



ROCKFORD MSA

PROMISING CREDENTIALS

ALIGNING DUAL ENROLLMENT WITH HEALTH
CARE LABOR MARKET NEEDS

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FOREWORD

Great Lakes College and Career Pathways Partnership

Funded by the Joyce Foundation, the Great Lakes College and Career Pathways Partnership (GLCCPP) supports four Great Lakes communities in building high-quality college and career pathways that equip students—particularly historically marginalized students or underrepresented groups—to thrive in college, career, and beyond. The Joyce Foundation created this funding opportunity in 2015 as one strategy to improve the educational and employment outcomes of residents in the Great Lakes region. Its approach is to identify, document, and scale programmatic and policy innovations.

Based on their dedicated leadership, strong K-12 and postsecondary partnerships, vision for enhancing college and career pathway systems, student population needs, and high employer involvement, the Joyce Foundation chose the following communities for this opportunity:

- The Central Ohio / Greater Columbus area
- Madison, Wisconsin
- Northwest Chicago suburbs, Illinois
- Rockford, Illinois

The Joyce Foundation also designated three national leaders in college and career pathway development to provide strategic technical assistance to these regions as they build and expand their pathway systems: JFF’s Pathways to Prosperity team, ConnectEd- The National Center for College and Career Readiness, and the Education Systems Center at Northern Illinois University.

Through GLCCPP, these four regions are bridging stakeholders across secondary, postsecondary, and workforce systems to align education with career opportunities in high-demand industries. In each region, pathways are collaboratively designed to include a variety of college and career preparation strategies, including work-based learning and early college credit. The aim is to enable students to pursue a two- or four-year degree and obtain a credential that has value in the labor market.

Promising Credentials and Program of Study Analysis

JFF works with regions to reverse-engineer pathways for grades 9 through 14-plus (9-14+) from the labor market to in-demand postsecondary credentials to dual enrollment offerings at the high school level. This process begins with an analysis of the regional labor market and postsecondary certificates and degrees, which reveals postsecondary credentials that are particularly sought after in the labor market. JFF coined the term “promising credentials,”

which refers to postsecondary credentials that lead to occupations that are in-demand, offer a family-supporting wage, and provide opportunity for growth within the industry.

JFF then analyzes and maps the programs of study for each postsecondary credential to identify the highest-leverage courses that should be included in a 9-14+ pathway program. JFF developed the terms “door opener dual enrollment” and “strategic dual enrollment” for courses that are high-leverage, nonremedial, core academic, and technical dual enrollment courses for high school students who have not yet matriculated into a formal degree program.

Door opener dual enrollment courses are college-level courses that provide high school students with foundational industry exposure and are required by the highest quantity of credentials within a career pathway. These courses provide the most postsecondary credentialing options for students. Strategic dual enrollment courses are college-level courses for high school students that apply to credential requirements and lead to specific labor market-aligned, high-growth, high-wage careers within an industry. As they are aligned with promising credentials, strategic courses accelerate a student on a pathway to a particular high-demand career in the labor market. Both door opener and strategic dual enrollment courses are important tools that young people can leverage as they move along pathways from high school, through college, and into careers.

INTRODUCTION

In Rockford, Illinois, many stakeholders are working together to help young people achieve their educational and career goals and build a thriving regional economy by crafting 9-14+ career pathways. This community of stakeholders comprises representatives from the Rockford Public Schools; Rock Valley College (RVC); Alignment Rockford, which is serving as an intermediary organization; and regional industry partners. Together, they identified health care as a promising sector to focus on to develop 9-14+ career pathways in Rockford.

Educational stakeholders at both the secondary and postsecondary levels use labor market information to design relevant programs of study that put students in Rockford on track for high-growth, high-wage careers. Students who attend Rockford Public Schools can take dual enrollment courses to earn college credit at RVC as part of their high school core requirements. This opportunity can accelerate students on a path to college and career readiness.

HEALTH CARE IN ROCKFORD

Health care has proven to be a high-demand, labor market-aligned industry with opportunities for career advancement and family-supporting wages. Data from Emsi and the US Bureau of Labor Statistics indicate that Rockford's health care industry is growing, with 25,764 jobs projected by 2026, up 11 percent from 2016 levels. This is an increase of over 2,500 health care positions in the Rockford, Illinois, Metropolitan Statistical Area (Rockford MSA) over one decade.

The median annual salary in the health care industry in Rockford is \$51,937, which is higher than the median household income of \$49,987.¹ In Rockford, the living wage is \$10.36 per hour for a single adult and \$22.26 per hour for a single adult who supports one child.²

Labor Market Snapshot

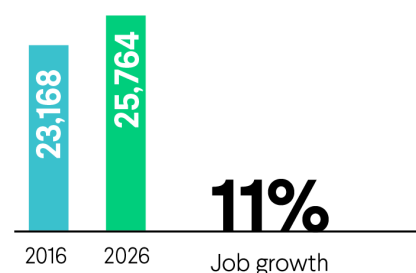


Table 1: Top 10 Health Care Occupations in Rockford MSA, by Job Growth³

Occupation Option	Employed in Industry (2016)	Employed in Industry (2026)	# Change (2016-2026)	Median Hourly Earnings	Typical Entry-Level Education
Registered Nurses	3,424	3,778	354	\$29.34	Bachelor's Degree
Personal Care Aides	1,290	1,623	333	\$10.53	No Formal Educational Credential
Home Health Aides	845	1,077	232	\$11.34	No Formal Educational Credential
Medical Assistants	1,026	1,205	179	\$14.98	Postsecondary Nondegree Award
Receptionists and Information Clerks	578	673	95	\$12.89	High School Diploma or Equivalent
Medical Secretaries	503	591	88	\$17.39	High School Diploma or Equivalent
Nurse Practitioners	188	245	57	\$44.19	Master's Degree
Residential Advisors	340	396	56	\$11.20	High School Diploma or Equivalent
Licensed Practical and Licensed Vocational Nurses	516	565	49	\$22.91	Postsecondary Nondegree Award
Physician Assistants	170	213	43	\$48.98	Master's Degree

Source: Emsi 2016.1—QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Many of the top 10 growing health care occupations are nursing, nursing support, health care administration, or clerical positions (*see Table 1*). However, only three of the top 10 occupations (registered nurses, nurse practitioners, and licensed practical or licensed vocational nurses) offer family-supporting wages. While nursing support occupations like personal care aides and home health aides are expected to grow significantly, these jobs offer very low wages. Fortunately, the health care industry in Rockford is robust and offers a wide array of promising careers that are high-growth, high-wage, and aligned with the RVC health science program of study.

Promising Health Care Credentials in Rockford

Students in Rockford who are interested in the health science field can enroll at RVC to earn a certificate, an associate's in applied science (AAS) degree, an associate's in arts (AA) degree, or an associate's in science (AS) degree. Depending on which certificate or degree they pursue, students who participate in the dual enrollment program at RVC will graduate with widely varying prospects for local employment and wages (*see Table 2*).

Table 2: Health Science Offerings at Rock Valley College by Job Growth⁴

Credential Conferred	Occupation Option	Employed in Industry (2016)	Employed in Industry (2026)	# Change (2016-2026)	Median Hourly Earnings	Typical Entry-Level Education
Associate's Degree in Nursing (ADN)	Licensed Practical and Licensed Vocational Nurses	516	565	49	\$22.91	Postsecondary Nondegree Award
Medical Office Professional (AAS)	Office Clerks, General	440	479	39	\$14.77	High School Diploma or Equivalent
Public Health Administration (AA)	Medical and Health Services Managers	244	275	31	\$40.44	Bachelor's Degree
Phlebotomy Technologist Certificate	Phlebotomists	159	189	30	\$14.96	Postsecondary Nondegree Award
Health Information Management (AA)	Medical Records and Health Information Technicians	256	281	25	\$16.75	Postsecondary Nondegree Award
Radiography (AS)	Radiologic Technologists	289	309	20	\$26.94	Associate's Degree
Dental Hygienist (AS)	Dental Hygienists	314	331	17	\$35.94	Associate's Degree

Surgical Technician Certificate	Surgical Technologists	104	116	12	\$18.87	Postsecondary Nondegree Award
Respiratory Care (AAS)	Respiratory Therapists	151	162	11	\$26.69	Associate's Degree
Pre-Pharmacy (AA)	Pharmacy Technicians	117	126	9	\$13.81	High School Diploma or Equivalent
Exercise Science (AS)	Athletic Trainers	34	34	0	\$22.54	Bachelor's Degree
Kinesiology (AA)	Athletic Trainers	34	34	0	\$22.54	Bachelor's Degree
Nutrition/Dietetics (AS)	Dietetic Technicians	185	184	(1)	\$10.58	Associate's Degree

Source: Emsi 2016.1—QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended

For example, a nursing aide certificate could lead to a career as a personal care aide, a job with growing demand both in Rockford and across the country. However, the median hourly wage for a personal care aide in Rockford is just \$10.53, less than half of the family-supporting wage in the region. While this certificate could be a stepping stone to another health care occupation that offers higher wages and opportunities for professional growth and career advancement, alone it does not offer a clear route to economic advancement or access to a viable career ladder in the industry.

A vital goal of 9-14+ career pathway development is to ensure that all young people can access educational opportunities that prepare them for personal and professional success. JFF developed the term “promising credentials” to refer to postsecondary credentials that lead to careers that are in-demand, offer a family-supporting wage, and provide opportunity for growth within an industry.

From a regional labor market perspective, some degree and certificate programs in health science at RVC are considered promising credentials and are well-suited for 9-14+ pathway development. Encouragingly, RVC offers several Promising Credentials (*see Table 3 and following detail*).

Table 3: Promising Credentials at Rock Valley Community College

Credential Conferred	Occupation Option	Employed in Industry (2016)	Employed in Industry (2026)	# Change (2016-2026)	Median Hourly Earnings	Typical Entry-Level Education
Associate's Degree in Nursing (ADN)	Licensed Practical Nurses	581	629	48	\$22.91	Postsecondary Nondegree Award
Public Health Administration (AA)	Medical and Health Services Managers	244	275	31	\$40.44	Bachelor's Degree
Radiography (AS)	Radiologic Technologists	289	309	20	\$26.94	Associate's Degree
Dental Hygienist (AS)	Dental Hygienists	314	331	17	\$35.94	Associate's Degree

Source: Emsi 2016.1 – QCEW Employees, Non-QCEW Employees, Self-Employed, and Extended Proprietors

Associate Degree in Nursing (ADN)

An ADN could lead to a career as a licensed practical nurse or a licensed vocational nurse, which offer a median hourly wage of \$22.91, just above the family-supporting wage in the area. Licensed practical nurse jobs are growing in the Rockford region and the nursing field offers a defined career pathway.

Additionally, a student could go on to pursue a bachelor's of science in nursing (BSN) and become a registered nurse, resulting in a median hourly wage of \$29.34. RVC has developed partnerships with five RN-BSN completion programs: Indiana-Wesleyan University, Northern Illinois University, Olivet-Nazarene University, St. Anthony College of Nursing, and University of Illinois in Chicago.

Public Health Administration AA

A public health administration AA could lead to a career as a medical or health service manager, with a median hourly wage of \$40.44. Medical or health service manager positions are projected to grow in the region, adding 31 new jobs by 2026. However, Rockford employers typically prefer that entry-level medical or health service managers hold a bachelor's degree. While some health care institutions may hire a graduate of RVC's public health administration AA, it is more likely that these students will be encouraged to pursue a bachelor's degree in health administration. The field offers a variety of career pathways in health care administration; a

student could go on to lead the management of a health care institution such as a hospital or a community health center, an insurance organization, or a health care-focused nonprofit.

Radiography AS

A radiography AS could lead to a career as a radiologic technologist, which offers a median hourly wage of \$26.94. Radiologic technologist jobs are growing in the Rockford region, though at a slower rate than other health care careers, and there are many opportunities for advancement and specialization within the field of radiography. Radiologic technologists can continue their education to specialize in a variety of disciplines including mammography, sonography, and nuclear medicine.

Dental Hygienist AS

A dental hygienist AS could lead to a career as a dental hygienist, which offers a median hourly wage of \$35.94. Dental hygienist jobs are projected to grow in the Rockford region. While they do not offer many options for career advancement within the industry, dental hygienist positions are considered “lifetime jobs,” as dental hygienists tend to stay in the field for a long time thanks to high stability and wages.

Aligning Dual Enrollment with Promising Credentials

Rockford, Illinois, is uniquely situated to help high school students earn promising credentials through career pathways. Rockford Public Schools is dedicated to providing students with educational experiences in small learning communities that link coursework to the workplace. These small learning communities intentionally design all Rockford Public Schools coursework to include industry-specific context, including core curriculum, electives, and career-based education.

When students in Rockford Public Schools enter 10th grade, they can select an industry focus with the opportunity to enroll in college-level coursework. Working actively in partnership with Rock Valley College, students who meet academic and school prerequisites can take dual enrollment courses to earn college credit at RVC as part of their high school core requirements. This opportunity can accelerate students on a path to achieve postsecondary credentials that have value in the current and future regional labor market.

Taking the coursework recommended in this report will not only lead Rockford students to a postsecondary credential in health care, but support stakeholders in building 9-14+ pathways that lead to labor market-aligned promising credentials. It is important to acknowledge that dual credit enrollment requires readiness in math and English for a student to matriculate directly into an RVC associate’s degree program.

To reach an accelerated pathway to a promising career in Rockford, students must successfully complete the requirements for both their high school diploma and the college-level degree. At RVC, several technical health science courses are best-suited to be offered as dual enrollment courses within Rockford Public Schools (*see Chart 1*). Courses that are required across multiple programs of study and lead to a health science credential are considered highly strategic. These should be embedded in pathways as part of students' dual credit course sequence while in high school. Several courses at RVC are required for multiple credentials at the institution.

Students who take college-level coursework while in high school have not yet matriculated into a specific degree program. For this reason, it is beneficial for them to enroll in courses that provide a broad, foundational opportunity and open doors to many options for further education beyond high school. JFF coined the term “door opener dual enrollment courses” to identify courses that lead to multiple credentials.

At RVC, eight health science courses qualify to be offered as door opener dual enrollment courses because they lead to a variety of credentials within the health care industry (*highlighted in blue in Chart 1*). The eight potential door opener dual enrollment courses are: General Psychology, Fundamentals of Communications, Composition 1, Microbiology, Foundations of Anatomy and Physiology, Medical Terminology, Elements of Statistics, and Intro to Sociology.

Door Opener Dual Enrollment Courses Definition

College-level courses for high school students that provide foundational industry exposure and apply to the highest number of options for postsecondary credentials within a career pathway. They are especially beneficial for students who are interested in an industry but do not know what specific career they want to pursue.

Chart 1: Health Science Door Opener Dual Enrollment Courses in Rockford⁵

Technical/Pathway Courses	Credential Applicability	Respiratory Care (AAS)	Associate's Degree in Nursing (ADN)	Surgical Technician Certificate	Radiography (AS)	Nutrition/Dietetics (AS)	Public Health Administration (AA)	Dental Hygienist (AS)	Phlebotomy Technologist Certificate	Exercise Science (AS)	Sport Management (AS)	Medical Office Professional (AAS)	Pre-Pharmacy (AA)	Kinesiology (AA)	Health Information Management (AA)
General Psychology*	8	✓	✓		✓	✓	✓	✓		✓	✓				
Fundamentals of Communication*	8	✓	✓		✓		✓	✓		✓				✓	✓
Composition 1*	7	✓	✓	✓	✓	✓				✓	✓				
Microbiology	5	✓	✓	✓				✓					✓		
Foundations of Anatomy and Physiology	5	✓	✓	✓						✓			✓		
Medical Terminology	5	✓		✓	✓				✓			✓			
Elements of Statistics*	3									✓	✓		✓		
Intro to Sociology*	3		✓				✓	✓							
Nutrition for Optimum Living	2	✓	✓												
Sociology of Sport	2									✓	✓				
Sport and Exercise Psychology	2									✓	✓				
Anatomy and Physiology 1	2				✓			✓							
Anatomy and Physiology 2	2				✓			✓							
Chemistry 1	1					✓	✓								
Intro to Life Science	1					✓	✓								

These eight potential door opener dual enrollment courses open multiple possibilities across all health science credentials at RVC. However, as previously discussed, not all credentials lead to high-growth occupations that offer family-supporting wages in the Rockford region. By taking door opener dual enrollment courses, students unlock options for themselves. They can continue their education, transition to entry-level work, attain labor market-aligned promising credentials, and ultimately set a trajectory toward a successful and sustaining career.

Four credentials at RVC align with promising careers in Rockford: ADN, radiography AS, public health administration AA, and dental hygienist AS (*see Chart 2*).

When evaluating a course, it is key to consider both how many credentials it applies toward and whether those credentials lead to labor market-aligned, promising careers. For example, while the course Microbiology opens doors to five credentials, only two of them (ADN and dental hygienist AS) align with a promising career in Rockford based on local labor market information. Foundations of Anatomy and Physiology, while applicable across five credentials, is only required within the ADN credential. Similarly, Medical Terminology is a potential door opener course that leads to five credentials, but is only required in the radiography AS program of study.

While potential door opener dual enrollment courses such as Anatomy and Physiology or Medical Terminology offer a strong technical foundation for students that lead to multiple entry-level industry certifications or stackable credentials, it is important to also analyze a program of study through the lens of the labor market. This enables stakeholders to identify what JFF calls “strategic dual enrollment courses.” Strategic dual enrollment courses lead to the greatest number of promising credentials as identified by regional labor market information.

Strategic Dual Enrollment Courses Definition

College-level courses taken by students in high school that fulfill requirements for credentials that lead to high-growth, high-wage careers.

In Rockford, General Psychology and Fundamentals of Communication are particularly well-suited to be offered as strategic dual enrollment courses, both of which are required by all four promising credentials in Rockford.

Chart 2: Health Science Strategic Dual Enrollment Courses in Rockford

Technical/Pathway Courses	Credential Applicability	Respiratory Care (AAS)	Associate's Degree in Nursing (ADN)	Surgical Technician Certificate	Radiography (AS)	Nutrition/Dietetics (AS)	Public Health Administration (AA)	Dental Hygienist (AS)	Phlebotomy Technologist Certificate	Exercise Science (AS)	Sport Management (AS)	Medical Office Professional (AAS)	Pre-Pharmacy (AA)	Kinesiology (AA)	Health Information Management (AA)
General Psychology*	8	✓	✓		✓	✓	✓	✓		✓	✓				
Fundamentals of Communication*	8	✓	✓		✓		✓	✓		✓				✓	✓
Composition 1*	7	✓	✓	✓	✓	✓				✓	✓				
Microbiology	5	✓	✓	✓				✓					✓		
Foundations of Anatomy and Physiology	5	✓	✓	✓						✓			✓		
Medical Terminology	5	✓		✓	✓				✓			✓			
Elements of Statistics*	3									✓	✓		✓		
Intro to Sociology*	3		✓				✓	✓							
Nutrition for Optimum Living	2	✓	✓												
Sociology of Sport	2									✓	✓				
Sport and Exercise Psychology	2									✓	✓				
Anatomy and Physiology 1	2				✓			✓							
Anatomy and Physiology 2	2				✓			✓							

SUMMARY

Education and industry stakeholders in Rockford, Illinois, are engaged in strong partnerships to identify and design 9-14+ pathways that lead to occupations with career advancement opportunities and family-supporting wages. To design high-quality college and career pathways,

it is important to clearly define and determine coursework that leads directly to credentials with value in the regional labor market.

In Rockford, Illinois, students can access a number of promising credentials (*see Recommended Courses and Credentials*). In determining which courses to take, guidance counselors and students should consider not only their interests but also which courses are most likely to put them on a path to a high-demand, high-wage career. While recommended door opener dual enrollment courses such as Anatomy and Physiology provide foundational exposure for a significant number of health care credentials at RVC, General Psychology and Fundamentals of Communication are recommended strategic dual enrollment courses that lead students more directly to labor market-aligned credentials.

Recommended Health Science Courses and Credentials in Rockford, Illinois

Promising Credentials	Door Opener Dual Enrollment Courses	Strategic Dual Enrollment Courses
Radiography AS	General Psychology	General Psychology
Associate's Degree in Nursing	Fundamentals of Communication	Fundamentals of Communication
Health Administration AA	Composition 1	
Dental Hygienist AS	Microbiology	
	Anatomy and Physiology	
	Medical Terminology	
	Elements of Statistics	
	Introduction to Sociology	

RECOMMENDATIONS

To effectively design pathways that lead young people to successful careers requires a much broader approach than just aligning coursework with labor market information. The following recommendations are important to consider for the continued refinement and implementation of health science pathways in Rockford, Illinois, and for any community engaged in similar work.

1. Adapt 9-14+ health science pathway programs of study to prioritize door opener dual enrollment courses to provide foundational industry exposure and ensure students have many options as they transition to postsecondary. When appropriate, incorporate strategic dual enrollment courses, which increase students' opportunity to earn credentials or degrees that launch high-wage, high-growth careers.
2. Identify and adapt postsecondary health science programs of study to increase the credential applicability of recommended foundational door opener dual enrollment courses such as Medical Terminology or Anatomy and Physiology.
3. To support students through multiple stages of academic and career development, identify and pursue strategic opportunities to align and streamline industry-recognized credentials to stackable associate's degree-level credentials. Every step must align with promising careers in the region.
4. Provide training for guidance counselors and advisors to review degree opportunities, dual enrollment, and labor market information with students. Ensure that support staff have the resources to communicate career growth, wage data, and course outcomes directly to students. Embed labor market discussions into sustained career advising.
5. Package the two suggested strategic dual enrollment courses with a suggested foundational door opener dual enrollment course to create a 9-credit hour package that, when coupled with gateway math and English, could total to an Illinois Power of 15 package.
6. Vet data and program outcomes with regional industry leaders to determine labor market needs that cannot be identified by external evaluations. Work with industry leaders to identify in-demand employability and technical competencies.
7. Develop systems for career exploration that incorporate student interest, passion, and career exposure to help youth make informed choices about their futures.
8. Conduct further analysis to account for students who relocate, including job opportunities in neighboring labor markets.
9. Identify barriers, particularly those faced by historically marginalized populations, to enrollment in dual credit courses. The goal is to increase the number of students who can

access dual credit coursework. This includes providing early supports for academic readiness in English and math.



JFF is a national nonprofit that drives transformation in the American workforce and education systems. For 35 years, JFF has led the way in designing innovative and scalable solutions that create access to economic advancement for all.

In 2012, building upon interest and demand at the state and national levels for better secondary-postsecondary technical pathway systems, JFF launched Pathways to Prosperity. PtoP is a partnership with the Harvard Graduate School of Education and state, regional, and local stakeholders from across education, employers, and government, with the long-term goal of creating systems of secondary through postsecondary career pathways that serve most students. PtoP focuses on five implementation levers: grades 9-14+ integrated college and career pathways, career information and advising systems, employer engagement and work-based learning, effective intermediaries, and supportive state policy and leadership. PtoP currently works with 15 states and over 60 regions across the country to ensure that all young people—including lower-income young people—have the skills and credentials needed to succeed in our economy.

This Report

The recommendations in this report were informed by an analysis of regional labor market information, a survey of the Rock Valley College Health Science programs of study, and conversations with local stakeholders from secondary, postsecondary, and workforce institutions. The labor market information reflects data from Emsi, the US Bureau of Labor Statistics, and real-time Burning Glass data for the Rockford MSA. Credential and course data in this report reflect information collected from a course audit conducted by JFF in February of 2018. Living wage data is collected from the Massachusetts Institute of Technology Living Wage Calculator (<http://livingwage.mit.edu>). In this report, a family-supporting wage is defined as a living wage for a single adult who supports one child.

END NOTES

¹ US Census Bureau, n.d., <https://www.census.gov/>.

² “Living Wage Calculator,” Massachusetts Institute of Technology, 2018, <http://livingwage.mit.edu/>.

³ Wages highlighted in red are wages below a living wage for a single adult supporting one child.

⁴ Associated occupation options in Tables 2 and 3 were sourced from the Rock Valley College website. The credential overviews provide information about potential occupation options following degree conferment. Table 2 does not reflect all RVC Health Science certificate and degree offerings.

⁵ Technical Pathway Courses with an asterisk (e.g., General Psychology*) indicate courses that are part of the Illinois Articulation Initiative and are credit-bearing to transfer to four-year bachelor’s degrees.