Why the CMS CHART Model Will Hurt Rural Hospitals

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EXECUTIVE SUMMARY

- Rural hospitals and the communities they serve would be harmed by participating in the CMS Community Health Access and Rural Transformation (CHART) Model:
  - Rural hospitals would be paid less for services under the CHART Model than under current payment systems, and the payment reductions would increase over time. Payments would be cut by higher amounts in smaller rural communities, and hospital payments would be reduced if the population of the community decreases.
  - Since Medicare, Medicaid, and private insurance plans currently pay most small rural hospitals less than it costs to deliver services to patients, the cuts in payment under the CHART Model would likely accelerate closures of rural hospitals.
  - Payments to rural hospitals under the CHART Model would still be primarily based on the volume of services delivered, and there would be no additional payments to enable expanded delivery of primary care or other high-value services. Rural hospitals would still lose money if they reduce avoidable services such as unplanned hospital readmissions or Emergency Department visits.

- Instead of the problematic payment system in the CHART Model, Medicare, Medicaid, and most importantly, private insurance plans should implement a Patient-Centered Payment System that will:
  - Pay adequately to ensure availability of essential services in a rural community, including both hospital services and primary care services;
  - Enable safe and timely delivery of the services patients need at prices they can afford to pay; and
  - Encourage better health for rural residents and lower overall healthcare spending.

I. The Serious Problems Facing Rural Hospitals

More than 800 rural hospitals – 40% of all rural hospitals in the country – are at risk of closing in the near future. Most of these are small rural hospitals that provide not only emergency care, inpatient care, and outpatient services, but also primary care, rehabilitation, and long-term care services for their communities. Moreover, most of these hospitals are located in isolated communities where loss of the hospital could severely limit access to health care services. More than 20 million people could be directly harmed if these hospitals close, and people in all parts of the country could be affected through the impacts on workers in agriculture and other industries.

Small rural hospitals are facing closure because the payments they receive for services are less than the cost of delivering care to patients in rural communities. Most of the smallest rural hospitals lose significant amounts of money delivering patient services, while the majority of larger rural hospitals make profits delivering services to patients. Although most hospitals lose money on Medicaid and uninsured patients, small rural hospitals also lose money on patients with private insurance plans (including Medicare Advantage plans), and those losses have a bigger impact on the total margins at small rural hospitals because there are far more patients who have private insurance. Large hospitals can offset losses on Medicaid and uninsured patients using the profits they make on patients with private insurance, but most small rural hospitals cannot do that because they don’t make profits on those patients.

Not only are the amounts of payments too low to support the cost of essential services, the methods of payment penalize rural hospitals for efforts to improve the health of rural residents. Because rural hospitals receive most of their revenues through fee-for-service payments, if community residents are healthier and need fewer ED visits and other services, the hospital’s fee-for-service revenues will decrease. However, the cost of maintaining the essential services at the hospital will not change, so financial losses at the hospital will increase. The same problem occurs under Medicare’s cost-based payment system for Critical Access Hospitals and Rural Health Clinics because Medicare’s share of the costs at the hospital or clinic decreases if Medicare beneficiaries receive fewer services.

Clearly, a better approach to paying rural hospitals is needed that pays adequately for essential services and encourages delivery of services that will improve the health of rural residents.
II. The CMS CHART Model

In August 2020, the CMS Center for Medicare and Medicaid Innovation (CMMI) announced plans to implement the “Community Health Access and Rural Transformation (CHART) Model.” According to CMS, the goals of the CHART Model are to:

- “Increase financial stability for rural providers through the use of new ways of reimbursing providers that provide up-front investments and predictable, capitated payments that pay for quality and patient outcomes;”
- Remove regulatory burden by providing waivers that increase operational and regulatory flexibility for rural providers; and
- Enhance beneficiaries’ access to health care services by ensuring rural providers remain financially sustainable for years to come and can offer additional services such as those that address social determinants of health including food and housing.”

There are two separate “tracks” in the CHART Model:

- The “Community Transformation Track” includes a component in which rural hospitals in 15 communities can be paid by Medicare, Medicaid, and potentially other payers through a “Capitated Payment Amount” instead of traditional fee-for-service or cost-based payment.
- The “ACO Transformation Track,” in which 20 entities located in rural areas can, if they agree to join the Medicare Shared Savings Program as Accountable Care Organizations and accept financial risk for total spending on Medicare beneficiaries, receive “advanced shared savings payments” rather than waiting until savings are actually generated.

A Notice of Funding Opportunity (NOFO) for the Community Transformation Track was issued on September 15, 2020. The Request for Application (RFA) for the ACO Transformation Track will not be available until sometime in 2021. Since no detailed information is currently available about the ACO Transformation Track, and since it is unlikely that participation in the Medicare Shared Savings Program would benefit most small rural hospitals, the focus of this report will be on the Community Transformation Track.

III. How Rural Hospitals Would Be Paid in the CHART Model

A. Eligibility Criteria for Rural Hospitals

Rural hospitals will only be eligible to participate in the Community Transformation Track of the CHART Model if they provide services to residents in one of 15 rural “Communities” across the country. The Communities will be selected by CMMI based on applications submitted by state Medicaid agencies and other eligible “Lead Organizations.”

A Community must consist of one or more counties or census tracts, all of which are classified as rural by the Federal Office of Rural Health Policy. A Community needs to be relatively large, since its counties and census tracts must collectively have at least 10,000 Original Medicare beneficiaries living within them. Most Communities will likely need to have total populations of more than 60,000 total residents in order to qualify. Medicare beneficiaries who are enrolled in Medicare Advantage plans do not count toward the 10,000-beneficiary minimum, so Communities will need to be larger in areas that have a high penetration of Medicare Advantage plans.

A rural hospital is eligible to participate in the CHART Model if either:

1. It is located in one of the selected Communities and receives at least 20% of its Medicare revenue from eligible hospital services provided to residents of that Community; or
2. Regardless of where the hospital is physically located, it delivers services representing at least 20% of the amount Medicare spends on eligible hospital services for all Medicare beneficiaries living in the Community.

In other words, either the residents of the Community must represent a large share of the hospital’s services, or the hospital must deliver a large share of the hospital services the residents of the Community receive.

In addition, in order to participate in the CHART Model, the hospital must agree to implement activities described in a Transformation Plan developed by the Lead Organization and to report quality and other information to CMMI.

The eligibility criteria preclude most rural hospitals from participating individually. As shown in Figure 1, only 15% of rural hospitals are located in a county that has 10,000 or more residents on Original Medicare. This means that in most cases, multiple counties would have to be included and two or more hospitals would have to agree to participate in order for a Community to qualify.

As shown in Figure 2, over 70% of small rural hospitals (those with less than $30 million in total expenses) are located in counties with fewer than 4,000 Medicare beneficiaries, and more than 40% are in counties with fewer than 2,000 beneficiaries, so this means that 3, 4, 5, or

![Figure 1: Proportion of Rural Hospitals Located in Counties With 10,000+ Medicare Beneficiaries](image-url)
even more small hospitals would all need to be part of the same Community in order for any of the small rural hospitals to be eligible.

B. Method of Payment for Inpatient and Outpatient Services

If the hospital meets the eligibility criteria and wishes to participate in the CHART Model, the hospital will receive a single, predetermined Capitated Payment Amount (CPA) each month. This will serve as the hospital’s full payment for the eligible inpatient and outpatient services it delivers to Medicare beneficiaries. The hospital will no longer receive standard Medicare payments for these services, i.e., Critical Access Hospitals will no longer receive cost-based payments, and other hospitals will no longer receive DRG-based payments for inpatient admissions or payments under the Outpatient Prospective Payment System for outpatient hospital services.

The Capitated Payment Amount applies only to (1) inpatient hospital services, (2) outpatient hospital services, and (3) inpatient rehabilitation services that are delivered in swing beds at Critical Access Hospitals. There will be no change in the way a rural hospital is paid for physician services and other professional services, Rural Health Clinic services, swing bed services at non-Critical Access Hospitals, home health services, hospice services, ambulance services, or inpatient rehabilitation services outside of swing beds. It is not clear whether the CPA would only apply to hospital services delivered to beneficiaries who reside in the community, or whether it would also replace standard Medicare payments for services delivered to beneficiaries who do not live in the Community.10

The CPA amount will be the same each month regardless of how many or what types of inpatient or outpatient services the hospital provides to residents of the Community during the month. For example, if the hospital admits fewer Medicare beneficiaries for inpatient care in a particular month, it will still receive the same CPA amount as it received in the previous month, and if it delivers more outpatient testing to Medicare beneficiaries, it will not receive any additional payments from Medicare. However, as described below, the amount of payment in future years would change based on how what proportion of the total hospital services in the Community the hospital delivers.

C. Determination of the Capitated Payment Amount

Obviously, the impact of the CHART Model on a rural hospital’s finances will depend heavily on how large the Capitated Payment Amount is compared to the payments the hospital would have otherwise received. In the Notice of Funding Opportunity, CMS describes the methodology it will use to determine the Capitated Payment Amount, although it states that the description is “for informational purposes and may change at CMMI’s sole discretion” and that “the final CPA financial methodology will be detailed further in a time and manner to be specified by CMMI.”11

Payment Amount in the First Year

The Capitated Payment Amount (CPA) in the first year of the CHART Model is determined through a complex series of steps:

1. The hospital’s “baseline revenue” is calculated. The amounts Medicare paid the hospital for eligible inpatient and outpatient services two years and three years prior to the start of the model will be determined and averaged. (If the Capitated Payments begin during 2022, the baseline revenue will be the average of the Medicare payments to the hospital during 2019 and 2020. There is no indication as to whether or how adjustments will be made for the impacts of the pandemic in 2020.)12

2. A “unit price adjustment” is made. The baseline revenue reflects the amounts paid for services 2-3 years in the past, but the costs of delivering individual services and the amounts Medicare pays for services will change between that period and the year in which the Capitated Payment Amount is paid. The unit price adjustment is presumably intended to address this. The adjustment is calculated differently for Critical Access Hospitals and other hospitals:

a. Critical Access Hospitals. According to the CMS methodology, “the unit price adjustment consists of the change in the interim payment rate between the cost report that the Critical Access Hospital (CAH) submitted for the baseline years and the most recently available, adjudicated cost report.”13 It is not clear exactly what “payment rate” is being referred to, since the CAH is paid for inpatient services using a per diem rate and it is paid for outpatient services based on a cost-to-charge ratio applied to the charges for services. The most recently available cost report available when the rate is initially set would likely be the later of the two baseline years (e.g., since the payments for 2022 would need to be determined in 2021, the most recent adjudicated cost report would be for 2020). There is a provision for adjusting the Capitated Payment Amount mid-year if a more recent cost report has been filed and adjudicated.
b. **Other hospitals.** For hospitals paid through the Inpatient Prospective Payment System and Outpatient Prospective Payment System, there are two components to the unit price adjustment. (The Notice of Funding Opportunity does not describe exactly how these two components will be combined or used to adjust the baseline revenue.)

i. **Geographic Adjustment Factor.** The change in the wage index and capital geographic adjustment factor applicable to the hospital are used to adjust the inpatient and outpatient portions of the baseline revenue.\(^{14}\)

ii. **Trend.** In addition, an adjustment is made based on the “expected” percentage change in national Medicare FFS expenditures from the baseline period to the year in which the payment will be made. This is not really a “unit price” adjustment, since the change in total expenditures is a function of not only changes in the prices of services but in the volume and mix of services delivered to Medicare beneficiaries. Since the Capitated Payment Amount is set prior to the beginning of the year, the actual national Medicare spending amount for the year will not be known, so it will have to be estimated by CMS. According to the methodology description, “If the observed regional trend differs from the projected national trend by more than three percentage points, CMS may retrospectively update the trend at the time that end-of-year adjustments are made,” which presumably means that the CPA could be increased or decreased after the year ends depending on how accurate the estimate of spending was.\(^{15}\) It is not clear what exactly is meant by “the regional trend” or what adjustment would be made if there is a difference of more than three percentage points.

3. **Adjustments are made for quality.** The payment would be adjusted for any changes in the penalties applicable to the hospital under the CMS Value-Based Purchasing Program, the Hospital Acquired Condition Reduction Program, and the Hospital Readmissions Reduction Program between the baseline years and the current year. Since these programs only apply to inpatient services, not outpatient services, presumably the adjustment would only apply to the subset of the baseline revenues derived from inpatient services.

4. **Adjustments are made for changes in the population served.** This includes three separate components:

a. **Population size adjustment.** The population served will be defined as the number of Original Medicare beneficiaries who “reside” in the Community for the majority of the 12 month period\(^{16}\) that began 18 months prior to the year in question (i.e., either the baseline years or the current year) times the number of months they are there.\(^{17}\) The number of beneficiaries in the community in the baseline years will be compared to the number in the current year, and the CPA will be adjusted based on the change in the number of beneficiaries. The methodology does not specify exactly what the adjustment will be, but presumably if the number of beneficiaries has increased or decreased by a certain percentage, the CPA would be increased or decreased by the same percentage. (The document states that “the population adjustment will avoid over-payment for Eligible Hospital Services by reducing revenue from a Participant Hospital’s baseline CPA if the population served by the Participant Hospital decreased between the baseline years and the Performance Period.”\(^{18}\)

b. **Demographic adjustment.** The demographic-only HCC scores of the population in the two time periods will be compared to determine whether the population has increased in age or the gender mix has changed.\(^{19}\) The methodology does not specify whether the CPA will be adjusted in direct proportion to the change in the average HCC score.

c. **Shift in eligible hospital services.** The third adjustment is based on whether there has been a “change in the distribution of services between hospitals.” The method of calculating this is not specified, but the document states the adjustment is intended to “avoid over-payment for Eligible Hospital Services by reducing revenue from a Participant Hospital’s baseline CPA if ... Eligible Hospital Services shifted between health care providers between the baseline years and the Performance Period,” so presumably this means that if the residents of the community receive a higher proportion of their hospital services at other hospitals, the CPA for the rural hospital will be reduced.\(^{20}\)

5. **A “discount” is applied.** After all of the other adjustments have been made, the resulting amount is reduced by a percentage that CMS refers to as the “discount.” The discount in the first year is 0.5% (i.e., one-half of one percent). The document states that the discount is included “in order for payers to realize savings.”\(^{21}\)

6. **Mid-year adjustments are made.** The Capitated Payment Amount will be adjusted mid-year if additional data become available about changes in the population served or if a newly adjudicated cost report for a Critical Access Hospital becomes available.

7. **Additional adjustments are made after the end of the year.** Although the Capitated Payment Amount is supposed to be a “prospective payment,” it will be retroactively adjusted six months after the end of the year based on claims data. In addition to the population adjustments described above, the NOFO says there “may” be an option for the hospital to receive an “outlier adjustment” to address “unexpected, catastrophically expensive utilization.” If CMS concludes that the Capitated Payment Amounts paid to the hospital had been too high, CMS would reduce the CPA to the hospital in the next year or potentially require a lump-sum repayment of the difference.\(^{22}\)

As shown in Figure 3, the final Capitated Amount may be higher or lower than revenues in previous years depending on the relative magnitudes of the various adjustments.
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Payment Amount in Subsequent Years

In subsequent years, the methodology for determining the Capitated Payment Amount will be similar to what is described above, but with three changes, as shown in Figure 4:

1. The adjustments for changes in unit prices, population size, demographics, and service use are applied to the Capitated Payment Amount from the previous year. The initial CPA is based on the average of the amount of fee-for-service or cost-based payments the hospital received in prior years. However, in the second and subsequent years, the current CPA serves as the starting point for determining the next year’s CPA using all of the various adjustments described above.

2. Additional reductions in payments are made based on quality measures. In addition to the adjustments based on current CMS hospital quality programs described above, the CPA will be reduced by up to 2% based on quality measures specifically defined for the CHART program. The quality adjustment would be based on a hospital’s performance on six measures, three of which would be required for all hospitals (per capita hospital admissions for chronic conditions, the all-cause readmission rate, and HCAHPS patient experience ratings), and an additional three that would be selected by the Lead Organization from a menu of seven measures (use of pharmacotherapy for opioid use disorder, use of high dosage opioids for non-cancer patients, the rate of Cesarean sections, the rate of post-partum contraceptive care, the rate of flu vaccination, screening and follow-up plan for depression, and continuity of primary care for children with medical complexity). It is not clear what will be considered good or bad performance by a small rural hospital on these measures; most of the measures on the second list would have relatively small denominators and would be difficult or impossible to measure reliably in small rural communities.

3. Payments will be reduced by larger amounts each year through higher discounts.
   a. A 1% discount in Year 2. In the second year of the program, the CPA is reduced by 1.0% rather than 0.5%.
   b. Discounts as high as 2.5% in Year 3. In the third year, the amount of the discount will range from 1.0% to as much as 2.5% depending on the total amount Medicare is paying through Capitated Payments for services in the Community. If the total of the CPA payments to all participating hospitals in the Community is less than or equal to $15 million, all of the payments will be reduced by 2.5%. If the total CPA payments are higher than $15 million, smaller discounts will be used, with a minimum discount of 1% for communities where $120 million or more of CPA payments are being made. The document states that the higher discounts are intended to provide “an incentive for Communities to recruit more hospitals to participate” and to increase “the likelihood that the [program] will yield savings that meet or exceed” the amount of the grant funding that is being provided to the Community as part of the CHART model.
   c. Maximum discounts between 3% and 4% in Years 4 through 6. In subsequent years, the maximum discount increases to as much as 4%, and the threshold for receiving only a 1% discount increases to $300 million in total CPA payments.

D. Payments from Other Payers

The state Medicaid agency is required to participate and serve as an “Aligned Payer” in order for a Community to be selected. However, Medicaid payments do not need to change until the second year of the program. Moreover, only 50% of the participating hospitals’ Medicaid revenue needs to be paid through a Capitated Payment Arrangement in the second year; that percentage increases to 60% in the third year and 75% in the fourth and subsequent years. The document does not say whether these percentages apply to all Medicaid revenues or only the revenue for services delivered to residents of the Community.

Participation by commercial payers as Aligned Payers is “recommended but not required,” and there is no requirement for Medicare Advantage plans to participate, so it is possible that payments will only change for Original Medicare beneficiaries and a portion of Medicaid beneficiaries.

The payment methodology used by Medicaid and other Aligned Payers is supposed to be “similar” to the Medicare methodology, but it does not need to be identical. The NOFO states that an “Aligned Payer may implement their capitated payment arrangement with Participant Hospitals differently based on their plan benefits and member populations.” The NOFO specifically states that other payers do not need to make adjustments for Critical Access Hospitals based on changes in the hospitals’ costs.
IV. The Impact of the CHART Model on Rural Hospitals

The complexity of the payment methodology makes it difficult for a rural hospital to understand what impact participation in the CHART Model would have. However, careful examination shows that:

- Rural hospitals would be paid less for services under the CHART Model than under current payment systems.
- Payments to rural hospitals under the CHART Model would still be based on the volume of services delivered.
- Hospital cost and losses would increase under the CHART Model.
- Hospitals would still lose money if they reduce avoidable services such as unplanned hospital readmissions or Emergency Department visits.

A. Rural Hospitals Would Be Paid Less for Services Under the CHART Model

Most rural hospitals are losing money on the services they deliver to patients because the payments they receive from Medicare, Medicaid, and private health insurance plans are less than what it costs for the hospitals to deliver the services. The CHART Model would not only fail to solve this problem, it would make it worse, because it is explicitly intended to reduce the amount that payers spend.

- **Capitated Payments Would Be Reduced Below Current Inadequate Levels.** The “discount” in the methodology reduces the Capitated Payment Amount below what the hospital would have received under current payment systems. At most rural hospitals, payments from Medicare and other payers are below the cost of services, so if the Capitated Payment is even lower, the hospitals’ losses will increase.\(^31\)

- **Payment Reductions Will Increase Over Time.** The discount in the first year is 0.5%, and it doubles to 1% in the second year. It doubles again to 2.0% or more in the third year for most hospitals,\(^32\) and it continues to increase by smaller amounts in each subsequent year to as much as 4.0% in the sixth year. In addition, beginning in the second year, a new quality adjustment would be added that could reduce payments by as much as 2% below the discounted amount. As shown in Figure 5, the hospital could receive less revenue during the demonstration than it received prior to entering.

- **Payment Reductions Will Be Larger for Smaller Rural Hospitals and Smaller Rural Communities.** The size of the discount will be based on the total amount of Medicare revenue included under the Capitated Payment Arrangement in a Community. The percentage reduction in payment to the hospital is larger if the total amount of Medicare revenue involved is smaller. In the sixth year of the program, the Capitated Payment Amount will be reduced by 4% if the hospitals in the Community receive less than $15 million in Medicare payments for the services covered by the Capitated Payment Amounts, and the discounts would only be 2% or less if there were more than $160 million in total Capitated Payments in the Community. As noted earlier, CMS states that the higher discounts are intended to provide “an incentive for Communities to recruit more hospitals to participate” and to increase “the likelihood that the [program] will yield savings that meet or exceed the amount of the cooperative funding.” However, as shown in Figure 6, 72% of rural hospitals receive less than $15 million per year in

![FIGURE 5](image_url)

**FIGURE 5**
Increasing Reductions in Capitated Payment Amounts Over Time in the CMS CHART Model

NOTE: Chart is not drawn to scale; adjustments are shown larger in proportion to total payments for visibility
Medicare payments for inpatient and outpatient services, and the majority of rural hospitals have less than $10 million in Medicare revenue, so a large number of hospitals would have to participate in a Community in order to qualify for smaller discounts.

- **Payments for Critical Access Hospitals Would No Longer Increase When Costs Increase During the Year.** Most small rural hospitals are classified as Critical Access Hospitals; currently, if their costs increase unexpectedly during the year, their cost-based payments from Medicare will increase proportionately. For example, if one of the hospital’s emergency physicians or nurses resigns or becomes ill and the hospital has to pay more for a temporary employee to fill the gap, the increase in the hospital’s personnel cost that year will result in a higher Medicare payment for that year. Under CHART, however, the Capitated Payment Amount for the year would not increase if the hospital’s costs increase unexpectedly during the year, resulting in lower revenues and higher losses under CHART than under the current payment system.

**B. Hospital Payments Would Still Be Based on the Volume of Services**

CMS says that the CHART Model payments will provide “a predictable and stable revenue stream” and that hospitals’ revenues will no longer be “predicated on realized volumes.” However, most of the hospital’s revenue would still come from fee-for-service payments, and even the Capitated Payments would still be tied to the number of services delivered.

- **Payments Will Not Change at All for Most of the Hospital’s Services.**
  - **Medicare:** Although Medicare is a large payer at most rural hospitals, it does not represent the majority of revenues at most hospitals. Moreover, the Capitated Payment Amount applies only to inpatient hospital services and outpatient hospital services. Medicare would continue to pay for physician services and other professional services, Rural Health Clinic services, swing bed services at non-Critical Access Hospitals, home health services, hospice services, ambulance services, and inpatient rehabilitation services outside of swing beds using fee-for-service payments. As shown in Figure 7, Medicare payments for inpatient and outpatient services only represent about one-third of total revenues at small rural hospitals and less than one-fourth of revenues at larger rural hospitals.
  - **Medicaid:** Although the state Medicaid program is required to participate in the CHART Model in order for a Community to be selected, Medicaid payments are not required to change until the second year, and even then, only 50% of Medicaid payments have to be provided through a capitated payment arrangement. Medicaid revenues only represent about 9-10% of total revenues at small rural hospitals, so if only 50% of Medicaid payments change, that would affect less than 5% of the hospital’s revenue.
  - **Private Insurance:** There is no requirement that private health plans participate in the program, so under the CHART Model, a hospital will likely continue to receive fee-for-service payments for most patients with private insurance.
  - **Total:** In combination, it is likely that less than half of the hospital’s revenues would be provided through Capitated Payments. For Critical Access Hospitals, that would primarily represent a change from cost-based payment, not a shift from fee-for-service payments.

- **The CHART Model’s Capitated Payment Would Be Reduced if the Population of the Community Decreases.** Many rural hospitals have had financial difficulties because population losses in the rural communities they serve have caused a reduction in the number of services they deliver and the associated fee-for-service revenues. The CHART Model would not prevent these losses of revenue; if the number of Medicare beneficiaries living in the Community decreases, the “population adjustment” in the payment methodology would reduce the hospital’s Capitated Payment Amount, which would have the same negative impact on the hospital’s revenues as the loss of...
fee-for-service revenues. In some cases, the hospital could be even worse off under the CHART Model, because the Capitated Payment would be reduced when the population decreases even if the number of services delivered does not decrease.

- **The CHART Model’s Capitated Payment Would Be Reduced if the Hospital Discontinues a Service Line.** Under the CHART Model, if a hospital stopped delivering a particular type of service, the Capitated Payment Amount would be reduced in the following year. As stated in the Notice of Funding Opportunity, “When Participant Hospitals shut down a service line, they will lose revenue from that service line...” The same is true if the hospital delivers fewer services and patients obtain those services at another hospital instead; the Notice of Funding Opportunity states that the Capitated Payment Amount will be reduced “if Eligible Hospital Services shifted between health care providers.” As a result, the hospital would have less revenue to cover the fixed costs of essential services. The only cases in which the hospital could continue to receive the same revenues when it delivers fewer services is when it reduces avoidable utilization in an existing service line and patients do not go to other hospitals to receive those services.

- **Elimination of Services Would Cause Financial Losses.** The NOFO states that a hospital receiving Capitated Payments “will be able to focus on more transformational and collaborative strategies, such as converting to a rural emergency medical center or reconfiguring service lines.” Although elimination of a service line could result in a significant reduction in costs at a hospital, the CHART Model would not allow the hospital to retain the revenue that it received for services that are no longer offered. Moreover, the hospital would also lose fee-for-service revenue that it received from other payers for those services. Although it is often assumed that small rural hospitals would be financially better off if they did not have to provide inpatient care, analysis shows that at most rural hospitals, elimination of inpatient services would result in significant financial losses for the hospital as well as loss of access to inpatient care, rehabilitative care, and long-term care for the residents of the community.

- **Rural Hospitals Would Experience Higher Costs and Financial Losses in Order to Satisfy CHART Model Requirements.** A hospital can only participate in the CHART Model if it agrees to change its services in accordance with a “Transformation Plan” developed by the Lead Organization. The Transformation Plan, which has to be approved in advance by CMMI, must include expanded use of telehealth and methods of addressing population health disparities, and it must also address either behavioral health treatment, substance use disorder treatment, chronic disease management and prevention, or maternal and infant health. There is no increase or other adjustment in the Capitated Payment Amount to provide additional resources for delivering these services. In addition, the Capitated Payments will be reduced by up to 2% based on the hospital’s performance on six quality measures, and the hospital will have to incur additional costs to track and analyze these measures and to change services in an effort to minimize penalties based on the quality measures.

Under the CHART Model, the Lead Organization will be able to receive grants of up to $500,000 per year, and it is permitted to “pass some of the funding directly to Participant Hospitals for investing in and successfully implementing care delivery redesign efforts.” However, there is no requirement that the Lead Organiza-
D. Examples of How Small Rural Hospitals Would Lose Money Under the CHART Model

A good way to understand why the Capitated Payments in the CHART Model would be problematic for a small rural hospital is to calculate how the hospital’s revenues and costs would change in the following circumstances:

- when the hospital’s services change in ways that the CHART Model is intended to encourage, such as reductions in avoidable Emergency Department visits and hospital readmissions, and
- when the need for hospital services in the community increases unexpectedly, such as during a natural disaster or infectious disease outbreak, or when access to primary care services is reduced.

1. Changes In Emergency Department Visits

A Hypothetical Emergency Department Under Current Payment Systems

Figure 8 shows revenues and costs at a hypothetical Critical Access Hospital’s Emergency Department under the current payment system. Three different scenarios are shown.

- In the Status Quo Scenario, the ED has 12,000 visits per year (1.2 every hour), and it has the bare minimum staffing needed to provide 24/7 coverage, i.e., one physician and one nurse on duty on all shifts and an additional nurse on duty during high-volume shifts. In this hypothetical example, it is assumed that under current payment systems:
  - Because the hospital is a Critical Access Hospital, Medicare pays for the hospital component of an ED visit based on the cost of operating the ED and the proportion of the total visits that are made by Medicare beneficiaries.
  - Medicare pays a $180 physician fee for each visit.
  - Payers other than Medicare (i.e., Medicaid, Medicare Advantage, commercial insurance plans, and self-insured patients) pay an average of $180 per ED visit ($120 for the hospital and $60 for the physician).
  - With these costs and payments, the hospital is able to generate a very small (1%) profit operating the ED.
- In Scenario A, the number of Emergency Department visits decreases by 10%. The Emergency Department is still receiving more than one visit every hour, so the hospital would not be able to reduce staffing in the ED. However, the hospital’s fee-based revenues would decrease because there are fewer visits. The cost-based payment from Medicare increases slightly because, with fewer visits, the physicians spend a smaller proportion of their time seeing patients, which means that a larger share of the physicians’ compensation will be treated as a hospital cost (which is eligible for cost-based payment) rather than a professional service (which is supposed to be paid for using Medicare physician fees). However, this increase in the cost-based payment does not offset the reduction in fee-based revenues, and the hospital now has a 4% loss in the service line.
- In Scenario B, the number of visits increases significantly (by 25%). It is assumed that the volume of visits during certain times is sufficiently high that the hospital needs to hire 2 additional FTE physicians in order to have two physicians on the high-volume shifts instead of one. Since the cost of operating the ED increases, the cost-based payment from Medicare increases to cover Medicare’s share of the higher cost. Since the number of visits increases, the hospital receives more fee-based revenue. The net result is that the hospital ED remains profitable. (The profitability will vary depending on exactly how much the total number of visits increases.)

The Hypothetical Emergency Department Under the CHART Model

Figure 9 shows the same ED if the hospital participates in the CHART Model. It is assumed that:

- The hospital receives a Capitated Payment Amount for hospital services from Medicare and also from one-half of the non-Medicare payers.
- the amount of the Capitated Payment allocated to the ED for each payer is 1% less than what the hospital would have received from that payer under the cost-based and fee-based payments shown in Figure 8, reflecting the minimum discounts in the CHART Model in years 2-6.
- the remaining payers continue to pay the same fees for each visit as they do under the current payment system.
- since the Capitated Payment Amount replaces only payments for hospital services, the hospital continues to receive fees from Medicare and all other payers for the time the physicians spend with patients.

Under the CHART Model:
- Hospital Margins Would Decrease Even With No Change in ED Visits. In the Status Quo Scenario, the hospital makes a smaller profit on the ED, reflecting the reduction in the payments for the hospital portion of the ED visit due to the discount used in calculating the Capitated Payment Amount.
- Hospital Margins Would Decrease If ED Visits Decrease. In Scenario A, fewer visits are made to the hospital ED.
  - As noted above, there would be no change in the cost of the ED because the same level of staffing would be needed to handle 10% fewer visits.
  - The revenue for hospital services from Medicare does not change because it is coming from the Capitated Payment Amount. In contrast, the hospital would have received more revenue under cost-based payment (because a larger share of the phy-
### FIGURE 8
**ED Margins Under Cost-Based & FFS Payment With Changes in ED Visits**

<table>
<thead>
<tr>
<th></th>
<th>STATUS QUO</th>
<th>SCENARIO A Fewer Visits</th>
<th>SCENARIO B More Visits + Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facility Payments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare (Cost-Based)</td>
<td>6,000</td>
<td>$1,195,000</td>
<td>5,400</td>
</tr>
<tr>
<td></td>
<td>5,400</td>
<td>$648,000</td>
<td>4,860</td>
</tr>
<tr>
<td>Uninsured</td>
<td>600</td>
<td>$0</td>
<td>540</td>
</tr>
<tr>
<td>Subtotal</td>
<td>12,000</td>
<td>$1,843,000</td>
<td>10,800</td>
</tr>
<tr>
<td><strong>Physician Payments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare (Fee-Based)</td>
<td>6,000</td>
<td>$1,080,000</td>
<td>5,400</td>
</tr>
<tr>
<td>Other (Fee-Based)</td>
<td>5,400</td>
<td>$324,000</td>
<td>4,860</td>
</tr>
<tr>
<td>Uninsured</td>
<td>600</td>
<td>$0</td>
<td>540</td>
</tr>
<tr>
<td>Subtotal</td>
<td>12,000</td>
<td>$1,404,000</td>
<td>10,800</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td></td>
<td>$3,247,000</td>
<td>$3,082,000</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility Cost</td>
<td>$2,396,000</td>
<td>$2,478,000</td>
<td>$2,908,000</td>
</tr>
<tr>
<td>Physician Visit Time</td>
<td>$817,000</td>
<td>$735,000</td>
<td>$1,021,000</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td>$3,213,000</td>
<td>$3,213,000</td>
<td>$3,929,000</td>
</tr>
<tr>
<td><strong>Profit/Loss (Margin)</strong></td>
<td></td>
<td>$34,000</td>
<td>($131,000)</td>
</tr>
<tr>
<td></td>
<td>+1.1%</td>
<td>+4.1%</td>
<td>-4.1%</td>
</tr>
<tr>
<td></td>
<td>$88,000</td>
<td>+2.2%</td>
<td></td>
</tr>
</tbody>
</table>

### FIGURE 9
**ED Margins Under CHART Model With Changes in ED Visits**

<table>
<thead>
<tr>
<th></th>
<th>STATUS QUO</th>
<th>SCENARIO A Fewer Visits</th>
<th>SCENARIO B More Visits + Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Facility Payments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare (Capitated)</td>
<td>6,000</td>
<td>$1,183,000</td>
<td>5,400</td>
</tr>
<tr>
<td>Other Payers (Capitated)</td>
<td>2,700</td>
<td>$321,000</td>
<td>2,430</td>
</tr>
<tr>
<td>Other (Fee-Based)</td>
<td>2,700</td>
<td>$324,000</td>
<td>2,430</td>
</tr>
<tr>
<td>Uninsured</td>
<td>600</td>
<td>$0</td>
<td>540</td>
</tr>
<tr>
<td>Subtotal</td>
<td>12,000</td>
<td>$1,828,000</td>
<td>10,800</td>
</tr>
<tr>
<td><strong>Physician Payments</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medicare (Fee-Based)</td>
<td>6,000</td>
<td>$1,080,000</td>
<td>5,400</td>
</tr>
<tr>
<td>Other (Fee-Based)</td>
<td>5,400</td>
<td>$324,000</td>
<td>4,860</td>
</tr>
<tr>
<td>Uninsured</td>
<td>600</td>
<td>$0</td>
<td>540</td>
</tr>
<tr>
<td>Subtotal</td>
<td>12,000</td>
<td>$1,404,000</td>
<td>10,800</td>
</tr>
<tr>
<td><strong>Total Revenue</strong></td>
<td></td>
<td>$3,232,000</td>
<td>$3,060,000</td>
</tr>
<tr>
<td><strong>Cost</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facility Cost</td>
<td>$2,396,000</td>
<td>$2,478,000</td>
<td>$2,908,000</td>
</tr>
<tr>
<td>Physician Visit Time</td>
<td>$817,000</td>
<td>$735,000</td>
<td>$1,021,000</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td>$3,213,000</td>
<td>$3,213,000</td>
<td>$3,929,000</td>
</tr>
<tr>
<td><strong>Profit/Loss (Margin)</strong></td>
<td></td>
<td>$19,000</td>
<td>($153,000)</td>
</tr>
<tr>
<td></td>
<td>+0.6%</td>
<td>-4.8%</td>
<td>-6.7%</td>
</tr>
</tbody>
</table>
The revenue for hospital services from the subset of other payers that are paying through the Capitated Payment Amount would stay the same, whereas that revenue would have decreased under fee-based payment.

The hospital would lose fee-based revenues for the hospital component of the service from the payers that are not using the Capitated Payment system, and it would also lose fee-based revenues from Medicare and other payers for physician services since those services are not included in the Capitated Payment.

The net effect is that the hospital experiences a larger reduction in revenue under Capitated Payments than under the current payment system. Since the total cost of the ED is the same, this means a bigger financial loss for the hospital.

Hospital Margins Would Decrease If There Are Significantly More Emergency Department Visits. In Scenario B, the hospital incurs higher costs because it has to employ additional physicians due to the significantly higher number of visits. Whereas the hospital’s Medicare revenue would have increased under the current cost-based payment system to cover a portion of the higher cost, the Medicare payment for the hospital component stays unchanged under the CHART Model. The hospital has significantly more visits, but since half of the non-Medicare payers are paying using the Capitated Payments, revenues increase less than they would under fee-for-service payments. The net result is that the hospital experiences a significant financial loss.

The Hospital Would Be Worse Off Financially Under the CHART Model in All Scenarios. As shown in Figure 10, the hospital is worse off financially under the CHART Model than under the current payment system in every scenario. The impacts would only be slightly different if every payer was paying the hospital using Capitated Payments, since less than 20% of the hospital component of revenues in Figure 9 is coming from fees.

The Status Quo Scenario was constructed assuming that the fees the hospital is currently receiving for ED visits are high enough to cover the cost of operating the ED. However, most small rural hospitals do not receive payments that are higher than their costs, so their actual margins under all of these scenarios would be much lower than those shown in Figure 8. However, the relative differences between the scenarios and the differences between a Capitated Payment and current payments in each scenario would still be similar to those shown in Figure 10.

Although it is possible that the hospital would receive a higher Capitated Payment in the future if the increase in ED visits was due to growth in the local population, this would not occur until the next year. It is also possible that the hospital would receive a lower Capitated Payment in the future if the population had decreased but the number of ED visits increased due to reduced access to primary care services in the community.

2. Reductions in Hospital Readmissions

The Notice of Funding Opportunity says that the CHART Model “creates an incentive ... to prevent readmissions.”42 However, the hospital’s ability to reduce readmissions and other avoidable services depends on whether the hospital can afford to deliver additional or alternative types of services to improve care for patients. For example, providing care management services to patients with chronic diseases can reduce both avoidable hospital admissions and readmissions, but if the hospital is currently losing money, it would not have any additional resources to invest in expanded care management services.

Figure 11 shows the revenues and expenses for an inpatient unit at a hypothetical Critical Access Hospital with a high rate of readmissions that it wants to reduce. The example assumes that:

- the hospital only has acute inpatients (i.e. no swing beds);
- half of the patients are Medicare beneficiaries, and all of the others have health insurance;
- the hospital has an average daily census of 6 patients;
- the hospital has 3 nurses and a nursing assistant on each shift to provide patient care;43
- because the hospital is a Critical Access Hospital, Medicare pays for each Medicare beneficiary based on the average daily cost of operating the unit;
- other payers pay an average of $1,600 per day for inpatient care, which is sufficient to create a small positive margin for operating the inpatient unit;

![CHART Model](image-url)
- the hospital has a readmission rate of 20%, so on average, one of the patients in the inpatient unit is a readmission;
- the hospital hires a nurse care manager to help patients during and following their discharge from the hospital, and the hospital is able to reduce the readmission rate between 50% and 100%;
- the hospital participates in the CHART Model, and Medicare and one half of the other payers begin paying the hospital using Capitated Payments rather than per diems or case rates for individual admissions.

As shown in Figure 11, under the CHART Model, the hospital would lose money by reducing readmissions:
- cutting the readmission rate in half would only reduce the census to 5.5 patients, so the same number of nurses and other staff would still be needed on the inpatient unit. Even if the hospital were able to eliminate readmissions entirely, it would likely still need the same level of staffing.
- Since the hospital would have received fee-for-service payments for some of the readmitted patients from payers not using Capitated Payments, reducing readmissions for these patients would reduce the hospital’s revenues.

- Hiring the nurse care manager to improve discharge planning and follow-up after discharge would increase the hospital’s costs, with no increase in revenue to pay for it.
- The net result is that improving care for patients makes the hospital worse off financially under the CHART Model. Here again, the status quo scenario assumes that the hospital’s current payments are high enough to cover the cost of operating the inpatient unit. Most small rural hospitals do not receive payments that are higher than their costs, so their actual margins under all of these scenarios would be much lower than those shown in Figure 11.
V. A Better Way to Pay Rural Hospitals

A. Goals for Rural Hospital Payment

How should a small rural hospital be paid? A good payment system would achieve three key goals:

1. Ensure availability of essential services in the community. A rural community needs to have assurance that the hospital emergency department and basic diagnostic and treatment services will be available to deliver high-quality services at all times. There is a minimum cost involved in providing this capacity in a small community, and the hospital needs to have sufficient revenue to cover that cost, regardless of how many people actually have emergencies or illnesses requiring treatment.

2. Enable safe and timely delivery of the services patients need at prices they can afford to pay. When residents have a health problem, payments should enable the hospital to provide safe, timely, and appropriate diagnostic and treatment services in the most efficient way possible. There should be no financial incentive for the hospital to either provide unnecessary services or to withhold or delay necessary and effective care. A patient and their insurance plan should expect to spend more on the patient’s care if the patient has more health problems or more serious problems, but not if the patient receives unnecessary services or has to be treated for problems caused by poor-quality care. Patients should be able to obtain the services they need at a price they can afford to pay.

3. Encourage better health and lower healthcare spending. Although it is important to treat health problems efficiently and effectively, it is even better to prevent problems from occurring in the first place. A good payment system would enable community residents to have access to effective primary care and other services that can help improve their health, reduce the need for expensive treatments, and avoid the use of unnecessary services.

The Capitated Payments under the CHART Model would not achieve any of these goals:

- The CHART Model would not ensure availability of essential services in a rural community. There is no assurance that the Capitated Payment Amount will be adequate to cover the cost of delivering essential hospital services. In fact, it is almost certain to be inadequate, since it is based on the amount of revenue the hospital received in the past, which was lower than the cost of delivering services, and the discount and quality adjustment would reduce revenue even further below costs.

- The CHART Model would not ensure safe, timely, and efficient delivery of needed services. The hospital would receive the Capitated Payment Amount each month regardless of how many services it delivered, so the hospital would not be penalized if it delayed or reduced access to services for patients. The strongest incentive for the hospital to continue delivering timely services is that the majority of its revenues would still be derived from fees for services. In fact, many countries that used global budgets and capitated payment systems for hospitals in the past have modified them to include fees for individual services in order to reduce waiting lists for services.

- The CHART Model would not encourage better health and lower healthcare spending. The Capitated Payment Amount is limited to hospital inpatient and outpatient services; there is no change in payments for Rural Health Clinic or other primary care services to sustain or expand primary care for the residents of the community. The higher discounts every year would make it increasingly difficult over time for the hospital to sustain its existing services, much less deliver additional services that could help improve the health of community residents.

B. A Patient-Centered Payment System for Rural Hospitals

Fortunately, there is a much better way to pay for rural health services than either the CHART Model or current payment systems. A Patient-Centered Payment System for rural hospitals and primary care clinics would both sustain and strengthen rural healthcare using the following five components:

- Standby Capacity Payments to support the fixed costs of essential hospital services. Standby Capacity Payments would be paid to a rural hospital by each health insurance plan (Medicare, Medicaid, Medicare Advantage, and commercial insurance) based on the number of members of that plan who live in the community, not based on the number of services the patients receive. The amount of the Standby Capacity Payments would be set each year at a level designed to ensure that the hospital has adequate revenues to support the minimum standby costs of essential services such as the emergency department, inpatient unit, and laboratory regardless of how many patients actually need services during any given month.

- Service-Based Fees for diagnostic and treatment services based on marginal costs. Under Patient-Centered Payment, hospitals would continue to receive fees for delivering individual services, but the Service-Based Fees would be much lower than current fees. Since the Standby Capacity Payments support the fixed costs of essential services, the Service-Based Fees only need to cover the small amount of additional costs incurred when additional services are delivered. This means that if patients stay healthy and need fewer services, revenues and costs will decrease by similar amounts, and the hospital’s margin will not be harmed.

- Patient-Based Payments for primary care management. The Rural Health Clinic(s) at the hospital and primary care practices in the community would receive a monthly Comprehensive Primary Care Management Payment from a health insurance plan for each insured member who enrolls with the clinic/practice for ongoing primary care. This payment would give the clinic/practice the flexibility to deliver services in ways that work most effectively for patients, rather than being restricted to delivering only in-person visits at the clinic/practice. The payments
would be higher for patients who have higher needs to ensure they can receive high-quality care.

- **Accountability for quality and spending.** In return for receiving adequate, predictable, flexible payments to support essential services, rural hospitals and primary care clinics would take accountability for delivering high-quality services and improving patient outcomes. Standards and measures of quality would be used that are appropriate for small rural hospitals and clinics.

- **Value-based cost-sharing for patients.** The high deductibles, copayments, and co-insurance used in most health insurance plans today cause many patients to delay or avoid receiving services they need. Rural hospitals and primary care clinics should have the flexibility to set lower cost-sharing rates for high-value services and to help pay for transportation or provide other assistance that would help patients to adhere to their care plans.

Rural hospitals that want to deliver desirable but non-essential services would need to support them using the standard fees for those services paid by Medicare and other payers.

The Patient-Centered Payment System would achieve all three of the goals described above:

- **The Patient-Centered Payment System would ensure availability of essential services in a rural community.** The Standby Capacity Payment would be specifically designed to support the minimum fixed costs of providing essential hospital services and the Patient-Based Payments for primary care would be specifically designed to sustain high-quality primary care. Moreover, paying separate Standby Capacity Payments and Service-Based Fees based on the fixed costs and variable costs of hospital services would ensure that the payments remained adequate but not excessive at different levels of service volume.

- **The Patient-Centered Payment System would ensure safe, timely, and efficient delivery of needed services.** Under the Patient-Centered Payment System, the hospital would be financially penalized if it failed to deliver essential services in a timely, high-quality fashion. Payments would be designed to provide adequate support for services when they are delivered efficiently at the levels of volume expected in small rural communities.

- **The Patient-Centered Payment System would encourage better health and lower healthcare spending.** Under the Patient-Centered Payment System, hospitals and primary care clinics would have the flexibility to deliver the services patients need in the most efficient and effective way possible. Hospitals and clinics would no longer be financially penalized if patients were healthier and needed fewer services, and there would be no need to provide unnecessary services or unnecessarily expensive services in order to generate sufficient revenues to cover the costs of essential services.

(A more detailed description of Patient-Centered Payment is available in the Center for Healthcare Quality and Payment Reform’s report Saving Rural Hospitals and Sustaining Rural Healthcare.42)

---

**FIGURE 12**
A Patient-Centered Payment System for Rural Hospitals and Clinics

<table>
<thead>
<tr>
<th>PAYMENTS</th>
<th>HOSPITAL COSTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Fees for Services</td>
<td>Other Services</td>
</tr>
<tr>
<td>Patient-Based Payments (Per Member Enrolled in Clinic)</td>
<td>Rural Health Clinics</td>
</tr>
<tr>
<td>Service-Based Fees (Per Service)</td>
<td>Other Essential Services</td>
</tr>
<tr>
<td>Standby Capacity Payment (Per Insured Member Residing in Hospital Service Area)</td>
<td>Laboratory &amp; Radiology</td>
</tr>
<tr>
<td></td>
<td>Inpatient Care (Acute, Rehab, LTC)</td>
</tr>
<tr>
<td></td>
<td>Emergency Department</td>
</tr>
</tbody>
</table>
VI. Saving Rural Hospitals and Strengthening Rural Healthcare

Over one hundred rural hospitals have closed in the past decade, and hundreds more will likely close in the near future unless they can receive adequate payments to cover the cost of services. In addition to higher payment amounts, small rural hospitals need a better payment system that will enable them to not only sustain essential hospital services but to improve primary care and other services for the residents of their communities and avoid the financial penalties they face under current payment systems when patients are healthier and need fewer services.

The CHART Model would fail to correct the problematic incentives in current payment systems, and it would reduce payments to rural hospitals even further below their current inadequate levels, increasing the likelihood of closure and the difficulty of improving services at hospitals that remain open. In contrast, a Patient-Centered Payment System with adequate levels of payment could not only prevent small rural hospitals from closing, it would give rural hospitals the flexibility and resources needed to improve care for their communities.

Unfortunately, it is unlikely the Center for Medicare and Medicaid Innovation (CMMI) would ever implement changes to the CHART Model or create an alternative program that would effectively address current inadequacies in payments for small rural hospitals because CMMI is prohibited by law from testing payment models that would require higher spending by the Medicare program. Although CMMI is authorized to implement demonstrations that are not initially budget neutral, it cannot continue them unless they are expected to reduce Medicare spending. This is why the CHART Model explicitly requires reductions in payments to hospitals and provides no mechanism for increasing payments to erase current deficits. Any new program would have similar limitations unless Congress changes the law.

It would be desirable for Congress to require CMS to pay rural hospitals using a Patient-Centered Payment System. However, changes in Medicare payments alone would be unlikely to eliminate losses or prevent closures at most small rural hospitals. Analysis shows that the biggest cause of negative margins in most small rural hospitals in most states is low payments from private insurance plans, including both commercial insurance plans and Medicare Advantage Plans. Even in states where Medicaid payments for services are lower than private insurance payments, most rural hospitals have far more patients with private insurance than patients on Medicaid, so a shortfall in private payments has a much bigger impact on the hospital’s total margin. If private health plans and Medicaid programs paid adequately, most of the small rural hospitals that are experiencing financial problems would likely be able to remain open. Consequently, it would be better for CMS to do nothing at all than to encourage use of a problematic payment system such as the CHART Model.

Although there are hundreds of rural hospitals at risk of closure, the total amount of money needed to prevent them from closing is relatively small because most of the hospitals are small. Eliminating the deficits at all of the rural hospitals at highest risk of closing would only require $3.7 billion per year in additional payments. This represents only one-tenth of one percent in the more than $3 trillion the U.S. spends on health care each year and less than one percent of the more than $1 trillion spent on hospital services. The amount is so small in relation to total healthcare spending that it is barely visible in Figure 13. Moreover, much of this increase in funding will be used to support delivery of primary care and emergency care, not inpatient care or ancillary services, since the biggest causes of losses at most small rural hospitals is low payments for emergency services and Rural Health Clinics. Conversely, failure to pay rural hospitals adequately and appropriately will likely cause healthcare spending for the residents of those communities to increase even more in the future. If the only hospital in an isolated rural community closes, the reduced local access to preventive care and prompt treatment will ultimately cause the residents to need even more services and more expensive services than they would otherwise. Paying more now to preserve local healthcare services is a much better way to invest healthcare resources and the only way to sustain the economies of rural communities.

**FIGURE 13**
Spending Needed to Prevent Hospital Closures Compared to Current National Healthcare Spending

Amount needed to prevent closures is the average annual loss in the most recent three years for which data were available for hospitals classified as being at immediate or high risk of closure. National spending on all healthcare and all hospitals is from 2017. Spending at rural hospitals is for the most recent year available (2018 or 2019).

**FIGURE 14**
Impacts on Healthcare Spending If Rural Hospitals Remain Open or Close

Why the CMS CHART Model Will Hurt Rural Hospitals

2. Ibid.


6. Saving Rural Hospitals and Sustaining Rural Healthcare, op cit., Chapter VI.

7. It appears that CMS does not expect or want rural hospitals to serve as Lead Organizations. A Lead Organization would need to have “received and successfully managed ...health-related grant(s) or cooperative agreement(s) totaling at least $500,000 over the last three years” and have experience “engaging and maintaining provider participation in APMs or CMMI demonstration projects/models.” The Notice of Funding Opportunity lists Independent Practice Associations and Academic Medical Centers as examples of entities eligible to serve as Lead Organizations, but not rural hospitals. Notice of Funding Opportunity, op. cit., p. 18.

8. The counties and census tracts in a Community do not need to be contiguous; moreover, there is no prohibition on the counties being in completely different parts of the country. Notice of Funding Opportunity, op. cit., p. 19.

9. Original Medicare beneficiaries typically represent about 16% of the total population in small rural counties, so in order to have 10,000 Medicare beneficiaries, the community would likely need to have 60,000 or more total residents.

10. The Notice of Funding Opportunity (NOFO) states that a Participant Hospital must agree to “assume accountability for hospital expenditures (as specified in Appendix XI: CPA Financial Methodology) for the Medicare beneficiaries they serve that reside in the Community” (p. 24, emphasis added). Appendix XI states that the hospital’s Capitated Payment Amount is determined “based on the portion of services that it provides to the Community” (p. 111) and it defines the population adjustment factor based on beneficiaries who “reside in the Community.” On the other hand, there is nothing in the definition of “Eligible Hospital Services” in the main body of the Notice of Funding Opportunity that indicates the community where the recipient resides is an eligibility criterion (p. 28). Moreover, the NOFO also states “For Participant Hospitals that are not located inside the Community, CMMI may modify this CPA financial methodology to account for the Medicare FFS expenditures of beneficiaries located inside the Community, rather than the total Medicare FFS revenue of the Participant Hospital” (p. 28). The latter statement seems to imply that hospitals would receive the CPA instead of standard Medicare payments for services delivered to any Medicare beneficiary, not just those who live in the Community. However, since the population adjustments would be based only on the residents of the Community, it would be problematic to use those to adjust the payments the hospital receives for services delivered to beneficiaries who live outside the community, particularly since a hospital located in the Community is only required to have 20% of its services delivered to Community residents.


12. The methodology states that the average will be calculated “after each historical year has been adjusted according to the prospective adjustments defined...below, to ensure that the years are comparable.” Presumably this means that the first of the two years will be adjusted for unit price changes and quality so it is more comparable to the second year before the average is taken, since all of the adjustments defined in the methodology would then be applied to the average in order to reflect the differences in payments and quality measures between the baseline period and the year in which the payment will be made. There are no adjustments defined for dealing with unique circumstances such as the impact of the coronavirus pandemic or a natural disaster.


14. In subsequent years, the hospital would no longer be receiving separate payments for inpatient and outpatient services, but the hospital would still be required to file claims for individual services, so presumably these adjustments would be based on the proportion of services delivered on an inpatient basis.


16. The methodology says that beneficiaries are “aligned” if they “reside in the Community for the majority of the alignment period,” but then states that a beneficiary “must not move out of the Community before or during the respective baseline or Performance Period.” Notice of Funding Opportunity, op. cit., p. 112. This may be intended to distinguish people who have a residence in the community but who do not live there full time; however, there is no detail on how it will be determined when an individual is “residing” in the community and when someone “moves out.”

17. If the Capitated Payments begin in January 2022, this presumably means that the Medicare population in the Community in the 12 months from July 2020 to June 2021 will be compared to the Medicare population in the Community from July 2017 to June 2018.


19. The Hierarchical Condition Category (HCC) system was developed to adjust payments to Medicare Advantage Plans based on the projected health needs of their enrolled beneficiaries, and the system is now used to adjust payments under a number of CMS Alternative Payment Models. Although the overall system is designed to adjust for the types of chronic conditions a beneficiary has, the
initial component of the HCC score for each beneficiary is a demographic factor based on the individual’s age and gender as well as their living status and reason for Medicare eligibility. For example, a 65-year-old female has an HCC demographic factor of .321, whereas a 95-year-old male has an HCC demographic factor of 1.033. The HCC score for a population is determined by adding all of the individual scores and dividing by the number of individuals.

23. The document states that this adjustment “will impact no more than 2% of the CPA.” Notice of Funding Opportunity, op. cit., p. 112. Existing CMS quality programs and alternative payment models for hospitals only reduce payments based on quality performance; they do not decrease them, and there is no indication in the NOFO that good performance on quality measures could result in an increase in the CPA, so it seems likely that CMS intends to reduce the CPA by some amount between 0% and 2%.
24. The document states that additional information on how the quality adjustments are made will be provided after hospitals are selected to participate. Notice of Funding Opportunity, op. cit., p. 112.
25. The Lead Organization that applies to participate in the CHART Model will receive a grant of up to $2 million during the “pre-implementation” year, and then up to $500,000 per year during each of the six years in which the hospitals are receiving the Capitated Payment Amounts. The Lead Organization is permitted to request smaller discount factors for hospitals in return for a reduction in the grant amount, and it is also permitted to negotiate different discount factors among the participant hospitals as long as the aggregate discount amount stays the same. Notice of Funding Opportunity, op. cit., p. 31.
30. The Notice of Funding Opportunity says “Aligned Payers may not need to align with the adjustments that rely on CAH cost report data, since those are not relevant for other payers besides Medicare FFS.” (Notice of Funding Opportunity, op. cit., p. 29)
31. Although Critical Access Hospitals receive “cost-based payment” from Medicare, federal sequestration requirements result in payments equal to at most 99% of their costs. As a result, no matter how much a Critical Access Hospital reduces its costs, it will still be paid less than its costs by Medicare, and under the CHART Model, the hospital would receive even less because of the discount and quality adjustment.
32. The discount would only be less than 2% if the total Capitated Revenues in the Community are more than $40 million. Since the majority of rural hospitals receive less than $10 million in Medicare payments for inpatient and outpatient services, four or more hospitals would likely have to participate in order to meet this threshold.
33. Notice of Funding Opportunity, op. cit., p. 31. If the hospital eliminates a service line, the patients would presumably need to obtain those services at another hospital, and the adjustment for a shift in eligible services in the CPA methodology would reduce the payment to the hospital that eliminated the services in order to avoid Medicare “paying twice” for that service.
34. On page 27, the Notice of Funding Opportunity states “...this APM creates an incentive to reduce potentially avoidable utilization, prevent admissions, and reduce hospital lengths of stay as appropriate. Participant Hospitals will be able to keep the savings that are generated through these reductions.” However, this only applies to services that the patient would not receive at all if the hospital does not deliver them: if the hospital stops delivering specific tests or procedures to patients because the hospital views them as unnecessary, but the patients go to other hospitals to receive those services, then the CPA would be reduced to reflect the fact that the services shifted to another hospital.
36. The average readmission rate nationally is about 19%. Even if a hospital had a 20% readmission rate and reduced the readmission rate to 16% (a 25% reduction), the average daily inpatient census would only decrease by 3%. Most rural hospital have an average daily inpatient census of less than 10 patients, so the reduction in the readmission rate would mean the inpatient census would decrease by less than 0.3 patients, which is not enough to allow a reduction in staffing.
37. Saving Rural Hospitals and Sustaining Rural Healthcare, op cit., Chapter III. The analysis showed that the direct cost of the inpatient unit typically represents only about 8-15% of the hospital’s total expenses. The revenue the hospital receives for inpatient services not only pays for those costs but a similar proportion of the hospital’s overhead costs and also a portion of the costs of delivering ancillary services such as lab tests and imaging studies. Consequently, eliminating the inpatient unit would cause the hospital’s revenues to decrease by more than the amount by which costs would decrease.
39. A detailed discussion of the staffing levels and costs of an Emergency Department at a small rural hospital is available in Saving Rural Hospitals and Sustaining Rural Healthcare, op cit., Chapter III.
40. Most ED visits with physicians are classified as Level 4 or Level 5 visits. In 2020, Medicare paid ED physicians $121.98 for a Level 4 ED visit and $177.20 for a Level 5 ED visit. Assuming that two-thirds of visits at small rural hospitals are Level 5 and one-third are level 4, this results in an average payment of $159. Hospitals that bill for the physician services are paid 15% more than the standard fees, bringing the average to $183. After the sequestration reduction, the average fee would be about $180.
41. Although the Capitated Payment Amount is not tied to specific service lines and the hospital does not need to allocate the same proportion of revenue to the ED as it did before, allocating more (or less) of the CPA to the ED would simply increase (or reduce) losses elsewhere.
42. Notice of Funding Opportunity, op. cit., p. 27.
43. A detailed discussion of the staffing levels and costs for an inpatient unit at a small rural hospital is available in Saving Rural Hospitals and Sustaining Rural Healthcare, op cit., Chapter III. This might seem like a very high nurse:patient ratio to those familiar with staffing patterns for medical inpatient units at large hospitals, where the staffing ratios would be more like 1 nurse for every 5-7 patients. However, at a small rural hospital, staffing ratios...
have to be higher because of the variability in the patient census (the fact that the average daily census is 6 patients does not mean that there are only 6 patients on the inpatient unit at any given time), the variability in patient needs, and the fact that there are no other nurses to perform admitting and discharge-related tasks. However, regardless of what staffing level is assumed to be appropriate, it is unlikely to change depending on whether the average daily census is 5.0 or 6.0, so the conclusions about the impacts of the CHART Model would be the same.

44. It is unlikely that any hospital could reduce readmission rates by this much; these large reductions are used to more clearly illustrate the impacts of the CHART Model on the hospital’s finances.

45. The loss would be smaller if every payer participated in the global budget program, but there would still be a loss because of the higher cost associated with hiring the nurse care manager with no increase in the Capitated Payment Amount to pay for that.

46. The quality measures in the CHART Model would do little, if anything, to discourage delays in services or reductions in service quality. The maximum penalty for poor quality is 2%, and since it is likely the hospital would receive some reduction in payment based on the quality adjustment no matter what it does, any additional penalty would likely represent at most a 1% reduction in the revenue from the Capitated Payment Amounts.

47. Saving Rural Hospitals and Sustaining Rural Healthcare, op cit., Chapter V.

48. Saving Rural Hospitals and Sustaining Rural Healthcare, op cit., Chapter VII.

49. Section 1115A of the Social Security Act created the Center for Medicare and Medicaid Innovation to “test innovative payment and service delivery models to reduce ... expenditures ... while preserving or enhancing the quality of care.” 42 U.S.C. 1315a.

50. For most small rural hospitals, the Medicare program is currently their “best” payer, in the sense that the losses on Medicare patients are smaller than the losses on patients with other types of insurance. This is because most small rural hospitals are classified as Critical Access Hospitals and thereby receive cost-based payment for the services they deliver to Medicare beneficiaries (except for beneficiaries who have enrolled in a Medicare Advantage plan). Medicare may or may not be the best payer for hospitals that do not qualify for Critical Access Hospital status; the majority of small rural hospitals that are not CAHs lose money on their Medicare patients. However, the losses on privately-insured patients at many of these hospitals are still larger.

51. Saving Rural Hospitals and Sustaining Rural Healthcare, op cit., Chapter II.