

AAMC CI Newsletter, December 2, 2020

Welcome DO Schools to the CI Distribution List, and Building a CI Chapter 6: Maintaining and Using Your CI from Year to Year

But first, I want to say, “thank you!”. As we approach the end of 2020 and celebrate the various holidays likely a bit differently this year, I want you to know that I am grateful for your dedicated support to your institutions and the greater academic medicine community. I also hope that you would join me in playing a gratitude word cloud game; here is how it works: record one thing that you are grateful for that starts with either a “c” or an “i” [here](#) and the final image of the CI gratitude word cloud will be delivered to you in our January 2021 CI newsletter. **Thank you for all that you do!**

Welcome DO schools to the CI distribution list

Since July 2020 we have been sending separate communications to our DO school users. December marks the first month where we are bringing our DO and MD school users together in one single communication stream to receive CI newsletters, invitations to the Building Better Curriculum webinar series, and updates. If there are additional faculty/staff at your school who wish to receive these messages, they can email “subscribe” to ci@aamc.org.

Building a Curriculum Inventory (CI) – Maintaining and Using Your CI from Year to Year

So far we have reviewed getting started in chapter 1, choosing a technical platform in chapter 2, program-level learning objectives in chapter 3, determining an organizational strategy in chapter 4, and course details in chapter 5. Please see past chapters on the [Resources to Establish Your CI webpage](#). Now that your CI is beginning to take shape, it is time to consider how you will maintain and use this data from year to year.

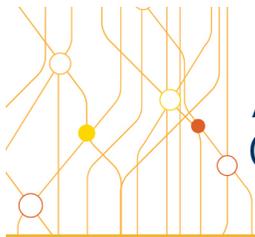
Chapter 6 Highlights

- Internal uses of CI data and ongoing resources
- Internal procedures and oversight bodies
- Centralized and decentralized processes

Internal uses of CI data

Recall the discussion of your school’s motivations and goals for having a CI, identified in chapter 1. Once your CI is established, your school may have a variety of uses for your data which align with the motivations and goals you earlier identified. Possible uses include:

- **Program evaluation**, e.g., evaluate the amount of student time spent in each domain of content, evaluate the overall mix of instructional and assessment methods, identify gaps or unintentional redundancies in the



curriculum, evaluate the progression of learning objectives from events, courses, and to the program objectives, etc.

- **Course evaluation**, e.g., evaluate the alignment of course objectives, instructional methods, and assessment methods, evaluate the number, duration, and content of teaching events, etc.
- **Accreditation support**, e.g., populate accreditation forms, identify curriculum weaknesses to address, document evidence of maintaining accreditation standards, etc.
- **Continuous quality improvement**, e.g., evaluate progress towards meeting a curricular goal, such as increasing the amount of case-based learning, examine integration of curricular threads, etc.
- **Curriculum renewal**, e.g., identify new content to add and less relevant content to discontinue, etc.
- **Curriculum benchmarking**, e.g., compare the percentage of your curriculum's time spent in various instructional methods to national norms, etc.

Outlining how you plan to use your CI data, for a variety of purposes, will help direct which stakeholders in your institution need to utilize CI data, and therefore what kinds of procedures to maintain and update your CI data are needed.

Perhaps you plan to use CI data to complete accreditation forms or demonstrate compliance. When medical schools think about accreditation, the Liaison Committee on Medical Education (LCME) for MD schools and the AOA Commission on Osteopathic College Accreditation (COCA) for DO schools are usually the first that come to mind. There may be additional accrediting agencies that you may find CI data useful for. For example, the Higher Learning Commission accredits universities in a select number of US states.

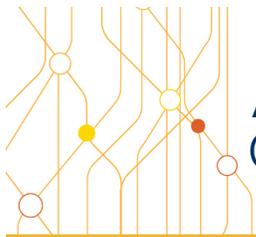
Perhaps your school wishes to establish a baseline for future curriculum renewal and change, or perhaps your curriculum committee would like to choose an annual goal for its curriculum review.

Because curriculum is adapting and changing all the time, having an accurate and complete CI at any given time is a tall order. It may be that yesterday your CI was perfectly accurate, but today one faculty member needed to adapt learning objectives in their lecture to the students' needs, and now edits to your CI are needed.

Edits to your CI will be needed on a very regular basis because of these natural and necessary changes to the curriculum. The CI is not an effort where you can "build it and forget it" – it will need attention and resources on an ongoing basis. As your CI matures from one year to the next, so too will the amount of data grow, such that eventually year-to-year comparisons of your curriculum will be possible. The thorough documentation you do now will facilitate analysis of curriculum change over time.

By identifying all the ways in which your school wishes to use CI data, and all the regular reviews and updates which will be needed, you can plan the ongoing resources to maintain it. Those resources will include faculty and staff, IT infrastructure and staff, and software licensing (if applicable).

Task 1: Refer to your CI motivations and goals from Chapter 1 and identify all your school's uses for CI data. One of



these uses is annually sharing CI data with AAMC.

Internal procedures and oversight bodies

The chapters you have reviewed thus far will give you a sense of the kinds and amounts of data you will be managing. While perfection may not be attainable, it is possible to establish internal procedures and processes to maintain your CI.

The most direct method to ensure that the CI is regularly updated and utilized is to incorporate it into your procedures and overseeing bodies. For example, consider how and how often the following groups may need to review, update, and utilize data from the CI:

- Your medical education and/or dean's office
- Curriculum leaders and administrative staff
- Your curriculum oversight bodies, such as a curriculum committee
- Your course directors and curriculum planners
- Your teaching faculty

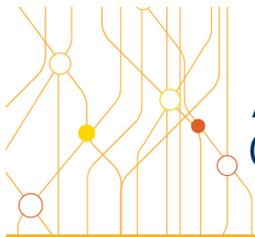
There may also be stakeholders who would benefit from some synthesized CI data reports, but are not responsible for contributing to the CI, such as your students, applicants, or institutional leaders. It is up to you to determine how you wish stakeholder groups to have knowledge or awareness of your CI.

Task 2: Identify which stakeholder groups and existing bodies and procedures need access to CI data and/or reports.

You may find from outlining how you wish these groups to use CI data that additional or different oversight bodies or procedures are needed. For example, perhaps your current course evaluation process does not incorporate all the CI data fields you would like to review. Perhaps your curriculum committee's policies and procedures need to incorporate CI data into their decision-making processes. Is your curriculum committee's existing membership, charge, and cadence of meetings sufficient to utilize CI data? There may be some aspects of the CI data that are more efficient to review asynchronously via reports or visualizations, and other aspects of the CI for which a committee meeting or longer retreat would be best.

Task 3: Identify any different or additional procedures and oversight bodies to include use of CI data and reports.

Your CI data will be thousands to millions of data points over time, and it may not be efficient or necessary for an overseeing body to review every aspect of your CI. It will, however, be necessary for *someone* to review and ensure the accuracy of each component of your CI. Once you answer the questions above, you will have a sense of who needs which parts of your CI, and when. Then you can develop your CI maintenance procedures to ensure that your CI data is accessible and up to date for each of your stakeholder needs.



We recommend outlining each piece of CI data, who is responsible for updating it, and how often. It also may be helpful to outline your existing curriculum evaluation documents (e.g., course evaluation forms), procedures (e.g., curriculum committee reviews), and meetings to determine which need to be adjusted to include CI data.

Task 4: Identify a person/role responsible for updating each piece of CI data, and document how often the CI data needs to be updated.

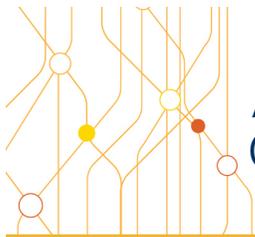
Centralized and decentralized processes

In chapters 1 and 5, we alluded to centralized and decentralized approaches to collecting and reviewing CI data. Now it is time to make decisions about to what degree your school will have a centralized and/or decentralized process.

In a decentralized approach, curriculum data comes from a variety of sources and people. It is a more distributed model. The chief advantage of the decentralized approach is that those with the most knowledge and familiarity with a given aspect of the curriculum have a hand in its documentation. For example, perhaps the course directors and curriculum coordinators responsible for an area of the curriculum are asked to provide all the CI data points relative to their areas of responsibility. The chief disadvantage of the decentralized approach is that there may not be consistency across the curriculum if different authors are providing the data. For example, faculty may write learning objectives with varying degrees of detail. If the curriculum data live in a variety of places, like presentation slides, syllabi, student schedules, and more, which version is the “master” copy? How can you ensure consistency across documents when CI data is changed? Also, those further removed from the overall CI, such as individual course directors, may not consider impact of curriculum changes they make. For example, if a course director decides to remove a course objective and its related content, what impact does that have on any related content in other courses?

In a centralized approach, the collection (and to some degree, writing) of curriculum data is in the hands of a few individuals, typically staff in the medical education or dean’s office. The chief advantage of the centralized approach is control and consistency. The medical education office can know where the master set of data is, and any changes to the CI are tightly controlled and overseen to ensure quality. For example, before a course objective can be changed, someone needs to determine if the previous program objective relationships will still fit, whether the previous event objective relationships will still fit, the fit of instructional and assessment methods, and more. The chief disadvantage of the centralized approach is that it does not bring content experts and others who would benefit the CI data into the development and oversight process. Also, it may impact the CI’s meaningfulness to faculty (and in turn, students) if those teaching have no relationship or awareness of the curriculum mapping.

There is more than one “right” way to oversee your CI data, and there are examples of schools with centralized and decentralized approaches. To some degree, the approach you choose will depend on your school’s organizational structure and staffing model. It may be that a careful mix of both decentralized and centralized approaches to



oversee your curriculum data may help promote the advantages of both approaches while mitigating their disadvantages.

Task 5: Determine what type of oversight model (whether centralized, decentralized, or a hybrid of both) you will employ to maintain your CI data.

Chapter 6 key questions

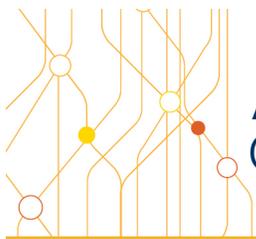
1. Recall the list of motivations and goals you identified for your CI in Chapter 1. Identify all your school's uses for CI data in the table below. Recall that uploading data to the AAMC annually is a goal that stretches outside your school.

Uses for CI	How we will use CI data for this purpose at our school
Program evaluation	
Course evaluation	
Accreditation support	
Continuous quality improvement	
Curriculum renewal	
Curriculum benchmarking	
Other?	

2. List all current curriculum oversight bodies including their meeting cadence, and list curriculum governance documents (e.g., course evaluation forms). Gathering this information will help inform the following questions in this chapter.

3. Complete the table below.

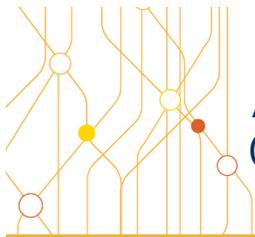
Stakeholder group	How is this group going to use our CI data? What kinds of CI data? How often?	What internal procedures or oversight bodies can we incorporate?	What is this group's role in updating the CI data regularly?



Example: Curriculum Committee (CC)	Example: Our CC evaluates program objectives once per year. This includes program objective language, coverage of program objectives by domain, distribution of program objectives coverage across academic levels and courses, links of program objectives to PCRS, etc.	Example: We will edit our CC policies procedures to specify that review of program objectives in our CI data are part of the CC's charge. Administrative staff will be responsible for gathering and sharing the data prior to the meeting.	Example: Changes to the program objectives can only be made with the CC's approval. The Curriculum Dean maintains the program objectives in our CI.
Curriculum leaders			
Administrative staff			
Curriculum oversight bodies			
Course directors and curriculum planners			
Teaching faculty			
Students			
Applicants			
Internal stakeholders			
Other?			

4. Now that you have completed the table above, are there any additional curriculum procedures or documents which need to be added or edited to include CI data collection and/or review?

5. Going back to the list of CI data points your school will collect which you identified in chapter 1, ensure that



each data point has a point person responsible for maintaining it. A limited example of how this could look is provided here:

CI data point	Faculty or staff person responsible
Course objectives	Course director is responsible for edits; curriculum coordinator is responsible for communicating updates to Curriculum Dean. Course objectives are finalized minimally three months prior to start of course. Course objectives, including updates, are reviewed in the monthly curriculum sub-committee meetings.
Event instructional methods	Medical education office's instructional designer is responsible for working with course director and teaching faculty; curriculum coordinator is responsible for communicating updates to curriculum manager. Event instructional methods are finalized minimally one month prior to start of course. Event instructional methods are reviewed in the weekly dean's office operational meetings.
Event keywords	Course director is responsible for tagging keywords to events within their course using the AAMC CI standardized keyword list; curriculum coordinator is responsible for communicating updates to curriculum manager. Event keywords are finalized minimally one week prior to start of course. Keyword reports are reviewed in the monthly curriculum committee meetings.

6. What ongoing resources, including faculty and staff, protected time, IT infrastructure, IT staff, software licensing, and more, are needed to maintain the CI, given how we wish to update the use of the data?

7. Will we have a centralized, decentralized, or hybrid approach to managing our CI data? Please describe in detail.

As questions arise, please feel free to reach out to ci@aamc.org.

Onward!

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