Lord Fairfax Community College  
Medical Billing/Coding Certificate Program Review

1. Reviewing completed assessments for program-specific courses, and address implications of the assessments for the program as a whole.

Course assessments were completed for HIT 111 – Medical Terminology I, HIT 112 – Medical Terminology II, HIT 253 – Health Records Coding-Beginning Medical Coding Basic, and HIT 254 – Advanced Coding and Reimbursement.

HIT 111 post-test score did not meet the goal established in the course assessment. This was the first semester the web class was taught, and faculty were charged to review course content and delivery, including refinement of the BlackBoard discussion area so that it could be used as a peer tutor area. Online office hours, remediation modules, and further investigation of audio and video components are being researched to be incorporated in the class as appropriate.

HIT 112 class average not meeting goal. Continued assessments, alternate assessment activities, study aids, and web enhanced study sessions will be planned to improved outcomes. Faculty will pilot a variety of study aids and testing strategies.

The student learning outcomes identified for HIT 111 and HIT 112 included:
- Analyze medical terms by their word elements to accurately spell, pluralize, form, divide, and pronounce medical terms
- Translate medical abbreviations
- Differentiate terms for directions, position, and planes of the body
- Interpret basic anatomy and physiology terms specific to each body systems

HIT 253 and HIT 254 course assessments indicate that course is meeting goals.

The student learning outcomes for HIT 253 included:
- Analyze and apply the principles of coding healthcare data using CPT, ICD-9-CM, and HCPCS coding
- Demonstrate problem solving skills to determine appropriate codes

The student learning outcomes for HIT 254 included:
- Master the skills needed to be an effective coder using CPT, ICD-9-CM and HCPCS coding
- Demonstrate high-level problem solving skills in assigning appropriate codes (successfully pass the national CPC examination to receive the CPC-A certification)

2. Provide and evaluate evidence of attainment of program and student learning outcomes for the program as a whole. Analyze the implications of the results for future actions and changes.

The certificate program has five identified SLO:

a) Pass the National Certification CPC-Apprentice exam - Test results for 2005 reveal that 20 students attempted the exam; 18 students successfully completed the exam and received the CPC-A certification. Test results for 2006 reveal that 22 students attempted the exam; 21 students successfully completed the exam and received the CPC-A certification. Test results for 2007 reveal that 26 students attempted the exam; 26 students successfully completed and received the
CPC-A certification. Test results for 2008 reveal that 9 students attempted the exam; 7 students successfully completed the exam and received the CPC-A certification.

b) Demonstrate the ability to read and post payments from remittances using billing software applications - HIT 253 and HIT 254 course assessments indicate that course is meeting goals. Also, successful completion of the CPC-A indicates student and program goals are being met.

c) Examine CPT-4 and ICD-9-CM coding systems and guidelines for selecting accurate out-patient/ambulatory surgery coding and prospective payment system - HIT 253 and HIT 254 course assessments indicate that course is meeting goals. Also, successful completion of the CPC-A indicates student and program goals are being met.

d) Demonstrate understanding of the interpersonal skills required for successful employment (work harmoniously with others, evaluate and accept responsibilities, identify methods used to respond to conflict, and efficiently work in teams) - Students enrolled in HIT/HIM 254 are encouraged to complete a shadow/internship experience with local businesses/medical services offices in the billing/coding/front office career. Students are evaluated by the host site as well as by the faculty teaching the program courses. Students usually stay with the host site for 20 to 40 hours (depending on host site requirements). Evaluations have been positive and many medical services offices have asked that we continue the program for each semester. Plans are underway to do so.

e) Conduct a job search campaign or complete an internship (minimum 40 hours) - Each spring semester in AST 206 Professional Development, students completed a job search campaign complete with resume, state application form, and cover letter as well as pre- and post-interview strategies. Students also sat for a “mock” interview conducted by office professionals who came to the school to conduct the interview. The interviews were videotaped and used as discussion for improvements along with the comment sheets completed by each interviewer. Students rated this activity as extremely useful and requested that this job search campaign project be included for future semesters. Those interviewing the students also submitted favorable reports of time well spent in preparing students for the rigors of employment search.

The general education outcomes for this program are:

a. Demonstrate the ability to use standard English
b. Demonstrate the ability to use problem solving skills.

These two outcomes were assessed in the course assessment for HIT/HIM 253 and HIT/HIM 254. These assessments provide evidence that program graduates have demonstrated these skills and abilities.

3. Comment on the program’s overall enrollment trend for the past three years. Based on this data, project program enrollment over the next three years.

Student enrollment in the certificate over the last three years is:

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Summer enrollment has increased steadily over the last three years, from 20 to 33 to 36. Fall enrollment saw a large increase in 2006, from 36 to 61, but this dropped slightly in Fall 2007 to 55. Spring enrollment saw a similar pattern of large increase in Spring 2007, followed by a decrease in Spring 2008.

The 41% increase in enrollment between fall 2005 and fall 2006 is in response to several factors. The health professions in general are experiencing significant increases in employment opportunity in our area.
as well as nationally. The interest in nursing programs at LFCC indirectly impacts this AST certificate. As students are placed “in waiting” to be admitted to nursing because of coursework admittance requirements, some will gravitate toward other career opportunities to allow greater flexibility in the job market. One program they select is Medical Billing and Coding.

Another factor includes existing licensed professional health worker who are considering another career which can incorporate their current expertise and interest. One obvious choice is Medical Billing and Coding.

Another reason for this increase is staffing. The program promotion proudly includes that all HIM classes are taught by practicing health professionals in coding and billing as well as other licensed health professionals.

A significant reason for the increase is the opportunity for program graduates to sit for the national certification exam (CPC – Certified Professional Coder) at LFCC. Not having to travel a great distance to sit for the qualifying exam is an important factor when students are making program decisions. Also the knowledge that 98% of our program graduates successfully complete the CPC certification is another promotion piece and important to those making career decisions. The national average is under 50%.

The 11% drop in enrollment between fall 2006 and fall 2007 can be attributed to graduation rates, local economy, and lower numbers of student enrolling in applied science programs with the introduction of the associate degree transfer program to four year institutions.

4. Identify the major factors that you believe are contributing to a) the past and b) the projected three-year enrollment trend.

Several factors contribute to the projected enrollment trend (based on the US Department of Labor, Bureau of Labor Statistics 2008-09 report) and local employment projections for Medical Billing and Coding.

Local employment is expected to grow faster than average for those with a strong background in medical coding. Employment of medical records and health information technicians is expected to increase by 18 percent through 2016—faster than the average for all occupations—because of rapid growth in the number of medical tests, treatments, and procedures that will be increasingly scrutinized by health insurance companies, regulators, courts, and consumers. Also, technicians will be needed to enter patient information into computer databases to comply with Federal legislation mandating the use of electronic medical records.

New jobs are expected in offices of physicians as a result of increasing demand for detailed records, especially in large group practices. New jobs also are expected in home health care services, outpatient care centers, and nursing and residential care facilities. Although employment growth in hospitals will not keep pace with growth in other health care industries, many new jobs will, nevertheless, be created.

Technicians with a strong background in medical coding will be in particularly high demand. Changing government regulations and the growth of managed care have increased the amount of paperwork involved in filing insurance claims. Medical billing will experience an increase as more and more focus is placed on hiring those with electronic records expertise and understanding of the essential integration of electronic health records.
5. Using VCCS productivity data available for programs under review (http://system.vccs.edu/vccsasr/Research/program_productivity.htm), comment on the program’s productivity trend over the past three years (productivity is defined as FTE generated by programs compared to the standard level set by VCCS.)

The Virginia Community College System (VCCS) reports the following productivity data for the Medical Billing/Coding program (named Medical Office Clerk in the VCCS report):

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Enrollment by academic year and FTEs increased in 2006-2007, and then decreased slightly in 2007-2008. This mirrors the Fall enrollment pattern discussed previously. The three year average headcount of 73 far exceeds the VCCS standard of 12.

6. Analyzing productivity information over the past three years, comment on the need (if any) for additional full-time staffing. What gains or improvements would be expected?

The current adjunct faculty, who have full time positions during the day as practicing medical office professionals, are meeting staffing needs. At this time, no additional full-time staffing is anticipated.

7. If the full program is offered at multiple locations, address any program challenges and opportunities by site.

Through the portable PolyCom units and hardware, classes are distanced to Fauquier from Middletown. Also, adjunct faculty are in place at both Fauquier and at Page Center to teach classes. Web based classes are also available so that students from Page Center, Fauquier, and Middletown have a variety of delivery methods to chose from.

A challenge for students may be requiring all students from all multiple locations to come to the Middletown campus where the Certified Professional Coder national certifying exam is held each spring semester. We do not have enough enrollment at the other sites (Page/Fauquier) to warrant adding examination centers at each location.

8. Comment on the trend in program graduates (degree and/or certificate) over the past three years, as well as the graduation rate (annual program graduates divided by program FTES). Is the graduation rate significantly higher or lower than the LFCC average?

Medical Coding/ Billing Certificates awarded:
- Spring 2006 - 2
- Summer 2006 - 2
- Fall 2007 - 2
- Spring 2007 - 7
- Spring 2008 - 3

9. Comment on the program’s three-year trend in retention rate (for a given fall semester, number of students enrolled with prior LFCC enrollment in the program divided by total number of students enrolled in the program).
The number of students retained as a percentage of total program enrollment each fall has increased over the last three years.

10. Using data from items 3, 5, 6, 8 and 9 above, compare the program’s performance to average program performance at LFCC.

It is difficult to compare this program to the average program at LFCC. This program attracts part-time, working adult students to a greater extent than the typical degree program at LFCC.

11. Identify any major factors that you believe contribute to either improving or declining trends in the program’s graduation rates and/or retention rates.

Local employment is expected to grow faster than average for those with a strong background in medical coding. Employment of medical records and health information technicians is expected to increase by 18 percent through 2016—faster than the average for all occupations—because of rapid growth in the number of medical tests, treatments, and procedures that will be increasingly scrutinized by health insurance companies, regulators, courts, and consumers. Also, technicians will be needed to enter patient information into computer databases to comply with Federal legislation mandating the use of electronic medical records. Our local employment opportunities for graduates should reflect the national average of 18%. Enrollment and retention should continue to be high.

12. Identify the general education or support discipline/course areas (e.g., ENG, MTH, PSY, etc.) most impacted by changes in this program’s enrollment, and based on current program enrollment trends, comment on any likely future enrollment trends in these disciplines/courses.

The ENG remediation classes will continue to be impacted by enrollment in this program as students prepare for successful completion of the ENG 111 required class.

13. For career programs: Using local, state and national labor market forecasts, as well as input from the relevant curriculum advisory council, address future job opportunities for graduates, as well as any implications of labor market changes for changes in the program curriculum.

As discussed throughout this assessment report, the local, state, and national labor forecasts would indicate a continued growth in this program should be expected. Changes for the graduates will focus primarily on changes in business practices: more coders may be contracted to services rather than
working for a local physician. This is a trend impacting many office professions, including the medical field.

14. **For transfer programs:** Using available data, identify the transfer success of program graduates and any implications of the data for program re-orientation.

Not applicable.

15. **Program-specific question provided by Vice President of Learning and Dean.**

Is the program reaching its target audience? Discuss.

Yes. As mentioned previously, technicians will be needed to enter patient information into computer databases to comply with Federal legislation mandating the use of electronic medical records.

16. **Program-specific question provided by program faculty.**

What connections exist among students enrolled in this Medical Billing/Coding one year certificate and the Administrative Support Technology associate degree and its two specializations (AST: Administrative Assistant Specialization and AST: Desktop Publishing Specialization) and the other certificate programs (Office Legal Assistant/Paralegal Studies, Graphic Design Office Assistant, Medical Secretary/Transcription, and Office Systems Assistant).

Of the two students in the Medical Billing/Coding certificate program and other AST programs, both are enrolled in the graphic Administrative Support Technology associate degree (parent degree).

This is a very small representative sampling of students; however, it would suggest that the certificate programs do correlate to the associate degree program offerings by enrollment and that the associate degree programs do correlate to the certificate program offerings by enrollment.

17. Based on the preceding analysis, develop a brief statement encompassing the following: a) the program’s likely vitality and viability over the next 3 years; b) areas of weakness and/or concern; c) strategies for strengthening the program.

a. Program vitality and viability over the next 3 years

The Medical Billing/Coding certificate is expected to follow the local and national employment trends with an 18 percent growth projected over the next three years.

Also, the program is being marketed to our local physician’s professional organizations and medical offices. More and more employees of the physicians are enrolling in this program to attain their CPC-A certification. This trend will increase over the next three years.
b. **Areas of weakness and/or concern**

The continued diligence to see that more HIM classes are distanced to Page Center. As the technology allows, more of the classes will be sent three-way from Middletown or Fauquier to Page Center.

a) **Strategies for strengthening the program**

Strategies for strengthening the program include a focus on marketing and promotion of the program with brochures and presentations to local professional organizations.

In addition, we will be more vocal with newsletters and newspaper stories about our student graduates’ employment successes, our talented adjunct faculty, and the successful pass rate of those program graduates sitting for the national certification offered at Lord Fairfax Community College each spring.

- Marketing and promotion of this certificate program through brochure design and distribution and through community presentations throughout the service area.