

## MedBiquitous Roundtables: Curriculum Management for Health Professions Education

Dates: March 30, April 12, and April 20, 2022

### **Definition of Curriculum Management**

*Curriculum Management (CM) is the process of developing, maintaining, and improving content- includes content, organization, assessment, and pedagogy.*

### **QUESTIONS**

**Currently, how is curriculum managed at your institution?**

### **Summary**

Excel is a popular tool for CM. Many used Excel in combination with another data management tool such as Qualtrics, Oasis, and Canvas, Elantra. Medical schools also contract with external vendors. There is a lot of interest in building a custom app, or custom dashboard. Some schools already had an app, while others were in the process of searching for a vendor to build the app.

### **RESPONSES**

Use combination of tools

Some assessment is still pen/paper, working on updating systems; fair via Excel particularly trends in cohorts and pull from different places

Excel for source files (sessions) then input into purchased software- then uploaded to the AAMC

Software built in house – have feeds and hook back into student info systems/Oasis

Excel sheets are manually pulled from Canvas/learning management

Elantra – would like a smoother transition to curriculum inventory uploads/connections

MedHub for curriculum management/inventory

Oasis as primary; some excel for analysis, but not priority, no shadow system

Elentra for curriculum management, D2L, Excel, ExamSoft for assessment and moved via Excel, Elentra downloaded through Filemaker.

Create an excel shadow, then database in MedHub

Built own reports to pull out of Oasis (customizes)

Some Excel, One45.

No real process, each unit used Trello for mapping then hit a wall. Moving toward excel while exploring options so no software purchased yet. Here to learn what others are doing

Struggling on the evaluation side

## **Motivation: What are motivating factors for having curriculum management in place?**

### **Summary**

Being prepared for LCME accreditation was the most popular response to this question. CM becomes more complex when faculty and students are at multiple locations. There is a desire to create management systems that can integrate software. Respondents want CM systems that help them evaluate the status of students learning objectives.

### **RESPONSES**

#### **LCME**

LCME requirements; recently underwent CI revision- trying to maintain quality, metrics, learner success, make minor pivots for CQI; clinic done at variety of sites so making sure students are getting best education/experience

LCME accreditation

Document for LCME and AAMC requirements; being organized helps track for various bodies they report into; beyond that at IU for internal CQI processes

LCME and internal tracking (via chat)

#### **Curriculum Integration**

Integrated curriculum - Faculty from all over teach in different spaces – used homegrown software used to distribute funds for budgeting period, purchased integrated software – now integrating all three systems

Needed a better way to manage everything – separate from university system –

“Can’t just catalog, need to real time dramatically manage”

#### **Evaluation**

“Developing a desire to know are we preparing physicians of the future or behind the curve?” – concerned about the consequences of COVID

## Staffing levels: numbers? Barriers?

### Summary

There were several barriers mentioned to having adequate staffing for CM. Respondents stated that the leadership of their school was aware of the staffing issues, but they were still having a difficult time filling those roles. Positions were being filled by staff with Excel skills and there was no guarantee that they would not be moved to another position. Ideally respondents want a dedicated CM person, preferably with IT skills, to help with current software like One45 and Oasis along with updating systems. People pointed out the relationship between a lack of dedicated staff members and the risk of data integrity. Respondents also expressed concern about faculty involvement. If faculty are not properly trained, including being familiar with MedBiq CI vocabulary, the integrity of the CM data is also at risk.

### RESPONSES

#### Data Integrity

Data integrity too; is a trade-off to get data integrity requires ample staffing. They're lucky to have three dedicated staff to this, so they have confidence in their data integrity; faculty not really involved/so feel left out; letting faculty play larger role requires more clean up afterward

Data integrity: faculty development to learn MedBiq CI vocabulary

#### Staffing Issues

Elephant in room: education doesn't generate revenue; faculty struggle = time; revenue going to faculty is the solution that never happens.

Started off as IT person, then started working/helping with data, though still point person to nag to get involvement. There is no dedicated curriculum staff person. Trying to organize ongoing

Learning One45; recently lost staff with Excel expertise so taking that on; One45 needs to be worked to data is usable to how they want; faculty not responsive to her and Dean is overwhelmed

Staffing challenge is recently built-up curriculum support system and have some staff, but still need IT component. Use One45 and oasis for mapping but don't have dedicated IT staff

## What is your motivation for data collection?

### Summary

There was a broad spectrum of reasons provided for engaging in data collection. Most answers included being able to enhance the student learning experience by using data to recommend content to students, personalize support, improve wellness, and provide benchmarking.

### RESPONSES

Goal is to use analyses to recommend content to students

Personalize support

Currently struggling with tagging-Want to move away from human tagging – want to tag assessment, evaluation data-taxonomies

LCME expectations

Allows us to look at broader issues

Benchmarking comparisons

Concerned how CIR is being used

Students should have access to their own learning, but they do not currently have access to their curriculum/mapping

Is postdoc in critical psychology? [do not understand statement – maybe related to tagging]

Interventions for made vulnerable populations

How to improve wellness and how to impart it into discussion

## **Are there types of data you're not able to collect but want to?**

### **RESPONSES**

Professionalism

How to manage/identify risks

How to track empathy in care providers – wellness

Do we have resilient workers?

Humanistic elements – How to know if a course is appropriately paced

## **Collecting Assessment Data as Part of Curriculum Management**

### **RESPONSES**

We do collect assessment data and evaluation data, but the assessment data is collected in a different system than curriculum management. Curriculum Management and Evaluations live in the same system. All third party

Homegrown, part of ecosystem

Collecting assessment of students, can use with other data

In exam system can do full assessment and connect to other areas. If faculty are consistent, can collect data on exam questions/map to curriculum.

This is tricky with National Board of Medical Examiners (NBME) data - not possible to map to because they're in their own system

## **Connections: What do you want to do with your data? What challenges in existing ecosystem?**

### **RESPONSES**

#### **Pressure to Update is Labor Intensive**

It's a really manual process to map the curriculum since we have to manually pull that information from multiple systems and then manually input it into our mapping system. We also have to do additional manual changes to our XML file to get the data to report properly to the AAMC.

Constant updating. Though mapping doesn't get updated as quickly

Good data in/good data out. Is a hard push despite having a good tool

#### **Other**

It depends on how the course is structured - is it a semester course, a 4–6-week course. We operate on a semester basis so at least twice a year data is entered

What is timeline? Input done continuously or is there set time during year for input

There is an SOP. SOPs written out of office of education. Collaborative effort

## **Data Connections: What connections are you looking to make?**

### **RESPONSES**

#### **Software and Systems Connections**

Have tried to connect objectives in Oasis to Canvas; need more work around ExamSoft getting stuff out

Currently writing RFP to renew systems; which system for which thing? Dream is to have one system to do everything. Now they have dueling systems; then add in Qualtrics and that complicates more. Univ supplied/owned systems while different schools have their own software used

Systems don't talk together. No IT support to figuring it out/connecting; when getting data out of MedHub is not in usable form/get messy excel file requiring manual cleanup and then build visuals on another software – would be great starting point to at least be able to pull clean data.

It seems like, not only does one system not do everything, but none of the systems work well together, creating more of a need for IT staff

#### **How Data Can Help Students Make Decisions**

Predict student outcomes as they move through the curriculum

Get predictive value over time for who are best fit students for school.

What residencies are appropriate for students

Ability to recruit students

#### **Alleviate Labor Intensive Data Processes**

Qualtrics/MedHub – MedHub takes ages to make usable; faculty and admin don't want a new system to learn. If it's proprietary software there's less ability to negotiate. Elentra has been positive influence because of this.

If we could pull from Canvas and put into mapping software that would eliminate manual work. Technology staffing: as largest med school they have a pretty good staff

Recent LCME visit was push to get data put in.

Then LCME ramps up and all scramble. LCME leaves and all breathe relief, but not time for effecting change

Yes - getting usable data without hours of manual labor is a real struggle for us



Technology isn't problem; course coordinators are in world of hurt/bombarded so entering metadata is last on list to get done

Data only as good as what is entered-Believes people entering data should know the data too.

Folks doing backend work supporting course delivery using a particular data governance approach established by ppl disconnected from trenches. Some others may actually be better equipped to do, but they don't have knowledge of courses.

Less of a resource constraint at their org; more about accountability and desire

Easy to drop balls without accountability.

Resource perspective: colleagues on same IT dept. focuses on application data, have people to support and also have programmers to pull data out in useful ways, modify interface to make more user friendly. Ops Med Ed has a team of coordinators that do busy work to maintain curriculum.

## **Other**

From experience, smaller schools barely can do; larger schools may be in better position but still challenge

Not part of central IT dept.; have four FTE supporting med ed apps/cloud based; each person supports 7-8 different software. Need to abide by central IT guidelines though for authentication. Concurrently knitting together backend.

Academic system: financial aid, tuition, registration

Teach and Learn side:

Have education IT committee that meets monthly; residency folks invited for awareness of UGME

Student info system has struggle

## **What currently exist?**

### **RESPONSES**

Word document via course directors – review grades/assessments/assessment methods

## **What needs to be created?**

### **RESPONSES**

If we want to develop certain types of demographics, we need to know who they are and how best to serve

Grades/assessments/assessment methods- trying to pull all into a single dashboard

Want a 360-degree view – want to see how program competencies are achieved by all students within a course – programmatically

Struggle to look at data in different ways- want to be able to “link data together”

## **What challenges in getting started/maintaining?**

### **RESPONSES**

Faculty involvement, optimistic that if they would tell what they’re teaching they could get into the CI

## **Sharing between schools or within institution to different schools**

### **RESPONSES**

Three on CI team, involved with Angela Blood/Curriculum Inventory and MedBiq; also now working with AAMC’s CI tool. Internally at IU for pre-clerkship they host IPE events (nursing, dentistry) to discuss management of curriculum but not directly about curriculum.

## **Data Collection: What data do you to collect, track, map? Currently, what are you collecting?**

### **RESPONSES**

#### **Tags**

How to separate and clarify tags in report.

Complaints that some topics are tagged improperly. Courses were tagged improperly- have had negative effects

Struggle with multiple campus regional model- two parallel tracks – Difficulty specifying what is tagged and weighted

#### **Other comments**

Have a timestamp feature – capture time spent in class vs independent learning

More distinction in relationship between inventory and mapping

What is the session really about?