VIEWPOINT

# Understanding Community Health Access and Rural Transformation Reform—Implications for Rural Surgical Care

**Stanley Kalata, MD, MS**
Department of Surgery, University of Michigan, Ann Arbor; and Center for Healthcare Outcomes and Policy, University of Michigan, Ann Arbor.

**Hari Nathan, MD, PhD**
Department of Surgery, University of Michigan, Ann Arbor; and Center for Healthcare Outcomes and Policy, University of Michigan, Ann Arbor.

**Andrew M. Ibrahim, MD, MSc**
Department of Surgery, University of Michigan, Ann Arbor; and Center for Healthcare Outcomes and Policy, University of Michigan, Ann Arbor.

**Corresponding Author:** Stanley Kalata, MD, MS, Department of Surgery, University of Michigan, 1500 E Medical Center Dr, Ann Arbor, MI 48109 (stkalata@med.umich.edu).

**Rural health care** is under enormous strain as 138 rural hospitals have closed since 2010, with an additional 30% of rural hospitals at risk of closing.[1] Disparities in life expectancy and mortality between rural and nonrural regions of the US are growing,[1,2] so the need to maintain adequate health care facilities in the rural US is more dire than ever. In response, the Centers for Medicare & Medicaid Services (CMS) have begun the initial implementation of the Community Transformation Track of the Community Health Access and Rural Transformation (CHART) Model. One major focus is to ensure continued access to rural hospitals by improving their financial stability. Hospitals would receive prospective, biweekly capitated payments, also known as a "global budget," to cover all inpatient and outpatient hospital spending for public payers. Medicare-eligible beneficiaries residing within the community are assigned to the rural hospital, and 2018-2019 fee-for-service reimbursements for those beneficiaries create the baseline. To date, global budget programs have been implemented in Maryland and Pennsylvania and will expand to participating rural hospitals within Alabama, South Dakota, Texas, and Washington (**Figure**).[3] These changes have several implications for surgeons and rural surgical care.

## Rationale for CHART Model Reform for Rural Hospitals

Because rural hospitals have variable volume month to month, a traditional fee-for-service contract may leave them vulnerable when volume is low. Due to their lower volume and narrow profit margins, rural hospitals are often unable to make significant infrastructure investments to improve health care delivery. In response, the CHART Model allocates funds for infrastructure improvements across multiple domains including telehealth, transportation, and chronic disease management.[3]

While global budgets have been proposed across multiple health care settings, they may be particularly effective in addressing challenges unique to surgical care at rural hospitals.[4] With a global budget, however, hospitals would have a guaranteed annual budget with payments that could buffer them through low-volume months. To minimize foreseeable consequences associated with capitation (eg, every incremental surgery performed becoming a cost driver), payments are frequently readjusted based on population and volume changes.

The use of global budgets in rural health care is also particularly attractive to policy makers. Because the budget is capitated annually, it provides policy makers a mechanism to monitor and potentially safeguard against excess health care spending. Moreover, as policy makers promote population health initiatives, rural hospitals may demonstrate the most direct return. Because these hospitals are often the sole provider in their region, any investments made in their communities may be realized at that specific hospital.

## Prior Experience With Global Budgets

Two states, Maryland and Pennsylvania, have existing experience with global budgets for hospitals that are similar to the proposed CHART Model. Maryland piloted this policy in 10 rural hospitals in 2010 before expanding to all hospitals in Maryland in 2014.[5] While Maryland has successfully been able to decrease the growth of health care costs and reduce overall health care utilization across the state, subsequent analyses focused on rural hospitals have demonstrated conflicting results.[6] Perhaps demonstrating the limitations of this model, 1 rural hospital in Maryland closed in 2020 despite being under a global budget model since 2010.[1]

The Pennsylvania Rural Health Model was implemented across 5 rural hospitals in 2019 and has since scaled to 18 hospitals by 2021. To date, the impact in Pennsylvania has not been evaluated given its recent implementation.[7]

## Potential Opportunities for Rural Surgery

There are 3 potential opportunities for global budgets to improve the quality of rural surgical care. First, adoption of global budgets may help rural hospitals maintain financial stability and prevent their closure. By remaining open, these hospitals will continue to provide care to communities that already have limited access to surgical providers.

Second, allowing rural hospitals to maintain their revenue with prospective payments may facilitate appropriate referral patterns for complex surgery.[8] Despite surgical procedures being associated with rural hospital profitability,[9] complex operations are generally not being performed at small rural hospitals.[10] Nonetheless, fee for service may provide a marginal incentive to maintain moderate-to-lower risk procedures better performed elsewhere. Under global budgets, rural hospitals would have the financial security to appropriately refer out larger, more complex cases that could be performed more safely elsewhere.[8] In fact, many of the infrastructure investments (ie, telehealth, transportation support) and stabilizing payments for planned consolidation of surgical services within participating hospitals within the CHART Model may directly support these optimal referral patterns.

Third, the financial stability of global budgets may facilitate high-quality surgical care by maintaining important infrastructure and staffing. Rural hospitals pro-

Figure. Timeline of Implementation of Global Budgets for Hospitals in the US

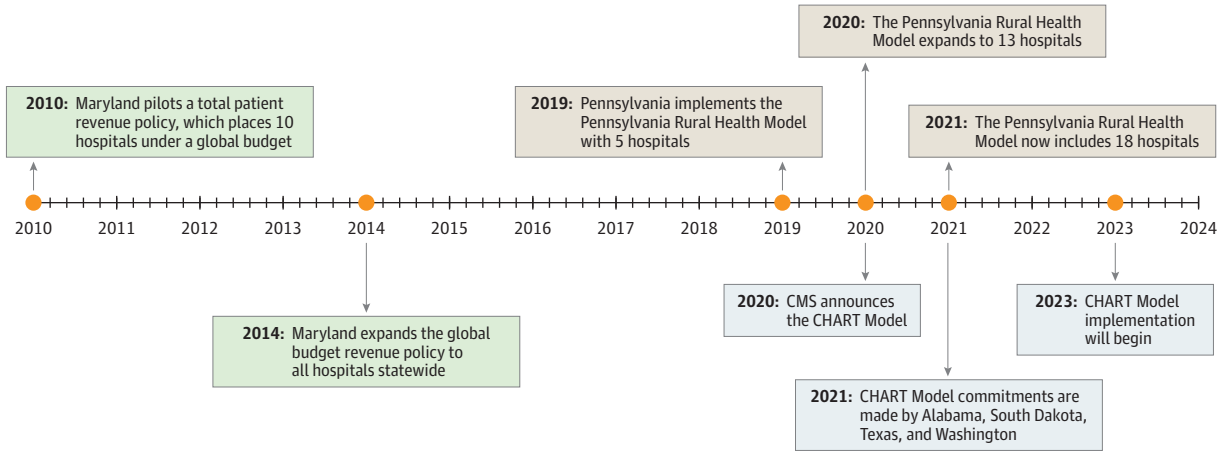


CHART indicates Community Transformation Track of the Community Health Access and Rural Transformation; CMS, Centers for Medicare & Medicaid Services.

vide valuable access to routine and emergency surgical care. Essential to that care is maintaining adequate staffing and retention of health care practitioners, which has been demonstrated as an important domain of surgical quality.

## Mitigating Potential Pitfalls for Rural Surgery

Despite the enthusiasm for global budgets in rural surgery, implementation of this model may have unintended consequences. First, rural hospitals under global budgets may increasingly transition portions of inpatient postoperative care to the outpatient setting. This is because post–acute care expenditures (eg, home health aides, skilled nursing facilities) are not included in global budgets. In doing so, global budgets may inadvertently raise quality concerns and increase overall spending. Therefore, utilization rates of these post–acute care services will need to be monitored.

Second, global budgets may lead rural hospitals to paradoxically limit access to surgical care. In an effort to stay under budget, rural hospitals may be incentivized to reduce discretionary procedures or more readily transfer emergency procedures that they would otherwise perform. Doing so would lead to worse quality and higher costs. The CHART Model currently includes quality measures for medical conditions.[3] However, attention to unwarranted variation in procedure volumes, postoperative outcomes, and patient travel burden should also be monitored to prevent unintended consequences for rural surgery.

The CMS CHART Model has the potential to improve surgical care within rural hospitals but comes with possible unintended consequences that need to be managed. This will be particularly important as more data emerges from Pennsylvania and the early adopters of CHART Model reform and as large payers (ie, CMS) consider expanding transformative alternative payment models. While attempting to be a comprehensive transformation of rural health care, this policy may not be sufficiently able to overcome the broader challenges facing rural health care, including maintaining an adequate surgical workforce. The CHART Model represents a potential opportunity for change through transforming the financing of hospitals motivated by a declining health care sector, and with further refinement and guidance, it may prove the key to revitalizing rural health care and broaden the appeal of this payment model so it can be applied to other settings.


### ARTICLE INFORMATION

**Accepted for Publication:** October 11, 2022.

**Published Online:** February 22, 2023. doi:10.1001/jamasurg.2022.6834

**Conflict of Interest Disclosures:** Dr Kalata reported receiving grants from the Agency for Healthcare Research and Quality (AHRQ) during the conduct of the study and the Frederick A. Coller Surgical Society. Dr Nathan reported receiving grants from the AHRQ. Dr Ibrahim reported receiving grants from the AHRQ and serving as a consultant to HOK Architects outside the submitted work. No other disclosures were reported.


### REFERENCES


1. Cecil G. Sheps Center for Health Services Research. 179 Rural hospital closures: January 2005-present (138 since 2010). University of North Carolina. Accessed May 31, 2022. https://www.shepscenter.unc.edu/programs-projects/rural-health/rural-hospital-closures/

2. Cross SH, Califf RM, Warraich HJ. Rural-urban disparity in mortality in the US From 1999 to 2019. *JAMA*. 2021;325(22):2312-2314. doi:10.1001/jama.2021.5334

3. Centers for Medicare & Medicaid Services. Community Health Access and Rural Transformation (CHART) Model. Accessed May 11, 2022. https://innovation.cms.gov/innovation-models/chart-model

4. Fried JE, Liebers DT, Roberts ET. Sustaining rural hospitals after COVID-19: the case for global budgets. *JAMA*. 2020;324(2):137-138. doi:10.1001/jama.2020.9744

5. Centers for Medicare & Medicaid Services. Maryland Total Cost of Care Model. Accessed June 10, 2021. https://innovation.cms.gov/innovation-models/md-tccm

6. Roberts ET. Response to "the effects of global budget payments on hospital utilization in rural Maryland". *Health Serv Res*. 2019;54(3):523-525. doi:10.1111/1475-6773.13161

7. Centers for Medicare & Medicaid Services. Pennsylvania Rural Health Model. Accessed May 18, 2022. https://innovation.cms.gov/innovation-models/pa-rural-health-model

8. Sheetz KH, Massarweh NN. Centralization of High-risk Surgery in the US: feasible solution or more trouble than it is worth? *JAMA*. 2020;324(4):339-340. doi:10.1001/jama.2020.2953

9. Doty B, Zuckerman R, Finlayson S, Jenkins P, Rieb N, Heneghan S. General surgery at rural hospitals: a national survey of rural hospital administrators. *Surgery*. 2008;143(5):599-606. doi:10.1016/j.surg.2007.11.022

10. Markin A, Habermann EB, Chow CJ, Zhu Y, Vickers SM, Al-Refaie WB. Rurality and cancer surgery in the United States. *Am J Surg*. 2012;204(5):569-573. doi:10.1016/j.amjsurg.2012.07.012