Preparing for the Meaningful Use 2014 Certified Electronic Health Record and ICD-10 Implementations

Jeanette Kompkoff
RPMS Investment Manager (Acting)

Agenda

- Establish the Implementation Plan
- RACI matrix sample
- OS and Key Database Utilities Required
- Install Order of applications
  - MU 2014
  - ICD-10
- OIT Support during Implementation

Implementation Plan

- Analyze Systems
- Analyze configurations and workflow
- Identify new services and functions
- Define roles and responsibilities
- Determine IT support needs for implementation
- Define and document training approach
- Communicate clearly and often

Analyze RPMS

- Analyze all RPMS databases to **determine existing**:
  - Operating System
  - RPMS Applications with versions and patch levels installed to date
- Track and manage the releases as part of standard practice for:
  - **Local Site Manager**
  - **Area (Tier 2 support**)
- Communicate with Programs to **determine future configuration needs. IT should consult with:**
  - CACs
  - Clinicians
  - CEO
  - Business Operations (Business Office, CHS, Finance)
  - Meaningful Use and ICD-10 Coordinators
  - Health Information Management

New Services

- New Functions/Applications may change configurations and work flows:
  - Health Information Exchange (HIE) – central service repository of Consolidated Clinical Document Architecture (CCDA) files. Provides exchange patient data electronically within the IHS HIE network and across the eHealth Exchange.
  - Master Patient Index (MPI) – central service repository of patients across separate clinical, financial, and administrative systems and is needed for information exchange.
  - Distributed Terminology Services – central terminology service to support SNOMED, RXNORM, etc.

New Services (cont.)

- Two new applications/functions require additional responsibilities. Plan for the change in personnel.
  - Direct – email secure messaging service used to exchange Personal Health Information with Patients and Providers
  - Personal Health Record (PHR) – central service to provide secure access for patients to their health information
    - RPMS Direct Area Administrator
    - RPMS Direct Service Unit/Facility Administrator
    - PHR Registrar
    - Message Agent for secure messaging

Roles and Responsibilities

- Roles and Responsibilities assignments
  - Who is **Responsible** to get work done?
    - Responsibility = role is responsible for actually doing or completing the item.
  - Who is **Accountable** for the work?
    - Accountable = role is accountable for ensuring that the item is completed. Usually only one person.
  - Who needs to be **Consulted**?
    - Consulted = role whose subject matter expertise is required in order to complete the item.
  - Who needs to be **Informed**?
    - Informed = role that needs to be kept informed of the status of item completion.
- Use a RACI Matrix to manage roles and responsibilities for activities.

Sample RACI Matrix

Activity \ Role	Program/Project Manager (Area MU/ICD-10 Consultant)	Area Director	Area CAC	Area ISC	Area IT Support	Training Coordinator/Trainer(s)	Area HIM Consultant	Area Business Office Coordinator	Tribal Liaisons	Executive/Program/Project Sponsors	Site Manager/Account Manager	Key User
Develop Area Implementation Plan	R	A	C	C	I	I	C	C	C	A	C	I
Document Area Implementation Plan	R	A	C	C	I	I	C	C	C	A	C	I
Analyze Legacy Systems and Software	A		C	A	R					A	R	
Develop Software Deployment Plan	A,R	A	C	C	R	I	C	C	C	I	R	I
Assess Organizational Change Management Impact	A,R	I	R	C	C	I	C	C	C	I	C	C
Address Organization Change (new roles/responsibilities)	A	C	C	C	I		R	R	R	R	I	I
Develop Area Training Approach	A	I	C	C	C	R	R	R	C	C	I	C
Design Area Training Curriculum	A		C	C	C	R	C	C	C	I	I	C
Develop/Incorporate Training Materials	A,R		C		C	R	C	C	C			
Develop Area Communications Plan	AR	I	C	C	I	C	C	C	C	I	I	I
Install Software	I	I	C	A	R	I	I	I	I	I	R	I
Configure Software	A	I	R,C	A	R,C	R	C	C	C	I	R	I

Software Upgrades

- IT Site and Area Staff :
  - Address deficient and future patching needs
    - Validate what is needed with Program experts
    - Set a schedule, assign tasks and necessary resources to install and configure
    - Communicate with affected staff that a patch will be installed

Installation – Actions To Consider

- If software patch requires additional configuration
  - Can the patch be installed and configuration occur later?
  - Set hard dates

- Consider after business hours installs
  - Engage Program Staff who need to help with immediate configurations
  - Notify tier 2 or tier 3 IT support personnel for standby assistance
    - Identify which applications feel like a challenge

- Back up systems before Installation!

Training and Communication

- Identify gaps in support staff knowledge and plan for training

- Gain awareness for ICD-10 and new services with Meaningful Use 2014

- Communicate the implementation plan fully and often

- Consider a listserv and/or a distribution list to keep stakeholders informed

Operating System and Key Database Utilities

AIX

- AIX 6.1 or higher
- Ensemble 2012.2.5
- Kernel RPC Broker (XWB 1.1p 1018)
- IHS Kernel Toolkit Extensions (BXT 1)

Windows

- Windows 2008 (with latest patches – need list)
- Ensemble 2012.2.5
- Kernel RPC Broker (XWB 1.1p 1018)
- IHS Kernel Toolkit Extensions (BXT 1)

Client Install for MU 2014

- Electronic Health Record (EHR)
- Bar Code Medication Administration (BCMA)
- VistaImaging (VI)

MU 2014 Patch Beta Test Install Order

Order	Application	Namespace/ Package	Version	Patch	Est. Install Time (min)
1	IHS Kernel Toolkit Extensions	BXT	1		20
2	IHS VA Support Files	AVA	93.2	22	1
3	IHS Dictionaries (Patient)	AUPN	99.1	23	2
4	Patient Registration with RACE API	AG	7.1	11	5
5	Practice Management Application Suite	BMW	2.5		60
6	Cache.dat				
7	IHS User Security Audit	BUSA	1		60
8	IHS Standard Terminology	BSTS	1		28
9	IHS Code Mapping (Clinical Quality Measures)	BCQM	1		3
10	IHS PCC Suite	BJPC	2	10	3
11	Clinical Reminders	PXRM	2		20
12	Clinical Reminders	PXRM	2	1001	10
13	Clinical Reminders	PXRM	2	1002	2
14	Text Integration Utilities	TIU	1	1011	6
15	IHS Pharmacy Modifications – Alpha	APSP	7	1017	8

MU 2014 Patch Beta Test Install Order (cont.)

Order	Application	Namespace/ Package	Version	Patch	Est. Install Time (min)
16	Adverse Reaction Tracking	GMRA	4	1007	2
17	Consult/Request Tracking	GMRC	3	1004	12
18	Gen. Med. Rec – Vitals	GMRV	5	1002	3
19	EHR – Alpha	EHR	1.1	13	2
20	Text Integration Utilities	TIU	1	1012	2
21	Radiology/Nuclear Medicine	RA	5	1005	1
22	Lab Service - Alpha	LR	5.2	1033	15
23	Referred Care Information Service	BMC	4	8	5
24	C32 – Install only if Patch 3 is installed	BJMD	1	4	10
25	CCDA (Consolidated Clinical Document Architecture)	BCCD	1		19
26	IHS PCC Reports (ILI Surveillance/Syndromic Surveillance patch)	APCL	3	29	2
27	iCare Management System	BQI	2.3	3	13
28	IHS MU Performance Reports (2014)	APCM	1	4	2
29	Health Summary Components (VA)	BHS	1	8	2
30	Emergency Room System – Inpatient only	AMER	3	5	1
31	EHR Site Checker	BCER	2		2

2014 Certified RPMS EHR Applications

	Namespace	Version	Patch	Package Name/Other
1	AG	7.1	11	Patient Registration
2	AG	7.2	3	MPI (under Patient Registration)
3	AMER	3.0	5.0	ER Visit System
4	APCL	3.0	29	IHS PCC Reports (ILI Surveillance/Syndromic Surveillance patch)
5	APCM	1.0	4	IHS MU Performance Reports (2014)
6	APSP	7.0	1017	IHS Pharmacy Modifications
7	AUM	13.0	4	ICD Update
8	AUPN	99.1	23	IHS Dictionaries (Patient)
9	AUT	98.1	26	IHS Dictionaries (Pointers)
10	AVA	93.2	22	IHS VA Support Files
11	BCCD	1.0		CCDA(Consolidated Clinical document architecture)
12	BCQM	1.0		Clinical Quality Measures (IHS Code Mapping)
13	BEPR	2.0		e-Prescribing production
14	BGO	1.1	13	BGO Components (for EHR p13)
15	BHS	1.0	8	Health Summary Components (VA)
16	BI	8.5	5	Immunization
17	BJPC	2.0	10	IHS PCC Suite
18	BMC	4.0	8	Referred Care Info System
19	BMW	2.5	0	Practice Management Application Suite
20	BMX	4.0	3	BMXNET RPMS .NET Utilities
21	BPHR	2.0	1	IHS Personal Health Record (PHR)
22	BQI	2.3	3	iCare Management System
23	BSTS	1.0		IHS Standard Terminology
24	BUSA	1.0		IHS User Security Audit
25	BXT	1.0		IHS Kernel Toolkit Extensions

2014 Certified RPMS EHR Applications (cont.)

	Namespace	Version	Patch	Package Name/Other
26	BYIM	2.0	4	Immunization Interface to registry
27	GMRA	4.0	1007	Adverse Reaction dictionary changes
28	GMRC	3.0	1004	Consult/Request Tracking
29	GMRV	5.0	1002	Gen. Med. Rec. - Vitals
30	HIE	1.0	3,4,5	IHS HIE/NwHIN
31	LR	5.2	1033	Lab Service
32	MAG	3.0	131 & 140	
33	PXRM	2.0	1002	Clinical Reminders
34	RA	5.0	1005	Radiology/Nuclear Medicine
35	TIU	1.0	1012	Text Integration Utility
36	XWB	1.1	1018	RPC Broker (Kernel)
	Security Requirements			
1	End User Encryption			Symantec 8.2, 7-Zip, Credant 2-go 7.3
2	Integrity			Winhasher
3	Authentication - Auto Logoff			GPO Setting
	Operating System and Environment:			
1	Windows			2008 (2012 is not supported)
2	AIX			6.1 or higher
3	IIS			7.0
4	Ensemble			2012.2.5

ICD-10

- In April 2014, President Obama signed into law to delay ICD-10 compliance to no earlier than October 1, 2015. CMS has indicated that October 1, 2015 will be the official compliance date.

- The delay provides additional time for Areas/sites to improve clinical documentation, prepare for IT support, test with payers, and understand any revenue changes with the upcoming transition.

ICD-10 Patch Install Order

Order	Application	Namespace/Package	Version	Patch
1	AICD	AICD	4	
2	Lexicon	LEX	2	1002
3	Taxonomy	ATX	5.1	11
4	Distributed Terminology Services	BSTS	1	2
5	PCC Suite	BJPC	2	11
6	PCC EPI (ILI)	APCL	3	30
7	Electronic Health Record	EHR	1.1	14
8	Health Summary Components (VA)	BHS	1	9
9	Clinical Reminders	PXRM	2	1003
10	Clinical Reminders	PXRM	2	1004
11	Text Integration Utilities	TIU	1	1013
12	Patient Information Management System	BDG		1016

ICD-10 Patch Install Order (cont.)

Order	Application	Namespace/ Package	Version	Patch
13	BMX.net	BMX	4	4
14	Prenatal	BJPN	2	
15	Emergency Room Dashboard	BEDD	1	2
16	Emergency Rooms Systems	ERS	3	5
17	Lab	LR	5.2	1034
18	Radiology	RA	5	1006
19	Immunization	BI	8.5	9
20	Pharmacy (APSP)	APSP	7	1018
21	Behavioral Health System	AMH	4	4
22	Dental	ADE	6	26
23	Dental	BADE	1	4
24	Case/Diabetes Management	ACM/BDM	2	8

ICD-10 Patch Install Order (more)

Order	Application	Namespace/ Package	Version	Patch
25	iCare	BQI	2.4	
26	Women's Health	BW	2	13
27	HIV Management System	BKM	2	2
28	Clinical Reporting System	CRS	13.1	
29	Referred Care Information System	BMC	4	9
30	Data Warehouse Export	BDW	1	4
31	Third Party Billing	ABM	2.6	14
32	Point of Sale	ABSP	1	45
33	Contract Health System	ACHS	3.1	23
34	Accounts Receivable	BAR	1.8	23

OIT Support

- Introduction to Meaningful Use 2014 and ICD-10 through Office Hours and other outreach
- High-level introduction to software changes to support Meaningful Use 2014 and ICD-10
- Train-the-Trainer sessions for:
  - Installation process of new applications (BMW, HIE)
  - Software application use
- OIT training materials available to all to use
- Clarification on Meaningful Use Rules as requested

OIT Support (cont.)

- Application user and technical manuals will be available

- Assistance with installation failures or challenges

  - Schedule well in advance

  - Notify OIT of scheduled installation time so that staff is available

Questions

Jeanette Kompkoff

RPMS Investment Manager (Acting)

Jeanette.Kompkoff@ihs.gov