NLINE APPENDIXES

Improving efficiency and preserving access to emergency care in rural areas

ONLINE APPENDIX

Swing bed cost accounting

Swing beds can be used for acute care, skilled nursing care, or residential nursing care (similar to nursing home care). Critical access hospitals (CAHs) are paid costbased payments for acute care and skilled nursing care of Medicare patients in swing beds. Some CAHs also have nursing home-type patients living permanently in the hospital, for which they can be paid Medicaid nursing home rates.

Medicare pays substantially more for a post-acute day in a CAH swing bed than in a skilled nursing facility (SNF). In 2013, Medicare paid the median CAH \$1,800 per post-acute swing bed day. This amount is \$1,400 higher than the \$400 per day paid to SNFs on average.¹ The high rate is partially due to cost allocation rules for CAHs that tend to overallocate costs to swing beds. CMS regulations require that swing bed costs be estimated to equal routine care (room/board/nursing) plus ancillary costs (e.g., therapy). The regulations require that routine costs are estimated by first calculating all routine inpatient costs, then subtracting an amount for nursing facility patients that live in the hospital; this "carve-out" is conservatively estimated to equal the Medicaid payment for these patients. Then the remaining costs are divided among acute and post-acute patients with the generous assumption that post-acute routine care costs are equal to acute routine care costs. The result is a payment of \$1,800 per post-acute day for the median hospital.

Because of the cost allocation system and the per diem payment method, each additional swing day increases payments to the hospital by far more than the marginal costs of that day, creating an incentive for CAHs to expand swing bed services. However, while the payment may be \$1,800 per day for routine and ancillary services, because of cost allocation effects of swing bed days on acute care costs, each additional swing bed day results in less costs allocated to other Medicare services—so the net marginal revenue from each swing day is less than the full \$1,800 per diem payment. This effect occurs because a certain share of hospital costs are fixed, and as swing volume increases, the share of those fixed costs allocated to other Medicare acute days declines. For example, assume a hospital had \$2 million of costs for inpatient services and had 1,111 acute care days. Assume 700 of those days were Medicare (acute and post-acute swing days) and so Medicare paid 70 percent of \$2 million, or \$1.4 million. Also assume that 60 percent of the CAHs costs are fixed due to its small size and that 40 percent were variable, meaning variable costs were $$1,800 \times 40$ percent or \$720

per day. If the CAH added one post-acute swing day and that day had a marginal cost of \$720, the total inpatient costs would now be \$2,000,720. This amount would be divided by 1,112 days for an average cost of \$1,799 per day (for simplicity, this example ignores differences in ancillary costs across services). Medicare payments for the 700 acute care days would decline by a total of \$700 across all cases $(700 \times (\$1,800 - \$1,799))$. The net increase in revenue for all cases after the addition of one more post-acute swing bed day would be \$1,799 – \$700 of reduced acute revenue or \$1,099. This example provides four points to take away regarding cost allocation and post-acute care payments:

- The marginal revenue for the CAH for post-acute swing bed care (\$1,099 per day in our simplified example) is dramatically higher than the payment rate to competing SNFs.
- Payments are well above marginal costs, giving CAHs an incentive to expand SNF care in swing beds.
- The net marginal revenue for the CAH (\$1,099 in our example) is less than the full per diem payment (\$1,799) because of additional swing bed days reducing costs allocated to other cost-based services at the CAH. The point that others have made is that if the post-acute swing days were eliminated and inpatient care retained, then Medicare payments for acute inpatient care would increase (Medicare Payment Advisory Commission 2005, Reiter et al. 2013). Therefore, if acute days were kept but post-acute days were dropped, savings would not be as large as simply the difference between PPS post-acute rates and costbased rates. There has been some confusion about this issue in the past (Office of Inspector General 2015).
- However, if all cost-based payments were eliminated (acute and post-acute), then almost all the savings from reduced post-acute payments (roughly \$1,400 per day) would represent program savings. The problem of inpatient costs being reallocated and affecting the payment for other services would not exist because all inpatient-specific costs would be eliminated and any reallocation of remaining overhead costs would not affect payments because all payments would be based on prospective payment system (PPS) rates. These savings from eliminating inpatientspecific costs would be available to fund alternative special payments to CAHs that cease offering inpatient services. ■

Endnotes

The median hospital's payment is \$1,800 per day. The mean hospital's payment is about \$2,000, but that amount reflects some outlier hospitals with very small numbers of days and hence high costs per day. For that reason, we focus on the median payment of \$1,800. The weighted average payment in 2013 was \$1,700 per day. The average rate paid to SNFs was about \$400 in 2013, and the average rate paid to PPS hospitals for post-acute care in swing beds was about \$300 per day. PPS hospitals are paid standard SNF rates for their skilled nursing patients and do not qualify for cost-based reimbursement.

References

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