

The Economic Impact of Lancaster General Health/Penn Medicine on Pennsylvania

March 2016

 Penn Medicine
Lancaster General Health


TrippUmbach
Research • Strategy • Impact

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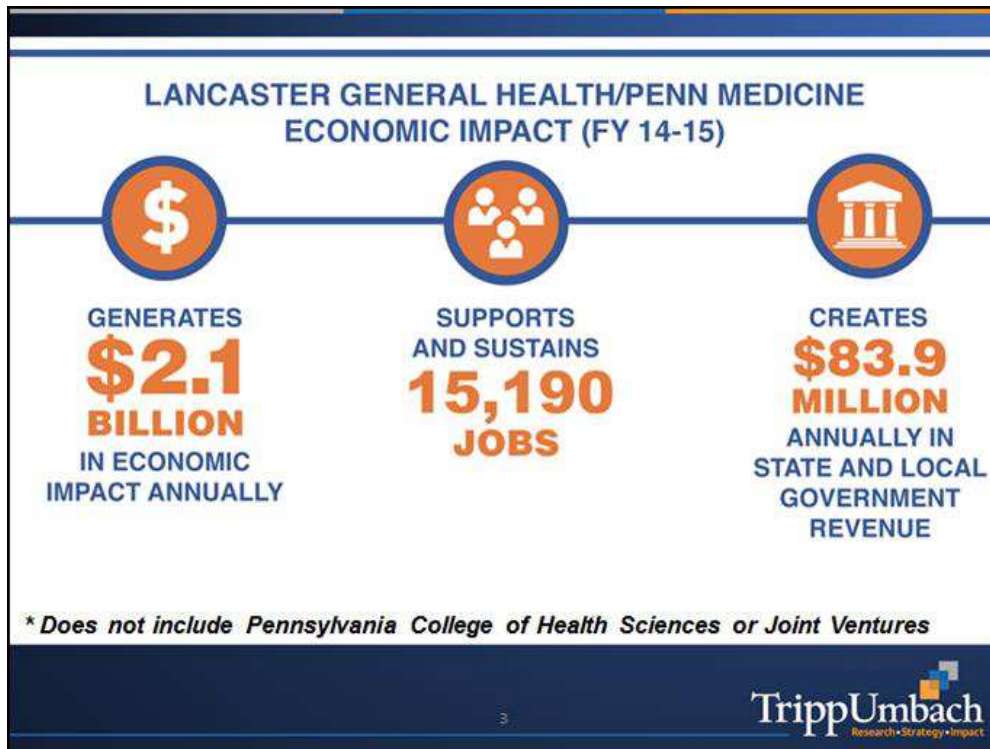
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INTRODUCTION

Lancaster General Health/Penn Medicine (LG Health/Penn Medicine) ¹ is a regional not-for-profit healthcare system located in Lancaster, PA. The system commissioned this economic impact study, while in the process of joining the University of Pennsylvania Health System (Penn Medicine). The winner of numerous national and local awards, LG Health's mission is to advance the health and well-being of the communities they serve.

The purpose of this study was to quantify the economic impact of the system, excluding its Pennsylvania College of Health Sciences, which conducted its own economic impact study in 2013, and any facility or service that is not wholly owned by LG Health/Penn Medicine. In short, this study includes LG Health/Penn Medicine's keystone facility, Lancaster General Hospital (LGH),² its network of more than 300 employed physicians,

¹ Lancaster General Health/Penn Medicine (LG Health/Penn Medicine) is a 689-licensed bed not-for-profit health system and member of the University of Pennsylvania Health System

² For the purposes of this study, LG Health/Penn Medicine entities included in the analysis are: Lancaster General Hospital, Lancaster General Health Physicians (LG Medical Group), The Heart Group of Lancaster General Health, Lancaster General Health – Columbia Center, LG Health Community Care Collaborative.

and facilities and services associated with LGH's license, which includes the Women & Babies Hospital, 14 outpatient centers, including the Downtown and Suburban Outpatient Pavilions.

Lancaster General Health joined the University of Pennsylvania Health System on Aug. 1, 2015. The action did not impact the finding in this report. Furthermore, the study did not include joint ventures that LG Health/Penn Medicine participates in, such as Lancaster Rehabilitation Hospital, Horizon Healthcare Services, Affilia Health or Physician's Surgery Center. This study also does not include the Pennsylvania College of Health Sciences, as Franklin & Marshall College estimated its economic impact in 2013.

F&M estimated PA College generated \$88 million in annual economic impact annually and supported/sustained more than 550 jobs in Pennsylvania. If added to this study - \$2.2B in economic impact annually and nearly 15,800 jobs would be supported.

The F&M study did not calculate state and local government revenue.

Designated three times as a Magnet hospital for nursing excellence, LGH has been recognized regionally and nationally for the clinical quality and safety of its care, and specific services such as cardiology, urology, oncology, intensive care, and orthopedics. Other key specialty services include open-heart surgery, obstetrics, neurosurgery, trauma, pediatric care, and inpatient and outpatient behavioral health. Outpatient programs and services include diabetes and

Lancaster General Health/ Penn Medicine Study Overview

STUDY OVERVIEW:

Fiscal Year 2014-2015 (FY 14-15)

THIS STUDY INCLUDES:

- Lancaster General Hospital (LGH)
- network of more than 300 employed physicians
- Lancaster General Health Physicians
- facilities and services associated with LGH's license, which includes the Women & Babies Hospital, 14 outpatient centers, including the Downtown and Suburban Outpatient Pavilions

STUDY GEOGRAPHY:

Pennsylvania

METHODOLOGY:

IMPLAN

nutrition, sleep medicine, wellness, wound care, interventional radiology, and occupational medicine.

LGH is ranked nationally in three adult specialties by U.S. News & World Report in 2015. It was also high-performing in four adult specialties. A 613-bed general medical and surgical hospital, LGH registered more than 32,800 admissions, more than 13,800 inpatient and 17,048 outpatient surgeries, and more than 107,800 emergency visits during its most recent fiscal year.

The operations of LG Health/Penn Medicine and associated facilities, services and physician practices generate an annual economic impact of \$2.1 billion and sustains 15,190 direct and indirect jobs throughout Pennsylvania.

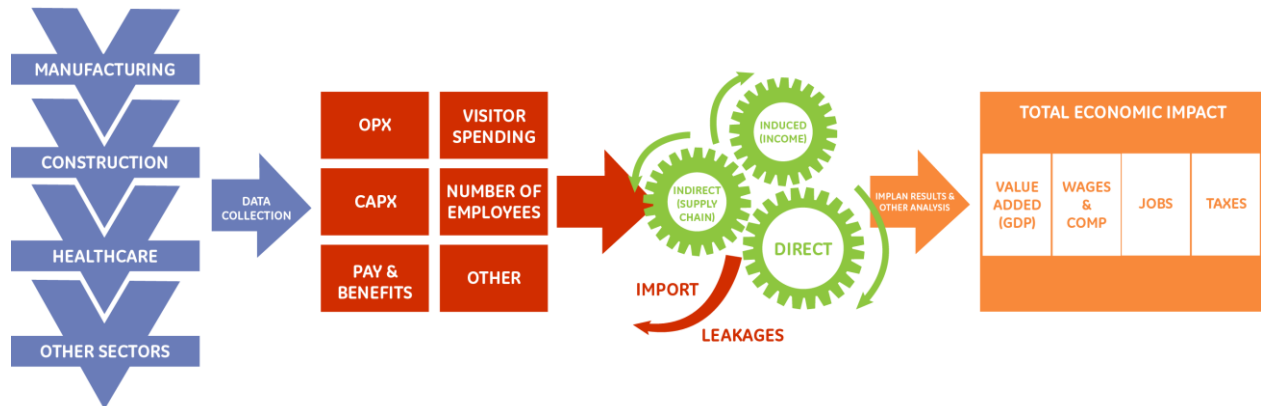
PROJECT OVERVIEW

LG Health/Penn Medicine retained Tripp Umbach to measure the economic, employment, and government revenue impacts of its operations. The overall economic and fiscal impact that the Lancaster General Health has on the vitality of the region and state includes the following elements:

- Economic impact of LG Health/Penn Medicine at a direct, indirect, and induced level (operational spending, capital spending, and pay and benefits).
- The direct, indirect, and induced employment impacts of the health system.
- The government revenue impact of LG Health/Penn Medicine at the local and state levels.

METHODOLOGY EMPLOYED IN THE ECONOMIC IMPACT STUDY

This economic impact analysis measures the effect of direct and indirect/induced business volume and government revenue impacts for LG Health/Penn Medicine’s operations throughout Pennsylvania. The methodology employed in the calculation of



these impacts is IMPLAN.³ Primary data utilized to conduct the analysis was collected from LG Health/Penn Medicine. Data included: capital expenditures, operational expenditures, jobs, payroll and benefits, and taxes. The approach taken on this study was decidedly conservative. Economic impact begins when an organization spends money. Studies measuring economic impact capture the direct economic impact of an organization’s spending, plus additional indirect and induced spending in the economy as a result of direct spending. The economic impact study of LG Health/Penn Medicine shows its contribution to the state economy.

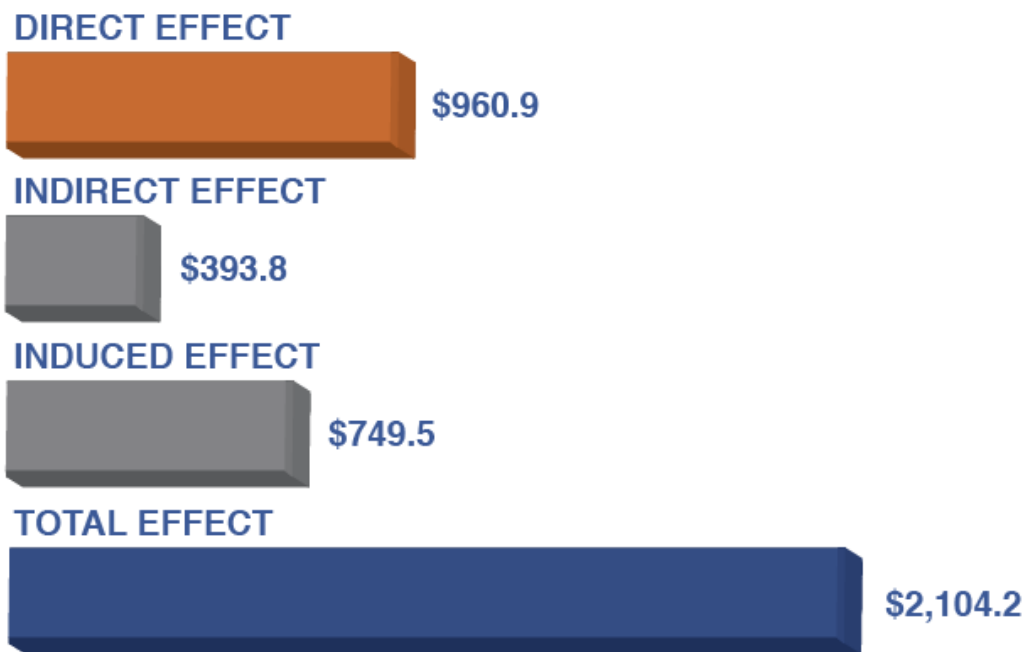
Total economic impact measures the dollars that are generated within Pennsylvania due to the presence of LG Health/Penn Medicine. This includes not only spending on goods and services with a variety of vendors within the state and the spending of its staff and employed physicians, but also the business volume generated by businesses within Pennsylvania that benefit from LG Health/Penn Medicine’s spending. It is important to remember that not all dollars spent by a health system remain in its home state. Dollars that “leak” out of the state in the form of purchases from out-of-state

³ Minnesota IMPLAN Group, Inc. (MIG) is the corporation that is responsible for the production of IMPLAN (IMpact analysis for PLANning) data and software. IMPLAN is a micro-computer-based, input-output modeling system. With IMPLAN, one can estimate Input-Output models of up to 528 sectors for any region consisting of one or more counties. IMPLAN includes procedures for generating multipliers and estimating impacts by applying final demand changes to the model.

vendors are not included in the LG Health/Penn Medicine’s economic impact on the state. The multipliers utilized in this study are derived from the IMPLAN software.

Key economic impact findings presented within the summary include the total current (FY 14-15) impact of LG Health/Penn Medicine’s operations on employment in Pennsylvania, as well as the revenue impact on state and local governments.

LANCASTER GENERAL HEALTH/PENN MEDICINE ANNUAL ECONOMIC IMPACT (FY 14-15) IN MILLIONS



Source: Tripp Umbach analysis through IMPLAN with data supplied by Lancaster General Health/Penn Medicine.

LG HEALTH/PENN MEDICINE CONTRIBUTES TO PA’S ECONOMIC WELL-BEING

LG Health/Penn Medicine’s operations directly or indirectly impact residents throughout Pennsylvania, generating more than **\$2.1 billion annually** in overall economic impact.

LG Health/Penn Medicine affects business volume in Pennsylvania in three ways:

1. Direct expenditures for goods and services by LG Health/Penn Medicine, its staff, and employed physicians. This spending supports local businesses, which in turn employ local individuals to sell the goods and provide the services that the health system's constituencies need.
2. Indirect spending within Pennsylvania. The businesses that receive direct payments re-spend this money within the state, thus creating the need for even more jobs.
3. Induced spending by households either directly employed by LG Health/Penn Medicine or its suppliers create a third tier of impact.

As a result of expenditures on goods and services by LG Health/Penn Medicine, its staff and employed physicians, **the overall economic impact of LG Health/Penn Medicine operations on Pennsylvania in FY 14-15 totaled more than \$2.1 billion:**

- \$960.9 million in direct expenditures for goods and services by LG Health/Penn Medicine, its staff, and employed physicians.
- Nearly \$400 million in indirect spending within Pennsylvania – activity conducted by our suppliers, purchasing goods and services, and hiring workers, to meet demand.
- Nearly \$750 million in induced spending by households either directly employed by LG Health/Penn Medicine or its suppliers

TOP INDUSTRY SECTORS IMPACTED

LANCASTER GENERAL HEALTH/PENN MEDICINE ECONOMIC IMPACT TOP TEN INDUSTRY SECTORS BY ECONOMIC OUTPUT (FY 14-15)

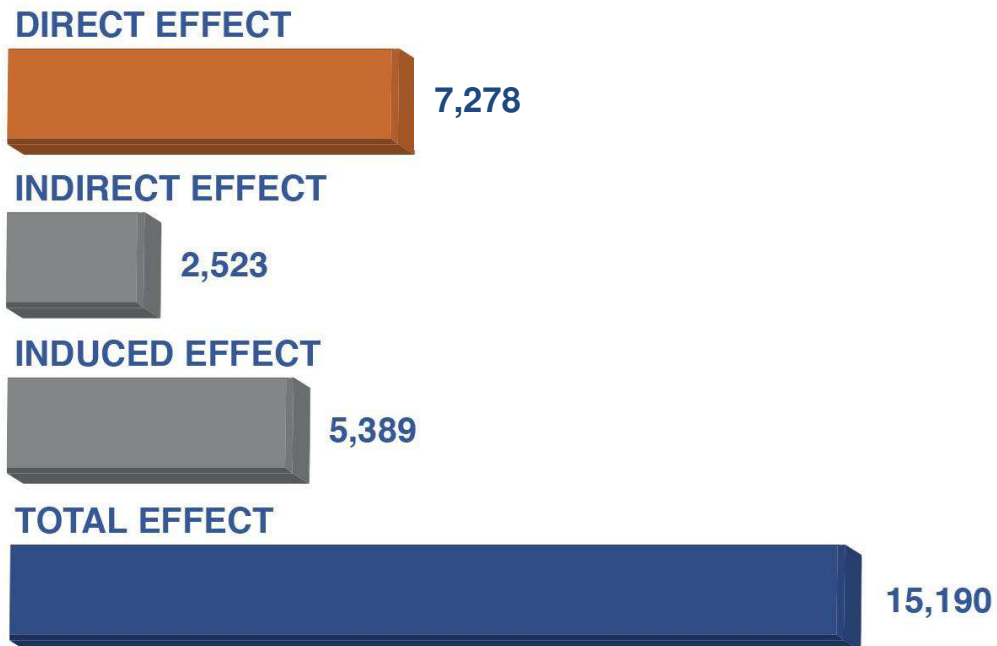
DESCRIPTION	TOTAL ECONOMIC OUTPUT
HEALTHCARE	\$1,009,898,176
OWNER-OCCUPIED DWELLINGS	\$88,625,462
INSURANCE CARRIERS	\$77,896,801
REAL ESTATE	\$72,533,885
WHOLESALE TRADE	\$57,617,144
OTHER FINANCIAL INVESTMENT ACTIVITIES	\$45,578,446
OFFICES OF PHYSICIANS	\$23,839,484
MANAGEMENT OF COMPANIES AND ENTERPRISES	\$23,822,492
INSURANCE AGENCIES, BROKERAGES, AND RELATED ACTIVITIES	\$23,723,371
WIRED TELECOMMUNICATIONS CARRIERS	\$23,588,162

Source: Tripp Umbach analysis through IMPLAN with data supplied by Lancaster General Health/Penn Medicine.

TOP INDUSTRY SECTORS IMPACTED BY ECONOMIC OUTPUT

The table above shows the top 10 industries impacted by LG Health/Penn medicine’s presence in terms of economic output by industry. The top sectors in the Pennsylvania economy impacted include the healthcare industry, real estate, wholesale trade, insurance, and finance.

LANCASTER GENERAL HEALTH/PENN MEDICINE ANNUAL EMPLOYMENT IMPACT (FY 14-15) IN JOBS



Source: Tripp Umbach analysis through IMPLAN with data supplied by Lancaster General Health/Penn Medicine.

LG HEALTH/PENN MEDICINE CREATES AND SUSTAINS JOBS

Lancaster General Health/Penn Medicine supports **15,190 jobs** in Pennsylvania. These jobs (both full-time and part-time) include not only direct employment by the health system, but also indirect and induced jobs created by supply and equipment vendors, contractors, and laborers for the construction and renovation of facilities, and jobs created in the community at hotels, restaurants, and retail stores in support of the system's workforce and its visitors.

LG Health/Penn Medicine directly employed **7,278 people** during FY 14-15. LG Health/Penn Medicine supports thousands of jobs statewide in virtually every sector of the Pennsylvania economy; such as construction, business and professional services, restaurants and hotels, information technology, security, and temporary employment

companies. These indirect/induced jobs (7,912 jobs) support the more than 7,278 jobs held by Pennsylvania residents directly employed by the health system.

**LANCASTER GENERAL HEALTH/PENN MEDICINE ECONOMIC IMPACT
TOP TEN INDUSTRY SECTORS BY EMPLOYMENT IMPACT (FY 14-15)**

DESCRIPTION	TOTAL EMPLOYMENT IMPACT (JOBS)
HEALTHCARE	7,617
EMPLOYMENT SERVICES	436
FULL-SERVICE RESTAURANTS	405
REAL ESTATE	341
LIMITED-SERVICE RESTAURANTS	250
WHOLESALE TRADE	245
INSURANCE CARRIERS	242
OTHER FINANCIAL INVESTMENT ACTIVITIES	233
RETAIL - FOOD AND BEVERAGE STORES	187
OFFICES OF PHYSICIANS	174

Source: Tripp Umbach analysis through IMPLAN with data supplied by Lancaster General Health/Penn Medicine.

TOP INDUSTRY SECTORS IMPACTED BY EMPLOYMENT

LG Health/Penn Medicine supports thousands of jobs statewide in virtually every sector of the Pennsylvania economy; such as construction, business and professional services, restaurants and hotels, information technology, security, and temporary employment companies. The table above shows the top 10 industries impacted by the presence of LG Health/Penn Medicine, in terms of employment.

LG HEALTH/PENN MEDICINE STRENGTHENS STATE AND LOCAL GOVERNMENTS

It is a common misperception that non-profit organizations do not generate tax revenue. State and local government revenues attributable to the presence of Lancaster General Health/Penn Medicine totaled **\$83.9 million (\$24.4 million direct taxes)** in FY 14-15. Through its local spending, as well as direct and indirect support of jobs, the presence of the health system stabilizes and strengthens the local and statewide tax base. LG Health/Penn Medicine is an integral part of the state's economy – generating revenue, jobs, and spending.

Most properties within the city

and county owned by LG Health and its affiliates (excluding Lancaster General Hospital, and Women & Babies Hospital) are fully maintained on the tax rolls – even when such properties are used to further our charitable mission, rendering them legally tax-exempt.

- This ensures that LG Health pays more than \$3.73 million in additional tax revenue to several local municipalities and school districts.

Figure also includes \$1.5 million in cash annually paid to Lancaster City Government, and \$1.5 million in cash and services annually paid to School District of Lancaster.

LANCASTER GENERAL HEALTH/ PENN MEDICINE ANNUAL STATE AND LOCAL TAX IMPACT (FY 14-15) IN MILLIONS

DIRECT EFFECT



INDIRECT EFFECT



INDUCED EFFECT



TOTAL EFFECT



Source: Tripp Umbach analysis through IMPLAN with data supplied by Lancaster General Health/Penn Medicine.

LANCASTER GENERAL HEALTH/PENN MEDICINE TOTAL STATE AND LOCAL TAX IMPACT (FY 14-15)

DESCRIPTION	EMPLOYEE COMPENSATION	TAX ON PRODUCTION AND IMPORTS	HOUSEHOLDS	CORPORATIONS	TOTAL
DIVIDENDS				\$166,066.00	\$166,066
SOCIAL INS TAX- EMPLOYEE CONTRIBUTION	\$578,246				\$578,246
SOCIAL INS TAX- EMPLOYER CONTRIBUTION	\$1,117,942				\$1,117,942
TAX ON PRODUCTION AND IMPORTS: SALES TAX		\$23,659,375			\$23,659,375
TAX ON PRODUCTION AND IMPORTS: PROPERTY TAX		\$20,911,930			\$20,911,930
TAX ON PRODUCTION AND IMPORTS: MOTOR VEHICLE LIC		\$411,854			\$411,854
TAX ON PRODUCTION AND IMPORTS: SEVERANCE TAX					\$0
TAX ON PRODUCTION AND IMPORTS: OTHER TAXES		\$4,239,809			\$4,239,809
TAX ON PRODUCTION AND IMPORTS: S/L NONTAXES		\$125,662			\$125,662
CORPORATE PROFITS TAX				\$3,055,970	\$3,055,970
PERSONAL TAX: INCOME TAX			\$24,577,844		\$24,577,844
PERSONAL TAX: NONTAXES (FINES- FEES)			\$3,115,773		\$3,115,773
PERSONAL TAX: MOTOR VEHICLE LICENSE			\$938,089		\$938,089
PERSONAL TAX: PROPERTY TAXES			\$449,256		\$449,256
PERSONAL TAX: OTHER TAX (FISH/HUNT)			\$562,553		\$562,553
TOTAL STATE AND LOCAL TAX	\$1,696,188	\$49,348,630	\$29,643,515	\$3,222,036	\$83,910,369

Source: Tripp Umbach analysis through IMPLAN with data supplied by Lancaster General Health/Penn Medicine.

STATE AND LOCAL TAX IMPACT

The table above shows how LG Health/Penn Medicine, its employees, and suppliers contributed to the tax base of Pennsylvania at the state and local level.

LG HEALTH/PENN MEDICINE SUPPORTS THE COMMUNITY

LG Health/Penn Medicine's total impact on Pennsylvania goes beyond its annual operational expenditures. Economic impact studies often capture only the impact that can be assigned a quantitative number, but the qualitative value and impact of the system goes far beyond its annual multi-billion dollar economic impact.

By using national volunteer trends research and local charitable contribution data, we can estimate that LG Health/Penn Medicine employees and employed physicians generate more than **\$16 million** annually in charitable donations and volunteer services.⁴ Staff and faculty donate dollars through systemwide fund-raising efforts, personal/private contributions and volunteer their time to give back to the broader community. These benefits are in addition to the **\$2.1 billion** annual impact and include the following:

- **\$7.6 million** donated to local charitable organizations by LG Health/Penn Medicine employees, either through personal contributions, or via LG Health/Penn Medicine-organized initiatives such as the United Way and other local fund-raising campaigns.
- Nearly **\$9 million** in value of volunteer time provided to area communities by LG Health/Penn Medicine employees, either through personal activities, or via LG Health/Penn Medicine-organized efforts such as the United Way Annual Campaign and Day of Caring, the American Cancer Society Relay for Life, the American Heart Association's Heart Walk and many others.⁵

⁴ Esri (esri.com) estimates the average Lancaster County resident donated \$1,046 to charity in 2015. This amount was multiplied by 7,279 – the number of people directly employed by LG Health/Penn Medicine. Environmental Systems Research Institute is an international supplier of Geographic Information System software, web GIS and geodatabase management applications.

⁵ Number calculated using national volunteerism data from the Points of Light Foundation and historical LG Health performance.

COMMUNITY BENEFIT IMPACT



In fiscal year 2015, LG Health/Penn Medicine provided more than

\$83,000,000
in total Community Benefit

LG Health/Penn Medicine also provided more than \$74.7 million in care that was not reimbursed by Medicare (not considered "Community Benefit")

*Fiscal Year 2015

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CARING FOR ALL IN THE COMMUNITY

LG Health/Penn Medicine provides care to anyone, regardless of their financial means or insurance coverage. The above summary describes the cost of providing healthcare services to people with little or no ability to pay, our programs and partnerships aimed at our community's identified health priorities, and our efforts to educate future physicians and health professionals.

The financial figures are based on LG Health/Penn Medicine's fiscal year, which started July 1, 2014, and ended June 30, 2015. All items listed as community benefit and based on categories, definitions and reporting guidelines outlined in "Guidelines and Standard Definitions for the Community" published by the Catholic Health Association of the United States and VHA Inc.

APPENDIX A: DEFINITION OF TERMS

STUDY YEAR	Fiscal Year 2014-2015 (FY 14-15)
TOTAL ECONOMIC IMPACT	The total economic impact of an institution includes both the direct impact and the indirect impact generated in the economy as a result of the institution.
DIRECT ECONOMIC IMPACT	Direct impact includes items such as institutional spending, employee spending and spending by visitors to the institution.
INDIRECT ECONOMIC IMPACT	Indirect impact, also known as the multiplier effect, includes the re-spending of dollars within the local economy by vendors/suppliers and households.
MULTIPLIER EFFECT	The multiplier effect is the additional economic impact created as a result of the institution's direct economic impact. Local companies that provide goods and services to an institution increase their purchasing by creating a multiplier.
DIRECT TAX PAYMENTS	Direct tax payments made by an institution to a unit of government.
INDIRECT TAX PAYMENTS	Government revenue that is collected by governmental units in addition to those paid directly by an institution, including taxes paid directly by employees of the institution, visitors to the institution and vendors who sell products to the institution.
DIRECT EMPLOYMENT	Total employees based on total jobs.
INDIRECT EMPLOYMENT	Indirect employment is the additional jobs created as a result of the institution's economic impact. Local companies that provide goods and services to an institution increase their number of employees as purchasing increases, thus creating an employment multiplier.

APPENDIX B: METHODOLOGY

Impact on State Business Volume and Government Revenue

Lancaster General Health/Penn Medicine (hereinafter referred to as LG Health/Penn Medicine) is a major employer in the state and, as such, a major generator of personal income for state residents. Businesses operating within Pennsylvania in the wholesale, retail, service, and manufacturing sectors benefit from the direct expenditures of the institutions and their staff and physicians, and visitors on goods and services.

Additionally, many of these “direct” expenditures are re-circulated in the economy as recipients of the first-round of income re-spend a portion of this income with other businesses and individuals within Pennsylvania.

Methodology and data utilized for the estimation of the economic impact of Lancaster General Health/Penn Medicine

The economic impact of LG Health/Penn Medicine was estimated using IMPLAN (Impact Analysis for PLANing), an econometric modeling system developed by applied economists at the Hospital of Minnesota and the U.S. Forest Service. The IMPLAN modeling system has been in use since 1979 and is currently used by over 500 private consulting firms, hospital research centers and government agencies. The IMPLAN modeling system combines the U.S. Bureau of Economic Analysis’ Input-Output Benchmarks with other data to construct quantitative models of trade flow relationships between businesses and between businesses and final consumers. From this data, one can examine the effects of a change in one or several economic activities to predict its effect on a specific state, regional, or local economy (impact analysis). The IMPLAN input-output accounts capture all monetary market transactions for consumption in a given time period. The IMPLAN input-output accounts are based on industry survey data collected periodically by the U.S. BEA and follow a balanced account format recommended by the United Nations.

IMPLAN’s Regional Economic Accounts and the Social Accounting Matrices were used to construct state-level multipliers, which describe the response of the state economy to a change in demand or production as a result of the activities and expenditures of LG

Health/Penn Medicine. Each industry that produces goods or services generates demand for other goods and services; and this demand is multiplied through a particular economy until it dissipates through “leakage” to economies outside the specified area. IMPLAN models discern and calculate leakage from local, regional and state economic areas based on workforce configuration, the inputs required by specific types of businesses, and the availability of both inputs in the economic area. Consequently, economic impacts that accrue to other regions or states as a consequence of a change in demand are not counted as impacts within the economic area.

The model accounts for substitution and displacement effects by deflating industry-specific multipliers to levels well below those recommended by the U.S. Bureau of Economic Analysis. In addition, multipliers are applied only to personal disposable income to obtain a more realistic estimate of the multiplier effects from increased demand. Importantly, IMPLAN’s Regional Economic Accounts exclude imports to an economic area, so the calculation of economic impacts identifies only those impacts specific to the economic impact area, in this case, Pennsylvania. IMPLAN calculates this distinction by applying Regional Purchase Coefficients (RPC) to predict regional purchases based on an economic area’s particular characteristics. The RPC represents the proportion of goods and services that will be purchased regionally under normal circumstances, based on the area’s economic characteristics described in terms of actual trade flows within the area.

Model Inputs and Data Sources

Model inputs included actual FY 14-15 expenditures provided by LG Health/Penn Medicine, collected and organized by its Public Relations & Corporate Communications Department.

APPENDIX C: FAQ'S REGARDING ECONOMIC IMPACT ASSESSMENT

What is economic impact?

Economic impact begins when an organization spends money. Economic impact studies measure the direct economic impact of an organization's spending, plus additional indirect spending in the economy as a result of direct spending. Economic impact has nothing to do with dollars collected by institutions, their profitability or even their sustainability, since all operating organizations have a positive economic impact when they spend money and attract spending from outside sources.

Direct economic impact measures the dollars that are generated within Pennsylvania due to the presence of LG Health/Penn Medicine. This includes not only spending on goods and services with a variety of vendors within the state, and the spending of its employees and visitors, but also the business volume generated by businesses within Pennsylvania that benefit from spending by LG Health/Penn Medicine. It is important to remember that not all dollars spent by LG Health/Penn Medicine stay in Pennsylvania. Dollars that "leak" out of the state in the form of purchases from out-of-state vendors are not included in the economic impact that LG Health/Penn Medicine has on Pennsylvania.

The total economic impact includes the "multiplier" of spending from companies that do business with LG Health/Penn Medicine. Support businesses may include lodging establishments, restaurants, construction firms, vendors, temporary agencies, etc. Spending multipliers attempt to estimate the ripple effect in the state economy where the spending occurs. For example: Spending by LG Health/Penn Medicine with local vendors provides these vendors with additional dollars that they re-spend in the local economy, causing a "multiplier effect."

What is the multiplier effect?

Multipliers are a numeric way of describing the secondary impacts stemming from the operations of an organization. For example, an employment multiplier of 1.8 would suggest that for every 10 employees hired in the given industry, eight additional jobs would be created in other industries, such that 18 total jobs would be added to the given economic region. The multipliers used in this study range from 1.8 to 2.0.

The Multiplier Model is derived mathematically using the input-output model and Social Accounting formats. The Social Accounting System provides the framework for the predictive Multiplier Model used in economic impact studies. Purchases for final use drive the model. Industries that produce goods and services for consumer consumption must purchase products, raw materials and services from other companies to create their product. These vendors must also procure goods and services. This cycle continues until all the money is leaked from the region's economy. There are three types of effects measured with a multiplier: the direct, the indirect and the induced effects. The direct effect is the known or predicted change in the local economy that is



to be studied. The indirect effect is the business-to-business transactions required to satisfy the direct effect. Finally, the induced effect is derived from local spending on goods and services by people working to satisfy the direct and indirect effects.

- **Direct effects** take place only in the industry immediately being studied.

- **Indirect effects** concern inter-industry transactions: because LG Health/Penn Medicine is in business, it has a demand for locally produced materials needed to operate.
- **Induced effects** measure the effects of the changes in household income: employees of LG Health/Penn Medicine and suppliers purchase from local retailers and restaurants.
- **Total economic effects** the total changes to the original economy as the result of the operations of LG Health/Penn Medicine . i.e., Direct effects + Indirect effects + Induced effects = Total economic effects

What methodology was used in this study?

IMPLAN (IMpact analysis for PLANning) data and software was utilized to complete the study. Using classic input-output analysis in combination with regional specific Social Accounting Matrices and Multiplier Models, IMPLAN provides a highly accurate and adaptable model for its users. The IMPLAN database contains county, state, zip code, and federal economic statistics which are specialized by region, not estimated from national averages and can be used to measure the effect on a regional or local economy of a given change or event in the economy's activity.

What is employment impact?

Employment impact measures the direct employment (employees, staff, faculty, administration) plus additional employment created in the economy as a result of the operations of LG Health/Penn Medicine .

Indirect and Induced employment impact refers to other employees throughout the region that exist because of the Health system's economic impact. In other words, jobs related to the population – city services (police, fire, EMS, etc.), employees at local hotels and restaurants, clerks at local retail establishments, and area residents employed by vendors used by LG Health/Penn Medicine.

What is the difference between direct and indirect taxes?

Direct tax dollars include sales taxes and net corporate income taxes paid directly by the institution to the state, while indirect taxes include taxes paid to the state by vendors that do business with LG Health/Penn Medicine and individuals.

Is this a one-time impact or does the impact repeat each year?

The results presented in the Lancaster General Health/Penn Medicine economic impact study are generated on an annual basis. The economic impact in future years can either be higher or lower based on number of employees, capital expansion, increases in external research, and state appropriations.

What are Tripp Umbach's qualifications to perform an economic impact study for Lancaster General Health/Penn Medicine?

Tripp Umbach is the national leader in providing economic impact analysis to leading healthcare organizations, universities, and academic medical centers. We have completed more than 150 economic impact studies over the past 20 years for clients such as: the University of Pittsburgh, The Ohio State University, the University of Washington/UW Medicine, UCONN, UAB, University of Pittsburgh Medical Center, the Cleveland Clinic, General Electric (GE), the University of North Carolina Hospitals, Penn Medicine, and The Ohio State University Medical Center.