
**Mandated report:
Developing a unified payment
system for post-acute care**

ONLINE APPENDIX

3-A

Comparison of outcomes across PAC settings

**TABLE
3-A1**

Outcomes reported by the Post-Acute Care Payment Reform Demonstration, by setting

Outcome measure	Difference compared with SNFs		
	HHA	IRF	LTCH
30-day all-cause readmission rate			
All conditions	None	None	Lower (better)
Nervous conditions	None	None	None
Respiratory conditions	None	None	Lower (better)
Circulatory conditions	None	None	Lower (better)
Musculoskeletal	None	None	None
Changes in mobility			
All conditions	None*	None	None
Nervous conditions	None	None	None
Musculoskeletal conditions	None	None	None
Changes in self-care			
All conditions	Higher (better)	Higher (better)	None
Nervous conditions	None	Higher (better)	None
Musculoskeletal conditions	Higher (better)	None	None

Note: SNF (skilled nursing facility), HHA (home health agency), IRF (inpatient rehabilitation facility), LTCH (long-term care hospital). Differences indicated are statistically significant at the 0.05 level. Changes in mobility measure a patient's independence in shifting positions in bed, transferring (between chair and bed, or to a car), and walking. Differences indicated were statistically significant. Changes in self-care gauge a patient's independence in eating, dressing, hygiene, and washing. The analyses include stays between 2008 and 2010 from post-acute care providers participating in the Post-Acute Care Payment Reform Demonstration.
*The difference was not statistically significant at the 0.05 level but was significant at the 0.10 level.

Source: Gage et al. 2012.

One important concern in establishing a unified payment for post-acute care (PAC) is the potential impact on patient outcomes. Unfortunately, there is a dearth of information comparing outcomes across PAC settings. The Post-Acute Care Payment Reform Demonstration (PAC-PRD) is the only study to date that has compared patient outcomes using comparable patient assessment information across a wide range of patient conditions treated in the four PAC settings. Evaluators of the demonstration compared risk-adjusted 30-day all-cause readmission rates and two measures of function: changes in mobility and changes in self-care (Gage et al. 2012). They examined differences in rates between skilled nursing facilities (SNFs) and the other three settings for all conditions and for subgroups of patients—those with nervous conditions, respiratory conditions, circulatory conditions, and musculoskeletal conditions—for some measures.¹

When compared with SNFs, readmission rates were not statistically different for inpatient rehabilitation facilities (IRFs) and home health agencies (HHAs), but long-term care hospitals (LTCHs) had lower rates compared with SNFs for all conditions combined and for respiratory conditions and circulatory conditions individually (Table 3A-1).² The evaluators noted that the lower readmission rates in LTCHs may be explained by this setting's capabilities to manage changes in medical care needs (Gage et al. 2012).

There were no statistically significant differences among the settings in change in mobility. The mobility measure examines a patient's independence in shifting positions in bed, transferring (between chair and bed, or to a car), and walking. Compared with patients treated in SNFs, HHA patients overall (all conditions combined) had greater improvement in mobility, but the results were not statistically significant. The differences between the

average change in mobility for HHAs and SNFs were not statistically significant for patients with nervous or musculoskeletal conditions.

The results comparing PAC settings' changes in self-care were mixed. Changes in self-care gauge a patient's independence in eating, dressing, hygiene, and washing. Compared with patients treated in SNFs, there were no

differences in the changes in self-care for patients treated in LTCHs for all patients combined or for patients with nervous or musculoskeletal conditions. Across all patients, those treated in IRFs and HHAs had significantly larger improvements in self-care compared with patients treated in SNFs, though the differences were not consistent for the subgroups of patients examined. ■

Endnotes

- 1 Nervous conditions include medical and surgical conditions, including stroke. The respiratory group includes surgical, medical, chronic obstructive pulmonary disease, extracorporeal membrane oxygenation, and tracheostomy patients. The circulatory group includes vascular and cardiac surgical and medical conditions; the musculoskeletal group includes minor and major medical and surgical conditions and spinal diagnoses.
- 2 The lower readmission rate for LTCHs is not explained by their having a higher mortality rate because the readmission rate excludes patients who died during the stay or the 30-day post-discharge period.

References

Gage, B., M. Morley, L. Smith, et al. 2012. *Post-Acute Care Payment Reform Demonstration: Final report, volume 1 of 4*. Prepared under contract to the Centers for Medicare & Medicaid Services. Baltimore, MD: CMS.

ONLINE APPENDIX

3-B

**Regulatory requirements differ
markedly across PAC settings**

Though there is overlap in the types of cases in the four post-acute care (PAC) settings, the regulatory requirements for each setting differ markedly. Some requirements aim to differentiate PAC from acute inpatient care, while others aim to identify which patients are appropriate for the setting. These requirements affect the mix of case types treated and services provided across settings and the associated costs of care.

Currently, long-term care hospitals (LTCHs) and inpatient rehabilitation facilities (IRFs) both must meet all Medicare conditions of participation for acute care hospitals. The regulations require a physician to be on duty or on call at all times. All nursing services must be furnished or supervised by a registered nurse (RN), and an RN or licensed practical nurse (LPN) must be on duty 24 hours a day.¹ In addition, LTCHs must have an average length of stay of greater than 25 days for specified case types, while IRFs have extensive requirements regarding the amount of therapy and the frequency and level of medical supervision their patients receive. IRF patients must be able to tolerate and are expected to benefit from an intensive therapy program (often interpreted as three hours of therapy a day). IRFs must use a coordinated interdisciplinary team approach to care led by a physician, and any rehabilitation services must be supervised by a rehabilitation physician through face-to-face visits with the patient at least three days a week. IRFs also must comply with the IRF compliance threshold (the “60 percent rule”), which requires that at least 60 percent of all cases an IRF admits have at least 1 of 13 conditions that CMS has determined typically require intensive rehabilitation therapy.²

By comparison, SNFs must meet Medicare’s conditions of participation for nursing homes.³ The regulations require SNFs to have an RN on site for a minimum of eight hours each day. An LPN must be on duty at all times, though this requirement can be waived in certain circumstances. (Some states have more stringent nurse staffing requirements for nursing homes.) SNFs are not required to have a physician on duty but must have arrangements for physician services in case of emergency. Medicare covers SNF care only after a medically necessary inpatient hospital stay of at least three days.⁴ SNF patients must be under the care of a physician and must be seen by a physician at least once every 30 days for the first 90 days of the admission and at least once every 60 days thereafter.⁵

Home health agencies (HHAs) have fewer structural and process requirements than institutional PAC providers. Agencies must have policies established by a group of professionals (associated with the agency or organization), including one or more physicians and one or more RNs. A physician or RN must supervise the overall provision of services. A physician must certify that a patient is eligible for home health care and that a patient receiving home health services is under the care of a physician. To be eligible for Medicare’s home health benefit, beneficiaries must need part-time (fewer than eight hours per day) or intermittent skilled care to treat their illnesses or injuries and must be unable to leave their homes without considerable effort.⁶ A preceding hospital stay is not required to qualify for home health care. ■

Endnotes

- 1 The requirement that an RN or LPN be on duty at all times can be waived for rural hospitals meeting specified criteria (42 CFR §482).
- 2 The 13 qualifying conditions are stroke; spinal cord injury; congenital deformity; amputation; major multiple trauma; hip fracture; brain injury; neurological disorders; burns; three arthritis conditions for which appropriate, aggressive, and sustained outpatient therapy has failed; and hip or knee replacement when bilateral, when body mass index is 50 or more, or when the patient is age 85 or older.
- 3 Most SNFs (more than 90 percent) are dually certified as SNFs and nursing homes (which typically provide less intensive, long-term care services).
- 4 Observation days and emergency room stays do not count toward the three-day requirement.
- 5 After the initial visit, the required physician visits may alternate between the physician and a physician's assistant, nurse practitioner, or clinical nurse specialist.
- 6 Medicare relies on the skilled care and homebound requirements as primary determinants of home health eligibility, but these broad coverage criteria permit beneficiaries to receive services in the home even though they are capable of leaving home for medical care. Most home health beneficiaries use some form of outpatient services while receiving home health care (Wolff et al. 2009). At the same time, though the intent of the skilled services requirement is that the home health care serves a clear medical purpose and is not an unskilled personal care benefit, Medicare's coverage standards do not require that skilled visits constitute the majority of the home health services a patient receives. For about 9 percent of episodes in 2010, most services provided were visits from an unskilled home health aide.

References

Wolff, J. L., A. Meadow, C. M. Boyd, et al. 2009. Physician evaluation and management of Medicare home health patients. *Medical Care* 47, no. 11 (November): 1147–1155.