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Research Study

The Economic Impact of Rural Nursing Homes

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Key Findings

- The Centers for Medicaid and Medicare Services are projecting nursing care facilities expenditures to increase over 65 percent and national total health expenditures to increase over 75 percent from 2015 to 2025. The aging of the population and increased life expectancies are reflected in these increases and are contributing to the future demand for nursing homes.
- In addition to their medical contributions, nursing homes contribute economically to the local community and surrounding area.
- Given three rural nursing home scenarios that are not skilled nursing facilities, these rural nursing homes have up to 200 licensed beds and may have employment impact from 70 to 259 employees, with wages, salaries and benefits (labor income) impact from $3.3 million to $12.0 million.
- Given two rural nursing home scenarios that are skilled nursing facilities, these rural nursing homes have from 51 to 200 licensed beds and may have employment impact from 140 to 280 employees, with wages, salaries and benefits (labor income) impact from $6.7 million to $13.2 million.
- Tools are now available that enable community leaders to estimate the economic impact of a rural nursing home on their local economy.

Background

Nursing homes are typically one of the large employers in rural communities, particularly in rural communities without a local hospital. Nursing homes supply jobs and labor income to their rural economies. With increasing life expectancies and increasing elderly population (from the aging of the Baby Boomers), demand for nursing homes may increase in the future. This increased demand will drive growth in the nursing home industry, which will, in turn, stimulate additional economic activity. Nursing homes must thrive economically to provide high quality care to residents and good jobs to local workers.

Medicare certification provides nursing homes the ability to provide medical, rehabilitative, and therapeutic care to patients following a hospitalization. These nursing homes are certified as skilled nursing facilities (SNF) to provide a level of care that requires the daily involvement of skilled nursing or rehabilitation staff that cannot be provided on an outpatient basis.[2,3]

Nursing homes are one of the larger employers in rural communities and are increasingly important in the future due to the increasing life expectancies and the aging of the population. Rural nursing homes are critical to these local economies, not only in terms of local jobs and payroll, but in terms of providing quality care for the growing elderly

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population. Nursing staff levels are important to the quality of care in nursing homes.[7]

Nursing homes not only provide an essential service for an extremely vulnerable population, but employ a substantial segment of the health care workforce. Rural communities are concerned with the financial viability of their local nursing homes.

Objective

The objective of this study is to update the economic impact of rural nursing homes on local economies.[9] Five rural nursing home scenarios have been developed with economic impacts measured utilizing a widely recognized input-output analysis model and data from IMPLAN.[\8] A tool is provided for rural communities to develop the economic impact of their local nursing home. An economic impact study may become very important in illustrating the contributions of a rural nursing home to the local economy.[1,4,5]

National Health Expenditure Data

A factor important to the success of rural communities is job creation and sustainability. ***The health care sector is an extremely fast growing sector, and based on the current demographics, there is every reason to expect this trend to continue.*** Data in **Table 1** provide selected expenditure and employment data for the United States.[11] Several highlights from the national health expenditures data are:

Table 1
United States Health Expenditures and Employment Data
1970-2015; Projected for 2020-2025

Year	Total Health Expenditures ($Billions)	Per Capita Health Expenditures ($)	Health as % of GDP (%)	Health Sector Employment (0)		Avg Annual Increase in Employment (%)
Historical - Census Years						
1970	$74.6	$356	6.9%	3,052	[a]	
1980	255.3	1,108	8.9%	5,278	[a]	7.3%
1990	721.4	2,843	12.1%	8,211	[a]	5.6%
2000	1,369.7	4,857	13.3%	10,858	[a]	3.2%
2010	2,596.4	8,404	17.4%	13,777	[b]	2.7%
Historical - Most Recent Non-Census Years						
2011	2,687.9	8,638	17.3%	14,026	[b]	1.8%
2012	2,795.4	8,915	17.3%	14,282	[b]	1.8%
2013	2,877.6	9,110	17.2%	14,492	[b]	1.5%
2014	3,029.3	9,515	17.4%	14,677	[b]	1.3%
2015	3,205.6	9,990	17.8%	15,080	[b]	2.7%
				Avg Yrly Increase 2000 to 2015		2.6%
Projections						
2020	4,198.3	12,490	18.7%			
2025	5,631.0	16,032	20.1%			

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics. Available at: www.bls.gov. Accessed: July 2017; U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, "National Health Expenditures 1960-2015" and "National Health Expenditure Projections 2016-2025." Available at: http://www.cms.gov/. Accessed: July 2017.

[a] Based on Standard Industrial Classification (SIC) codes for health sector employment.

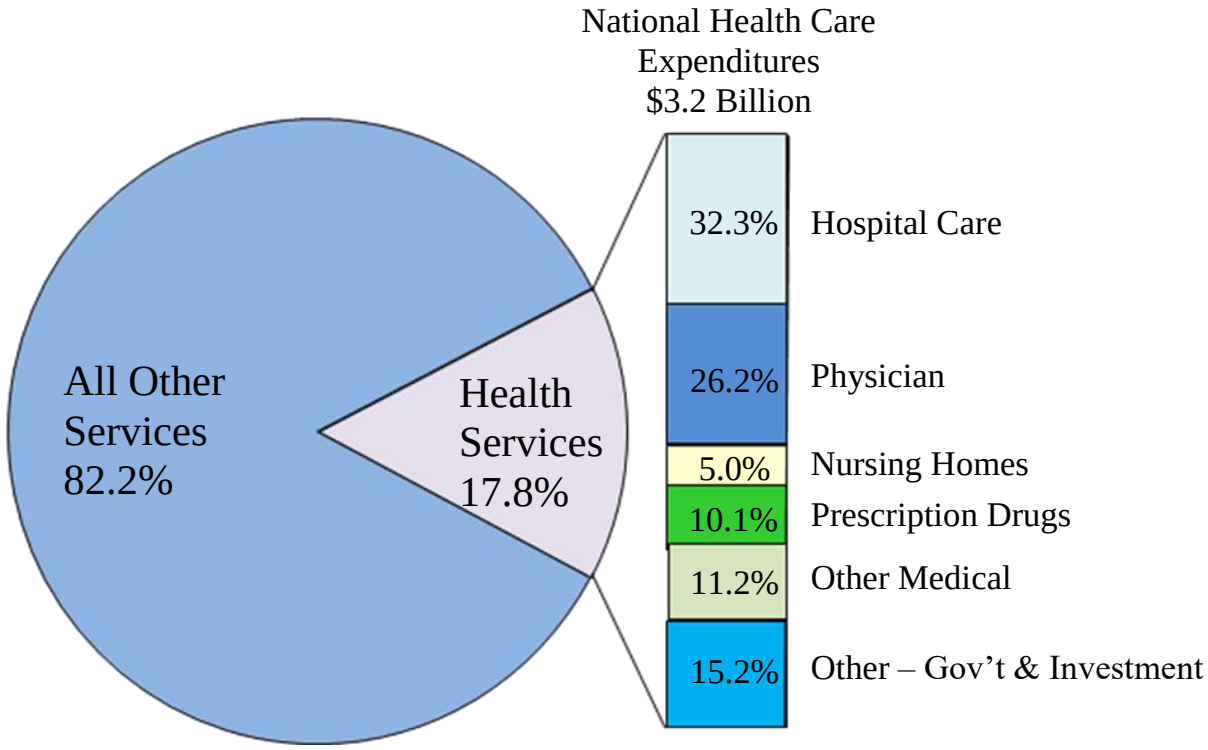
[b] Based on North American Industrial Classification System (NAICS) for health sector employment.

- In 1970, health care services as a share of the national gross domestic product (GDP) were 6.9 percent and increased to 17.8 percent in 2015;
- Per capita health expenditures increased from $356 in 1970 to $9,990 in 2015;
- Employment in the health sector increased 394.1 percent from 1970 to 2015; and
- Employment increased an average annual 2.6 percent from 2000 to 2015.

The U. S. Department of Health and Human Services, Centers for Medicare and Medicaid Services (CMS),[11] also projects that health care expenditures will account for 18.7 percent of GDP by 2020 and increase to 20.1 percent of GDP in 2025. Per capita health care expenditures are projected to increase to $12,490 in 2020 and to $16,032 in 2025. Total health expenditures are projected to increase to over $5.6 trillion in 2025.

Figure 1 illustrates 2015 health expenditures by percent of GDP and by type of health service. Health services represented 17.8 percent of national GDP in 2015. The largest category of health services was hospital care, representing 32.3 percent of the total and the second

Figure 1
National Health Expenditures as a Percent of Gross Domestic Product and by Health Service Type, 2015



SOURCE: U. S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, National Health Expenditures 2015. Available at: http://www.cms.gov/. Accessed: July 2017.

largest category was physician services with 26.2 percent of the total. Nursing homes represented 5.0 percent of total health expenditures.

Also available from CMS are national expenditures data for nursing care facilities.[11] **Table 2** compares the nursing care facilities expenditures data to the national health expenditures data. Several highlights from the national nursing care facilities data are:

- Per capital nursing care facilities increased from $19 in 1970 to $489 in 2015;
- Nursing care facilities expenditures increased from $4.0 billion in 1970 to $156.8 billion in 2015 (an increase of 3,820 percent or 38.2 times greater).
- Nursing care as a percent of total national health expenditures was 5.4 percent in 1970 and was 4.9 percent in 2015.
- Expenditures for nursing care facilities are projected to continue to increase.

The increase in expenditures reflects the aging of the population and the increasing life expectancies. These data illustrate the future demand for nursing homes.

Table 2
United States Health and Nursing Care Facilities' Expenditures Data
1970-2015; Projected for 2020-2025

Year	Total Health Expenditures ($Billions)	Per Capita Health Expenditures ($)	Health as % of GDP (%)	Total Nursing Care Facilities' Expenditures ($Billions)	Per Capita Nursing Care Expenditures ($)	Nursing Care - % of Total Health Expenditures (%)
Historical						
1970	$74.6	$355	6.9%	$4.0	$19	5.4%
1980	255.3	1,108	8.9%	15.3	66	6.0%
1990	721.4	2,843	12.1%	44.7	176	6.2%
2000	1,369.7	4,857	13.3%	85.0	302	6.2%
2010	2,596.4	8,404	17.4%	140.0	453	5.4%
2011	2,687.9	8,638	17.3%	145.0	466	5.4%
2012	2,795.4	8,915	17.3%	147.4	470	5.3%
2013	2,877.6	9,110	17.2%	149.2	472	5.2%
2014	3,029.3	9,515	17.4%	152.6	479	5.0%
2015	3,205.6	9,990	17.8%	156.8	489	4.9%
Projections						
2020	4,198.3	12,490	18.7%	197.6	588	4.7%
2025	5,631.0	16,032	20.1%	260.0	740	4.6%

SOURCES: U.S. Department of Labor, Bureau of Labor Statistics. Available at: www.bls.gov. Accessed: July 2017. U.S. Department of Health and Human Services, Centers for Medicare and Medicaid Services, "National Health Expenditures 1960-2015" and "National Health Expenditure Projections 2016-2025." Available at: https://www.cms.gov/. Accessed: July 2017.

Nursing Home National Data

Official Nursing Home Compare Datasets are available from the U.S. Department of Health and Human Services, Centers for Medicare & Medicaid Services, updated July 26, 2017.[10] In 2017, the datasets included 15,676 nursing homes, representing 1,643,955 total certified nursing home beds with 1,326,533 residents occupying nursing home beds. This represents an average national occupancy rate of 80.7 percent (**Table 3**). The average certified beds per nursing home were 104.9.

Table 3
Data for All Nursing Homes
from Official Nursing Home Compare Datasets, 2017

	All Homes All Beds	All Homes 0-50 beds	All Homes 51-100 Beds	All Homes 101-200 Beds	All Homes 200+ Beds
Number of Nursing Homes	15,676	2,274	6,022	6,556	824
Avg Beds/Home	104.9	37.0	77.9	135.0	274.6
Beds					
Total Certified Beds	1,643,955	84,089	469,042	864,556	226,268
Total No. Residents	1,326,533	67,179	377,643	693,810	187,901
Occupancy Rate	80.7%	79.9%	80.5%	80.3%	83.0%
Average Reported Hours/ Resident/Day					
CNA Staffing	2.45	2.67	2.46	2.38	2.38
LPN Staffing	0.86	0.83	0.84	0.88	0.83
RN Staffing	0.84	1.36	0.79	0.72	0.72
Total Staffing	4.15	4.86	4.09	3.98	3.93
Licensed Nurses	1.69	2.19	1.63	1.61	1.55
Physical Therapy	0.10	0.16	0.09	0.09	0.08
Average Ratings (1-5 high)					
Overall	3.30	3.95	3.40	3.03	3.00
Health Inspection	2.81	3.34	2.89	2.60	2.47
QM	3.76	3.75	3.77	3.73	3.96
Staffing	3.19	3.95	3.24	2.96	2.89
RN Staffing	3.37	4.20	3.42	3.10	3.11

SOURCE: U. S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. "Official Nursing Home Compare Datasets, Updated July 26, 2017." Available at: https://data.medicare.gov/. Accessed: July 2017.

The staffing data from the datasets illustrate the number of hours for each indicated staff category per resident day for the nursing and physical therapy staff (**Table 3**). From the datasets, certified nursing assistants (CNAs) are the largest component of nurse staffing with an average of 2.45 reported hours per resident day. For the reported LPNs, the average was 0.86 and for RNs, 0.84 hours. The total nurse staffing per resident day was an average of 4.15.

Physical therapy (PT) staffing per resident day was also included with an average of 0.10 hours. No data were available from the nursing home datasets on the staffing hours per resident day for the remainder of the nursing home staff. The PT staffing level is the only indicator of a skilled nursing facility.

These data are also provided for nursing home certified bed sizes: 0-50 beds, 51-100 beds, 101-200 beds, and 200+ beds.

Table 3 also shows nursing home average ratings for five categories. In general, the smaller the nursing home, the higher the rating. The QM category was the exception showing the highest rating for the 200+ bed category.

Nursing Home Rural Sample Data

In order to determine a rural sample of nursing homes, a listing of critical access hospitals (CAHs) was obtained from Critical Access Hospital Locations, Flex Monitoring Team, University of Minnesota, University of North Carolina at Chapel Hill, University of Southern Maine.[6] The zip codes of the locations of the CAHs were matched to the zip code locations of the nursing homes to obtain a rural sample of nursing homes.

Summary data for the rural sample are provided in **Table 4**. There are 1,341 CAHs and the rural sample resulted in 1,539 rural nursing homes, with an average of 77.1 certified beds per nursing home. The rural sample for all beds is provided, as well as a breakdown for 0-50 beds, 51-100 beds, and 101-200 beds. There was only one nursing home bed in the sample over 200 beds and it is not included.

The rural sample represented 118,430 total certified beds and 89,696 total residents, with an occupancy rate of 75.7%. Staffing for the rural sample shows CNAs with 2.50 hours per resident day, LPNs with 0.72, and RNs with 0.78. This resulted in total nurse staffing of 4.00 hours per resident day. Licensed nurse staffing was 1.51 resident hours per day and physical therapy staffing was 0.6.

The average ratings were also included for the rural sample (**Table 4**). RN staffing received the highest rating of 3.58 based on a scale from one to five with five being the highest rating. Overall rating of rural nursing homes was similar to the national nursing home datasets.

The breakdown of the rural sample nursing homes is included in **Table 4**. In general, the smaller rural nursing homes have higher occupancy rates, higher staffing levels for nurses and the average ratings are higher for all categories.

The datasets provide the average staffing hours for the nursing staff and the physical therapy staff. No data are provided on the staffing hours per resident for the remainder of the nursing home staff.

Data were determined for the other nursing home staff in the 2014 nursing home study from the National Center for Rural Health Works.[7,9] **Table 5** illustrates the average resident hours for each of the other categories of nursing home staff.

Other care staff includes activities director, assistant activities director, transportation-driver, medical director, chaplain, cooks, kitchen aides, physical therapist, assistants, and/or aides, occupational therapist, assistants, or aides, speech therapist, respiratory therapist, and other specialty care staff/aides. Nursing home facilities are required to employ a licensed physician to serve as medical director. The medical director is part of the other

Table 4
Data for Rural Sample Nursing Homes
from Official Nursing Home Compare Datasets, 2017

	RURAL SAMPLE All Beds	RURAL SAMPLE 0-50 Beds	RURAL SAMPLE 51-100 Beds	RURAL SAMPLE 101-200 Beds
Number of Nursing Homes	1,538	389	808	341
Avg Beds/Home	77.1	37.8	75.0	126.4
Beds				
Total Certified Beds	118,430	14,723	60,605	43,102
Total No. Residents	89,696	11,955	46,574	31,167
Occupancy Rate	75.7%	81.2%	76.8%	72.3%
Staffing - Average Reported Hours/Resident/Day				
CAN	2.50	2.70	2.43	2.44
LPN	0.72	0.69	0.70	0.81
RN	0.78	1.05	0.72	0.64
Total Nurses	4.00	4.45	3.85	3.89
Licensed Nurse	1.51	1.74	1.42	1.45
PT	0.06	0.06	0.06	0.06
Average Ratings (1-5 high)				
Overall	3.30	3.76	3.27	2.89
Health Inspection	2.89	3.13	2.86	2.69
QM	3.42	3.52	3.45	3.24
Staffing	3.33	4.01	3.22	2.88
RN Staffing	3.58	4.31	3.52	2.95

SOURCE: Flex Monitoring Team, Critical Access Hospital Listing, Updated July 12, 2017, Available at: http://www.flexmonitoring.org/, Accessed July 2017: U. S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. "Official Nursing Home Compare Datasets, Updated July 26, 2017." Available at: https://data.medicare.gov/. Accessed: July 2017.

care staff with the medical director responsible for implementation of resident medical care policies and the coordination of medical care in the nursing home facility.

Administrative staff includes director, assistant director, counselor, patient manager, financial staff, secretarial, receptionist, and administrative assistant staff. The housekeeping and other staff includes laundry, housekeeping (custodial workers), and grounds/maintenance/repair staff.

Table 5
Nursing Home Staffing Ratios for All Staff, 2017

Staffing Category	Rural Sample with SNFs	Rural Sample NO SNFs
Other care staff	1.47	1.11
Administrative Staff	0.33	0.33
Housekeeping and other staff	0.89	0.89

SOURCE: "Nursing Home Staffing and Its Relationship to Deficiencies." (2000) Journal of Gerontology 55B(5), 5278-5287. ; U. S. Department of Health and Human Services, Centers for Medicare & Medicaid Services; "An Overview of Nursing Homes and the Economic Impact of Rural Nursing Homes, November 2014," National Center for Rural Health Works, Available at : www.ruralhealthworks.org. Accessed: July 2017.

The ratios show the staffing for a rural sample with SNFs and for a rural sample without SNF (**Table 5**). Few changes have occurred in the nursing home industry since the 2014 study[7,9] and these data are still considered relevant. These data will be utilized to determine rural staffing patterns in the next section.

Rural Nursing Home Scenarios

After review of the data for the rural nursing homes sample, nursing home staffing are illustrated in **Table 6.** Staffing for all personnel are included, illustrating overall nursing home staffing for the five rural sample scenarios. With the larger sample for rural nursing homes, data were available to illustrate nursing homes without SNF and nursing homes that are skilled nursing facilities. The staffing for all personnel will be utilized to determine the employment and labor income for each scenario described below.

The larger rural sample allowed data for three bed sizes, 0-50, 51-100, and 101-200 and also allowed for the two larger bed sizes to reflect nursing home scenarios with SNF (**Table 6**). For each scenario, the FTEs per personnel category are shown as well as the total FTEs, total labor income, and average labor income per FTE employee.

The staffing ratios from **Table 6** were utilized to determine the FTEs for each scenario. The appropriate staffing ratios (based on SNF or no SNF services) were applied to the annual resident days per year (occupied residents x 365 days/year). The staffing ratios were then multiplied times the total number of annual resident days to result in the total staffing hours. The annual number of staffing hours was then converted to full-time equivalent employees (FTEs). These were calculated for each staffing category and rounded to the next whole number (**Table 7**).

The next step was to determine an average salary for each occupation and to allocate the FTEs to each occupation. The average wages for each nursing home occupation were determined from the U. S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics, "May 2016 National Occupational Employment and Wage Estimates, United States."[32] Multiplying the number of FTEs times the annual salary results in the annual wages and salaries. All occupations and all staffing categories were calculated to result in the total wages and salaries.

To add benefits to the total wages and salaries, the latest average national benefit rate available from the U. S. Department of Labor, Bureau of Labor Statistics, "Employer Costs for Employee

Table 6
Data for Rural Sample Nursing Homes
from the Five Rural Scenarios, 2017

	NOT SNF			SNF	
	Scenario 1	**Scenario 2**	**Scenario 3**	**Scenario 4**	**Scenario 5**
	Rural Sample 0-50	**Rural Sample 51-100**	**Rural Sample 101-200**	**Rural Sample 51-100**	**Rural Sample 101-200**
(Average reported hours/Resident day)					
Staffing for All Personnel					
CNA	2.74	2.42	2.47	2.43	2.40
LPN	0.69	0.69	0.81	0.70	0.81
RN	0.97	0.67	0.60	0.78	0.69
Total Nurse Staff	4.40	3.78	3.88	3.91	3.90
Other Care	1.11	1.11	1.11	1.47	1.47
Administrative	0.33	0.33	0.33	0.33	0.33
Housekeeping/Other	0.89	0.89	0.89	0.89	0.89
TOTAL STAFFING	6.73	6.11	6.21	6.60	6.59
Staffing - Average Reported Hours/Resident/Day					
Licensed Nurses	1.66	1.37	1.42	1.48	1.50
Physical Therapy	0.01	0.02	0.03	0.10	0.09
Average Ratings (1-5 high)					
Overall	3.80	3.23	2.86	3.34	2.93
Health Inspection	3.18	2.85	2.68	2.91	2.73
QM	3.31	3.33	3.18	3.61	3.30
Staffing	4.11	3.24	2.90	3.21	2.86
RN Staffing	4.37	3.48	2.87	3.56	3.02

SOURCE: Flex Monitoring Team, "Critical Access Hospital Listing, Updated July 12, 2017," Available at: http://www.flexmonitoring.org/, Accessed July 2017: U. S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. "Official Nursing Home Compare Datasets, Updated July 26, 2017." Available at: https://data.medicare.gov/. Accessed: July 2017, "Nursing Home Staffing and Its Relationship to Deficiencies." (2000) Journal of Gerontology 55B(5), 5278-5287. ; National Center for Rural Health Works. "An Overview of Nursing Homes and the Economic Impact of Rural Nursing Homes, November 2014." Available at: www.ruralhealthworks.org. Accessed: July 2017. U. S. Department of Labor, Bureau of Labor Statistics. "Employer Costs for Employee Compensation, March 2017," Available at: https://www.bls.gov/. Accessed: July 2017.

Table 7
Rural Nursing Home Scenarios, 2017

	Scenario 1	Scenario 2	Scenario 3	Scenario 4	Scenario 5
Occupied Beds	**50**	**100**	**200**	**100**	**200**
With/Without SNF	NO SNF	NO SNF	NO SNF	WITH SNF	WITH SNF
FTEs Staffing					
Nursing	38	66	136	69	136
Other Care	10	20	39	26	52
Administrative	3	6	12	6	12
Housekeeping/Other	8	15	31	15	31
Total FTE Employees	**59**	**107**	**218**	**116**	**231**
Total Labor Income	**$2,830,781**	**$4,913,734**	**$10,137,683**	**$5,594,704**	**$11,115,876**
Average per FTE	$47,979	$45,923	$46,503	$48,230	$48,121

SOURCE: Flex Monitoring Team, Critical Access Hospital Listing, Updated July 12, 2017, Available at: http://www.flexmonitoring.org/data/critical-access-hospital-locations/, Accessed July 2017: U. S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. "Official Nursing Home Compare Datasets, Updated July 26, 2017." Available at: https://data.medicare.gov/data/nursing-home-compare. Accessed: July 2017, "Nursing Home Staffing and Its Relationship to Deficiencies." (2000) Journal of Gerontology 55B(5), 5278-5287. ; U. S. Department of Health and Human Services, Centers for Medicare & Medicaid Services; "An Overview of Nursing Homes and the Economic Impact of Rural Nursing Homes," National Center for Rural Health Works, November 2014, "Employer Costs for Employee Compensation," March 2017, accessed at: https://www.bls.gov/news.release/ecec.nr0.htm, accessed on: July 2017.

Compensation, March 2017"[13] was determined to be 31.7 percent and multiplied times the wages a nd salaries to result in total wages, salaries, and benefits. The average wages, salaries, and benefits (labor income) per employee are included for each scenario (**Table 7**).

The results are in **Table 7**. For **Scenario 1**, a rural nursing home with 50 beds and no SNF services results in 59 FTEs and $2.8 million in labor income; this is an average labor income per FTE of $47,979. For **Scenario 2**, a rural nursing home with 100 beds and no SNF services results in 107 FTEs and labor income of $4.9 million; this is an average labor income per FTE of $45,923. For **Scenario 3**, a rural nursing home with 200 beds and no SNF services results in 218 FTEs and labor income of $10.1 million; this is an average labor income per FTE of $46,503. For **Scenario 4**, a rural nursing home with 100 beds and SNF services results in 116 FTEs and labor income of $5.6 million; this is an average labor income per FTE of $48,230. For **Scenario 5**, a rural nursing home with 200 beds and SNF services results in 231 FTEs and labor income of $11.1 million; this is an average labor income per FTE of $48,121.

The employment (FTEs) and annual labor income are the direct economic activities of the rural nursing home scenarios.

The Economic Impacts of the Rural Nursing Home Scenarios

Multipliers have been derived for each scenario from rural counties from states across all Census regions in the U.S. For the non-SNF nursing homes, multipliers were available for 226 nursing homes located in 16 states. For the SNF nursing homes, multipliers were available for 171 nursing homes located in 17 states. The multipliers were derived utilizing an input-output analysis model and data

from IMPLAN.[20] **Appendix A** provides more detailed information on IMPLAN.[8]

Nursing and residential care is a separate industry sector in the model and the multipliers were all derived for this sector. All multipliers were for counties with CAHs. The average of these county multipliers will be utilized to illustrate the impacts of the three scenarios. The multipliers were derived for the non-SNF and for the SNF. For the non-SNF, the average nursing and residential care employment multiplier was 1.19 and the average nursing and residential care labor income multiplier was 1.18. For the SNF, the average nursing and residential care employment multiplier was 1.21 and the average nursing and residential care labor income multiplier was 1.19. **Table 8** illustrates the employment and labor income impacts for the five scenarios.

For **Scenario 1**, the nursing home has 50 occupied beds with no skilled nursing. The total direct employment impact is 59 employees. After applying the employment multiplier of 1.19, the secondary employment impact is eleven employees (59 x 0.19 = 11) and the total employment impact is 70 employees (59 x 1.19 = 70). The total direct labor income (wages, salaries, and benefits) impact is $2,830,781. After applying the labor income multiplier of 1.18, the secondary labor income impact is $509,541 and the total labor income impact is $3,340,322.

For **Scenario 2**, the nursing home has 100 occupied beds with no skilled nursing. The total direct employment impact is 107 employees. After applying the employment multiplier of 1.19, the secondary employment impact is 20 employees (107 x 0.19 = 20) and the total employment impact is 127 employees (107 x 1.19 = 127). The total direct labor income (wages, salaries, and benefits) impact is $4,913,734. After applying the labor income multiplier of 1.18, the secondary labor income impact is $884,472 and the total labor income impact is $5,798,206.

For **Scenario 3**, the nursing home has 200 occupied beds with no skilled nursing. The total direct employment impact is 218 employees. After applying the employment multiplier of 1.19, the secondary employment impact is 41 employees (218 x 0.19 = 41) and the total employment impact is 259 employees (218 x 1.19 = 259). The total direct labor income (wages, salaries, and benefits) impact is $10,137,683. After applying the labor income multiplier of 1.18, the secondary labor income impact is $1,824,783 and the total labor income impact is $11,962,466.

Table 8

Nursing Home Scenario Impacts, 2017

	Scenario 1 50 Beds NO SNF	Scenario 2 100 Beds NO SNF	Scenario 3 200 Beds NO SNF	Scenario 4 100 Beds WITH SNF	Scenario 5 200 Beds WITH SNF
Employment Impact					
Direct Impact	59	107	218	116	231
Multiplier	1.19	1.19	1.19	1.21	1.21
Secondary Impact	11	20	41	24	49
Total Impact	**70**	**127**	**259**	**140**	**280**
Labor Income Impact					
Direct Impact	$2,830,781	$4,913,734	$10,137,683	$5,594,704	$11,115,876
Multiplier	1.18	1.18	1.18	1.19	1.19
Secondary Impact	$509,541	$884,472	$1,824,783	$1,062,994	$2,112,016
Total Impact	**$3,340,322**	**$5,798,206**	**$11,962,466**	**$6,657,698**	**$13,227,892**

For **Scenario 4**, the nursing home has 100 occupied beds with skilled nursing. The total direct employment impact is 116 employees. After applying the employment multiplier of 1.21, the secondary employment impact is 24 employees (116 x 0.21 = 24) and the total employment impact is 140 employees (116 x 1.21 = 140). The total direct labor income (wages, salaries, and benefits) impact is $5,594,704. After applying the labor income multiplier of 1.19, the secondary labor income impact is $1,062,994 and the total labor income impact is $6,657,698.

For **Scenario 5**, the nursing home has 200 occupied beds with skilled nursing. The total direct employment impact is 231 employees. After applying the employment multiplier of 1.21, the secondary employment impact is 49 employees (231 x 0.21 = 49) and the total employment impact is 280 employees (231 x 1.21 = 280). The total direct labor income (wages, salaries, and benefits) impact is $11,115,876. After applying the labor income multiplier of 1.19, the secondary labor income impact is $2,112,016 and the total labor income impact is $13,227,892.

Template to Build Your Own Nursing Home Impact Table

The next table is an example of what the impact table will look like for an individual nursing home. This table is provided for a rural community to build their own nursing home impact on their local economy. The multipliers from this study can be used with the actual nursing home employment and wages, salaries, and benefits (labor income) or multipliers can be derived to be specific to the local nursing home. The National Center for Rural Health Works can assist an individual community or nursing home in deriving their specific multipliers.

TEMPLATE

EMPLOYMENT IMPACT		
Direct Employment Impact	_____	(A)
Employment Multiplier	_____	(B)
Secondary Employment Impact	_____	(C)
Total Employment Impact	_____	(D)
LABOR INCOME IMPACT		
Direct Labor Income Impact	_____	(E)
Labor Income Multiplier	_____	(F)
Secondary Labor Income Impact	_____	(G)
Total Labor Income Impact	_____	(H)

(A) Direct employment impact is the latest annual employment for the nursing home. This can be total full-time and part-time employees OR total full-time equivalents.
(B) The rural community (or rural nursing home) can use the appropriate average nursing and residential care employment multiplier from this study or can choose to derive their local specific multiplier by contacting the National Center for Rural Health Works.
(C) Secondary employment impact is calculated with one of the following formulas:

$$(A) \times [(B) - 1.00] = (C)$$

or

$$(D) - (A) = (C).$$

(D) Total employment impact is calculated with the following formula:

$$(A) \times (B) = (D).$$

(E) Direct labor income impact includes the latest total annual wages, salaries, and benefits for the nursing home.
(F) The rural community (or rural nursing home) can use the appropriate average nursing and residential care labor income multiplier from this study or can choose to derive their local specific multiplier by contacting the National Center for Rural Health Works.
(G) Secondary labor income impact is calculated with one of the following formulas:

$$(E) \times [(F) - 1.00] = (G)$$

or

$$(H) - (E) = (G).$$

(H) Total labor income impact is calculated with the following formula:

$$(E) \times (F) = (H).$$

NOTE: All numbers calculated in this table are rounded to whole numbers with no decimals; EXCEPT the multipliers which are derived and have two decimals.

An optional "Rural Nursing Home Economic Impact Study" template is provided below for the rural community or rural nursing home to utilize. Rural community or nursing home leadership can change the wording to fit the local situation. This is only an option for a community or nursing home to consider.

Appendix B also includes the "Rural Nursing Home Economic Impact Study" template; however, this document is totally generic and a rural community would only need to fill in the noted blanks; i.e., <name of nursing home>, <number of nursing homes employees>, etc.

Limitations and Other Considerations

The presence of a nursing home in a rural community contributes directly to the local economy and also contributes secondary impacts through the multiplier effects. There can be other significant effects on nearby hospitals. If the nursing home is owned by the hospital, profit from the nursing home can subsidize hospital operations and services that are not financially self-supporting (including primary care, emergency and urgent care services). Further, hospital expenditures could be reduced by sharing services with the nursing home; i.e. dietary and nutrition, food services, housekeeping/janitorial, maintenance/upkeep, etc. The operation of the nursing home can make all health services more robust and more valuable to the community.

Beyond this, the presence of a nursing home may have the following effects:

1) Expanded utilization of the hospital associated with referrals of nursing home patients.

2) Expanded work for local physicians and other primary care providers in the nursing homes, that in turn supports the sustainability of rural practices.

3) Better ability for the hospital to reduce uncompensated days of care in the hospital (e.g., reduction of days waiting placement).

4) Complimentary interaction with a hospital's swing beds (skilled nursing) to form a better continuum of care.

5) Improved continuum of care to decrease readmissions.

6) Contribution to a greater critical mass of locally available health provider talent.

7) Greater political clout to support the sustainability of the local health care system.

TEMPLATE:

The Economic Impact of XYZ Nursing Home on ABC County

Nursing homes are typically one of the large employers in rural communities, particularly in rural communities without a local hospital. Nursing homes supply jobs and labor income to their rural economies. With increasing life expectancies and increasing elderly population (from the aging of the Baby Boomers), demand for nursing homes may increase in the future. This increased demand will drive growth in the nursing home industry, which will, in turn, stimulate additional economic activity. Nursing homes must thrive economically to provide high quality care to residents and good jobs to local workers.

Nursing homes not only provide an essential service for an extremely vulnerable population, but employ a substantial segment of the health care workforce. With nursing homes' reliance on Medicaid and Medicare funding, any changes in Medicaid and Medicare reimbursement impact the survival of rural nursing homes. Our community is concerned with the financial viability of our local nursing home. Our community wants to emphasize the economic impact of XYZ Nursing Home to our local economy.

Illustration of Community or County Economic System

This study is to illustrate the economic impact of XYZ Nursing Home on ABC County. The XYZ Nursing Home provides 115 jobs to the ABC County economy with $5,358,425 in wages, salaries, and benefits (labor income).

The direct impacts of XYZ Nursing Home, measured by employment and wages, salaries, and benefits (labor income), are only a portion of the total impact. There are additional economic impacts created as XYZ Nursing Home and its employees spend money. These are known as secondary impacts and are measured by multipliers using an input-output model and data from IMPLAN (the model and data are further discussed in **Appendix A**). This model is widely used by economists and other academics across the U.S.

A brief description of the input-output model and the multiplier effect is included and illustrated in **Figure 1**. **Figure 1** illustrates the major flows of goods, services, and dollars of any economy. The businesses which sell some or all of their goods and services to buyers outside of the community are the foundation of a community's economy. Such a business is a basic industry. The flow of products out of, and dollars into, a community are represented by the two arrows in the upper right portion of **Figure 1**. To produce these goods and services for "export" outside of the community, the basic industry purchases inputs from outside of the community (upper left portion of **Figure 1**), labor from the residents or "households" of the community (left side of **Figure 1**), and inputs from service industries located within the community (right side of **Figure 1**). The flow of labor, goods, and services in the community is completed by households using their earnings to purchase goods and services from the community's service industries (bottom of **Figure 1**). It is evident from the interrelationships shown in **Figure 1** that a change in any one segment of a community's economy will have reverberations throughout the entire economic system of the community.

Consider, for instance, the closing of a hospital. The services sector will no longer pay employees and the dollars going to households will stop. Likewise, the hospital will not purchase goods from other businesses, and the dollar flow to other businesses will stop. This decreases income in the "households" segment of the

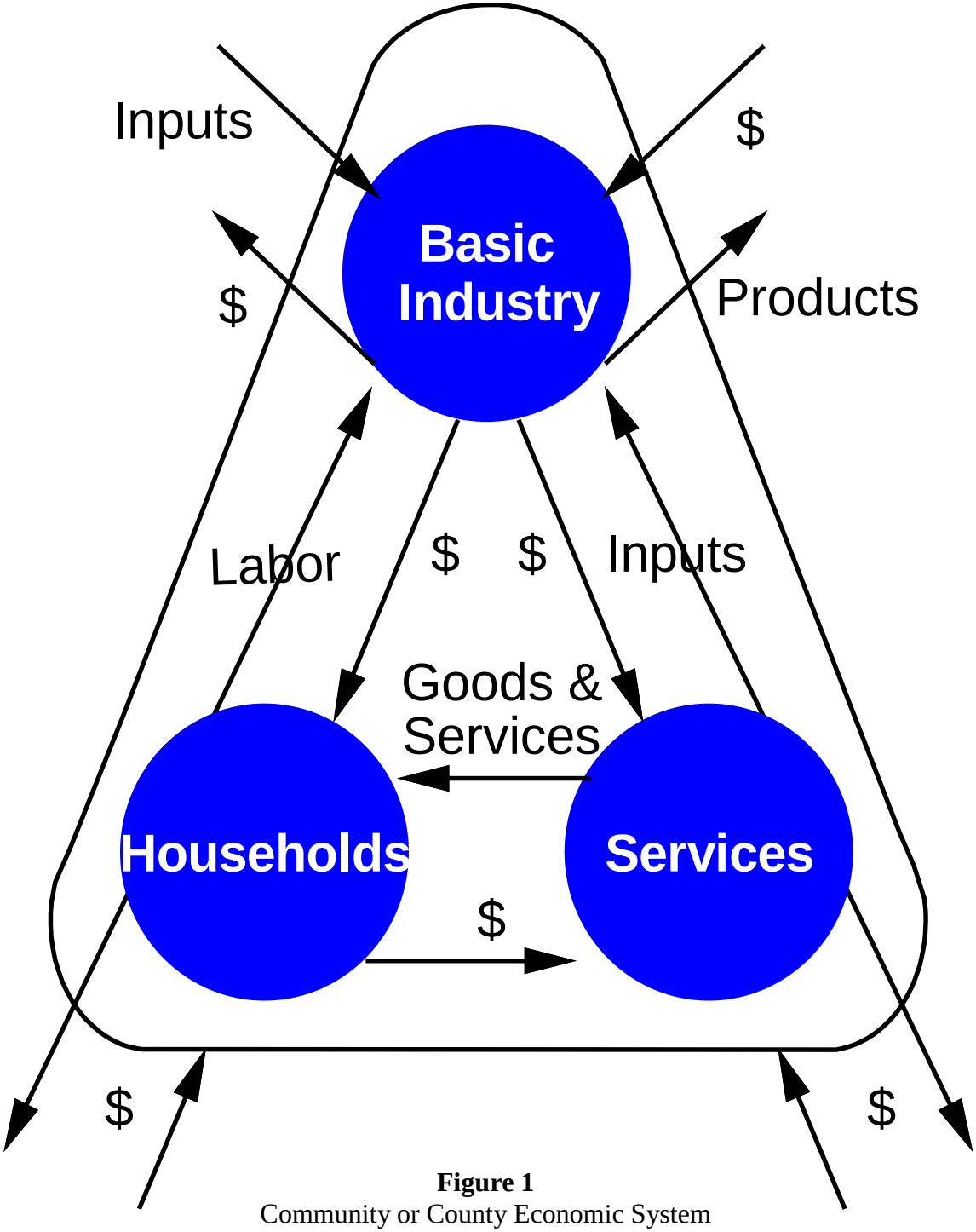


Figure 1
Community or County Economic System

economy. Since earnings would decrease, households decrease their purchases of goods and services from businesses within the "services" segment of the economy. This, in turn, decreases these businesses' purchases of labor and inputs. Thus, the change in the economic base works its way throughout the entire local economy.

The total impact of a change in the economy consists of direct, indirect, and induced impacts. Direct impacts are the changes in the activities of the impacting industry, such as the closing of a hospital. The impacting business, such as the hospital, changes its purchases of inputs as a result of the direct impact. This also produces an indirect impact in the business sectors. Both the direct and indirect impacts change the flow of dollars to the community's households. The households alter their consumption accordingly. The effect of this change in household consumption upon businesses in a community is referred to as an induced impact.

A measure is needed that yields the effects created by an increase or decrease in economic activity. In economics, this measure is called the multiplier effect. Multipliers are used in this report. An employment multiplier is defined as:

> ***"…the ratio between direct employment, or that employment used by the industry initially experiencing a change in final demand and the direct, indirect, and induced employment."***

An employment multiplier of 1.90 indicates that if one job is created by a new industry, 0.90 jobs are created in other sectors due to business (indirect) and household (induced) spending. The same concept applies to labor income and output multipliers.

The Economic Impact of XYZ Nursing Home

The economic impact of XYZ Nursing Home is illustrated in the table. *(add a few sentences about XYX Nursing Home here, if applicable).*

The direct employment impact is 115 employees; these are the employees that work directly for XYZ Nursing Home. The average nursing and residential care employment multiplier is 1.16. After applying the average nursing and residential care employment multiplier of 1.16, the secondary employment impact is 18 employees (115 x [1.16-1.00] = 18) and the total employment impact is 133 employees (115 x 1.16 = 133).

The total direct labor income (wages, salaries, and benefits) impact is $5,358,425. After applying the average nursing and residential care labor income multiplier of 1.15, the secondary labor income impact is $803,764 and the total labor income impact is $6,162,189.

Summary

XYZ Nursing Home employs a significant number of people in our local community. The total employment impact is 133 employees and the total labor income impact if $6,162,189. These impacts are from the operation of XYZ Nursing Home occur every year and will continue to occur each and every year that XYZ Nursing Home remains in operation in the future. These are long term economic benefits of XYZ Nursing Home.

With the longer life expectancies and the projected increase in elderly population, XYZ Nursing Home is increasingly important to ABC County. The impacts of XYZ Nursing Home contribute to the local economy of ABC County. XYZ Nursing Home employs a significant number of employees. The nursing home and its employees spend money in ABC

County. This generates a secondary impact in the economy. If XYZ Nursing Home decreases in size, XYZ Nursing Home may no longer be able to meet the needs of the increasing elderly population and this may also adversely impact the economic health of ABC County.

Quality nursing home services are important, because they not only contribute to the overall economic health of ABC County, but they also contribute to the overall health and welfare of the residents of ABC County.

Economic Impact of XYZ Nursing Home on ABC County

EMPLOYMENT IMPACT	
Direct Employment Impact (FTEs)	115
Employment Multiplier	1.16
Secondary Employment Impact	18
Total Employment Impact	**133**
LABOR INCOME IMPACT	
Direct Labor Income* Impact	$5,358,425
Labor Income Multiplier	1.15
Secondary Labor Income Impact	$803,764
Total Labor Income Impact	**$6,162,189**

* Labor income includes annual wages, salaries, and benefits.

References

1. Aiken, Linda H. (May 2008) "Economics of Nursing." *Policy, Politics, & Nursing Practice* 9(2): 73-79.

2. Alliance for Quality Nursing Home Care. "Therapy Services in Nursing Facilities." September 2010.

3. Alliance for Quality Nursing Home Care. "Trends in Post-Acute and Long-Term Care." September 2009.

4. American Health Care Association and Alliance for Quality Nursing Home Care. (February 2011) "Economic Contribution of Nursing Facilities." Care Context.

5. American Health Care Association and National Center for Assisted Living. (January 2011) "Economic Impact of Long Term Care Facilities, United States."

6. Flex Monitoring Team, University of Minnesota, University of North Carolina at Chapel Hill, University of Southern Maine. "Critical Access Hospital Locations. Updated July 12, 2017." Available at: http://www.flexmonitoring.org/. Accessed: July 2017.

7. Harrington, C., David Zimmerman, Sarita L. Karon, James Robinson, and Patricia Beutel. (2000) "Nursing Home Staffing and Its Relationship to Deficiencies." *Journal of Gerontology* 55B(5): 5278-5287.

8. IMPLAN. Available at: www.implan.com. Accessed: July 2017.

9. National Center for Rural Health Works. "An Overview of Nursing Homes and the Economic Impact of Rural Nursing Homes, November 2014." Available at: www.ruralhealthworks.org. Accessed: July 2017.

10. U. S. Department of Health and Human Services, Centers for Medicare & Medicaid Services. "Official Nursing Home Compare Datasets, Updated July 26, 2017." Available at: https://data.medicare.gov/. Accessed: July 2017.

11. U. S. Department of Health and Human Services, Centers for Medicare and Medicaid Services. "National Health Expenditures 1960-2015" and "National Health Expenditures Projections 2016-2015." Available at: https://www.cms.gov/. Accessed: July 2017.

12. U. S. Department of Labor, Bureau of Labor Statistics, Occupational Employment Statistics. "May 2016 National Occupational Employment and Wage Estimates, United States." Available at: http://www.bls.gov/. Accessed: July 2017.

13. U. S. Department of Labor, Bureau of Labor Statistics, News Release: USDL-14-1075. "Employer Costs for Employee Compensation - March 2017." Available at: http://www.bls.gov/. Accessed: July 2017.

Appendix A

IMPLAN Software and Data:

Model and Data Used to Derive Multipliers

IMPLAN Software and Data from IMPLAN Group, LLC: Model and Data Used to Derive Multipliers

A Review of Input-Output Analysis

Input-output (I/O) (Miernyk, 1965) was designed to analyze the transactions among the industries in an economy. These models are largely based on the work of Wassily Leontief (1936). Detailed I/O analysis captures the indirect and induced interrelated circular behavior of the economy. For example, an increase in the demand for health services requires more equipment, more labor, and more supplies, which, in turn, requires more labor to produce the supplies, etc. By simultaneously accounting for structural interaction between sectors and industries, I/O analysis gives expression to the general economic equilibrium system. The analysis utilizes assumptions based on linear and fixed coefficients and limited substitutions among inputs and outputs. The analysis also assumes that average and marginal I/O coefficients are equal.

Nonetheless, the framework has been widely accepted and used. I/O analysis is useful when carefully executed and interpreted in defining the structure of an area, the interdependencies among industries, and forecasting economic outcomes.

The I/O model coefficients describe the structural interdependence of an economy. From the coefficients, various predictive devices can be computed, which can be useful in analyzing economic changes in a state, an area or a county. Multipliers indicate the relationship between some observed change in the economy and the total change in economic activity created throughout the economy.

The basis of IMPLAN was developed by the U. S. Forest Service to construct input/output accounts and models. The complexity of this type of modeling had hindered practitioners from constructing models specific to a community requesting an analysis. The University of Minnesota utilized the U.S. Forest Service model to further develop the methodology and expand the data sources to form the model known as IMPLAN. The founders of IMPLAN, Scott Lindall and Doug Olson, joined the University of Minnesota in 1984 and, as an outgrowth of their work with the University of Minnesota, entered into a technology transfer agreement with the University of Minnesota that allowed them to form Minnesota IMPLAN Group, Inc. (MIG).

In 2013, Minnesota IMPLAN Group, Inc. was purchased by IMPLAN Group, LLC. In 2015, IMPLAN Group, LLC became IMPLAN and relocated to:

IMPLAN
16905 Northcross Drive, Suite 120
Huntersville, NC 28078

IMPLAN support can be reached by phone at 800-507-9426 or by email on their web page at: http://implan.com/company/contact-us/.

IMPLAN Software and Data

At first, IMPLAN focused on database development and provided data that could be used in the Forest Service version of the software. In 1995, IMPLAN took on the task of writing a new version of the IMPLAN software from scratch that extended the previous Forest Service version by creating an entirely new modeling system – an extension of input-output accounts and resulting Social Accounting Matrices (SAM) multipliers. Version 2 of the new IMPLAN software became available in May of 1999. The latest development of the software is now available, IMPLAN Version 3 Software System, the new economic impact assessment software system.

With IMPLAN Version 3 software, the packaging of products has changed. Version 3 utilizes 2007 or later data. When data are ordered, the data cost plus shipping are the only costs. Version 3.0 software is included in the cost of the data. There are no additional fees to upgrade to IMPLAN Version 3.0. Data files are subject to licensing restrictions. Version 2 is no longer compatible with 2008 and later data sets.

Version 3 allows the user to do much more detailed analyses. Users can continue to create detailed economic impact estimates. Version 3.0 takes the analysis further, providing a new method for estimating regional imports and exports is being implemented - a trade model. IMPLAN can construct a model for any state, region, area, county, or zip code area in the United States by using available national, state, county, and zip code level data. Impact analysis can be performed once a regional input/output model is constructed.

IMPLAN online is an additional feature offered, allowing users to subscribe to online availability of the data and software. To purchase IMPLAN online, contact the company. Model economic impacts can be done from anywhere by utilizing IMPLAN online. IMPLAN online subscribers always have access to the latest data releases and most current software updates. Plus, subscribers also receive access to historical datasets (back to 2010) in addition to the data year of their selection.

Users should note that there are two different versions of the software available. One is referred to as IMPLAN online (available anywhere on the cloud) and is available at a monthly cost. The other version is called IMPLAN PRO (or desktop version) and is available on an individual computer. The cost is for the data. There are several differences in the two versions available and a user should determine through consultation with IMPLAN which version is appropriate for their needs. Be sure to check this thoroughly so the data you purchase will fulfill your needs.

IMPLAN Data

Five different sets of multipliers are estimated by IMPLAN, corresponding to five measures of regional economic activity. These are: total industry output, personal income, total income, value added, and employment. Two types of multipliers are generated. Type I multipliers measure the impact in terms of direct and indirect effects. Direct impacts are the changes in the activities of the focus industry or firm, such as the closing of a hospital. The focus business changes its purchases of inputs as a result of the direct impacts. This produces indirect impacts in other

business sectors. However, the total impact of a change in the economy consists of direct, indirect, and induced changes. Both the direct and indirect impacts change the flow of dollars to the households. Subsequently, the households alter their consumption accordingly. The effect of the changes in household consumption on businesses in a community is referred to as an induced effect. To measure the total impact, a Type II (or Type SAM) multiplier is used. The Type II multiplier compares direct, indirect, and induced effects with the direct effects generated by a change in final demand (the sum of direct, indirect, and induced divided by direct).

IMPLAN also provide an additional feature that shows the state and local tax impacts and the federal tax impacts for a particular industry or a scenario for a specific employer.

APPENDIX B

TEMPLATE:

Rural Nursing Home Economic Impact Study (Fill-In the Blanks)

The Economic Impact of <name of nursing home> on <name of county or community medical service area>

Nursing homes are typically one of the large employers in rural communities, particularly in rural communities without a local hospital. Nursing homes supply jobs and labor income to their rural economies. With increasing life expectancies and increasing elderly population (from the aging of the Baby Boomers), demand for nursing homes may increase in the future. This increased demand will drive growth in the nursing home industry, which will, in turn, stimulate additional economic activity. Nursing homes must thrive economically to provide high quality care to residents and good jobs to local workers.

Nursing homes not only provide an essential service for an extremely vulnerable population, but employ a substantial segment of the health care workforce. With nursing homes' reliance on Medicaid and Medicare funding, any changes in Medicaid and Medicare reimbursement impact the survival of rural nursing homes. Our community is concerned with the financial viability of our local nursing home. Our community wants to emphasize the economic impact of <name of nursing home> to our local economy.

Illustration of Community or County Economic System

This study is to illustrate the economic impact of <name of nursing home> on <name of county or community medical service area>. The <name of nursing home> provides <number of direct nursing home employees> to the <name of county or community medical service area> economy with <amount of direct nursing home wages, salaries, and benefits> in wages, salaries, and benefits (labor income).

The direct impacts of <name of nursing home>, measured by employment and wages, salaries, and benefits (labor income), are only a portion of the total impact. There are additional economic impacts created as <name of nursing home> and its employees spend money. These are known as secondary impacts and are measured by multipliers using an input-output model and data from IMPLAN (the model and data are further discussed in **Appendix A**). This model is widely used by economists and other academics across the U.S.

A brief description of the input-output model and the multiplier effect is included and illustrated in **Figure 1**. **Figure 1** illustrates the major flows of goods, services, and dollars of any economy. The businesses which sell some or all of their goods and services to buyers outside of the community are the foundation of a community's economy. Such a business is a basic industry. The flow of products out of, and dollars into, a community are represented by the two arrows in the upper right portion of **Figure 1**. To produce these goods and services for "export" outside of the community, the basic industry purchases inputs from outside of the community (upper left portion of **Figure 1**), labor from the residents or "households" of the community (left side of **Figure 1**), and inputs

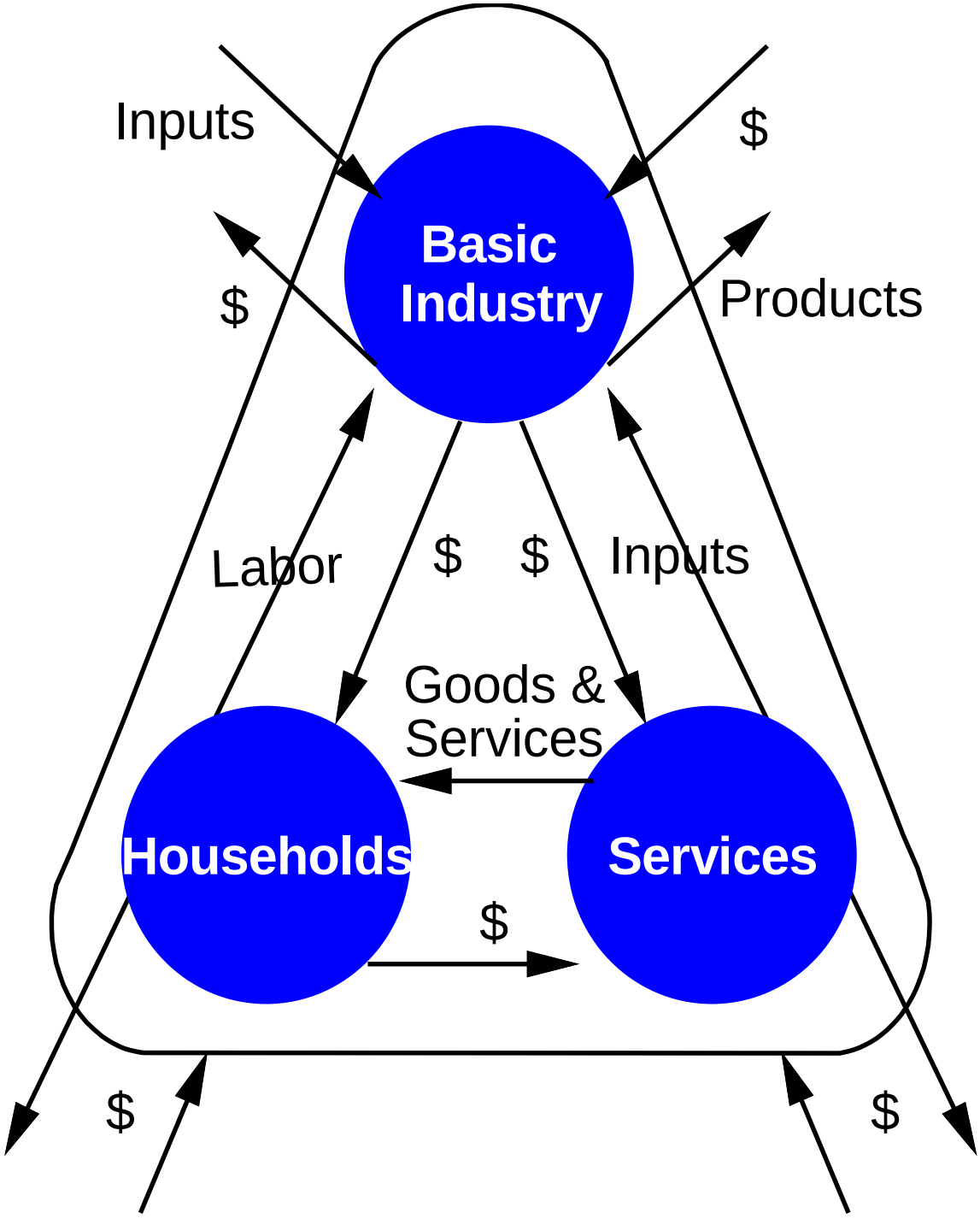


Figure 1
Community or County Economic System

from service industries located within the community (right side of **Figure 1**). The flow of labor, goods, and services in the community is completed by households using their earnings to purchase goods and services from the community's service industries (bottom of **Figure 1**). It is evident from the interrelationships shown in **Figure 1** that a change in any one segment of a community's economy will have reverberations throughout the entire economic system of the community.

Consider, for instance, the closing of a hospital. The services sector will no longer pay employees and the dollars going to households will stop. Likewise, the hospital will not purchase goods from other businesses, and the dollar flow to other businesses will stop. This decreases income in the "households" segment of the economy. Since earnings would decrease, households decrease their purchases of goods and services from businesses within the "services" segment of the economy. This, in turn, decreases these businesses' purchases of labor and inputs. Thus, the change in the economic base works its way throughout the entire local economy.

The total impact of a change in the economy consists of direct, indirect, and induced impacts. Direct impacts are the changes in the activities of the impacting industry, such as the closing of a hospital. The impacting business, such as the hospital, changes its purchases of inputs as a result of the direct impact. This also produces an indirect impact in the business sectors. Both the direct and indirect impacts change the flow of dollars to the community's households. The households alter their consumption accordingly. The effect of this change in household consumption upon businesses in a community is referred to as an induced impact.

A measure is needed that yields the effects created by an increase or decrease in economic activity. In economics, this measure is called the multiplier effect. Multipliers are used in this report. An employment multiplier is defined as:

> ***"…the ratio between direct employment, or that employment used by the industry initially experiencing a change in final demand and the direct, indirect, and induced employment."***

An employment multiplier of 1.90 indicates that if one job is created by a new industry, 0.90 jobs are created in other sectors due to business (indirect) and household (induced) spending. The same concept applies to labor income and output multipliers.

The Economic Impact of <name of nursing home>

The economic impacts of <name of nursing home> are illustrated in the table. *<(add a few sentences about local nursing home here, if applicable).>*

The direct employment impact is <number of direct nursing home employees> employees; these are the employees that work directly for <name of nursing home>. The average nursing and residential care employment multiplier is <nursing and residential care employment multiplier>. After applying the average nursing and residential care employment multiplier of <nursing and residential care employment multiplier>, the secondary employment impact is <number of

secondary impact employees> employees (<number of direct nursing home employees> x [<nursing and residential care employment multiplier>-1.00] = <number of secondary impact employees>) and the total employment impact is <number of total impact employees> employees (<number of direct nursing home employees> x <nursing and residential care employment multiplier> = <number of total impact employees>). The total direct labor income (wages, salaries, and benefits) impact is <amount of direct nursing home wages, salaries, and benefits>. After applying the average nursing and residential care labor income multiplier of <nursing and residential care labor income multiplier>, the secondary labor income impact is <amount of secondary labor income impact> and the total labor income impact is <amount of total labor income impact>.

Economic Impact of <name of nursing home> on the <name of county or community medical service area>

EMPLOYMENT IMPACT	
Direct Employment Impact (FTEs)	<number of direct nursing home employees>
Employment Multiplier	<nursing and residential care employment multiplier>
Secondary Employment Impact	< number of secondary impact employees>
Total Employment Impact	<number of total impact employees>
LABOR INCOME IMPACT	
Direct Labor Income* Impact	<amount of direct nursing home wages, salaries, and benefits>
Labor Income Multiplier	<nursing and residential care labor income multiplier>
Secondary Labor Income Impact	<amount of secondary labor income impact>
Total Labor Income Impact	<amount of total labor income impact>

* Labor income includes annual wages, salaries, and benefits.

Summary

<name of nursing home> employs a significant number of people in <name of county or community medical service area>. The total employment impact is <number of total impact employees> and the total labor income impact is <amount of total labor income impact>. These impacts are from the operation of <name of nursing home> and occur every year and will continue to occur each and every year that <name of nursing home> remains in operation in the future. These are long term economic benefits of <name of nursing home>.

With the longer life expectancies and the projected increase in elderly population, <name of nursing home> is increasingly important to <name of county or community medical service area>. The impacts of <name of nursing home> contribute to the local economy of <name of county or community medical service area>. <name of nursing home> employs a significant number of employees. The nursing home and its employees spend money in <name of county or community medical service area>. This generates a secondary impact in the economy. If <name of nursing home> decreases in size, <name of nursing home> may no longer be able to meet the needs of the increasing elderly population and this may also adversely impact the economic health of <name of county or community medical service area>.

Quality nursing home services are important, because they not only contribute to the overall economic health of <name of county or community medical service area>, but they also contribute to the overall health and welfare of the residents of <name of county or community medical service area>.

Fields Needed to Complete Template

<name of nursing home>

<name of county or community medical service area>

<number of direct nursing home employees>

<amount of direct nursing home wages, salaries, and benefits>

<add a few sentences about local nursing home here, if applicable>

<nursing and residential care employment multiplier>

<number of secondary impact employees>

<number of total impact employees>

< nursing and residential care labor income multiplier>

<amount of secondary labor income impact>

<amount of total labor income impact>