

The Rural Hospital and Health System Affiliation Landscape – A Brief Review

Authors

Onyinye Oyeka, MPH

Fred Ullrich, BA

A. Clinton MacKinney, MD, MS

Joseph Lupica, JD

Keith J. Mueller, PhD

November 2018



**Rural Health Research
& Policy Centers**

Funded by the Federal Office of Rural Health Policy
www.ruralhealthresearch.org



RURAL POLICY RESEARCH INSTITUTE

RUPRI Center for Rural Health Policy Analysis
University of Iowa, College of Public Health
Department of Health Management and Policy
145 N. Riverside Drive, Iowa City, IA 52242
(319) 384-3832

<http://www.public-health.uiowa.edu/rupri>

E-mail: cph-rupri-inquiries@uiowa.edu

This project was supported by the Federal Office of Rural Health Policy (FORHP), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS) under cooperative agreement/grant #U1C RH20419. The information, conclusions and opinions expressed in this document are those of the authors and no endorsement by FORHP, HRSA, or HHS is intended or should be inferred.

Table of Contents

| | |
|---|----|
| Purpose | 1 |
| Introduction | 1 |
| Definition of Terms | 1 |
| The Rural Landscape | 2 |
| Demographics | 2 |
| Rural Hospital Status | 2 |
| Affiliation Activity | 3 |
| Interests of Parties Participating in Agreements | 4 |
| Affiliation Variations | 5 |
| Summary | 8 |
| Rural Hospital Considerations | 9 |
| Conclusions | 10 |
| References | 10 |

Purpose

Health care system affiliation among both metropolitan and non-metropolitan hospitals and health systems continues to increase (RUPRI, 2018). Many factors drive affiliations including capital needs, value-based payment and regulations (HFMA, 2016), and demand for improved clinical quality and population health. Given increased system affiliation activity, it is important to understand what system affiliation portends for sustaining access to essential rural health care services (Williams, 2018). This Rural Policy Research Institute (RUPRI) Center policy paper examines the choices available to rural hospitals considering affiliations with urban-based hospitals or health systems, the motivation for such affiliations, and examples of various affiliation types. We recognize that the “right” affiliation choice for any given hospital is highly contextual.

Introduction

The shift from traditional fee-for-service to value-based payment requires major capital investment and sophisticated management expertise that may prompt hospitals and health systems to consider affiliation options (HFMA, 2016). Traditional fee-for-service reimbursement methodologies incent providers to deliver more care, and do not differentiate beneficial services from those that are redundant and unnecessary (Noether et al., 2017). In contrast, value-based reimbursement methodologies incent providers to reduce costs and/or improve health outcomes (NEJM Catalyst, 2017). Some observers posit that these payment methodology changes have led hospitals and health systems to consolidate for the scale necessary to support new, value-based health care delivery models (e.g., Noether et al., 2017) or to adopt non-consolidation options that achieve interdependence without ceding independence (Geffner & Lupica, 2012; Becker’s Hospital Review, 2013a).

Rural hospitals are generally smaller than urban hospitals (HFMA, 2016), lack access to capital funding for investment in capital projects (Arduino, 2015), and serve an aging population that relies primarily on publicly funded insurance programs (Center for Rural Affairs, 2018). Studies have found that rural hospitals, especially the smallest, have the lowest profitability and liquidity (Holmes, 2015). These challenges and the resources required for the transition to value-based payment, has prompted many rural hospitals to consider affiliations with larger, regional health systems (Arduino, 2015). Through system affiliation, rural hospitals may benefit from shared resources, access to technologies, cash infusion, increased supply chain efficiencies, and improved performance through clinical integration. However, to reap these benefits, rural hospital leaders must have a sophisticated understanding of their hospital’s financial and operating conditions and the affiliation options available (Karash, 2016) while protecting the essential elements of autonomy that matter to the communities they serve (Lupica, 2013).

Definition of Terms

This paper uses the American Hospital Association (AHA) definition of a hospital or health care system as either a multihospital system or a diversified single hospital system. “A multihospital system is two or more hospitals owned, leased, sponsored, or contract managed by a central organization. Single, freestanding hospitals may be categorized as a system by bringing into membership three or more, and at least 25 percent, of their owned or leased non-hospital preacute or postacute health care organizations” (AHA, 2018). RUPRI Center analysis of the 2016 AHA annual survey of U.S. hospitals identified 4,400 general

medical and surgical institutions in the 50 states and District of Columbia not under Federal government control. Further analysis found that 2,838 (64.5 percent) of these hospitals were members of 366 health systems.

From 2005 through 2016, 380 rural hospitals merged with another health care organization (Williams, 2018). This policy paper examines rural hospital affiliations (including mergers) that involved or resulted in an AHA-defined health system. Furthermore, this analysis focuses on system affiliation, not network participation. The AHA defines networks as groups of hospitals, physicians, other providers, insurers, and/or community agencies that work together to coordinate and deliver a broad spectrum of services to their community. System affiliation does not preclude network participation, nor does network participation preclude system affiliation (AHA, 2018). System affiliation represents a contract-based integration, while networks may include contractual interorganizational relationships to coordinate care.

The Rural Landscape

Demographics

The financial viability of small, independent rural hospitals is challenged by the demography of rural America. Ninety-seven percent of the nation's land area is considered rural but only 19.3 percent of the population lives in rural areas (U.S. Census Bureau, 2016). The rural population is decreasing due to several factors, including outmigration of young adults, fewer births, increased mortality among working-age adults, an aging population, and increased geographic urbanization, which implies that the remaining rural counties have lower population growth potential (USDA, 2017). On average, rural residents are poorer, more likely to be uninsured or underinsured (Center for Rural Affairs, 2018), and experience physical isolation and transportation difficulties that may impede access to needed health care services (Goins et al., 2005). In rural communities, where individuals have higher rates of poverty and disability and lower rates of employer-sponsored insurance, Medicaid represents an important source of coverage. Medicaid covers 24 percent of the nonelderly individuals in rural areas, compared to 22 percent in urban areas and 21 percent in other areas (Foutz et al., 2017).

Rural Hospital Status

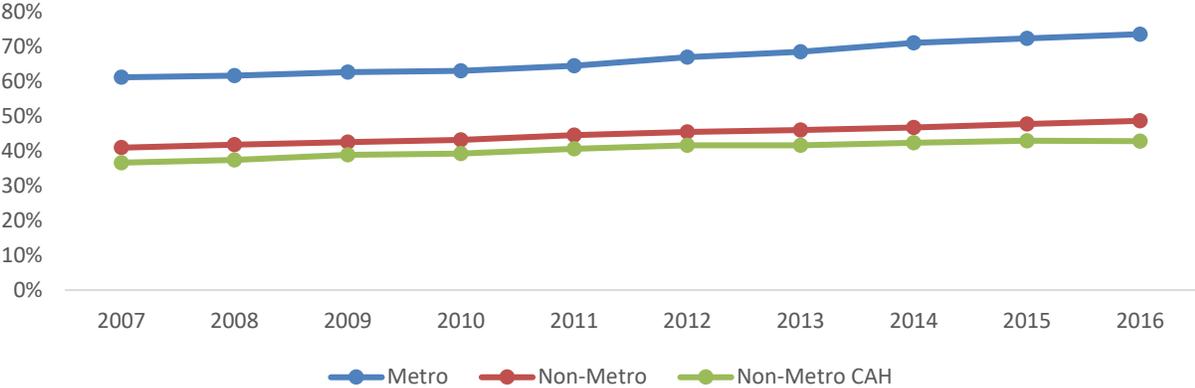
Health care communities in rural areas have limited supplies of health care professionals (Rural Health Information Hub, 2017) and face issues of insufficient demand and decreasing cash flow (Pink, 2017). The past board chair of Grinnell Regional Medical Center in Iowa, Todd Reding, stated "reimbursement issues were especially daunting to rural "tweener" hospitals, that is, hospitals that are too large to qualify for Critical Access Hospital status and too small to absorb the financial risk associated with prospective payment system programs" (Karash, 2016). The CEO of the Cary Medical Center in Maine, Kris Doody, said "all of us as hospitals delivering services in rural Maine are dealing with shrinking reimbursement, challenges in physician recruitment, high technology and labor costs, and a rapidly aging population" (AetnaHealth, 2018). More than 40 percent of the nation's rural hospitals have been operating at a loss while trying to manage care for a decreasing population that is often older, sicker, and poorer than that of their urban counterparts (Kacik, 2018). Independent government-owned hospitals, including many in rural areas, had an average yearly operating margin of negative 16.6 percent and a \$15.8 million operating loss in 2016, compared with a negative 7.9 percent operating margin and \$8.4 million operating loss for system-owned hospitals (Kacik, 2018; Waller, 2017). The North Carolina Rural Health Research Program

reported that 208 rural hospitals have closed between 2005 and 2018 (Pink, 2018), and the trend of rural hospital closure is likely to continue, with 175 rural hospitals identified as being at risk of financial distress in 2016 (Kaufman et al., 2016). These circumstances force rural hospitals to make difficult decisions about which services to maintain, which services to discontinue, and whether to affiliate with a larger health system (Karash, 2016).

Affiliation Activity

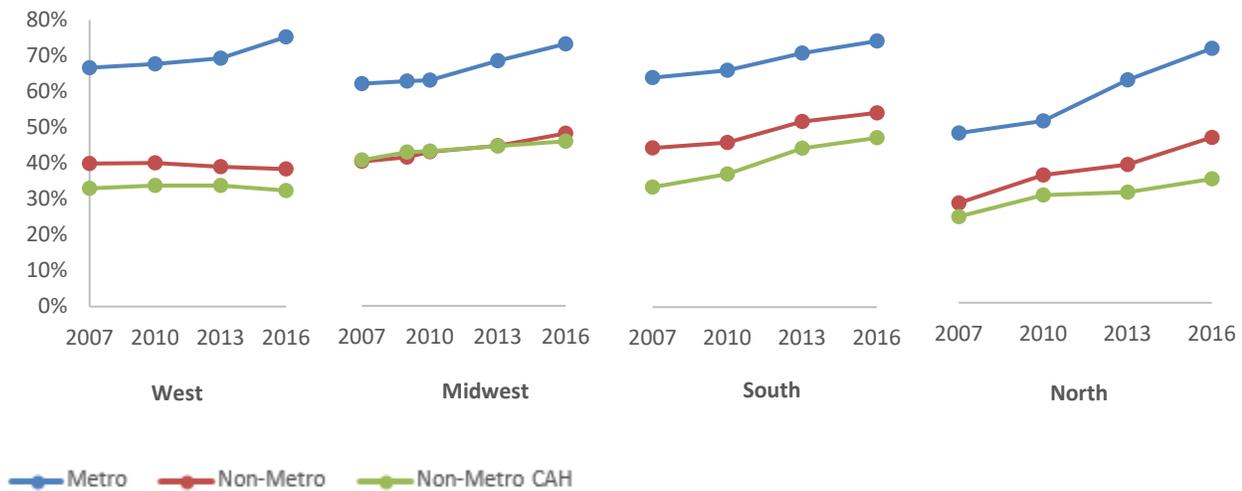
RUPRI Center analysis of AHA data shows continued growth in system affiliation among both metropolitan and non-metropolitan hospitals, including Critical Access Hospitals (CAHs), from 2007 to 2016. CAHs are located in both metropolitan and non-metropolitan areas. CAH classification depends on whether the CAH is located outside a metropolitan statistical area (MSA), located in an MSA but considered to have rural status, or if the CAH is a necessary provider (Center for Medicare and Medicaid Services, 2016). Metropolitan hospitals affiliating with systems increased from 61.1 percent in 2007 to 73.5 percent; non-metropolitan hospital system affiliation increased from 40.9 percent to 48.6 percent, and non-metropolitan CAH system affiliation grew from 36.6 percent to 42.8 percent over the same period (RUPRI, 2018). See Figure 1.

Figure 1: Trend in Hospital System Affiliation, 2007 – 2016



System affiliation growth was relatively similar among West region non-metropolitan hospitals and West region non-metropolitan CAHs, from 39.9 percent to 38.4 percent and 33.0 percent to 32.4 percent, respectively; otherwise system affiliation grew in every other geographic category. System affiliation increased in non-metropolitan CAHs in the South region, from 33.1 percent to 46.7 percent, and the North region, from 24.0 percent to 34.5 percent (RUPRI, 2018). See Figure 2.

Figure 2: Trend in Hospital System Affiliation by Census Region, 2007 – 2016



Source: RUPRI Center analysis of AHA annual survey data.

Interests of Parties Participating in Agreements

Affiliations between a rural hospital and a health system have the potential to improve rural hospital financial and operational performance. Specifically, affiliation benefits to rural hospitals may include the following:

- a. Access to technology – Clinical, administrative, and financial technology systems are costly to implement and maintain. Rural hospitals may receive reduced payment if they cannot meet quality and technological standards (Noles, 2015).
- b. Staff recruitment and retention – Rural hospital recruitment and retention of medical staff and other professionals can be challenging. System-based recruitment services, generous compensation and/or benefit packages, and professional collegiality may improve rural hospital recruitment and retention (Rural Health Information Hub, 2017; NCSL, 2013).
- c. Expanded health care and operational services – Health systems can offer improved rural hospital access to subspecialty medical care and hospital operational support (e.g., accounting, quality improvement, human resources) (Vogel, 2012), but can also lead to service line discontinuation to achieve a system goal of consolidation (Noether et al., 2017).
- d. Group purchasing – Rural hospitals may receive discounts on supply purchases via the bargaining power of a larger health system (Karash, 2016).
- e. Reduced cost of capital – Rural hospitals may have difficulty obtaining favorable borrowing rates to update or replace aging plants and equipment, or to expand service

lines (Arduino, 2015). Affiliation may make capital available through the health system financing or loans at favorable rates.

Health system motivations to affiliate with a rural hospital are mixed. Health systems might pursue affiliation to increase market share (Cutler & Morton, 2013), gain territory (King, 2010), or increase profitability (Sager & Miller, 2016). However, there may also be mission driven motivations for health systems seeking affiliation with rural hospitals. They may seek to invest in clinical care improvements (Sager & Miller, 2016) and maintain access to care (Guerin-Calvert & Maki, 2014). Our research also suggests the following issues may be important to health systems:

- a. Increased subspecialty referrals – Through affiliation, health systems hope to increase tertiary referrals (Miller, 2014), build a niche in rural health (Barkholz, 2016), and enhance and expand services (Jimison, 2014).
- b. Cost reduction – “Rural hospitals and their associated clinics are often capable of delivering cost-effective, high-quality primary care, which can benefit a large health system” (Arduino, 2015). Keeping health care local helps reduce the need for expensive tertiary care (Kacik, 2018) and reduces patient and family travel costs. In addition, increased volume due to referrals from the affiliate spreads fixed costs and lowers per-service costs (Noether et al., 2017).
- c. Improved rural health and strengthened rural communities – The mission of many health systems includes improving the health of the system’s service area. By “leveraging scale with supplies” (Miller, 2014), assisting with the business operations, and integrating clinical staff, health systems can strengthen rural hospital service to the local community and thus improve service area health (Ingold, 2017).
- d. Cost allocation to CAHs – Due to CAH cost-based reimbursement, health systems can allocate certain system costs to system-based CAHs and receive Medicare (and in some states Medicaid) cost-based reimbursement for those costs (Ederhof & Chen, 2014).

The senior vice president of clinical network development at the University of Alabama at Birmingham Health System, Don Lilly, states that “the survival and effectiveness of rural hospitals benefit everyone, including payers.” He also states that “keeping patients in local markets and out of higher-end tertiary facilities saves money and improves quality” (Kacik, 2018).

Affiliation Variations

Affiliations between rural hospitals and health systems may provide necessary financing and support to strengthen rural hospital financial and clinical performance. However, rural hospital leaders often struggle to find the appropriate balance between local decision-making control and health system requirements for affiliation. Thus, selecting or designing an affiliation agreement is a critical task.

Affiliations may take many forms. The following list is not exhaustive but includes common agreements and a representative example. These affiliation structures represent different ways health care systems can scale and/or gain additional presence in a local or regional market.

- a. Management agreement – In a management agreement, the system takes management control of operations without assuming ownership or governance. The managed hospital may retain majority governance, but the system has practical control of the business unless the managed hospital carefully crafts protections in the contract.

For example, Guttenberg Municipal Hospital (GMH) in Iowa signed a management service agreement with Mercy Health Network (Clive, Iowa). The agreement enhances support for Guttenberg’s primary care providers and hospital and improves local access subspecialists. Under the agreement, GMH maintains local governance (Mercy Health Network, 2017).

Similarly, Sarasota Memorial Health Care System signed a management contract with BayCare Health System (Clearwater, Florida) to provide a broad range of cost-effective health care services through shared resources. The strategic deal was also intended to provide greater leverage for Sarasota Memorial Health Care System when negotiating contracts with insurers and purchasing supplies. Under the agreement, Sarasota Memorial agreed to pay BayCare \$1 million a year to provide management services (Meinhardt, 2012; Smith, 2014).

- b. Clinically integrated network (CIN) – A CIN is “an organization established to incentivize hospitals and employed and independent physicians to work together to improve outcomes, reduce costs, and manage a population’s health” (Allen et al., 2016). If properly designed, a CIN allows joint negotiations without engaging in prohibited collusion (U.S. Department of Justice, 1996)

For example, Eastside Health Network is a CIN based in Bellevue and Kirkland, Washington. The CIN is comprised of 1,352 providers, 185 practice locations, 41 primary care locations, 10 urgent care clinics, and four hospitals (Paavola, 2108).

- c. Joint Venture (JV) – In a JV, the resources of two or more separate groups or entities combine to accomplish a designated task (Pelfrey et al., 1989). Each party has governance rights over the JV, but not over one another, and the JV has no governance over the parties.

For example, Michigan Medicine (Ann Arbor, Michigan) and the St. Joseph Mercy Health System (Michigan) established a joint venture, which will operate the 133-bed St. Joseph Mercy Chelsea Hospital in Chelsea, Michigan. Under the definitive agreement, Michigan Medicine’s surgical offerings will expand at St. Joseph Mercy Chelsea, and patients will have increased access to Michigan Medicine physicians. St. Joseph Mercy will maintain control and manage hospital operations, including appointing its leaders, and Michigan Medicine will be involved in JV governance (Michigan Medicine, 2018).

- d. Equity interest – Equity is the ownership share of a stockholder in a business. Not-for-profit organizations do not have “equity,” per se; but rather, can deliver the incidents of equity, such as governance or a share of distributions.

For example, in 1999, Ministry Health (Wisconsin) acquired a sole member interest in Door County Medical Center, Wisconsin (DCMC). Both are not-for-profit entities. Ministry granted DCMC the right to buy its independence if Ministry changed control, as in a sale or member substitution. Ascension Health’s acquisition of Ministry in 2013 gave DCMC the right to exercise that change of control (COC) clause, thus regaining its independence. DCMC raised the capital to exercise the COC by entering a joint membership (ownership) that transferred a minority percentage interest in its governance and distributions to Hospital Sisters Health System (HSHS). The agreement with HSHS granted both parties reserve powers that required both owners to approve an agreed list of major governance items regardless of their percentage interest. At the end of this complex transaction, DCMC regained its independent majority control and preserved its Catholic sponsorship (Schmitt, 2016).

Ambulatory Surgery Centers (ASCs) provide typical cases of joint investments in for-profit entities. In one of many, Aspen Valley Hospital District (Colorado) (a government entity) and Surgical Management, LLC, a Colorado corporation established a 51 percent and 49 percent equity interest, respectively, in the for-profit Midvalley Ambulatory Surgery Center, LLC, Colorado. Aspen will elect three board members and Surgical Management could will elect two board members. (BKD, 2014).

e. Acquisition

1. Stock Purchase (for-profit only) – In a stock transaction, the buyer normally becomes the sole shareholder or member of the target entity, thus controlling the target entity’s governance structure, and in turn, its day-to-day operations (AHLA, 2017a).
2. Member Substitution (not-for-profit) – A member substitution is similar to a stock purchase in a corporate merger. The buyer becomes the sole corporate member (Marlow et al., 2017). The local hospital might retain a board, but the ultimate power remains with the member. Even if the member has only a minority of seats on the board, it normally holds substantial reserved powers over budgeting, spending, borrowing, appointment of the CEO, and purchase or sale of property, among others. The board may remain a full fiduciary board, but a sole member can remove board members at its pleasure. A system rarely exercises that power, given the potential damage to community relations. But Ascension (St. Louis Missouri) recently did just that when the local board refused to approve the corporate decision to close acute care service at Providence Hospital in Washington, D.C. (Baskin, 2018)

For example, Susquehanna Health System in central Pennsylvania transferred its membership interest to University of Pittsburgh Medical Center (UPMC). UPMC agreed to make an initial investment in the newly named UPMC Susquehanna while committing to expand several facilities and establish a center of excellence (Kamholz & Cohen, 2017). UPMC Susquehanna’s local governance continues under its board of directors, consisting of 16 volunteer business and community members along with eight newly appointed members from UPMC. UPMC Susquehanna’s local board of

directors is responsible for quality of care, medical staff, and growth initiatives (UPMC, 2016). Though normally left unspoken in media releases on such transactions, it is likely that the sole member has the power to approve or reverse most local votes or remove local board members.

3. Asset Transaction – In an asset transaction, some or all the assets of the target entity are acquired by the buyer. This type of agreement sometimes occurs when the buyer is interested in only a specific target entity service line or division, or if the target entity is interested in selling only certain assets (AHLA, 2017b). More commonly, buyers enter an asset transaction when they want to exclude certain classes of known and unknown liabilities.

For example, Duke LifePoint Healthcare (Brentwood, Tennessee), an affiliate of a publicly traded company, acquired substantially all assets of Marquette General Hospital (Marquette, Michigan) but excluded certain liabilities from the transaction (LifePoint Health, 2012; Department of Attorney General, 2012).

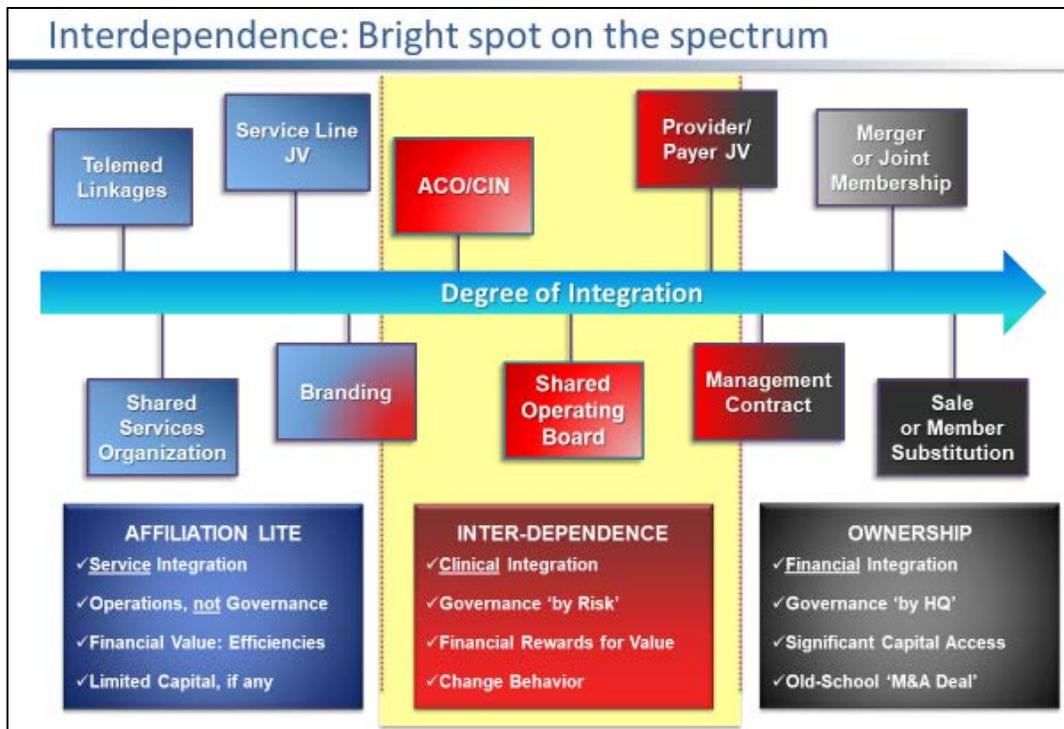
4. Merger – Two entities combine to form a single entity (AHLA, 2017c).

For example, Baylor Health Care System and Scott & White Healthcare merged, creating a fully integrated health system called Baylor Scott & White Health in Texas (Fellows, 2012). Similarly, Trinity Health and Catholic Health East merged to form Trinity Health in Michigan (Becker's Hospital Review, 2013b). Though parties may style the transaction as a "merger of equals," it is rarely so. One party essentially acquires the other despite using the legal vessel of merger (Lupica, 2013).

Summary

Affiliation variations might be understood as a spectrum of integration from "affiliation lite" to "ownership" (Lupica, 2016) The article posits that affiliations defined by "interdependence" may best serve rural hospitals and their communities because rural hospitals can remain independent while pursuing affiliations that will address their financial, operational, and clinical needs. See Figure 3.

Figure 3: Affiliation Interdependence (Lupica, 2016)



© 2017 Newpoint Healthcare Advisors, LLC, reprinted by permission.

Rural Hospital Considerations

Rural hospital and health system affiliations are expanding and taking different forms. Yet many rural hospitals currently remain independent and successful. If possible, rural hospitals should assess affiliation opportunities from a position of financial and market strength, rather than from a position of financial distress and collapsing market share (Lupica, 2013; Snow, 2017; Greene, 2009). Even if a rural hospital is not currently considering a health system affiliation, rural hospital leaders should develop a thoughtful affiliation strategy that weighs the relative benefits of affiliation (in one of its many permutations) versus independent local control. Rural hospital affiliation strategies should include, but are not limited to, the following:

1. Understand what the hospital should offer the community and the region, and whether an affiliation or continued independence can help achieve stated objectives. Reach out to local constituencies for input (Lupica, 2013).
2. Gather information from hospital and community stakeholders about what should be sought from an affiliation and the value the rural hospital can bring to the affiliation (Lupica, 2013).
3. Assess the hospital's current key capabilities and the financial resources needed to develop necessary capabilities. This process helps establish the hospital's value to stakeholders and potential partners. Key capabilities include clinical integration, operational efficiency and quality, and care management infrastructure and protocols (Allen et al., 2016).

4. Prepare a formal Request for Proposal (RFP) for affiliation. A formal RFP may bring unexpected partners and/or reveal openness to structural options with partners in the same geography (Snow, 2017).
5. Negotiate governance and control to protect an appropriate level of governance and management authority, reserved powers to protect local trustee decisions and/or post-closing covenants from the system to protect services and commitments for future capital investment levels and the like (Lupica, 2013).

Conclusions

Rural hospitals are challenged by rural American demography and the transition from volume-based to value-based payment. Partially in response to these pressures, the pace of rural hospital and health system affiliation is increasing. System affiliations may provide rural hospitals access to technology, staff recruitment and retention, expanded health care and operational services, group purchasing, and reduced cost of capital. Health systems may benefit too through increased subspecialty referrals, cost reductions, improved rural health, strengthened rural communities, and cost allocation to CAHs. Many hospital affiliation configurations are possible, from contractual alliances, to clinically integrated network collaboration, to mergers, and finally to outright acquisitions/member substitutions. However, rural hospital leaders often struggle between maintaining decision-making authority and meeting affiliation demands. Therefore, rural hospitals should develop a thoughtful affiliation strategy that weighs the relative benefits of affiliation versus independent local control.

References

- AetnaHealth (2018) At Hospitals, the Question Is Collaboration or Consolidation. The Atlantic. Retrieved from <https://www.theatlantic.com/sponsored/athenahealth/collaboration-or-consolidation-health-cares-future-is-about-working-together/705/>
- AHA (American Hospital Association). (2018). Fast Facts on U.S. Hospitals. Retrieved from <https://www.aha.org/statistics/fast-facts-us-hospitals>
- AHLA (American Health Lawyers Association). (2017a). Health Law Practice Guide. § 29:3. Stock transactions and Member Substitutions. November 2017 Update.
- AHLA (American Health Lawyers Association). (2017b). Health Law Practice Guide. § 29:4. Asset Transactions. November 2017 Update.
- AHLA (American Health Lawyers Association). (2017c) Health Law Practice Guide. . § 29:28. Merger and Acquisition Agreements. November 2017 Update.
- Allen, P.M., Finnerty, M.J., Gish, R.S., et al. (2016, June). Guide to Health Care Partnerships for Population Health Management and Value-based Care. Chicago, IL: Health Research & Educational Trust and Kaufman, Hall & Associates, LLC. Accessed at <http://www.hpoe.org/Reports-HPOE/2016/guide-to-health-care-partnerships-pop-health.pdf>
- Arduino, K. (2015). Rural Hospitals- An Asset in the Continuum of Care. Healthcare Financial Management, 2015 Nov; 69(11): 82-86, 88
- Barkholz, D. (2016, November 18). Curae sees opportunity in rural hospitals that for-profit chains are selling. Modern Healthcare. Retrieved from <http://www.modernhealthcare.com/article/20161118/NEWS/161119900>
- Baskin, M. (2018). Bulk of Providence Hospital Board Abruptly Fired Amid Closure Fiasco. Washington CityPaper. Retrieved from <https://www.washingtoncitypaper.com/news/city-desk/article/21020435/bulk-of-providence-hospital-board-abruptly-fired>

Becker's Hospital Review. (2013a). UC Irvine Health, MemorialCare Health Strike Affiliation. Retrieved from <https://www.beckershospitalreview.com/hospital-transactions-and-valuation/uc-irvine-health-memorialcare-health-strike-affiliation.html>

Becker's Hospital Review. (2013b). Trinity Health, Catholic Health East Complete Merger. Retrieved from <https://www.beckershospitalreview.com/hospital-transactions-and-valuation/trinity-health-catholic-health-east-complete-merger.html>

BKD. (2014). 2014 Annual Report of Aspen Valley Hospital District. Retrieved from [https://www.aspenvalleyhospital.org/userfiles/files/Aspen%20Final%202014%20FS\(1\).pdf](https://www.aspenvalleyhospital.org/userfiles/files/Aspen%20Final%202014%20FS(1).pdf)

Center for Rural Affairs. (2018). Health Care in Rural America. Retrieved from <http://www.cfra.org/Healthcare>

Cutler, D.M., Morton, F. S. (2013). Hospitals, Market Share, and Consolidation. *Journal of American Medical Association*; 310(18):1964-1970. doi:10.1001/jama.2013.281675

Department of Attorney General. (2012). Asset Purchase Agreement by and Between Marquette General Hospital, INC., as Seller, and DLP Marquette Holding Company as Buyer. Retrieved from https://www.michigan.gov/documents/ag/Purchase.Agreement.for.public_391349_7.pdf

Ederhof, M., Chen, L. M. (2014). Critical access hospitals and cost shifting. *JAMA Internal Medicine*, 174(1), 143-144.

Fellows, J. (2012). Baylor Health Care System, Scott & White to Merge. HealthLeaders Media. Retrieved from <https://www.healthleadersmedia.com/strategy/baylor-health-care-system-scott-white-merge>

Geffner, C. J., Lupica, J. R. (2012). Enlightened Interdependence: Considering a merger? Step back and take another look at the options. *Trustee Magazine*. Retrieved from <https://www.trusteemag.com/articles/313-enlightened-interdependence>

Goins, R. T., Williams, K. A., Carter, M. W., Spencer, M., Solovieva, T. (2005). Perceived barriers to health care access among rural older adults: a qualitative study. *J Rural Health*, 21(3), 206–213

Greene, J. (2009). How can small hospitals survive? *Trustee*, 62(1), 6-10, 11.

Guerin-Calvert, M. E., Maki, J. A. (2014). Hospital Realignment: Mergers Offer Significant Patient and Community Benefits. Retrieved from <https://www.fticonsulting.com/~media/Files/us-files/insights/reports/hospital-realignment-mergers-offer-significant-patient-and-community-benefits.pdf>

HFMA (Healthcare Financial Management Association). (2016). Health Care 2020: Consolidation. Westchester Illinois.

Holmes, M. (2015). Financially fragile rural hospitals: mergers and closures. *N C Med J*, 76(1), 37-40.

Ingold, J. (2017, July 4). In Colorado's drumbeat of medical mergers, rural hospitals often trade independence for better care. *The Denver Post*. Retrieved from <https://www.denverpost.com/2017/07/04/colorado-rural-hospitals-merge-with-big-city-health-economic-concerns/>

Jimison, J. (2014, February 10). Inside the Wilson Medical Center Deal. *Wilson Daily Times*, N.C. Retrieved from <https://insurancenewsnet.com/oarticle/Inside-the-Wilson-Medical-Center-deal-a-458855#.WdxtPGhSzD4>

Kacik, A. (2018). More independent rural hospitals will seek some type of affiliation with a larger hospital. *Modern Healthcare In Depth*. Retrieved from http://www.modernhealthcare.com/indepth/health-systems-pitch-in-protect-rural-providers/?utm_source=modernhealthcare&utm_medium=email&utm_content=externalURL&utm_campaign=dose

Foutz, J., Artiga, S., Garfield, R. (2017). The Role of Medicaid in Rural America. Kaiser Family Foundation. Retrieved from <https://www.kff.org/medicaid/issue-brief/the-role-of-medicaid-in-rural-america/>

Kamholz, K. A., Cohen, D. (2017). Interested in Acquiring a Hospital? 8 Best Practices to Know About. Kaufman, Hall & Associates, LLC. Retrieved from <https://www.kaufmanhall.com/sites/default/files/Interested-in-Acquiring-a-Hospital.pdf>

Karash, J.A. (2016, January). Ready for Anything and Everything – How CAH and 'Tweener' Hospitals Leaders are Helping their Boards to Meet the Many Challenges of our Changing Health Care System. *Hospitals and Hospital Networks Magazine*. Retrieved from <https://www.hhnmag.com/articles/6724-todays-rural-trustees-ready-for-anything-and-everything>

Kaufman, B., Randolph, R., Pink, G. H., Holmes, M. (2016). Trends in Risk of Financial Distress among Rural Hospitals. NC Rural Health Research Program. Retrieved from <http://www.shepscenter.unc.edu/product/trends-risk-financial-distress-among-rural-hospitals/>

King, K. (2010). Industry watchers say Spectrum Health is positioning itself well for tough health reform market. West Michigan Business. Retrieved from https://www.mlive.com/business/west-michigan/index.ssf/2010/01/industry_watchers_say_spectrum.html

LifePoint Health. (2012) Marquette General Joins Duke LifePoint. Retrieved from <http://www.lifepointhealth.net/news/2012/09/05/marquette-general-joins-duke-lifepoint>

Lupica, J. R. (2013). Protecting What Matters: Four considerations help boards preserve community goals during a merger. Trustee Magazine. Retrieved from <http://newpointhealth.com/wp-content/uploads/2016/11/trustee-magazine-july-2013-protecting-what-matters.pdf>

Lupica, J. R. (2016). Affiliation Interdependence. Newpoint Healthcare Advisors.

Marlow, K., Burgdorfer, R., Voss, A. (2017). Membership Substitution Transactions – Why Are They So Misunderstood? The Bond Buyer. Retrieved from http://www.juniperadvisory.com/wp-content/uploads/2017/02/Membership-Substitution-Transactions_Why-Are-They-So-Misunderstood-February-2017.pdf

Meinhardt, J. (2012). BayCare, Sarasota Memorial Discuss Alliance. Tampa Bay Business Journal. Retrieved from <https://www.bizjournals.com/tampabay/blog/morning-edition/2012/09/baycare-sarasota-memorial-discuss.html?page=2>

Mercy Health Network. (2017). Guttenberg Municipal Hospital to sign Letter of Intent with Mercy Health Network [Press Release]. Retrieved from <https://www.mercyhealthnetwork.com/news-detail/guttenberg-municipal-hospital-letter-of-intent-with-mercy-health-network/>

Michigan Medicine. (2018). U-M HEALTH, SAINT JOSEPH MERCY HEALTH JOINT VENTURE IN CHELSEA NOW OFFICIAL [Press Release]. Retrieved from <https://mmheadlines.org/2018/07/u-m-health-saint-joseph-mercy-health-joint-venture-in-chelsea-now-official/>

Miller, A. (2014). Sagging rural hospital tries to get an urban boost. Georgia Health News. Retrieved from <http://www.georgiahealthnews.com/2014/12/sagging-rural-hospital-urban-facility/>

NCSL (National Conference of State Legislatures). (2013). Improving Rural Health: State Policy Options. Retrieved from http://www.ncsl.org/documents/health/RuralHealth_PolicyOptions_1113.pdf

NEJM. (New England Journal of Medicine Catalyst). (2017). What is Value based Healthcare? Retrieved from <https://catalyst.nejm.org/what-is-value-based-healthcare/>

Noether, M., May, S. (2017). Hospital Merger Benefits: Views from Hospital Leaders and Econometric Analysis. Charles River Associates.

Noles, M.J., Reiter K.L., Boortz-Marx, J., Pink, G. (2015). Rural Hospital Mergers and Acquisitions: Which Hospitals Are Being Acquired and How Are They Performing Afterward? Journal Healthcare Management. Nov-Dec; 60(6): 395-407.

Paavola, A. (2018). Embrace risk: How one Clinically Integrated Network Found Success Under Value-Based Care. Becker's Hospital Review. Retrieved from <https://www.beckershospitalreview.com/finance/embrace-risk-how-one-clinically-integrated-network-found-success-under-value-based-care.html>

Pelfrey, S., Theisen, B. (1989). Joint Ventures in Healthcare. The Journal of Nursing Administration 19(4): 39-42. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/2703900>

Pink, G.H. (2017). Financial Distress and Closures of Rural Hospitals. Rural Health Research Gateway (This was a webinar). Retrieved from <https://www.ruralhealthresearch.org/webinars/financial-distress-closures-of-rural-hospitals>

Pink, G.H. (2018). Statement by George H. Pink before the Committee on Finance U.S. Senate. NC Rural Health Research Program. Retrieved from <https://www.finance.senate.gov/imo/media/doc/24MAY2018PinkSTMNT.pdf>

RUPRI Center for Rural Health Policy Analysis. (2018). Trends in Hospital Network Participation and System Affiliation, 2007-2016. University of Iowa College of Public Health, Department of Health Management and Policy. <http://www.public-health.uiowa.edu/rupri>.

Rural Health Information Hub. (2017). Healthcare Access in Rural Communities. Retrieved from <https://www.ruralhealthinfo.org/topics/healthcare-access#barriers>

Sager, J., Miller, M. (2016). Health Market Consolidation. Community Catalyst. Retrieved from https://www.communitycatalyst.org/resources/publications/document/Policy-Brief_Health-Market-Consolidation-FINAL-June-2016.pdf

Schmitt, P. (2016). Door County Medical Center and Hospital Sisters Health System Officially Begin Partnership. Door County Daily News. Retrieved from <https://www.doorcountydailynews.com/2016/11/02/9657/>

Smith, B. P. (2014). Sarasota Memorial Dissolves BayCare Management Deal. Herald-Tribune. Retrieved from <http://www.heraldtribune.com/news/20140618/sarasota-memorial-dissolves-baycare-management-deal>

Snow, D.H. (2017). Independent Rural Hospitals: Extinction Looming. Modern Healthcare.

UPMC (University of Pittsburgh Medical Center). (2016). Susquehanna Health Joins UPMC to Expand Health Care Services, Advance Quality Care in Region [News Release]. Retrieved from <http://www.upmc.com/media/NewsReleases/2016/Pages/susquehanna.aspx>

U. S. Census Bureau. (2016, December 08). New Census Data Show Differences between Urban and Rural Populations. Release Number: CB16-210. Retrieved from <https://www.census.gov/newsroom/press-releases/2016/cb16-210.html>

USDA. (U. S. of Department of Agriculture). (2017). Rural America at A Glance. Retrieved from <https://www.ers.usda.gov/webdocs/publications/85740/eib-182.pdf>

U.S. Department of Justice. (1996). Statement of Antitrust Enforcement Policy in Health Care. Retrieved from https://www.justice.gov/atr/statements-antitrust-enforcement-policy-health-care#CONTNUM_61

Vogel, J. (2012, September 14). Let's make a deal: Lessons learned from hospital mergers. Minnesota Public Radio. Retrieved from <http://minnesota.publicradio.org/display/web/2012/09/14/ground-level-rural-health-deal/>

Williams, D., Thomas, S. R, Howard, H. A, Pink, G. H. (2018). Rural Hospital Mergers from 2005 through 2016. NC Rural Health Research Program. Retrieved from <https://www.ruralhealthresearch.org/alerts/249>

Waller Lansden Dortch and Davis LLP. (2017). The State of Government Owned Hospitals in the United States – Special Edition for MidSouth Commercial Law Institute. Preservinghealthcare.com. Retrieved from <https://www.scribd.com/document/379566970/The-state-of-government-owned-community-hospitals>