NC RHRP

Findings Brief
NC Rural Health Research Program

November 2016

The Financial Importance of the Sole Community Hospital Payment Designation

Sharita R. Thomas, MPP; Randy Randolph, MRP; G. Mark Holmes, PhD; George H. Pink, PhD

BACKGROUND

In 1983, Congress created the Sole Community Hospital (SCH) program to support small rural hospitals for which "by reason of factors such as isolated location, weather conditions, travel conditions, or absence of other hospitals, is the sole source of inpatient hospital services reasonably available in a geographic area to Medicare beneficiaries."[1] A hospital qualifies as a SCH by meeting the following criteria:

1) It is located at least 35 miles from a similar hospital; or

2) It is between 25 and 35 miles from a similar hospital, and meets one of the following criteria:
   - No more than 25% of its total inpatients or 25% of Medicare inpatients admitted are also admitted to similar hospitals within a 35 mile radius; or
   - It has fewer than 50 acute care beds and would admit at least 75% of inpatients from the service area were it not for some patients requiring specialized care that the hospital does not offer; or

3) It is between 15 and 25 miles from other similar hospitals that are inaccessible for at least 30 days in each of two out of three years due to topography or weather; or

4) Travel time to the nearest hospital is at least 45 minutes because of distance, posted speed limits, or predictable weather.[2]

A SCH is often the only source of hospital care for isolated rural residents. As such, Medicare SCH classification helps to keep these institutions financially viable through certain payment enhancements and protections to the hospital. For inpatient services, Sole Community Hospitals receive the higher of payments under 1) the Inpatient Prospective Payment System (IPPS) or 2) an updated hospital-specific rate (HSR), which are payments based on their costs in a base year (1982, 1987, 1996, or 2006) updated to the current year and adjusted for changes in their case mix.[3] Since 2006, SCHs also receive an additional adjustment set at 7.1% above the Outpatient Prospective Payment System (OPPS) rate for outpatient services.[4] Additionally, SCHs can qualify for adjustments due to decreases in inpatient volume, participation in the Hospital Value-Based Purchasing Program, and participation in the Hospital Readmissions Reduction Program.

The purpose of this study was to assess the financial importance of the SCH program by investigating: 1) the proportion of SCHs that was reimbursed at the hospital-

KEY FINDINGS

- Since 2009, more SCHs are reimbursed at the hospital-specific rate (HSR) rather than the federal inpatient prospective payment system (IPPS) rate.
- Between 2006 and 2015, only 58 SCHs were reimbursed by the IPPS rate, and 112 by the HSR in every year; the remainder switched between the two rates at least once.
- The median Medicare inpatient margins of SCHs reimbursed at the federal IPPS rate and SCHs reimbursed at the HSR in every year 2006-2015 were positive and higher than SCHs that switched between the two rates at least once.
- Between 2006 and 2015, the median Medicare outpatient margin of SCHs reimbursed at the federal IPPS rate in every year was higher than other SCHs in every year of the study period except 2013, and the median Medicare outpatient margin of SCHs reimbursed at the HSR was lower than other SCHs in every year of the study period.
- If the SCH program had not existed in 2015 – that is, if Medicare inpatients and outpatients in all SCHs had been reimbursed at the IPPS and OPPS rates, respectively – there would have been an estimated reduction in 2015 Medicare margin of 2.47% for SCHs that were reimbursed at the federal IPPS rate and 14.6% for SCHs that were reimbursed at the HSR.
- SCHs in the South would be less affected by cessation of the SCH program because more SCHs are already paid at the federal IPPS rate whereas SCHs in the Midwest and Northeast would be more affected because more SCHs are paid at the hospital-specific rate.

specific rate between 2006 and 2015; 2) the profitability of providing services to Medicare patients in SCHs between 2006 and 2015, and; 3) the financial consequences if the SCH program had not existed in 2015.

RESULTS

Proportion of SCHs Reimbursed at the Hospital-Specific Rate

Table 1 shows the proportion of SCHs that were reimbursed at the hospital-specific rate versus the IPPS federal rate between 2006 and 2015.[5] For cost reporting periods beginning on or after fiscal year 2000, the hospital-specific rate was based on either the fiscal year 1982, 1987, or 1996 costs per discharge. After 2009, the cost-per-discharge base was updated to fiscal year 2006 for cost reporting periods beginning on or after fiscal year 2009. The data in Table 1 shows the impact of the 2009 update: prior to 2009, more than half of SCHs were reimbursed at the IPPS federal rate. Approximately 50 hospitals switched from IPPS rate to a hospital-specific rate after the rate update in 2009 and another 80 switched in 2010.

Table 1: Population of SCH Cost Reports by Payment Type, 2006-2015

Year	SCHs paid at federal IPPS rate: # of Cost Reports	SCHs paid at HSR: # of Cost Reports	Total SCHs: # of Cost Reports	Percent of SCHs Paid at HSR
2006	245	225	470	48%
2007	241	212	453	47%
2008	241	205	446	46%
2009	195	254	449	57% (HSR Rebased)
2010	110	339	449	76%
2011	104	337	441	76%
2012	119	335	454	74%
2013	134	321	455	71%
2014	165	290	455	64%
2015	122	310	432	72%

Profitability of Medicare Patients in SCHs[6]

To investigate the impact of the reimbursement method on the profitability of SCHs, hospitals with cost report periods less than 360 days and hospitals missing one or more cost reports during the study period were excluded (n = between 84 and 122). In addition, SCHs can switch between federal IPPS and HSR rates in any cost report year because the higher Medicare amount determines the reimbursement method. As a group, this means that changes in annual profitability of SCH (IPPS) and SCH (HSR) could be due to: 1) changes in the sample of hospitals that received each type of reimbursement; 2) changes in real profitability; or 3) both. In order to account for changing samples and to isolate the effect of reimbursement method on profitability, for each year of the study period the hospitals were partitioned into:

SCH (IPPS always) = SCHs with Medicare inpatients reimbursed at federal IPPS rate and Medicare outpatients reimbursed at 7.1% above the standard OPPS rate in every year of the study period of 2006-2015 (n = 58).

SCH (IPPS switch) = SCHs with Medicare inpatients reimbursed at federal IPPS rate and Medicare outpatients reimbursed at 7.1% above the standard OPPS rate in year *t*, but reimbursed at hospital-specific rate in at least one other year of the study period (n = between 29 and 133).

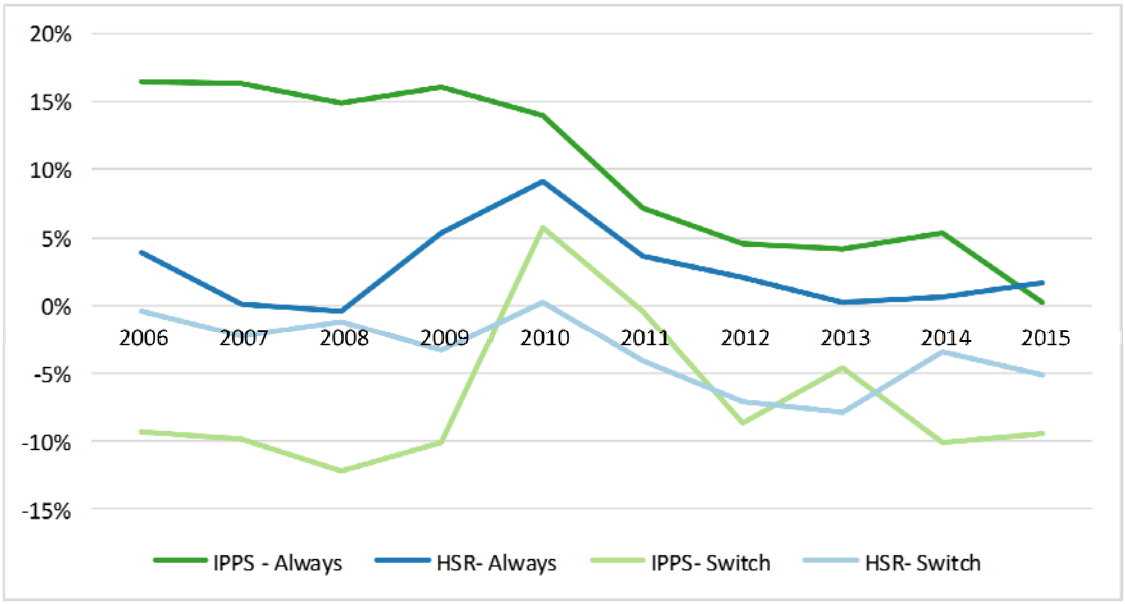
SCH (HSR always) = SCHs with Medicare inpatients reimbursed at hospital-specific rate and Medicare outpatients reimbursed at 7.1% above the standard OPPS rate in every year of the study period (n = 112).

SCH (HSR switch) = SCHs with Medicare inpatients reimbursed at hospital-specific rate and Medicare outpatients reimbursed at 7.1% above the standard OPPS rate in year *t*, but reimbursed at federal IPPS rate in at least one other year of the study period (n = between 45 and 149).

Medicare inpatient margin is defined as (Medicare inpatient revenue – Medicare inpatient cost) / Medicare inpatient revenue. It measures the control of expenses relative to revenues for Medicare inpatients, and expresses the profit a hospital makes as a proportion of revenue brought in. For example, a 5% Medicare inpatient margin means that a hospital makes five cents of profit on every dollar of revenue for a Medicare inpatient.

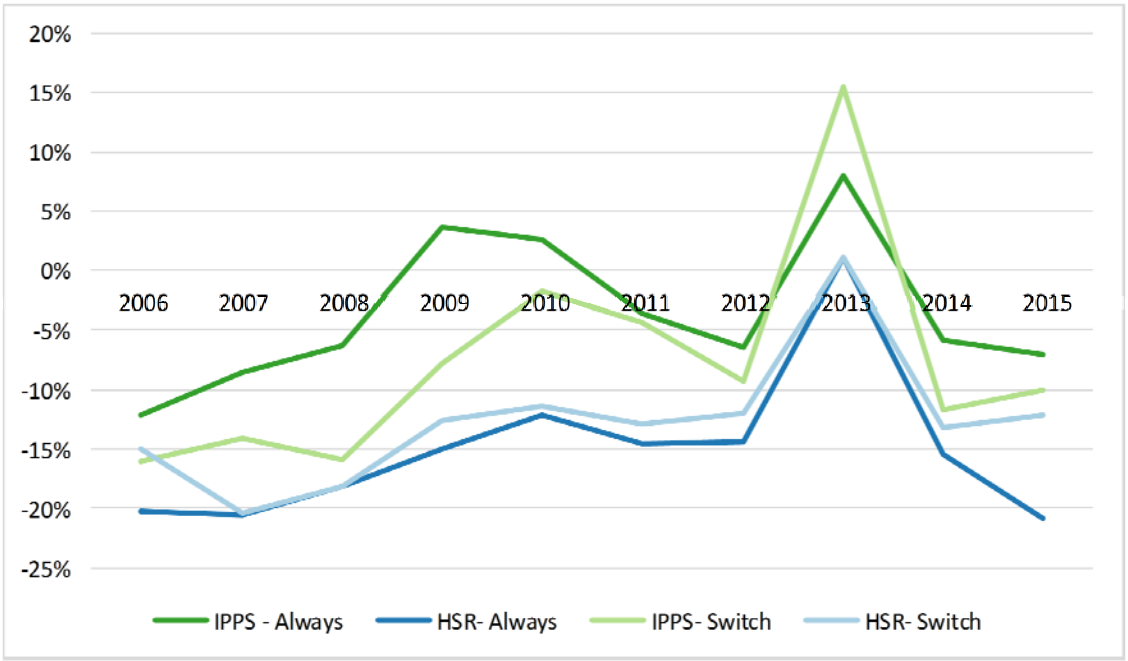
Figure 1 shows the profitability of Medicare inpatients in SCHs between 2006 and 2015. Interestingly, the median Medicare inpatient margins of both SCH (IPPS always) and SCH (HSR always) were positive and higher than SCH (IPPS switch) and SCH (HSR switch) in every year of the study period. In contrast, the median Medicare inpatient margin was negative for nine of 10 years for both SCH (IPPS switch) and SCH (HSR switch).

Figure 1: Median Medicare Inpatient Margin for SCHs, 2006-2015



Medicare outpatient margin is defined as (Medicare outpatient revenue – Medicare outpatient cost) / Medicare outpatient revenue. Both SCH (HSR) and SCH (IPPS) receive a 7.1% adjustment above the standard OPPS rate for outpatient services. Figure 2 shows the profitability of Medicare outpatients in SCHs between 2006 and 2015. The median Medicare outpatient margin of SCH (IPPS always) was higher than other SCHs in every year of the study period except 2013, and the median Medicare outpatient margin of SCH (HSR) was lower than other SCHs in every year of the study period.

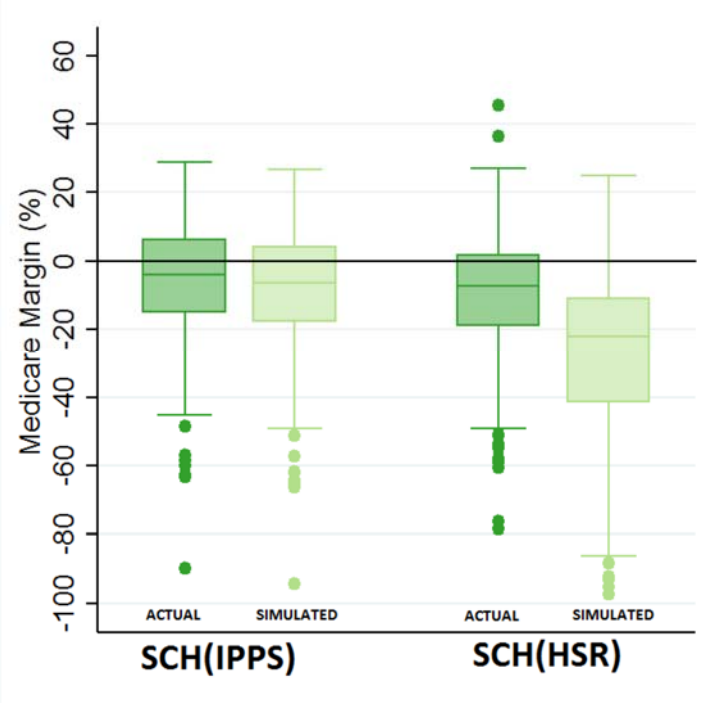
Figure 2: Median Medicare Outpatient Margin for SCHs, 2006-2015



2015 SCH Medicare Profitability without the SCH Program

To predict the financial outcome if the SCH program had not existed in 2015,[7] the financial consequences were estimated by comparing the actual 2015 Medicare margins to simulated 2015 Medicare margins. Simulated Medicare margins are estimates of the margins that would have occurred in the absence of the SCH program: that is, the Medicare margins that would have occurred if Medicare inpatients and outpatients in all SCHs had been reimbursed at the IPPS and OPPS rates, respectively. Medicare margin is defined as ((Medicare inpatient and outpatient revenue – Medicare inpatient and outpatient cost) / Medicare inpatient and outpatient revenue). Figure 3 compares the actual and simulated Medicare margins of 122 SCHs that were reimbursed at the federal IPPS rate and 310 SCHs that were reimbursed at the hospital-specific rate in 2015.

Figure 3: 2015 Medicare Margin of SCHs with and without the SCH Program

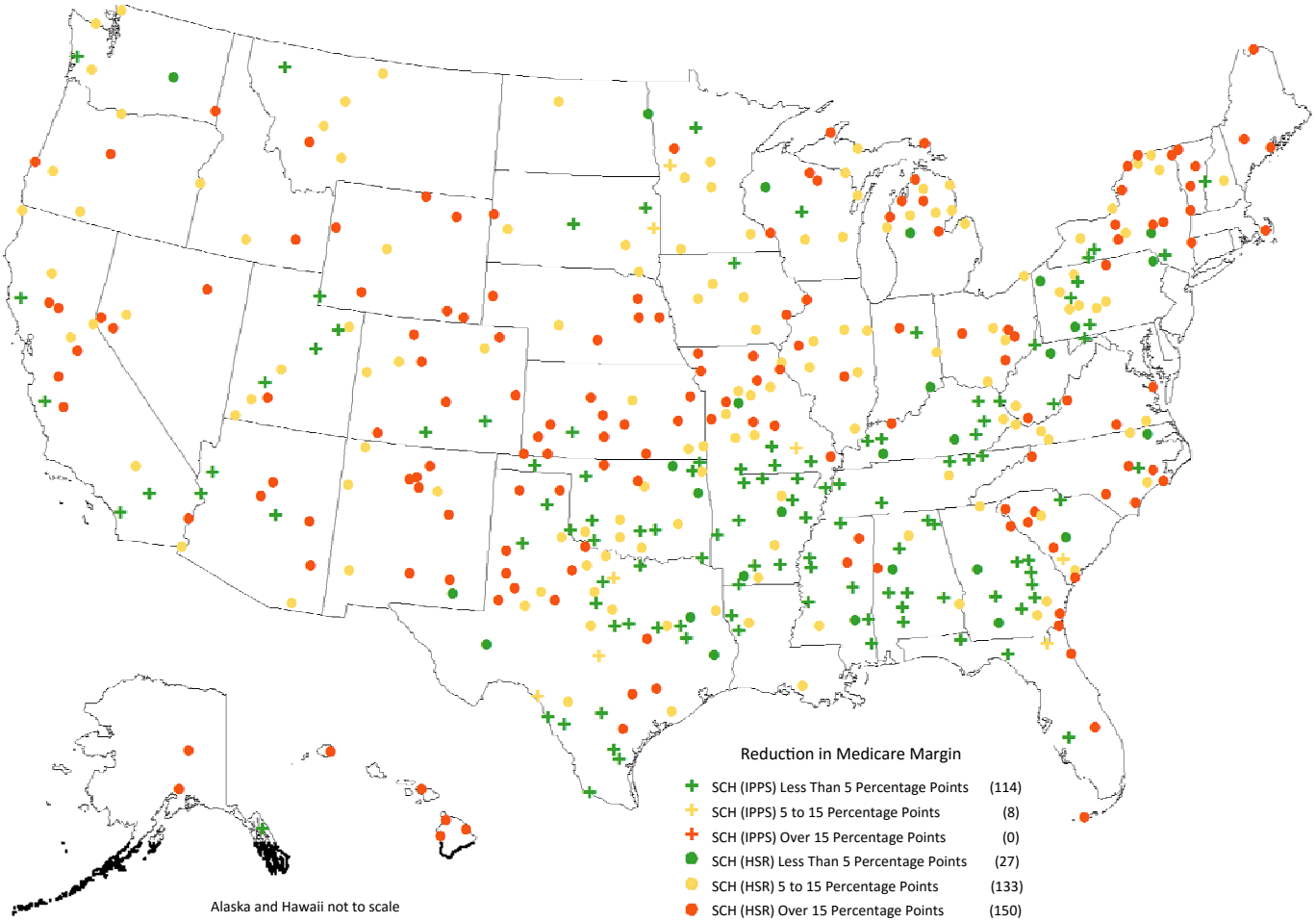


This boxplot shows the range of values for SCH (IPPS) and SCH (HSR). The horizontal line in the middle of each box is the median, at the top of the box is the 75th percentile value, and at the bottom of the box is the 25th percentile. The "whiskers" at the top and bottom of the vertical lines are the last observed value less than or equal to 1.5 times the interquartile range above the upper quartile/below the lower quartile, and the dots are outliers.

If the SCH program had not existed in 2015, Figure 3 shows that this would have resulted in an estimated reduction in 2015 Medicare margin of 2.47% for SCHs that were reimbursed at the federal IPPS rate (from a median actual margin of –3.92% to a median simulated margin of –6.39%) and 14.6% for SCHs that were reimbursed at the hospital-specific rate (from a median actual margin of –7.33% to a median simulated margin of –21.93%). The estimated reduction in margin is much larger for SCHs reimbursed at the hospital-specific rate because there would be revenue loss for both Medicare inpatients and outpatients, whereas for SCHs reimbursed at the federal IPPS rate, there would be a 7.1% revenue loss for Medicare outpatients only (because they were already paid at the federal IPPS rate for inpatients).

Figure 4 shows the geographic distribution of SCHs reimbursed at the federal IPPS rate and those reimbursed at the hospital-specific rate in 2015, and the magnitude of estimated reduction in 2015 Medicare margin for each (the difference in percentage points between the actual 2015 Medicare margin and the simulated 2015 Medicare margin). If the SCH program had not existed in 2015, two points are clearly illustrated by the map: first, the overwhelming majority (114 / 122) of SCHs reimbursed at the federal IPPS rate would have experienced a relatively small (< 5 percentage points) reduction in Medicare margin, and most of these hospitals are located in the South (the green plus signs). Second, a large number (150 / 310) of SCHs reimbursed at the hospital-specific rate would have experienced a relatively large (> 20 percentage points) reduction in Medicare margin, and most of these hospitals are located in the Midwest and the Northeast (the red circles). 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). Conversely, SCHs in the Midwest and Northeast would be more affected by cessation of the SCH program because more are paid at the hospital-specific rate (because their hospital-specific rates are greater than the IPPS rate).

Figure 4: Reduction in 2015 Medicare Margin without the SCH Program



Source: North Carolina Rural Health Research and Policy Analysis Center, Cecil G. Sheps Center for Health Services Research, University of North Carolina at Chapel Hill, November 2016
http://www.shepscenter.unc.edu/programs-projects/rural-health/

CONCLUSION

Sole Community Hospitals are safety-net hospital service providers, often being the only source of such services for many rural communities. The Medicare payment enhancements that SCHs receive are meant to protect against financial distress so that these institutions can continue to serve communities.

This study found that, since 2009, more SCHs are reimbursed at the hospital-specific rate than the federal IPPS rate. The availability of reimbursement at the hospital-specific rate provided by the SCH program is clearly important to most SCHs. If the SCH program had not existed in 2015, then this would have resulted in an estimated reduction in 2015 Medicare margin of 2.47% for SCHs that were reimbursed at the federal IPPS rate and 14.6% for SCHs that were reimbursed at the HSR. SCHs in the South would be less affected by cessation of the SCH program because more are already paid at the federal IPPS rate, whereas SCHs in the Midwest and Northeast would be more affected because more are paid at the hospital-specific rate. If the SCH program did not exist, the study findings suggest that there would be: 1) significant financial consequences for most SCHs, and 2) geographic variation in the magnitude of the financial consequences. Policymakers should carefully assess the consequences of cessation of the SCH program.

REFERENCES AND NOTES

1. Section 405.476, Title 42 of the 1983 Code of Federal Regulations.
2. Centers for Medicare & Medicaid Services. Acute Care Hospital Inpatient Prospective Payment System; 2016 [cited Nov 7, 2016]. Available at: https://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/Downloads/AcutePaymtSysfctsht.pdf.
3. The Centers for Medicare & Medicaid Services is required to make annual updates to prospective payment system reimbursement rates. If a hospital incurred a relatively high cost per discharge in 1982, it is possible using fiscal year 1982 as the base year would provide a higher updated hospital-specific rate than a more recent base year. The cumulative effect of differences in the annual payment changes to the IPPS rate and the base year can make the IPPS rate the higher rate one year but not for the next year.
4. The 7.1% adjustment applies to outpatient services paid under OPPS only as certain services (such as diagnostic mammography and outpatient therapies) are excluded from OPPS payments.
5. We included Sole Community Hospitals that were also Rural Referral Centers in this group.
6. The Medicare Cost Report accounts and Medicare margin definitions used in the study are shown in the Appendix.
7. In 2003, the "Hold Harmless" provision for Medicare OPPS was created for SCHs. Under this provision, if payments under the OPPS were less than a cost-based payment, the SCH received 85% of the difference between the two amounts. On December 31, 2012, the Hold Harmless provision for Medicare OPPS was eliminated for SCHs and rural hospitals under 100 beds. The full effect of removal of this provision should be reflected in the 2015 data.

APPENDIX—STUDY DATA

Project data were obtained from the Hospital Service Area File (HSAF), the Hospital Cost Report Information System (HCRIS), the Area Health Resource File (AHRF) and other census data.

Medicare Cost Report (MCR) Accounts

Study variable	2010 MCR Accounts	1996 MCR Accounts
Medicare inpatient revenue with Sequestration (IPPS)	Worksheet E, Part A, Line 47 minus Line 71.01	Worksheet E, Part A, Line 6 minus Line 27
Medicare inpatient revenue with Sequestration (HSR)	Worksheet E, Part A, Line 49 minus Line 71.01	Worksheet E, Part A, Line 8 minus Line 27
Medicare inpatient operating cost	Worksheet D1, Part II, Line 53	Worksheet D1, Part II, Line 53
Medicare outpatient revenue	Worksheet E, Part B, Line 24	Worksheet E, Part B, Line 17.01
Medicare outpatient revenue with Sequestration	Worksheet E, Part B, Line 24 minus Line 40.01	Worksheet E, Part B, Line 17.01 minus Line 33
Medicare outpatient cost	Worksheet D, Part V, Title XVIII, Hospital, Sum Col 5-7, Line 202	Worksheet D, Part V, Title XVIII, Hospital, Sum Col 9-9.02, Line 104

Medicare Margin Definitions

Measure	Numerator	Denominator
Actual 2006-15 Medicare inpatient margin for SCH (IPPS)	Medicare inpatient revenue with Sequestration (IPPS) – Medicare inpatient operating cost	Medicare inpatient revenue with Sequestration (IPPS)
Actual 2006-15 Medicare inpatient margin for SCH (HSR)	Medicare inpatient revenue with Sequestration (HSR) – Medicare inpatient operating cost	Medicare inpatient revenue with Sequestration (HSR)
Actual 2006-15 Medicare outpatient margin for both SCH (IPPS) and SCH (HSR)	Medicare outpatient revenue with Sequestration – Medicare outpatient cost	Medicare outpatient revenue with Sequestration
Simulated 2015 Medicare margin for SCH (IPPS) without SCH program	(Medicare inpatient revenue with Sequestration (IPPS) + (Medicare outpatient revenue with Sequestration/ 1.07)) – (Medicare inpatient operating cost + Medicare outpatient cost)	Medicare inpatient revenue with Sequestration (IPPS) + (Medicare outpatient revenue with Sequestration/ 1.07)
Simulated 2015 Medicare margin for SCH (HSR) without SCH program	(Medicare inpatient revenue (IPPS) with Sequestration + (Medicare outpatient revenue with Sequestration/ 1.07)) – (Medicare inpatient operating cost + Medicare outpatient cost)	Medicare inpatient revenue with Sequestration (IPPS) + (Medicare outpatient revenue with Sequestration/ 1.07)

This study was supported by the Federal Office of Rural Health Policy (FORHP), Health Resources and Services Administration (HRSA), U.S. Department of Health and Human Services (HHS) under cooperative agreement # U1GRH03714. The information, conclusions and opinions expressed in this brief are those of the authors and no endorsement by FORHP, HRSA, HHS, or The University of North Carolina is intended or should be inferred.