Mandated report: Relationship between clinician services and other Medicare services

Dan Zabinski and Shinobu Suzuki
March 4, 2021
Mandated reports on relationship between clinician and total Parts A, B, and D services

- Required under Section 101(a)(3) of MACRA
- Clinician services: Services provided by physicians and other health professionals
- Published initial report June 2017
- Final report due July 1, 2021

Note: MACRA (Medicare Access and CHIP Reauthorization Act of 2015).
Overview

- Analysis has two broad parts
  - Relationship between clinician services and nonclinician Part A and Part B services
  - Relationship between clinician services and Part D drugs
- Correlation is a key concept
  - Positive correlation: Clinician services and nonclinician Part A, B, and D services are complements
  - Negative correlation: Clinician services and nonclinician Part A, B, and D services are substitutes
Program spending and service use are different measures

- Program spending: Monetary outlays by Medicare
  - Differences in prices, demographics, and health status can cause spending to differ between regions or years

- Service use: Reflects volume and service intensity
  - Based on spending
  - Remove effects of differences in prices, demographics, and health status
Unit of analysis

- Limited analysis to FFS beneficiaries
  - Excluded MA enrollees
  - MACRA directs us to evaluate Parts A, B, and D; not Part C
- Evaluated how relationship between clinician and nonclinician services changed over time at the national level
- Evaluated relationship between clinician and nonclinician services at a point in time at the level of ‘MedPAC units’
- 484 MedPAC units, based on MSAs
Share of program spending on clinician services fluctuated, 2009-2019

- Service use more meaningful than unadjusted spending
  - Spending affected by prices, demographics, and health status
  - During 2009-2019, updates to clinician payment rates smaller than updates in other FFS payment systems

Source: Reports from the Medicare Trustees, 2019 and 2020.

Data are preliminary and subject to change.
Use of clinician services as a percent of all Part A and Part B services

- Estimated service use in FFS Medicare in 2013 and 2018
- Use of clinician services as a share of all Part A and Part B services decreased slightly
  - 24.3% in 2013
  - 23.8% in 2018

Source: Master Beneficiary Summary files and Medicare Provider and Review files, 2013 and 2018

Data are preliminary and subject to change
Change in use of clinician services and nonclinician Part A and Part B services

- For geographic units, evaluated correlation between
  - Percent change over 2013-2018 in use of clinician services and
  - Percent change over 2013-2018 in use of nonclinician Part A and Part B services

- Result: Correlation is nearly nonexistent
  - Coefficient on percent change in clinician services was 0.001
  - R-squared from regression was .01

Source: Master Beneficiary Summary files and Medicare Provider and Review files, 2013 and 2018

Data are preliminary and subject to change
Change in use of clinician services vs. use of nonclinician services

![Graph showing the change in use of clinician services vs. nonclinician services between 2013 and 2018. The graph displays data points indicating the percent change for both clinician and nonclinician services.]

Percent change, nonclinician services, 2013-2018

Percent change, clinician services, 2013-2018

Source: Master Beneficiary Summary files and Medicare Provider and Review files, 2013 and 2018

Data are preliminary and subject to change
Compare use of clinician services to use of nonclinician Part A and Part B services, 2018

- For geographic units, evaluated correlation between
  - Per capita use of clinician services in 2018 and
  - Per capita use of nonclinician Part A and Part B services in 2018

- Slight negative correlation
  - Coefficient on use of clinician services was -0.15 (p=.07)
  - R-squared from regression was .01
  - Low R-squared indicates little of variation in use of nonclinician services explained by differences in use of clinician services

Data are preliminary and subject to change
Use of clinician services vs. use of nonclinician services, 2018

Per capita use, clinician services vs. per capita use, nonclinician services.

Data are preliminary and subject to change.

Source: Master Beneficiary Summary file and Medicare Provider and Review file, 2018
Clinician services and Part D drugs: Data and methods

- Study limited to a subset of FFS beneficiaries enrolled in Part D
- Drug use is gross spending adjusted for differences in:
  - Demographic characteristics
  - Health status (prescription drug hierarchical condition categories)
- Analysis of correlation between clinician service use and Part D drug use across geographic units

Note: FFS (fee-for-service).
Source: Gross drug spending includes payments for ingredient costs, dispensing fees, and sales taxes, before accounting for postsale rebates and discounts.
Clinician services and Part D drugs: 2013 vs. 2018 study population

- Changes in Part D enrollment patterns
  - More FFS beneficiaries covered under Part D
  - Smaller share in stand-alone drug plans

- Somewhat different demographics in 2018 compared with 2013
  - 18% are under 65 disabled (vs. 22% in 2013)
  - 31% receive the low-income subsidy (vs. 38% in 2013)

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFS beneficiaries in stand-alone drug plans, millions</td>
<td>24.2</td>
<td>27.2</td>
</tr>
<tr>
<td>% of FFS beneficiaries</td>
<td>61%</td>
<td>67%</td>
</tr>
<tr>
<td>% of all Part D enrollees (remainder in MA-PD plans)</td>
<td>64%</td>
<td>58%</td>
</tr>
</tbody>
</table>
Clinician services and Part D drugs: Per capita spending growth diverged after 2013

<table>
<thead>
<tr>
<th></th>
<th>Per capita spending</th>
<th>Cumulative growth</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2008</td>
<td>2008-2013</td>
</tr>
<tr>
<td>Clinician services*</td>
<td>$1,836</td>
<td>12%</td>
</tr>
<tr>
<td>Part D drugs**</td>
<td>$2,805</td>
<td>10%</td>
</tr>
</tbody>
</table>

Growth in Part D spending

- 2008-2013: mostly due to increase in the number of prescriptions filled
- 2013-2018: mostly due to higher prices

* Average physician fee schedule payments for all FFS beneficiaries.
** Average gross drug spending for FFS beneficiaries enrolled in PDPs.

Data are preliminary and subject to change

Note: FFS (fee-for-service), PDP (prescription drug plan).
Source: MedPAC based on Table IV.B2 of the annual report of the Boards of Trustees of the Medicare trust funds for 2016 and the annual report of the Boards of Trustees of the Medicare trust funds for 2020, and Part D prescription drug event data and denominator files from CMS. Gross drug spending includes payments for ingredient costs, dispensing fees, and sales taxes, before accounting for postsale rebates and discounts.
Positive relationship between clinician services and Part D drug use

- Prescription drug use varied less than clinician service use
- Weak positive correlation between changes in clinician service use and prescription drug use between 2013 and 2018
  - Coefficient of 0.36 ($R$-squared = 0.08)
- Modest positive correlation between levels of clinician service use and prescription drug use
  - 2013: coefficient of 0.3 ($R$-squared = 0.24)
  - 2018: coefficient of 0.35 ($R$-squared = 0.22)

Data are preliminary and subject to change

Source: MedPAC analysis of Medicare Master Beneficiary Summary Files, the Medicare Provider and Review files, Part D prescription drug event data, and denominator files from CMS.
Key takeaways

- Findings suggest clinician services are:
  - Neither clear complements to nor substitutes for other Parts A and B services
  - Modest complements to Part D drugs

- Caveats:
  - Correlation (or no correlation) between service use does not prove or disprove causality
  - Findings are aggregate results and may not represent any individual circumstances or specific geographic areas
Next steps

▪ Questions or comments?

▪ Final report due no later than July 1, 2021
▪ We plan to include this material in the June 2021 Report to the Congress