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Chairman Hatch, Ranking Member Wyden, and members of the committee, thank you for the opportunity to testify today on behalf of my colleagues at the North Carolina Rural Health Research Program (NC RHRP) and the Gillings School of Global Public Health about our research into financial distress and closure of rural hospitals.

The NC RHRP at the Cecil G. Sheps Center for Health Services Research is built upon a 44 year history of rural health research at The University of North Carolina at Chapel Hill and draws on the experience of a wide variety of scholars and researchers, analysts, managers, and health service providers associated with the Center. NC RHRP studies problems in rural health care delivery through basic research, policy-relevant analyses, geographic and graphical presentation of data, and the dissemination of information to organizations and individuals who can use the information for policy or administrative purposes to address complex social issues affecting rural populations. We are funded primarily by the Federal Office of Rural Health Policy (FORHP) in the Health Resources and Services Administration.

Our testimony summarizes our research on rural hospital closures and the financial distress of rural hospitals. To explain, we will focus on the following four categories: rural hospital closures between 2005-18, causes of financial distress and closure, characteristics of communities served by hospitals at high-risk of financial distress, and potential strategies that might be considered.

**Rural hospital closures between 2005-18**

We define rural hospital closures as rural hospitals (including all Critical Access Hospitals) that close their inpatient service or move their services fifteen or more miles away from the current location. The definition is important because of the variation in circumstances that might be considered open or closed.

Rural hospital closures are sometimes difficult to identify because they may close and re-open, be part of a merger, a move, a disaster, etc. For example, they may close temporarily due to hurricane damage or they may close their emergency department, but keep inpatient care open. Our primary method of discovering closed hospitals is through media outlets. Applying this definition helps us keep an accurate and defensible count as not every hospital administrator sees their situation as a closure.

Figure 1 shows that since January 2005, 125 rural hospitals have closed (83 since January 2010). These closures increased annually until 2016, but have started to slow.

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Rural hospitals are often the largest or second largest employer in their communities, so the closure of the only hospital in the county can have significant negative economic effects on a rural community. After the closure of inpatient services, alternative health care delivery models offer the potential to retain local access to some health care services as well as soften the economic impact of closure on the community. Of the 125 closed hospitals, some have converted to outpatient/primary care clinics (18.1%), urgent or emergency care (21.7%), or skilled nursing facilities (6%), but more than half either converted to non-health care use (54.2%), such as condominiums, or were abandoned.

Most closures and “abandoned” rural hospitals are in South (60%), where poverty rates are higher and people are generally less healthy and less likely to have health insurance (private or public). Southern states have also been less likely to expand Medicaid. Ten out of 18 states that

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2 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1702512/.
3 Garfield R, Damico A. The Coverage Gap: Uninsured Poor Adults in States that Do Note Expand Medicaid. Kaiser
have not expanded Medicaid are southern states.\textsuperscript{4,5} It is difficult to accurately determine whether it is the expansion decision \textit{per se} that has led to higher closure rates, or whether states that have not expanded Medicaid have other factors leading to higher closure rates; this is an important question on which many researchers are currently working.

Figure 2 shows that patients in affected communities are probably traveling at least 5 to 30 miles to access inpatient care (12.5 miles on average); however, 43\% of the closed hospitals are more than 15 miles to the nearest hospital, and 15\% are more than 20 miles.\textsuperscript{6} The additional travel burden is of concern because residents of rural communities are less likely to have reliable transportation (due to age, health conditions, and income) than urban residents.\textsuperscript{7}

\textbf{Figure 2: Range of distance from closed hospital to next closest hospital}

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\textsuperscript{5} Rural Health Information Hub. Rural Health Disparities: What regions of the country experience high levels of rural health disparities? Nov 14, 2017. https://www.ruralhealthinfo.org/topics/rural-health-disparities


Causes of financial distress and closure

The causes of financial distress and closure of rural hospitals are numerous and complex. We have developed a model to predict financial distress among rural hospitals. After exploring a large number of potential causes, we found that four types of factors predict financial distress: 1) Financial performance and profitability; 2) Proportion of Medicare and Medicaid in the payer mix; 3) Hospital ownership and size, and; 4) Characteristics of the market served by the hospital, including competition, economic condition, and market size.

Among these factors, profitability is particularly important. Nationally, urban hospitals were twice as profitable as rural hospitals in 2016: the U.S. median profit margin for urban hospitals was 5.51% which was more than double the margins for Critical Access Hospitals (2.56%) and other types of rural hospitals (2.01%). There was also substantial geographic variation in profitability: among census regions, Critical Access Hospitals in the South and other types of rural hospitals in the Northeast were less profitable than hospitals in other regions.

Figure 3 shows that, in 2016, 31 percent of all acute care hospitals (1,375 / 4,471) were unprofitable, and the majority of unprofitable hospitals were rural: 847 unprofitable rural hospitals versus 528 unprofitable urban hospitals8.

Figure 3. Number of Profitable and Unprofitable Hospitals in 2016*

*Note: Other Rural Hospitals are hospitals are Medicare Dependent Hospitals, Sole Community Hospitals, and rural PPS hospitals (as well as not CAHs and not urban)

There was also substantial geographic variation in the number of unprofitable hospitals: among

census regions, the greatest number of unprofitable hospitals were “other rural hospitals” in the South, urban hospitals in the South, and Critical Access Hospitals in the Midwest. There are many reasons for geographic variation in the profitability of urban and rural hospitals: for example, compared to urban hospitals, rural hospitals serve older, poorer, and sicker communities where higher percentages of patients are covered through public insurance programs, if they are covered at all. Most rural hospitals are located in the South, the region with the highest rates of poverty, and in the Midwest, the region with the lowest rates of poverty. Regardless of the reasons, unprofitable hospitals are at greater risk of closing and warrant elevated concern by policy makers and those concerned with access to hospital care by rural residents.

**Characteristics of communities served by hospitals at high risk of financial distress**

We used profitability and the other three factors to develop a model to predict financial distress of rural hospitals\(^9\). Among 2,177 rural hospitals in 2015, 9 percent (197 hospitals) were classified at high risk of financial distress and 16 percent (339 hospitals) at medium-high risk. Most high-risk hospitals are located in the South: States with the largest percentages of rural hospitals at high risk were Oklahoma (31%, n=24), Tennessee (25%, n=13), Florida (25%, n=6), Virginia (24%, n=7), and Alabama (23%, n=10).

**Figure 4. Rural hospitals at high risk of financial distress in 2017**

One finding of particular concern was a racial disparity among communities served by hospitals at high-risk of financial distress compared to those served by hospitals not at high risk. Communities served by rural hospitals at high risk of financial distress had a significantly higher percentage of non-Hispanic black residents (16% vs 7%), while those served by rural hospitals not at high risk had a higher percentage of non-Hispanic white residents (84% vs 75%). Communities served by rural hospitals at high risk of financial distress had a significantly higher percentage of residents who did not graduate high school and who were unemployed. Finally, communities served by rural hospitals at high risk of financial distress had a significantly higher percentage of residents who reported having fair to poor health, who were obese, who smoked, and who had increased years of potential of life lost (premature mortality).

Hospitals at high risk of financial distress serve a more vulnerable population than those not at high risk. Because hospitals at high risk of financial distress are more likely to close or curtail services, these vulnerable populations are at increased risk of reduced access to hospital services, exacerbation of health disparities, and loss of hospital and other types of local employment.

**Potential strategies to address financial distress and closure of rural hospitals**

Given the factors above and the fact that during the past 35 years some of the most innovative and effective developments in rural health policy have emerged from the Finance Committee, we hope the committee will consider our two suggested approaches to address financial distress and closures.

1. **Improve what exists - Assess whether Medicare payment designations could be better targeted.** Over the past 25 years, Congress has created special payment classifications and adjustments to assist rural hospitals, including Critical Access Hospital, Sole Community Hospital (SCH), Medicare Dependent Hospital, Rural Referral Center, Medicare Disproportionate Share Hospital and low-volume hospital adjustment. These programs are important to many rural hospitals; however, some of them might be refined to better target rural hospitals at high risk of financial distress. For example, the SCH program provides payment enhancements to safety-net hospitals that are often the only source of such services for many rural communities. In our initial study we found that there would be significant financial consequences to hospitals if the SCH program did not exist. However, we also found that the hospitals that benefited the least from the SCH program were in the South\(^*\), the region with the greatest prevalence of rural hospitals at high risk of financial distress and closures.\(^{11}\) In our subsequent study, we found that hospitals that benefited from the SCH program were: 1) located in markets with greater total population, lower unemployment and

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\(^{10}\) SCHs in the South would be less affected by cessation of the SCH program because more are already paid at the IPPS rate (because their hospital-specific rates are lower than the federal IPPS rate).

\(^{11}\) SR Thomas, R Randolph, GM Holmes, and GH Pink, The Financial Importance of the Sole Community Hospital Payment Designation, NC Rural Health Research Program Findings Brief, November 2016.
poverty rates, and higher high school graduation rates; 2) located in counties with lower percentages of people who are obese, have fair/poor self-rated health, and have no health insurance, as well as a lower number of potential years of life lost, and; 3) more profitable (higher total and operating margins), larger (greater net patient revenue), more efficient (higher occupancy rate), and employed more FTE staff per bed.12 These findings raise the question of whether the SCH program could be better targeted by reassessing eligibility criteria, conditions of participation, or the payment method. This could be done for other Medicare hospital payment classifications and other types of providers, such as ambulances and home health.

2. Develop something new – Select some models for demonstration and accelerate evaluation of current demonstration projects. The Centers for Medicare & Medicaid Services’ Innovation Center has several rural demonstrations projects, including the Rural Community Hospital Demonstration, the Frontier Community Health Integration Project and the Pennsylvania Rural Health Model. The Medicare Payment Advisory Commission has proposed a 24/7 emergency department model and a clinic and ambulance model for communities that may have insufficient inpatient volume13. The American Hospital Association Task Force on Ensuring Access in Vulnerable Communities Emerging Strategies to Ensure Access to Health Care Service identified several rural models14. The National Rural Health Association has proposed the Community Outpatient Hospital as a model to ensure emergency access to care for rural patients15. The Kansas Hospital Association is promoting “Primary Health Centers” to shift small rural hospitals away from a focus on admissions to more outpatient and transitional services16. The Oregon Rural Health Reform Initiative is an effort to sustain rural hospitals financially by transitioning them away from a cost-based reimbursement model17. Thus there is no shortage of innovative ideas that could lead to demonstration projects and proposed models that may hold the ultimate solutions for enhancing access to care in rural communities. The profound challenges facing providers that serve rural communities are getting worse: we believe that innovation needs to be accelerated – testing of new models, simpler approval processes, faster evaluation and implementation, and development of new Medicare payment methods, Conditions of Participation, and regulations that will allow and sustain new models of rural care and Medicaid as foundation elements of demonstration models.

14 https://www.aha.org/system/files/content/16/ensuring-access-taskforce-exec-summary.pdf
15 https://www.ruralhealthweb.org/advocate/save-rural-hospitals
Conclusion

In conclusion: 1) Rural hospital closures are likely to continue and will probably occur more frequently in disadvantaged communities; 2) the causes of financial distress and closure are complex and the number of rural hospitals at high risk of financial distress is growing, and; 3) assessment of whether Medicare payment designations could be better targeted and acceleration of innovation and testing of more new models are recommended strategies.

Many communities across the United States are concerned about the ability of their hospitals to continue providing health care to their residents. Rural hospitals at high risk of financial distress and closure are not well positioned to meet the challenges of the new realities in the health care delivery system. Major payment reform and industry restructuring will put pressures on hospitals of all types, but especially on financially weak organizations. Thus, it will be critical to assess carefully how these changes are affecting rural hospitals, the care they deliver, the populations they serve, as well as how existing and potential policies might impact hospitals.