COVER SHEET STATEMENT OF NEED

Program Information

Program Name: <u>Healthcare Information Technology</u>
Institution Name: Bellevue College
Degree: BAS, Healthcare Technology and Management Level: Bachelor (e.g. B.S. Chemistry) (e.g. Bachelor) Type: Healthcare Information Technology CIP Code: 51.0706 (e.g. Science)
Proposed Start Date: Fall Quarter 2012
Projected Enrollment (FTE) in Year One: 25 FTE At Full Enrollment by Year: 60 FTE by 2016 (# FTE)
Funding Source: State FTE Self SupportX Other
Mode of Delivery
Single Campus Delivery Bellevue College (enter locations) Off-site (enter locations) Distance Learning Online courses
(enter formats)
Statement of Need • Employer demand • Student demand • Options for place-bound students Please see criteria and standard sheet FORM B
Contact Information (Academic Department Representative) Name: Tom Nielsen Title: Vice President of Instruction Address: Bellevue College 3000 Landerholm Circle SE, Room A202 Bellevue WA 98007-6484 Telephone: (425) 564-2442 Fax: (425) 564-6163 Email: tom.nielsen@bellevuecollege.edu
Chief Academic Officer Chief Academic Officer Date

Degree Description

Bellevue College requests authority to proceed with the development of a new bachelor of applied science degree in Healthcare Technology and Management with a concentration in Healthcare Information Technology. The degree would prepare graduates to be effective members of a team that manages and performs the customization, implementation, integration and maintenance of healthcare information systems, data and components.

The college proposes to articulate the new 2+2 degree with Washington community and technical college associate degrees in information technology-related programs (IT) and information and records management programs. Depending on which associate degree students possess, the curriculum will begin with two entry pathways to prepare students for the core courses – one providing essential background in healthcare and the other, the fundamentals of IT. Students will then coalesce in the core program to take general education courses focused on healthcare issues, and applied technology courses in workflow process, project management, information systems analysis, data security, and so forth. Students will work in teams through the online medium to solve real world problems while strengthening their particular area of interest and gaining advanced expertise.

Although one other college in Washington has recently developed an undergraduate degree in healthcare information, this degree program will be distinctly different in its focus. As an applied baccalaureate degree, students will be able to enter the program with a professional/technical degree; most four-year healthcare-related or IT/CS-related programs require a transfer degree which effectively shuts the door on professional-technical college graduates. Because the degree will be offered online as well as in the classroom, students from any part of the state will be able to enroll, expanding opportunities for place bound students. Most of the new degree programs emphasize healthcare information management, which focuses on the collection and organization of medical records and coding. The Bellevue College degree will be in healthcare information technology, which utilizes computer technology to implement and maintain healthcare data systems, as well as to analyze and utilize that data to facilitate efficient and effective healthcare delivery and payer organizations.

Bellevue College has a reputation for delivering high quality programs in information technology and has been recognized nationally for its work through the National Workforce Center for Emerging Technologies and at the state level as a Center for Excellence in Information Technology. In addition the college is rapidly becoming a leader in the field of healthcare IT (HIT) education, having received federal grants from the Office of the National Coordinator for Health Information Technology, National Science Foundation and Department of Labor totaling \$8.5M for implementation of healthcare IT curricula development and dissemination. BC has also been designated by the Washington State Healthcare Authority as the lead healthcare organization for WA state workforce development and technical training in Healthcare IT.

BC aspires to develop a bachelor's degree program that furthers the work being done in healthcare IT and creates a career pathway for students interested in this field. BC has already made progress in the HIT arena by offering curriculum via its Health Informatics certificate program to update skills for those who want to move into the field of HIT. Current enrollment is typically between 25-27 students per quarter. This new applied bachelor's degree is an appropriate fit for BC that builds on the college's expertise and provides an outstanding educational choice in a rapidly growing, high demand field.

Employer Need

Because the field of healthcare information technology is still in an emerging phase, to get a complete picture one must look at the emerging trends and reasons for possible growth in this field. Through the American Recovery and Reinvestment Act of 2009 (ARRA) and the Health Information Technology for Economic and Clinical Health Act (HITECH), the federal government has invested over \$19.2 billion in stimulus funding to support adoption of electronic medical records (EMR) in every hospital, clinic and ambulatory practice to advance the use of information systems in healthcare. With its new applied bachelor's degree, Bellevue College proposes to prepare the workers who will be needed in Washington State to implement these new information systems.

In an article published in the May 23, 2011 edition of <u>Information Week</u>, Nicole Lewis affirms the need to prepare people for this emerging field. Quoting a study conducted by the University of California San Diego extension, she states that "a career in health information technology is the hottest vocation for college graduates in this challenging economy."

The article goes on to say,

As healthcare delivery organizations embark on transferring patient records from paper-based systems to digitized medical records, the shift has fueled a demand for health information technicians who can oversee the growth of a comprehensive database of medical records during the next decade.

.... To support this shift, the healthcare industry will need technicians for emerging jobs such as healthcare integration engineer, healthcare systems analyst, clinical IT consultant, and technology support specialist, the report said.

"Several factors--a growing industry with vast employment needs, a societal concern with federal backing for broad reform, and a solution incorporating advanced knowledge and skills among workers--combine to form a strong base for workforce development and employment opportunity for the coming decade," Mark Cafferty, San Diego Workforce Partnership president and CEO, said in a statement.

¹ http://www.informationweek.com/news/healthcare/EMR/229625377

He also said skilled knowledge workers will not only meet the immediate needs in healthcare, but also will serve as a catalyst for new and emerging types of jobs in the coming years as the impact of healthcare IT takes hold.

The Bureau of Labor Statistics estimates that medical records and health information technicians held about 172,500 jobs in 2008 (about 39% of jobs were in hospitals). Jobs are expected to grow by 20%, or about 35,100 new jobs, for the decade 2008-2018.²

The most recent studies conducted for the Office of the National Coordinator for Health Information Technology (ONC) estimate that 80% of physician offices and 89% of hospitals have not yet begun to use electronic healthcare records (EHR) at a basic level of function. The anticipated growth in the use of EHR systems is expected to create a demand for HIT workers who are prepared to provide installation services, workflow redesign, and the support of activities such as quality reporting and other key aspects comprising the meaningful use of EHRs. Thus, the limited supply of qualified healthcare information professionals is a factor that can limit the rate at which certified EHR technology can be adopted, and may be one of the greatest barriers to comprehensive adoption and meaningful use of healthcare information technology (HIT). As physicians and hospitals increasingly adopt EHRs, the demand for qualified healthcare IT professionals is certain to grow, and to exceed the capacity of existing training programs.³

Further driving home this point, an August 2010 article appearing in *The Rheumatologist* stated,

HITECH's reach extends well beyond EHR adoption to include the development of a strong framework and infrastructure to support health information technology (HIT) adoption and implementation, health information exchange infrastructure, HIT workforce training, and health information and communication systems research and development.

Under the provisions of HITECH, CMS [Centers for Medicare and Medicaid Services] estimates that between \$14.1 and \$27.5 billion in funding will be distributed through the EHR Meaningful Use incentive program. This program is meant not only to lend support for the acquisition of EHR systems, but also to ensure that systems purchased are capable of meeting the minimum requirements for secondary utilization and exchange of health information.⁴

George Lauer, a journalist for *iHealthbeat*.com, stated in a March 2009 article, "Many predict it will take a small army to achieve the goal of computerizing the nation's medical records within five years. Don Detmer, president of the American Medical Informatics Association, estimates it will take as many as 130,000 information technicians and 70,000 informatics specialists." He went on to say, "While IT opportunities in other industries are stagnating, healthcare IT offers

² ibid

³ U.S. Department of Health and Human Services

⁴ http://www.the-rheumatologist.org/details/article/863255/What Does Meaningful Use Really Mean.html

many new opportunities and probably will attract skilled IT workers from other walks of life, such as from the financial, auto and engineering industries."⁵

Many skilled IT workers laid off from industries hurt by the economic downturn have the technical skills for these jobs, but they will need more than just IT skills. In February 2010, the American Society of Health Informatics Managers (ASHIM) published the results of a survey on jobs in healthcare information technology⁶. Of the 135 HIT professionals who responded to the survey, ninety percent believe that HIT employees need to have both IT and healthcare experience. Ninety-six percent believe that there will be 50,000 - 200,000+ new jobs in HIT between now and 2015. More than 50% of the respondents believe IT professionals will seek additional skills to work in HIT.

HIMSS (Healthcare Information and Management Systems Society) conducts a monthly survey of healthcare IT professionals on current industry trends and publishes the results in a newsletter named Vantage Point. Their most recent survey published in February 2011 noted,

According to the United States Bureau of Labor Statistics, in December, 2010 employment in the healthcare sector continued to expand, with a gain of 36,000 jobs, with the highest growth in ambulatory services. Because the Bureau's report is not specific to healthcare information technology (IT) positions, this edition of the HIMSS Vantage Point took the opportunity to survey our audience. Nearly three-quarters of respondents, who represent provider, vendor, consulting and other work sites, indicated that they hired IT FTEs over the course of 2010. Another two-thirds have the budget to hire additional IT FTEs in 2011. Clinical informatics professionals and implementation experts are the two areas for which respondents anticipated that their organization would need to hire staff as the industry transitions from traditional, paper-based records to electronic technology. These were also the areas in which respondents report a perceived staffing shortage that would impact their organization's ability to handle future work. Finally, 60 percent of respondents indicated that IT projects would be slowed down either because appropriate staff couldn't be hired at their organizations or because non-provider organizations could not hire the staff needed to assist clients."7

An article published in 2010 by *iHealthBeat* reported that "state and local spending on healthcare IT-related initiatives is expected to increase by 19% across the next five years, propelled by the economic stimulus package and other emerging healthcare trends, according to a report issued from market research firm Input, Federal Computer Week reports. The report found that the total addressable health IT market is estimated to reach \$9.9 billion in 2015, up from \$8.3 billion in 2010."8

⁵ George Lauer, "Where Will the 'Mini-Army' of Health IT Workers Come From?", iHealthbeat.com, 3/13/09.

⁶ http://docs.google.com/viewer?a=v&q=cache:SO5c5k 53wcJ:ashim.org/wp-content/uploads/2010/02/HIT-Jobs-Survey.pdf+HIT+jobs+survey&hl=en&gl=us&pid=bl&srcid=ADGEESiWzDQgX9FV0XzRCIJ07iOPh3XhB-BI96zanwFEWujNdgZIGS51YMhEmUe A-EShQLa2V5WsFV9D1MLHiUbB CTqnDlZiftDGhwA7UCzshcJlu6InVogPurfeKFS42i-

kMUiNfl&sig=AHIEtbRSeYn4Q3thSvXM4C1j4jpuY7Jvbg

http://www.himss.org/content/files/vantagepoint/pdf/vantagepoint_feb11.pdf

http://www.ihealthbeat.org/articles/2010/8/25/local-state-health-it-spending-to-hit-10b-by-2015-report-finds.aspx

A challenge to providing federal and state data on employer demand in healthcare IT is that it is an emerging field and is not currently tracked by the Bureau of Labor Statistics (BLS), so one must look to somewhat related fields for data. In the field of medical records and healthcare information, technicians assemble patients' healthcare records and are responsible for the electronic coding of records into the new electronic healthcare systems. This job typically requires an associate's degree and would be one of the feeder programs for BC's new degree program. The BLS reports that employment is expected to increase by 20 percent, or about 35,100 new jobs, in this field, much faster than the average for all occupations through 2018. The BLS reports that job prospects will be very good with openings, in addition to growth, coming from retirements, those who leave the occupation permanently and a particularly high demand for technicians that demonstrate a strong understanding of technology and computer software.

In the area of medical and health service managers (including health information managers), the BLS reports that job opportunities will be good, especially for applicants with work experience in healthcare and strong business and management skills. They report that this segment is expected to grow 16 percent from 2008 to 2018 (from 238,500 to 328,800), faster than the average for all occupations.

In searching Washington State job trends data, Workforce Explorer offers no reportable data for the emerging field of healthcare IT. Again, although not a perfect match, we can look at data for medical records and health information technicians or computer and information systems managers, which are the nearest fields to show state and local trends in healthcare IT. In WA, growth between 2008 and 2018 shows a 22.3 percent ten-year growth rate and 200 average annual openings for medical records professions. For the same period, computer information systems jobs in WA are projected to grow a total of 12.5 percent with 275 annual openings.

In the Seattle King County Workforce Development Area jobs for computer and information systems managers for the same period are projected to grow 12.9 percent over ten years with average annual openings of 189. Medical records technicians in Seattle King County mirror the state averages – 22.2 percent growth over ten years with 70 average annual openings.

By looking at the current job postings in health IT, one can get a more complete perspective on demand in the specific field of Health IT. A job search conducted in March 2011 with the terms health informatics, healthcare informatics, health IT, healthcare IT or clinical informatics in the job description on indeed.com, a web crawler for jobs, produced 8,742 national job postings and 283 job postings in WA State (233 within a 25-mile radius of Bellevue), with most of these jobs in the Puget Sound area.

A survey conducted by Bellevue College in March 2011 of healthcare IT professionals shows that 58% of survey respondents hire exclusively or significantly more health information technology (HIT) employees with a baccalaureate degree while only 9% hire equal numbers of baccalaureate and associate degree holders; only 2% hire mainly associate degree holders. The predilection for hiring employees who hold a baccalaureate degree was confirmed by this industry search of web-posted jobs.

As these job titles are still fairly new in the industry, one can also look at jobs based on more traditional IT job titles. If the terms healthcare <u>and</u> application support, business analyst, business analysis, systems analyst, systems integration, or business intelligence are searched in the job description, then the search produces 10,831 job postings nationally, 298 in Washington and 245 in a 25-mile radius from Bellevue. As a side note, "healthcare IT" is the most used term in job postings, while "health IT" shows the highest growth of jobs including the term, followed by "clinical informatics" and "healthcare IT". Again, the majority require a bachelor's degree. The trends for these job titles show a steady growth.

On a local level, Bellevue College surveyed 826 members of the Washington chapter of Healthcare Information and Management Systems Society (HIMSS) in March 2010. Although only 45 people responded to the survey, the data mirrored national trends. Eighty-seven percent responded that the need for professionals trained in Healthcare IT is growing; while 93 percent responded that there is a critical to moderate shortage in finding healthcare IT professionals to fill their employment needs.

Fifty-eight percent of the respondents indicated that when they hire information technology workers they would hire either bachelor's degree and above exclusively or significantly more bachelor degree than associate degree graduates. Another 31 percent said that industry experience was the quality they sought most. Comments about why they prefer bachelor's degree candidates fell into two main categories: one had to do with demonstrating the commitment and advanced thinking skills conferred by a bachelor's degree. Other comments concerned the ability of the person to apply the technical skills that are critical to bridging the gap between information technology and healthcare. Comments include, "Completing a four year degree demonstrates perseverance and commitment. A four year degree provides a more well-rounded candidate." "Bachelor's degree graduates typically bring a higher level of analytical, organizational and interpersonal skills."

When asked to select which workplace skills were the most important, survey respondents identified those that require a combination of IT-focused critical thinking and problem solving skills and the ability to manage workflow and project oriented work within the healthcare environment. These will form the essential elements of the curriculum in the new healthcare IT degree program at BC.

Chart 1: Employer Rankings of Importance of Workplace Skills

	Very Important	Important	Very Important + Important
Information System Analysis & Design	54.55%	36.36%	90.91%
Healthcare Workflow Process Analysis &			
Design	70.45%	15.91%	86.36%
Project Management	50%	36.36%	86.36%
Healthcare Information Systems	59.09%	27.27%	86.36%
Systems Integration	54.55%	29.55%	84.10%
Database	29.55%	40.91%	70.46%
Networking	15.56%	46.67%	62.23%
Mobile & Portable Devices	24.44%	37.78%	62.22%
Healthcare Legal & Regulatory Environment	22.22%	40%	62.22%
Programming	13.33%	44.44%	57.77%

Based on the amount of funding being invested in the convergence, in all of its manifest forms, of healthcare and information technology; the desire by those in the industry to hire baccalaureate-level workers whose expertise combines both fields; and the shortage of appropriately skilled workers, it is clear that there is great demand for new bachelor-degree programs to fill this gap.

Bellevue College Feeder Programs

The new BAS in Healthcare IT will offer a baccalaureate pathway for associate degree graduates coming from information technology programs, information and records management programs and allied health programs. The two IT professional/technical associate degree programs at Bellevue College that will comprise the foundation of the new degree are Information Systems (IS) and Network Services and Computing Systems (NSCS). Information Systems focuses on software development, databases and analytics while Network Services & Computing Systems focuses on systems infrastructure and operating systems. Both degrees provide a valuable basis for the new degree.

From its inception, the goal of the BC IT degrees has been to educate students in the latest software and hardware techniques and technologies so that they are well prepared for the growing number of careers in IT. The healthcare IT degree is the next step to achieve this goal.

The Information Systems program began in the late 1970s and continues to evolve to meet the needs of information systems employers. The program began with a degree in Programming and broadened to include a degree in Database Administration in 2003. In 2005 a program in Business Intelligence (BI) was added, which addresses the growing needs of organizations to make sense of all the data they had been collecting. In the 21st century IT organizations have

been shifting their dollars from operational systems to systems that facilitate data analysis and performance management. With that shift came the need for qualified people to develop and apply new software. The BC BI program addresses that need.

The Network Services & Computing Systems program began in 2000 with a degree in Technical Support to educate students to support the proliferation of PCs. In about 2001, the Network Support degree was created, with a track in Operating System Technical Support added in 2004. At that time, the Network Support degree name was changed to Network Services and Computing Systems to reflect the broad nature of the curriculum. Beginning in fall 2010, the Technical Support and Network Services and Computing Systems degrees were combined into a single Network Services & Computing Systems degree with three distinct tracks.

Chart 2 shows the several tracks of the two Bellevue IT degrees along with their FTES and total graduations. The chart reveals a substantial difference between the number of students enrolled in the programs and the number of actual students who graduate. This is due to the fact that, except for the networking degree which articulates with Eastern Washington University, graduates have no opportunity for entry into a four-year degree program, so there is little benefit to obtaining the associate degree. Instead, most students obtain specialty certificates which help them either find jobs or gain career advancement. This trend was exhibited in the data from every community and technical college that provided information for this proposal (see Chart 3). The new healthcare IT degree should help to turn around the low number of associate degree graduates, since students will have a clear educational pathway to a bachelor's degree.

Chart 2: Bellevue College IT Associate Degree Programs FTES and Graduates

	200	5-06	2006-07		2007-08		2008-09		2009-10	
	Act FTES	Grads								
Information Systems	52	17	62	19	68	7	106	4	170	11
Networking										
Services	32	22	15	17	33	12	43	15	56	17
Totals	84	39	77	36	101	19	149	19	226	28

Student Demand

From March – May 2011, the college conducted a survey to gauge how many students enrolled in Puget Sound community and technical college IT programs or the healthcare records and coding programs might be interested in a bachelor's degree in healthcare IT. Although this is an emerging field that is just beginning to reach people's awareness, the results were encouraging. Of the 264 students who responded to the survey, 68 percent said they would be interested in an applied bachelor's degree in healthcare IT; and 88 percent said they would be interested in taking advanced courses in Healthcare IT. Most students' comments centered on a bachelor's degree

giving them a better competitive advantage and more confidence when applying for a job, as well as greater flexibility in the choice of jobs. Many stressed increased opportunities for career advancement and jobs with broader responsibilities, as well as increased job security. Several students reflected that it is increasingly difficult to get a job in any IT-related field without a baccalaureate degree. Students also commented that this baccalaureate degree would offer them more flexibility than a traditional university degree and would allow them to keep their job while completing the degree. A few students saw the baccalaureate degree as a gateway to post-graduate study. Several students appreciated the wider breadth of knowledge and the more indepth and higher-level skills that a baccalaureate degree would afford them.

The proposed bachelor's degree will offer an option that is completely online for those students who are unable to come to campus, which will draw students from throughout the state. However, for the purposes of this proposal the college collected data from seven Puget Sound community and technical college IT programs and the three Healthcare Information programs to evaluate their annualized FTES and associate degree completions for the years 2005-06 through 2009-10. In academic year 2009-10, the eight colleges shown in Chart 3 produced 1,153 annualized FTES and 179 degree completing students.

If one assumes that only 25 percent of the graduates would enroll in the new degree, rather than the 68 percent indicated in the survey, that would provide 45 students from these programs alone. If one takes into account the other community and technical IT program graduates not included in this analysis, there is excellent potential for very strong enrollments.

Another source for students in this new degree program will come from incumbent healthcare workers who need IT education to improve their career pathway and from laid-off IT workers who are no longer finding work in more traditional IT fields. Although it is impossible to quantify the number of people who will be included in this demographic, the literature on the subject indicates it is likely to be a substantial number.

In an article titled, "Where Will the 'Mini-Army' of Health IT Workers Come From?" Bill Hersh, chair of the Department of Medical Informatics and Clinical Epidemiology at Oregon Health and Science University's School of Medicine, predicts many members of the new mini-army will be health professionals looking to move into the growing IT field. He says there also will be IT professionals from other industries looking for work in the newly expanding health IT arena. The same article quotes JoAnn Klinedinst, vice president of education for the Healthcare Information and Management Systems Society. She says, "HIMSS believes that sources of [healthcare IT] workers, both implementers and end users of healthcare information technology, will include the displaced worker; our veterans; those currently working in healthcare who desire a role centered on healthcare information technology; sources from other industries that provide

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⁹ George Lauer, "Where Will the 'Mini-Army' of Health IT Workers Come From?", iHealthbeat.com, 3/13/09.http://www.ihealthbeat.org/Features/2009/Where-Will-MiniArmy-of-Health-IT-Workers-Come-From.aspx

similar core competencies on topics like quality assurance, management engineering, process improvement, project management; and our high schools and vocational schools". ¹⁰

Chart 3: Annualized FTES and Completers for Potential Feeder Programs

	2005-	06	2006-	07	2007-	-08	2008-	-09	2009-	-10
	Act FTES	Grads								
Bellevue College										
IS	52	17	62	19	68	7	106	4	170	11
Networking Svc	32	22	15	17	33	12	43	15	56	17
Tacoma CC										
HIT	25	10	30	15	29	15	25	14	41	11
Networking	27	10	34	8	42	6	68	11	98	18
Bates TC										
Database	16	4	13	0	15	0	16	3	15	1
ITS	34	6	25	2	61	1	37	2	39	8
Software	47	0	44	2	37	1	46	2	45	3
Web	26	0	34	0	48	1	36	2	42	5
Seattle Central CC										
Network Design	34	6	21	8	24	5	44	3	59	5
Programming	27	4	34	3	41	4	53	3	66	1
Spokane CC										
Health Info Tech	38	18	32	20	24	12	32	10	40	22
Edmonds CC										
CIS	54	11	45	5	49	5	64	9	86	15
Database IT	7	4	7	2	7	3	7	0	13	2
Info Security	2	0	7	1	10	1	16	1	27	9
Network Tech	28	11	29	12	25	10	40	23	70	10
Web App	3	2	11	1	10	3	14	0	28	2
Bus IT/Med IT	5	5	19	8	21	8	32	4	54	8
Green River CC										
Information Tech	35	8	48	9	62	6	80	12	120	7
Cascadia CC										
Network Tech/Web App	23	12	15	7	14	5	10	9	9	5
Shoreline CC										
Health Informatics	42	42	39	25	49	15	67	16	75	11
Total All Programs	557	192	564	164	669	120	836	143	1153	171

¹⁰ Ibid.

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Maximizing State Resources and Serving Place-bound Students

Only three records and coding associate-level programs in Washington community and technical colleges and a smattering of other healthcare information programs at private colleges as well as a Med IT certificate program at Bellevue College offer education in healthcare records and technology. Except for Bellevue's Med IT certificate, these programs do not provide sufficient in-depth information technology and data analysis courses that workers need to obtain advanced healthcare IT jobs. Between the availability of new funding and educational efforts encouraged by the federal government and HIMSS, new programs are beginning to emerge. Bellevue College just received a grant from the National Science Foundation to create a national Health IT Specialist (HIS) certification in healthcare information technology and develop curriculum modules beginning at the high school level and completing in community college.

Chart 4 shows Washington programs in health information management or technology. The University of Washington bachelor's degree in Health Informatics and Health Information Management, prepares people to work in the management of health records rather than in systems that serve the delivery of data. Western Governors University offers an online BS in Health Informatics which is similar in scope to the UW degree. Eastern Washington University offers a BS in Health Services Administration focused on healthcare information technology, but does not accept students with professional/technical degrees. A problem for professional-technical graduates is that they are unable to transfer into these baccalaureate programs to continue their studies. Except for general education courses, they would need to begin their studies again to be accepted into these programs. The new BAS in Healthcare IT at Bellevue will provide a direct pathway for students holding professional-technical associate degrees.

Chart 4: Related Degrees at the Associate or Bachelor's Degree-Level

Degree Title	Institution	Degree
Health Informatics and Information	Shoreline Community College	AAS
Management		
Health Information Management	Tacoma Community College	AAS
Health Information Technology	Spokane Community College	AAS
Information Technology for	North Seattle Community	AAS-T (no longer being
Healthcare	College	offered)
Health Information Technology	Devry University	AAS
Health Informatics	Bellevue College	Certificate
Health Services Administration	Eastern Washington University	BA
Health Informatics and Health	University of Washington	BS and post baccalaureate
Information Management		certificate
Health Information Administration	University of Washington	Post baccalaureate certificate
Health Administration	University of Phoenix	BSHA
Computer Information Systems,	Devry University	BS
Health Information Systems emphasis		
Health Informatics	Western Governors University	BS

The BAS in Healthcare IT will offer both classroom-based and online degree options, making it attractive for students throughout the state. With its focus on the application of healthcare technology, the degree will ensure that graduates have specific skills to fill the overwhelming workforce demand that has been created by the HITECH Act.

Once the college completes the new degree prerequisites and curriculum, it will work with each feeder college to develop associate degree pathways that minimize additional coursework graduates would need to enter the degree program. BC has already begun talks with all of the colleges shown in Chart 5. Every college has expressed interest in having a bachelor's option for their students and has agreed to work with Bellevue to create educational pathways. In the fall, BC will hold a meeting with college program chairs and faculty to begin articulation agreements.

Chart 5: Puget Sound Community and Technical College Feeder Programs

College	Program list
Bates TC	Database Technologies (AT and AAS)
	Information Technology Specialist (AT)
	Software Development (AT and AAS)
	Web Development (AT and AAS)
Cascadia CC	Network Technology (AAS)
	Web Application Programming Technology (AAS)
Edmonds CC	Computer Information Systems (ATA)
	CIS: Database Information Technologies; Information Security
	and Digital Forensics; Web Application Developer (ATA)
	Network Technology (ATA)
Green River CC	IT Information Assurance (AAS-T)
	IT Networking; Networking Infrastructure (AAS-T)
	IT Security (AAS-T)
	IT Systems (AAS-T)
	IT Computing and Software Systems (A-PP)
Highline CC	Data Recovery & Forensics (AAS)
	Information Systems Project Coordinator (AAS)
	Network Specialist (AAS)
	Web Database Developer (AAS)
Lake Washington TC	Computer Security & Network Technician (AAS)
Seattle Central CC	Network Design & Administration (AAS-T)
	Computer Programming (AAS-T)
	Web Development (AAS-T)
Shoreline CC	Business Technology or Computer Information Systems (AAS-T)
	Health Informatics and Information Management (AAS)
South Seattle CC	Network Administration (AAS & AAS-T)
	Computing and Software Systems (AA)
Spokane CC	Health Information Technology (AAS)
Tacoma CC	Networking and Convergence Technologies (AAS)
	Health Information Management (AAS)

The college has also met with Eastern Washington University to discuss how we can best coordinate with their new Healthcare IT degree. Although Eastern's degree is already being offered, they do not have funds to develop online courses and would like to work with BC as we develop our courses to collaborate on course content.

Conclusion

As a state leader in information technology programs and a national leader in developing new curricula to address the rapid advances in the field of healthcare information technology, Bellevue College is well situated to develop a bachelor of applied science degree in healthcare information technology. There is urgent need for a program that will prepare graduates to effectively manage and perform the design, implementation, integration and administration of healthcare information systems and components. Professional-technical community and technical college graduates are desperate for programs that will allow them to earn a bachelor's degree without having to begin their education at square one; this program will permit them to start on that pathway immediately. Because it will be offered online, the new program will be accessible to any student regardless of where he or she lives. It will fill a critical workforce education gap and provide high wage jobs for graduates throughout the state.