

**MedBiquitous**

**CAPETIHP Workshop**

**First Breakout**

**Interoperability Pain Points**

# Group 1: Interoperability pain point brainstorm

Reporter's name: Rosalyn

## Institutional Sharing

- Tracking LCME competencies (2)
- Connection to LMS (2)
- Outside users may not value or reliability in systems (1)
- Comparisons of competency between health professions (1)
- Working with multiple clinical sites (1)
- Sharing with oversight bodies
- Long term tracking of prof dev competency is difficult
- Interdisciplinary
- Accreditation Reportin
- Maximizing opportunities to use material from other professionals schools within a university
- Differing requirements for different clinical sites

## Reporting

- Instructor looking to see progress from students in a unified dashboard (3)
- Inconsistency in reports among departments (2)
- Not having Measurable outcomes (2)
- Ability to track assessments to competency attainment (1)
- Reports - unstandardized format
- activities tracking
- Dashboard connectivity

## Technical Issues

- Needin support/back from back end developers (unsustainability of use) (4)
- Passing dat back from learning tools back into the LMS (2)
- internet connectivity (1)
- SOM LMS is separate from Univ LMS
- Coding that I don't understand so can't fix
- API and LTI lockdown

## End User Issues

- Making it eas for students to move from the LMS to a learning platform (2)
- Ensuring that single sign-on works for students and faculty
- Making it easy for students to access their work from mobile devices

## Data Issues

- Upload/download with different excel forms - same data, diff columns (1)
- Inability to complete outcomes research with out a lot of dat manipulations (1)
- Difficult to manage time with various sources of data / reformatting of data (1)

## Staffing Issues

- How to bring in and train professionals not familiar with technology, especial (2)
- Inability to use what is there
- Training of staff to use multiple systems that

## Vendor Issues

- Cost (1)
- Admin databases not focused on ed
- Lack of accessibility from book vendors
- Choices where there should be - onedrive vs google

# Group 2: Interoperability pain point brainstorm

Reporter's name: Amy

## Lack of standardization

- 1 Betamax vs. VHS
- 1 Vendors don't work with competitors
- 5 No consistent data model on how to share data
- 2 Uniformity in messaging re standards
- 2 Standards are loosely enforced
- IS wish for standardized software vs need for customized reports
- 3 Unclear objectives for Interoperability
- 2 Low on the vendors' priority list

## Siloes and lack of leadership

- 2 Politics - various data owners and no collaboration
- 2 Lack of leadership agreement on reporting metrics
- Cross-program goal alignment
- 2 Top/down vs. bottom/up decision making vs. inertia
- 3 Silo systems with different management approaches
- Constraints on the educational program (e.g. accreditation)
- 1 Lack of vision from school administration and national governing bodies
- 1 Historical data concerns vs. contemporary needs

## Training/ Skill development

- 2 Lack of staff with data admin skills
- 1 Expertise IT staffing
- Faculty training
- Moving targets (new IT tools and capabilities)

## Money/resource

- 1 \$\$\$
- Budgets - no shared tools across areas
- 1 Intellectual Property Concerns
- 1 Analytics are viewed via financial lens, not educational lens
- Org size in relation to requisite budgeting

# Group 3: Interoperability pain point brainstorm

Reporter's name: Michael

As security standards/requirements become more stringent, we are forced to change systems frequently	cataloging definitions <sup>1</sup>	Multiple data owners & purposes of data	Unclear "sources of truth"
Systems that don't talk to each other	User interfaces using different apps	Getting appropriate permissions in University-level systems <sup>1</sup>	standardized vocabulary
Data often overlaps in different systems, but not cleanly	Vendors that don't have a mature approach to data privacy and contracting requirements	Vendors who don't export all data for proprietary purposes	Users get confused about where they are
Hundreds of faculty/student/staff "customers" all looking for different things with differing levels of detail	Poorly designed interfaces and data rules <sup>1</sup>	Lack of staffing and resources	Security of 3rd party systems

- Lack of well-structured, accessible APIS
- Lack of consistent standards
  - Outdated technologies
  - Idiosyncratic data definitions
  - Conflicting understanding of needs
    - Vendor independence
- Lack of inter-institutional shared models and voice
- Lack of technology resources
- Interoperable tech landscapes cost money

1. Duplicate info in different places;
2. Time to complete evals (time suck);
3. Pressure to generate revenue removes surgeons from educational activities;
  - 4. COVID extra work;
5. Lack of IT support available for EdTech used;
6. Oligarchical systems;
7. Lack of specificity - meant for all specialties;
8. Cost for specialty-specific programs;
9. ACGME Requirements vs. support;
10. Inability to use information collected to make data-based decisions on curricula/GME.

## Themes for Voting

Vendor support <sup>3</sup>	Duplicate data/multiple sources <sup>4</sup>	Vendor Independence
Competing system needs <sup>2</sup>	Standardized Vocabulary <sup>3</sup>	Shared model and voices <sup>3</sup>
Clarity of decision-makers <sup>3</sup>	Technological Infrastructure <sup>5</sup>	Support (financial, staff) <sup>5</sup>
Migration challenges <sup>1</sup>	Security <sup>3</sup>	

# Group 4: Interoperability pain point brainstorm

Reporter's name: Jamie Fairclough

## Aggregating data

Data access

Data integration -  
single source  
of truth

legacy systems  
that are not  
capable of  
automated  
integrations

Continuity of  
data from  
admissions  
through GME

Data liquidity  
concerns - -  
getting right  
data to right  
person at the  
right time

Alignment of  
key data  
elements  
across  
systems

## Connecting with users

Dashboarding  
across  
multiple units  
and levels

Intuitive user  
interfaces

Single source of  
communication/messaging

## Data capture

Some systems  
capturing real  
time data vs.  
others that do  
not

Low density  
systems that  
hold limited  
data  
types/amounts

Real-time  
data  
connections  
with Registrar

## Other

Minimizing  
systems  
creep

# Group 5: Interoperability pain point brainstorm

Reporter's name: Terence Ma, PhD - "Tere"

## TOP THEME 1: Data Standards...or not?

No way to have live data	Standards not published for coders	No way to create KPIs	WHICH standards to adopt?
Pleasant pain point - lots of data, lots of approaches	format of the data exchange	Standards are a moving target	Lack of incentives to implement standards
Many org do follow standards by creating their own "profiles"	Data are not formatted the same - data tables	Changing standards (XML, JSON, etc.)	Tech leaps - working on something and bam, it is outdated
Standards not complete for all MedEd data types	Many standards-- which to adopt?	Many different standards organizations	

## TOP THEME 2: Vendor Issues

Vendors change APIs w/o notice	Moving test items between vendor platforms	Vendor lock in
Vendors not motivated to "share"	no back end access to commercial software	Org are not in a position to influence technical vendors
Old concept of data...who owns?	Vendors lock-in	
<p>Canvas output of data to excel for use in other programs Panopto listings of all sessions like a file listing with links for use in Canvas and Medtrics Out putting E*values information into Medtrics</p> <p>Banner data of information about courses Grades from Exam Soft into other databases for analysis of student performance.</p>		

## TOP THEME 3: People/Expetise

Know how among educational technologists	Communication - always, finding out new things, being in the loop	Teams' turnover - building new relationships takes time
THEME: Coding/Programming	semantics and terminologies	lack of business rules to permit automation (everything is an exception)
Lack of documentation	Lack of documentation and/or not updated	the functional source of record is not the institutional source of record -- data flow issues
Programming language of the month		

## THEME: Assessment Related

Moving test items between the test development platform and the test delivery platform	Exchange of assessment items	Testing providers providing medical schools with data about their students test scores and test history	Exchanging demographics on med students to facilitate testing	Exchanging test rosters with medical schools
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## THEME: Prioritization/Small Market?

Low prioritization	time to market chaleInges	Bandwidth - projects moving to back burner and languishing	Why SHOULD we?
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## THEME: Software Needs

No common set of software needs	tightly couple systems and point to point integrations	legacy systems
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## THEME: Technical(?)

no batch/bulk task functions in front-end	many services still dealing in PDFS	Open source community supprt for health systems interoperability
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## THEME: Access/Permission

Not having the same level of access to different systems	unified security standard challenges
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## THEME: Scope

The scope - how big should the umbrella be
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