

## Great Variability in Geographic Access to Primary Care Facilities

Primary care physicians play an integral role within the U.S. healthcare delivery system, in part, because they promote communication with patients and encourage them to become a partner in health care by being more informed about their health needs.<sup>1</sup> For this reason, an appropriate primary care physician population is crucial for the healthcare system to be effective and efficient.<sup>2</sup> Too few primary care physicians would result in increased costs due to delayed care, worsened health conditions, and increased hospital and emergency room usage.<sup>3</sup> However, having too many primary care physicians could potentially increase healthcare spending due to the possibility that individuals would receive unnecessary health services.<sup>4</sup> Currently, the U.S. is experiencing uneven levels of access to primary care physicians, which could negatively impact health outcomes for persons lacking access to primary care services. The *Health Resources and Services Administration* (HRSA) identified 6,282 *Health Professional Shortage Areas* (HPSA) in primary care as of October 2015.<sup>5</sup> This Health Capital Topics article will discuss how, in light of the *Patient Protection and Affordable Care Act* (ACA) provisions promoting utilization of primary care, great geographic variability exists in many parts of the United States regarding access to primary care physicians. This article will also detail how geographic variability impacts access to healthcare services and overall community health while providing certain practices health systems can incorporate to address geographic variability in primary care access.

The expansion of health insurance coverage under the ACA has increased the ability of more members of the U.S. population to access primary care services. As of May 2015, 17 to 18 million Americans are newly insured as a result of the ACA's expansion of private insurance coverage and expansions to Medicaid eligibility.<sup>6</sup> The increase in new health insurance enrollees will likely exacerbate the already-existing healthcare workforce shortage, particularly in primary care facilities,<sup>7</sup> because the ACA, once fully implemented, is projected to increase the number of Americans who are able to obtain health insurance coverage by 30 to 34 million.<sup>8</sup> Due to the increase in the number of Americans who are able to obtain health insurance coverage, concerns have been raised about the capacity and availability of the primary care physician workforce.<sup>9</sup> HRSA noted that, to reach a ratio of one

primary care physician for every 2,000 members of the population (which is often found to be a suitable level of primary care access), over 16,000 primary care physicians would be needed.<sup>10</sup> However, other observers who are incorporating projected increases in the number of persons with health insurance call for the recruitment of much higher numbers of primary care physicians. For example, a study by the *Annals of Family Medicine*, estimated that, after incorporating coverage expansion and projecting the resulting increase in physician office visits, an additional 52,000 primary care physicians would be needed by 2025.<sup>11</sup>

Satisfying the ACA's aim of increasing primary care utilization may be hindered by geographic maldistribution of primary care physicians. As stated above, over 6,200 primary care HPSAs currently exist in the United States;<sup>12</sup> in the past, many of these primary care HPSAs have been located in rural areas as defined by the U.S. Census Bureau.<sup>13</sup> However, new research is beginning to demonstrate that persons living in urban census tracts may also lack meaningful access to primary care services. In May 2015, a study conducted by members of the University of Pennsylvania's Leonard Davis Institute of Health Economics found significant variability in access to primary care for persons living in different neighborhoods in Philadelphia. While finding that, as a whole, Philadelphia's population to primary care provider ratio sat as an acceptable 863:1 level, the range of access between Philadelphia neighborhoods varied from approximately 250:1 to in excess of 2600:1.<sup>14</sup> Many of the neighborhoods identified by the study were clustered into six larger areas of the city, which had varying rates of public insurance utilization, unemployment, and poverty.<sup>15</sup> The study noted the need for continuing research regarding the role of unemployment, poverty, racial makeup, and public insurance utilization as factors influencing access to primary care services but stated that "*these factors and others are likely to be inter-related and explain...the available primary care supply.*"<sup>16</sup>

A number of factors have contributed to the geographic maldistribution of primary care physicians. Physicians, in deciding where to practice and what specialty to practice, often are motivated by legitimate personal needs and goals.<sup>17</sup> These factors include location preferences, projected workloads,<sup>18</sup> and specialty

preferences.<sup>19</sup> In determining location preference, primary care physicians frequently consider: (1) the type of lifestyle they would like to achieve; (2) quality of schools and education for their children; (3) housing preferences; and, (4) stability of community.<sup>20</sup> Together, these factors help push primary care physicians to live in more affluent areas, which often leaves rural areas and poorer urban areas underserved.<sup>21</sup> In conjunction with location preferences, medical students consider the potential compensation primary care physicians can expect after graduation, which is often lower than specialty physician compensation.<sup>22</sup> When considering student loan debts in relation to potential primary care physician salaries, specialty practice is often viewed as the more lucrative and more attractive option.<sup>23</sup>

With the increase in the number of Americans eligible for private and public health insurance, primary care physicians are expected to increase their caseloads, which may also discourage primary care physicians from practicing in certain areas.<sup>24</sup> The increase in persons with health insurance as a result of the ACA has reduced many geographic and economic variances in health insurance coverage; however, many U.S. regions currently experiencing significant growth in the number of insured individuals, particularly less affluent urban regions, are also facing the most extreme shortages in primary care physicians.<sup>25</sup> The authors of the University of Pennsylvania study note that, in urban areas, the “*distribution of providers may be more of a problem than the absolute number,*” noting that “*the latest evidence suggests that urban areas are relatively oversupplied, and rural areas undersupplied.*”<sup>26</sup>

The lack of meaningful access to primary care providers contributes to an increase of morbidity and mortality for underserved areas.<sup>27</sup> Due to the limited availability of primary care physicians in certain areas, waiting times in physician offices may increase, patients may need to travel longer distances for care, and further resources, such as specialty physicians, needed to treat more complex conditions may not be accessible.<sup>28</sup> Further, aging baby boomers will also create a strain on the primary care workforce as older adults tend to suffer from chronic diseases, which often require more frequent primary care visits.<sup>29</sup> Finally, as physicians become more dissatisfied with increased regulatory scrutiny and the financial costs of private practice, physicians may sell their practices, which may lead to increased coordination of care but also may reduce the impact of competitive forces on improving care quality.<sup>30</sup>

The ACA has included several provisions to address geographic differences in access to primary care.<sup>31</sup> A number of the provisions provide grants, scholarships, loan repayment, and fellowship programs to underrepresented minorities from rural areas and students of disadvantaged backgrounds to pursue careers in the healthcare profession.<sup>32</sup> For example, Section 5403 amended the *Area Health Education Program* (AHEP) to authorize grants that support

physician recruitment and retention in underserved areas.<sup>33</sup> In addition, Section 10501(l) has authorized medical schools to play a more proactive role in promoting students to practice in underserved communities through focused training and experiences in rural and urban HPSAs.<sup>34</sup> Little data is available to determine the impact of these and other ACA provisions in attracting new primary care physicians and utilizing primary care physicians to address geographic variability in access to primary care.

Even though primary care accessibility varies throughout the U.S., health systems can help reduce this variability in access. First, health systems can expand the roles of nurse practitioners and physician assistants within the bounds of their licensure as well as within Medicare supervision requirements.<sup>35</sup> By utilizing a diverse clinician workforce, health systems can expand a primary care physician’s workload capacity and allow more patients to access primary care services.<sup>36</sup> Additionally, health systems can improve access to primary care by removing physicians from performing many necessary but inefficient tasks common within primary care, including counseling on lifestyle issues and the refusal to utilize “*panel management*” processes for routine services.<sup>37</sup> Under a “*panel management*” process, primary care physicians develop a database of routine, preventive services commonly administered or prescribed by a primary care physician, such as colorectal cancer screenings, mammograms, and immunizations.<sup>38</sup> From this database, mid-level providers cross a patient’s medical record with the database to determine whether a routine service is needed, thereby freeing the physician to perform more complex medical duties.<sup>39</sup> Promoting these efficiencies could not only reduce costs to health systems but also allow health systems to make smarter investments in primary care HPSAs for the provision of primary care services.

---

1 “Maldistribution of Primary Care in America” By Kareem Assassa, American Association of Aesthetic Medicine & Surgery, 2015, <http://www.aaams.net/articles/maldistribution-of-primary-care/> (Accessed 09/24/15).

2 “Physician Supply and the Affordable Care Act” By Elayne Heisler, Congressional Research Service, 2013, [http://op.bna.com/hl.nsf/id/myon-93zpre/\\$File/crsdoctor.pdf](http://op.bna.com/hl.nsf/id/myon-93zpre/$File/crsdoctor.pdf) (Accessed 10/8/2015), p. 1.

3 *Ibid.*

4 *Ibid.*

5 “Shortage Areas” Health Resources and Services Administration, October 28, 2015, <http://datawarehouse.hrsa.gov/topics/shortageAreas.aspx> (Accessed 10/28/2015).

6 “How Many People Has Obamacare Really Insured?” By Scott Gottlieb, Forbes, 2015, <http://www.forbes.com/sites/scottgottlieb/2015/05/14/how-many-people-has-obamacare-really-insured/> (Accessed 10/8/2015).

7 “The Impact of the Affordable Care Act on the Health Care Workforce” By Amy Anderson, The Heritage Foundation, 2014, [http://thf\\_media.s3.amazonaws.com/2014/pdf/BG2887.pdf](http://thf_media.s3.amazonaws.com/2014/pdf/BG2887.pdf) (Accessed 9/24/15), p. 3.

8 Amy Anderson, 2014, p. 14.

9 “Primary Care Access Mapped Across Entire City of Philadelphia” By Hoag Levins, LDI Health Economist,

- University of Pennsylvania, May 2015, <http://ldihealtheconomist.com/he0000113.shtml> (Accessed 10/28/15).
- 10 “Shortage Designation” Health Professional Shortage Areas & Medically Underserved Areas/Populations, Health Resources and Services Administration, 2015, <http://www.hrsa.gov/shortage/> (Accessed 10/8/2015).
- 11 “Projecting US Primary Care Physician Workforce Needs: 2010-2025” By Stephen Petterson, PhD, et al., *Annals of Family Medicine*, Vol. 10, No. 6 (November 2012), p. 507.
- 12 “Shortage Areas” Health Resources and Services Administration, October 28, 2015, <http://datawarehouse.hrsa.gov/topics/shortageAreas.aspx> (Accessed 10/28/2015).
- 13 “Primary Care Workforce Facts and Stats No. 3” Agency for Healthcare Research and Quality, January 2012, <http://www.ahrq.gov/sites/default/files/publications/files/pcwork3.pdf> (Accessed 10/12/15).
- 14 “Location Matters: Differences in Primary Care Supply by Neighborhood in Philadelphia” By Elizabeth J. Brown, M.D., et al., Leonard Davis Institute of Health Economics, University of Pennsylvania, May 2015, <http://ldihealtheconomist.com/media/location-matters-full-report060715.pdf> (Accessed 10/12/15) p. 54.
- 15 *Ibid*, p. 37.
- 16 *Ibid*, p. 56.
- 17 Kareem Assassa, 2015.
- 18 *Ibid*.
- 19 Amy Anderson, 2014, p. 17.
- 20 Kareem Assassa, 2015.
- 21 *Ibid*.
- 22 “Income Disparities Shape Medical Student Specialty Choice” By Venis Wilder, M.D., et al., *American Academy of Family Physicians*, 2010, <http://www.aafp.org/afp/2010/0915/p601.pdf> (Accessed 10/23/15).
- 23 “The Best- And Worst-Paying Jobs for Doctors” By Jacquelyn Smith, *Forbes*, July 20, 2012, <http://www.forbes.com/sites/jacquelynsmith/2012/07/20/the-best-and-worst-paying-jobs-for-doctors-2/> (Accessed 10/23/15).
- 24 Kareem Assassa, 2015.
- 25 Kareem Assassa, 2015.
- 26 Elizabeth J. Brown, M.D., et al., May 2015 p. 55-56.
- 27 “The Impact of Primary Care: A Focused Review” By Leiyu Shi, *Scientifica*, 2012, <http://www.hindawi.com/journals/scientifica/2012/432892/> (Accessed 9/24/15), p. 10.
- 28 Amy Anderson, 2014, p. 17.
- 29 “The Boomer Challenge” By Paul Barr, *Hospitals & Health Networks*, 2014, <http://www.hhnmag.com/Magazine/2014/Jan/cover-story-baby-boomers> (Accessed 10/28/15).
- 30 Amy Anderson, 2014, p. 13.
- 31 Elayne Heisler, 2013, p. 21.
- 32 *Ibid*, p. 22.
- 33 “Patient Protection and Affordable Care Act of 2010 ” Pub. L. No., 111-148, § 5403, 124 Stat. 119, 644 (March 23, 2010).
- 34 “Patient Protection and Affordable Care Act of 2010 ” Pub. L. No., 111-148, § 10501(l), 124 Stat. 119, 999-1000 (March 23, 2010).
- 35 “3 Ways to Improve Primary Care Access By Richard Migliori, MD and Grace Terrell, MD, *medpageTODAY’s*, 2014, <http://www.unitedhealthgroup.com/~media/UHG/PDF/2014/UH-NH-3Ways-Improve-Primary-Care-Access.ashx> (Accessed 9/24/15).
- 36 *Ibid*.
- 37 “Sharing the Care to Improve Access to Primary Care” By Amireh Ghorob, M.P.H., and Thomas Bodenheimer, M.D., *The New England Journal of Medicine*, Vol. 366, No. 21 (2012), p. 1957.
- 38 *Ibid*.
- 39 *Ibid*.



(800) FYI - VALU

*Providing Solutions  
in the Era of  
Healthcare Reform*

Founded in 1993, HCC is a nationally recognized healthcare economic financial consulting firm

- [HCC Home](#)
- [Firm Profile](#)
- [HCC Services](#)
- [HCC Experts](#)
- [Clients & Projects](#)
- [HCC News](#)
- [Upcoming Events](#)
- [Contact Us](#)
- [Email Us](#)

**HEALTH CAPITAL CONSULTANTS (HCC)** is an established, nationally recognized healthcare financial and economic consulting firm headquartered in St. Louis, Missouri, with regional personnel nationwide. Founded in 1993, HCC has served clients in over 45 states, in providing services including: valuation in all healthcare sectors; financial analysis, including the development of forecasts, budgets and income distribution plans; healthcare provider related intermediary services, including integration, affiliation, acquisition and divestiture; Certificate of Need (CON) and regulatory consulting; litigation support and expert witness services; and, industry research services for healthcare providers and their advisors. HCC's accredited professionals are supported by an experienced research and library support staff to maintain a thorough and extensive knowledge of the healthcare reimbursement, regulatory, technological and competitive environment.



**Robert James Cimasi**, MHA, ASA, FRICS, MCBA, CVA, CM&AA, serves as Chief Executive Officer of **HEALTH CAPITAL CONSULTANTS (HCC)**, a nationally recognized healthcare financial and economic consulting firm headquartered in St. Louis, MO, serving clients in 49 states since 1993. Mr. Cimasi has over thirty years of experience in serving clients, with a professional focus on the financial and economic aspects of healthcare service sector entities including: valuation consulting and capital formation services; healthcare industry transactions including joint ventures, mergers, acquisitions, and divestitures; litigation support & expert testimony; and, certificate-of-need and other regulatory and policy planning consulting.

Mr. Cimasi holds a Master in Health Administration from the University of Maryland, as well as several professional designations: Accredited Senior Appraiser (ASA – American Society of Appraisers); Fellow Royal Institution of Chartered Surveyors (FRICS – Royal Institution of Chartered Surveyors); Master Certified Business Appraiser (MCBA – Institute of Business Appraisers); Accredited Valuation Analyst (AVA – National Association of Certified Valuators and Analysts); and, Certified Merger & Acquisition Advisor (CM&AA – Alliance of Merger & Acquisition Advisors). He has served as an expert witness on cases in numerous courts, and has provided testimony before federal and state legislative committees. He is a nationally known speaker on healthcare industry topics, the author of several books, the latest of which include: “*Accountable Care Organizations: Value Metrics and Capital Formation*” [2013 - Taylor & Francis, a division of CRC Press], “*The Adviser’s Guide to Healthcare*” – Vols. I, II & III [2010 – AICPA], and “*The U.S. Healthcare Certificate of Need Sourcebook*” [2005 - Beard Books]; and, “*Healthcare Valuation: The Financial Appraisal of Enterprises, Assets, and Services*” was published by John Wiley & Sons in 2014. Mr. Cimasi is the co-author of the soon-to-be released “*Adviser’s Guide to Healthcare – 2nd Edition*” [2015 – AICPA].

Mr. Cimasi is the author of numerous additional chapters in anthologies; books, and legal treatises; published articles in peer reviewed and industry trade journals; research papers and case studies; and, is often quoted by healthcare industry press. In 2006, Mr. Cimasi was honored with the prestigious “*Shannon Pratt Award in Business Valuation*” conferred by the Institute of Business Appraisers. Mr. Cimasi serves on the Editorial Board of the Business Appraisals Practice of the Institute of Business Appraisers, of which he is a member of the College of Fellows. In 2011, he was named a Fellow of the Royal Institution of Chartered Surveyors (RICS).



**Todd A. Zigrang**, MBA, MHA, ASA, FACHE, is the President of **HEALTH CAPITAL CONSULTANTS (HCC)**, where he focuses on the areas of valuation and financial analysis for hospitals, physician practices, and other healthcare enterprises. Mr. Zigrang has over 20 years of experience providing valuation, financial, transaction and strategic advisory services nationwide in over 1,000 transactions and joint ventures. Mr. Zigrang is also considered an expert in the field of healthcare compensation for physicians, executives and other professionals.

Mr. Zigrang is the co-author of the soon-to-be released “*Adviser’s Guide to Healthcare – 2nd Edition*” [2015 – AICPA], numerous chapters in legal treatises and anthologies, and peer-reviewed and industry articles such as: *The Accountant’s Business Manual* (AICPA); *Valuing Professional Practices and Licenses* (Aspen Publishers); *Valuation Strategies; Business Appraisal Practice*; and, *NACVA QuickRead*. Additionally, Mr. Zigrang has served as faculty before professional and trade associations such as the American Society of Appraisers (ASA); the National Association of Certified Valuators and Analysts (NACVA); Physician Hospitals of America (PHA); the Institute of Business Appraisers (IBA); the Healthcare Financial Management Association (HFMA); and, the CPA Leadership Institute.

Mr. Zigrang holds a Master of Science in Health Administration (MHA) and a Master of Business Administration (MBA) from the University of Missouri at Columbia. He is a Fellow of the American College of Healthcare Executives (FACHE) and holds the Accredited Senior Appraiser (ASA) designation from the American Society of Appraisers, where he has served as President of the St. Louis Chapter, and is current Chair of the ASA Healthcare Special Interest Group (HSIG).



**John R. Chwarzinski**, MSF, MAE, is Senior Vice President of **HEALTH CAPITAL CONSULTANTS (HCC)**. Mr. Chwarzinski holds a Master’s Degree in Economics from the University of Missouri – St. Louis, as well as, a Master’s Degree in Finance from the John M. Olin School of Business at Washington University in St. Louis. Mr. Chwarzinski’s areas of expertise include advanced statistical analysis, econometric modeling, as well as, economic and financial analysis.



**Jonathan T. Wixom**, MBA, is Vice President of **HEALTH CAPITAL CONSULTANTS (HCC)**. Mr. Wixom holds a Master of Business Administration degree from Washington University, a Bachelor of Arts in Economics from St. Louis University, and a Bachelor of Science in Business Administration from St. Louis University. Mr. Wixom’s areas of expertise include valuation consulting, financial analysis, due diligence, and financial modeling. He is a member of the St. Louis Chapter of the American Society of Appraisers, as well as a Level III Candidate in the Chartered Financial Analyst Program.



**Jessica L. Bailey-Wheaton**, Esq., is Senior Counsel of **HEALTH CAPITAL CONSULTANTS (HCC)**, where she conducts project management and consulting services related to the impact of both federal and state regulations on healthcare exempt organization transactions and provides research services necessary to support certified opinions of value related to the Fair Market Value and Commercial Reasonableness of transactions related to healthcare enterprises, assets, and services. Ms. Bailey is a member of the Missouri and Illinois Bars and holds a J.D., with a concentration in Health Law, from Saint Louis University School of Law, where she served as Fall Managing Editor for the *Journal of Health Law & Policy*.



**Kenneth J. Farris**, Esq., is a Research Associate at **HEALTH CAPITAL CONSULTANTS (HCC)**, where he provides research services necessary to support certified opinions of value related to the Fair Market Value and Commercial Reasonableness of transactions related to healthcare enterprises, assets, and services, and tracks impact of federal and state regulations on healthcare exempt organization transactions. Mr. Farris is a member of the Missouri Bar and holds a J.D. from Saint Louis University School of Law, where she served as the 2014-2015 Footnotes Managing Editor for the *Journal of Health Law & Policy*.