

# Economic Impact Study

## of the RGV Healthcare & Bioscience Industry



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# Introduction

The RGV Partnership, with financial support from regional hospitals and Workforce Solutions, commissioned UTRGV's Data and Information Systems Center (DISC) to conduct an economic impact study of the Rio Grande Valley healthcare and bioscience industry. The purpose of the study is to quantify and demonstrate the economic importance of the healthcare and bioscience industry in the Rio Grande Valley. Secondary objectives of the study are to collect wage and salary data on select high growth occupations in the industry, and identify career opportunities to maintain and repair industry equipment.



**The University of Texas**  
**Rio Grande Valley**  
Data & Information  
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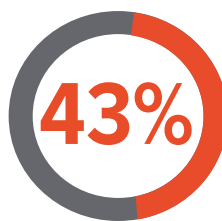


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# Highlights

The RGV healthcare and bioscience industry has an economic impact of

## \$13.7 Billion



of new jobs created over the past decade (2009 to 2019) were in the healthcare and bioscience industry.

## \$3.3 Billion

Annual wages and salaries paid to persons in the industry.

Most jobs in the healthcare and bioscience industry pay wages and salaries higher than average.



## \$1.2 Billion

of goods and services within the RGV are purchased in the industry, supporting local businesses.

## 3,256



Establishments operating in the RGV healthcare and bioscience industry.



The healthcare and bioscience industry is one of the RGV's largest industries in terms of jobs and contribution to the gross regional product of the economy (14%).



Employees in the RGV work in the healthcare and bioscience industry.

### The Industry Employs:

116,563 Persons, in which 82,602 are in health services and 33,961 related industries.

## 163,530

jobs are supported by the RGV healthcare and bioscience industry (119,055 health services, 44,475 related industries) in the regional economy.

## 31,581

added new jobs over the past decade (2009-2019), fueling RGV's job growth.

## \$659.5 million

in investments generated and 1,000 new jobs created by UTRGV School of Medicine since 2015.

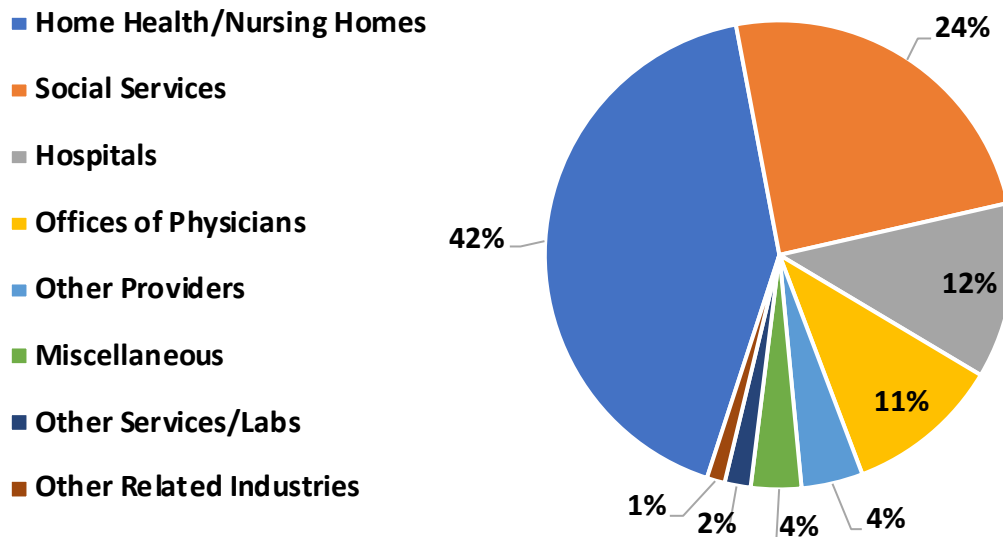
# Overview

The RGV's healthcare and bioscience industry is both large and diverse. It includes a wide variety of direct healthcare services, and related industries that support the provision of health and medical care.

Direct health services include the care provided in hospitals, physicians' and dentists' offices, home health, nursing homes, the offices and clinics of a variety of other healthcare providers, and various other outpatient and ambulatory care settings. In the RGV, health services include both medicine and a variety of governmental, for-profit and non-profit operations and facilities.

Related industries complement and support the provision of medical and healthcare services. These industry sectors include health insurance carriers, pharmaceutical companies, medical equipment producers and manufacturers, civilian medical education, research organizations, residential care and social service providers, and a variety of related endeavors.

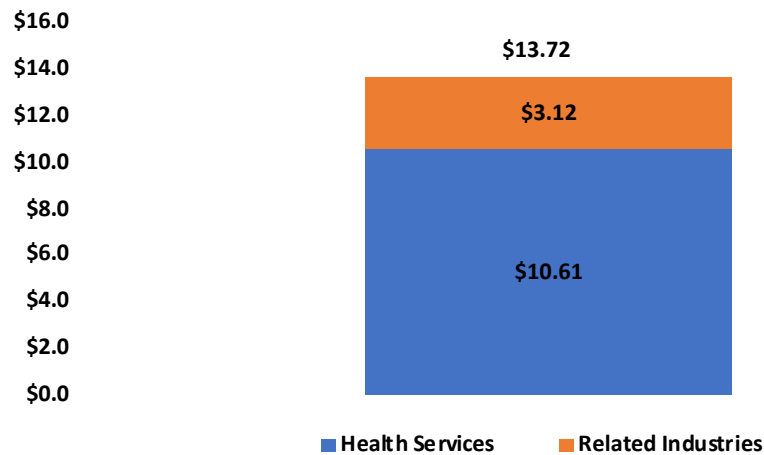
## RGV Healthcare and Bioscience Employment



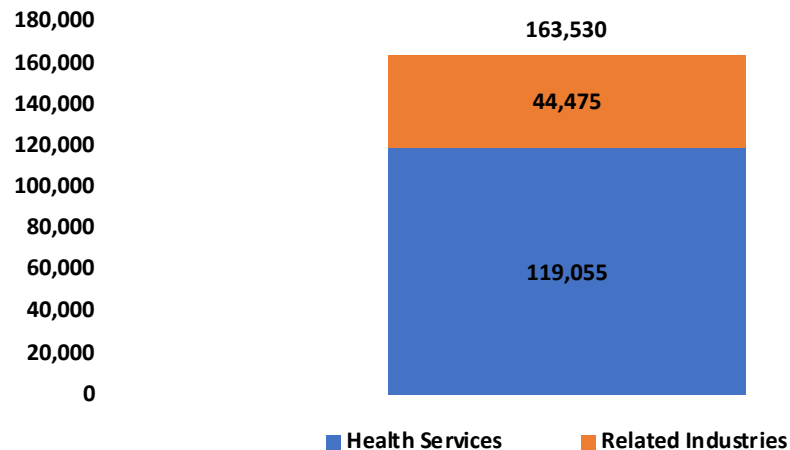
# Overall Impact

Measured by the dollar volume of final sales of its products and services, the economic impact of the RGV's healthcare and bioscience industry totaled \$13.7 billion in 2019. Direct health services accounted for more than three quarters of the total impact at \$10.6 billion. Related industries generated another \$3.1 billion in economic impact.

## Economic Impact (billions)



## Impact (jobs)



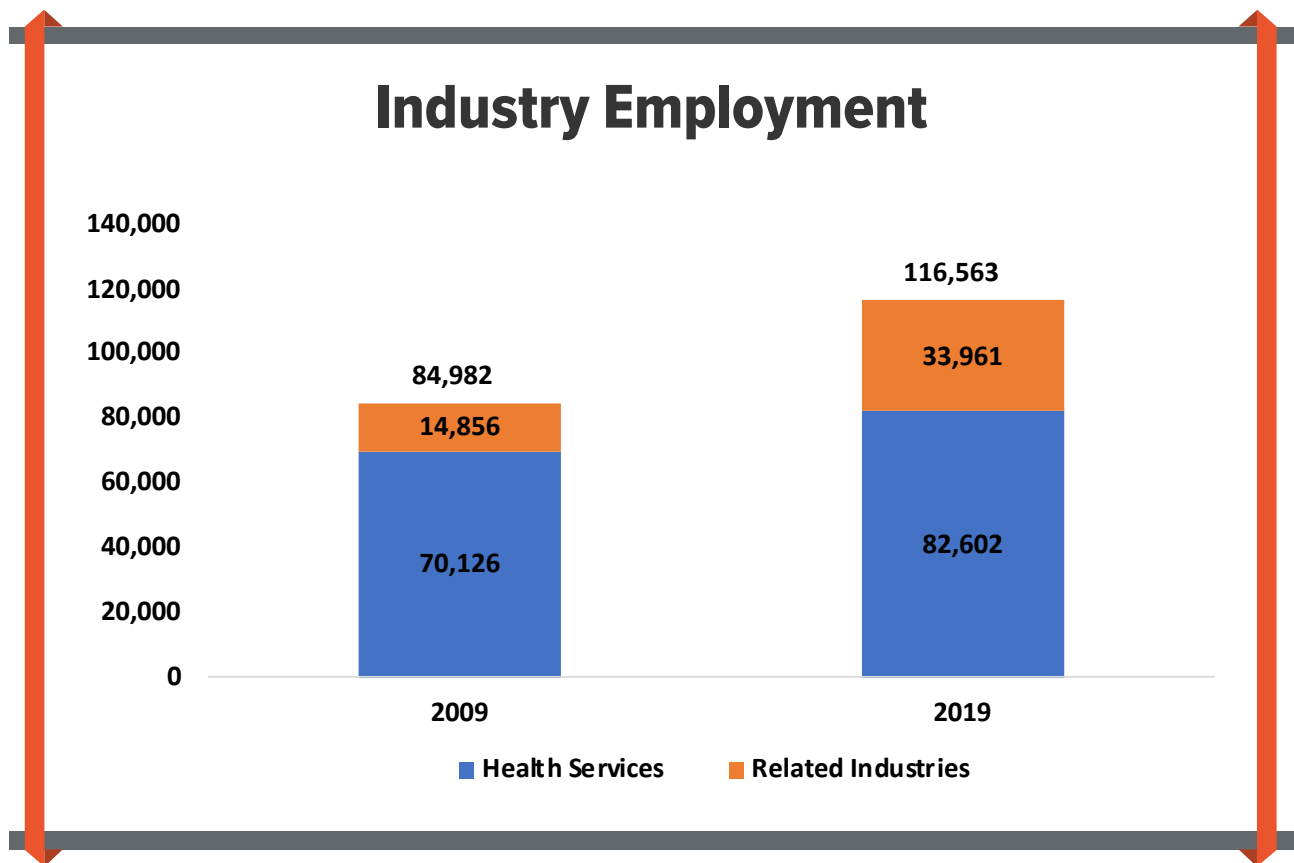
# Workforce

In 2019, a total of 116,563 RGV workers were employed in the healthcare and bioscience industry. This represents 30 percent of the RGV workforce.

Using the comprehensive estimates, 82,602 of these employees were involved in the direct provision of health and medical services (71%); the remaining 33,961 were employed in related industries (29%).

Since 2009, the industry has added 31,581 net new jobs, an increase of 37%. Employment in health services added 19,105 jobs, while related industries employment added 12,476 jobs.

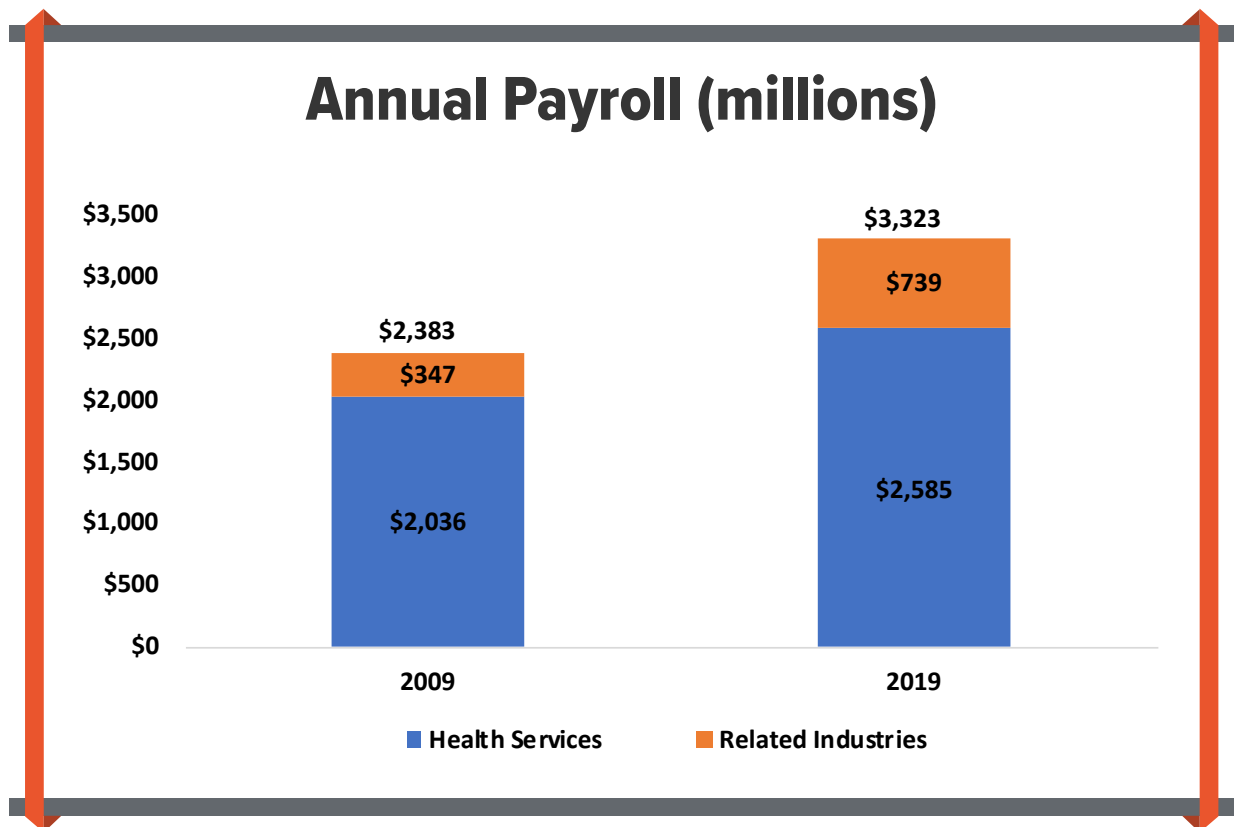
The industry is projected to continue to grow, adding 40,550 new jobs from 2019 to 2029, an increase of 33%.



# Annual Payroll

The total annual payroll for the RGV healthcare and bioscience industry was \$3.3 billion in 2019. Annual payroll for the industry grew by 39% since 2009.

Annual payroll for health services totaled \$2.5 billion and payroll for related industries totaled \$739 million.



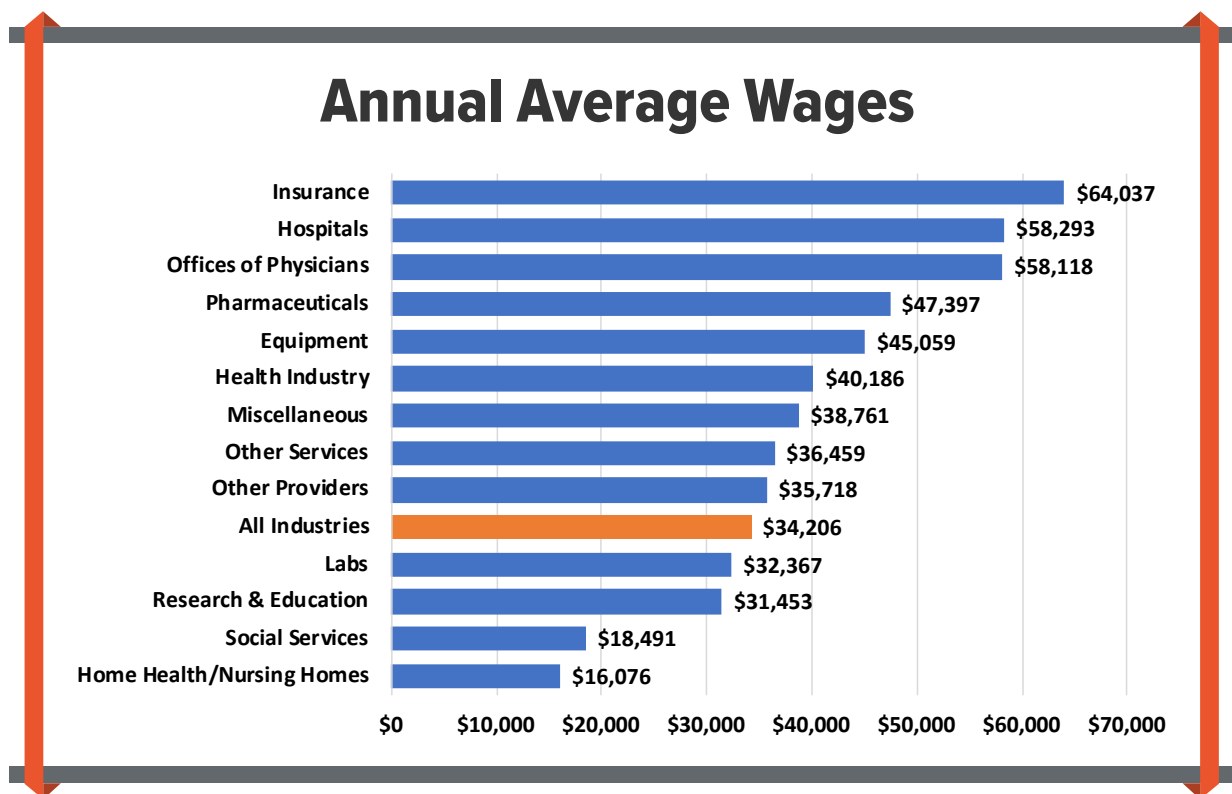


# Annual Salary

Most persons employed in the RGV healthcare and bioscience industry earned wages that were higher than average of \$34,206 for all industries in the RGV.

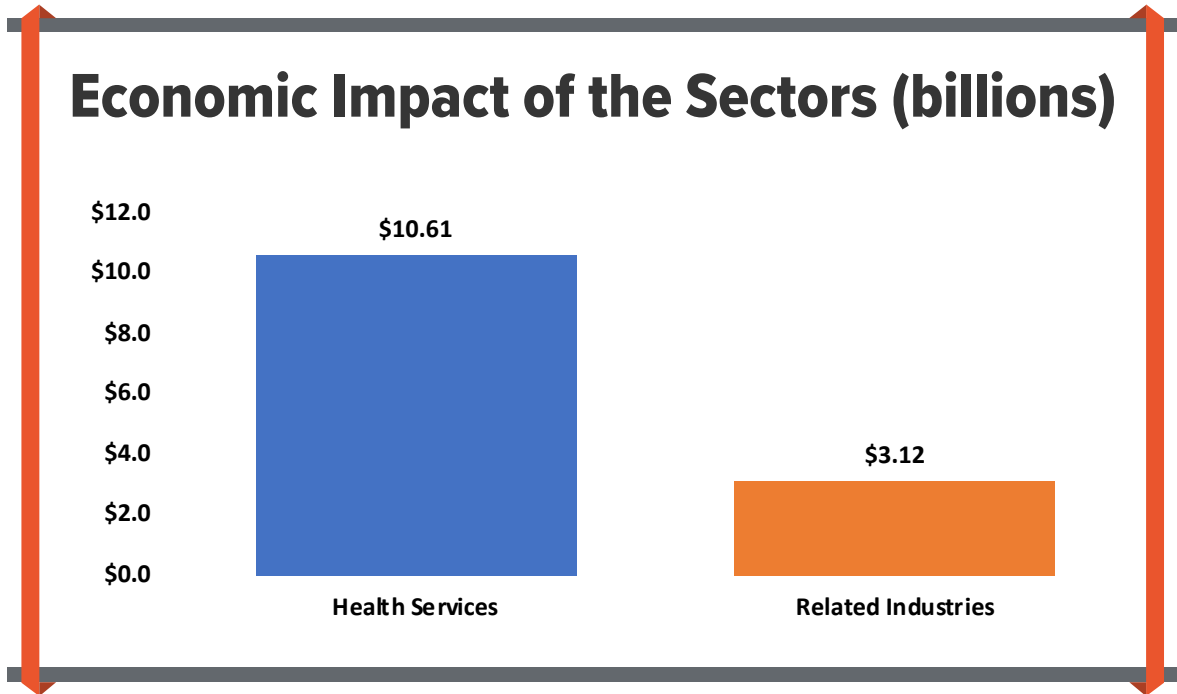
Persons employed in insurance, hospitals, office of physicians, pharmaceuticals, equipment, health, miscellaneous, other services, and other providers had higher than average wages.

While persons employed in labs, research and education, social services, and home health/nursing homes had lower than average wages.

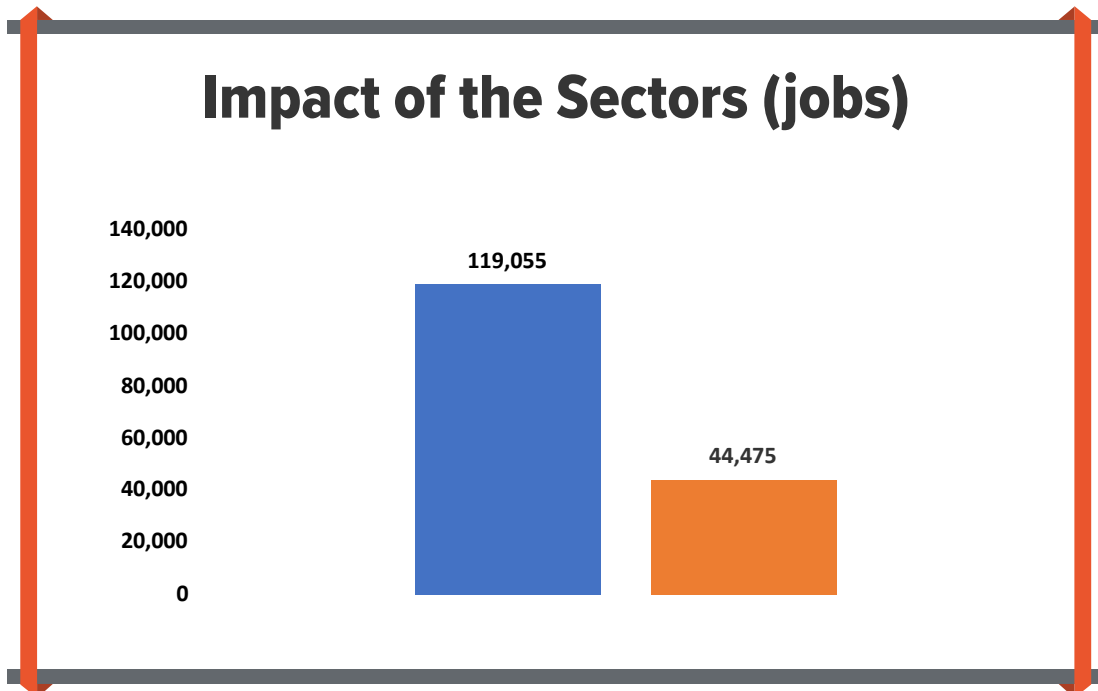


# Two Sectors

The health services sector, which is larger than the related industries sector in terms of employment and payroll, generates \$10.6 billion in economic impact, while related industries generates \$3.1 billion in economic impact.



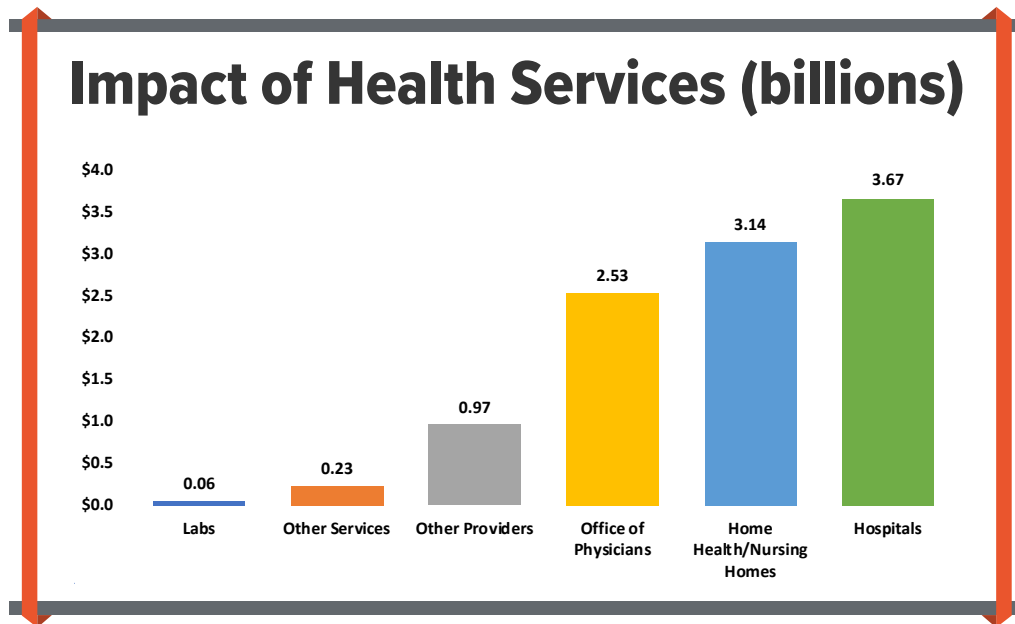
Likewise, the health services sector impact on jobs (119,055) was larger than the related industries sector impact on jobs (44,475).



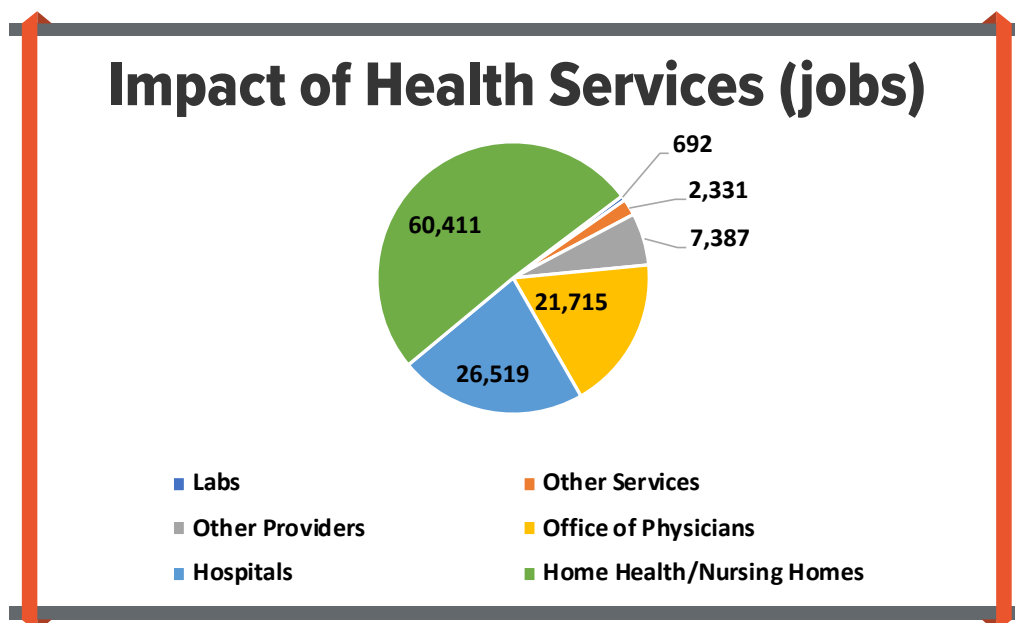
# Health Services Sector

Direct health services include the care provided in hospitals, physicians' and dentists' offices, home health, nursing homes, the offices and clinics of a variety of other healthcare providers, and various other outpatient and ambulatory care settings. In the RGV, health services include both medicine and a variety of governmental, for-profit and non-profit operations and facilities.

Hospitals (\$3.6 billion), home health/nursing homes (\$3.1 billion), and office of physicians (\$2.5 billion) had the largest economic impacts in the health services sector.



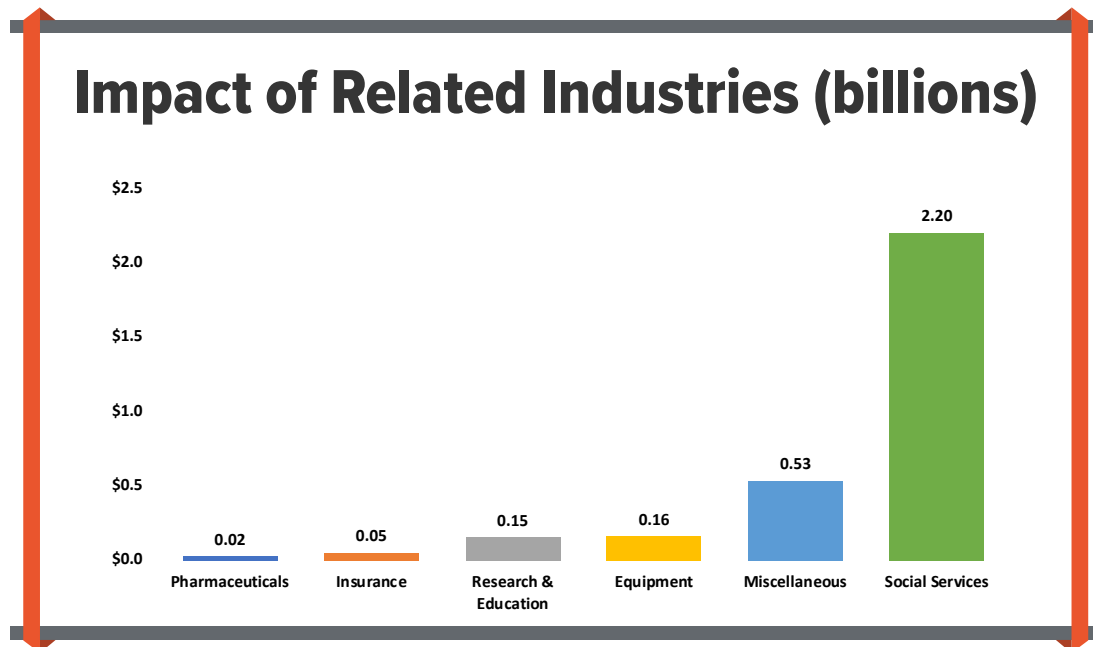
Home health/nursing homes (60,411 jobs), hospitals (26,519 jobs), and office of physicians (21,715 jobs) had the largest job impacts in the health services sector.



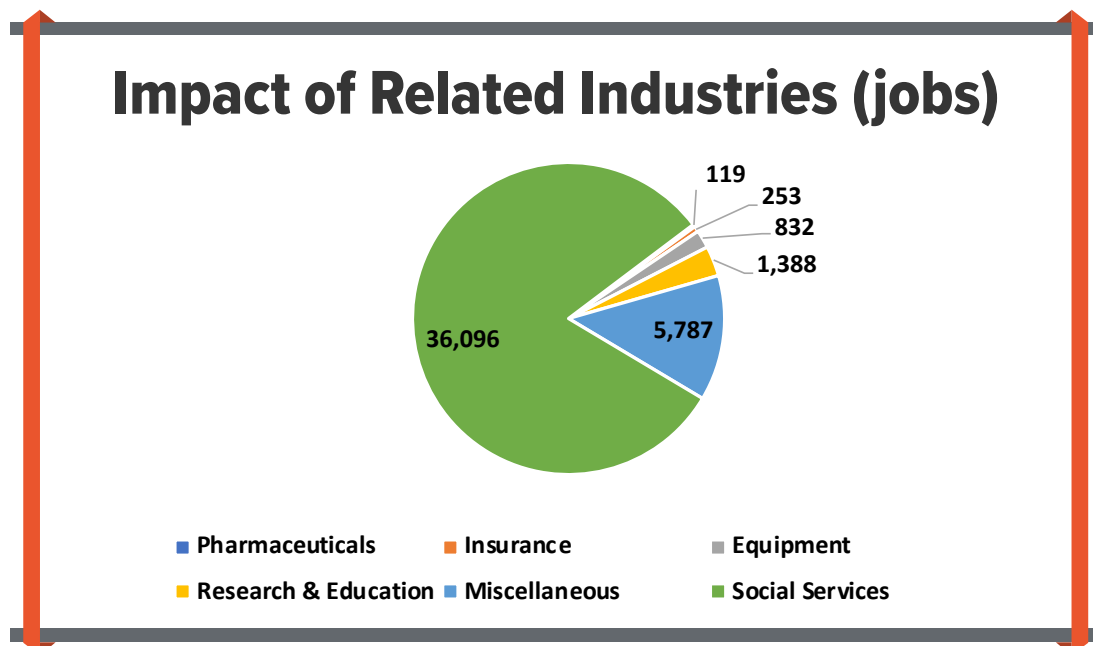
# Related Industries

Related industries complement and support the provision of medical and healthcare services. These industry sectors include health insurance carriers, pharmaceutical companies, medical equipment producers and manufacturers, civilian medical education, research organizations, residential care and social service providers, and a variety of related endeavors.

Social services (\$2.2 billion) had the largest economic impact in the related industries sector.



Social services (36,096 jobs) had the largest job impacts in the related industries sector.

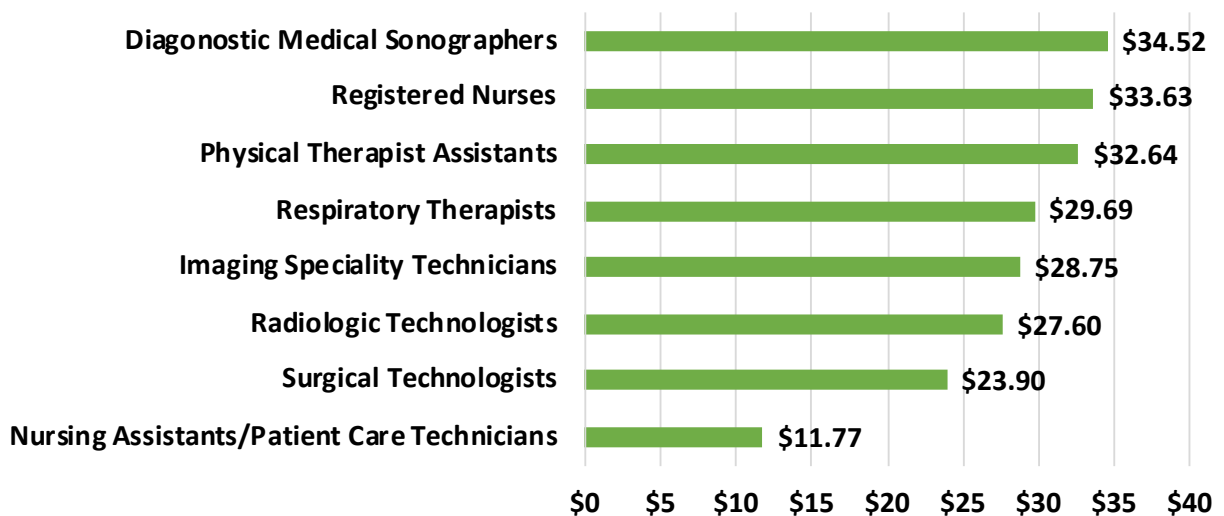


# Survey-High Growth Job Wages

A secondary goal of the RGV Healthcare and Bioscience Industry study was to collect wage and salary data on select high growth occupations in the industry. To drive local entrepreneurship and training programs, the study also identified how much hospitals spent on outside vendors and or contractors to maintain and repair their hospital equipment. DISC developed the survey with input from the RGV Partnership. The RGV Partnership sent out the survey electronically to hospitals to collect the data.

Hospital systems representing 11,474 employees, provided, wage data for occupations in high demand in the industry. Wages were averaged among the hospital systems for confidentiality. Below are the average hourly wage rates for high growth occupations in the industry.

## Average Hourly Wage - High Growth Occupations





# Survey-Local Apprentice and Training

Several hospitals suggested looking into developing a local apprentice or training program for advanced medical equipment, and/or general biomedical engineering to address the local needs of workers. All of the hospitals surveyed said they have personnel who maintain and repair advanced medical equipment, and they outsourced or have contracts with outside vendors and contractors to maintain and repair their advanced medical equipment.

- Survey responses from hospitals identified \$1.1 million was being spent annually on outside vendors and contractors to maintain or repair advanced medical equipment.
- Maintenance and repair of advanced medical equipment being outsourced included: MRI, CT, X-ray, ultrasound, IV pumps, hospital beds, nuclear medicine cameras, diagnostic imaging, patient monitoring, urology laser, hyperbaric chambers, heart and lung machines, endoscopy scopes, Davinci robots, surgical microscopes, dialysis machines, ventilators, balloon pumps, phacoemulsifiers, and specialty surgical tables.



# Methodology and Definitions

Using data from the Texas Workforce Commission and Emsi, DISC collected data on the healthcare and bioscience industry in the RGV. Data collected included the number of employees, wages, and other data to provide an overview of how many people work in the industry, average wages compared to other industries, value of the industry to the gross regional product, etc. Industry data was broken down by NAICS code to show the composition such as hospitals, physicians and dentist offices, nursing homes, and other healthcare providers in the industry.

DISC also developed a survey of hospitals to gather primary data on their capital and operating budgets, non-operating expenses, research grants/expenditures, Medicaid Disproportionate Share Hospital (DSH) payments, and wage and salary data on select high growth occupations. The RGV Partnership sent out the survey to RGV hospitals to collect the data.

With the data collected TWC, Emsi, and the hospital survey, DISC designed/setup/ran the economic impact project study in IMPLAN, a nationally recognized and widely-used input/output modeling software for estimating economic impacts. DISC used local regional modeling data from IMPLAN for the Rio Grande Valley counties of Cameron, Hidalgo, Starr, and Willacy, to estimate the economic impact of the healthcare and bioscience industry.



# Information Sources

Quarterly Census of Employment and Wages, U.S. Bureau of Labor Statistics. The primary economic product is the tabulation of employment and wages of establishments which report to the Unemployment Insurance (UI) programs of the United States. Employment covered by these UI programs represents about 97% of all wage and salary civilian employment in the U.S. The data is aggregated into the lines of business defined by the North American Industrial Classification System (NAICS) coding framework. It represents essentially a 100% sample of all the businesses with employees in each NAICS sub code.

The information necessary for the inclusion of the UTRGV School of Medicine was derived from data supplied by UTRGV.





# NAICS Codes for the Healthcare & Bioscience Industry

## Health Services

### PHYSICIANS

62111 offices of physicians

### OTHER HEALTH CARE PROVIDERS

62121 offices of dentists

62131 offices of chiropractors

62132 offices of optometrists

62133 offices of mental health practitioners

62134 offices of specialty therapists

62139 offices of all other health practitioners

### NURSING HOMES/HOME HEALTH

62161 home healthcare services

62311 nursing care facilities

### HOSPITALS

62211 general medical and surgical hospitals

62221 psychiatric and substance abuse hospitals

62231 other hospitals

### LABS

62151 medical and diagnostic laboratories

### OTHER DIRECT SERVICES

62191 ambulance services

62199 all other ambulatory healthcare services

## Related Industries

### RESEARCH & EDUCATION

54171 physical, engineering, and biological research, UTRGV School of Medicine, South Texas Diabetes and Obesity Institute, Institute for Neuroscience, and Biomedical Research Building and Labs

### SOCIAL SERVICES

62141 family planning centers

62142 outpatient mental health and substance abuse centers

62149 other outpatient care centers

62321 residential mental retardation facilities

62322 residential mental health and substance abuse facilities

62331 continuing care retirement communities and assisted living facilities for the elderly

62399 other residential care facilities

62412 services for the elderly and disabled

62431 vocational rehabilitation services

### PHARMACEUTICALS

32541 pharmaceutical and medicine manufacturing

42421 druggists' goods merchant wholesalers

### EQUIPMENT MANUFACTURING AND WHOLESALE

33911 medical equipment and supplies manufacturing

42345 medical equipment merchant wholesalers

42346 ophthalmic goods merchant wholesalers

### INSURANCE

52411 direct health and medical insurance carriers

### MISCELLANEOUS

44611 pharmacies and drug stores

44613 optical goods stores

44619 other health and personal care stores

92312 administration of public health programs

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