White Paper

Thought Leadership Series

Emerging Health Care Trend: Increased Need for Care Coordination

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A coordinated care delivery system helps decrease both patient safety risks and the costs of care. Practitioners who understand the treatments and medications provided in other settings have a distinct advantage over those who can't. Practitioners and patients benefit from reduced duplication of services and improved medication management, and patients have less opportunity for confusion because of the harmonized guidance and self-care instructions.

To capture these benefits of coordinated care, healthcare providers are consolidation and strengthening ties across the healthcare continuum. Organizational structures like Accountable Care Organizations (ACOs), Patient-Centered Medical Homes, and Clinically Integrated Networks (CINs) have been created and refined with care coordination as one of the primary goals. While hospitals or groups of medical practices often lead the charge in creating these organizations, the role of post-acute care (PAC) providers is undeniable and critical in achieving the desired care coordination goals.

Coordinated care delivery can take many forms:

- **Patient Centered Medical Homes (PCMH)** are medical practices with certified abilities to follow-up on referrals, track lab tests, and coordinate care transitions, among many other traits.
- **Clinically Integrated Networks (CIN)** are formed when independent practices team up with physicians, hospitals, and post-acute providers.
- **Accountable Care Organizations (ACO)** bring together providers from various care settings, including medical practices, hospitals, and post-acute facilities to care for Medicare patients.
- **Integrated Delivery Networks (IDN)** combine medical practices, hospitals, post-acute providers, and sometimes health plans under common ownership.

The Role of Post-Acute Care Providers

Post-acute care is an increasingly important facet of care delivery. With varying levels of acuity, post-acute care providers range from long-term acute care (LTAC) to skilled nursing facilities (SNF) to Home Care and Hospice. The spectrum of post-acute care settings enables clinicians to match an appropriate care setting to the complexity of a patient's needs. From highly complex patients with comorbid diseases to patients near the end of life, post-acute settings often receive patients transferred directly from hospitals and then monitor, rehabilitate, and help patients recover to their targeted health status. Post-acute settings often present a financially attractive option because of smaller clinical labor staffs and less intensive technology requirements when compared to acute care hospitals.

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Post-Acute Providers Reduce Readmission Risk

Facing significant monetary readmission penalties, hospitals have been compelled to take more active efforts to manage patients after hospital discharges, and they do this with post-acute care. As Baby Boomers age, post-acute care helps the frail elderly avoid Emergency Department visits and inpatient admissions. Further, post-acute care providers like Home Health are attractive by enabling some patients to maintain greater personal freedom by staying in their own homes while helping them manage chronic diseases and be more adherent to treatments. Sustaining post-acute care delivery over longer periods of time can help patients recover more completely and decrease the likelihood of a readmission.

Focused Home Health Relationships Impact Readmissions

To illustrate the impact that greater care coordination between home health and hospitals could have on readmissions, we looked to Health Market Science®, A LexisNexis® Company. Health Market Science® used a nationwide compilation of de-identified health care claims data to analyze readmission rates associated with home health agencies. While the concept that closer care coordination can reduce readmission rates seems intuitive, a claims data study can help identify whether more focused collaboration between hospitals and home health agencies had a positive impact on readmission. In our study, 'more focused' collaboration results when hospitals discharge to fewer home health agencies, and 'less focused' collaboration results when hospitals discharge to more home health agencies.

To review readmission rates, hospitals were split into 10 equal groups, or deciles, based on the volume of patients each hospital discharged into the home health setting. For this analysis we removed hospitals in the lowest decile in order to limit noise resulting from small sample sizes. The top 9 deciles accounted for 1,946 hospitals. In order to calculate readmission rates by home health agency, patients discharged into the home health setting were tracked and identified on corresponding claims submitted by home health agencies. Readmissions were calculated by identifying patients who were present on a second inpatient claim within 30 days of their previous discharge. Only patients who were discharged into the home health setting were included in this analysis. No other risk factors or diagnosis categories were applied.

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Results

After calculating the readmission rates for each home health agency, we found the average readmission rate for patients discharged into the home health settings from the studied hospitals was 13.5%. This means that 13.5 patients out of 100 patients discharged had a readmission within 30 days. (For comparison, the nationwide statistic on home health data on data.medicare.gov shows that 16% of home health patients have to be admitted to the hospital.)

To continue the analysis, we reviewed how many home health agencies were sharing patients with each hospital. In an event where multiple agencies from the same home health provider were treating patients discharged from the same hospital, the agencies were counted together as a singular provider. The average hospital discharged into 34.9 home health providers. Hospitals using more than 34.9 providers had a readmission rate of 14.4% and those using fewer than 34.9 had a readmission rate of 13.1%. At the upper extreme, there were 106 hospitals that discharged into 100 or more different home health providers. On average, 16.2% of the home health patients from these hospitals were readmitted. This supports the notion that hospitals who funnel discharges to fewer home health providers have fewer readmissions.

In order to gauge the strength of relationship between a hospital and its top home health provider, we looked at the percent of discharges treated by the top provider for each hospital studied. On average, the top relationship at a hospital received 46.5% of the patients discharged to home health. For hospitals whose top home health provider got more than 46.5% of the home health discharges, the average readmission rate was 12.6%. For hospitals whose top agency got less than 46.5% of the home health discharges, the average readmission rate was 14.4%. For the 199 hospitals where the top provider received more than 75% of the home health discharges, the average readmission rate was just 11.3%. Conversely, there were 367 hospitals where the top provider had less than a 25% share of discharges. In these hospitals, 15% of home health patients were readmitted on average. Again, this supports the idea that greater focus between hospitals and home health results in reduced readmissions.

Although the methodology for this study did not attempt to use quasi-scientific methods, it illustrates that there are measurable readmission benefits when hospitals narrow their home health relationships. In order to quantify the benefits of the relationship, we calculated the value of a 1% readmissions rate for a illustrative 1,000,000 life population using available statistics. Using the CDCs metrics we estimate there will be about 114,000 inpatient discharges. Of those inpatient discharges, about 18,240 (16%) will be discharged to home health. Each 1% of the home health population that is readmitted represents approximately 182 readmitted home health patients. According to the Health Care Cost Institute the average price per inpatient admission in 2013 was $18,030, bringing the additional cost or savings potential to $3,288,672 for each additional percent of readmissions. Reducing the number of home health relationships may be worth significant financial benefits.

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Evidence in Consolidation

If health care providers at large understand the economic benefits of more focused relationships with home health providers, we wanted to find additional evidence to support the desirability of closer relationships with home health providers.

Our next stop was to calculate National Market Share rankings of over 9,000 home health providers. After identifying all home health agencies, we tallied the number of unique patients treated at each agency and summed the totals by provider. Then we divided the patient quantities at each provider by the total unique patients, nationwide, to produce the National Market Share per home health provider. Only 7 home health providers had greater than 1% market share; together these 7 account for only 17.58% of the total home health market.

National Rank	Agency Owner	National Market Share
1	KINDRED	5.81%
2	AMEDISYS	4.60%
3	LHC GROUP	2.27%
4	ALMOST FAMILY	1.77%
5	VISITING NURSE SERVICE OF NEW YORK	1.08%
6	CHE TRINITY HEALTH	1.03%

More evidence mounts as we observe the largest home health providers across the country and some of the publicized investments into home health. Health care providers from various settings are merging to provide a greater spectrum of care options for patients. Examples include Kindred's merger with Gentiva and Genesis Healthcare's merger with Skilled Healthcare Group. Similarly, many of the largest home health providers are now either owned by large post-acute care providers that previously concentrated efforts on other types of PAC facilities (Kindred, HCR-ManorCare, and Brookdale) or even large health systems (CHE-Trinity, Sutter, and CHI).

Conclusion

The discussion of home health serves to illustrate the value of a broader set of post-acute care providers in the larger context of U.S. health care delivery. Recognizing the financial benefits of more focused coordination with post-acute providers, we expect increased consolidation and greater investments in these care delivery settings. As the benefits of post-acute care become increasingly familiar, acute care providers will develop stronger ties to a narrower set of post-acute providers in order to improve care coordination. In turn, improved coordination with post-acute settings will support the overarching goals to reduce patient safety risks and lower the costs of care.

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