

Healthcare BIM Consortium

Session #2



**KAISER
PERMANENTE®**



**Department of
Veterans Affairs**



Sutter Health



Military Health System
(Tricare Management Activity / Health Affairs)

**February 2, 2011
OAKLAND, CA**

HBC Mission Statement



The Healthcare BIM Consortium (HBC) has been created by healthcare owners in collaboration with software vendors to seek solutions for interoperability to support the Facility Life Cycle Management (FLCM)

Data Samples



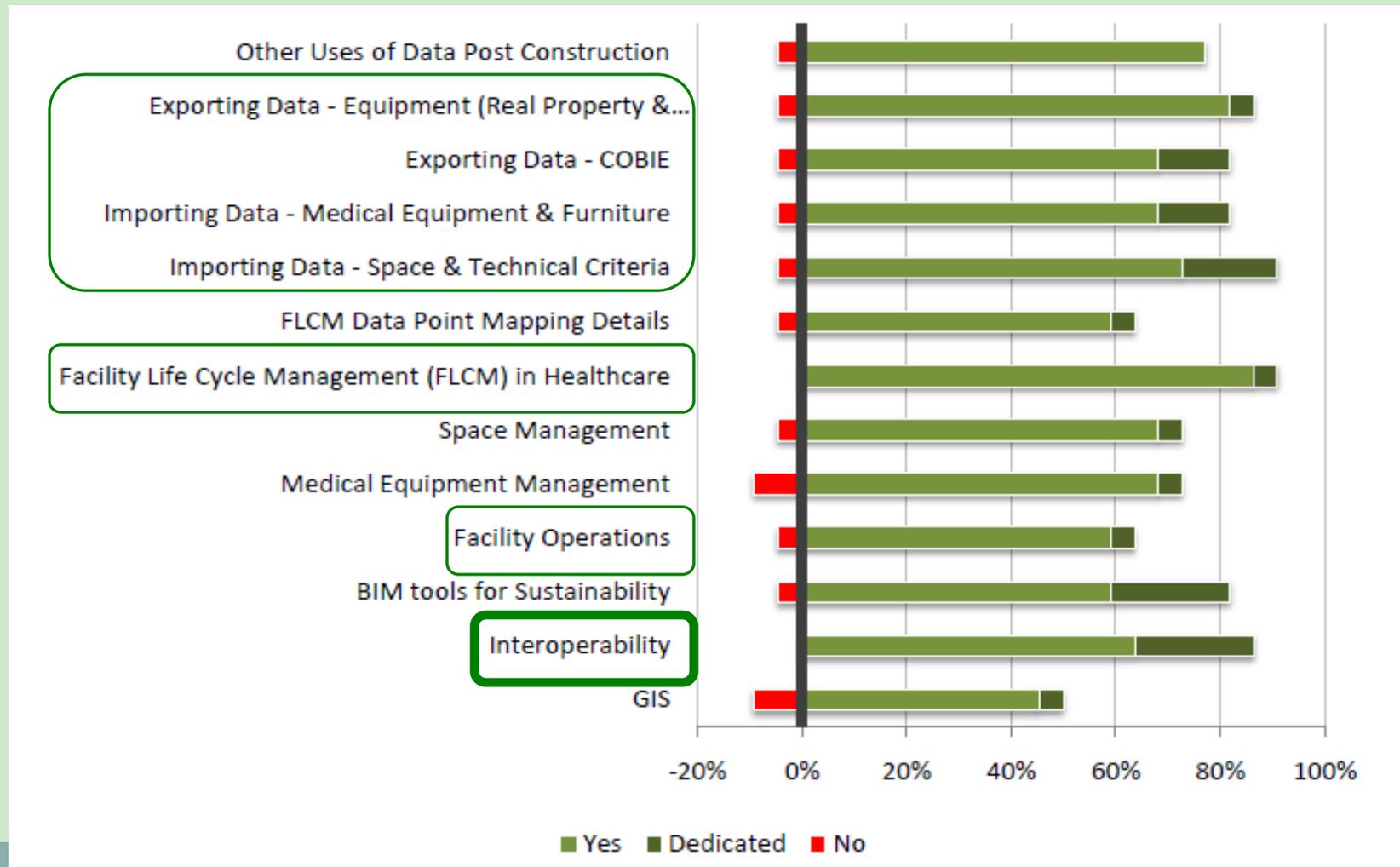
Data Samples for Development Efforts:

	Sample File	Schema & Data Definitions
DoD-MHS	<p><i>Clinic Example</i></p> <p>(a) <u>.rvt File</u> (New) – This is a sample file that is representative of a medical treatment facility (MTF) or Out Patient Clinic – Medical & Dental activities. (WinZIP File)</p> <p>(b) <u>SEPS BIM Exports - space & medical equipment</u> (New) – corrected to include service (lead agency) in cover page. (WinZIP File)</p> <p>(c) <u>COBie/LCie Data Samples</u> (New) – sample export data for this sample clinic in a LCie format. (Note: when you click on this link, scroll down to the "Medical Clinical Example")</p>	<p>(x) <u>SEPS BIM Schema</u> (New) – corrected to include service (lead agency) in the cover page; added details descriptions.</p> <p>(y) <u>DMLSS-FM RPIE Schema</u> – <i>Under Development</i> -- will be posted when available</p>

Note: Zipped files were zipped using WinZip. Some people have had trouble opening without using WinZip.

<http://www.tricare.mil/ocfo/ppmd/events.cfm#BIM-Samples>

Survey Results: Future Meeting Topics



Housekeeping/ Agenda for the day



Agenda	
Topic: Interoperability	
HBC Owner Presentation	Russ Manning
Introductions & Housekeeping	Bill McLaurin
Interoperability Programming	
• <i>OmniClass Space and Equipment Classification</i>	Renee Tietjen
• <i>Data Sets Crosswalk/ Framework of Interoperability</i>	Abeer Haddad, Russ Manning
Break	All
Interoperability Design & Construction	
• <i>What is Possible Right Now with Current Software: Designing for Fabrication</i>	Digby Christian
• <i>What Does Software Need to Do to Enable Further Transformational Improvement?</i>	Digby Christian
Lunch	All
Interoperability Operations	
• <i>CMMS/CAFM & BIOMED Systems</i>	Ingrid La Mar, Russ Manning
Path Forward	Ellen Boffo

What is OmniClass?



- ❖ The *OmniClass* Construction Classification System is a classification system developed by the Construction Specifications Institute (CSI) for the construction industry.
- ❖ Besides other uses, it provides a classification nomenclature for electronic databases. It incorporates other extant systems currently in use as the basis of many of its Tables – MasterFormat™ for work results, UniFormat for elements, and EPIC (Electronic Product Information Cooperation) for structuring products.

Table	Status	Release Date
Introduction - OmniClass Introduction	Release	2006-03-28
Table 11 - Construction Entities by Function	Release	2006-03-28
Table 12 - Construction Entities by Form	Release	2006-03-28
Table 13 - Spaces by Function	Pre Consensus Approved Draft	2010-06-24
Table 14 - Spaces by Form	Release	2006-03-28
Table 21 - Elements (includes Designed Elements)	Conditional Draft	2006-03-28
Table 22 - Work Results	Release	2006-05-02
Table 23 - Products	Pre Consensus Approved Draft	2010-06-24
Table 31 - Phases	Release	2006-03-28
Table 32 - Services	Pre Consensus Approved Draft	2010-06-24
Table 33 - Disciplines	Release	2006-03-28
Table 34 - Organizational Roles	Release	2006-03-28
Table 35 - Tools	Draft	2006-03-28
Table 36 - Information	Pre Consensus Approved Draft	2010-06-24
Table 41 - Materials	Release	2006-03-28
Table 49 - Properties	Draft for Comment	2010-06-24

What is OmniClass



- ❖ VA worked with CSI to develop OmniClass Table 13
- ❖ Used VA/DoD Medical Spaces as a base
- ❖ VA then aligned the OmniClassification numbers with VA/DoD Space Codes.

Mapping

OmniClass Table 13 –VA Space Code



OMNICLASS						VA Room Name	
OmniClass Codes	OmniClass Level 1	OmniClass Level 2	OmniClass Level 3	OmniClass Level 4	Definition	VA Room Name	VA Room Code
13-51 11 13	Healthcare Spaces	General Examination Spaces	Exam Room, Airborne Infection Isolation		Space used for examination of patients who are suspected to have or have a condition which could pose an airborne infection threat to other patients.	Exam, Isolation, Negative Pressure	EXRG6
13-51 11 15	Healthcare Spaces	General Examination Spaces	Exam Room, Isolation		Space used for examination of patients with suspected contagious diseases.	Exam, Emergency Room	EXER1
13-51 11 17	Healthcare Spaces	General Examination Spaces	Exam Room, OB/Gyn		Space used for gynecological examination of women.	Exam Room, OB/GYN	EXRG8
13-51 11 19	Healthcare Spaces	General Examination Spaces	Exam Room, Pediatric		Space used for examination of patients who conform to institutional criteria as being children, generally 1 year old to 20 years old.	Exam, Pediatric Screening	EXRG5
13-51 11 21	Healthcare Spaces	General Examination Spaces	Exam Room, Protective Environment Isolation		Space used for examination of patients who are suspected to have or have a condition which makes them highly susceptible to infection.	Exam, Isolation, Positive Pressure	EXRG7

Open Discussion



**What do you need from us?
What do you think?**

Data Crosswalk



Kaiser	DoD	VA	DoD/VA: Units	DoD/VA: Description	DoD/VA: Type
Default Elevation	Elevation	Elevation	Feet	elevation in the model with which the object is associated. Determined by BIM platform.	#N/A
	Project_Room_ID	Project_Room_ID		unique room ID from SEPS output. Key for updates of PFD and associated linkage for room equipment association	INTEGER
	Project_Equipment_ID	Project_Equipment_ID		unique equipment ID from SEPS output. SEPS UID for piece of equipment.	INTEGER
Show Interference (default)	*YES*	*YES*			#N/A
Phase	Phase1	Phase1	Poles		Numeric
Weight Comment					#N/A
Weight (lbs)	Weight_AV	Weight_AV	LBS		Numeric
Length	Width_IN	Width_IN	Inches		Numeric
Height	Height_IN	Height_IN	Inches		Numeric
Depth	Depth_IN	Depth_IN	Inches		Numeric
Model Number	Model	Model			#N/A
Specification Number	JSN	JSN			CHAR
Model Name	Make	Make			#N/A
Manufacturer	Manufacturer	Manufacturer			#N/A
Cost	Cost	Cost			Numeric
Watts	Watts1	Watts1			Numeric
Volts	Volts1	Volts1			Numeric
Amperage	Amps1	Amps1			Numeric

Rooms Project Details Facility Equipment RPIE (Facility) COBIE Mapping **Medical Equipment** Specialty Equipment & C

SCRL

Framework of Interoperability



- Defining degrees/levels of interoperability
- What degree of interoperability do we need?

	Short Description	Description
0	None	No ability to share or communicate
1	Digitize	Data output to File or Print and can be digitized or recreated
2	View only	Produce / Read Graphics results only
3	View / Read only	Produce / Read Graphics results and data for View only
4	View / Read / Edit Some	Produce / Read Graphics and Data with exchange Limitations on data Structure and Parametric graphics editing
5	View / Read / Edit All	Produce / Read Graphics and Data with no exchange limitations (as if drawn in native application)

Framework of Interoperability: Crosswalk



Kaiser	Importing Data 				Exporting Data 			
	Interoperability	Bi-directional or Uni-directional	Editable (Yes or No)	Single or Iterative Exchange	Interoperability	Bi-directional or Uni-directional	Editable (Yes or No)	Single or Iterative Exchange
Phase	1	Uni-directional	Yes	Iterative	1	Bi-directional	Yes	Iterative
Weight Comment	1	Uni-directional	Yes	Iterative	1	Bi-directional	Yes	Iterative
Weight (lbs)	1	Uni-directional	Yes	Iterative	1	Bi-directional	Yes	Iterative
Length	1	Uni-directional	Yes	Iterative	1	Bi-directional	Yes	Iterative
Height	1	Uni-directional	Yes	Iterative	1	Bi-directional	Yes	Iterative

Open Discussion



What do you need from us?
What do you think?



Open Discussion

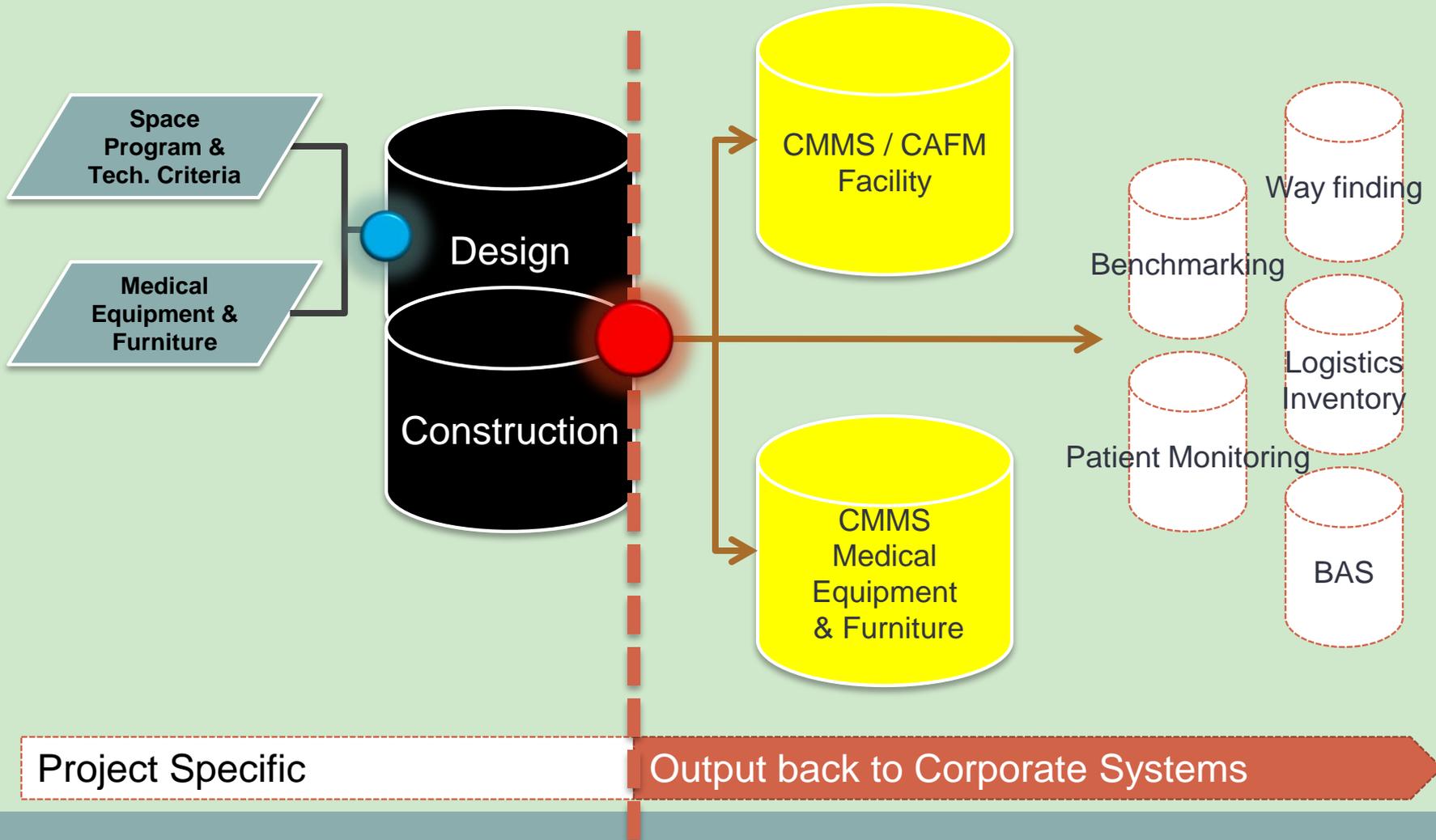
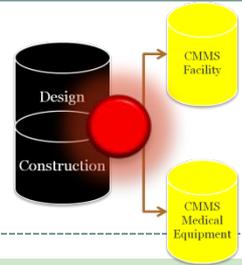


During Design and Construction, how can we get:

Seamless single-discipline data transfer from preliminary design through to fabrication detailing?

Painless transfer of relevant data across disciplines regardless of where they are in the design to fabrication flow?

Output Data Flow



COBie w/ Healthcare Extension



We are going to move data from Design and Construction into our Facility/Equipment Operations systems. We are all doing it today, but not efficiently.

Our goal is to leverage BIM across the facility life cycle.

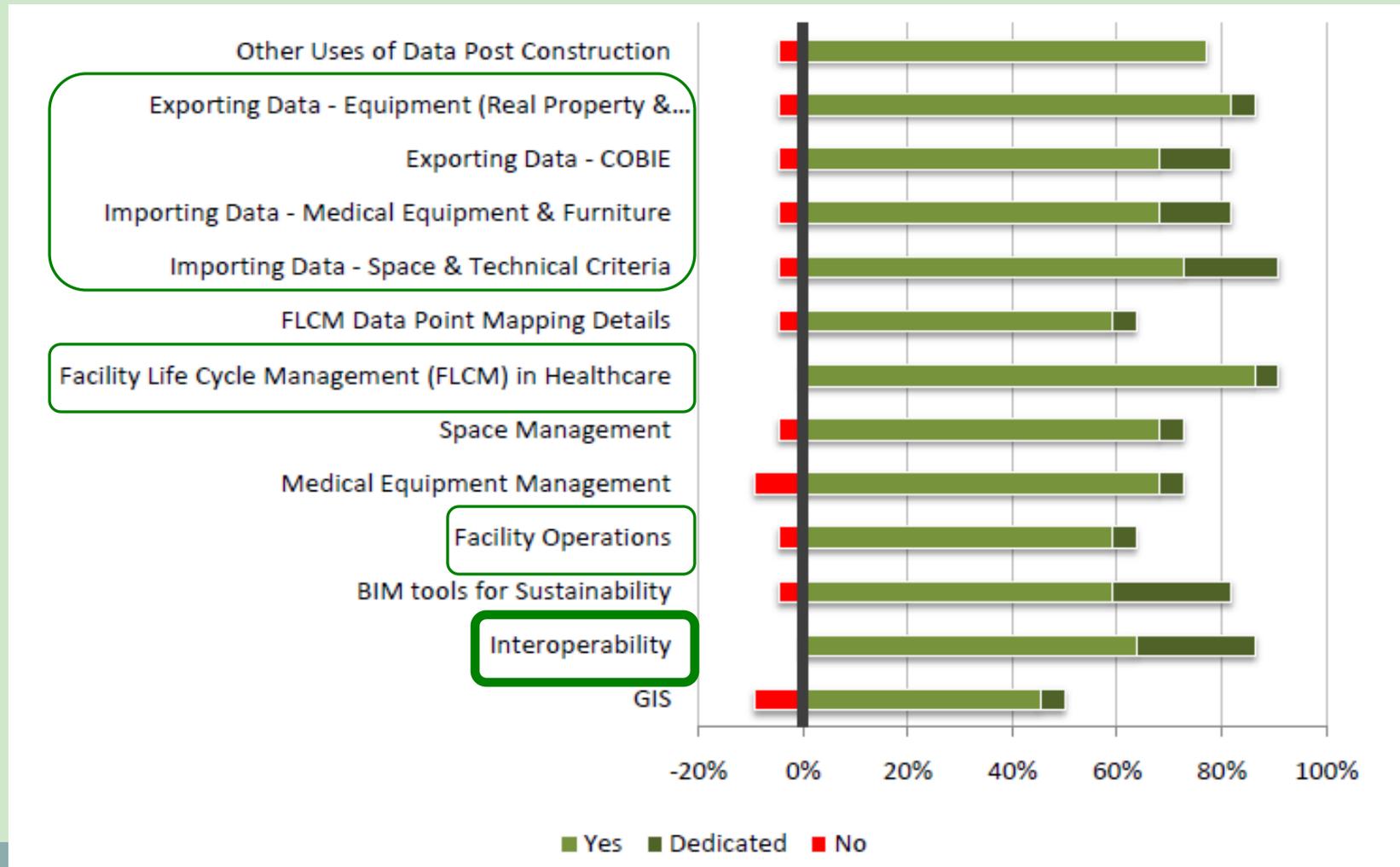
As owners, KP, VA & DoD are all committed to moving forward with COBie w/ Healthcare extensions. A collaborative work group has already been formed and will report out on the effort at the June HBC meeting.

Open Discussion



**What do you need from us?
What do you think?**

Survey Results: Future Meeting Topics



Healthcare BIM Consortium Path Forward



- We want to keep you engaged in the Future of the HBC.
 - ❖ Here is what we see right now:
 - ✦ Feedback & Planning Survey (Mid February)
 - ✦ HBC owners may receive or request proposals for additional time with the vendors. See website for more information.
 - ✦ Periodic full HBC group updates for active participants (every 6 to 12 months)
 - ✦ Next HBC Meetings: June 28-30, 2011 (Washington D.C.)

<http://www.tricare.mil/ocfo/ppmd/events.cfm#Events-BIM-HBC-NextMeeting>



Thank You!