Career & Technical Education

College Name:	Shawnee Community College
Academic Years Reviewed:	2017-2021

Program Identification Information

Program Title	Degree or Cert	Total Credit Hours	6-Digit CIP Code	List all certificate programs that are stackable within the parent degree
Medical Coding Specialist (HIT 2224)	Certificate	33	510713	Medical Coder (HIT 2174) Medical Biller (HIT 2176)

Address all fields in the template. If there are certificates and/or other stackable credentials within the program, please be sure to specify and sufficiently address all questions regarding each stackable credential within this template or results may be reported within its own template. This is at the discretion of the college.

| **Program Objectives** What are the overarching objectives of the program? *(i.e. what are the program learning outcomes? What occupations is this program intended to prepare students for?)* | The Medical Coder (12-hour certificate) program is aligned with the Department of Health & Human Services, (DHHS) Official Guidelines for Coding and Reporting for physician services. The Medical Coder program is for entry-level physician coding careers in the Health Science Technology pathway into Health Science: Health Informatics. The Medical Biller (11-hour certificate) program is aligned with the Department of Health & Human Services (DHHS), Official Guidelines and Association for Healthcare Documentation Integrity (AHDI) Guidelines for Medical Office Careers. The Medical Biller program is for entry-level medical office careers in the Health Science Technology pathway into Health Science: Health Informatics. The Medical Coding Specialist (33-hour certificate) program is aligned with the Department of Health & Human & Services (DHHS) and Official Guidelines for Coding and Reporting for physician services. The Medical Coding Specialist program is for entry-level physician coding careers in the Health Science Technology pathway into Health Science: Health Informatics. Upon successful completion of the specialist certificate students are eligible to sit for the Certified |

	Coding and Billing Specialist exam administered by the National Healthcare Association. Upon completion of the Medical Coding Specialist program students will be able to: 1. Demonstrate a fundamental understanding of the human body and medical terminology as they apply to medical billing and coding. 2. Assign and understand diagnostic and procedure codes using ICD and HCPCS/CPT coding systems as used in a variety of settings. 3. Uphold legal and ethical standards and adhere to principles of patient confidentiality within the health care community environment as defined by federal, state, and local guidelines and regulations. 4. Demonstrate ability to think critically, manage time, and communicate in oral and written formats.
To what extent are these objectives being achieved? Please detail how achievement of program objectives is being measured or assessed. How do you know if and how objectives are being achieved? *This may include employment rates of graduates, passing exam/licensure rates, assessment of students meeting Program Learning Outcomes, etc.)*	Program objectives are measured throughout the program with the assessment of Shawnee Community College's core competencies.
Past Program Review Action What action was reported last time the program was reviewed? Were these actions completed?	The action from the previous program review was to convert all courses to online. This action was completed in the time since the last program review. All courses within the program are online.
Review Team Please identify the names and titles of faculty and staff who were major participants in the review of this program. Also describe their role or engagement in this process.	Kayla Sauerbrunn - Allied Health Department Chair Dr. April Teske - Executive Director of Institutional Effectiveness

Stakeholder Engagement Please list other stakeholders and participants who were engaged in this process (i.e. Student Support Services, students, employers, etc.) Also describe their role or engagement in this process.	The Advisor for this program calculates student rank using weighted grades for previous college coursework in addition to the HOAE test results and communicates with students who have interest in these programs. Student Support Services is available to all students. Students are notified through new student orientation, information on the college's website, the college's social media platforms, email, text, and student flyers. Perkins assistance is available for all CTE students in the form of textbook assistance through the Perkins Lending Library, tool rental, and bus passes for transportation.
CTE Program Review Analysis Complete the following fields and provide concise information where applicable. Please do not insert full data sets but summarize the data to completely answer the questions. Concise tables displaying this data may be attached. The review will be sent back if any of the below fields are left empty or inadequate information is provided.
Were pre-requisites for this program (courses, placement scores, etc.) analyzed as part of this review? If yes, please elaborate on any findings or revisions moving forward.	All corequisites and prerequisites have been built in to the program curriculum. The one-year certificate includes Basic Computer Systems (COM 111) and Anatomy & Physiology (BIO 212).
Provide a rationale for content/credit hours beyond 30 hours for a certificate or 60 hours for a degree.	The Medical Coding Specialist Certificate is a 33-hour certificate. It incorporates two stackable certificates, Medical Coder (12-hour certificate) and Medical Biller (11-hour certificate), along with other courses needed in the profession.
Indicator 1: Need	**Response**
1.1 What is the labor market demand for the program? Cite local and regional labor market information.	According to the U.S. Bureau of Statistics, overall employment of medical records and health information specialists is projected to grow 9 percent from 2020 to 2030, about as fast as the average for all occupations. Illinois Department of Employment Security (IDES) projects 529 annual openings for Medical Records and Health Information Technicians. The local workforce (LWA) district for Shawnee Community College (LWA 26) and the surrounding workforce (LWA 25) both project an increase in this occupational demand. LWA 26 projects a 3% increase

	and LWA 25 higher at a 6% increase.
1.2 How has demand changed in the past five years and what is the outlook for the next five years?	Demand has continued to increase in the program area due to the U.S. aging population which requires more medical services. The number of individuals who have access to health insurance is expected to increase and will require staff to be efficient in medical office skills. According to the U.S. Bureau of Statistics, about 34,300 openings for medical records and health information specialists are projected each year, on average, over the decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force, such as to retire. According to ONET, Health Information Technologists and Medical Registrars are considered Bright Outlook occupations (onetonline.org). Bright Outlook occupations are expected to grow rapidly in the next several years, will have large numbers of job openings, or are new and emerging occupations.
1.3 What labor market information sources are utilized and how often are LMI data reviewed?	When reviewing labor market information, the college looks at southeast Missouri and western Kentucky, because our students either live or seek employment in those areas. According to the SCC Labor Market analysis, the Medical Biller is a high need living wage job in LWA 25, which is directly north and adjacent to our district's labor workforce area (LWA 26). This is the area where the largest healthcare provider in southern Illinois is located. Executive Director of Institutional Effectiveness, provides an annual labor market analysis. Illinois Labor Market Data Southeast Missouri Labor Market Data Western Kentucky

1.4 How does the institution/ program ensure that there is a sufficient "pipeline" or enrollment of students to fulfill the labor market need? (e.g. how/where are students recruited for this program?)	Students are recruited through Shawnee Community College community events, social media, Career Tech Day (CTE), Shawnee Experience, and various other recruiting events. Students are recruited within the counties making up the Shawnee Community College district – Alexander, Johnson, Massac, Pulaski, and Union.
1.5 How are needs/changes evaluated by the curriculum review committee and campus academic leadership?	Proposed needs/changes are brought to the Curriculum and Instruction Team for review. This team meets monthly throughout the academic year.
1.6 Did the review of program need result in actions or modifications (e.g. closing the program, expanded industry partnerships, revised recruitment, reducing/expanding program offerings)? Please explain.	Although labor market data reflects a demand in the field, enrollment at SCC in the Medical Coding Specialist program remains low. In the past year marketing videos have been created to promote the program. We will continue to work on strategies to promote the program.
Indicator 2: **Cost Effectiveness** *(see ICCB and system resources for cost-effectiveness:* *https://www.iccb.org/academic_affairs/program-review/)*	**Response**
2.1 How does the institution assess cost-effectiveness for CTE programming? Consider: ● Costs to the institution associated with this program ● How costs compare to other similar programs on campus ● How the college is paying for this program and its costs (e.g. grants, tuition, fees (lab, technology, background checks, etc.). ● Revenue Analysis ● Student to faculty ratio ● Course/section fill rates	During this fiscal year the college has begun an intensive budget analysis process involving faculty and programs. This analysis is broken out for each program detailing all costs associated with programs including, but not limited to salary and benefits, institution cost, capital and facility maintenance, and purchases. These costs are attributed to specific funds to indicate how the college is paying for those costs (i.e. grant and institutional money, etc.). Each course head count and credit hours generated are attributed to that program to determine overall cost to the program. As part of this analysis a team of faculty and administration look at factors such as faculty to student ratio, course and section fill rates, and scheduling efficiency to improve cost effectiveness. This budget effectiveness model is being integrated into program planning and academic assessment beginning FY23.

	Enrollment trends

- Enrollment trends
- Credit hours earned year to year
- Scheduling efficiency

Number of Credit Hours by AY

	2018	2019	2020	2021	2022	Sum:
HIT-0100	438	351	384	369	336	1878
HIT-0101	36	42	30	51	57	216
HIT-0104	54	48	33	27	39	201
HIT-0106	33	45	36	15	30	159
HIT-0107	36	56	28	20	36	176
HIT-0109	42	34	40	30	40	186
HIT-0111	11	15	7	7	9	49
HIT-0209	36	48	52	20	36	192
Sum:	686	639	610	539	583	3057

2.2 What are the findings of the cost-effectiveness analysis?	The findings for this section will be based on the old budget modeling process and what has been discovered in FY22 when transitioning to the new budget model. When looking at the cost effectiveness model over the last several fiscal years we determined that we were not attributing separately for the Medical Office Assistant and Medical Coding Specialist programs. Therefore, the findings for the cost analysis will include both of these programs. Overall, the direct cost total for the two programs combined has remained consistent over the last four fiscal years. Since FY18 the number of credit hours, while they have decreased slightly, have produced revenue that exceeds our direct cost total. Making the programs sustainable to SCC. While credit hours have decreased slightly the program has kept total cost stable by utilizing quality adjuncts to replace a retired full time faculty member.
2.3 If most of the costs are offset by grant funding, is there a sustainability plan in place in the absence of an outside funding source? Please explain.	This program is not directly offset by grant funding.
2.4 How does the institution/program assess student affordability for this program? (Consider if program costs are reasonable, comparable to like programs)	The Financial Aid advisors at SCC guides students through the financial aid process and provide assistance with understanding grant, scholarship, and federal work-study opportunities. Students have access to Student Support Services (SSS).

How does the institution/ program assist students in overcoming financial barriers to participate in this program? (e.g. WIOA, Ability-to-Benefit, scholarships, grant funding, referral to services, apprenticeship programming)	SSS is funded through the U.S. Department of Education TRiO programs and offers supplemental grant aid. Students have access to apply for assistance through the Workforce Innovation and Opportunity Act (WIOA).
2.5 How will the college increase the cost- effectiveness of this program?	Beginning FY23 the college will be looking at cost effectiveness of the Medical Office Assistant and Medical Coding Specialist programs as separate cost organizations. This will help us to make better decisions for the individual programs as they will reveal true cost and revenue streams. Because of the way the program is designed as an online program with only one section per course delivered sequentially, this maximizes the cost effectiveness of the Medical Coding Specialist program. In the cost analysis it was observed that even with our current model, if the credit hours continue to decrease at the rate they are now, we will show a loss within the next two years. To combat this trend the program is in conversation with administration to go back to a full-time faculty position as it was prior to FY19. This will allow the faculty to devote full time attention to recruitment, marketing, and advisement strategies for this much needed labor area.
2.6 Did the review of program cost result in any actions or modifications? Please explain.	The college is in consideration of a Registered Health Information Technician (RHIT) program which incorporates all of the courses within the Medical Office Assistant and Medical Coding Specialist programs. The Department Chair is working with the Institutional Research Office on a report that will recommend the direction for the Health Information Technology programs which includes the Medical Coding Specialist.
Indicator 3: Quality	**Response**

3.1 What are the delivery methods of this program? (e.g. traditional format/online/hybrid/team-teaching/ competency-based education, etc.)? How do the success rates of each delivery system compare?	The program is currently offered in an online format only.
3.2 How does the program ensure that quality, relevant, contextualized, and culturally responsive instruction is delivered?	The official Guidelines for Coding and Reporting are obtained from CMS website and the Current National Healthcare Association (NHA) CBCS test plan is reviewed. Changes to improve curriculum are discussed at the Advisory Committee meetings and necessary steps are then followed to make improvements. Updates to the curriculum are based on coding and guideline changes each year.
3.3 Is this program part of a Program of Study as defined by Perkins V and approved by the ICCB? If yes, describe any strengths or challenge to program of study implementation.	Not at this time.
3.4 Does this program meet the definition of a career pathway program? If so, please describe each career pathway element and identify how the college plans to improve the program as it relates to the career pathway system elements. Examples include connections to adult education including integrated education and training, prior learning assessment, dual credit, support services, career services). If no, please describe if and how the college will improve the program based on the career pathway elements.	The Medical Coder, Medical Biller, and Medical Coding Specialist certificates follow the Health Science Technology pathway into Health Science: Health Informatics. These certificates can also lead into an Associate of Applied Science in Health Information Technology offered at other institutions. The Medical Office Assistant certificate fits into Health Science: Health Informatics Career Cluster Career Pathway. The Medical Coder, Medical Biller, and Medical Coding Specialist certificates include dual credit courses, which allows students to take college-level courses while in high school. Once students have completed the Medical Coding Specialist program they can continue on at SCC and earn an Associate of Applied Science degree. With the completion of an Associate of Applied Science degree

	students have the opportunity to advance their degree in Health Information Technology (HIT) at a 4-year institution.
3.5 What innovations, that contribute to quality or academic success, have been implemented within this program that other colleges would want to learn about?	Coding courses are offered in online format with usage of online tutorials to aid in student learning of course content.
3.6 Describe dual credit implementation for this program (generally how many students, courses, participating high schools). In terms of strengthening the program, what dual credit courses are seen as a priority?	COM 111 – Massac County High School HIT 100 – Goreville, Massac, and Vienna High Schools
3.7 Identify what work-based learning opportunities are available and integrated into the curriculum. How do these opportunities improve the quality of the program? In what ways can these opportunities be improved?	The instructor utilizes case studies and mock electronic health records to allow students practice skills learned throughout the program.
3.8 Is industry accreditation required for this program (e.g. nursing)? If so, identify the accrediting body. Please also list if the college has chosen to voluntarily seek accreditation (e.g. automotive technology, ASE).	At this time, there is no industry accreditation required for this program.

3.9 Are there industry-recognized credentials embedded within this program? If so, please list.	Shawnee Community College is an approved facility to offer the National Health Career Association examination for Certified Billing Coding Specialist (CBCS) credential. To sit for the exam, the registration plus test prep fees are $170.
3.10 Are there apprenticeship opportunities available through this program? If so, please elaborate.	At this time, there are no apprenticeship programs associated with this program.
3.11 Please list all applicable licensure and industry/professional examinations. Include examination pass rates and the number of students who took each respective exam.	At this time, there are no required licensure exams. There is an optional Certified Billing Coding Specialist (CBCS) credential. Shawnee Community College students have a 100% pass rate of the students who sit for the exam.
3.12 What current articulation or cooperative agreements/initiatives are in place for this program?	There are no formal articulations or cooperative agreements in place for this program. Students who complete the Medical Coder, Medical Biller, and Medical Coding Specialist certificates can pursue an Associate of Applied Science in Health Information Technology at a surrounding institution.
3.13 Have partnerships been formed since the last review that may increase the quality of the program and its courses? If so, with whom? What opportunities exist for other partnerships?	There have not been any new partnerships formed since the last review.
3.14 What partnerships (internal or external) have been formed for the advancement of equitable access and outcomes for this program?	Advisory Committee meetings have given us the opportunity to work with employers and other institutions of higher education to improve the quality of our program.
3.15 What professional development or training is offered to adjunct and full-time faculty that may increase the quality of this program? What additional professional development is needed?	Full-time faculty members are offered professional development/training through American Health Information Management Association (AHIMA), Illinois Health Information Management Association (ILHIMA), and Southern Illinois Health Information Management Association (SILHIMA).

3.16 What professional development is provided for faculty and staff in this program on Diversity, Equity, and Inclusion?	The College has a Diversity, Equity, Inclusion Council that meets once per month. The council frequently sends faculty and staff informational flyers and opportunities for professional development in the area of Diversity, Equity, and Inclusion.
3.17 What is the status of the current technology and equipment used for this program?	Due to the nature of the industry and yearly required updates from Department of Health & Human Services (DHHS), technology is up to date with industry needs.
3.18 What assessment methods are used to ensure student success?	Assessment of Shawnee Community College's core competencies in communication, problem solving, personal growth and responsibility, and research and information literacy is achieved by various methods. Coding exams (both theory and practical applications), insurance claims completion, article summary reviews, portfolio collection of reference materials for coding/billing, online chapter tutorial completion, etc. are many of the assessment methods used to ensure student success.
3.19 How are these results utilized and shared with others at the institution for continuous improvement?	At the end of each course the results are entered into Weave, which allows them to be shared within the institution. Student artifacts are also uploaded with the results.
3.20 What curriculum revisions to improve program quality and learning outcomes have been made based on the assessment of student learning? (How do you use the information gained from the assessment to improve your program and students learning?)	Increase the use of online tutorials, case studies, and mock medical health records to enhance learning and practice skills learned throughout the program.
3.21 How satisfied are students with their preparation for employment? How is this student satisfaction information collected?	Students who have kept in contract with the instructor appear to be very satisfied with preparation for employment. Currently student satisfaction is an informal process of communication through faculty. We will be developing a more formal data collection of student satisfaction.
3.22 How does the program advisory committee contribute to the quality of the program? How can this engagement be improved?	In April 2022, we held a virtual Advisory Committee meeting. Due to Covid regulations we were not able to meet for several years prior to this meeting. Next year we plan to implement a department wide advisory meeting with a Career Pathways focus. This will

	bring together multiple programs under one pathway that overlap within an industry. This should enhance the ability to cross train and ensure students have other options in the Career Pathway of their interest.
3.23 In what other ways are employers engaged in this program? (e.g. curriculum design, review, placement, work- based learning opportunities)	Employers offer internship site placement to provide students with hands-on learning of front office skills.
3.24 How satisfied are employers in the preparation of the program's graduates? How is employer satisfaction information collected?	Based on employer communication, they are very satisfied with the preparation of the program's graduates. At this point, employer satisfaction information is collected through discussion during Advisory Committee meetings.
3.25 What are the program's strengths?	The online delivery of this program allows for more flexibility and accessibility than a traditional face to face program. The use of the electronic health record to medical office procedures lab allows students to gain experience using front office procedures. Electronic health record software is available for students anywhere there is internet access. Coding textbooks are updated annually. All other textbooks are updated as new editions are published. Program is aligned with Department of DHHS Official Guidelines for Coding and Reporting; plus AHDI transcription guidelines. Close alignment of three one-year certificates gives students an option of obtaining three certificates in two years.
3.26 What are the identified or potential weaknesses of the program?	All courses within the program are being taught by adjunct instructors. Enrollment and completion numbers for this program remain low. There are no industry-recognized credentials for this program.

3.27 Did the review of program quality result in any actions or modifications? Please explain.	The college is continuing to work on strategies to increase enrollment and completion numbers for the program.

List any additional barriers encountered while implementing the program not detailed above. Please consider the following: retention, placement, support services, course sequencing, etc.

Performance and Equity

Please complete for each program reviewed. Colleges may report aggregated data from the parent program or report on enrollment and completion data individually for each certificate within the program. Provide the most recent 5- year longitudinal data available. Each year may represent a cohort.

CTE Program	Medical Coding Specialist (HIT 2224)
CIP Code	510713

	2017	2018	2019	2020	2021
Number of Students Enrolled	Not Available	13	16	16	21
Number of Completers	5	3	6	2	8
Other (Please identify)					

What disaggregated data was reviewed? If program enrollment is low, programs may disaggregate data at the department or discipline level. Disaggregated may include, but is not limited to race, ethnicity, gender, age, part-time/full-time status.	In addition to program enrollment and completion rate, HIT 2224 enrollment was subdivided by gender, age, ethnicity, and county in order to know how to target recruiting efforts. That data was then cross referenced with the same demographic information for the entire college.

It may also be appropriate to analyze intersectionality among student demographics (e.g. gender & race, special population status & race, etc.)	
How does the data support the program goals?\n\nElaborate.	Although this program meets the goals of preparing students to enter the workforce as a medical coder/medical biller, enrollment and completion rates continue to be an issue. This program is being monitored during FY22 for potential withdrawal.
Were there gaps in the data (equity gaps, enrollment gaps, retention gaps, success gaps, etc.)? Please explain.	The Medical Coding Specialist program has low completion rates with notable retention gaps.\n\nWe are currently working on strategies to increase completion rates and close the noted retention gaps.
What is the college doing to overcome any identified gaps? If nothing is currently being done, explain what the college plans to do to close identified gaps.	All initiatives must be tied to the college's Strategic Plan, which relies on data metrics and bridging any identifiable gaps.\n\nStrategic Plan Key Performance Indicators:\n\n• Area-1: Community Need, Measure A) Workforce Development, Indicator - Adequacy of graduate output by labor market data\n• Area-1: Community Need, Measure B) Economic Development, Indicator - poverty rate impact\n• Area-2: Student Interest, Measure E) Accessible Programs/Services, Indicator - Number of accommodation services available\n• Area-2: Student Interest, Measure E) Affordable Programs/Services, Indicator - Percentage of students that receive financial support\n\nThe largest data gap comes in terms of not tracking demographic data such as financial need and transfer rates for program enrollment. The college is currently working to create a process for collecting this data, which should make data collection in the future easier and more readily available.
Are the students served in this program representative of the total student population? Please explain.	According to the disaggregated data that was available, there are a higher proportion of females enrolled in this program over the past five years as compared to the college.

Are the students served in this program representative of the district population? Please explain.	Students served in this program are representative of the district population. Students are from a wide geographical range within the college's district.

Review Results	
Action	☐Continued with Minor Improvements ☒Significantly Modified ☐Placed on Inactive Status ☐Discontinued/Eliminated ☐Other (please specify)
Summary Rationale Please provide a brief rationale for the chosen action.	The Department Chair is working with the Institutional Research Office on a report that will recommend the direction for the Health Information Technology programs, which includes the Medical Coding Specialist program.
Intended Action Steps What are the action steps resulting from this review? Please detail a timeline and/or dates for each step.	If the program does not show improvement and major change in enrollment and completion rates, the program will be recommended for withdrawal.
Program Objectives If program objectives are not being met, what action steps will be taken to achieve program objectives?	Program objectives are being met. No action needed.
Performance and Equity To what extent are action steps being implemented to address equity gaps, including racial equity gaps?	All initiatives must be tied to the college's Strategic Plan, which relies on data metrics and bridging any identifiable gaps. The college is currently working to create processes for collecting this data, which should make data collection in the future easier and more readily available.
Resources Needed	Report recommending the direction for the Health Information Technology programs.

Responsibility Who is responsible for completing or implementing the modifications?	Amanda Hannan - Dean of Allied Health and Nursing Kayla Sauerbrunn - Allied Health Department Chair Dr. April Teske - Executive Director of Institutional Effectiveness