additional training materials, if needed. SMAs may also identify other trainings needed (based on previous implementation experience) or choose to combine methods to create hybrid approaches.
Table 11 identifies anticipated SMA training needs[15]; SMAs are responsible for executing and delivering training related to ICD-10 implementation. SMAs should refer to Table 11 for guidance.

[15] Fox Training Material, Training Segment 10, Education and Training Processes

Table 11: Training Type, Purpose, and Audience

Training Name	Purpose of Training	Suggested Audience
Basic Understanding of the ICD-10 Code Sets	• Understand the differences between ICD-9-CM and ICD-10 • Learn rationale for adoption of ICD-10	Executive staff, policy staff, operational staff, IT staff, partners, contractors, and vendors
Clinical Definitions and Terms in ICD-10:	• Explain ICD-10 terminology • Emphasize clinical terms and meanings	Policy staff, IT staff
ICD-10 Impacts on Business Processes	• Describe ICD-10 impacts on business processes	Executive staff, policy staff, operational staff
Coding Diagnoses and Inpatient Hospital Procedures	• Describe how to produce ICD-10 codes from medical documentation	Operational staff, IT staff
ICD-10 Implementation Program	• Present the ICD-10 Implementation Plan • Review ICD-10 Implementation Assistance Handbook	Executive staff, policy staff, operational staff, IT staff
Partner and Contractor	• Explain roles and responsibilities in ICD-10 implementation process	Partners and contractors
Using New Business Processes	• Explain and validate changes in business processes • Explain implications of business process changes	Executive staff, policy staff, and operational staff
Using Systems Updated for ICD-10	• Review ICD-10 system impacts • Focus on system updates	IT staff

5.1.5.1 Training Methods

SMAs may use a variety of training methods to train their staff, external partners and contractors. The SMA will create a unique training plan based on technical assistance needs identified internally by the SMA, the RO and CMCS. Table 12 includes sample training methods SMAs may use and pros and cons for each method.

Table 12: Training Methods Pros and Cons

Method	Type	Delivery Mode	Pros	Cons
In person Live Session or Workshop	In person	In person presentation Lecture PowerPoint	• Demonstrate leadership approval and support of ICD-10 • User is able to interact with the instructor in real time • Allows for impromptu training customization • Increased focused attention from participants • Participants may interact easily during breaks fostering training • Face-to-face interaction	• Increased costs for training facility/location and staff time away from work • Inherent time constraints • May require travel • May have limited participation due to scheduling
Computer-Based (without Web Access)	Distance learning	Self-directed	• Interactive interface with the computer could provide real-time feedback • May incorporate tactile learning environment • Able to utilize testing or training facilities • Trainee sets the training pace	• Only provides stocked responses to questions • Does not allow for impromptu explanations to ensure comprehension • May need to purchase or set aside computers and training facilities • May be less interactive • Difficult to adapt and upgrade

Method	Type	Delivery Mode	Pros	Cons
Web-based live session/ workshop or on demand recording	Distance learning	WebEx Webinar Streaming Chat session	• User is able to interact with the instructor in real time • Does not require travel • Access training remotely • Potential for increased participation • Trainee may complete at their convenience • Do not have to dedicate time to travel, allowing trainees to accomplish other tasks that day • Ability to be interactive with presenter • Ability to receive information in real time • Less expensive (no travel costs) • Flexibility to update over time • May be able to reference information in the future • Reach broad audiences simultaneously	• May have limited participation due to dedicated time period • Greater difficulty to focus due to computer/phone availability, nearby colleagues • Must create web-based infrastructure • Lengthy development time (not all cases) • Limited bandwidth causes slow/intermittent connection

Method	Type	Delivery Mode	Pros	Cons
Interactive Game or Activity	In person or Distance learning	Online, computer-based or in person game or activity	• Engaging learning environment • Tactile learning environment • May be able to access remotely • Does not require travel • Trainee may be able to set the learning pace	• Costly to develop and implement • Difficult to update or modify over time • Lengthy development and implementation process • Limited bandwidth causes slow/intermittent connection • May not allow for impromptu explanations to ensure comprehension • May need to purchase or set aside computers and training facilities
Power Point	Distance learning	PowerPoint file	• Easy to display information • Good for high level or overview information • Allows for easy scrolling to specific points and topics • Trainees can save file to computer for reference on a later date • May update training easily • Quick development and distribution time	• Not interactive with presenter/trainer • Slides provide less detail and specific information • Does not allow for impromptu explanations to ensure comprehension

Method	Type	Delivery Mode	Pros	Cons
Pre-Recorded	Distance learning	Video file Audio file	• Trainees may watch the training at their convenience • Can post to web for remote access • Trainees can save file to computer for reference on a later date • Record live already-planned sessions, allowing training to reach a broader audience	• User is unable to interact with instructor • Cannot update training over time

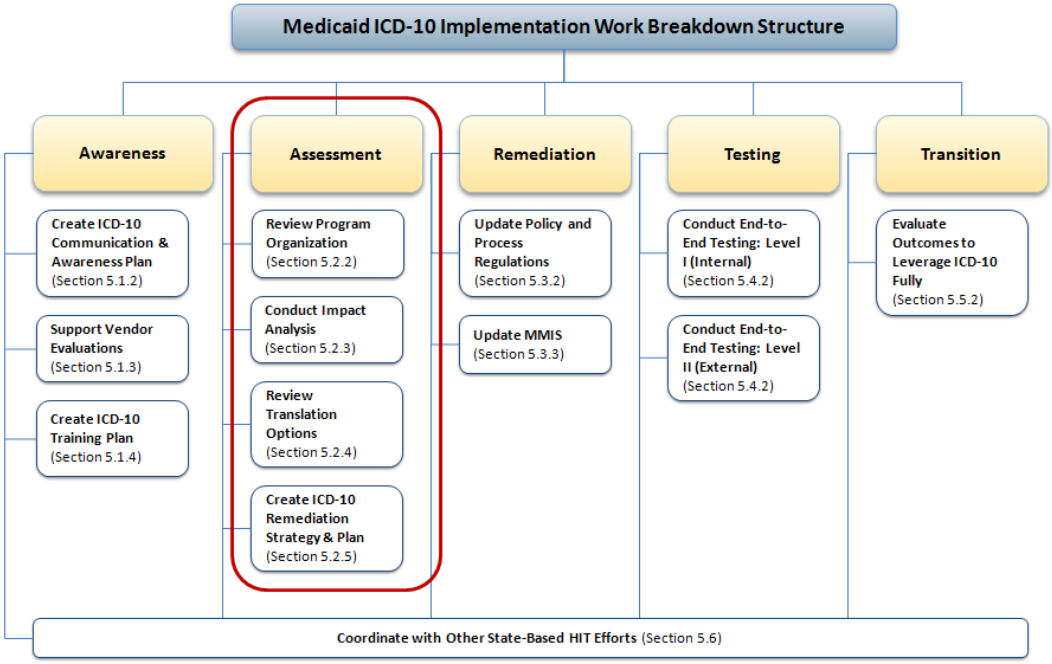
5.2 Assessment Phase Overview

This section provides an overview and introduction of the Assessment Phase and the major activities involved in this phase.

5.2.1 Phase Overview and Introduction

The Assessment Phase is the second phase in the ICD-10 implementation, as highlighted in Figure 3 below.

Figure 4: Medicaid ICD-10 Implementation Assessment Phase



5.2.2 Assessment Phase Milestones

This section includes the milestones in the assessment phase per the Medicaid ICD-10 Implementation Schedule/Project Plan. Table 13 explains the phase purpose, inputs, activities, outcomes and supporting tools and templates.

Table 13: Assessment Phase Information

Assessment
Phase Purpose:
The Assessment Phase establishes the foundation for the ICD-10 remediation by identifying the ICD-10 impacts on the SMA and developing a guiding remediation strategy. The Assessment Phase should result in a complete understanding of how the SMA uses ICD-9-CM codes and a go forward strategy to implement ICD-10.
Key Inputs to Phase and/or Predecessors:
• **Input: Communication and Awareness Plan** • **Input: Updated Medicaid ICD-10 Implementation Schedule/Project Plan** • **Input: Existing Program Organization Information** • **Predecessor: Executive Sponsorship for ICD-10 program**
Major Activities:
1. **Review Project Organization** 2. **Conduct Impact Analysis** 3. **Review and Understand Translation Options** 4. **Create ICD-10 Remediation Strategy and Plan**

Assessment
Key Outcomes from Phase:
• **Updated Project Organization** • **Impact Analysis** • **Translation Strategy** • **Remediation Strategy and Plan** • **Updated Medicaid ICD-10 Implementation Schedule/Project Plan**
Supporting Tools and Templates:
• **Published ICD-10 Relevant Articles;** • **Internal/External Stakeholder List;** • **ICD-10 Program/Workgroup Charter;** • **Roles and Responsibilities Matrix- Responsible, Accountable, Support, Consulted, Informed (RASCI);** • **Budget Management Template;** • **Executive Status Reporting Template;** • **Project Status Reporting Template;** • **Issue Management Plan;** • **Risk Management Plan; Change Control Management Plan;** • **Scope Management Plan;** • **Resource Acquisition Plan;** • **ICD-10 MITA Impact Analysis: Policies, Processes, and Systems;** • **Impact Scoring Template;** • **ICD-10 Impact Checklists of Systems, Policies and Processes;** • **ICD-10 Impacted Trading Partner Matrix;** • **Business Process Models (BPMs): as-is and to-be;** • **Requirements Traceability Matrix: Business and Technical Requirements Template;** • **System Interaction Diagrams;** • **Mind Mapping as an ICD-10 Migration Analysis Tool;** • **Concept of Operations[16];** • **Remediation Plan Template;** • **Test Plan; and** • **Test Case Template: Interface and Report Test Case Template.**

16 Concept of Operations supporting artifact can be found at: http://mita.wikispaces.com/file/view/Part+I+Appendix+A+Concept+of+Operations+Details.pdf

Table 14 references the milestones associated with the Assessment Phase of the Medicaid ICD-10 Implementation Schedule. The SMA should build into their SMA specific Medicaid ICD-10 Implementation Schedule/Project Plan supporting tasks needed to remediate their unique business processes, policies and systems. The table includes the following columns:

- **ID**: SMA Timeline milestone identification number
- **Milestone Description:** Provides high level detail around milestone activities
- **Inputs:** Key documents/deliverables and inputs into the milestone activities
- **Key Activities:** Actions associated with completion of each milestone activity
- **Outputs:** Key documents/deliverables associated with each milestone activity
- **Start-Finish Dates:** SMA Timeline milestone dates

Table 14: Assessment Phase Milestone Details

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
15	**High-level planning for ICD-10 activities:** Establish an Executive Sponsorship, ICD-10 Steering Committee, ICD-10 Point of Contact	• Internal/External Stakeholder List • Medicaid ICD-10 Implementation Schedule/Project Plan	• Identify Executive Sponsors, Steering Committee, and ICD-10 Point of Contact at each SMA • Identify roles and responsibilities including clear authority/accountability and decision making • Establish operating model	• Operating Model including Executive Sponsorship, Steering Committee, CMS Program Lead, Point of contact at each SMA for ICD-10 • ICD-10 Program/Workgroup Charter • Roles and Responsibilities Matrix- Responsible, Accountable, Support, Consulted and Informed • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	9/1/10 - 10/1/10

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
16	**High-level planning for ICD-10 activities:** Establish and Organize Impact Assessment Team	• Stakeholder Expectations • Medicaid ICD-10 Implementation Schedule/Project Plan	• Draft and finalize ICD-10 Impact Assessment core team capabilities and functions	• Core Team capabilities and functions • Roles and Responsibilities Matrix- Responsible, Accountable, Support, Consulted and Informed • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	9/1/10 - 10/1/10
17	**High-level planning for ICD-10 activities:** Review/Establish Program Management Office and Governance Structure	• Stakeholder Expectations • Medicaid ICD-10 Implementation Schedule/Project Plan	• Finalize and review governance structure and roles and responsibilities including clear authority/accountability and decision making • Identify PMO Structure and roles and responsibilities	• Governance Structure • PMO Structure • PMO Roles and Responsibilities • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	9/1/2010 - 10/1/10

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
18	**Develop Tools/Processes to Facilitate Assessment Activities**	• Governance Structure • PMO Structure • PMO Roles and Responsibilities • Medicaid ICD-10 Implementation Schedule/Project Plan • Mind Mapping as an ICD-10 Migration Tool • Concept of Operations • Impact Scoring Template • ICD-10 Impact Checklists of Systems, Policies and Processes • ICD-10 Impact Analysis: Policies, Processes and Systems	• Establish PMO activities including budget management; scope management; status reporting (ICD-10 sponsorship, ICD-10 executive steering committee, governance committee; and workgroups); meeting execution issue management; risk management; and change control management • Utilize mind mapping tools to facilitate Impact Assessment.	• Standup of PMO Organization • Budget Management • Scope Management • Executive Status Report • Project Status Report • Issue Management • Risk Management • Change Control Management • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	9/1/10 - 11/30/10

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
20	**Perform Impact Assessment:** Identify Policies Impacted by ICD-10	• Policies • Procedures • Medicaid ICD-10 Implementation Schedule/Project Plan	• Identify impacted policies and procedures • Build questionnaire to identify degree of ICD-10 impact • Assess level/degree of impact • Identify cost, tasks and work effort associated with remediation working with SMEs • Work with business area SMEs to identify high level Business Requirements	• Scored Impact Assessment for Policies • Business Requirements • Business Process Models (as-is and to-be) • Updated Medicaid ICD-10 Implementation Schedule/Project Plan (with Work effort and associated remediation tasks)	10/01/10 - 12/30/10

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
21	**Perform Impact Assessment:** Identify Processes Impacted by ICD-10	• Business Process Models (as is) • Medicaid ICD-10 Implementation Schedule/Project Plan	• Identify impacted business processes • Build questionnaire to identify degree of ICD-10 impact • Assess level/degree of impact • Identify cost, tasks and work effort associated with remediation working with SMEs • Work with business area SMEs to identify high level Business Requirements	• Scored Impact Assessment of business processes • Business Requirements • Business Process Models (as-is and to-be) • Updated Medicaid ICD-10 Implementation Schedule/Project Plan (with Work effort and associated remediation tasks)	10/01/10 - 12/30/10

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
22	**Perform Impact Assessment:** Identify Systems Impacted by ICD-10	• List of Impacted Systems • Medicaid ICD-10 Implementation Schedule/Project Plan	• Identify impacted systems • Build questionnaire to identify degree of ICD-10 impact • Assess level/degree of impact • Identify cost, tasks and work effort associated with remediation working with SMEs • Work with business area technical SMEs to identify high level Business Requirements	• Scored impact assessment of systems • Business Requirements • Business Process Models (as-is and to-be) • System Interaction Diagrams • Updated Medicaid ICD-10 Implementation Schedule/Project Plan (with Work effort and associated remediation tasks)	10/01/10 - 12/30/10

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
23	**Perform Impact Assessment:** Identify Impacts of ICD-10 on Trading Partners/Providers/Contractors/Vendors Relations	• ICD-10 Impacted Trading Partner Matrix • List of Providers • List of ICD-10 Impacted Contractors • List of ICD-10 Impacted Vendors • Medicaid ICD-10 Implementation Schedule/Project Plan	• Identify impacted 3rd parties • Build questionnaire to identify degree of ICD-10 impact • Assess level/degree of impact • Identify cost, tasks and work effort associated with remediation working with SMEs • Work with business area SMEs to identify high level Business Requirements	• Scored impact assessment of trading partners • Business Requirements • Business Process Models (as-is and to-be) • ICD-10 Impacted Trading Partner Matrix • Updated Medicaid ICD-10 Implementation Schedule/Project Plan (with work effort and associated remediation tasks)	10/01/10 - 12/30/10

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
24	**Perform Impact Assessment:** Document and Communicate Impact Assessment Findings	• ICD-10 Impact Assessment • Medicaid ICD-10 Implementation Schedule/Project Plan	• Aggregate impact findings • Create Executive presentation to communicate findings • Finalize review of policy, processes, system business requirements • Create and finalize technical requirements	• Executive Impact Presentation including impact assessment and work effort associated with remediation • Finalized business requirements • Finalized technical requirements • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	10/01/10 - 12/30/10

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
26	**Perform Impact Assessment:** Determine Administrative Budget for Design Develop and Implement (DDI) and Operations & Maintenance (O & M)	• Budget Plan • Work Effort (Tasks and Resources) • Medicaid ICD-10 Implementation Schedule/Project Plan	• Assess degree of work effort to DDI functionality for ICD-10: o Policies and Procedures o Business Processes o 3rd Parties o Assess degree of work for O & M systems o Propose ICD-10 Program Budget o Finalize ICD-10 Program Budget	• Finalized ICD-10 Program Budget • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	10/01/10 - 12/30/10

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
28	**Develop Remediation Strategy/Plan:** Create and Receive Approval of Remediation Strategy for Policies, Processes, and Systems (including Cross-Walking and Mapping Strategies)	• Executive Impact Presentation including impact assessment and work effort associated with remediation • Medicaid ICD-10 Implementation Schedule/Project Plan	• Identify strategy (including work effort, cost) to remediate ICD-10 business policies, processes, and systems • Socialize strategies with stakeholders • Select final strategy based on cost and benefit analysis • Receive approval from ICD-10 steering committee and sponsors.	• ICD-10 Remediation Strategy • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	12/30/10 - 3/30/11

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
29	**Develop Remediation Strategy/Plan:** Create End-to-End Testing Strategy	• List of all internal systems for Level I internal End-to-End testing • Identify ICD-10 user groups • List of Trading Partners, Vendors and Providers that exchange ICD-10 codes with SMA for Level II external End-to-End testing • Medicaid ICD-10 Implementation Schedule/Project Plan	• Build testing strategy to include the following: ○ Testing level (integration or system) ○ Roles and Responsibilities ○ Testing Environment (manual/automatic, equipment, data, restore) ○ Testing Procedures ○ Risks and Mitigation ○ Schedule ○ Regression Test Approach ○ Test Groups ○ Requirements tracing ○ Testing Sign off Procedure	• Test Plan • Test Cases (e.g., Report and Interface) • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	12/30/10 - 3/30/11

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
29	**Develop Remediation Strategy/Plan:** Create End-to-End Testing Strategy (Continued from above)		○ Build test case scenarios		
32	**Develop Remediation Strategy/Plan:** Develop Financial Plans: Forecast Claims Payments with ICD-10 Codes	• ICD-10 Remediation Strategy • Historical ICD-9-CM payment records • Medicaid ICD-10 Implementation Schedule/Project Plan	• Predict ICD-10 payment records based on historical ICD-9-CM payment records utilizing data analytics • Identify impact of selected remediation strategy on ICD-10 Claim payment records	• Financial Plan: Forecasted ICD-10 Claims Payments • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	2/28/11 - 3/30/11
33	**Develop Remediation Strategy/Plan:** Develop Financial Plans: Develop and Execute Resource Acquisition Plan	• Finalized ICD-10 Program Budget • Medicaid ICD-10 Implementation Schedule/Project Plan	• Create Resource Acquisition Management Plan: ○ Identify resource needs and skills ○ Fill resource positions ○ Finalize Resource Acquisition Plan	• Resource Acquisition Plan • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	2/28/11 - 5/29/11

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
34	**Develop Remediation Strategy/Plan:** Develop Financial Plans: Develop Advanced Planning Documents (APDs), and Coordinate APD Approvals	• Finalized ICD-10 Program Budget • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Draft Planning APD Plan: ○ Identify funds required from Federal and State (e.g., matching) ○ Draft Implementation Advance Planning (IAP) Plan ○ Submit finalized plans for approval	• Finalized Advance Planning Document (APDs) • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	2/28/11 - 5/29/11
35	**Develop Remediation Strategy/Plan:** Establish and Organize Remediation Team	• Resource Acquisition Plan • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Fill positions (internal staff or contracted staff)	• Finalized ICD-10 Team Organization structure • ICD-10 Program Contact List • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	2/28/11 - 3/30/11

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
36	**Develop Remediation Strategy/Plan:** Develop Detailed Implementation Plans	• Executive Impact Presentation including impact assessment and work effort associated with remediation • Remediation Plan • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Draft detailed implementation plans based on activities required to successfully implement ICD-10 policies, processes and systems	• Remediation Plan • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	3/30/11 - 5/29/11

5.2.3 Review Project Organization

To implement ICD-10 successfully, SMAs need to define their ICD-10 Project Organization clearly. The components that are involved in the Project Organization are as follows:

1. Concept of Operations;
2. Governance Structure;
3. WBS; and
4. Workgroup formation.

This section explains each component, its purpose, its importance to ICD-10 implementation, and provides examples of templates/tools SMAs can leverage to build their ICD-10 Project Organization.

5.2.3.1 Concept of Operations

The SMA needs to complete a standard Concept of Operations[17] to complete the Advanced Planning Documents (APDs). This section outlines the key decisions that will prepare the structure of the ICD-10 project as well as kick off the planning process for a transition from ICD-9-CM to ICD-10[18].

The purpose of the concept of operations is to provide a foundation and roadmap for the ICD-10 Project Implementation and requirements development.
The concept of operations will do the following:

- Describe the high-level vision of the ICD-10 project;
- Summarize the ICD-10 impact;
- Identify the roles and responsibilities for ICD-10 implementation;
- Describe the high-level sequence of activities for the ICD-10 project; and
- Summarize the high-level policy, process, and system requirements for ICD-10 implementation.

NOTE: The ICD-10 Implementation Assistance Handbook- refers to the process around conducting an impact assessment. The document is not directly associated with the MITA impact assessment performed for CMS.

Cross-MITA Business Area Strategies

Cross-MITA business area strategies describe the enterprise strategies that will guide the individual projects to design, update and implement consistently for ICD-10. For example, ICD-

17 Ibid.
18 This section reflects much of the same content found in the CMS Solution Concept.

10 implementation requires an enterprise strategy for integrating and implementing ICD-9-CM and ICD-10 mapping to avoid the risk of inconsistent business outcomes for both internal and external stakeholders. The executive sponsor will need to work with the SMA MITA business process areas to develop and implement enterprise strategies.

Cross-*MITA business area* strategies are not specific to any one business area but span the ICD-10 project, including;

- Planning and oversight (covered in Section 5 of this handbook);
- Internal training and communications (covered in Section 5.1 of this handbook);
- External outreach and communications (covered in Section 5.1 of this handbook);
- ICD-9-CM to ICD-10 translation (covered in Section 5.2.5 of this handbook);
- Risk planning and management (covered in Section 5.2.4 of this handbook);
- Integrated process and system design (covered in Section 5.3.3 and 5.3.4 of this handbook); and
- End-to-End testing strategy and coordination (covered in Section 5.4.2 of this handbook).

MITA Business Area Solutions

MITA business and system owners are responsible for managing and executing discrete projects to implement the changes required for ICD-10. The project management office will need to oversee MITA business projects as well as their interdependencies across the enterprise.

The MITA business area solutions are specific to a business area (e.g., operations management); the cross-MITA business area strategies are applicable to the entire ICD-10 project.

Refer to the Appendix B – Templates and Artifacts.

5.2.3.2 Governance Structure

This section explains the governance structure and its importance to the ICD-10 implementation.

When beginning a major implementation, it is important to develop a governance structure with clearly identified roles and responsibilities. The governance structure should include the following core roles:

- Executive Sponsor
- Steering Committee
- Project Leads
- Project Teams
- Workgroup Leads
- Workgroup Members
- Project Management

The governance structure should indicate the hierarchy of stakeholders involved in ICD-10 decision making, execution, and project management. In addition, the governance structure should indicate clearly the persons Responsible, Accountable, Support, Consulted, and Informed (RASCI).

The project team should be comprised of *both* business *and* system SMEs with experience working directly with system and operational processes, policies, and previous implementations. In addition, the SMEs should have a clear understanding of the ICD-10 impact.

Reference the Appendix B – Templates and Artifacts for template information.

5.2.3.3 Work Breakdown Structure

This section describes the need for a WBS to manage and track the ICD-10 Project Organization.

A Work Breakdown Structure (WBS) visually illustrates the organization of project team discrete work elements in a way that helps to organize and define the total work scope of the project. A WBS highlights the work effort required to complete the entire ICD-10 implementation including phases, deliverables (internal and external), and high level activities.

The Project Manager is accountable for managing the WBS; however the WBS is shared with the team as a tool to illustrate project scope. The deliverables may vary from SMA to SMA.

An example WBS is shown in Figure 2: Medicaid ICD-10 Implementation Work Breakdown Structure.

5.2.3.4 Workgroup Formation

This section describes potential ICD-10 workgroups during ICD-10 implementation.

Workgroups can be comprised of internal SMA resources and external contractor(s) or vendor SMEs (as needed). Workgroups can be especially useful in:

- Addressing recommended actions and raising issues and risks to leadership;
- Facilitating communications across MITA business areas to limit duplication of work effort spanning multiple MITA business areas; and
- Reaching beyond the SMA fostering communication with other SMAs or focus groups implementing ICD-10.

Despite differences among SMAs, SMAs should share lessons learned and project progress with other SMAs, CMS, and healthcare industry players. This will allow the SMAs to adopt best practices for ICD-10 implementation, leverage templates, and share issues and risks they may encounter.

Table 15 identifies workgroups useful for ICD-10 implementation. The table includes the name of the workgroup, a brief description and a CMCS recommendation indicating whether the workgroup should comprise of internal SMA resources or external SMA resources.

Table 15: Possible Workgroups for ICD-10 Implementation[19]

Workgroup Name	Description	Internal SMA Staff Involved	External Entities Involved
HIT Oversight Workgroup	This workgroup is comprised of executive level sponsorship and governance overseeing the development ICD-10 project. This workgroup is responsible for setting the overall direction of the project and accountability for decision making. In addition, the HIT Oversight Workgroup meets as needed to monitor project progress.	**X**	
Planning Development and Implementation (PDI) Workgroup	This workgroup monitors project progress and project dependencies. The purpose of this workgroup is to identify cross-project risks/issues and facilitate sessions to mitigate issues and risks.	**X**	
Policies and Processes Workgroup	This workgroup works in an advisory capacity to research and recommend changes to existing policies or processes. The group coordinates across states and/or healthcare industry players to identify and understand adjustments that need to be made to policies or processes.	**X**	**X**

19 Names and descriptions for the workgroups came from WEDI workgroups, CMS ICD-10 workgroups, and the Oklahoma State Medicaid Health Information Technology Plan for a previous implementation (http://www.okhie.org/Medicaid%20Incentives/State%20Medicaid%20HIT%20Plan%20(SMHP)/OHCA%20SMHP%20Draft-S%2006162010.pdf).

Workgroup Name	Description	Internal SMA Staff Involved	External Entities Involved
Finance Workgroup	This group is responsible for managing financials and accounting across the ICD-10 project. The group is responsible for making recommendations, setting financial and accounting controls for ICD-10 implementation. In addition, the workgroup provides input on system capabilities and financial reporting needs for inclusion in the Implementation Advanced Planning Document (I-APD).	**X**	
Provider & Business Operations Work Group	This group identifies impacts to providers and business operations. They are responsible for providing direction for planning and implementation across provider relations, provider services, and business operations of ICD-10 Implementation.	**X**	**X**
Legal – Policy Work Group	This group makes recommendations and provides direction on legal and policy matters supporting planning and implementation of ICD-10.	**X**	
Technical – Information Systems Work Group	This group makes recommendations and provides direction on integration of ICD-10 business requirements into MMIS; resolves technical issues and plans for system modifications to support capability needs identified by the other workgroups. The Technical workgroup identifies system requirements and plans for overall "to be" capabilities. They are responsible for identifying the appropriate MITA level changes in the I-APD.	**X**	

Workgroup Name	Description	Internal SMA Staff Involved	External Entities Involved
Provider Outreach & Education Work Group	This group makes recommendations and provides direction on ICD-10 outreach, education, and communications. The Provider Outreach and Education Work Group coordinates across business areas the communication/outreach required to distribute communications supporting ICD-10 implementation.	**X**	**X**
End-to-End Testing Workgroup	The workgroup will address all SMA ICD-10 transition impacted areas for all levels of End-to-End Testing. This includes Level I and Level II testing[20]. This workgroup is responsible for communicating with stakeholders testing plan and status.	**X**	**X**
Historical Data	This workgroup should identify and recommend strategies to store and maintain historical information for business and system functions.	**X**	**X**

Reference the Appendix B – Templates and Artifacts for template information.

5.2.4 Conduct Impact Analysis

This section explains the importance of an Impact Analysis for ICD-10 implementation.

An ICD-10 Impact Analysis assesses the impact of the transition from ICD-9-CM to ICD-10 on policies, processes, and systems. The assessment identifies where the SMA uses ICD codes, and the risks and opportunities of ICD-10. The impact analysis identifies the work effort required to transition to ICD-10 and should be used to further build out the detailed tasks in the SMA's Medicaid ICD-10 Implementation Schedule/Project Plan.

[20] Level I testing refers to internal end-to-end testing of all SMA systems that use ICD-10 codes. Level II testing refers to external trading partner end-to-end testing between the SMA and other healthcare entities to verify that all systems across businesses that use ICD-10 interoperate as desired.

There are five (5) high-level steps required to conduct a detailed Impact Analysis.

1. **Develop Inventory:**
    a. Analyze all policies, processes and systems and identify use of ICD-9-CM.
    b. Use business process modeling to identify process steps affected by ICD-10.
    c. Create system interaction diagrams to identify systems and systems interfaces that use ICD codes.
2. **Analyze Risks:**
    a. Describe and score the ICD-10 risks for each use of ICD codes.
    b. Develop risk response plans for each risk.
3. **Assess Opportunities:**
    a. Identify and describe the business and technical opportunities that ICD-10 offers.
4. **Aggregate and Prioritize Risks and Opportunities:**
    a. Aggregate risk scores to an overall MITA business area.
    b. Prioritize business area impact.
5. **Distribute:**
    a. Distribute the impact analysis to appropriate stakeholders.

Each SMA needs to complete a detailed Impact Analysis to identify where ICD-10 is used in the SMA and identify any SMA specific policies, processes, or systems as identified in the steps above.

The Impact Analysis scoring system assists SMAs in identifying the areas to allocate resources and estimate work effort to remediate the ICD-10 impacted policies, processes, and systems.

Reference Appendix B – Templates and Artifacts for template information.

5.2.5 Review and Understand Translation Options

This section focuses on the planning and considerations for the ICD-10 translation effort. This section provides background information on ICD-10 translation so that the SMA can develop appropriate remediation strategies (See Section 5.2.5).

ICD-9-CM codes do not map exactly to ICD-10 codes. Furthermore, the ICD-10 code set is a complete replacement of the ICD-9-CM code set. Therefore, SMAs will need processes and tools for selecting new ICD-10 codes. Without careful planning, translation may result in the loss of key information, or the assumption of information that may be incorrect.

Translation is the process of converting bi-directional information based on ICD-9-CM or ICD-10.

5.2.5.1 Translation Needs

SMAs need to translate between ICD-9-CM and ICD-10 for the following reasons:

1. **To facilitate remediation**
   During the implementation, SMAs will need to update policies and operations that currently use ICD-9-CM codes. Using the impact analysis results, SMAs will need to update all policies, processes, and systems to use ICD-10.
   a. SMAs will need to redefine rules or policies currently based on ICD-9-CM codes so that ICD 10-updates appropriately define the intent of those rules or policies.
   b. SMAs will need to redefine categories of analysis currently based on ICD-9-CM codes so that ICD-10 updates appropriately define the intent of those categories.
2. **To facilitate interaction with non-covered entities**
   The ICD-10 rule applies to HIPAA covered entities. Non covered entities, such as auto insurers, are not required to upgrade to ICD-10. As a result, SMAs may need to retain the ability to interface with organizations still using ICD-9-CM after the compliance date.
   a. SMAs may have non-HIPAA covered providers who continue to submit ICD-9-CM claims if permitted by the SMA.[21] Newer systems may only support ICD-10 and not ICD-9-CM. The systems will require the conversion of ICD-9-CM codes to ICD-10 to allow for timely and accurate processing of the ICD-9-CM claims.
   b. SMAs interface with non-covered entities for Coordination of Benefits (COB). SMAs will need the ability to interact with these organizations even if they remain on ICD-9-CM.
3. **To enable historical data analysis**
   SMAs will need the ability to analyze ICD-9-CM and ICD-10 longitudinal data potentially spanning multiple years for trending, reporting, and analysis (depending on the predominance of ICD code type in the data set).
4. **To facilitate dual processing**
   Providers will be submitting valid ICD-9-CM and ICD-10 codes based on the date of service or the date of discharge. SMAs will need to update affected systems accordingly to handle and utilize both code sets to allow consistent processing and reporting during this period.

[21] https://questions.cms.hhs.gov/app/answers/detail/a_id/2456/related/1/session/L2F2LzEvc2lkL1NXVFVBOWJr

5.2.5.2 Mapping Tools

CMS developed two mapping tools for use by the industry:

1. **General Equivalence Mappings (GEM):**
   GEM files are a set of files that provide assistance in identifying codes that an SMA may use in developing a crosswalk or in redefining sets of codes. They are not crosswalks, but support the development of crosswalks as a resource tool. GEM files include mappings from ICD-9-CM to ICD-10 and from ICD-10 to ICD-9-CM. GEM files support both ICD-10-CM (diagnosis codes) and ICD-10-PCS (institutional procedure codes). The CMS ICD-10 site provides considerable documentation to support a thorough understanding of the structure, use, and limitations of these files.[22,23]

2. **Reimbursement Maps:**
   Reimbursement Maps are a set of files that serve the function of providing the appropriate ICD-9-CM code for reimbursement purposes that can be used to replace an inbound ICD-10 code. This mapping is intended only as an interim measure in the cases where legacy systems have not be converted to support ICD-10.[24]

5.2.5.3 Crosswalks and Equivalent Aggregation Translation Options

SMAs will need to consider the crosswalks and equivalent aggregation translation options.

Crosswalk

A crosswalk is a code conversion specification that defines the conversion of an ICD-9-CM or ICD-10 code to one or more counterpart codes depending on the direction of translation. Crosswalking is a system translation function that supports conversion of individual codes at the record level.

Equivalent Aggregation

An equivalent aggregation represents the grouping of ICD-10 codes to represent a medical concept that spans multiple codes.

> **Example:** The concept of "nonunion" of a fracture is contained in one ICD-9-CM diagnosis code, but the same concept is contained in 2894 ICD-10-CM codes.

22 http://www3.cms.gov/ICD10/12_2010_ICD_10_CM.asp
23 http://www3.cms.gov/ICD10/13_2010_ICD10PCS.asp
24 http://www3.cms.gov/ICD10/Downloads/3_reimb_map_guide_2010.pdf

SMAs base most rules, policies, and analytic categories on defined code groups representing some conceptual intent. Translation requires the redefinition of the original intent of the rule, policy, or category based on aggregation or grouping of codes that represent that intent.

There are two types of translation that the SMAs will need to consider.

1. **Crosswalks** – Converting from a source code to one or more codes in the target standard.
2. **Equivalent Aggregation** – Redefining the intent of rules or analysis based on categories (groups) of codes in ICD-10.

There are two (2) aggregations to consider:

1. **Redefining Aggregations:**

   A simple crosswalk will not address equivalent code groups. SMAs must define the intent of their rules or policies in ICD-10, independent of prior definitions within ICD-9-CM. The translation of rules, and categories based on ICD-10 requires a four (4) step process.

   1. A clear identification and definition of the original intent of the rule or category.
   2. Identification of the ICD-10 codes that represent that intent.
   3. Configuring systems to support these codes.
   4. Testing reconfigured systems with appropriate scenarios to assure that the original intent of the rule or category was met by the group definition or system configuration process.

2. **Identifying the appropriate codes for aggregation:**

   Definition of the codes that most appropriately represent the intent of the rule or category requires research. The use of the GEM files may help in identifying these codes, but will not provide a complete list of all codes that meet that intent in many instances. Use of additional term based searches will often be required to assure that the new aggregation of ICD-10 codes represents the original intent of the rule or policy prior to transition.

   Example: A policy or rule limits a specific treatment, "Chelation Therapy," to conditions related to "Heavy Metal Toxicity." In this policy example, the ICD-9-CM diagnosis code an SMA might use to identify "Health Metal Toxicity" could include 24 codes. A simple GEM mapping (ICD-9-CM to ICD-10) would result in 42 codes. The intent of the policy related to the condition of "Heavy Metal toxicity" requires 100 ICD-10-CM codes to represent this intent.

5.2.5.4 Translation Considerations

SMAs should consider translation direction and diagnosis code versus procedure code translation.

5.2.5.4.1 Translation Direction

Translation direction results in issues for combination codes used within ICD-10. ICD-10-CM frequently uses combination codes. ICD-10 PCS avoids using combination codes even if combined ICD-10-PCS codes have added meaning. Below are the implications to combination codes depending on the direction of translation, ICD-10-CM to ICD-9-CM diagnosis codes or ICD-9-CM diagnosis codes to ICD-10-CM.

Translation from ICD-10-CM to ICD-9-CM diagnosis codes increases the potential loss of ICD-10-CM detail. ICD-9-CM diagnosis codes comparisons to ICD-10-CM are more likely to have consistent meaning at an aggregate level. There are some ICD-9-CM diagnosis codes that have more detail than ICD-10-CM codes, but this is not common.

Translation from ICD-9-CM diagnosis codes to ICD-10-CM increases integrity challenges since without additional clinical information to supplement the ICD-9-CM diagnosis code, this translation often forces the assumption of concepts that may not be true because there is simply no less detailed corresponding ICD-10-CM code to match.

> **Example:** Translation of the ICD-9-CM procedure code for "Finger Amputation" includes only one code, but the corresponding ICD-10 procedure codes include 32 codes related to each finger, level, and approach. There is no general ICD-10-CM code for "Finger Amputation." The SMA must specify the finger, level, and approach. Without additional clinical information the SMA must translate to assign a finger, level, and approach arbitrarily.

5.2.5.4.2 Diagnosis Code vs. Procedure Code Translation

The translation of ICD-10 diagnosis codes and ICD-10 procedure codes pose challenges requiring different translation approaches. The ICD-10 diagnosis code structure often is consistent with the ICD-9-CM code structure. Concepts and terms defined in ICD-10-CM repeat consistently and tend to have similar definitions. There are a number of unspecified variations of the ICD-10-CM codes that allow for some matches that are more equivalent in many cases.

Unlike ICD-10 diagnosis codes, ICD-10 procedure codes are markedly different in structure and definition. ICD-10 procedure codes are specific, but ICD-9-CM procedure codes range from specific to non-specific. The ICD-10 procedure codes are discrete, which forces potential translation to multiple ICD-9-CM procedure codes. Since the ICD-10 procedure codes are very detailed with very limited general codes, matching ICD-9-CM procedure codes to ICD-10-PCS can lead to assumptions that may not be accurate. As a result of the dramatic changes in terminology in ICD-10 procedure codes, defining equivalency may be difficult for operational users unfamiliar with the new precise definitions in ICD-10-PCS.

5.2.5.5 Translation Accountability

Translation accountability refers to the need to account for translation events and the impact associated with those translation events. Translations alter the content of healthcare data, which may have both information quality and financial impacts.

Table 16 outlines the key parameters of data accountability that the SMAs should consider to establish ICD-9-CM/ICD-10 translation accountability.

Table 16: Key Parameters of Data Accountability

Accountability Parameters	Description	Key ICD-10 Considerations
Validation	Validation is the process of confirming that codes are consistent according to the required HIPAA standard.	• During the transition period, SMAs will receive both valid ICD-9-CM and ICD-10 codes. SMAs will need to dual process both ICD-9-CM and ICD-10 since the validity of the codes submitted on a claim is determined by the date of service or the date of discharge. • SMA validation engines will need to support validation of ICD codes based on these dates of service/discharge.

Crosswalk Specifications	Crosswalk specifications define how the code in one (1) standard translates to the code(s) for another standard.	• ICD-9-CM and ICD-10 crosswalks are bi-directional and may result in the loss of integrity of the concepts initially intended in the source code.
		• Specifications to consider:
		  ○ Rationale for utilizing a crosswalk from one code to another was chosen from possible options;
		  ○ Identify the information lost in the translation process; and
		  ○ Identify information assumed in the translation process that may not be true.

Accountability Parameters	Description	Key ICD-10 Considerations
Transaction Routing	As SMAs process transactions, the SMA may alter some content to suit the purpose of routing business rules supporting downstream systems.	• The SMA should evaluate the system's ability to handle and support ICD-9-CM and ICD-10 codes as a precursor to identifying the best approach for support transaction routing. • The SMAs will require rules for system specific translations to support source data translation. • The SMA will require visibility into the routing of translated transactions to identify altered data by system. • An understanding of how the SMA translation strategy will impact contractors and their interfaces with the MMIS or other SMA contractors and systems
Activity Log	The SMA will need a log to identify each instance of alteration of source data.	• The SMA will need a log to identify each ICD translation created for each system transaction to capture the following: o Data translated; o Translation direction; o Purpose of translation; o Date of data translation; and o Who performed the translation?
Data Linkages	Reporting and outbound transactions must support retrieving the original, unaltered data from the source transaction.	• If the SMA translates ICD-9-CM or ICD-10 codes, the SMA needs to create a linkage to both the original, unaltered code and translated code. • When an SMA translates from ICD-10 to ICD-9-CM and back to ICD-10 without the correct linkage, the SMA could lose information in the multiple translations.

5.2.6 Create ICD-10 Remediation Strategy and Plan

This section identifies considerations in developing and executing a consistent remediation strategy. Refer to Table 17 for key questions to address when planning for remediation.

Table 17: ICD-9-CM to ICD-10 Considerations

Considerations	Key Questions
What is the SMA's ICD code translation strategy?	• Should the SMA pursue an upgrade strategy (Maximum or Minimum), a crosswalk strategy or a hybrid strategy? • Should the SMA convert historical data from ICD-9-CM to ICD-10? • What translation approaches should each business area utilize (assumes a conversion strategy)?
How should the SMA implement its translation strategy?	• How will the SMA resolve non one-to-one ICD-9-CM/ICD-10 mappings across business areas (assumes an upgrade strategy)? • How will the SMA document and communicate translation decisions? • How will the SMA apply ICD-10 code translations to policies, processes, and systems? • When will the SMA start updating instructions and other documents?

5.2.6.1 Remediation Strategy Options

This section describes remediation strategy options to choose from when implementing ICD-10.

A remediation strategy addresses the method and approach to implement ICD-10. In order to determine the best method for ICD-10 SMA implementation, the SMA should consider several possibilities for implementation.

This section identifies four (4) HIPAA compliant remediation strategy options.

1. Crosswalk Reimbursement Strategy (not preferred);
2. Minimal Upgrade Strategy;
3. Maximum Upgrade Strategy (**preferred**); and
4. Upgrade and Crosswalk Hybrid Strategy.

Note: A crosswalk strategy might not pass future MMIS Certifications.

The SMA is accountable and responsible for determining the remediation strategy for ICD-10 implementation. This strategy will drive translation decisions and shape the nature of the entire SMA ICD-10 implementation.

The SMA should evaluate the following *key assumptions* regardless of the remediation strategy chosen:

- Depending on the business area, the SMA may need to retain the ability to process information using ICD-9-CM codes;
- There will be a period of time where the SMA must be able to dual process ICD-9-CM and ICD-10 codes; and
- Longitudinal data that spans multiple years will need to be converted to ICD-9-CM or to ICD-10 for trending and other reporting and analysis that spans multiple years depending on the predominance of code type in the data set that is being analyzed.

Reference Appendix B – Templates and Artifacts for template information.

5.2.6.1.1 Crosswalk Reimbursement Strategy

This section describes the crosswalk reimbursement strategy SMAs could choose to implement ICD-10.

Table 18 provides a brief description of the crosswalk strategy as well as associated pros and cons. Reference the Appendix B – Templates and Artifacts for template information.

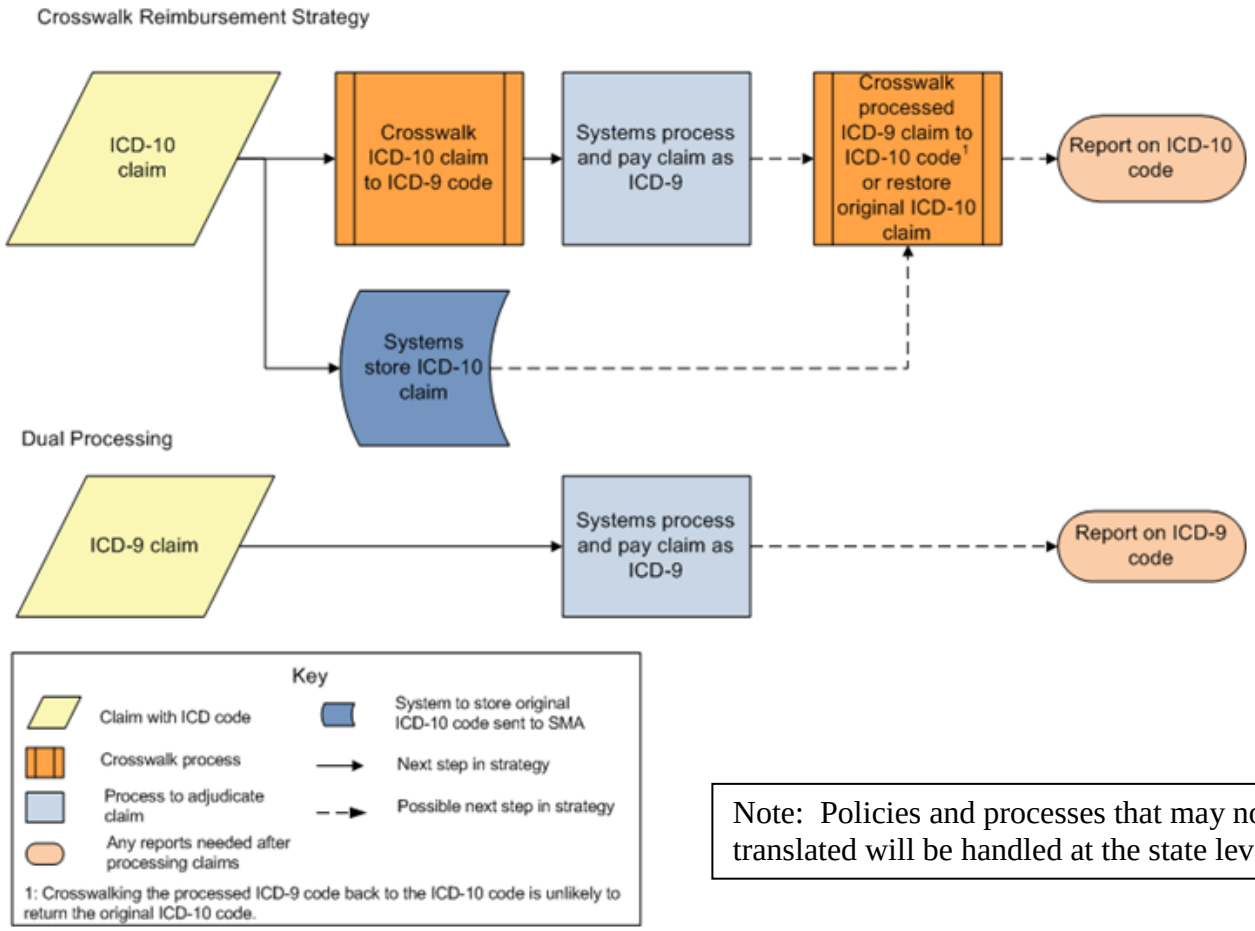
Table 18: Crosswalk Reimbursement Strategy

Strategy	Description	Advantages	Disadvantages
Crosswalk Strategy[25]	Transform inbound ICD-10 business transactions to the ICD-9-CM equivalent using reimbursement mappings or crosswalks. The business processes and systems would continue to store ICD-9-CM codes and utilize ICD-9-CM rules, without full conversion to ICD-10 codes. Utilize a crosswalking strategy to translate incoming ICD-10 codes to ICD-9-CM codes. This does not require update to internal policies, processes, or systems to accommodate ICD-10 codes.	• Lower ICD-10 implementation costs initially • Less disruption to business operations and systems initially	• Not CMCS preferred strategy • SMA not positioned to take advantage of ICD-10's benefits • ICD-10 implementation more difficult and costly in the future • Difficulty associating ICD-10 code submitted by external partner to information stored in SMA systems • Loses specificity of ICD-10 codes and their added granularity • Will have to undergo another transition when fully converts to ICD-10

Figure 5 illustrates the crosswalk strategy.

25 Might not pass future MMIS certifications

Figure 5: Crosswalk Reimbursement Strategy



Note: Policies and processes that may not be translated will be handled at the state level.

5.2.6.2 Minimum Upgrade Strategy

This section describes the minimum upgrade strategy SMAs could employ to implement ICD-10.

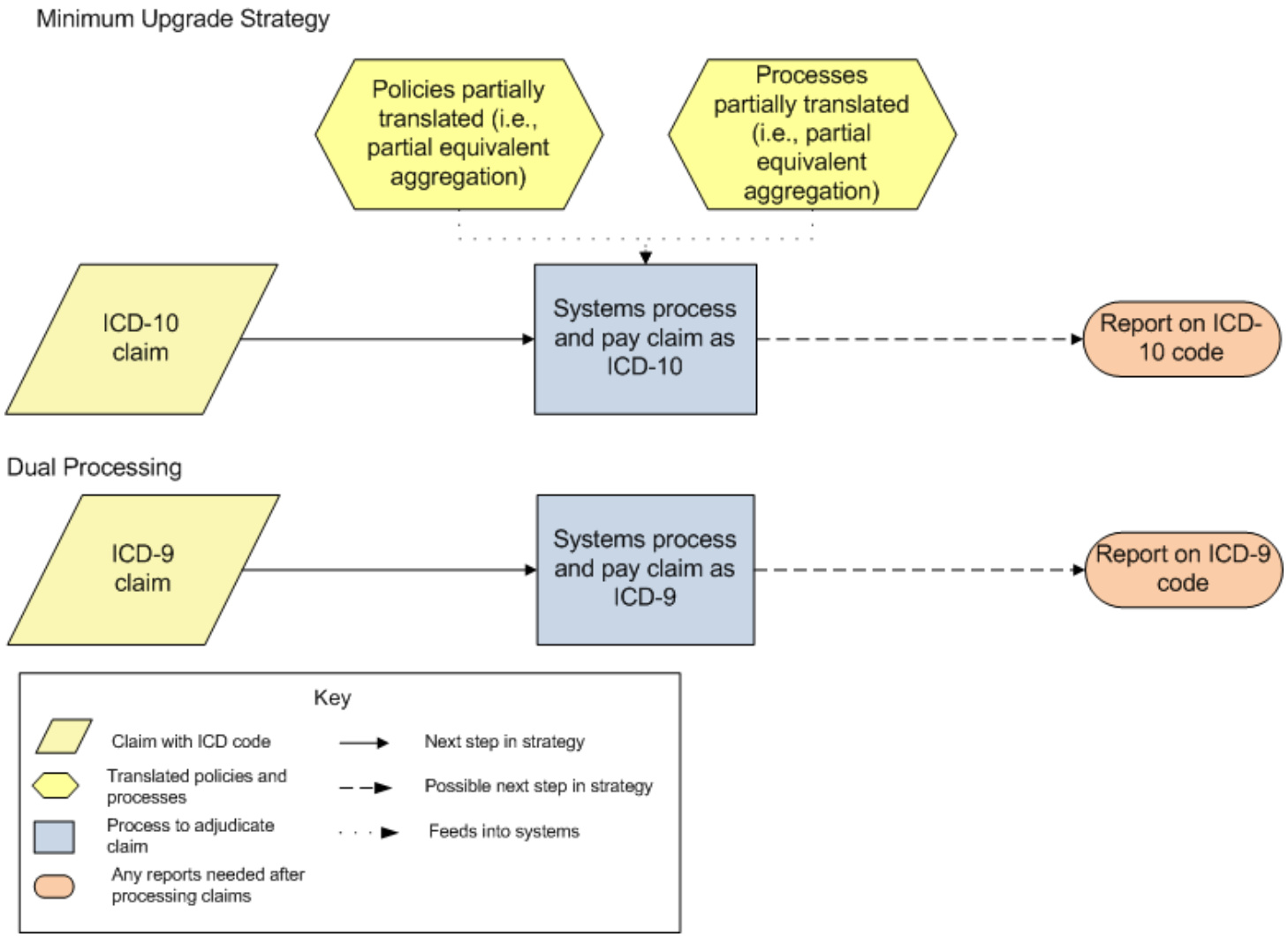
Table 19 provides a brief description of the minimum upgrade strategy as well as pros and cons associated with it.

Table 19: Minimum Upgrade Strategy

Strategy	Description	Advantages	Disadvantages
Minimum Upgrade Strategy	Convert **SOME** SMA policies, processes, and systems to ICD-10 using the GEMs tool. The SMA translates policies and processes **PARTIALLY** by equivalent aggregation. Accept, store, and process ICD-10 transactions from business partners. Update business rules in the MMIS to utilize **SOME** added granularity of ICD-10. Translate ICD-9-CM business rules and policies to ICD-10 without taking into consideration the full potential benefits of ICD-10.	• Upgrade MMIS to meet minimum business functionality • Potential for fewer future transitions than the crosswalk strategy- to the maximum upgrade strategy	• Not CMCS preferred strategy • Does not gain all of ICD-10 benefits • Will need to upgrade in the future to fully utilize ICD-10 • Could spend extra money to update same MMIS modules twice

Figure 6: Minimum Upgrade Strategy illustrates the minimum upgrade strategy.

Figure 6: Minimum Upgrade Strategy



5.2.6.3 Maximum Strategy

This section describes the maximum strategy SMAs could employ to implement ICD-10.

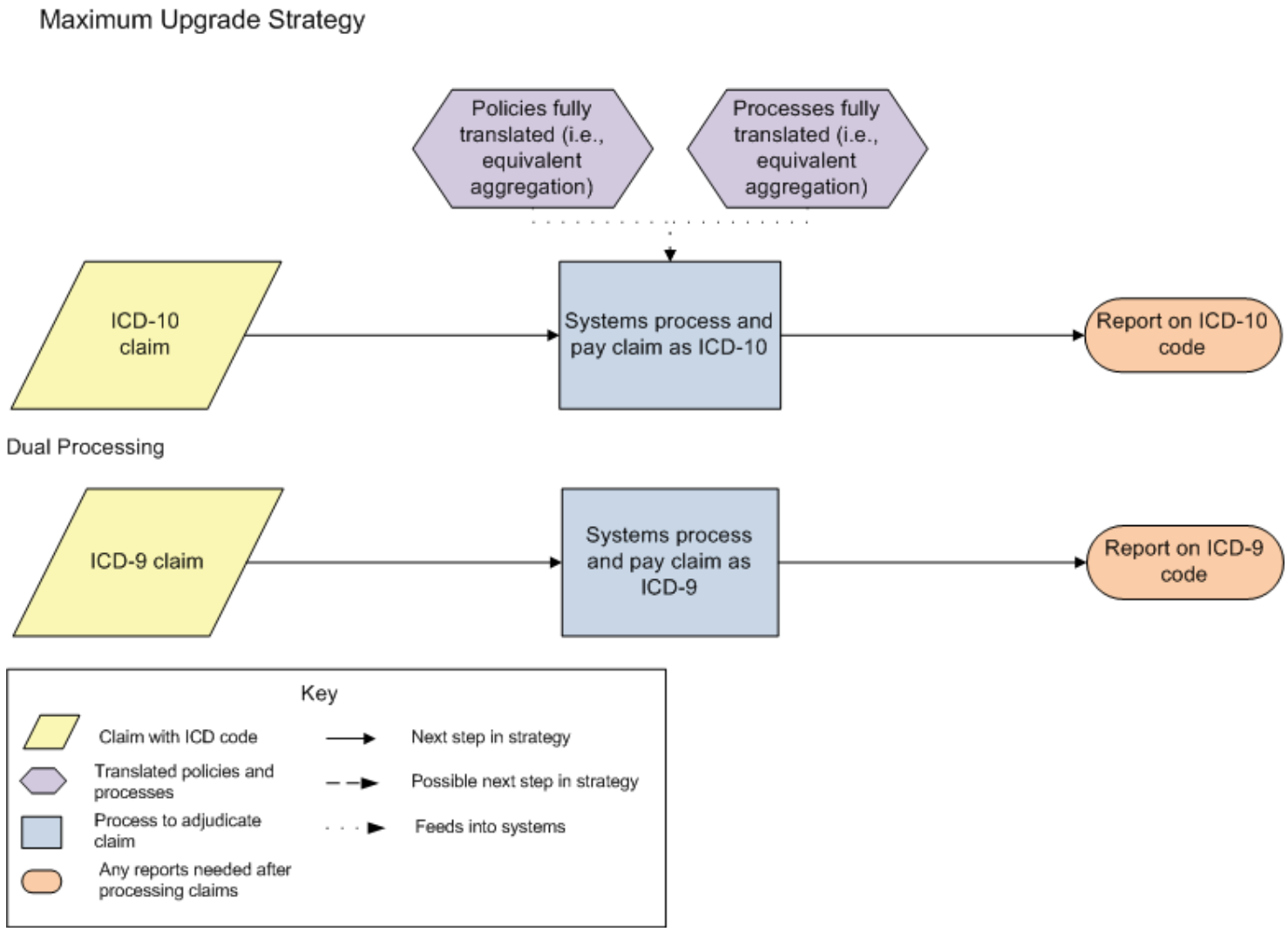
Table 20 provides a brief description of the maximum upgrade strategy as well as pros and cons associated with it.

Table 20: Maximum Upgrade Strategy

Strategy	Description	Advantages	Disadvantages
Maximum Upgrade Strategy	Convert **ALL** SMA policies, processes, and systems to ICD-10 using the General Equivalence Mappings (GEMs) tool. The SMA translates policies and processes **FULLY** by equivalent aggregation. Accept, store, and process ICD-10 transactions from business partners. Update **ALL** business rules in the MMIS to use the added granularity of ICD-10. Translate ICD-9-CM business rules and policies to ICD-10 taking into consideration the full potential benefits of ICD-10.	• CMCS preferred strategy • SMA positioned to benefit from ICD-10 • No later conversions are required so future costs are reduced • SMA can pay more accurately based on the greater specificity and granularity of ICD-10 codes • Improve reporting and historical data files	• Initial development costs might be higher

Figure 7 illustrates the maximum upgrade strategy.

Figure 7: Maximum Upgrade Strategy



5.2.6.4 Upgrade and Crosswalk Hybrid Strategy

This section describes the upgrade and crosswalk hybrid strategy SMAs could employ to implement ICD-10.

Table 21 provides a brief description of the upgrade and crosswalk hybrid strategy as well as pros and cons associated with it.

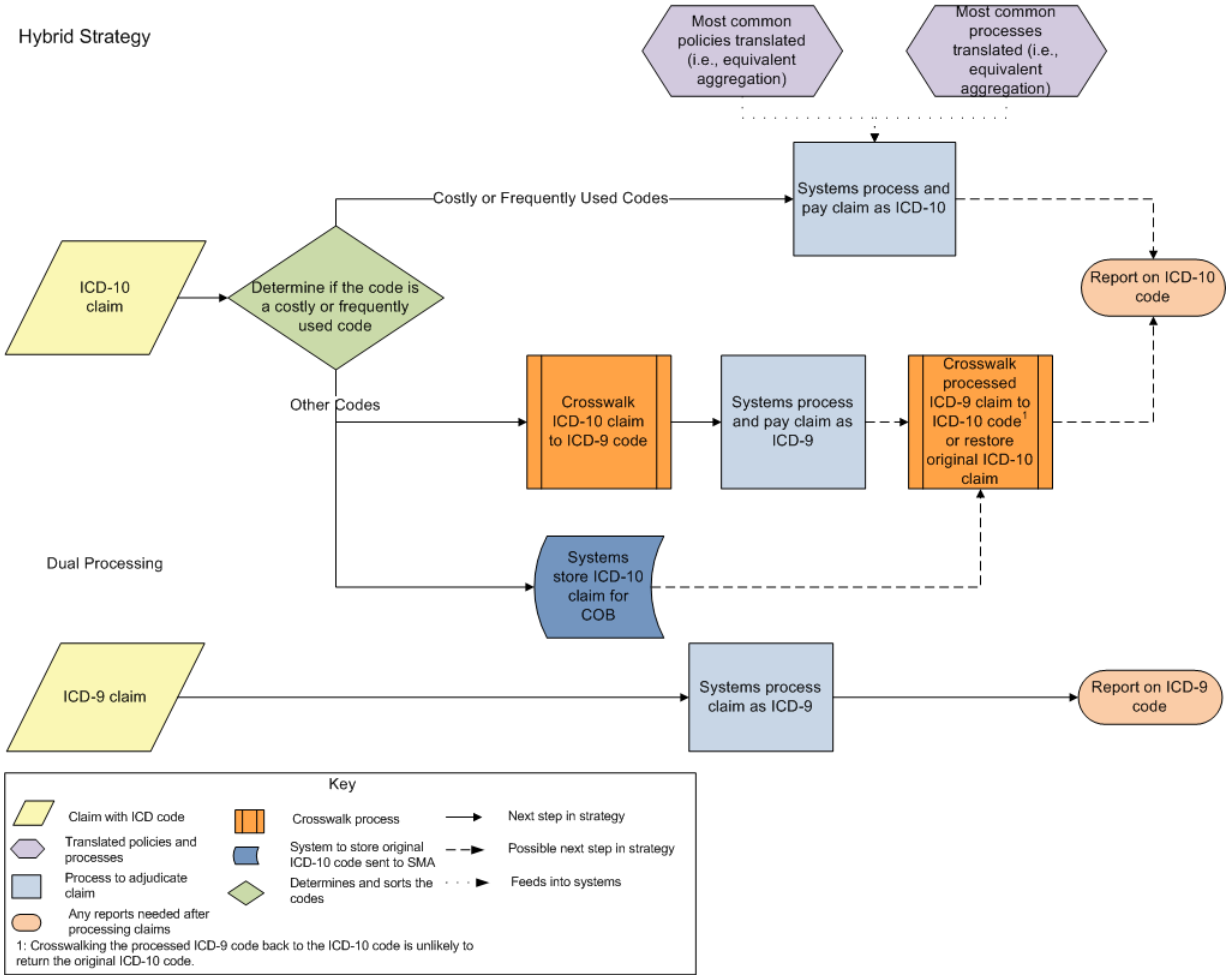
Table 21: Upgrade and Crosswalk Hybrid Strategy

Strategy	Description	Advantages	Disadvantages
Upgrade and Crosswalk Hybrid Strategy[26]	Converts highly impacted or frequently referenced SMA policies, processes, and systems to ICD-10 using the GEMs tool. For claims with ICD-10 codes that do not fall into the costly or frequently used category, an ICD-10 to ICD-9 crosswalk will be utilized. Accept, store, and process ICD-10 transactions from business partners in critical areas. The highly impacted or frequently referenced SMA policies, processes, and systems will not crosswalk from ICD-10 to ICD-9-CM. All other transactions require a crosswalk from an ICD-10 code to ICD-9-CM All other policies, processes, and systems are not updated to ICD-10.	• Lower initial cost than optimal compliance • Gains some ICD-10 benefits	• Not CMCS preferred strategy • Difficult to scope which systems should be updated to ICD-10 • Difficult to identify all interrelationships at the beginning of process • Will need to transition the rest of the policies, processes, and systems at a later date

Figure 8 illustrates the upgrade and crosswalk hybrid strategy.

[26] Might not pass future MMIS certifications

Figure 8: Upgrade and Crosswalk Hybrid Strategy



5.2.7 Historical Data

SMAs should consider historical data sets as they transition to ICD-10. SMAs have a significant asset in their historical data repositories that contain information about conditions, as well as services related to the management of those conditions. This data is critical to understanding patterns of care and predicting what actions the SMA should consider moving forward. Analysis of historical data provides the intelligence needed for an analysis of a variety of key functional areas[27]:

- Financial risk;
- Quality of care;
- Population health status;
- Disease trends;
- Patterns of utilization and cost for institutional procedures;
- Effectiveness and outcomes;
- Efficiency of care (episode analysis);
- Disease surveillance;
- Population based disease trends; and
- Changing disease patterns.

5.2.7.1.1 Historical Data Conversion Strategies

Assuming a set of data that crosses the transition period where one half of the data in the repository was created during a period when ICD-9-CM codes were valid and the other half was created after Oct 1, 2013, some conversion of information will be required to report experience over this period.

Given this scenario, there are three options presented in Table 22.

[27] This is just a limited list of the uses of historical data by SMAs.

Table 22: Historical Data Conversion Options

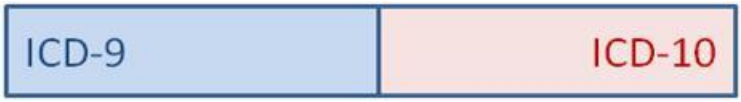
Option	Advantages	Disadvantages
Convert ICD-9-CM diagnosis codes to ICD-10-CM	• Maintains the detail of existing ICD-10 codes. • Is more consistent with reporting moving forward.	• Makes assumptions about some of the data that may not be true. • Is inconsistent with prior history. • Requires the conversion of existing reporting logic to support ICD-10.
Convert ICD-10-CM codes to ICD-9-CM diagnosis codes	• Is less likely to assume facts that may not be true. • Is more consistent with historical reporting content. • Requires less effort in converting existing reporting logic.	• Loses the ability to report at a more detailed level. • Loses the ability to utilize risk and severity parameters. • Will require remediation at some point in the future.
Do not convert ICD-9-CM or ICD-10 codes and report only at an aggregate level	• Provides a much more accurate representation of the facts as they can be reported. • Creates a bridge between the ICD-9-CM and ICD-10 reporting environments that can be stable during the transition of historical data.	• Does not fully leverage the parameters offered by ICD-10. • Requires some level of conversion of existing reporting logic. • Will require replacement with a different reporting environment to take full advantage of ICD-10 in the future.

Given these options, the advantages and disadvantages may change over time depending on the profile of the data in the historical data set.

The three scenarios below illustrate differences in distribution of ICD-9-CM and ICD-10 codes over time within a historical data set:

1. A historical set of data in Early 2014 would contain the largest volume of claims reported with ICD-9-CM codes:

2. A historical set of data in early 2015 might contain the half of the claims defined with ICD-9-CM and the other half with ICD-10 codes:



3. A historical set of data in late 2015 would contain the largest volume of claims reported with ICD-10 codes:

5.2.7.1.2 Historical Data Analysis in the Future

There are several factors to consider regarding historical data analysis in the future:

- **Data integrity**

  Data integrity is a key issue in the transition of data over time. Crosswalking data in a historical repository is likely to result in the loss of important facts about conditions and services or the assumption of facts that may not be true.

- **The right level of aggregation**

  Based on the nature of the available data, SMAs should perform reporting at a level of aggregation that is supported by the underlying data. As the historical data matures and they derive more data from native ICD-10 codes, it will be possible to provide better detail and greater analysis of risk, severity, and other important parameters offered by these codes.

- **Cross comparisons and benchmarking**

  As data is analyzed across various enterprises, it is unlikely that the same strategies for data transition or aggregation models will be consistently applied. SMAs should view comparisons and benchmarks with some skepticism until they establish a clear level of comparability.

- **Data driven initiatives**

  The ICD-10 transition will impact initiatives such as pay for performance, effectiveness measurement programs, or other data driven programs. This may factor into decisions on timing of participation in these initiatives as well as the risk of data quality issues that might impact the outcome of these initiatives or programs.

- **Source Code Reliability**

  Changes in ICD-10 definitions, structure, and rules may pose challenges in the early transition phase for providers. This could result in a fluctuating level of coding errors that will improve overtime, but will impact consistency of data until coding skills improve.

- **Remediation of Reporting and Analytic Models**

Remediation of existing reporting and analytic models to support ICD-10 will require a significant investment of resources. Reporting at a higher level of aggregation and limiting reporting during the transition period to critical needs is a consideration until there is sufficient ICD-10 historical data to leverage with more robust analytic models that can take advantage of ICD-10.

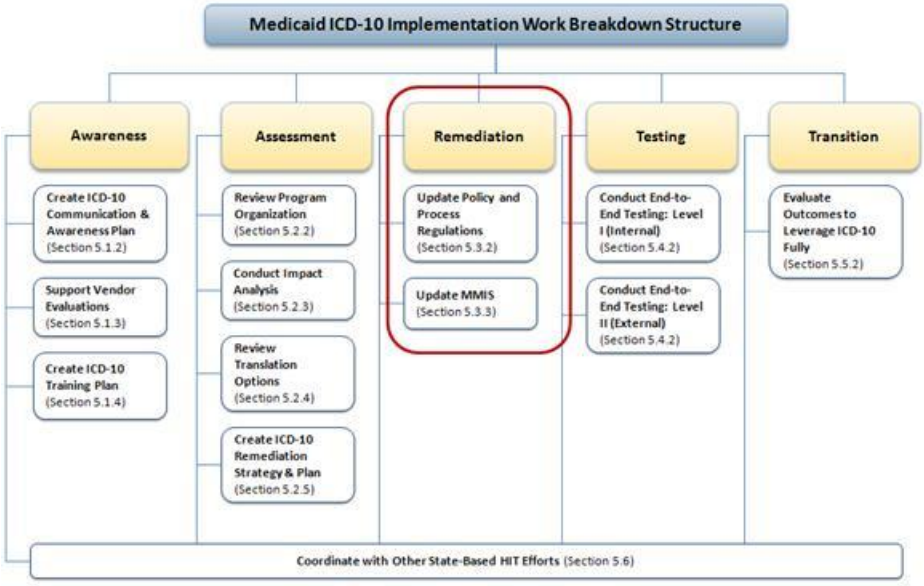
5.3 Remediation Phase Overview

This section provides an overview and introduction of the Remediation Phase and the major activities involved in this phase.

5.3.1 Phase Overview and Introduction

The Remediation Phase is the third phase in the ICD-10 implementation, as highlighted in Figure 9 below.

Figure 9: Medicaid ICD-10 Implementation Remediation Phase



5.3.2 Remediation Phase Milestones

This section includes the milestones in the remediation ICD-10 implementation phase per the Medicaid ICD-10 Implementation Schedule/Project Plan. Table 23 explains the phase purpose, inputs, activities, outcomes, and supporting tools and templates.

Table 23: Remediation Phase Information

Remediation
Phase Purpose:
The purpose of the Remediation Phase is to make ICD-10 changes to impacted policies, processes, and systems.
Key Inputs to Phase and/or Predecessors:
• **Input and Predecessor: Impact Analysis** • **Input and Predecessor: Remediation Strategy and Plan** • **Input: Updated Medicaid ICD-10 Implementation Schedule/Project Plan**
Major Activities:
1. **Update Policy and Process Regulations** 2. **Update MMIS**
Key Outcomes from Phase:
• **Updated Policy and Processes** • **Updated MMIS** • **Updated Medicaid ICD-10 Implementation Schedule/Project Plan**
Supporting Tools and Templates:
• **Remediation Plan Template;** • **Business Clinical Scenarios;** • **ICD-9 and ICD-10 Clinical Concept Examples;** • **Business Process Models (BPMs): as-is and to-be** • **Requirements Traceability Matrix: Business and Technical Requirements Template;** • **Change Control Plan;** • **Test Data Checklist;** • **Test Plan; and** • **Translation Checklist.**

Table 24 references the milestones associated with the Remediation phase of the Medicaid ICD-10 Implementation Schedule. The SMA should build into their SMA specific Medicaid ICD-10 Implementation Schedule/Project Plan supporting tasks needed to remediate their unique business processes, policies, and systems. The table includes the following columns:

- **ID**: SMA Timeline milestone identification number
- **Milestone Description:** Provides high level detail around milestone activities
- **Inputs:** Key documents/deliverables and inputs into the milestone activities
- **Key Activities:** Actions associated with completion of each milestone activity
- **Outputs:** Key documents/deliverables associated with each milestone activity
- **Start-Finish Dates:** SMA Timeline milestone dates.

Table 24: Remediation Phase Milestone Details

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
38	**Develop Updates to Policies**	• Scored Impact Assessment • Work effort and associated remediation tasks • Business Requirements • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Conduct thorough review of impacted policies and language required to implement ICD-10 • Conduct working sessions with business area SMEs to update impacted policies with appropriate language (e.g., review and understand clinical coding changes) • Receive approval for updated language	• Updated Policy Documents • Updated Medicaid ICD-10 Implementation Schedule/Project Plan • Business Clinical Scenarios • ICD-9 and ICD-10 Clinical Concept Examples	5/29/11 - 8/27/11

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
39	**Develop Updates to Processes**	• Scored Impact Assessment • Work effort and associated remediation tasks • Business Requirements • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Create to-be future state process maps (e.g., review and understand clinical coding changes) • Receive approval for updated to-be process maps	• Updated to-be process maps (BPMs) • Updated Medicaid ICD-10 Implementation Schedule/Project Plan • Business Clinical Scenarios • ICD-9 and ICD-10 Clinical Concept Examples	5/29/11 - 8/27/11

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
41	**IT Changes:** Develop System Requirements and Change Requests	• Scored Impact Assessment • Business Requirements • Technical Requirements • Remediation Plan • Translation Checklist • Test Data Checklist • Change Control Plan • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Finalize System/Technical requirements • Create System Change Requests • Identify Test data requirements	• Finalized Technical Requirements • System Change Requests • Updated Medicaid ICD-10 Implementation Schedule/Project Plan • Test Data	5/29/11 - 8/27/11

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
42	**IT Changes:** Design System Changes	• Finalized Technical Requirements • System Change Requests • List of Impacted Systems • Remediation Plan • Translation Checklist • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Design code to remediate system changes/updates	• Updated System Coding • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	8/27/11 - 10/26/11
43	**IT Changes:** Develop System Changes	• Updated System Coding • Remediation Plan • Translation Checklist • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Build code to remediate system changes/updates	• Updated System coding logic • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	10/26/11 - 4/23/12

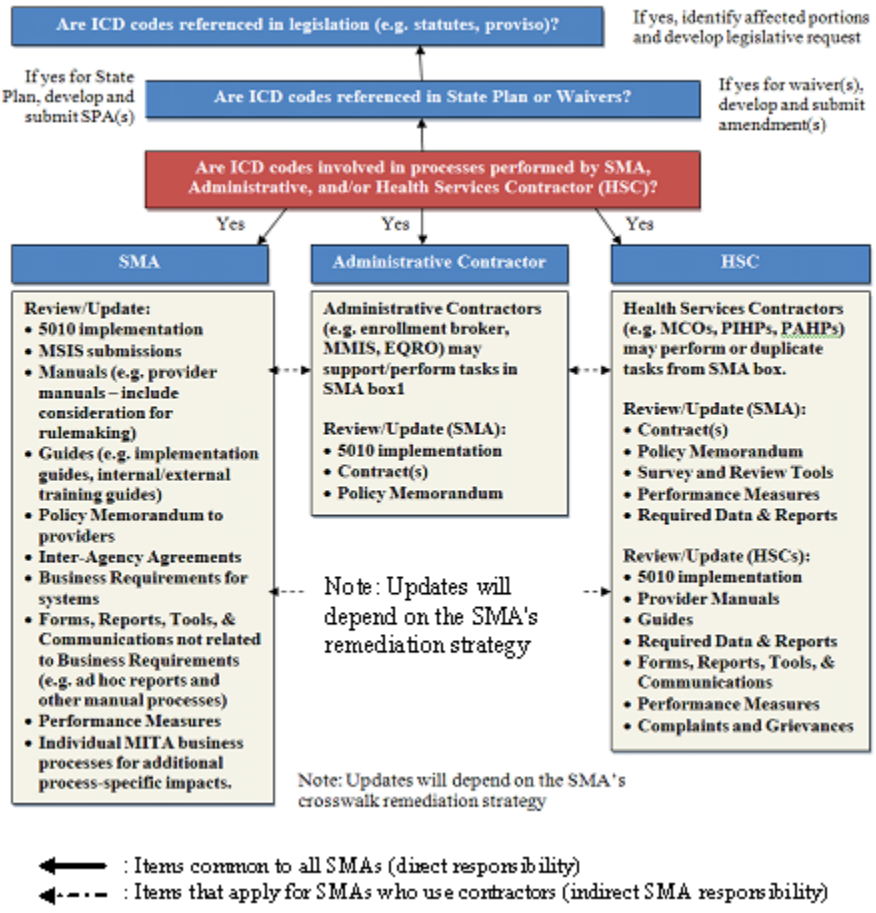
ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
44	**IT Changes:** Perform System Tests for Each System	• Updated System coding logic • Test Cases (e.g., report and interface) • Test Plan • Test Data • Test Data Checklist • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Conduct Testing based on updated system logic • Finalize test data	• Test Results • Updated Medicaid ICD-10 Implementation Schedule/Project Plan • Test Data	3/24/11 - 5/23/12

5.3.3 Update Policy and Process Regulations

This section identifies and describes the impacted global policy framework for the ICD-10-CM and ICD-10-PCS code sets implementation. In addition, this section specifies the impacts that may be specific to one or more of the MITA business processes.

Figure 10 outlines the global policy framework impacts, the figure represents ICD codes and whether they are referenced in State Plan or Waivers and if so, whether the processes performed by SMAs, Administrative Contractors, or Health Services Contractors will be impacted by ICD-10. The CMS MITA Impact Assessment addressed essential functions (functions which are impacted by ICD-10) while the Implementation Assistance Handbook addresses all MITA functions, not just essential.

Figure 10: Global Impacts and Remediation Pathway



The MITA framework organizes an SMA's operations into common business processes.[28] SMAs can leverage the MITA framework as a starting point to evaluate and assess the impact of business and system changes to develop the necessary remediation and testing plans. For each of the MITA business processes, SMAs need to assess global impacts and process-specific impacts as listed in subsequent tables. SMAs should update their Updated Medicaid ICD-10 Implementation Schedule/Project Plan to include the key activities associated with remediating policies and processes.

Table 25 explains the ICD-10 impacts on Member Management.

Table 25: Impacts of ICD-10 on Member Management

Business Process	Description (brief)[29]	ICD-10 Impacts
Determine Eligibility	Receives eligibility application; checks for status, establishes eligibility type; screens/edits required fields, verifies applicant information with external entities, assigns ID, establishes eligibility categories and hierarchy, associates with benefit packages, and produces notifications	• Diagnosis-specific eligibility[30] • Non-SMA agency often involved
Disenroll Member	Manages termination of member enrollment in a program, including: processing of eligibility terminations and requests for disenrollment; validation termination meets state rules; requesting process to load new/ changed info; prompting process to provide timely/accurate notification or make enrollment data available to appropriate parties/processes	• Enrollment broker, managed care, and non-SMA agency often involved • Diagnosis-specific conditions triggering automated disenrollment

28 This document refers to the MITA 2.01 Framework.

29 For official descriptions of MITA processes, refer to http://mita.clemson.edu/ar/collection/USAR:CO_BA

30 For example, cervical/breast cancer, non-SSI disability, and pregnancy.

Business Process	Description (brief)[29]	ICD-10 Impacts
Enroll Member	Receives eligibility data, determines additional qualifications for enrollment in programs for which the member may be eligible, loads the enrollment outcome data into the Member and Contractor data store, and produces notifications to the member and the contractor	• Diagnoses may be used to enroll members in specific benefit packages, plans, and/or waiver programs (e.g., HIV/AIDS & developmentally disabled) • Enrollment broker and managed care contractors often involved
Inquire Member Eligibility	Receives requests for eligibility verification from authorized providers, programs or business associates; performs inquiry; prepares response, generates outbound transaction	• Additional specificity of ICD-10 will help identify member eligibility info
Manage Applicant & Member Communication	Receives requests for info, appointments and assistance from prospective/current members, such as those related to eligibility, redetermination, benefits, providers, health plans, and programs and provides requested assistance, appropriate responses and information packages	• Call-center scripts for eligibility and other requests that may be affected by ICD-10

Business Process	Description (brief)[29]	ICD-10 Impacts
Manage Member Grievance and Appeal	Handles applicant or member (or advocate) appeals of adverse decisions or communications of a grievance. Grievance/ appeal is received; logged and tracked; triaged; researched; hearing may be scheduled and conducted in accordance with legal requirements; and ruling made based upon evidence. Results of hearing documented, distributed, and stored in applicant/member file	• Diagnoses and procedures are used in grievances and appeals • Quality Assurance (QA)/Quality Improvement (QI) tracking of Grievances &Appeals • Legal process • QIOs/EQROs • Oversight of contractors
Manage Member Information	Responsible for managing all operational aspects of Member data store, which is the source of comprehensive information about applicants/members, and their interactions with the SMA	• Diagnoses used to determine eligibility may be included in member profile • Output: shared data with numerous agencies/entities
Perform Population & Member Outreach	Originates internally within Agency for purposes such as: notifying prospective applicants and current members about new benefit packages and population health initiatives; new initiatives from Program Administration, and indicators of underserved populations	• Additional specificity of ICD-10 will help identify populations and members for targeted outreach

Table 26 explains the ICD-10 impacts on Provider Management.

Table 26: Impacts of ICD-10 on Provider Management

Business Process	Description (brief)[27]	ICD-10 Impacts
Enroll Provider	Responsible for managing providers' enrollment in programs, including Receipt/processing of enrollment application, including status tracking & validating meet state rules; determine contracting parameters and negotiate contracts; establish payment rates and funding sources; supporting receipt/verification of contractor's provider enrollment roster information; requesting process to load initial/changed enrollment info, including providers contracted with program contractors into Provider data store; prompting process to provide timely and accurate notification or to make enrollment data available to all appropriate parties/processes	• Provider allowed services, if defined • Provider agreements and contracts, including performance evaluation and payment info
Disenroll Provider	Manages providers' enrollment in programs, including processing of disenrollment; tracking of disenrollment requests and records, including assigning identifiers and monitoring status; validation that disenrollment meets state rules and substantiating basis for disenrollment; requesting process load initial/changed disenrollment into Provider data store; prompting process to prepare disenrollment notifications and instructions for closing out provider contracts; prompting process to provide timely and accurate notification or make disenrollment data available to all appropriate parties/ processes; prompting process to notify and reassign, where necessary, members on the provider's patient panel; prompting process to provide material to displaced members	• Re-assignment of members to provider with similar allowed services

Business Process	Description (brief)[27]	ICD-10 Impacts
Manage Provider Information	Manages all operational aspects of the Provider data store, which is the source of comprehensive information about prospective and contracted providers, and their interactions with the SMA	• Diagnoses and procedures may be included in the provider profile to specify restrictions or self-selected limits
Inquire Provider Information	Receives requests for provider enrollment verification; performs inquiry; prepares response; generates outbound transaction	• Provider allowed services (if defined)
Manage Provider Communication	Receives requests for information, provider publications, and assistance from prospective/current providers' communications such as inquiries related to provider eligibility, covered services, reimbursement, and enrollment requirements Provides requested assistance and appropriate responses and information packages	• Additional specificity of ICD-10 will help identify providers for targeted outreach and communications • Provider publications • Response to ICD related queries (e.g., covered services, reimbursement)
Manage Provider Grievance and Appeal	Handles provider appeals of adverse decisions or communications of a grievance Grievance or appeal is received; logged and tracked; triaged; researched; hearing may be scheduled and conducted in accordance with legal requirements; and ruling is made based upon evidence Results of hearing are documented, distributed to provider file, and provider is formally notified of decision	• Diagnoses and procedures are used in grievances and appeals • QA/QI tracking of G&As • Legal process • QIOs/EQROs • Oversight of contractors

Business Process	Description (brief)[27]	ICD-10 Impacts
Perform Provider Outreach	Originates internally within the Medicaid enterprise in response to multiple activities, e.g., identified gaps in medical service coverage, public health alerts, provider complaints, medical breakthroughs, changes in the Medicaid program policies and procedures	• Diagnoses and procedures may be used to support outreach activities (e.g., identify gaps in provider networks and provide public health alerts)

Table 27 explains the ICD-10 impacts on Contractor Management.

Table 27: Impacts of ICD-10 on Contractor Management

Business Process	Description (brief)[27]	ICD-10 Impacts
Manage Administrative or Health Services Contract	Receives the contract award data set, implements contract monitoring procedures, and updates contract if needed, and continues to monitor the terms of the contract throughout its duration	• Contracts should include consideration of ICD-10 to ensure compliance, reporting, and alignment with State efforts (e.g., Health Effectiveness Data Information Set / encounter data) • Payment may include Pay for Performance (P4P) for specific services, e.g., multiple chronic health conditions.
Award Administrative or Health Services Contract	Utilizes requirements, advanced planning documents, requests for information, request for proposal and sole source documents. This process is used to request and receive proposals, verifies proposal content against Request for Proposal (RFP) or sole source requirements, applies evaluation criteria, designates contractor/vendor, posts award information, entertains protests, resolves protests, negotiates contract, and notifies parties. In some States, this business process may be used to make a recommendation of award instead of the award itself	• Application of evaluation criteria should include consideration of ICD-10

Business Process	Description (brief)[27]	ICD-10 Impacts
Close-out Administrative or Health Services Contract	Begins with order to terminate a contract. Close-out process ensures that the obligations of the current contract are fulfilled and the turn-over to the new contractor is completed according to contractual obligations	• Members may be re-assigned to contractors with similar allowed services (e.g., health plans and disease management)
Produce Administrative or Health Services RFP	Gathers requirements, develops a RFP, requests and receives approvals for the RFP, and solicits responses	• Procurements should include consideration of ICD-10 to ensure contractors align with State remediation and management efforts
Manage Contractor Communication	Receives requests for information, appointments, and assistance from contractors such as inquiries related to changes in Medicaid program policies and procedures, introduction of new programs, changes to existing programs, public health alerts, and contract amendments, etc. Communications are researched, developed, and produced for distribution.	• Contractors may receive memorandum and other documents from the state with reference to specific diagnoses and procedure codes
Perform Contractor Outreach	Originates within the Agency in response to multiple activities, e.g., public health alerts, new programs, and/or changes in the Medicaid program policies and procedures	• States may need specialized assistance with transition to and management of ICD-10 and may perform targeted contractor outreach

Business Process	Description (brief)[27]	ICD-10 Impacts
Manage Contractor Information	Receives a request for addition, deletion, or change to the Contractor data store; validates the request, applies the instruction`, and tracks the activity	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Inquire Contractor Information	Receives requests for contract verification from authorized providers, programs or business associates; performs the inquiry; prepares response; and generates outbound transaction	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Support Contractor Grievance & Appeal	Handles contractor appeals of adverse decisions or communications of a grievance Grievance or appeal is received; logged and tracked; triaged; researched; hearing may be scheduled and conducted in accordance with legal requirements; and ruling is made based upon evidence Results of hearings are documented and relevant documents are distributed to contractor information file Contractor is formally notified of the decision	• Diagnoses and procedures may be involved

Table 28 explains the ICD-10 impacts on Operations Management.

Table 28: Impacts of ICD-10 on Operations Management

Business Process	Description (brief)[27]	ICD-10 Impacts
Authorize Referral	Used when referrals between providers must be approved for payment Examples are to providers for lab procedures and surgery Primarily used in provider network and managed care settings	• Referral for specialist may depend on diagnosis and/or procedure • May be performed by Health Service Contractors (HSCs)
Authorize Service	Encompasses both a pre- and post-approved service request Focuses on specific types/numbers of visits, surgeries, tests, drugs, Durable Medical Equipment (DME), and institutional days of stay (Primarily used in Fee for Service (FFS))	• Service authorization will depend on diagnosis and/or procedure • May be performed by HSCs
Authorize Treatment Plan	Encompasses both pre- and post-approved treatment plan Primarily used in care management settings where team assesses client, completes plan, which prior-authorizes providers and services over period of time	• Treatment plans are created for specific diagnoses • May be performed by HSCs • Updates to treatment plan as diagnoses change
Apply Attachment	Receiving attachment that has either been requested by payer or been sent by provider; linking with trace number to associated claim; stapling to claim or pending attachment for a predetermined time period set by edit and/or audit process; validating application level edits; determining if attachment provides additional information necessary to adjudicate claim	• Attachment diagnoses and procedures must be consistent with claim

Business Process	Description (brief)[27]	ICD-10 Impacts
Apply Mass Adjustment	Begins with receipt/notification of retroactive changes Identifying claims by claim/bill type or Healthcare Common Procedure Coding System(HCPCS, Current Procedural Terminology (CPT), Revenue Code(s), or member identification that were paid incorrectly during specified date range; applying predetermined set or sets of parameters that will reverse paid claims and repay correctly	• Mass adjustments consistent with SMA's remediation strategy

Business Process	Description (brief)[27]	ICD-10 Impacts
Audit Claim-Encounter	Receives a validated original or adjustment claim/encounter and checks Payment History data store for duplicate processed claims/encounters and life time limits Verifies services requiring authorization have approval, clinical appropriateness, and payment integrity Suspends data sets that fail audits for internal review, corrections, or additional information Sends successfully audited claims to price/value process	• Diagnoses and procedures are used in audit functions • Claims edits, provider allowed services, member coverage, medical necessity, authorization • COB • Validation of code sets and correct coding • National Correct Coding Initiative (NCCI) and other PI edits • Groupers and bundles • Pricing of claim/encounter • Different processes for encounters • Checks for limited services (e.g., lifetime, duplicates) represented by different code sets in history

Business Process	Description (brief)[27]	ICD-10 Impacts
Edit Claim-Encounter	Receives original or adjustment claim/encounter and determines its submission status, validates edits, service coverage, Third Party Liability (TPL), coding; and populates with pricing information Sends validated data to audit process and failed data sets to the remittance advice/encounter report process	• Diagnoses and procedures are used in claims edits • Claims edits, provider allowed services, member coverage, medical necessity, authorization • COB • Validation of code sets and correct coding • NCCI and other Program Integrity (PI) edits • Groupers and bundles • Pricing of claim/encounter • Different processes for encounters

Business Process	Description (brief)[27]	ICD-10 Impacts
Price Claim-Value Encounter	Receives a claim/encounter from audit claim/encounter process, applies pricing algorithms, calculates managed care and Primary Care Case Management (PCCM) premiums, decrements service review authorizations, calculates and applies member contributions, and provider advances, deducts liens and recoupment Responsible for ensuring all adjudication events are documented in Payment History data store and are accessible to all Business Areas	• Diagnoses and/or inpatient procedures are used to price and risk adjust claims/encounters and updating groupers • Claims edits, provider allowed services, member coverage, medical necessity, authorization • COB • Validation of code sets and correct coding • NCCI and other PI edits • Groupers and bundles • Pricing of claim/encounter • Different processes for encounters

Business Process	Description (brief)[27]	ICD-10 Impacts
Prepare Coordination of Benefits (COB)	Used to identify and prepare outbound claim transactions that are forwarded to third party payers for handling of cost avoided claims as well as performing post payment recoveries Begins with completion of price claim/value encounter process. Claims flagged and moved to a COB file for COB-related activities based on predefined criteria	• Diagnoses and/or procedures may be used for COB activities • Coordination with third party payers (e.g., 5010/ICD-10) • Coordination with third party payers that are not covered entities (e.g., workers compensation, automobile liability) that may not use ICD-10
Prepare Explanation of Benefits (EOB)	Begins with scheduled correspondence; includes producing, distributing and processing returned EOBs to determine if services received by client	• Diagnoses and/or procedures may be included on EOB statements • Manage historical payment information over code change timeframe
Prepare Home and Community Based Services (HCBS) Payment	Many HCBS are not part of traditional Medicaid benefits Services tend to be client-specific, arranged through a plan of care, rendered by atypical providers and authorized or adjudicated differently than other providers Begins with receipt of data resulting from edit, audit, and pricing processes, performing required manipulation according to business rules, formatting results, and submitting via outbound transaction	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process

Business Process	Description (brief)[27]	ICD-10 Impacts
Prepare Premium Electronic Funds Transfer (EFT)-Check	Responsible for managing generation of electronic and paper based reimbursement instruments, including calculation of member premiums (Health Insurance Premium Payments (HIPP), Medicare), management fees, Managed Care Organization (MCO) premiums, stop-loss claims; application of automated or user defined adjustments based on contract; disbursement and routing of premium, PCCM fee, or stop loss payment from appropriate funding sources to receiving party per Contractor data store payment instructions for EFT or check generation and mailing	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Prepare Provider EFT-Check	Responsible for managing the generation of electronic and paper based reimbursement instruments including: calculation of payment amounts; payroll processing, e.g., for HCBS providers; disbursement of payment from appropriate funding sources to receiving party per Provider data store payment instructions for EFT or check generation and mailing	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Prepare Remittance Advice-Encounter Report	Preparing remittance advice/encounter transactions that will be used by providers to reconcile their Accounts/Receivable Begins with receipt of data sets resulting from the pricing, audit and edit processes, performing required manipulation according to business rules and formatting the results into required output data set, which is sent via outbound transaction	• Procedure codes are used on remittance advice for hospital inpatient procedures, including DRG determination
Prepare Capitation Premium Payment	Includes premiums for capitated programs Begins with scheduled correspondence stipulated by Agreement and includes: retrieving enrollment and benefit transaction data, retrieving rate data, and formatting payment data, which is sent via outbound transaction	• Diagnoses and/or procedures may be used to determine risk adjustment, risk corridors, stop-loss, and supplemental payments (e.g., birth)

Business Process	Description (brief)[27]	ICD-10 Impacts
Prepare Medicare Premium Payment	Begins by receiving eligibility data from Medicare, performing a matching process against the Medicaid member registry, generating buy-in files for CMS for verification, formatting premium payment, which is sent via outbound transaction	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Prepare Health Insurance Premium Payment	Begins with an application for Medicaid where the applicant indicates they have third party health coverage or by receiving eligibility information via referrals from Home and Community Services Offices, schools, community services organizations, or phone calls directly from members; checking for internal eligibility status as well as eligibility with other payers, editing required fields, producing a report, and notifying members	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Inquire Payment Status	Begins with receiving a 276 Claim Status Inquiry or via paper, phone, fax or AVR request for current status of a specified claim(s); calling payment history data store and/or repository; capturing required claim status response data; formatting the data set into 277 Claim Status Response, and sending claim status response data via outbound transaction	• Providers may inquire on claims by diagnosis and/or procedure

Business Process	Description (brief)[27]	ICD-10 Impacts
Manage Payment Information	Managing all operational aspects of Payment Information data store that is comprehensive source of payment information Payment History data store with OM processes that generate payment info and validates data upload requests, applies instructions, and tracks activity Payment History data store also provides access to records for other applications and users via record transfers, response to queries, and "publish and subscribe" services	• Diagnoses and/or procedures are part of payment data store • Coordination with other Agencies and external approved users to receive ICD-10 (e.g., program integrity and providers) • Manage historical payment information over code change timeframe
Calculate Spend-Down Amount	Begins with the receipt of member eligibility data Once eligibility determination process is completed using various categorical and financial factors, the member is assigned to a benefit package or program that requires a predetermined amount the member must be financially responsible for prior to Medicaid payment for any medical services	• Claims used to fulfill spend-down may need to meet coverage, medical necessity requirements
Prepare Member Premium Invoice	Begins with a timetable for scheduled invoicing Process includes retrieving member premium data, performing required data manipulation according to business rules, formatting results, and producing member premium invoices which will be sent via outbound transaction	• Member premiums may be related to diagnoses if not accounted for in eligibility/enrollment processes

Business Process	Description (brief)[27]	ICD-10 Impacts
Manage Drug Rebate	Describes process for managing drug rebate that will be collected from manufacturers Begins with receiving quarterly drug rebate data from CMS, comparing the data to quarterly payment history data, identifying drug data matches based on manufacturer and drug code, applying the rebate factor and volume indicators, calculating total rebate per manufacturer, preparing drug rebate invoices, sorting invoices by manufacturer and drug code, sending invoice data to drug manufacturer via outbound transaction	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Manage Estate Recovery	Begins by receiving estate recovery data from multiple sources, generating correspondence data set, opening formal estate recovery case, determining value of estate lien, files petition for lien and estate claim of lien, conducts case follow-up, sending data set to perform accounting functions, releasing estate lien when recovery is completed	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Manage Recoupment	Initiated by discovery of overpayment as result of Utilization Review (UR) audit, receipt of claims adjustment request, for situations where monies are owed due to fraud/abuse, & involvement of third party payer	• Diagnoses and/or procedures may be used to determine overpayment
Manage Cost Settlement	Begins with requesting annual claims summary data, reviewing provider costs and establishing basis for cost settlements or compliance reviews, receiving audited Medicare Cost Report, capturing necessary provider cost settlement data, calculating final annual cost settlement, generating and verifying data, producing notifications to providers, establishing interim reimbursement rates, sending cost settlement data set via outbound transaction and sending receivables data to perform accounting functions and track settlement payments	• Diagnoses and/or procedures may be included as data for cost settlement

Business Process	Description (brief)[27]	ICD-10 Impacts
Manage TPL Recovery	Receiving TPL data from various sources, identifying the provider or TPL carrier, locating recoverable claims, creating post-payment recovery files, sending notification data to other payer or provider, receiving payment from provider or third party payer, sending receivable data to perform accounting function, and updating Payment History Repository	• Diagnoses and/or procedures may be used to determine TPL recoveries • Use of ICD-10 codes to coordinate with third party payer to determine liability (benefits and coverage with private health insurer) • May require recovery from a non covered entity who does not use ICD-10 coding

Table 29 explains the ICD-10 impacts on Program Management.

Table 29: Impacts of ICD-10 on Program Management

Business Process	Description (brief)[27]	ICD-10 Impacts
Designate Approved Service /Drug Formulary	Begins with a review of new and/or modified service codes or National Drug Classification (NDC) codes for possible inclusion in various benefit programs	• Diagnoses and procedures are used to review utilization and medical evidence in order to designate covered benefits • Service/drug coverage (e.g., step and tiered therapy) • Benefits may vary by program or plan (e.g., specialty plan) • Automated prior authorization for specific conditions requiring drug therapy
Manage Rate Setting	Responds to requests to add /change rates for covered service or product	• ICD10-PCS rates • Diagnoses may be used to set rates based on illness burden

Business Process	Description (brief)[27]	ICD-10 Impacts
Develop & Maintain Benefits Package	Begins with receipt of coverage requirements and recommendations through new or revised Federal statutes and/or regulations, State law, organizational policies, requests from external parties such as External Quality Review Organizations (EQROs) or changes resulting from court decisions	• Diagnoses may be used to develop specific benefit packages (e.g., DM and waiver programs and specialty plans/medical homes/ACOs) • Benefit packages may be structured based on diagnoses (pregnancy, breast cancer) or hospital procedures (transplants)
Develop and Maintain Program Policy	Responds to requests or needs for change in the agency's programs, benefits, or rules, based on federal or state statutes and regulations; governing board or commission directives; Quality Improvement Organization (QIO) findings; federal or state audits; agency decisions; and consumer pressure	• Diagnoses and procedures are used to inform policy development (should certain diseases be covered, how, who, etc.) • Rules, manuals, handbooks, guides, contracts, program memorandum
Maintain State Plan	Responds to prompts to update and revise the State Plan	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process

Business Process	Description (brief)[27]	ICD-10 Impacts
Develop Agency Goals and Objectives	Assesses mission statement, goals, and objectives Changes could be warranted under new administration or in response to changes in demographics/public opinion; or in response to natural disasters	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Manage Federal Financial Participation (FFP) for MMIS	Oversees reporting and monitoring of APDs and other program documents necessary to secure/maintain FFP	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Formulate Budget	Examines current budget, revenue stream, expenditures, trends, assesses external factors, agency initiatives, and plans, models different budget scenarios, and periodically produces new budget	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Manage State Funds	Oversees state funds / ensures accuracy in reporting of funding sources	• Budget models and reporting relative to ICD-10 • State only funded programs for specific diseases (e.g., ESRD or behavioral health, or insurance plans)

Business Process	Description (brief)[27]	ICD-10 Impacts
Manage 1099s	Describes process by which 1099s are handled including preparation, maintenance and corrections The process is impacted by any payment or adjustment in payment made to a single Social Security Number (SSN) or Tax Identification Number (TIN)	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Perform Accounting Functions	Currently States use a variety of solutions including outsourcing to another Department or use of a commercial off the shelf (COTS) package. Activities included in this process can be as follows: • Periodic reconciliations between MMIS and the system(s) that performs accounting functions • Assign account coding to transactions processed in MMIS • Process accounts payable invoices created in the MMIS • Process accounts payable invoices created in Accounting System (gross adjustments or other service payments not processed through MMIS, and administrative payables) • Load accounts payable data (warrant number, date, etc.) to MMIS • Manage canceled/voided/stale dated warrants • Perform payroll activities • Process accounts receivable (estate recovery, co-pay, drug rebate, recoupment, TPL recovery, and Member premiums) • Manage cash receipting process • Manage payment offset process to collect receivables • Develops and maintain cost allocation plans • Manages draws on letters of credit Manages disbursement of federal admin. cost reimbursements to other entities	• Accounting must determine diagnosis related programs (behavioral health, pregnancy), pay correctly, and report in appropriate category to obtain FFP • Recommended that SMAs investigate whether there is an ICD-10 impact on the business process

Business Process	Description (brief)[27]	ICD-10 Impacts
Develop/Manage Performance Measures and Reporting	Involves the design, implementation, and maintenance of mechanisms and measures to be used to monitor the business activities and performance of the Medicaid enterprise's processes and programs. This includes the steps involved in defining the criteria by which activities and programs will be measured and developing the reports and other mechanisms that will be used by the **Monitor Performance and Business Activity** process to track activity and effectiveness at all levels of monitoring	• Performance measures for SMA objectives • Program, plan, provider, and population health performance measures (e.g., HEDIS) include diagnoses and procedures
Monitor Performance and Business Activity	This process includes the steps involved in implementing the mechanisms and measures to track agency activity and effectiveness at all levels of monitoring. Examples of mechanisms and measures are: Goal: *To assure that prompt and accurate payments are made to providers* Measurement: *Pay or deny 95% of all clean claims within 30 days of receipt* Mechanism: *Weekly report on claims processing timelines*	• Business activity may be monitored by diagnoses submitted on claims, e.g., how many diabetics/asthmatics/heart attacks are prevalent in MCO populations vs. FFS • Program, plan, provider, and population health performance measures (e.g., HEDIS) include diagnoses and procedures

Business Process	Description (brief)[27]	ICD-10 Impacts
Manage Program Information	Responsible for managing all operational aspects of Program Information data store , which is source of comprehensive program info used by all Business Areas and authorized external users for analysis, reporting, and decision support capabilities required by enterprise for administration, policy development, and management functions	• Additional specificity of ICD-10 provides the ability to monitor program statistics with greater accuracy and reliability • Update DSS systems • Update file transfers (e.g., MSIS), queries, reports, and dashboards
Maintain Benefits-Reference Information	Triggered by any addition or adjustment that is referenced or used during the processing of claims/encounters The process includes adding new HCPCS, CPT and/or Revenue codes; adding rates associated with those codes; updating/adjusting existing rates; updating/adding member benefits; updating/adding provider information; adding/updating drug formulary information; and updating/adding benefit packages	• Benefits data store will include diagnoses and procedures • ICD-10-PCS codes • Formulary information (e.g., medical necessity) • Benefit packages (e.g., specialty plans)
Generate Financial and Program Analysis/Report	Begins with request for information or scheduled correspondence Process includes defining required reports format, content, frequency and media, as well as state and federal budget categories of service, eligibility codes, provider types and specialties; retrieving, compiling, and formatting data and submitting via outbound transaction	• Additional specificity of ICD-10 provides the ability to understand, evaluate, and improve Medicaid program operations • Financial and program analysis reports

Business Process	Description (brief)[27]	ICD-10 Impacts
Draw and Report FFP	Involves the activities to assure that federal funds are properly drawn and reported to CMS. The state is responsible for assuring that the correct FFP rate is applied to all expenditures in determining the amount of federal funds to draw. When CMS has approved a State Plan, it makes quarterly grant awards to the state to cover the federal share of expenditures for services, training, and administration. The grant award authorizes the state to draw federal funds as needed to pay the federal share of disbursements. The state receives federal financial participation in expenditures for the Medicaid and State Children's Health Insurance Program (CHIP) programs.	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Manage FFP for Services	This process applies rules for assigning the correct Federal Medical Assistance Percentages (FMAP) rate to service expenditures and recoveries documented by the Medicaid enterprise This process begins with the receipt of notification to apply FMAP rate to service expenditures or recoveries	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process
Manage Federal Medical Assistance Percentages (F-MAP)	Periodically reviews and changes, as appropriate, the FMAP and enhanced FMAP rate used in the Manage FFP Business Process. (See 42 CFR 433.10)	• No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process

Table 30 explains the ICD-10 impacts on Business Relationship Management.

Table 30: Impacts of ICD-10 on Business Relationship Management

Business Process	Description (brief)[27]	ICD-10 Impacts
Establish Business Relationship	Encompasses activities undertaken by the SMA to enter into business partner relationships with other stakeholders Includes Memoranda of Understanding (MOUs) with other agencies, electronic data interchange agreements with providers, MCOs, and others, and CMS, other Federal agencies, and Regional Health Information Organizations (RHIOs)	• Diagnoses and procedures may be exchanged though a business relationship (e.g., HIE) • Business associate agreements, MOUs, IAAs, EDI agreements, managed care contracts, and other agreements that involve data submission and/or sharing • Coordination with other state-based Health Information Technology (HIT) /Health Information Exchange (HIE) initiatives

Business Process	Description (brief)[27]	ICD-10 Impacts
Manage Business Relationship	Maintains agreement between SMA agency and other party Includes routine changes to required information such as authorized signers, addresses, coverage, and data exchange standards	• Relationships will need coordination and transparency to increase the understanding of accuracy and reliability of diagnosis/procedure data • Business associate agreements, Memorandum of Understanding (MOUs), IAAs, EDI agreements, managed care contracts, and other agreements that involve data submission and/or sharing • Coordination with other state-based HIT/HIE initiatives
Manage Business Relationship Communication	Produces routine and ad hoc communications between the business partners	• Routine and ad hoc communications between business partners may involve diagnosis and/or procedure codes • Coordination with other state-based HIT/HIE initiatives

Business Process	Description (brief)[27]	ICD-10 Impacts
Terminate Business Relationship	Cancels the agreement between the SMA and the business partner	• Since ICD data may be exchanged though a business relationship (e.g., HIE), these processes must be terminated with the relationship

Table 31 explains the ICD-10 impacts on Program Integrity Management.

Table 31: Impacts of ICD-10 on Program Integrity Management

Business Process	Description (brief)[27]	ICD-10 Impacts
Identify Candidate Case	Uses State-specific criteria and rules to identify target populations (e.g., providers, contractors, or beneficiaries), establishes patterns or parameters of acceptable/unacceptable behavior, tests individuals against these models, or looks for new and unusual patterns, in order to identify outliers that demonstrate suspicious utilization of program benefits	• Diagnoses and procedures are used to identify areas of further examination for potential fraud and abuse and program efficiency
Manage Case	Receives a case file from an investigative unit with the direction to pursue the case to closure The case may result in civil or criminal charges, in corrective action, in removal of a provider, contractor, or beneficiary from the Medicaid program; or the case may be terminated or suspended	• Once particular areas are identified for further examination, diagnoses and procedures are used to perform monitoring and follow-up

Table 32 explains the ICD-10 impacts on Care Management.

Table 32: Impacts of ICD-10 on Care Management

Business Process	Description (brief)[27]	ICD-10 Impacts
Manage Medicaid Population Health	Designs and implements strategies to improve general population health by targeting individuals by cultural or diagnostic or other demographic indicators The inputs to this process are census, vital statistics, immigration, and other data sources The outputs are educational materials, communications, and other media	• Diagnoses and procedures will be used to monitor population health and target populations that may receive benefit from public health initiatives • Public Health measures • Population 'burden of illness' and health risk • Health services research
Establish Case	Uses criteria and rules to identify target member populations for specific programs, assign a care manager, assess client's needs, select program, establish treatment plan, identify and confirm providers, and prepare information for communication	• Diagnoses and procedures will be used to identify members that may receive benefit from care management • Interface with health registries, i.e. cancer, immunization, death, which all will need to use ICD-10

Business Process	Description (brief)[27]	ICD-10 Impacts
Manage Case	Uses State-specific criteria and rules to ensure appropriate and cost-effective medical, medically related social and behavioral health services are identified, planned, obtained, and monitored for individuals identified as eligible for care management services under such programs as: • Medicaid Waiver program case management • Home and Community-Based Services • Other agency programs • Disease management • Catastrophic cases • Early Periodic Screening, Diagnosis, and Treatment (EPSDT)	• Diagnoses and procedures will be used to understand the provision of care management services for members
Manage Registry	Specification in development	• Diagnoses and procedures may be included in various disease registries (e.g., cancer, immunization, kidney disease)

5.3.4 Update MMIS

This section identifies and describes the Information Technology (IT) modifications within MMIS required to implement the ICD-10-CM diagnosis and the ICD-10-PCS procedures code sets.

The MMIS implementation may be different for each state. Differences include internal and external interfaces, the varying state programs that MMIS supports, system functionality, and system architecture.

SMAs use MMIS as a claims processing and reporting system. Although there are common modules and functionality, the MMIS implementation may be different for each SMA. Differences include internal and external interfaces, the varying SMA programs MMIS supports, system functionality, and system architecture. SMAs may use other non-MMIS software programs for functions such as eligibility, managed care, drug claims, and interface translators. SMAs may maintain their unique data warehouse and reporting applications. SMAs support state-specific programs; data inputs and exports to and from those programs will be different from state to state. Additionally, a centralized mainframe architecture will have different challenges than a decentralized, multiple server environment; for example, the number of interfaces involving ICD-10 and degree of inter-system/module communications. Each state will develop a specific ICD-10 implementation plan for its MMIS updates.

5.3.4.1 MMIS Modules and the Impact to ICD-10

Table 33 identifies the MMIS modules impacted by ICD-10 and aligns them with the MITA business process model.

NOTE: For the purposes of this handbook, the references to subsystems, modules, and services are synonymous.

A checked column indicates the project activities required to prepare MMIS for the transition to ICD-10. Each column is defined as indicated:

- **Update Business Rules** – MMIS has business rules or algorithms
- **Update System Interface** – MMIS has interface(s) with another system(s) that require the transmittal/receipt of ICD-10 codes
- **Update User Interface** – MMIS has an user interface that will have to be updated for ICD-10
- **Adjust Field Length** – The current length of the field(s) that store ICD codes is not large enough to store ICD-10 codes and must be increased

- **Collect, Store, and Utilize ICD-9 and ICD-10** – MMIS will need to store both ICD-9-CM and ICD-10 codes. MMIS will be required to support and process both ICD-9-CM and ICD-10**.**
- **Store Additional ICD-10 Occurrences** – Stores the occurrence of two or more ICD-10 codes at the same time. (Note: ICD-10-CM and 5010 will require the ability to store a substantially greater number of codes per claim than ICD-9-CM and 4010).
- **Historical Data Solution** – MMIS will need the ability to utilize data that crosses the compliance date. For example, constructing utilization history will require reporting on ICD-9-CM and ICD-10 claims.
  Update Reports – MMIS produces reports (state, federal, etc.)
- **MITA Business Area Impact** – Identify impacts to the MITA business architecture

Table 33 lists the modules impacted by the ICD-10 Implementation.

Table 33: MMIS Modules and the Impact of ICD-10

MMIS Modules	Update Business Rules	Update System Interface	Update User Interface	Adjust Field Length	Collect and Store ICD 9-CM & ICD-10	Store Additional ICD-10 Occurrences	Historical Data Solution	Update Reports	MITA Business Area Impact
EDI Intake Translation	✓	✓		✓	✓	✓	✓		Operations Management
Recipient module		✓	✓	✓	✓	✓		✓	Member Mgmt., Operations Management, Program Mgmt., Program Integrity
Provider module		✓	✓	✓		✓		✓	Provider Management, Operations Management, Program Management, Program Integrity
ICD-10 Reference File		✓	✓	✓	✓	✓			Operations Management, Program Management,

MMIS Modules	Update Business Rules	Update System Interface	Update User Interface	Adjust Field Length	Collect and Store ICD 9-CM & ICD-10	Store Additional ICD-10 Occurrences	Historical Data Solution	Update Reports	MITA Business Area Impact
Claims Processing Module	✓	✓	✓	✓	✓	✓	✓	✓	Operations Management, Recipient Management, Provider Management, Program Integrity, Program Management.
Encounter Processing	✓	✓	✓	✓	✓	✓	✓	✓	Operations Management, Recipient Management, Provider Management, Provider Integrity, Program Management, Contractor Management, Operations Management

MMIS Modules	Update Business Rules	Update System Interface	Update User Interface	Adjust Field Length	Collect and Store ICD 9-CM & ICD-10	Store Additional ICD-10 Occurrences	Historical Data Solution	Update Reports	MITA Business Area Impact
Third Party Liability Module	✓	✓	✓	✓	✓	✓	✓	✓	Operations Management
Management and Reporting	✓	✓	✓	✓	✓	✓	✓	✓	Program Management
Surveillance and Utilization Review Module		✓	✓	✓	✓	✓	✓	✓	Program Management
Managed Care Module	✓	✓	✓	✓	✓	✓	✓	✓	Care Management, Operations Management, Contractor Management
Decision Support Module	✓	✓	✓	✓	✓	✓	✓	✓	Program Management

5.3.4.2 MMIS ICD-10 Impact Based on the MITA Business Processes

This section describes the MMIS remediation efforts to meet the October 1, 2013, compliance date. Each table includes the business process functions, an indication of ICD-10 impact, and the possible remediation efforts by ICD-10 impacted MITA business process and MMIS modules.

5.3.4.2.1 Member Management Business Area

The Member Management business area maintains eligibility determination, determines enrollment to the appropriate benefit packages, and stores service authorizations. Table 34 explains the key functions impacted by ICD-10 and the specific remediation efforts that must occur.

Table 34: Member Management Business Area Impact

Functions (*Denotes ICD-10 impacted functions)	Remediation Efforts

Functions (*Denotes ICD-10 impacted functions)	Remediation Efforts
Enroll Member* **Disenroll Member*** **Determine Eligibility*** **Inquire Member Eligibility*** **Manage Member Information*** **Manage Applicant and Member Communication***	<u>Data Structure Updates</u> • If ICD-9-CM codes are stored in the member record, expand the member record to store the longer ICD-10 codes • If ICD-9-CM codes are stored in the member record, expand the member record to store the additional ICD-10 occurrences • For mainframe environments, may need to utilize filler or expand the copybook layout to accommodate longer ICD-10 codes <u>Inbound System Interfaces</u> • Update the EDI translator to accept inbound 834 transactions that contain ICD-10 codes • Update interfaces between the EDI translator and the enrollment module to exchange ICD-10 codes • Update EDI translator to accept ICD-10 codes on 834 Benefit Enrollment, 270 eligibility inquiry and 276 claim status inquiry for return on outbound transactions <u>User Interface</u> • Update the enrollment data entry screens to accept ICD-10-CM codes <u>Business Rules and Edits</u> • Update X12 Implementation Assistance Handbook edits that use ICD-10 codes • Update systems processing that uses ICD codes to determine members ability to enroll • Develop a solution for utilizing historical ICD-10 data that precedes the compliance date (e.g., utilization checking) • Develop a solution for utilizing historical ICD-9-CM data that precedes the compliance date to compare to ICD-10 data after compliance (e.g., utilization checking) • Develop a solution to discern diagnosis codes that trigger automated disenrollment (e.g., pregnancy) <u>Reports</u> • Update enrollment reports that contain ICD-9-CM to accommodate the use of ICD-10 codes <u>Outbound Systems Interfaces</u> • Update the enrollment module and EDI translator to send ICD-10 codes on the outbound 271 and 277.

Functions (*Denotes ICD-10 impacted functions)	Remediation Efforts
Manage Member Grievance and Appeals*	Data Structure Updates • If ICD-9-CM codes are stored in the appeals record, expand the record to store the longer ICD-10 codes • If ICD-9-CM codes are stored in the appeals record, expand the record to store the additional ICD-10 occurrences Inbound System Interfaces • Update any interfaces between the claims processing module and the appeals module (if it is a separate module) that includes ICD-9-CM codes. User Interface • Update appeals screens that accept ICD-10 codes Business Rules and Edits • Develop a solution for utilizing historical ICD-10 data that precedes the compliance date. Reports • Update appeals reports that contain ICD-9-CM to accommodate ICD-10 codes Outbound Systems Interfaces N/A
Manage Member Outreach	• ICD-9-CM codes used as input for models to identify target populations and outliers

5.3.4.2.2 Provider Management Business Area

The Provider Management business area supports the following functions: provider enrollment, maintenance, and provider specific pricing methodologies to enable claims processing. The key functions impacted by the implementation of ICD-10 are the Enroll and Disenroll provider functions. Table 35 explains the specific remediation efforts that must occur.

Table 35: Provider Management Business Area

Functions (*Denotes ICD-10 impacted functions)	Update To MMIS
Manage Provider Information* **Inquire Provider Information**	Data Structure Updates • If ICD-9-CM codes are stored in the provider record (e.g., to track allowed services), expand the provider record to store the longer ICD-10 codes • If ICD-9-CM codes are stored in the provider record (e.g., to track allowed services), expand the provider record to store the additional ICD-10 occurrences • For mainframe environments, may need to utilize filler or expand the copybook layout to accommodate longer ICD-10 codes • If ICD-9-CM codes are stored on the provider record, expand the provider record to store the qualifier for ICD-10 and ICD-9-CM codes Inbound System Interfaces • Update inbound provider enrollment interfaces that include ICD-9-CM codes, if applicable. User Interface • Update provider data entry screens, if applicable. Business Rules and Edits • If ICD-9-CM codes are stored in the provider record, develop a solution for utilizing historical ICD-10 data that precedes the compliance date. Update any ICD based business logic Reports • Update any provider enrollment reports that contain ICD codes Outbound System Interfaces • Update process to send provider files to MCOs and other plans

Functions (*Denotes ICD-10 impacted functions)	Update To MMIS
Manage Provider Grievance and Appeals*	Data Structure Updates • If ICD-9-CM codes are stored in the appeals record, expand the appeals record to store the longer ICD-10 codes Inbound System Interfaces • Update any interfaces between the claims processing module and the appeals module (if it is a separate module) that include ICD codes. User Interface • Update appeals screens that accept ICD-10 codes Business Rules and Edits • Develop a solution for utilizing historical ICD-10 data that precedes the compliance date. Reports • Update appeals reports that contain ICD-9-CM codes to accommodate ICD-10 Outbound Systems Interfaces • Make appropriate changes to claims in history based on results of grievance process
Manage Provider Communication*	• Review customer management modules to ensure they are prepared to track and manage ICD-10 inquiries from provider
Enroll Provider **Disenroll Provider** **Perform Provider Outreach**	No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process

5.3.4.2.3 Contractor Management Business Area

This Contractor Management business area supports various types of administrative and health services contracts necessary for an SMA to conduct business. Table 36 identifies the key functions with required remediation efforts.

Table 36: Contractor Management Business Area Impact

Function (*Denotes ICD-10 impacted functions)	Remediation Efforts
Manage Administrative or Health Services Contracts* **Award Health Services or Administrative Contract*** **Close Out Administrative or Health Service Contract*** **Manage Contractor Communication *** **Perform Potential Contractor Outreach*** **Support Contractor Grievance and Appeals*** **Produce Administrative or Health Service Request for Proposal (RFP)***	<u>Business Rules and Edits</u> • Update contract to ensure Contractors' business rules and policies for applying the new codes comply with the state's rules • Assure that contractor interfaces to the MMIS accommodate the ICD-10 code structure, length, and qualifiers. • Assure that contractor compliance is sequenced to enable adequate testing for downstream impacts <u>Business Rules and Edits, Inbound System Interface, Outbound System Interface, and Data Structure Updates,</u> • Update Remediation Efforts outlined in this handbook for all applicable Business processes • Update rules to identify beneficiaries eligible under Waiver 1115 <u>Reports</u> • Update to accommodate ICD-10 for all applicable reports as required under MCO contract
Manage Contractor Information **Inquire Contractor Information**	No significant ICD-10 impact identified, however it is recommended that SMAs investigate whether there is an ICD-10 impact on the business process

5.3.4.2.4 Operations Management Business Area

The Operations Management business area supports the daily operations of adjudicating and paying provider claims. The Operations Management business area includes the following areas: Payment Management, Payment Information Management, Member Payment Management, Cost Recoveries, and Service Authorization applications. This module processes all claims data against defined service, policy, and payment parameters. In addition, the module verifies recipient and provider enrollment. Table 37 explains the specific remediation efforts that must occur.

Table 37: Operations Management Business Area Impact

Functions (*Denotes ICD-10 impacted functions)	Remediation Efforts
Price Claim/Value Encounter* **Edit Claim/Encounter*** **Audit Claim Encounter*** **Apply Mass Adjustment*** **Prepare Home Community Based Service (HCBS) payment (if adjudicated in the same manner as regular claims)*** **Prepare Medicare Premium Payment (if applicable)*** **Apply Attachment** **Manage Settlement Cost** **Calculate Spend-Down Amount**	<u>Data Structure Updates</u> • Expand the claims record to store the longer ICD-10 codes • Expand the encounter record to store the longer ICD-10 codes • Expand the claims record to store additional occurrences of ICD-10 codes • Expand the encounter record to store additional occurrences of ICD-10 codes • If utilized, expand the ICD-10 field in the "store and forward repository" [31] • For mainframe environments, may need to utilize filler or expand the copybook layout to accommodate longer ICD-10 codes • Expand both the claim and encounter record to store qualifiers for ICD-10 and ICD-9-CM codes <u>Inbound Systems Interfaces</u> • Update the EDI translator to accept ICD-10 codes on 837I (Inpatient claim), 837P (Professional claim), 837 (Dental claim) claim transactions, also NCPDP claims and prior authorization interfaces • If utilized, update the interface to write EDI transactions to a store and forward repository • Update the interface between the EDI translator and claims adjudication module to exchange ICD-10 codes • Update imaging system that scan paper claims <u>User Interfaces</u> • Update Claims/Encounter data entry screens to accept ICD-10 codes <u>Business Rules and Edits</u> • Update X12 Implementation Assistance Handbook edits that use ICD-10 codes

31 A database that stores a snapshot of the EDI transactions submitted by providers. Some health plans use these to assist in responding correctly on outbound EDI response transactions to providers.

(continued from above)

- Update Medicare Severity (MS) Diagnosis Related Groups (DRG) (e.g., grouper software) for hospital claims and ambulatory payment processes. Not all states use the MS DRG grouper, although some states may use the software to read Medicare claims. While the MSDRG grouper is not used for ambulatory claims, states may use Ambulatory Patient Groupers (APG) or Ambulatory Payment Classification (APC) or other
- Develop a solution for processing claims/encounters when the dates of service span the compliance date (e.g., instances where the prior authorization spans the compliance date)
- Update any systems processing that uses ICD-9-CM codes in claims adjudication. Possible uses of ICD-10 codes include the following:
  - Automated Medical Review
  - Manual Medical Review
  - Pre-Payment and Post Payment Fraud Edits
  - Claims Grouping
  - Update Medicaid code editor
  - Update MS Diagnosis Related Groups (DRG) (grouper software) for hospital claims and ambulatory payment processes
  - Claims Pricing
  - Prior Authorization Verification
  - Benefit Utilization Checking
  - COB and TPL Identification
- Develop a solution for utilizing historical ICD-10 data that precedes the compliance date (e.g., utilization checking)
- Develop a solution for processing claims/encounters when the dates of service span the compliance date

<u>Reports</u>

- Update reporting that includes ICD-10 codes.

<u>Outbound Systems Interfaces</u>

- Update claims extract for Decision Support System (DSS)
- Update the interface between the claims adjudication subsystem and the EDI Translator to exchange ICD-10 codes.
- Update the EDI translator to send 835 claims responses with ICD-10 codes.

Inquire Payment Status*	Inbound System Interface • Update EDI translator to receive the 276 (Electronic claim status request) Business Rules and Edits • Update X12 Implementation Assistance Handbook edits that use ICD-10 codes Outbound System Interface • Update EDI translator to send the 277 (Electronic claim status response) transaction data set
Manage Recoupment*	System Interface • Update Reference subsystem
Prepare Coordination of Benefits (COB)*	Data Structure • Update COB file structures to store longer ICD-10 codes • For mainframe environments, may need to utilize filler or expand the copybook layout to accommodate longer ICD-10 codes Inbound System Interface • Update the COB module (if it is a separate module) to accept COB claims from the claims processing module User Interface • Update COB screens to accept and utilize ICD-10 codes Business Rules and Edits • Update edits that identify COB cases during claims processing • Develop a solution for utilizing historical ICD-10 data that precedes the compliance date. Develop a solution for utilizing/determining mapping or matching of ICD-9-CM with ICD-10 so that there is correlation between old claims and new claims for the same case and/or episodes of illness • Update the process to support the maintenance of historical data on TPL resource records • Update the process to identify/flag trauma diagnosis Outbound System Interface • Update 837 COB transaction to transmit claims to Trading Partners. This includes developing a solution for non-covered entity trading partners (e.g., auto insurance) that still use ICD-9-CM codes.
Prepare Remittance Advice/Encounter Report*	Reports • If ICD-9-CM codes utilized in remittance advice reporting, update for ICD-10.

Prepare Explanation of Benefits (EOB)*	Reports • If ICD-9-CM codes utilized in EOB reporting, update for ICD-10.
Manage Payment Information*	Data Structure • Update the Payment Information Repository to store ICD-10 codes.
Prepare Capitation Premium Payment*	Business Rules and Edits • Update edits that utilize ICD-9-CM codes to prepare premium payments.
Prepare Member Premium Invoice*	Business Rules and Edits • Update edits that utilize ICD-9-CM codes to prepare premium payments.
Authorize Referral*	Data Structure • Update authorization data files and databases to store the longer ICD-10 code. • Update authorization data files and databases to store the additional ICD-10 occurrences. Inbound System Interface • Update the EDI Translator to accept ICD-10 codes on 278 transactions. • Update the interface between the EDI translator and authorization module to exchange ICD-10 codes User Interface • Update authorization entry screen field length Business Rules and Edits • Update x12 Implementation Assistance Handbook edits that utilize ICD-9-CM codes to accommodate ICD-10. • Update any ICD-9-CM based business logic that processes referrals Outbound System Interface • Outbound system interface

Authorize Service*	Data Structure • Update authorization data files and databases to store the longer ICD-10 code • Update authorization data files and databases to store the additional ICD-10 occurrences Inbound System Interface • Update the EDI Translator to accept ICD-10 codes on 278 transactions. • Update the interface between the EDI translator and authorization module to exchange ICD-10 codes • Update interfaces between PA contractors and MMIS to use ICD-10 codes • Update interfaces between PBM and MMIS to exchange ICD-10 codes User Interface • Update authorization entry screen field length Business Rules and Edits • Update X12 Implementation Assistance Handbook edits that utilize ICD-9-CM codes to accommodate ICD-10 • Update any ICD-9-CM based business logic that processes service authorizations Outbound System Interface • Outbound system interface
Authorize Treatment Plan*	Business Rules and Edits • Update any ICD-9-CM based business logic that processes service authorizations
Manage TPL Recovery*	Inbound and Outbound System Interface • Update data exchanges to receive data
Manage Estate Recovery **Manage Drug Rebate** **Prepare Premium Electronic Funds Transfer (EFT)** **Prepare Provider EFT** **Prepare Health Insurance (HI) premium Payment***	No significant ICD-10 impact identified, however it is recommended that SMA's investigate whether there is an ICD-10 impact on the business process

5.3.4.2.5 Program Management Business Area

One of the primary responsibilities of the Program Management business area is the Financial Reporting function. The module updates claim history and financial files, maintains financial transactions to support 1099s, and provides an audit trail to the service of general ledger transactions generated by MMIS. Table 38 explains the specific remediation efforts.

Table 38: Program Management Business Area Impact

Function (*Denotes ICD-10 impacted functions)	Remediation Efforts
Designate Approved Service/Drug Formulary* **Generate Financial and Program Analysis/Report*** **Develop and Maintain Benefits Package***	Data Structure Updates • Update Program Information Repository to accept new codes • Expand the record to store the longer ICD-10 codes • For mainframe environments, may need to utilize filler or expand the copybook layout to accommodate longer ICD-10 codes Inbound System Interfaces • Update the data exchanges received from contractors/vendors and MCOs Business Rules and Edits • Update benefit structure based on new ICD-10 codes, if necessary • Update medical policies • Update Drug Formulary • Develop a solution for utilizing historical ICD-10 data that precedes and spans the compliance date Reports • Update various state mandated reports to reflect ICD-10 • Develop a solution for creating reports that precede the compliance date • Update financial reports to accept ICD-10 (e.g., Medicaid Summary Report) • Develop a solution for creating reports that precede the compliance date or that span compliance dates Outbound System Interfaces • Update extract for Decision Support System (DSS)
Manage Rate Setting*	Business Rules and Edits • Update provider contract rates, if necessary • Update logic in DRGs and APCs/APGs

Function (*Denotes ICD-10 impacted functions)	Remediation Efforts
Develop and Maintain Program Policy*	Business Rules and Edits • Update medical policies • Update benefit structure based on new codes
Manage Program Information* **Develop and Manage Performance Measures and Reporting** **Monitor Performance and Business Activity** **Manage State Funds** **Perform Accounting Functions**	Data Structure • Update Program Information Repository
Manage Benefit/Reference Information*	System Interface • Update Reference subsystem
Maintain State Plan **Develop Agency Goals and Initiatives** **Manage 1099s** **Formulate Budget** **Manage Federal Financial Participation for MMIS** **Manage Federal Financial Participation for Services** **Manage Federal Medical Assistance Percentages (FMAP)** **Draw and Report FFP**	No significant ICD-10 impact identified, however it is recommended that SMA's investigate whether there is an ICD-10 impact on the business process, including if the SMA is considering a maximum upgrade solution

5.3.4.2.6 Business Relationship Management Business Area

The Business Relationship Management business area supports relationships that enrich the SMAs in the administration of the Medicaid program. Table 39 identifies the key functions and the required remediation efforts.

Table 39: Business Relationship Management Business Area Impact

Function (*Denotes ICD-10 impacted functions)	Remediation Efforts
Establish Business Relationships* **Manage Business Relationships*** **Terminate Business Relationships***	Inbound and Outbound System Interface • Update electronic data interchanges, based on relationships between business entities • Update interface with MSIS • Update interface with RHIOs (Regional Health Information Organizations) for the exchange of EHR data Business Rules and Edits • Update Trading Partner Agreements • Update rules that govern the exchange of clinical information • Develop a solution for utilizing historical ICD-10 data that precedes the compliance date • Develop a solution for processing claims/encounters when the dates of service span the compliance date
Manage Business Relationship Communications	ICD-9-CM codes used as input for models to identify target populations and outliers

5.3.4.2.7 Program Integrity Business Area

The Program Integrity business area supports the monitoring processes that maintain the integrity of the Medicaid program. This module supports, consolidates, organizes, and reports on data to aid in the investigation of provider abuse and misuse. Table 40 explains the key remediation efforts.

Table 40: Program Integrity Business Area Impact

Function (*Denotes ICD-10 impacted functions)	Remediation Efforts
Identify Candidate Case*	Data Structure Updates • Update and expand PI records to accept and store ICD-10 codes • Update the PI records to expand the encounter record to store the longer ICD-10 codes • Store additional occurrences of ICD-10 codes and update to accommodate periodic updates • For mainframe environments , may need to, utilize filler or expand the copybook layout to accommodate longer ICD-10 codes Systems Interfaces • Update the interface to program integrity data warehouses to accept ICD-10 codes. Business Rules and Edits • Modify PI functionality to update any algorithms and data mining functionality that utilize ICD-10 codes • Update PI algorithms to detect new and more sophisticated types of fraud based on the more granular ICD-10 codes • Update Program Integrity processes to identify potential new types of fraud using ICD-10 codes and to leverage granularity in detecting new types of fraud • Update Program Integrity processes to select claims for medical review using ICD-10 • Develop a historical solution that allows Program Integrity algorithms to work across data sets that have ICD-9-CM and ICD-10
Manage Case	Recommended that SMAs investigate whether there is an ICD-10 impact on the business process

5.3.4.2.8 Care Management Business Area

The Care Management business area addresses the types of care delivered to members and the actions of the SMA to assure that care is rendered appropriately. In addition, this area supports eligible recipients enrolled in managed care. Table 41 explains the key remediation efforts.

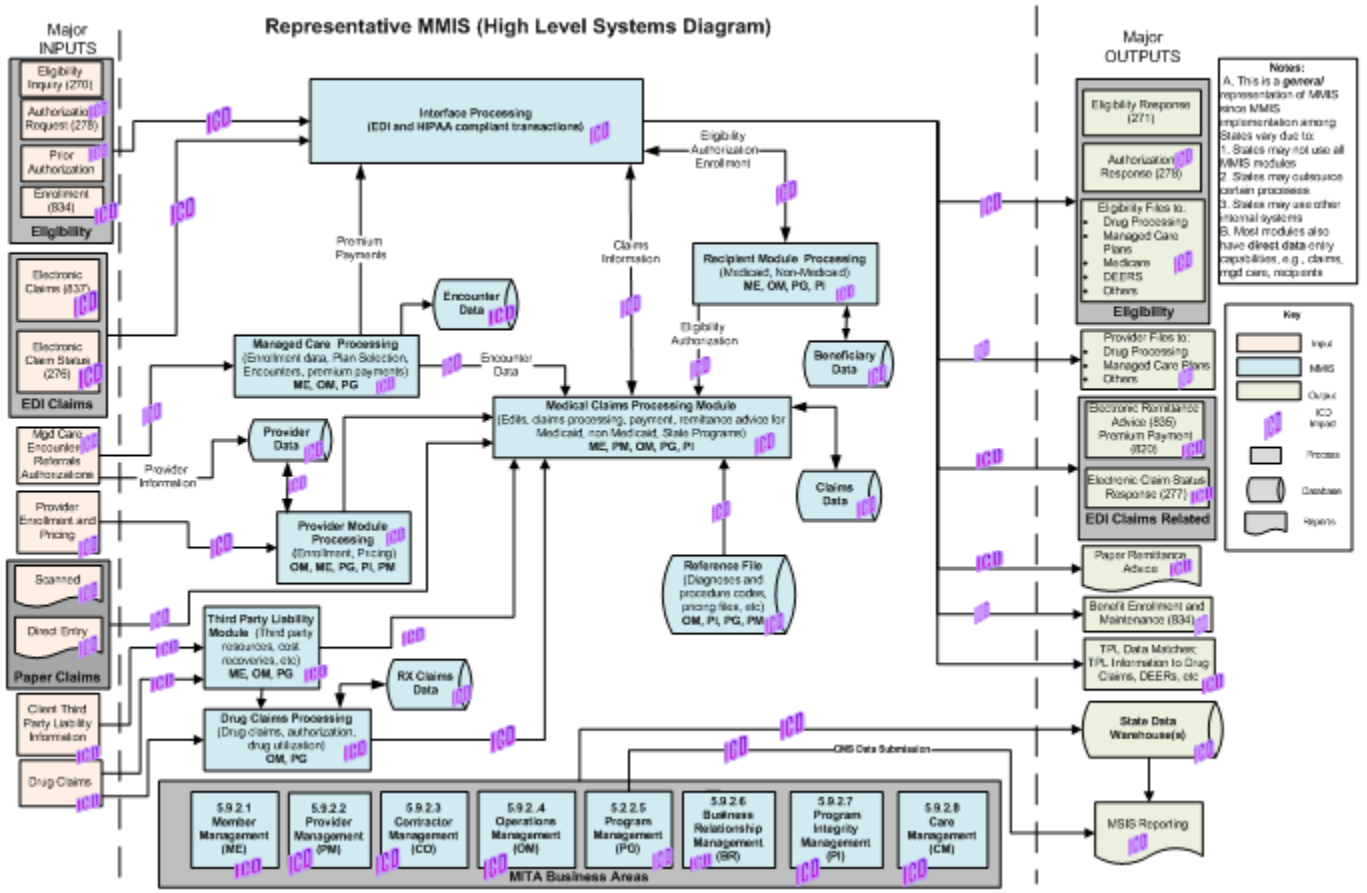
Table 41: Care Management Business Area Impact

Function (*Denotes ICD-10 impacted functions)	Remediation Efforts
Establish Case*	Business Rules and Edits • Update medical policies to aid in the identification of case • Update algorithms and rules for case management • Update rules and processes to support Registry (i.e. Immunization, Cancer) management and reporting or inputs from external registries managed by public health Outbound System Interface • Update data extract to DSS
Manage Medicaid Population Health*	
Manage Case*	
Manage Registry*	

5.3.4.2.9 MMIS High Level Systems Diagram

Figure 11 presents a high level general systems diagram depicting potential impacts of ICD-10 on key MMIS modules and MITA business areas. The diagram highlights key data inputs, such as eligibility inquiries, electronic medical and drug claims, paper claims, provider enrollment, third party liability information, and managed care encounters. The diagram captures data flow to and from major MMIS processing modules and key files. An ICD symbol indicates potential ICD-10 impacts. The MITA business process abbreviation indicates relationships between modules, files, and MITA business processes. The diagram is meant as a general representation and not each SMA's actual MMIS environment. Some SMAs outsource their MMIS modules (e.g., Drug Claim Processing). SMAs may use other internal systems in place of MMIS modules (e.g., Eligibility, Management Reporting/Data Warehouse). Figure 11 also displays key outputs including eligibility responses, remittance advices, and provider file updates.

Figure 11: Impacts of ICD-10 on MITA Business Areas Specific to MMIS Functionality



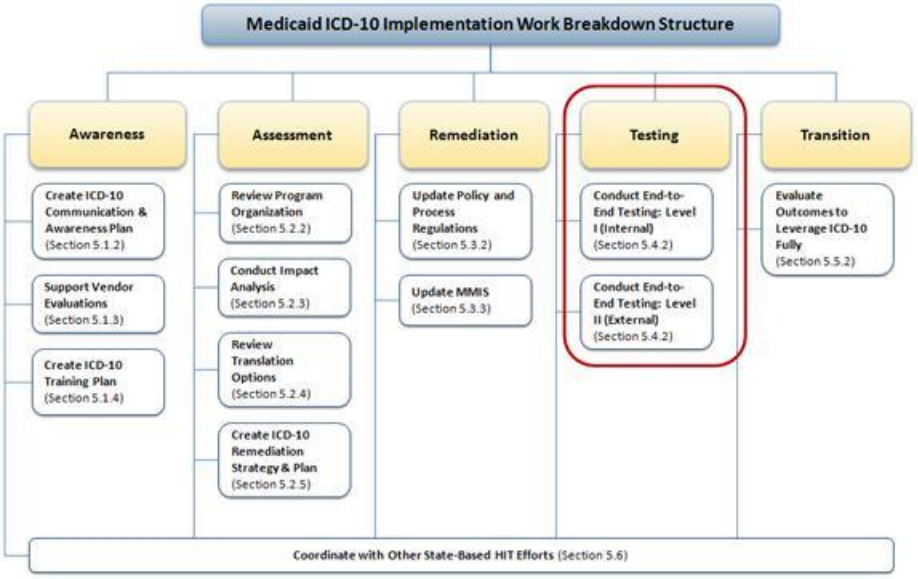
5.4 Testing Phase Overview

This section provides an overview and introduction of the Testing Phase and the major activities involved in this phase.

5.4.1 Phase Overview and Introduction

The Testing Phase is the fourth phase in the ICD-10 implementation, as highlighted in Figure 12 below.

Figure 12: Medicaid ICD-10 Implementation Testing Phase



5.4.2 End-to-End Testing Phase Milestones

This section includes the milestones in the testing ICD-10 implementation phase per the Medicaid ICD-10 Implementation Schedule/Project Plan. Table 42 explains the phase purpose, inputs, activities, outcomes and supporting tools and templates.

Table 42: Testing Phase Information

Testing
Phase Purpose:
The purpose of the Testing Phase is to verify and validate the accuracy of the ICD-10 changes completed in the Remediation Phase.

Testing
Key Inputs to Phase and/or Predecessors:
• **Input and Predecessor: MMIS Updates** • **Inputs: Testing Strategy and Plan**
Major Activities:
1. **Develop Test Plan** 2. **Develop Test Cases and Test Data** 3. **Conduct ICD-10 Testing:** a. **Unit Testing** b. **System Testing** c. **Regression Testing** d. **Non Functional Testing (Performance and Privacy/Security)** e. **Internal End-to-End Testing (Level 1)** f. **External End-to-End Testing (Level II)**
Key Outcomes from Phase:
• **Test Plan** • **Test Cases and Test Data** • **Tested systems that are ready for production** • **Testing completed with external business partners**
Supporting Tools and Templates:
• **Test Plan Template;** • **Report Test Case Template;** • **Interface Test Case Template; Test Data Checklist; and** • **ICD-10 Impacted Trading Partner Matrix.**

Table 43 references the milestones associated with the End-to-End Testing phase of the Medicaid ICD-10 Implementation Schedule. The SMA should build into their SMA specific

Medicaid ICD-10 Implementation Schedule/Project Plan supporting tasks needed to remediate their unique business processes, policies and systems. The table includes the following columns:

- **ID**: SMA Timeline milestone identification number
- **Milestone Description:** High level detail around milestone activities
- **Inputs:** Key documents/deliverables and inputs into the milestone activities
- **Key Activities:** Actions associated with completion of each milestone activity
- **Outputs:** Key documents/deliverables associated with each milestone activity
- **Start-Finish Dates:** SMA Timeline milestone dates

Table 43: End-to-End Testing Phase Milestone Details

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
47	**Develop Test Plans and Test Data**	• Technical Requirements • List of Trading Partner, Vendor and Provider Interfaces that use ICD-10 • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Determine internal system requirements to include in the Internal Test Plan • Draft the Internal Test Plan • Finalize the Internal Test Plan • Determine external testing requirements to include in the External Test Plan • Draft the External Test Plan • Finalize the External Test Plan • Compile test data based on Internal and External Test Plan needs	• Test Plan: Internal and External • Test Data • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	02/23/12 - 04/23/12

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
48	**Test Internally: End-to-End - Level I Testing**	• ICD-10 Testing Plan • Test cases (e.g., reports and interfaces) • Test Data • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Share test data across all internal system owners • Execute the most basic scenario in the test plan thoroughly • Execute all scenarios in the test plan to ensure comprehensive internal testing passes	• Ability to successfully process a claim internally from beginning to end	04/23/12 - 10/20/12
49	**Test Externally: Partner End-to-End - Level II Testing**	• List of Trading Partners, Vendors and Providers that exchange ICD-10 codes with SMA • ICD-10 Testing Plan • Test cases(e.g., reports and interfaces) • Test Data • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Share test data with pilot trading partner, contractor, vendor, or provider • Execute pilot test case scenario with a trusted trading partner, contractor, vendor, or provider • Share test data with all trading partners, contractors, vendors, and providers • Execute exhaustive test case scenarios with as many trading partners, contractors, vendors, and providers	• Ability to successfully process claims externally from beginning to end	10/05/12 - 07/02/13

5.4.3 Conduct ICD-10 Testing

This section discusses the process of enterprise-wide testing to assure that business functions are executed as anticipated through the transition from ICD-9-CM to ICD-10. Similar to the 5010 and 4010 transactions, ICD-10 will require extensive testing due to the magnitude of business and system modifications. This section defines and identifies testing considerations in anticipation of ICD-10 testing, including test types, test plans, test cases, test data, as well as testing remediation updates.

Testing is the process of proving that a system or process meets requirements and produces consistent results with correct output.

The Final Rule for compliant ICD-10 Implementations requires Level I (Internal) and Level II (External) testing.

After making ICD-10 changes to MMIS and other systems, SMAs will need to complete several types of tests. First, SMAs will need to complete unit testing of individual components, system testing, and non-functional testing such as performance testing. Many of these tests will be similar to testing SMAs perform for all IT changes. Second, SMAs will need to complete specific ICD-10 End-to-End testing as described in the ICD-10 Final Rule.

Table 44 describes the testing required for the ICD-10 implementation.

Table 44: ICD-10 Testing Types

Testing Type	Description	Key ICD-10 Considerations

Unit Testing/Basic Component Testing	Unit Testing/Basic component testing confirms that updates meet the requirements of each individual component in a system. The SMA will first need to test each component updated for ICD-10.	• Unit testing will need to include several key elements:
		  ○ Verifying that expanded data structures can store the longer ICD-10 codes and their qualifiers;
		  ○ Verifying that 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 is critical. Critical report elements to evaluate include:
		  ○ *Input filters* – Do all filters produce the anticipated outcome?
		  ○ *Categorization* – Do categories represent the intent of the user 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?

Testing Type	Description	Key ICD-10 Considerations
System Testing	System testing verifies that an integrated system meets requirements. After completing unit testing, SMAs will need to integrate related components and ensure that ICD-10 functionality produces the desired results.	• The SMA should plan carefully for testing of ICD based business rules and edits that are shared between multiple system components. • SMAs should carefully identify, update, and test all system interfaces that include ICD codes.
Regression Testing	Regression Testing focuses on identifying potential unintended consequences of ICD-10 changes. SMAs should 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 codes translation may result in unintended consequences to business processing. The SMA needs to identify these unintended consequences through a number of testing scenarios that anticipate potential risk areas given the changes implemented.
Non Functional Testing - Performance	Performance testing includes an evaluation of non-functional requirements[32], such as transaction through-put, system capacity, processing rate, and similar requirements.	A number of changes related to ICD-10 may result in significant impact on system performance: • Increase in the number of available ICD-10 diagnosis and procedure codes; • Increase in the number of codes submitted per claim; • Increase in the complexity of rules logic; • Initial increases in the volume of re-submission due to rejected claims; or • Increase in storage capacity requirements.

32 http://www.csee.umbc.edu/courses/undergraduate/345/spring04/mitchell/nfr.html

Testing Type	Description	Key ICD-10 Considerations
Non Functional Testing - Privacy/Security	Federal and state legislations define specific requirements for the handling of data related to conditions associated with mental illness[33], substance abuse, and other privacy sensitive conditions. To identify these sensitive data components / conditions, SMAs often use ICD-9-CM codes.	• The SMA needs to update the definition of these sensitive components / 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 End-to-End Testing (Level I)	The ICD-10 Final Rule requires Level I Compliance Testing. Level I compliance indicates that a covered entity can create and receive compliant transactions, resulting from the completion of all design / build activities and internal testing.	• Do transactions maintain integrity of content as they move through systems and process? • Are transformations, translations, or other changes in data tracked and audited?
External End-to-End Testing (Level II)	The ICD-10 Final Rule requires Level II Compliance Testing. Level II compliance indicates that a covered entity has completed End-to-End 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.	• Have trading partner testing portals been established? • Have transaction specification changes been defined and communicated? • Will inbound and outbound transaction related training be required? • Is there a certification process in place for inbound transactions? • How will rejections and re-submissions related to invalid codes be handled at the transaction level? • Will parallel testing systems be created to test external transactions?

33 http://www.dshs.state.tx.us/hipaa/privacynoticesmh.shtm

5.4.3.1 Test Plan Implications

SMAs need to use a test plan to document the strategy and to verify that a business process and system meet the future design specifications. The development of test plans should not drive the scope and definition. SMAs should develop a test plan to do the following:

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

5.4.3.2 Test Case Implications

SMAs need to define test cases to assure that the system updates meet every business requirement and that the system components function efficiently to support business requirements. The design of test cases includes both anticipated outcomes and scenarios that relate to exception processing and errors. Test cases should also include high-risk scenarios.

5.4.3.3 Test Data Implications

Test Data assures testing several key system functions:

- Data Validation
- Data to trigger errors
- Data to test high risk scenarios
- Data to test volume
- Data to test all types of domains and categories
- Data to simulate a standard environmental model over time
- Data to test comparisons, ranking, trending variation, and other key analytic models

5.4.3.4 Testing Remediation

All testing will result in some errors. Effective remediation of testing errors is the objective of the Testing Phase. Proper planning and operation of remediation are keys to successful testing. SMAs should consider the following to support of the remediation environment:

- Multiple testing layers to support various iterations of re-testing in parallel tracts;
- Effective detection and repair of blocking errors that limit testing activities;
- An error tracking system with standard alerts and reporting to stakeholders;
- Prioritization model for error remediation designed to focus and business critical requirements;
- Set of acceptance criteria;
- Model for reporting “known issues;” and
- Approach to identifying the schedule for remediation of “known issues” at some date in the future.

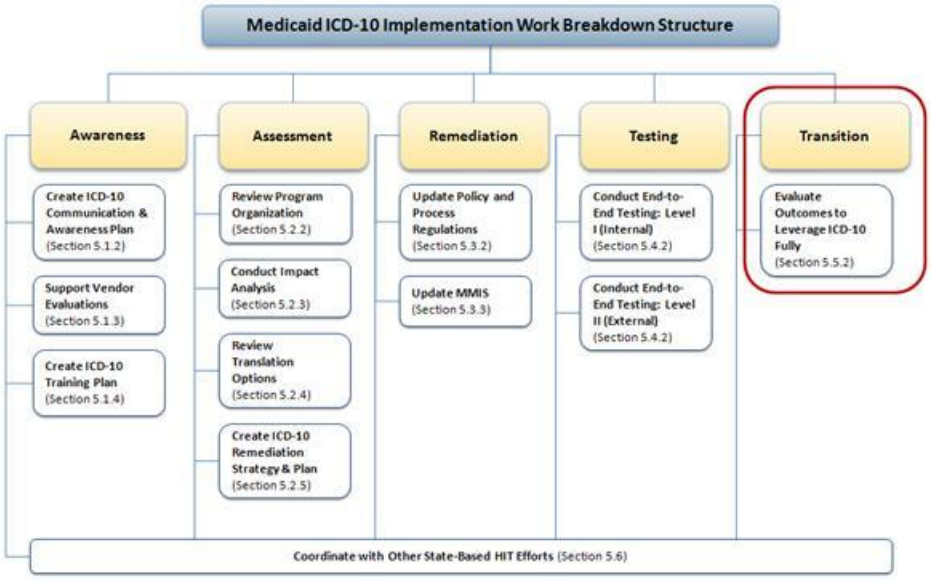
5.5 Transition Phase Overview

This section provides an overview and introduction of the Transition Phase and the major activities involved in this phase.

5.5.1 Phase Overview and Introduction

The Transition Phase is the fifth and final phase in the ICD-10 implementation, as highlighted in Figure 13 below.

Figure 13: Medicaid ICD-10 Implementation Transition Phase



5.5.2 Transition Phase Milestones

This section includes the milestones in the testing ICD-10 implementation phase per the Medicaid ICD-10 Implementation Schedule/Project Plan. Table 45 explains the phase purpose, inputs, activities, outcomes and supporting tools and templates.

Table 45: Transition Phase Information

Transition
Phase Purpose:
The Transition Phase involves "going live" with ICD-10 and initiating operations with all ICD-10 updates in place.

Transition
Key Inputs to Phase and/or Predecessors:
• **Input and Predecessor: Unit, System, and Non Functional Testing Completed** • **Input and Predecessor: Completed Level I (Internal) End-to-End Testing** • **Input and Predecessor: Completed Level II (External) End-to-End Testing**
Major Activities:
1. **Evaluate Outcome to Leverage ICD-10 Fully**
Key Outcomes from Phase:
• **All MITA business areas function accurately and timely with ICD-10 codes.**
Supporting Tools and Templates:
N/A

Table 46 references the milestones associated with the Transition phase of the Medicaid ICD-10 Implementation Schedule. The SMA should build into their SMA specific Medicaid ICD-10 Implementation Schedule/Project Plan supporting tasks needed to remediate their unique business processes, policies and systems. The table includes the following columns:

- **ID**: SMA Timeline milestone identification number
- **Milestone Description:** Provides high level detail around milestone activities
- **Inputs:** Key documents/deliverables and inputs into the milestone activities
- **Key Activities:** Actions associated with completion of each milestone activity
- **Outputs:** Key documents/deliverables associated with each milestone activity
- **Start-Finish Dates:** SMA Timeline milestone dates

Table 46: Transition Phase Milestone Details

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
52	**Publish Final Rule and Sub-regulatory Policy Updates**	• Policy updates from Remediation Phase • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Draft Policy Final Rule • Finalize Policy Final Rule • Publish Policy Final Rule • Draft Policy Sub-regulatory Updates • Finalize Policy Sub-regulatory Updates • Publish Policy Sub-regulatory Updates	• Policy Final Rule • Policy Sub-regulatory Updates	4/4/13 - 10/1/13
53	**Publish Final Rule and Sub-regulatory Process Updates**	• Process updates from remediation phase • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Draft Process Final Rule • Finalize Process Final Rule • Publish Process Final Rule • Draft Process Sub-regulatory Updates • Finalize Process Sub-regulatory Updates • Publish Process Sub-regulatory Updates	• Process Final Rule • Process Sub-regulatory Updates	4/4/13 - 10/1/13

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
54	**Transition and Implement System Changes**	• Satisfactory End-to-End testing results • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Determine transition plan • Draft transition plan • Execute transition plan	• Claims processed with ICD-10 codes	7/3/13 - 10/1/13
57	**Post Transition Support:** Provide Customer Support	• External Communications • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Adjust customer support levels as needed for ICD-10 inquiries • Train customer support staff on ICD-10 related topics and issues	• Standup and integration of ICD-10 Customer Support	7/3/13 - 12/30/13

ID	Milestone Description	Inputs	Key Activities	Outputs	Start – Finish Dates
58	**Post Transition Support:** Monitor Operations	• Standard Operations and Maintenance procedures • Updated Medicaid ICD-10 Implementation Schedule/Project Plan	• Monitor operations of ICD-10 code usage • Identify usage of ICD-10 and places for improvement of ICD-10 usage • Perform any necessary updates to ICD-10 usage, either system or business related • Evaluate unexplored opportunities in ICD-10 usage • Identify actions and decisions required to support updates to ICD-10 usage to maximize opportunities	• Evaluation and action required to support ICD-10 updates and opportunities	7/3/13 - 3/30/13

5.5.3 Evaluate Outcomes to Leverage ICD-10 Fully

This section discusses the significant improvement opportunities ICD-10 implementation provides to the healthcare industry specifically around quality and detail embedded within the code structure. This section addresses the value an SMA can achieve by leveraging ICD-10 codes to realize business advantages. To realize these advantages, SMAs needs to actively plan, implement and measure outcomes.

ICD-10 codes provide a number of information advantages:

- *Additional detail*

  ICD-10-CM and ICD-10-PCS offer significantly more detail in medical concepts related to the ICD codes than the ICD-9-CM codes. The additional detail captures patient health conditions as well as the inpatient procedures with the intent to maintain or improve the specified health condition.

- *Enhanced categorization models*

  The level of detail supported by ICD-10 codes allows for meaningful categorization for analysis of data to support actionable business intelligence. Comparisons represent comparable categories of service and conditions unlike with ICD-9-CM.

- *Better severity and risk definition*

  ICD-10 codes have an ability to distinguish risk factors for health conditions:

  - ICD-9-CM diagnosis codes for fractures involving the growth plate describe at a single level. ICD-10-CM codes describe these fractures at four levels. For example, a "Salter Harris I" level requires little treatment, but a "Salter Harris IV"s fracture requires immediate complex and precise surgery and the risk of permanent growth deformity is extremely high. ICD-10-CM captures the differences between these two procedures.
  - ICD-9-CM procedure codes report an amputation of the finger with a single general code for "Finger Amputation." ICD-10-PCS uses a code for every finger, every amputation level, and every surgical approach and eliminates non-specific codes for "Finger Amputation." For example, an amputation of the end of the small finger requires little treatment where as an amputation through the mid portion of the index finger requires major surgical reconstruction with prolonged rehabilitation and ongoing disability. ICD-10-PCS captures the differences between these two procedures.

- *More forward flexibility*

  The design of ICD-10 codes including more characters, alphanumeric values, and placeholders provides the ability to add codes in the future without disruption of the existing code structure.

- *Better care management*

  The detail in ICD-10 enables the payer to understand whether members are improving or getting worse. With this information, the SMA can determine if its chronic or high risk members are best served in primary care, medical home, or managed care environments. These members can be moved to the most effective and cost effective environment.

- *Better ability to integrate clinical information*

  ICD-10 codes support the ability to define risk and severity factors, and addition of key clinical information, which better describes the patient health state. The following are some of the parameters of health conditions that are included in ICD-10 codes:

  - Co-morbidities;
  - Complications;
  - Sequelae;
  - Manifestations;
  - Causation;
  - Etiologic agents;
  - Laterality;
  - Precise anatomical locations;
  - Disease phases;
  - Morphology; and
  - Fracture patterns.

These information advantages translate into the following business advantages:

- *Compliance*

  As a regional leader in the healthcare industry and an arm of government-supported healthcare, SMAs should provide leadership in compliance with mandated standards. Providers will be looking at government leadership in their assessment of their own transition.

- *Better contracting*

  The precision of ICD-10 codes and the ability to stratify severity and risk provides more appropriate contracting opportunities for providers with respect to the burden of illness providers manage. Over time, SMAs will be able to analyze contracting models and apply them with greater effectiveness.

- *Better claims payments*

  Similar to contracting, ICD-10 provides the opportunity for greater recognition of the severity of conditions and the complexity of services. Using this information, the SMA can

develop more appropriate payment models that distribute payment based on the greatest patient need and the most complex level of services.

- *Better risk prediction*

  The SMAs often predict population risk by assessing the pattern of health conditions that exist in a population. The added ability in ICD-10 to identify the parameter of conditions that results in a significantly different burden of illness will greatly improve the ability to predict risk and resource utilization.

- *Better fraud, waste and abuse detection*

  The detection of fraud, waste, and abuse is an ongoing challenge across all healthcare industries in part because of the limited data and imprecise nature of the data that is available. The increased precision and content of ICD-10 can support sophisticated detection and analysis of potential fraud, waste, or abuse cases. To realize this benefit, SMAs need to create system rules that leverage this additional content.

- *Enhanced network management*

  The SMAs can use ICD-10 content to obtain precise information about network performance and stratification of illness within locations served by providers. The SMAs can use this information to look at network adequacy, network provider quality and efficiency, and the nature of the patient conditions served by regional providers.

- *More accurate understanding of population health*

  The additional detail and precision supplied by ICD-10 codes provides the ability to assess the patterns of conditions that exist within populations. The SMAs can define shifts in patterns of illness in a timely fashion to support patient-health improvement measures to mitigate health risk associated with these changing patterns of illness.

- *An opportunity to reach out to providers to improve coding practices*

  Providers must use ICD-10 codes appropriately in order to record patient health conditions or the nature of institutional procedures accurately. The SMAs will not realize the advantages offered by ICD-10 codes unless providers use ICD-10 codes appropriately. The SMAs have an opportunity to work with providers directly or in cooperation with local initiatives and associations to provide education, training and other activities to assure that all trading partners benefit from the advantages offered by ICD-10 codes.

5.6 All Phases: Coordinate with Other State-Based Healthcare Information Technology (HIT) Efforts

This section identifies the coordination activities required between State-Based HIT efforts and ICD-10 implementation.

The healthcare community is undergoing a massive change that focuses on the use of health information technology and tools administered to improve the quality, efficiency and cost of care

in the United States. As David Blumenthal, the Director of the Office of the National Coordinator of Health Information Technology recently stated, "Congress apparently sees HIT—computers, software, Internet connection, telemedicine—not as an end in itself but as a means of improving the quality of health care, the health of populations, and the efficiency of health care systems."

The proposed changes to the healthcare industry adopt provider incentives to implement certified electronic health records (EHR) and meaningfully using them (e.g., e-Prescribing). In addition, the adoption of EHR implements electronic exchange of health information to improve quality of care and other clinical measures. Moreover, the provider adoption of EHR thus shifts the industry toward provider payment systems that will focus more heavily on patient care, measuring health outcomes, and the quality of care.

The US healthcare reform initiatives are also overdue as the U.S. health care system lags other advanced countries regarding the use of HIT in terms of functionality, spending, and innovation. However, the efforts to accelerate HIT/HIE efforts come with both costs and benefits. A recent report stated that impending changes to health care and health information technology policy will require changes to as many as ninety (90) percent of payer IT systems.[34] Additionally, the same report noted that opportunities abound for payers and providers to realize the potential value of these new tools.

The various HIT initiatives with direct dependencies with ICD-10 transition include the following:

- *Modifications to Health Insurance Portability and Accountability (HIPAA) transaction standards*
- *Implementation of the American Recovery and Reinvestment Act(ARRA)*
    - *Development of State HIT/HIE Plans* to develop and advance mechanisms for information sharing across the health care system, including establishing HIE capacity among health care providers and hospitals in their jurisdiction, ultimately enabling exchange across states
    - *Implementation of Medicaid Electronic Health Records (EHR) incentives*, including State Medicaid Health Information Technology Plan (SMHP), APDs, and alignment with the state's MITA self-assessment (MITA SS-A)
    - *Beacon community grants* for selected communities to build and strengthen their health information technology infrastructure and exchange capabilities

[34] http://www.mckinseyquarterly.com/The_new_IT_landscape_for_health_insurers_2645. McKinsey & Co. "The new IT landscape for health insurers." No 20: Summer 2010.

  - *Meaningful Use* requires states to implement ways to automate e.g., exchange health record information between providers and health plans instead of requesting paper records or requiring attachments to prior authorization requests
  - *HIT Regional Extension Centers (RECs)* that will offer technical assistance, guidance and information on best practices to support and accelerate health care providers' efforts to become meaningful users of EHRs. The consistent nationwide adoption and use of secure EHRs will ultimately enhance the quality and value of health care.
  - *Extension of broadband to rural providers*
  - *Assistance to safety net providers*, including Community Health Centers (CHCs), Rural Health Clinics (RHCs), Federally Qualified Health Centers (FQHCs), and tribal facilities with implementing HIT/EHR improvements
- *Implementation of ACA*
  - Administrative Simplification
  - American Health Benefit Exchanges
  - Fraud, Waste, and Abuse
  - Medicaid Expansion
  - The National Correct Coding Initiative (NCCI)
- *Maturation of MMIS systems within CMS' Medicaid Information Technology Architecture (MITA) Framework*
- *Value Based Purchasing (VBP)*
- *State-specific Quality Improvement Organizations, External Quality Review Organizations, and patient registries* (e.g., immunization registries)
- Improvements in public health coordination, including the *National Electronic Disease Surveillance System (NEDSS).*

6. Next Steps

This section identifies recommended next steps for CMS/CMCS, ROs, and SMAs after reviewing the State Medicaid Implementation Assistance Handbook and supplemental materials referenced or provided in Appendix B – Templates and Artifacts.

6.1 CMS/CMCS Next Steps

1) CMCS will update the Implementation Assistance Handbook and supplemental materials throughout the ICD-10 implementation and distribute the updates to the ROs and SMAs.
2) CMCS will assist the ROs with ICD-10 implementation support requests.
3) CMCS will assist the SMAs with ICD-10 implementation support requests, as time and resources allow.

6.2 RO Next Steps

1) RO will distribute any updates to this Implementation Assistance Handbook or supplemental materials to the SMAs.
2) RO will assist with any ICD-10 implementation support requests received from the SMAs.
3) RO will assist the SMAs with ICD-10 implementation support requests as time and resources allow.

6.3 SMA Next Steps

1) SMA should customize this Implementation Assistance Handbook and supplemental materials (including templates) to develop and execute their ICD-10 implementation plans, to include all collateral material for the awareness, assessment, remediation, testing and transition phases.
2) SMA should report their ICD-10 implementation progress to their RO on a quarterly basis and should continue to update the online assessment tool. The progress report should include any major ICD-10 implementation barriers.
3) SMA should collaborate internally with other state entities affected by ICD-10 and externally with SMAs experiencing similar barriers to draw on existing ICD-10 implementation knowledge and support.

A Appendix A – Glossary of Terms

Term	Definition/Explanation
CHIP	Children's Health Insurance Program
CM	Clinical Modification
CMCS	Center for Medicaid, Children's Health Insurance Program (CHIP) and Survey & Certification
CMS	Centers for Medicare & Medicaid Services
EDI	Electronic Data Interchange
EOB	Explanation of Benefits
FTE	Full Time Equivalent
HCBS	Home and Community Based Services
HHS	Health and Human Services
HIPAA	Health Insurance Portability and Accountability Act
I-APD	Implementation Advanced Planning Document
ICD	International Classification of Diseases
MITA	Medicaid Information Technology Architecture
NCHICA	North Carolina Healthcare Information and Communications Alliance
NCHS	National Center for Health Statistics
OESS	Office of E-Health Standards and Services
P-APD	Planning-Advanced Planning Document
PMO	Program Management Office
RFP	Request for Proposal
ROs	Regional Offices
SMAs	State Medicaid Agencies
TPL	Third Party Liability
WEDI	Workgroup for Electronic Data Interchange
WHO	World Health Organization

B Appendix B – Templates and Artifacts

This section includes templates and artifacts included in the handbook for the SMAs to use for ICD-10 implementations. Table 47 below explains the purpose of each template or artifact.

Table 47: Purpose of ICD-10 Implementation Assistance Handbook Templates and Artifacts

Template/Artifact	Purpose
Budget Management Template	Tracks and monitors ICD-10 implementation budget within an SMA, including the overall budget, budget by task, and monthly budget.
Business Clinical Scenarios	Models the definition of ICD-10-CM / ICD-9 CM clinical or business scenarios that test business functions, system remediation, and vendor performance.
Business Process Models (BPMs): as-is and to-be	Assists in sorting MITA operations into manageable areas of action to analyze and improve the efficiency and quality of operations. Assists the SMA in describing the level of detail and steps required to identify an as-is and to-be process (process sit downs with business/technical SMEs and sign off from business leads). **NOTE**: Based on MITA version 2.01.
Change Control Management Plan	Describes the process to request and manage changes to work products created or maintained by the ICD-10 project team members. Changes apply to areas impacted by ICD-10, including policies, processes, and systems.
Communication and Awareness Plan Template	Assists the SMA in planning and identifying communication and awareness tasks for the ICD-10 implementation. Includes a plan and considerations for distributing communications; assigning task owners; and developing a detailed communication/awareness timeline.
Concept of Operations	Resource from CMCS which provides information on the business operations that support the Medicaid enterprise in the as-is and to-be contexts.
Executive Status Reporting Template	Provides high-level reporting for the steering committee and/or sponsors, including dates, milestones, budget allotment, action items for program leadership, progress reporting, issues escalation, project status (on target, delayed, overdue), current implementation phase activities, internal and external key activities for program level review.

Template/Artifact	Purpose
ICD-10 Impact Checklists of Systems, Policies and Processes	Evaluation checklist (for policies, processes, and systems); identify ICD-10 risks and impacts to functional processes (e.g., case management, utilization management, enroll member, price/edit claim), policy (e.g., legislative; state, waivers); assist in identifying systems that enable functional processes.
ICD-10 Impacted Trading Partner Matrix	Tracks and monitors external testing transaction certifications with trading partners.
ICD-10 MITA Impact Analysis: Policies, Processes, and Systems	Methodology to develop a detailed analysis of the SMAs policies, processes, and systems and understand the ICD-10 impact on each.
ICD-9 and ICD-10 Clinical Concepts Examples	Provides example ICD-10 CM concepts that help to identify risk and severity not in ICD-9 CM.
ICD-10 Program/Workgroup Charter	Documents ICD-10 Program or Workgroup objectives including scope, goals and objectives, program benefits, success criteria, high-level deliverables, dependencies, ICD-10 Program or Workgroup membership.
Impact Scoring Template	Sample framework to determine the ICD-10 impacts throughout the SMA, including creating a numerical score for the ICD-10 impact. This template supports the SMA impact risk scoring component of the impact analysis.
Interface Test Case Template	A workbook of tabulated worksheets for tested reports. This template intends to represent individual worksheets, not to replace a formal tracking system.
Internal/External Stakeholder List	Tracks stakeholder engagement throughout the ICD-10 Implementation including contact dates; contact information (full name, email address, phone number, role at SMA, role on ICD-10 project); and information exchanged.
Issue Management Plan	Provides a definition of an issue; the objectives of the issue management plan; the roles and responsibilities in regards to issue management and resolution; the process for reviewing issue in project team; the process for escalating to executive leadership; the process for expediting and issue; and an issue tracking system.
Medicaid ICD-10 Implementation Schedule/Project Plan	Project Plan timeline of tasks, milestones and start-to-finish dates for the ICD-10 implementation phases (Awareness, Assessment, Remediation, Testing, and Transition). The project plan references dependencies, task owners, and resources names for each task.

Template/Artifact	Purpose
Mind Mapping as an ICD-10 Migration Analysis Tool	Illustrates the mind mapping methodology, including categorizing impacted areas in an organization; drilling down to detailed subject area levels; identifying the degree of impact in business areas; and defining and attaching tasks and resources.
Project Status Reporting Template	Provides detailed reporting for project leads and/or their direct management including dates, project name, point of contact, overall project status (on target, delayed, overdue), milestones, project costs and budget, phase status and completion, progress on phase deliverables, key activities planned for the activities, project issue identification, action items for project team.
Published ICD-10 Relevant Articles	Listing of publicly available white papers written by CMS, American Health Information Management Association (AHIMA), American Academy of Professional Coders (AAPC), Workgroup Electronic Data Interchange (WEDI), Healthcare Information Management Systems and Services (HIMSS), blogs, vendor sites.
Remediation Plan Template	Framework to support remediation strategy selection; communicate the strategy and implication to stakeholders; support budget and/or funding requests. Steps include determine remediation strategy options; define the strategy options; develop a strategy scoring method; evaluate criteria for each strategy; scale and compare each strategy using the scoring mechanism; choose a strategy. Outlines four strategies: Crosswalk reimbursement strategy (not preferred); Minimal upgrade strategy; Maximum upgrade strategy (preferred); and Upgrade and crosswalk hybrid strategy.
Report Test Case Template	A workbook of tabulated worksheet for each tested report.
Requirements Traceability Matrix: Business and Technical Requirements Template	Tracks data associated with business and technical requirements: MITA business process, MITA business area, MITA system module, priority level, requirement owner, exceptions, assumptions, dependencies, release number, test case scenario, and requirement status.
Resource Acquisition Plan	Identifies a process to define the appropriate knowledgeable/skilled resources and the number of resources to meet the project timeline for delivery; document the process to conduct an internal organizational assessment; document the process to plan, execute and manage acquisitions throughout the project lifecycle; address policy, process, and regulatory requirements related to resource acquisitions.

Template/Artifact	Purpose
Risk Management Plan	Provides a definition of a risk; the objectives of the risk management plan; the roles and responsibilities in regards to risk identification and resolution; the project risk management process (identify/classify a risk, analyze risk, determine approach to identified risk, track risk, mitigate risk, escalation process, and tracking process).
Roles and Responsibilities Matrix- Responsible, Accountable, Support, Consulted, Informed (RASCI)	Matrix used to structure and clarify role assignments within the team; describes the participating roles, aligned tasks/ deliverables. The matrix assists in clarifying the roles and responsibilities in cross-functional/departmental projects and processes.
Scope Management Plan	Outlines the process to manage scope; define roles and responsibilities with regard to scope management; define description of the project and its deliverables; provide the project scope statement including the product scope description, the product acceptance criteria, the project deliverables, the project exclusions, project constraints, and project assumptions. Includes an overview of WBS, scope verification, scope control, and scope acceptance.
System Interaction Diagrams	Illustrates system processes, inputs (e.g., eligibility requirements, electronic medical and drug claims, paper claims, provider enrollment, third party liability, managed care encounters), outputs, and transactions, which include ICD-10; capture data flow from MMIS processing modules; identify potential ICD-10 impacts; identify relationships between modules, files, and MITA business processes.
Test Data Checklist	Checklist of key requirements and data sets for testing.
Test Plan Template	Identifies test items, the features to test, testing tasks, testing assignments, and risks requiring contingency planning.
Training Plan Template: Training Needs, Training Approach, and Training Evaluation	Three-fold planning and delivery training guide including the following sections: Training Needs Assessment (considerations and planning required to identify training needs and requirements to meet the ICD-10 compliance date); Training Approach (document and identify training topics, target audience, purpose, expected outcomes, frequency, and training method), and Training Evaluation (considerations and planning required to measure training effectiveness to improve the quality of future trainings).
Translation Checklist	Checklist with key items to evaluate when auditing the translation process. Includes a checklist for two translation types: Crosswalking and Redefining Categories.