Implications of Hospital Employment of Physicians on Medicare & Beneficiaries

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Analysis by Avalere Health, LLC
About the Physicians Advocacy Institute

• The Physicians Advocacy Institute (PAI) is a not-for-profit organization that was established to advance fair and transparent policies in the health care system to sustain the profession of medicine for the benefit of patients.

• As part of this mission, PAI seeks to better understand the challenges facing physicians and their patients and also educate policymakers about these challenges.

• PAI also develops tools to help physicians prepare for and respond to policies and marketplace trends that impact their ability to practice medicine.

• Information about PAI can be found at physiciansadvocacyinstitute.org.
PAI Is Committed to Researching Topics Important to Physicians and Patients

• Through a research collaboration with Avalere Health, PAI is working to gain a more complete picture of the potential impact that various marketplace dynamics have on physicians and patients
• This analysis, examining the implications of hospital employment of physicians on Medicare and Medicare beneficiaries, highlights the increased costs associated with the growing number of physicians under employment arrangements with health systems and hospitals
• Understanding the implications of the recent physician employment trends provides a better understanding of today’s healthcare marketplace.
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Executive Summary

• Physician employment by hospitals grew by 49% between 2012 and 2015
  o More than 140,000 physicians were employed by hospitals in 2015
• Healthcare services provided in hospital outpatient (HOPD) settings are reimbursed at higher rates than when provided in physician offices
  o This affects cost to Medicare as well as patient out-of-pocket costs
• Physicians employed by hospitals perform a higher volume of services in HOPD settings than in physician offices
  o For some procedures studied, employed physicians were 7 times more likely to perform services in a HOPD setting than independent physicians
• For certain cardiology, orthopedic, and gastroenterology services, hospital employment of physicians results in up to 27% higher costs for Medicare and 21% higher costs for patients
Description of the Analysis

• Our model projected how costs of care for employed physicians would change if they had the same site of care practice patterns as independent physicians in their geographic area
  o The model assumed the same patients would receive the same procedures in a different setting of care
• Once the costs were projected for employed physicians with independent physician practice patterns, we calculated the difference in costs to Medicare and beneficiary cost sharing responsibility
Key Findings

- Across the services we examined, physician employment has resulted in more than $3.1 billion in increased costs from 2012-2015
  - Medicare program paid $2.7 billion more for these services
  - Medicare beneficiaries faced $411 million more in financial responsibility for these services

Source: Avalere analysis of SK&A hospital/health system ownership of physician practice locations data with Medicare 5% Standard Analytic Files
Note: Study adjusts for geographic practice pattern differences when comparing employed vs. independent physicians
Background
There Are Longstanding Concerns that Hospital Employment of Physicians Increases Costs

- Medicare beneficiaries can receive the same services in different settings
- Medicare pays different amounts based on setting and beneficiary financial responsibility varies as well.

MedPAC estimated that Medicare spent $1.6 billion more in 2015 than it would have if prices for E&M office visits in HOPDs were the same as freestanding office prices. Similarly, beneficiaries paid about $400 million more in cost sharing for these E&M visits.¹

E&M = evaluation and management; HOPD = Hospital Outpatient Department

Physician Employment Grew by 49% and Increased to More than 140,000 Between 2012 and 2015

• Between 2012 and 2015, the number of physicians employed by hospitals grew by 46,000 (+49%) nationwide

• From July 2014 to July 2015 the pace of employment accelerated, as nearly 27,000 physicians shifted into employment models, which marked a 24% increase

Source: Avalere analysis of SK&A hospital/health system ownership of physician practice locations data with Medicare 5% Standard Analytic Files
Hospital or Health System Ownership of Physician Practices Grew by 86% Between 2012 to 2015

• The number of physician practices employed by hospitals increased by 31,000 practices (+86%) between 2012 and 2015

• From July 2014 to July 2015 alone, the number of hospital owned practices grew by approximately 18,000, which is a 37% increase

Source: Avalere analysis of SK&A hospital/health system ownership of physician practice locations data with Medicare 5% Standard Analytic Files
Hospital Employment of Cardiologists, Orthopedists, and Gastroenterologists Grew 7-9% per Year from 2012 to 2015

Source: Avalere analysis of SK&A hospital/health system ownership of physician practice locations data with Medicare 5% Standard Analytic Files
There Are Several Factors Driving the Recent Physician Employment Trend

- **Financial Incentives**: Higher reimbursement for services performed under a hospital payment system, capital needed for IT infrastructure, etc.

- **Administrative Burden**: Growing administrative burden for documentation, IT system integration, data capabilities to support contracting

- **Physician Preference**: Some younger physicians prefer to focus on medicine instead of running a business as a private practice

- **Coordination**: The shift from volume to value encourages tighter integration of hospitals and physicians to manage populations across episodes of care

- **340B Program**: Medicines prescribed by the physicians in the acquired practice may become eligible for the 340B discount following the acquisition*

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*340B is a federal program that mandates manufacturers to provide certain providers with discounts on outpatient drugs as a condition of participating in Medicaid*
Medicare Payments for Services Are Higher for Outpatient Settings than Physician Offices

Physician Office

- An independent physician bills Medicare for healthcare services at the “non-facility rate”

HOPD Setting

- In a HOPD/ASC setting, a physician bills for these services at the “facility rate” which is typically lower than the non-facility rate
- In a HOPD/ASC setting, the physician also bills for facility costs which makes the total billing higher

For example, the colonoscopy listed below would cost Medicare 164% percent more if provided in a HOPD/ASC setting than in an independent physician’s office.

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Medicare Payment in a Physician Office</th>
<th>Medicare Payment in a HOPD</th>
<th>Difference Between HOPD and Office Payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>45380 - Colonoscopy, flexible; with biopsy, single or multiple</td>
<td>$413</td>
<td>$1090</td>
<td>+$677</td>
</tr>
</tbody>
</table>

ASC = Ambulatory surgery centers
HOPD= Hospital Outpatient Department
* Does not include services of physicians and other professionals not employed by the hospital who may bill separately.
** Physician service will encompass supplies as part of the practice expense.

Sources: CY 2017 Medicare Physician Fee Schedule Final Rule Addendum B,
CY 2017 Outpatient Prospective Payment System and Ambulatory Surgical Center Final Rule Addendum B
Most Medicare Beneficiaries Have Supplemental Coverage to Reduce Out-of-Pocket Costs

• In fee for service (FFS) Medicare, beneficiaries pay a portion of the cost for healthcare services performed in a physician setting (Medicare Part B), and a portion of the cost for services performed in a hospital setting (Medicare Part A).

• 83% of Medicare FFS beneficiaries have supplemental insurance that help cover out-of-pocket expenses not covered by Medicare.

• 20% have Medicaid, which covers the cost sharing requirements for low income individuals.

• 19% have MediGap.

• 17% have no supplemental insurance.

Source: Kaiser Family Foundation analysis of the Current Medicare Beneficiary Survey Cost and Use File, 2010
Study Findings
Employed Physicians Perform a Greater Portion of Services in HOPD Settings than Independent Physicians

Average % of Procedures Performed in a Hospital Outpatient Department 2012-2015

- Colonoscopy (Gastroenterology): 95% Independent, 98% Employed
- Arthrocentesis (Orthopedic Surgery): 3% Independent, 21% Employed
- Echocardiogram (Cardiology): 24% Independent, 70% Employed
- Diag Card Cath (Cardiology): 92% Independent, 99% Employed

Source: Avalere analysis of SK&A hospital/health system ownership of physician practice locations data with Medicare 5% Standard Analytic Files
Medicare Spent $2.7 Billion More for These Services Provided by Employed Physicians’ from 2012 to 2015

### Increased Cost to Medicare for Employed Physicians

- **Diag Card Cath (Cardiology)**: $369,300,000, +13%
- **Echocardiogram (Cardiology)**: $2,083,500,000, +27%
- **Arthrocentesis (Orthopedic Surgery)**: $25,600,000, +4%
- **Colonoscopy (Gastroenterology)**: $233,200,000, +14%

### Total Medicare Spend

- **$0**
- **$500,000,000**
- **$1,000,000,000**
- **$1,500,000,000**
- **$2,000,000,000**
- **$2,500,000,000**

Source: Avalere analysis of SK&A hospital/health system ownership of physician practice locations data with Medicare 5% Standard Analytic Files

Note: Study adjusts for geographic practice pattern differences when comparing employed vs. independent physicians
Medicare Paid up to 27% per Episode for Procedures Performed by Employed Versus Independent Physicians

Average Increase in Medicare Spending Per Episode

- Diag Card Cath (Cardiology): $994
- Echocardiogram (Cardiology): $667
- Arthrocentesis (Orthopedic Surgery): $33
- Colonoscopy (Gastroenterology): $263

Source: Avalere analysis of SK&A hospital/health system ownership of physician practice locations data with Medicare 5% Standard Analytic Files
Note: Study adjusts for geographic practice pattern differences when comparing employed vs. independent physicians
Beneficiary Financial Responsibility Was $411M Higher for Services Studied due to Hospital Employment of Physicians

Source: Avalere analysis of SK&A hospital/health system ownership of physician practice locations data with Medicare 5% Standard Analytic Files

*Beneficiary responsibility is estimated based on standard Medicare cost sharing requirements. This does not account for supplemental insurance which may cover a portion of a beneficiary’s financial responsibility.

Note: Study adjusts for geographic practice pattern differences when comparing employed vs. independent physicians
Beneficiaries Were Responsible for up to 21% More per Episode for Services Performed by an Employed Physicians

Average Medicare Beneficiary Share per Episode 2012-2015

Source: Avalere analysis of SK&A hospital/health system ownership of physician practice locations data with Medicare 5% Standard Analytic Files

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Note: Study adjusts for geographic practice pattern differences when comparing employed vs. independent physicians
Conclusions
Physician Employment Status Is Directly Linked to Medicare Payment Amounts and Beneficiary Financial Responsibility

• When physicians are employed by hospitals or health systems they perform more services in a HOPD setting than independent physicians
  
  o This could occur for a variety of reasons, including enhanced care coordination, reimbursement incentives, network access and specific HOPD assets

• The higher proportion of services performed in a HOPD setting increases costs to the Medicare program and patients

• The trend of increased physician employment points to continued cost implications to Medicare and patients in the future
Patients May Not Benefit from Greater Rates of Hospital-Employed Physicians

**Prices rise**
Research suggests that physician-hospital integration may increase the price of healthcare\(^1\)

**Options are limited**
A hospital's ownership of an admitting physician’s practice dramatically increases the probability that the physician's patients will choose the owning hospital\(^2\)

**No evidence of quality improvement**
Research on physician-hospital consolidation has not demonstrated an impact on quality of care.\(^3,4\)

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3. http://www.rwjf.org/content/dam/farm/reports/issue_briefs/2012/rwjf73261
Medicare Spent $2.7B More for These Services Provided by Employed Physicians’ from 2012 to 2015

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Total Medicare Beneficiary Responsibility 2012-2015 (Millions)

- Diag Card Cath (Cardiology): $624 (Employed), $583 (Estimated Independent), +7%
- Echocardiogram (Cardiology): $1,800 (Employed), $1,490 (Estimated Independent), +21%
- Arthrocentesis (Orthopedic Surgery): $161 (Employed), $152 (Estimated Independent), +6%
- Colonoscopy (Gastroenterology): $462 (Employed), $411 (Estimated Independent), +12%

Source: Avalere analysis of SK&A hospital/health system ownership of physician practice locations data with Medicare 5% Standard Analytic Files
*Beneficiary responsibility is estimated based on standard Medicare cost sharing requirements. This does not account for supplemental insurance which may cover a portion of a beneficiary's financial responsibility.
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Beneficiaries Were Responsible for up to 21% More per Episode for Services Performed by an Employed Physicians

Average Medicare Beneficiary Share per Episode 2012-2015

<table>
<thead>
<tr>
<th>Service</th>
<th>Employed</th>
<th>Estimated Independent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diag Card Cath (Cardiology)</td>
<td>$1,679</td>
<td>$1,569</td>
</tr>
<tr>
<td>Echocardiogram (Cardiology)</td>
<td>$576</td>
<td>$477</td>
</tr>
<tr>
<td>Arthrocentesis (Orthopedic Surgery)</td>
<td>$206</td>
<td>$194</td>
</tr>
<tr>
<td>Colonoscopy (Gastroenterology)</td>
<td>$521</td>
<td>$464</td>
</tr>
</tbody>
</table>

Source: Avalere analysis of SK&A hospital/health system ownership of physician practice locations data with Medicare 5% Standard Analytic Files

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Note: Study adjusts for geographic practice pattern differences when comparing employed vs. independent physicians.
Study Methodology
Trends in Hospital Ownership of Physician Practices with Medicare-Billing Physicians

- Avalere licensed an extract of the SK&A database, an IMS Health product, that contains physician-practice location information on hospital/health system ownership: whether a particular practice location is “employed”—part of a hospital or health system-owned practice—or “independent”
  - Each unique physician-practice location is associated with an NPI, a unique person-specific ID, and a unique practice location ID
  - This analysis is based on seven equally-spaced “snapshots” of ownership for each physician-practice location combination, and associated NPIs, from July 2012 to July 2015, yielding six 6-month intervals over which Avalere could detect ownership changes
    - SK&A data for January 2012 were discarded because practices managed by a physician management group were reported as “hospital-owned”

- Avalere identified physicians as belonging to three distinct groups based on ownership of their practices from July 2012 through July 2015:
  - “Always independent:” never belonging to a hospital-owned practice during this period
  - “Always employed:” always belonging to one or more hospital-owned practices
  - “Changed employment:” having at least one six-month period with ownership status different from other periods
  - Avalere assigned physicians to these groups for the six months following the reporting time point

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Assigning Physician Specialties, Episodes, and Episode Payments

- Avalere assigned physicians to one or more specialties based on the specialty code(s) provided on their claims to Medicare
  - Physicians with multiple specialties in a particular year were assigned to each specialty using allowed charges in those specialties on a pro rata basis
- Episodes for all selected services are defined as the seven days prior to, the day of, and the 14 days after the index service event
  - A 22-day period was used for all service types
  - Service events (and the 22-day window around them) were excluded if another event of the same service type (e.g., two echocardiograms) would have overlapping episode windows
  - So that ownership information was known for the entirety of an episode, the earliest index service date was July 8, 2012, and the latest index service date was December 15, 2015
- Episode spending was separated based on amounts reported on Medicare claims for all institutional, professional, and durable medical equipment providers
  - Medicare program payments: amount paid by the Medicare program to providers
  - Beneficiary responsibility: amount for which the patient is responsible, regardless of whether paid by Medicaid, MediGap (supplemental), or out-of-pocket
  - Amounts for claims for periods (e.g., inpatient stays) not completely within the 22-day window were pro rated according to the proportion of the period within the 22-day episode window

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Data Sources and Counterfactual Estimates of Episode Payments for Always-Employed Physicians

• To estimate an “employment effect” on payments for always-employed physicians, Avalere compared actual payments (Medicare program payments and beneficiary responsibility) to an estimate of what those payments would have been had they been independent.
  
  o The estimated counterfactual payments were based on service-specific statistical models adjusting for time trends and geographic location of the physician, using only data from always-independent physicians.
  
  o Avalere then applied the estimated models to the always-employed physicians to estimate what the payments for their episodes would have been had they instead been independent.
  
  o This method has the benefit of avoiding direct comparisons of the employed and independent physicians, which allows for direct estimation of the total increase in payments for the patients the employed physicians actually treated.

• Data Sources
  
  o Medicare 5% Sample Limited Data Set (LDS) Standard Analytic Files (SAFs), including all covered Part A and Part B services from July 1, 2012 through December 31, 2015.
  
  o SK&A database extract of physician practice ownership information, seven time points from July 2012 through July 2015.

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