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Instructional Design, Curricular Content and Students’ Perceptions of a New Health Data Management Course

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**Abstract**

Student surveys were used to assess a health data course created and delivered to juniors in an undergraduate health services management program during Spring semester 2013 and Spring semester 2014. Initially, this course was created for instruction of on-campus and distance students using an exclusively online format. During the second year of delivery, a limited number of in-class sessions were taught face-to-face and subsequently recorded for online delivery, so that on-campus students were taught in a hybrid format and distance students received instruction exclusively online. The majority of the students surveyed felt adequately prepared in healthcare records management and compliance, but less prepared in coding. The vast majority of the students surveyed felt that the course provided the opportunity to build skills in how to (1) review health records to ensure that documentation in the record supports the diagnosis, (2) identify relevant standards, guidelines and conventions, and (3) employ marketable skills related to medical records documentation and administration. The students expressed a preference for coding to be taught in greater depth and with more coding exercises. Online teaching of this course was effective; however, some of the students preferred the course to be taught in a face-to-face setting.

**Key Words:** Health Services Management, Health Data Management, Medical Records, Medical Record Administration, Online Learning, Instructional Design, Distance Education, Coding, Higher Education

**Introduction**

The Department of Health Services and Information Management at East Carolina University has had a long history with online education. Founded in 2003, the Health Services Management (HSM) Program was initially designed as an online program because of classroom and facility constraints in the building where the department was housed. A move to a new building in 2006 facilitated program offerings in both online and face-to-face settings. Since then, the lectures for the HSM courses are typically taught in a face-to-face setting for campus students, and the class is recorded through Mediasite for the distance education (DE) students. Since 2007, the proportion of exclusively online students has ranged from approximately 33 – 50%. On-campus students are allowed to take online courses at their discretion which has resulted in a faculty experienced in the delivery of online classes and a student body which consists of exclusively face-to-face students, exclusively distance students, and students who migrate between modes of delivery.

 Several factors influenced the decision to add an online health data course to the curriculum of the Health Services Management Program at East Carolina University in 2012.

1. The founding program in the department was a Health Information Management Program (circa 1968). Although that program was in the process of transitioning to a Masters in Health Informatics and Information Management, expertise existed in the department related to medical records management and coding.
2. A 2010 departmental retreat resulted in the decision to introduce four new courses into the HSM curriculum including an online course in health data management providing an orientation to medical records management, coding, and compliance. The curriculum revision placed emphasis on teaching students skills that would make them more competitive for entry into the profession.
3. Recorded presentations from guest lecturers, experts in the various course topic fields, are a major component of this course.
4. *Guidelines for Undergraduate Program Criteria* published by the Association of University Programs in Health Administration and since revised (2014) require two curricular content areas that are served by the health data course.
	1. Information systems management and assessment. The curriculum of the health services management (HSM) program already had a course in health information management. This course focused on organization-wide information systems. During assessment of student learning of the capstone managerial course, program preceptors recorded a need for additional content on practical operations of health information management (HIM) in health care settings. Specifically, students needed more content on electronic health records, coding, medical records, standards, and oversight (accreditation and federal regulations for certification). During an exit survey, three graduates recommended adding this content to the curriculum. Five other students, recognizing the desirability of additional knowledge in these areas, had either inquired about obtaining additional knowledge in these content areas or applied for the BS in HIM program (second degree students). In support, a related professional association, the American College of Medical Practice Executives, has included managing medical information systems including medical records as one of the skill areas in its body of knowledge (American College of Medical Practice Executives, 2011).   Finally, during the initial certification of the HSM Program in 2009, program reviewers observed that the department’s origins in medical records administration placed the program in a unique position to teach this content.
	2. Financial analysis and management. Although the review elements for this curricular content area do not address medical records management and coding, at least one contemporary finance text has recognized the connection between medical records management, coding and reimbursement (Cleverley, Song, & Cleverley, 2011).
5. HSM students in their senior year are required to do an internship at a health care facility. Each internship had a preceptor who supervised and gave feedback to the program director regarding the internship experience. Several preceptors over the past several years indicated that the HSM students were not knowledgeable enough about coding, compliance and standards. This deficit needed to be corrected. Our graduates need to be suitably educated, “educated in a way that improves performance in management roles” (Davies, 2006, p. 326).

Therefore, a new online course proposal, Health Data Management, was created by Dr. Elizabeth Forrestal, an HSIM full professor and previous HSIM Department Chair.

**Course Development**

 Once the course proposal was accepted, the first author along with Dr. Forrestal developed the course which was specifically aimed at three needed areas: medical records management, coding, and compliance along with other topics to give the students a foundation and understanding for the three areas. Dr. Forrestal and the first author met and worked out the details of the course. A list of topics to be covered was developed and experts in the specific areas were identified. Experts in the field were contacted, informed of the need for the new course and asked if they would record a lecture/presentation on a specific topic. Since the course mainly consisted of pre-recorded lectures from experts in the field, it was decided that the course would be taught online for both the on-campus students and distance education students during the initial course offering during Spring semester 2013.

 Various speakers were scheduled to discuss documentation practices in the venue/discipline which would then be covered in the didactic portion addressing medical records management. This would bring the real world experiences in and give students the opportunity to interact with multiple professionals. Since guest lecturers did not have to be scheduled during a face-to-face class period, the instructor had greater flexibility in speaker selection as faculty had found scheduling speakers during the day had become more challenging due to the disruption in the speaker's work schedule. Offering this course online greatly increased the flexibility of the experience and was beneficial to the student. From the instructor’s perspective, the online course required faculty to rethink the way face-to-face material was to be presented to students. The experts in the field for this course’s topics were working professionals; therefore, it was found that the most beneficial way (for the students and experts) was to record the experts (guest lecturers) presentations and make them available through the online course. According to the American Health Information Management Association (AHIMA), “the most effective distance education courses are those that have been redesigned to use technology and the Internet to promote learning” (Transitioning to ICD-10-CMS/PCS, 2012 in the classroom, p. 70).

 The course, HSMA 3045, Health Data Management (3 credit hours) description is: Processes of health data and record keeping, compliance with record keeping standards, and diagnostic and procedural coding across the continuum of care. The course contains many topics including coding, compliance and standards. It addresses the processes of health data and record keeping, compliance with record keeping standards, and diagnostic and procedural coding across the continuum of care, and the course is required for the HSM students at East Carolina University. With the backgrounds and educational goals of the students, it seemed that the course should have a practical rather than a theoretical focus and that it should offer real world knowledge and expertise from experts in the health information/health services management field. Subsequently, experts were scheduled as guest speakers. There are three assignments in the course, one focusing on coding, one on compliance and one on medical records management.

 A weekly schedule was developed with a topic for each week. After taking the dates for the midterm test and final exam along with spring break and course review, there were enough class sessions to cover the topics on the original list. The last week of the course was a “Review/Catch-up/Buffer” week and the students were also instructed to write questions on specific topics in the course about which they were confused. The questions were to include follow-up questions to specific speakers that they would have liked to have asked, but did not have an opportunity to ask. The questions were emailed to the appropriate speakers and the speakers responded accordingly.

 The course schedule and syllabus directly reflected the list of topics that were developed. As prospective course instructor, the primary author searched the Web to see whether similar courses were being taught at the undergraduate level. This produced helpful information, but nothing related to a course similar to HSMA 3045, Health Data Management.

* Course Schedule:
* <http://winmedia.ecu.edu/kennedym/Article/Health_Data_Management_Schedule.pdf>
* Course Syllabus
* <http://winmedia.ecu.edu/kennedym/Article/Health_Data_Management_Syllabus.pdf>

 The required textbooks for the course were:

Fahrenholz, C.G. (2011). *Documentation for medical practices*. Chicago, IL: American Health Information Management Association Press. **ISBN #:** 9781584262282.

Skurka, Margaret A. (2003). *Health Information Management Principles and Organization for Health Record Services, 5th ed.* ISBN# 978-0-470-42956-3 (e-book); 978-0-7879-5977-7 (paperback).

Because these textbooks did not cover some of the topics in depth, several supplemental articles were added to the course schedule.

***Course administration***

 The course was first offered in the Spring semester of 2013 with 57 students which consisted of 31 on-campus students and 26 distance education students. Student evaluations were conducted using the university’s Student Perception of Teaching Survey. All the results were uniformly positive; however, the on-campus students did note that they preferred to meet periodically with the instructor for face-to-face interaction. Students liked the diversity of the topics covered in the course and the guest speakers provided the real-world expertise needed to make the course meaningful.

 The course was offered again in the Spring semester of 2014 with some minor modifications. Although the syllabus was the same, the schedule was revised to include four face-to-face classes which included an orientation to the course and coding presentations. Also, it was not a requirement but the instructor met with the face-to-face students weekly to discuss any problems or concerns with the particular week’s topic and guest speaker’s presentation. The Spring 2014 course had 67 students which consisted of 37 campus students and 30 distance education students.

 Formal assessment of the course was initiated in May 2014.

**Methodology**

***Population of the study***

A survey was developed to solicit feedback from students taking the course in Spring semester 2013 and Spring semester 2014.

***Area of study***

This study was restricted to students in the new Health Data Management course.

***Design of the study***

 Survey questions consisted of 11 close-ended survey questions and two open-ended questions. Questions are presented during the discussion of survey results in the next paragraph. The survey was vetted though the Institutional Review Board and received approval for administration as an exempt study.

 Below is the introduction paragraph for Exempt survey research:

You are being invited to participate in a **research** study titled *“*Required New Health Data Management Course*”* being conducted by Dr. Susie Harris and Dr. Michael Kennedy, faculty members at East Carolina University in the Health Services and Information Management department. The goal is to survey 122 individuals in/at Easat Carolina University. The survey will take approximately ten minutes to complete. It is hoped that this information will assist us to better understand the impact of the first and second years’ deliveries of the Health Data Management course on the development of knowledge skills and abilities related to medical coding and management of health records. The survey is anonymous, so please do not write your name. Your participation in the research is **voluntary**. You may choose not to answer any or all questions, and you may stop at any time. There is **no penalty for not taking part** in this research study. Please call Dr. Susie Harris at 252-744-6173 for any research related questions or the Office of Research Integrity & Compliance (ORIC) at 252-744-2914 for questions about your rights as a research participant.

**Results**

 The first two questions of the survey address student preparation and skill building in three curricular content areas – health care records, coding, and compliance. Tables 1 and 2 provide a summary of student responses.

[Insert Table 1]

 Table 1 results indicate that a higher percentage of students agreed or strongly agreed that they felt adequately prepared in health care records and compliance than coding, although improvement was noted for all three content areas during the second year. Results ranged 40.8% for coding to 63.3% for compliance in 2013, then improved to 70.8% for coding in 2014 while both health care records and compliance rose to 79.2% in 2014.

[Insert Table 2]

 Students affirmed that the course provided the opportunity to build skills in all three areas. As indicated by Table 2, both health care records and compliance received greater than 90% “Yes” responses during both 2013 and 2014. 78.1% of students agreed that the course provided the opportunity to build coding skills and this improved to 93.0% in 2014.

[Insert Table 3]

 Table 3 records the assessment of student confidence to perform specific tasks. During 2013, the greatest percentage of students expressed confidence in performing the following tasks:

* Review health records to ensure that documentation in the record supports the diagnosis. 92.2% responded “Yes.”
* Identify relevant standards, guidelines, and conventions (setting, purpose, and document) related to medical records. 92.2% responded “Yes.”
* Employ marketable skills related to medical records documentation and administration. 91.8% responded “Yes.”

 During 2014, the greatest percentage of students expressed confidence in performing the following tasks:

* Review health records to ensure that documentation in the record reflects the clinical progress, clinical findings, and discharge status. 96.0% responded “Yes.”
* Identify relevant standards, guidelines, and conventions (setting, purpose, and document) related to medical records. 96.0% responded “Yes.”
* Employ marketable skills related to medical records documentation and administration. 92.0%% responded “Yes.”

 In contrast Table 3 illustrates that a lower percentage of students expressed confidence related to performing coding-related tasks.

* Identify coding resources, recognize types of codes, and evaluate the expertise needed to accurately code. 78.4% responded “Yes” in 2013 and 84.0% responded “Yes” in 2014.
* Employ marketable skills related to medical coding. 65.3% responded “Yes” in 2013, but this improved to 83.7% who responded “Yes” in 2014.

 The final two close-ended survey questions addressed concepts related to course delivery.

[Insert Table 4]

 The statement “Communication of the concepts of this course was facilitated by online delivery” received an 84.0% response of “Yes” in 2013. The next year, 100% of the students provided an affirmative response.

 The statement “Use of guest lecturers facilitated the communication of up-to-date standards of practice” garnered an 82.4% response of “Yes” in 2013 and a 94.0% response of “Yes” in 2014.

 Responses to the open-ended survey questions generally confirmed student responses to the close-ended questions. Open-ended responses were reviewed for recurring themes in response to the question, “What were two significant things that you learned from this course?” Tables 5 and 6 provide a count and percentage of response themes.

[Insert Table 5]

 Out of 43 thematic responses in 2013, 19 identified significant learning associated with coding (44.2%), 8 cited health records (18.6%), and 6 cited compliance (14.0%)

[Insert Table 6]

 The same three themes were identified as significant learning opportunities during 2014. Out of 80 thematic responses in 2014, 44 addressed significant learning associated with coding (55.0%), and 9 each identified health records (11.3%) and compliance (11.3%)

 The second open-ended question asked, “How might the course experience be improved?” Fewer responses were received and fewer themes identified.

[Insert Table 7]

[Insert Table 8]

 The response theme, Face-to-Face Delivery, was identified 8 times in 2013, the highest percentage at 32.0%. The response theme, No Changes, was identified 12 times in 2014, the highest percentage at 35.3%, followed by Face-to-Face Delivery with a count of 11 (32.4%). A high percentage of students had indicated that communication of the course concepts was facilitated by online delivery in response to survey question 12. Why was a theme supporting face-to-face delivery emerging as response to an open-ended question? The reason for this is because the students who had registered for the campus section, face-to-face, section of the course were anticipating face-to-face classes even though the course was clearly indicated as an online course. The on-campus and distance sections of the 2013 course contained 31 on-campus and 26 distance students, respectively. The face-to-face and distance sections of the 2014 course contained 37 on-campus and 30 distance students, respectively. During both years, the sections were merged on Blackboard and taught as an online course. The instructor met four times with the students in the campus section of the course, and these sessions were recorded and placed on Blackboard for online viewing. As many of the subject matter experts who supplemented class lectures were unable to record during the scheduled class delivery time, lecture and subject matter expert recordings frequently occurred outside of class and were posted asynchronously.

 Student comments associated with coding appears to reinforce the results of close-ended questioning. Students felt the course provided the opportunities to build skills in coding as reflected by answers to question 2: 78.1% responded “Yes” in 2013 and 93.0% responded “Yes” in 2014. However, the response to question 1 indicated that fewer agreed or strongly agreed that they had been adequately prepared in coding: 40.8% agreed or strongly agreed in 2013; 70.8% agreed or strongly agreed in 2014. Comment to the Coding theme revealed the desire of many students to gain more substantial knowledge about coding. “More coding experience to enhance our toolkit because coding deals with reimbursement” (2013 student). “More coding exercises for a grade” (2013 student). “To improve this course, we can have more hands-on activities to do with coding” (2014 student). “Coding seems a little intimidating. Maybe having some sort of activity to get students more familiar with coding” (2014 student).

**Conclusions**

 The majority of the students surveyed felt adequately prepared in healthcare records management and compliance, but less prepared in coding. The vast majority of the students surveyed felt that the course provided the opportunity to build skills in how to (1) review health records to ensure that documentation in the record supports the diagnosis, (2) identify relevant standards, guidelines and conventions (setting purpose, and document) related to medical records, and (3) employ marketable skills related to medical records documentation and administration. The students would like more coding taught in the class and more coding exercises. Online teaching of this course is effective; however, some of the students indicated that they would prefer the course to be taught in a face-to-face setting. This provides a cautionary note. As many traditional, campus-based programs expand their online course offerings, programs should ensure that the needs of their face-to-face students continue to be met as new technology is brought into the classroom and content delivery formats change to meet the challenges of distance education.

 Although the field of health services management encompasses disciplines and subject areas that are familiar and long standing, the field is in a changing state that allows health administration professionals to contribute to the field through teaching and curriculum development in a way that may not be possible in more established educational programs. Health sciences academia may have many opportunities to influence the continuously changing health management services field. The content areas of medical records management, coding and compliance typically are not emphasized in most health services management programs, but this should change.

**Discussion**

In schools, curriculum is taught and consists of a set of subjects, content, concepts, program of study, materials, sequence of courses, or set of performance objectives based on a global body of knowledge. The subject content that is offered by an academic program, permits the students to acquire a set of entry-level competencies or learning outcomes at the end of the academic program. “A student learning outcome is defined by three characteristics:

* Behavior: what the learner will be able to do
* Condition: how the learner will do it
* Measurable: how well the learner is able to do the task” (Gordon, 2013, p. 54)

 With the recent changes in the healthcare services management profession, students need to be educated on a wide variety of functions/skills, particularly coding, documentation and how to conduct audits. In addition, determining the appropriate people, scheduling, and preparing agendas and reports for meetings are essential tasks (Manger, 2013).
 The American Health Information Management Association’s (AHIMA), a leading professional organization for health information professionals, has developed a Career Map after analyzing health information management jobs and career transitions. The jobs are categorized into six job families (listed below). In the Health Data Management course, topics regarding the revenue cycle, coding and billing (which includes medical record documentation) are covered in detail.

* Compliance/Risk Management
* Education/Communication
* Informatics/Data Analytics
* IT/Infrastructure
* Operations Medical Record Administration
* Revenue Cycle, Coding, and Billing

The Career Map is available online at http://hicareers.com/ CareerMap (Sandefer, 2014).

 Using the Career Map to investigate options allows current HIM professionals to see career paths of the future and also guide students into new career paths (Fabrizio, 2014).

 Today, healthcare facilities have many departments, some of which did not exist in recent years, such as revenue integrity, clinical documentation improvement, and informatics. A healthcare industry trend is the decentralization of health information management departments in medical offices, hospitals and other healthcare systems. With technology improvements, many functions, such as information systems, billing, revenue cycle, coding, compliance, clinical documentation improvements, are located throughout a facility or off site. There are no longer boundaries to the records room (Butler, 2015). This means that health services managers may increasingly manage professionals with skill sets in those areas. Competencies for health services managers should be expanded to include more than just a passing knowledge of medical records management, coding, and compliance.

 Similarly, the curricular content areas of health administration programs should incorporate medical records management, coding, and compliance. As demonstrated by this study, these topics can be taught effectively in an online format.

**Implications**

 As governmental mandates the adoption of electronic health records (EHRs) and the ICD-10-CM/PCS coding system, health services management curriculum must progress simultaneously to stay aligned with standards of practice in the healthcare profession and also for certification. (Bates, 2014)

 Additionally, the US Bureau of Labor Statistics indicate 23 percent projected growth in the need for medical and health services managers from 2012 to 2022 (much faster than the average for all occupations). Due to the aging of the large baby-boom population, people continue to be active later in life. Consequently, the healthcare industry will see an increase in the demand for healthcare services (as well as health service managers). <http://www.bls.gov/ooh/management/medical-and-health-services-managers.htm>

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Table 1

*Responses to Survey Question 1: As a result of taking this course, I feel adequately prepared in the following areas*

|  |  |  |
| --- | --- | --- |
| Content Area | Number Agree or Strongly Agree2013 (n = 49) 2014 (n = 48) | Percent %2013 (n = 49) 2014 (n = 48) |
|  |  |  |  |  |
| Health Care Records | 30 | 38 |  61.2% | 79.2% |
| Coding | 20 | 34 |  40.8% | 70.8% |
| Compliance | 31 | 38 |  63.3% | 79.2% |

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Table 2

*Yes/No Responses to Survey Question 2: Did the course provide me an opportunity to build skills in the following areas?*

|  |  |  |
| --- | --- | --- |
| Content Area | Number Responding “Yes”2013 (n = 32) 2014 (n = 43) | Percent %2013 (n = 32) 2014 (n = 43) |
|  |  |  |  |  |
| Health Care Records | 30 | 40 |  93.8% | 93.0% |
| Coding | 25 | 40 |  78.1% | 93.0% |
| Compliance | 30 | 41 |  93.8% | 95.3% |

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Table 3

*Yes/No Responses to Survey Questions 3 - 11: As a result of taking this course, I am more confident that I can:*

|  |  |  |
| --- | --- | --- |
| Question |  Number Responding “Yes” 2013 2014 | Percent % 2013 2014 |
|  |  |  |  |  |
| 3. Review health records to ensure that documentation in the record supports the diagnosis.  | 47 of 51 | 44 of 49 | 92.2% | 89.8% |
| 4. Review health records to ensure that documentation in the record reflects the clinical progress, clinical findings, and discharge status. | 45 of 51 | 48 of 50 | 88.2% | 96.0% |
| 5. Identify relevant standards, guidelines, and conventions (setting, purpose, and document) related to medical records. | 47 of 51 | 48 of 50 | 92.2% | 96.0% |
| 6. Trace the process of record keeping for compliance with standards (Joint Commission and Medicare Conditions of Participation) and conventions of good practice. | 41 of 50 | 45 of 50 | 82.0% | 90.0% |
| 7. Identify coding resources, recognize types of codes, and evaluate the expertise needed to accurately code. | 40 of 51 | 42 of 50 | 78.4% | 84.0% |
| 8. Recognize the relationship between compliant clinical data required and systems of accreditation and reimbursement in the health care delivery system. | 39 of 50 | 41 of 48 | 78.0% | 85.4% |
| 9. Use the terminology of record keeping, standards, and coding. | 41 of 50 | 45 of 50 | 82.0% | 90.0% |
| 10. Employ marketable skills related to medical records documentation and administration. | 45 of 49 | 46 of 50 | 91.8% | 92.0% |
| 11. Employ marketable skills related to medical coding. | 32 of 49 | 41 of 49 | 65.3% | 83.7% |

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Table 4

*Yes/No Responses to Survey Questions 12 – 13.*

|  |  |  |
| --- | --- | --- |
| Question |  Number Responding “Yes” 2013 2014 | Percent % 2013 2014 |
|  |  |  |  |  |
| 12. Communication of the concepts of this course was facilitated by online delivery. | 42 of 50 | 50 of 50 | 84.0% |  100.0% |
| 13. Use of guest lecturers facilitated the communication of up-to-date standards of practice. | 42 of 51 | 47 of 50 | 82.4% | 94.0% |

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Table 5

*2013 Responses to Survey Question 14: What were two significant things that you learned from this course?*

|  |  |  |
| --- | --- | --- |
| Response Themes |  Count |  Percent % |
|  |  |  |
| Coding |  19 | 44.2% |
| Health Records |  8 | 18.6% |
| Compliance |  6 | 14.0% |
| Billing |  4 | 9.3% |
| Data Management |  1 | 2.3% |
| Documentation |  1 | 2.3% |
| Government Entities |  1 | 2.3% |
| Management Skills |  1 | 2.3% |
| Modeling |  1 | 2.3% |
| Quality |  1 | 2.3% |

Table 6

*2014 Responses to Survey Question 14: What were two significant things that you learned from this course?*

|  |  |  |
| --- | --- | --- |
| Response Themes |  Count |  Percent % |
|  |  |  |
| Coding |  44 | 55.0% |
| Health Records |  9 | 11.3% |
| Compliance |  9 | 11.3% |
| Electronic Medical Records |  4 | 5.0% |
| Accreditation |  4 | 5.0% |
| Healthcare Systems |  3 | 3.8% |
| Administration |  2 | 2.5% |
| Billing |  1 | 1.3% |
| Computerized Physician Order Entry |  1 | 1.3% |
| Data |  1 | 1.3% |
| Filing Systems |  1 | 1.3% |
| Payment Types |  1 | 1.3% |

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Table 7

*2013 Responses to Survey Question 15: How might the course experience be improved?*

|  |  |  |
| --- | --- | --- |
| Response Themes |  Count |  Percent % |
|  |  |  |
| Face-to-Face Delivery |  8 | 32.0% |
| Increase Coding |  7 | 28.0% |
| More Hands On |  3 | 12.0% |
| No Changes |  3 | 12.0% |
| Add Content |  1 | 4.0% |
| Cover the Basics |  1 | 4.0% |
| Less Use of Specific Software |  1 | 4.0% |
| Spread the Class Out |  1 | 4.0% |

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Table 8

*2014 Responses to Survey Question 15: How might the course experience be improved?*

|  |  |  |
| --- | --- | --- |
| Response Themes |  Count |  Percent % |
|  |  |  |
| No Changes |  12 | 35.3% |
| Face-to-Face Delivery |  11 | 32.4% |
| Increase Coding |  6 | 17.6% |
| Fewer Guest Speakers/Videos |  2 | 5.9% |
| Classroom Management |  1 | 2.9% |
| More Real-Life Applications |  1 | 2.9% |
| Online Delivery |  1 | 2.9% |

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Dr. Kennedy has served as Director of the undergraduate Health Services Management Program at East Carolina University. In past academic assignments, he has served as Director of the Doctor of Health Administration Program at Central Michigan University, has taught in the Health Services Administration Program at Slippery Rock University, and was the Deputy Director of the U.S. Army-Baylor University Graduate Program in Healthcare Administration.

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