I. Introduction

The Rural Health Information Hub reports that rural populations are disproportionately impoverished as shown by lower income, higher poverty and unemployment rates, and higher uninsured rates than their urban counterparts. These issues collectively contribute to the significant health disparities that rural residents face. Higher incidence of disease and disability, increased mortality rates, and lower life expectancy are noted when comparing rural residents to urban. Health risk behaviors, chronic illness, and overall poor health all have increased in rural communities. Mortality rates for the top five causes of death in the U.S. – heart disease, cancer, unintentional injury, respiratory disease, and stroke – were identified by the Centers for Disease Control and Prevention as having a significantly higher death rate in rural versus urban populations. This increase is largely attributed to a lack of access to care.

Rural residents are made more vulnerable by limited access to acute and primary medical care. The rapid rate of closure of rural “tweener” hospitals is accelerating this problem. This paper highlights some of the reasons for the closure crisis, why tweener hospitals are closing disproportionately compared to other rural hospitals, what happens to a community when a rural hospital closes, and policy recommendations to ensure tweener hospital survival.

II. Statement of the issue

Definitions

Tweener hospitals refer to facilities too large to be considered critical access hospitals (CAH: 25 beds or less) and too small to be rural referral centers (RRC: 275 beds or more or meeting alternative criteria that may include source and volume of patient admissions) that face unique challenges. This definition can be interpreted to include inpatient prospective payment system (IPPS) facilities further designated as Medicare-dependent hospitals (MDH) or sole community hospitals (SCH). These acute care facilities are typically too small to thrive under the Medicare IPPS system and are most often found in smaller communities with minimal resources; therefore, they struggle with financial sustainability.

MDH facilities are defined as rural hospitals with 100 or fewer beds whose Medicare inpatient days or discharges are equal to or greater than 60 percent. Historically, Medicare payments have been below the actual cost of care, which resulted in financial
strain on those facilities with higher-than-average Medicare populations. The MDH designation allows rural hospital inpatient payment adjustments equal to the federal rate plus 75 percent of the amount by which the MDH hospital-specific payment rate exceeds the federal rate.\textsuperscript{4}

The SCH designation is a bit more complicated. These facilities are, however, typically acute care facilities between 15 and 35 miles from another similar facility and serve at least 75 percent of residents in their service area that receive inpatient hospital care.\textsuperscript{5} SCHs qualify for higher inpatient payments if their hospital-specific payment from one of four specified base years exceeds the federal inpatient payment rate. SCHs also qualify for a 7.1 percent add-on to outpatient prospective payments.

Besides the MDH and SCH classifications, all rural IPPS hospitals are potentially eligible for low-volume hospital (LVH) payment adjustments, which are paid on a sliding scale dependent on the exact number of total discharges. Facilities with 500 or fewer total discharges are paid a 25 percent add-on payment for each Medicare discharge, while those with greater than 500 but less than 3,800 are paid a smaller add-on calculated with a predetermined formula.

History

The tweener hospital closure crisis is real and escalating, increasing the gap in access to care for rural residents. Tweener hospital trouble initially began in the mid-1980s when Congress voted to reform the Medicare payment model from cost-based reimbursement to an IPPS or diagnosis-related group system.\textsuperscript{6} This new payment system used a predetermined set fee, which Congress deemed a reasonable reimbursement, for diagnosis and treatment of Medicare patients without regard to the cost of services or length of stay (LOS).\textsuperscript{6} This change had a profoundly negative impact on the rural tweener market because the native payer mix was heavily weighted towards an older Medicare population that is typically sicker and requires longer LOS. Not only did larger facilities with higher patient volumes have greater ability to even out the LOS, they also had a more diverse payer mix that provided the latitude to recoup costs where Medicare was systematically underpaying.

Some relief did arrive in 1997 when Congress passed the Balanced Budget Act, allowing special provisions for some rural hospitals to declare a CAH designation and return to a cost-based reimbursement payment model.\textsuperscript{7} Those tweener hospitals that did not or could not convert to a CAH remained under IPPS or tweener licensure. Payment incentives such as disproportionate share payments, upper payment limits, uncompensated care, 1115 waiver program, 340B Drug Pricing Program, and others helped tweener hospitals remain financially solvent.\textsuperscript{8} The Affordable Care Act of 2010 (ACA) scheduled several special payment incentives to phase out, anticipating Medicaid expansion would cover the shortfall; however, Congress did not anticipate the
Supreme Court's decision to allow states to refuse Medicaid expansion.\(^8\) The ACA also instituted significant Medicare payment cuts, which disproportionately disadvantaged rural IPPS hospital with above-average Medicare patient utilization. Soon after, the tweener hospital closure crisis escalated.

**Distribution**

Since January 2010, 124 rural hospitals have closed, with at least 76 (62 percent) of these being tweener facilities.\(^9\) Four of these hospitals closed from January to February 2020, resulting in access to care being unavaiable to some of the nation’s neediest populations.\(^9\) According to USA.com, rural residents’ access to care was restricted or increased by an additional 30 more miles on average.\(^10\) That is an additional 30 minutes or more of driving time when added to the 100-plus miles rural residents may drive to the nearest care access point and can often mean the difference between life and death.\(^11,\,12\) To add insult to injury, Becker’s Hospital Review published research showing 673 more rural hospitals throughout the U.S. were identified as vulnerable to closure, with 355 of those in markets with significant health disparities.\(^13\) That equates to more than 20 percent of the nation’s rural hospitals struggling to keep their doors open. This crisis is a national emergency.

To avoid complete closure, many facilities are closing service lines, with obstetrics leading the list. Because it is rare to find labor and delivery service lines in a CAH, many of these closures are from PPS or tweener facilities. About 500,000 women give birth each year in rural hospitals, yet access to labor and delivery units has been declining. Comprehensive figures are spotty, but an analysis of 306 rural hospitals in nine states with large rural populations found that 7.2 percent closed their obstetrics units between 2010 and 2014.\(^14\) On average these closures force an additional 30-mile drive for deliveries, concerns about continuity of local rural maternity care, and escalation of distant intrapartum care for women.

**Relevant policies**

Several policies in recent years have impacted tweener hospitals. Perhaps most impactful are the MDH and LVH policies that provide supplemental payments to tweener hospitals. These programs are not permanent and must be renewed by Congress periodically. Recent delays in Congress resulted in the MDH and LVH programs not getting renewed for the 2018 fiscal year; however, policymakers did finally vote for approval of a five-year extension of the program and made it retroactive to cover the expiration of the 2018 year.\(^15\) This lack of permanence in their programs leaves tweener hospitals in a state of limbo, making it difficult for hospitals to plan and ensure long-term sustainability.
The Affordable Care Act created opportunities for expanded coverage of low-income residents and those with pre-existing conditions. Rural areas represent a disproportionate share of low-income populations and those with complicated health conditions. As such, affordable insurance coverage for rural residents provides a backstop for reimbursement of tweener hospital-billed services. Though effective in 2014, many states with rural populations in need of care have not opted to expand the income requirements for Medicaid, contributing to high uninsured rates in rural areas and unpaid hospital bills. As of 2019, 37 states had expanded Medicaid coverage, contributing to ongoing high uninsured rates in rural areas and unpaid hospital bills. Though the ACA resulted in plans available through state-based marketplaces, there has been a lack of competition in rural areas. This has resulted in high premiums, co-pays, and deductibles for people in rural areas, forcing some to opt to be uninsured. The tweener hospitals are forced to absorb these increased costs.

The Rural Community Hospital Demonstration Project Program was initially passed in 2003 as part of the Medicare Modernization Act, though it has been re-authorized in five-year increments since that time. This program allows for a maximum of 30 hospitals to participate in a pilot program that seeks to explore the feasibility of innovative practices of cost-based reimbursement for inpatient services in tweener hospitals. CMS is conducting evaluations of the demonstration project to assess the financial impact on participating hospitals and the broader impact on the community. Innovations being explored would reimburse rural hospitals based on reasonably incurred costs rather than under the standard IPPS payment system. Medicaid 1115 waivers function similarly at the state level to foster innovative practices and have potential utility in supporting tweener hospitals.

The Balanced Budget Act of 1997 created the CAH designation, which allowed for cost-based reimbursement. Along with this, the necessary provider provision was created, which allowed for states to certify hospitals as necessary providers even if they did not meet the federal CAH guidelines if the facility was deemed crucial to providing health care services. But in 2003 the Medicare Prescription Drug, Improvement and Modernization Act put an end to the necessary provider provision, and as of Jan. 1, 2006, states no longer have the ability to waive CAH requirements. CMS became the only entity able to define and redefine the guidelines.

Before 2006 not all hospitals that might have been considered for the necessary provider waivers requested this status. Many tweener hospitals fall into this category. Since “CAHs are often in a stronger financial position than rural PPS hospitals because they received cost-based Medicare reimbursement,” as the hospital crisis continues many hospitals could be helped if Congress would allow states to resume granting necessary provider status.
The 340B Drug Discount Program represents an opportunity for tweener hospitals to receive reduced-cost prescription drugs. The program began as a means to lower the cost of outpatient medication for a small set of under-resourced health care facilities that primarily serve low-income patients.24 The viability of the 340B program for tweener facilities determines the service lines provided in some cases (cancer care, hemodialysis, etc.). Currently, there are only six categories of hospitals eligible to participate in 340B: disproportionate share hospitals, children’s hospitals and cancer hospitals exempt from the Medicare IPPS system, SCHs, rural referral centers, and CAHs.24

Several potentially impactful pieces of national legislation were introduced in 2018 but failed to progress, including those that sought to amend the Social Security Act to provide enhanced payments to rural health providers (Save Rural Hospitals Act, HR 2957) and provide coverage for rural emergency medical center services under Medicare (Rural Emergency Medical Center Act, HR 5678).25 The Save Rural Hospitals Act proposed to eliminate Medicare sequestration cuts for rural hospitals, permanently extend low-volume and Medicare dependent hospital programs, reinstate the sole community hospital hold harmless program for outpatient services, eliminate rural Medicare and Medicaid disproportionate share funding reductions, and more, but it failed to gain traction.25

Practice-based policies have potential local influence and range from collaborative practices to formalized affiliations. Some tweener hospitals are opting to increase their size by collaborating or becoming an affiliate of academic medical centers, nonprofit health systems, or for-profit health systems. Though different models exist, the balance between the expected levels of invested capital, contributed goodwill, and assumed risk of the external party is weighted against the degree of post-affiliation control maintained by the tweener hospital and the community. Independent or contract-based collaborations or joint-operating agreements represent models with more control held by the tweener hospital, whereas joint venture mergers, sole member replacements, or leasing of the tweener hospital represent models where the affiliate has increasing control.

On Nov. 1, 2019, CMS finalized policies to amend the PPS system. Specifically, CMS finalized a change to the generally applicable minimum required level of supervision for hospital outpatient therapeutic services furnished by all hospitals and CAHs from direct supervision to general supervision. General supervision means the procedure is furnished under the physician's overall direction and control, but the physician's presence is not required during the performance of the procedure. To conform to the FY 2020 IPPS final rule for CY 2020, CMS will use the post-reclassified wage index for urban and rural areas to determine adjustments for the OPPS payment rate and copayment standardized amount. This policy change seeks to address the wage gap
hindering recruitment efforts in rural hospital settings. Unfortunately, lab fee schedules remain unequal between rural and urban hospitals.

**Other contributing factors**

Tweener hospitals also often face a lack of qualified leadership, both in administrative and board positions. While many times the hospital board is made up of community leaders, they often lack understanding of board governance responsibilities, legislative concerns, strategic planning, third-party reimbursement, and how health care payment systems work.\(^\text{26, 27}\) The lack of education makes at-risk hospitals a target for unscrupulous vendors. One such example is the recent reference lab situation that several rural hospitals fell prey to.\(^\text{28}\) Many small hospitals have been forced to file for bankruptcy because of companies that have been allowed to mismanage hospitals that were already in a precarious situation.\(^\text{29}\) Poor leadership leads to poor outcomes.

How the local community views the tweener hospital has a big impact on how much they utilize the facility. The small-town environment where everyone knows their neighbors – which is the reason many people live in rural America – can be a detriment to the local hospital. Tweeners must provide not just adequate care but exceptional care. Social media and its impact can have a larger ripple effect in the rural environment, as it can damage the local view of the hospital. While urban counterparts still must provide good care, one negative social media post isn't going to travel as far in an urban setting as it does in the rural setting. This type of issue doesn't just happen on the service-to-service level but at the consumer level as well. One expert says that "consumers associate aesthetics with higher quality care; our hospitals must be able to compete on both fronts."\(^\text{30}\) The same article discusses how able patients will travel farther for what they think will be better care simply because the facility is bigger, newer, or has access to cutting-edge clinical trial research. Rural hospitals must ensure patients get equivalent high-quality care locally.

Another issue is the physician shortage across the United States, with 66 percent of this shortage occurring in rural areas.\(^\text{15}\) Rural hospitals treat a disproportionate number of aging patients with chronic diseases, and the uninsured rates range on average from 11 to 14.6 percent.\(^\text{15}\) The patient population isn’t the only challenge when it comes to recruiting qualified staff. Rural facilities may be old, outdated, and unexciting, with high workloads without relief or support. Many rural hospitals do not have the volume to support a specialty physician nor backup physicians to share the workload.\(^\text{31}\) The two hardest-hit specialties are OB/GYN and general surgery, which has led to an increasing number of rural hospitals closing their obstetrics services. All of this can contribute to challenges in physician recruiting. Rural hospitals also face decreasing inpatient numbers, with more than half of the hospitals only receiving 40 percent of their income from inpatient care.\(^\text{32}\)
High technology costs and in some cases the lack of broadband internet to support the technology of medicine are also factors disproportionately affecting tweener hospitals. A study of electronic health records (EHR) incentive programs “suggests that the digital divide between urban and rural hospitals that are adopting EHRs and using the technology is widening, thereby posing a challenge for these hospitals to provide cost-effective and quality care in their communities.”33 This conclusion also suggests that meaningful use would not provide adequate resources to shrink this divide and allow hospitals to meet the growing demands. The study does suggest that “federal agencies could use this information to generate programs and additional funding opportunities devoted to providing technical assistance to rural hospitals.”33 Some hospitals are trying to manage the high cost of EHR by participating in joint ventures that allow several smaller hospitals to purchase the system together to help leverage this expense.31

Hospital closure effects on community

Rural hospitals are essential to the health care system, and in many communities, health care is the center of the economy. The loss of access to emergency and acute care is the most obvious effect; however, without a hospital, primary care and specialty physicians and providers soon leave the community, exacerbating the gap. As devastating as the loss of access to care for a community can be, often the closure of a hospital is even more damaging to the local economy. It can eliminate hundreds of jobs immediately. Loss of jobs has a negative impact on the tax base, resources for schools, public services, and potentially jobs in the public sector as well.23

III. Recommendations

- Make permanent MDH and LVH
- Rebase MDH and SCH
- Reinstate the OPPS hold-harmless for SCH, MDH, and LVH
- Expand and make permanent the Rural Community Hospital Demonstration Project
- Reinstate the necessary provider provision on a limited basis as appropriate
- Secure 340B Drug Pricing Program for rural hospitals
- Provide funding to support education of rural hospital leaders and governing boards

IV. Conclusion

The reasons for rural tweener hospital closures are multifocal and complex. The evolution of health care policy has precipitated the shutdowns of rural tweener hospitals at a disproportionate rate and must be addressed through advocacy efforts for long-
term change; however, rural hospital leaders must be open to and supportive of adopting new and innovative ideas that may enhance the success and survival of rural health care access. Rural leaders must have a voice at the policy table, and all policy must be considered through a rural lens. Only then will change occur. Rural leaders must be the change, as it is often a bottom-up approach by thought leaders that initiates successful and sustainable change. The leaders who envision the ideas transcend the physical distance of rural isolation.
Reference List


