Health care is the largest private-sector employer in Corpus Christi. Expansion in health care facilities reflects local population trends. Despite employment growth among health care professionals, the increases of physicians in different specialties have lagged behind the rest of the nation. Those gaps post a challenge particularly in accommodating the medical needs of the rapidly growing old age population in South Texas.

This article benefits from communications with Mack Ray of American Bank and others.

Largest Private Sector

Including social assistance, such as children’s day care and assisted living retirement communities, the Corpus Christi metro area’s health care sector accounts for 14 percent of its local workforce, making it the largest private-sector employer.

Since 2001, employment for those services has grown 29 percent, nearly double that of the area’s overall employment. Gauged by job numbers, the size of this sector locally is 12 percent larger than the national average of comparable communities.
The relative size of a local industry in comparison with the relative size of that industry in the nation can be interpreted through a measure called location quotient. A location quotient greater than one means that the industry is relatively more concentrated in the local area than elsewhere in the nation.

Accordingly, the location quotient for Corpus Christi’s health care industry is 1.12. This measure highlights their significance for not only the metro area, but also the region of South Texas. This statistic also seems to suggest that the community has a sufficient amount of health care providers.

Despite the overall expansion of medical facilities in the past decade, the local quotient of this sector was in fact even higher at 1.3 some 15 years ago. Health care employment growth has trailed the tourism or hospitality sector, which includes hotels and motels, and restaurants and bars.

Recent growth of local health care services paralleled the community’s population trends. Between 2001 and 2015, health care employment growth outpaced the 11-percent population growth across the metro area. Yet growth was tilted toward nursing and retirement homes.

Since 2001, the number of area residents aged 55 or older has grown nearly 50 percent. On the contrary, the age group for 35 to 54 years old has shrunk by 4 percent, while the population younger than 25 years old has not changed at all.

In Aransas County, employment among nursing and retirement homes has grown by a whopping 228 percent, as compared to 46 percent for the entire metro area. Likewise, its current location quotient exceeds 2. Those figures reflect the growing old age population in that county due primarily to migration of Baby Boomers, as explained in a recent Economic Pulse article (2015, Issue 7).

Aransas County’s medical care facilities have also grown more rapidly than the other two counties in Corpus Christi. However, as for San Patricio County, its local quotient for medical services is below 0.5. At first glance, those remarkably low local quotients signify insufficient supplies of medical services.

The majority of health care providers are in fact located in Nueces County, which has a relatively high location quotient of 1.5. With more than 90 percent of health care jobs in the metro area, the city of Corpus Christi effectively serves as the medical hub for nearby communities in the Coastal Bend. The decline of medical care employment in San Patricio County is associated with a recent decline of its population.

Despite its overall rapid growth, the availability of health care services in Corpus Christi looks drastically different in light of the key players in that industry—physicians. The relative availability of physicians in Nueces County varies remarkably by their fields of specialization. The county has a relatively high concentration of pediatricians. The 131 pediatricians in the area together give rise to a remarkably high location quotient of 3.1. The location quotient for internists, obstetricians, gynecologists, and surgeons are also greater than one.

By contrast, there are only 23 anesthesiologists, resulting in the lowest location quotient of 0.55. This means that the number of anesthesiologists in this community is about half of that number in a typical community of the same size. Likewise, the location quotient for family and general practitioners is also substantially below the national benchmark.

The location quotient for all physicians together in Nueces County is less than one, even though the corresponding measure for health care professionals as a whole, which also include nurses and other medical practitioners, is above one.

Local physicians are overrepresented by pediatricians. Their location quotient of 3.1 suggests that the number of pediatricians are three times that of the national average.
Medical Service Gaps

The supply of various types of physicians also does not follow changes in the regional population. This can be realized from the components of a dynamic measure called shift-share, as opposed to the static measure of location quotient.

In shift-share analysis, a change in the number of a particular occupation between two years is the outcome of three effects. The first effect captures changes of that occupation nationwide; the second effect reflects the national trend of all jobs; and the third effect represents factors unique to the local area.

Between 2001 and 2015, both occupational and national effects were positive in Nueces County for physicians of all specialty fields, reflecting growth in those occupations as well as overall employment nationwide. Those two factors were the primary sources of increases among local physicians. The measures of effects unique to the community were all negative. In other words, the increases of physicians locally have lagged behind the rest of the nation.

For instance, there was no change in the number of anesthesiologists within the last 15 years. The negative local-specific effects totally offset the positive growth effects arising from its own occupation as well as the national employment trend. The number of all physicians combined increased by 52, or 7 percent, which fell short of the local population growth of 11 percent.

Even for pediatricians, who increased the most, the 12 additional physicians only paralleled national trends. Locally the population younger than 5 years old in fact reduced by one percent within the past 15 years.

So, when the supply of health care services is judged by the growing numbers of physicians in different medical fields instead of other health care professionals, then Corpus Christi is falling behind the rest of the nation. Yet the area has a high concentration of pediatricians, with more than 3 pediatricians for every one nationally.

The increases of local physicians also did not reflect the disparate population growth patterns of different age groups. Those gaps can potentially result in shortages of certain types of medical treatments.

The evidence of imbalances in the local health care industry also posts a challenge for the community that aims at maintaining a high quality of life against a rapidly growing old age population in South Texas.

<table>
<thead>
<tr>
<th>Specialization</th>
<th>Number</th>
<th>Location Quotient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anesthesiologists</td>
<td>23</td>
<td>0.55</td>
</tr>
<tr>
<td>Family &amp; General Practitioners</td>
<td>120</td>
<td>0.71</td>
</tr>
<tr>
<td>Internists</td>
<td>109</td>
<td>1.68</td>
</tr>
<tr>
<td>Obstetricians &amp; Gynecologists</td>
<td>37</td>
<td>1.24</td>
</tr>
<tr>
<td>Pediatricians</td>
<td>131</td>
<td>3.10</td>
</tr>
<tr>
<td>Surgeons</td>
<td>71</td>
<td>1.27</td>
</tr>
<tr>
<td>All other physicians</td>
<td>311</td>
<td>0.74</td>
</tr>
<tr>
<td>Total</td>
<td>802</td>
<td></td>
</tr>
</tbody>
</table>

Source: EMSI, 2015.2.
Past Issues:

2016, No. 2: Economic Disparity Among Us
2016, No. 1: Small Business Climate
2015, No. 7: Aging Corpus Christi
2015, No. 6: Economic Diversification in South Texas
2015, No. 5: Construction as a New Game Changer
2015, No. 4: Local Employment Outlook
2015, No. 3: A Diversified Economy?
2015, No. 2: Payoffs of Advanced Training and Resource Curse
2015, No. 1: Corpus Christi as One of America’s Happiest Cities
2014, No. 6: What Drives Coastal Bend Employment Growth?
2014, No. 5: From Oil Boom to Sustainable Economic Growth
2014, No. 4: Resurgence of an Industry
2014, No. 3: Community Benefits of Type A Funds
2014, No. 2: BRAC’s Impact on Regional Economies
2014, No. 1: Vision 2020: How Big Will We Get?
2013, No. 5: Local Climate Change
2013, No. 4: The Business of Incubating Businesses
2013, No. 3: A Tale of Two Counties
2013, No. 2: Year 2012 in Review
2013, No. 1: Reversal of Fortunes for South Texas
2012, No. 4: Coastal Bend Regional Growth: How Much is Regional?

Economic Pulse
is a joint publication of the South Texas Economic Development Center, the College of Business, and the EDA University Center at Texas A&M University-Corpus Christi. Material may be reprinted if the source is properly credited.

Any opinions expressed or implied are solely those of the original authors and do not reflect the views of the College of Business or Texas A&M University-Corpus Christi. Send correspondence to Jim Lee, (361) 825-5831 or email jlee@tamucc.edu.

For past issues of this newsletter and other publications, visit us online at: SouthTexasEconomy.com

Editorial Team:

John Gamble, Dean, College of Business
Jim Lee, Editor
Shawn Elizondo, Assistant to the Editor

SouthTexasEconomy.com

To conserve resources, paper copies of the Economic Pulse newsletter will be mailed out only upon request. Please visit us online for an electronic version of our publications.