

Transitioning to ICD-10-CM/PCS in the Classroom: Countdown to Implementation - Retired

Save to myBoK

The compliance date for the implementation of ICD-10-CM/PCS is due to take effect on October 1, 2015. Currently, academic programs are in various stages of transitioning the classroom toward this new and long-awaited classification system. This practice brief is the third in a series addressing the implementation of ICD-10-CM/PCS in the classroom. The first practice brief was published in April 2009 and provided guidance on when and how to start the implementation.¹ The second practice brief followed in June 2010 and went into more depth by providing answers to some of the questions raised among educators.²

Medical coding certificate and diploma programs, health information technology programs, and health information administration programs each have unique challenges dependent upon their respective timelines. The compliance change has raised additional questions that must be addressed at each level throughout the different curriculums. This practice brief will address the transition to ICD-10-CM/PCS, taking into account the three different levels of programs offered across a variety of academic settings. It will also offer best practices and recommendations to help streamline the overall transition for the educator and the student.

General Challenges Across All Programs and Environments

Many of the challenges facing academic programs during the transition from ICD-9-CM to ICD-10-CM/PCS are the same regardless of academic level, and these programs face further complications due to the potential delay in the ICD-10-CM/PCS implementation date. This section covers some of the general challenges, such as textbook selection, impact on other courses, and transfer credits.

Textbooks and Resources

One such challenge is the determination of which textbooks and resources will be best for students to use. Timely availability of textbooks and resources is critical for review and selection. Coding requires independent practice on the part of the student, and the textbooks chosen should be designed to accommodate independent study. Many ICD-10-CM/PCS manuals, textbooks, and student workbooks are still being finalized by publishers, which in turn causes hesitation among faculty to adopt texts at this time.

The cost of code books and manuals for students is an ongoing issue faced by all programs. Currently, the ICD-10-CM/PCS manuals must be purchased separately, which adds their cost to the other required textbooks and workbooks that students must purchase. Faculty should evaluate the availability of supplemental materials and hands-on resources for use in their programs, such as the free digital versions of ICD-9-CM, ICD-10-CM, and ICD-10-PCS that are located on the CMS website.^{3,4,5}

Faculty should notify students of additional coding practice resources, including coding workbooks, practice exams, and exam review textbooks, as early as possible to ensure that the students have the resources necessary to successfully complete courses. Programs also must ensure their encoder is updated to reflect the most current ICD-10-CM/PCS codes (encoders in the AHIMA Virtual Lab are updated automatically).

Coding Faculty and Training

Locating professionals who have relevant industry knowledge, up-to-date training, and interest in teaching is a challenge. Consequently, the recruitment and retention of qualified coding faculty is a critical factor for the successful implementation of ICD-10-CM/PCS.

It is imperative that instructors receive the appropriate level of ICD-10-CM/PCS training. Administration must verify that all coding faculty has completed thorough training to ensure proper education in ICD-10-CM/PCS to students. If an institution does not have a budget allowance to provide faculty with the proper training, (e.g. face-to-face or online), a train-the-trainer approach may be a viable option. Training is not a one-time event, but should instead take place on a continuous basis. It is important to note that AHIMA-certified professionals are required by the Commission on Certification for Health Informatics and Information Management (CCHIIM) to participate in a predetermined number of mandatory baseline educational experiences specific to ICD-10-CM/PCS.³

Professional Practice Experience (PPE)

Students trained exclusively in ICD-10-CM/PCS prior to the implementation date will have an issue meeting PPE objectives that measure accuracy of coding, due to the fact that clinical sites will still be using ICD-9-CM. Alternative options to fulfill the PPE objectives for coding will need to be explored and adjusted accordingly.

Impact On Other Courses

Most programs have a set number of semesters or quarters in which a student can start and finish a program or degree. All programs must keep to the time frames specified by their institution. In addition, accommodations must be considered for balancing full-time and part-time students. Sequencing of coding courses is crucial to ensure students have the required prerequisite courses completed before beginning ICD-10-CM/PCS coding courses.

Courses providing foundation information such as anatomy and physiology (A&P), medical terminology, and medical science should be reviewed to ensure they meet the needs for coding within ICD-10-CM/PCS. It may be necessary to change the sequence or adjust the supporting courses within the curriculum. The depth of A&P and a deeper understanding of body systems in medical terminology may be necessary changes. Faculty must determine where to include the terminology for root operations in an already-full curriculum. Students should be continually monitored to determine if they have sufficient prerequisite courses in the biomedical sciences, especially those transferring into programs or taking courses part-time.

Revisions to curriculum should be approved at the institution level. Additional hours needed to prepare students to code with ICD-10-CM/PCS may impact the length of programs as well as the type of degree, certificate, or diploma granted depending upon institution guidelines.

There are some general education issues to address when revising courses and curriculum. For example, there may be a need to evaluate appropriate comprehension skills for students to be able to assign codes in this expanded coding system. Teaching critical thinking skills is always challenging and coding is no different. Educating students about where to find information, what to code, and what not to code may require additional educational learning tools and resources.

Implementation and transition to ICD-10-CM/PCS will impact more than just coding course curriculums. Educators must also review other courses that may be impacted by this major change. Impacted course content includes, but is not limited to, the US healthcare system, reimbursement methodologies, management, healthcare delivery, and information technology.⁴

Teaching the ICD-10-PCS coding system presents unique challenges. Today, procedure coding is taught as a portion of the introduction to the systems, with many of the conventions and rules similar to the diagnosis coding system. This all changes with the ICD-10-PCS system because it is a completely different system with separate conventions and guidelines that will require additional instruction time to fully cover at the level needed.

Knowledge of ICD-9-CM and its structure (as a legacy system) will be beneficial while the databases supplied by ICD-9-CM are examined for past statistics, and while transition to ICD-10-CM/PCS takes place. The appropriate use of the General Equivalence Mappings (GEMs) will need to be added to the curriculum as well. Students will need to be able to map bi-directionally and understand how to utilize the data in a meaningful way.

Understanding of both the ICD-9-CM and the ICD-10-CM/PCS systems will be valuable in management courses, as the student must understand the impact of the transition on the management of the coding function. An example of an impact would be a decline in productivity as the ICD-10-CM/PCS system is implemented.

There is some question as to whether it will be advantageous to teach ICD-9-CM as a legacy system. Students may be better utilized as "ICD-10-CM/PCS resources" within facilities, since providers already have ICD-9-CM experts. Conversion mapping and translators are available, but students should be discouraged from utilizing them while learning ICD-10-CM/PCS in order to prevent the temptation of using the mapping as an alternative to the code manuals. These tools were not developed as a substitute for coding manuals, but rather as a means to convert large amounts of data for use in tracking quality, recording morbidity and mortality, calculating reimbursement, and converting applications.

Allotted Curriculum Hours

Many programs have designated one to two courses for ICD-9-CM within their curriculum. However, ICD-10-CM/PCS may require more credit hours. Curriculum developers must assess the number of credit hours required to teach ICD-10-CM/PCS and determine the best way to incorporate it into the current course structure, with the possible necessity of adding an additional course. This presents a challenge to the already-full curriculum across all programs.

Educators

Educators are faced with a myriad of considerations when teaching ICD-10-CM/PCS. Prior experience teaching ICD-9-CM, and the need to continue doing so, precludes total focus on the ICD-10-CM/PCS coding systems, which may inhibit a thorough understanding of the new code set. Moreover, the educator is faced with a new procedure system that does not include diagnosis, eponyms, or common procedure names. The differences in the systems require the incorporation of in-depth A&P into the coding educational plan. These obstacles are few; the benefits and resulting breadth of knowledge that students will gain, however, outweigh the initial obstacles facing educators.

Students

Students are challenged in their capacity to apply the correct codes based on knowledge of diagnoses, anatomy, and operative procedures. Students must be equipped with a strong sense of anatomy, disease process, and the intent of each operative encounter, as well as a thorough understanding of coding guidelines to ensure success with ICD-10-CM/PCS.

For many students, getting a coding certificate or diploma is the start of their HIM education. Coding is an excellent example of a career that requires dedication to life-long learning. Many students are committed to advancing their HIM degree—leading to an RHIT or RHIA. Institutions that build progression ladders into their offerings encourage students to come back to school while they are employed. Students working in the field are a good resource for instructors because they can bring real-life examples into the classroom during the transition.

Transfer Credits

Once the programs have fully transitioned to teaching ICD-10-CM/PCS, credits for ICD-9-CM coding classes can no longer be accepted as transfer credits since the content of the coding classes are no longer equal. If a student requests transfer credits for coding classes, programs will need to review documentation (e.g. syllabi) carefully before granting the transfer. Some programs will have increased the credits associated with coding classes, since credit hours for some coding classes may not be equal to the current ones. Another consideration program directors may need to address is whether or not a new course needs to be developed with a different course number to reflect that ICD-10-CM/PCS classes are significantly different from existing ICD-9-CM courses.

Program-Specific Challenges

Certificate Level

AHIMA is expected to begin offering ICD-10-CM/PCS-based CCA, CCS, and CCS-P exams once ICD-10 is officially implemented (October 1, 2015). Coding certificate students who graduate near or after that date should be fully trained in ICD-10-CM/PCS. Preparing students for these exams can present specific challenges since some of the programs offer more comprehensive coding classes than others²⁰¹ Students with an expected completion date of October 2015 or later will need to

have completed coding courses where ICD-10-CM/PCS is taught as the primary code set. Any student planning on taking the certification exam prior to October 1, 2015 will need to be fully trained in ICD-9-CM. Using the exam date change, plan accordingly for when each coding course will need to be converted to ICD-10-CM/PCS as primary. Faculty and students should also be familiar with the new competency statements released by CCHIIM that will correspond with these coding certification exams.⁸

Associate Level

The length of associate degree programs is typically two full years, with much pressure to not exceed that time frame. These programs have articulation agreements with HIA/progression programs, so maintaining specific program length is critical to student success should they elect admission to a progression program. Associate-level programs are mostly offered by community colleges and may be expected to provide ICD-10-CM/PCS education to their medical community. This anticipated need may require additional resources, such as additional staffing, currently beyond program limits.

Baccalaureate Level

The biggest challenges in the transition to the ICD-10-CM/PCS system at the baccalaureate level is being experienced now for students who are operating in the ICD-9-CM world but who will most likely be tested on the RHIA examination based on ICD-10-CM/PCS.

Students beginning a two-year HIM program will graduate in May 2015 and will be eligible for early testing for the RHIA in March 2015. So the need for them to know both ICD-9-CM and ICD-10-CM/PCS is crucial. As they enter HIM practice, the entire healthcare world will be in the final stages of preparation for the ICD-10-CM/PCS system. There will be a critical need for professionals who are proficient in the new system and can assist with the transition.

As a result, the current students must be taught dual systems at the same time. A decision must be made regarding which system should be taught first. For example, the ICD-9-CM system may be taught with side-by-side comparisons of how the ICD-10-CM/PCS system differs. This works fairly well with the diagnosis coding system; however, with the variations in guidelines, it can be challenging for students to become proficient in both. The other option is for the ICD-10-CM/PCS system to be taught as the primary system, with a look backwards at how the ICD-9-CM system worked. There are challenges to this approach as well. For instance, the timing of the publication of the ICD-10-CM and ICD-10-PCS code manuals does not coincide with the timing needs of the academic market, so the online versions of the code sets must be used. Also, most textbooks include minimal information about ICD-10-CM/PCS but still cover ICD-9-CM comprehensively.

Academic Challenges

Face-to-Face vs. Online

ICD-10-CM/PCS in distance education online programs will need additional support (resources, both human and financial) to rework these courses and to adopt application software that can be used to assist with and assess the student's grasp of the materials.

Curriculum Development

Distance education (online) courses require faculty to rethink the way face-to-face material is presented to students. The most effective distance education courses are those that have been redesigned to use technology and the Internet to promote learning. In an online environment, ICD-10-CM/PCS curriculum must be presented in a manner that incorporates a multitude of ICD-10-CM/PCS electronic resources and provides students with the proper tools to translate theory into application and proficiency. Thus, adequate time must be devoted to electronic curriculum development for ICD-10-CM/PCS education.

Curriculum development for online courses generally requires 40 hours of preparation for every hour of online content. Curriculum development workload should be calculated using 40 hours as the multiplier for the number of recommended

instructional hours to yield the amount of time to be devoted to ICD-10-CM/PCS online curriculum development. For example, AHIMA recommends 50 hours of ICD-10-CM/PCS instruction for experienced coders; $40 \times 50 = 2000$ hours for online curriculum development.

Asynchronous vs. Synchronous Modalities

The two common modes of instruction used in the distance education environment are asynchronous and synchronous instruction. Asynchronous instruction delivers recorded presentations and electronic documents to students at different times and different locations, usually via the Internet. Synchronous instruction occurs when the learners and the instructor are working at the same time, though not at the same location. An example of this is real-time video conferencing.

Asynchronous instruction, which includes recorded webinars, is best suited for basic ICD-10-CM/PCS instruction and appears to be the most prevalent modality in use. Examples of basic instruction are an introduction to the structure of the code set, definitions of the 31 root operations and seven approaches used in ICD-10-PCS. Instructors might use technologies to support student learning—short videos to reinforce key concepts, such as how to use your code book (step by step) and how to use the encoder, for instance. However, asynchronous instruction lacks the element of participatory inquiry and student engagement. In addition, it does not provide for a "robust" online experience. In light of this, online programs must continually perform evidence-based analysis as to whether asynchronous instruction achieves learning objectives. The results of this analysis may reveal the need to incorporate synchronous instruction into ICD-10-CM/PCS online courses. This would also be an opportune time to consider a learning management system upgrade. For synchronous sessions, use of webcams to hold weekly video chats/discussions around content would be a great added benefit to the students.

Training for Online Instructors

Faculty who teach in an online environment should receive additional training in the use of distance learning modalities, in addition to any assistance necessary to ensure their skills are effective in the online environment.

Distance education programs can attest that faculty trained in ICD-10-CM/PCS and Web 2.0 strategies are few and far between. Distance education programs are challenged with training faculty in the use of technology and Web 2.0 in addition to ICD-10-CM/PCS training

Classroom Best Practices and Recommendations

Text Books and Resources

When selecting a coding textbook, complete a thorough review of the content from student and educator perspectives; verify publisher printing date and pricing, and obtain any additional instructor supplements.

With the cost of ICD-10-CM/PCS textbooks and code books rising each year, some colleges, publishers, and online bookstores may consider offering rental programs in addition to the traditional purchasing option for textbooks as an attempt to help offset the cost. Another way to save money on textbooks when teaching ICD-9-CM and ICD-10-CM/PCS concurrently is to have the students utilize the digital versions of the codebook(s).

The AHIMA certification practice exams have been a valuable resource tool to assist students in assessing their readiness to take their respective certification exams. They will continue to be a valuable resource to students as the exams change to include testing for ICD-10-CM/PCS. Programs may wish to encourage their students to complete a practice exam.

Helpful resources for educators include the AHIMA Communities of Practice to network with fellow educators, ICD-10-CM/PCS trainers and coders within the field, the AHIMA Virtual Lab, and the CourseShare web portal (courseshare.ahima.org/).

Coding Faculty and Training

Finding qualified coding faculty is not always easy, so educators should actively mentor those within the coding community who have expressed a desire to learn more about the opportunities within education. Trained faculty must be prepared to teach the new coding system by fall 2013.

As mentioned earlier, continuous faculty training is essential to successful ICD-10-CM/PCS classroom instruction. It is recommended that programs identify at least one key faculty member to attend the AHIMA Academy for ICD-10-CM/PCS and provide train-the-trainer sessions for other full-time and adjunct faculty. Education programs can further investigate component state associations and locally sponsored training/workshops as well as other various AHIMA sponsored training opportunities, such as e-learning and the annual coding meeting to provide up to date faculty training. Colleges, consulting firms, and other organizations should also be considered.

Distance education programs must provide additional training that covers their online learning platform, online teaching strategies, and how to access ICD-10-CM/PCS electronic resources. It is recommended that online instructors undertake 40–60 hours of Web 2.0 training in addition to ICD-10-CM/PCS training. Training webinars and Web 2.0 best practices in distance education can be found online and on campus.

Professional Practice Experience (PPE)

For programs that will have trained their students in ICD-10-CM/PCS before the implementation date, faculty may need to look at measures other than accuracy in order to meet the coding objectives of analysis, completeness of the record, and comparison of ICD-9-CM to ICD-10-CM/PCS.

Another solution is to provide the students with a virtual lab experience as part of their PPE, which would allow the students to practice their ICD-10-CM/PCS coding skills on authentic medical records.

Impact on Other Courses

It is important to review all supporting courses and initiate a dialogue with the faculty of these courses regarding content needs that will support successful ICD-10-CM/PCS coding. Share knowledge clusters and competency statements as well as course objectives to ensure they understand the impact of their supporting course on ICD-10-CM/PCS coding courses.

It may be necessary to offer additional coding classes covering ICD-10-CM/PCS as workshops or special topics. These types of courses don't typically require a formal curriculum change and can often be offered on an alternate schedule, such as an eight-week block. It may be particularly useful for the baccalaureate students who are far enough along that they have already taken classes covering ICD-9-CM, but who will be graduating closer to the ICD-10-CM/PCS implementation date. Depending on the flexibility of the degree, a student might be able to use a workshop as an upper division elective.

Program Completion Time Frame

Review the current time allowed within the schedule and make adjustments appropriate to lengthen the course credit hours or contact hours as needed. One alternative to easily prevent program completion delays is to lengthen the time frame of the coding course if it is less than a traditional full-length term.

Advising for both part-time and full-time students is very important to ensure students are prepared to enter the workforce. Use of advising worksheets would be helpful to track student progress and estimated program completion date.

Students

Faculty must ensure that students recognize the full impact of ICD-10-CM/PCS on the healthcare community as a whole, not just on coding. Students must be aware of the amount of time they will spend studying ICD-10-CM/PCS outside of the classroom in order to prepare for their PPE, credentialing or certification exam, and future employment in HIM. Faculty should identify key attributes of student success and share with the students the importance of attending class, completion of supplemental exercises for reinforcement, and the use of resources and references.

Program-Specific Recommendations

All program levels need to take a close look at their curriculum to ensure it is adequately preparing students for the transition to ICD-10-CM/PCS. Curriculum changes should be brought forth through the appropriate channels for approval, both internal (e.g. college and system level) and external (e.g. accreditation) to the program.

Notes

1. AHIMA ICD-10-CM/PCS Academic Transition Workgroup. "Transitioning to ICD-10-CM/PCS—An Academic Timeline" *Journal of AHIMA* 80, no.4 (April 2009): 59-64.
2. AHIMA ICD-10-CM/PCS Academic Transition Workgroup. "Advancing the Academic Transition to ICD-10-CM/PCS." *Journal of AHIMA* 81, no.6 (June 2010): 62-66.
3. Centers for Disease Control and Prevention. "International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM)." September 23, 2011. <http://www.cdc.gov/nchs/icd/icd9cm.htm>.
4. Centers for Disease Control and Prevention. "International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM)." December 19, 2011. <http://www.cdc.gov/nchs/icd/icd10cm.htm>.
5. Centers for Medicare and Medicaid Services. "ICD-10." http://www.cms.gov/ICD10/11b15_2012_ICD10PCS.asp#TopOfPage.
6. Commission on Certification for Health Informatics and Information Management. "CCHIM ICD-10 Certification Requirements." October 5, 2010.
7. AHIMA ICD-10-CM/PCS Academic Transition Workgroup. "Transitioning to ICD-10-CM/PCS— An Academic Timeline" *Journal of AHIMA* 80, no.4 (April 2009): 59-64.
8. Commission on Certification for Health Informatics and Information Management. "Candidate Guide." February 2012.

References

AHIMA. "Curriculum Maps." Faculty Resources Web Page.

Commission on Certification for Health Informatics and Information Management. "Candidate Guide." AHIMA.

Purdue University North Central. "Best Practices for Distance Education." www.pnc.edu/distance/bestprac.html.

Office of the National Coordinator for Health Information Technology Curriculum Development Centers Program. "Training and Instructional Design." Health IT Workforce Curriculum Components. <http://onc-ntdc.org>.

Prepared By

Korene Atkins, MA, RHIA, CCS, CPC, CPC-H
 Leola Burke, MHSA, CCS
 Angela K. Dinh, MHA, RHIA, CHPS
 Linda H. Donahue, RHIT, CCS, CCS-P, CPC
 Melanie Endicott, MBA/HCM, RHIA, CCS, CCS-P
 Leah A. Grebner, MS, RHIA, CCS, FAHIMA
 Therese Jorwic, MPH, RHIA, CCS, CCS-P
 Quanda King, MA, Ed, RHIA, HITPRO
 Michele Maier, MHMS, RHIA, CCS
 Geralyn Matejcek, MBA, RHIA
 Patt Peterson, MA, RHIA
 Kimberly Rice, MA, RHIA, CCS
 Jaime Sand, MA, RHIT, CCS
 Nanette Sayles, EdD, RHIA, CCS, CHPS, CPHIMS, FAHIMA
 Lou Ann Schraffenberger, MBA, RHIA, CCS, CCS-P, FAHIMA
 Mary Worsley, MS, RHIA, CCS

Acknowledgements

Jan-Marie Barsophy, RHIT
Sue Bowman, MJ, RHIA, CCS
Jill Clark, MBA, RHIA
Linda Darvill, RHIT
Lee Ford, MHA, RHIT, CHC
Gretchen Jopp, RHIA, CPC
Priscilla Komara, RHIA, CCS-P
Carole Liebner, RHIT, CCS
Monna Nabers, MBA, RHIA
Ann Rees, RHIA, CCS
Theresa Rihanek, RHIA, CCS
Diana Warner, MS, RHIA, CHPS, FAHIMA
Linda Young, JD, RHIA

The information contained in this practice brief reflects the consensus opinion of the professionals who developed it. It has not been validated through scientific research.

Article citation:

AHIMA Practice Brief. "Transitioning to ICD-10-CM/PCS in the Classroom: Countdown to Implementation - Retired" (Updated September 2014)

Driving the Power of Knowledge

Copyright 2022 by The American Health Information Management Association. All Rights Reserved.