Avalere

TO: **Third Way**

FROM: **Avalere Health**

DATE: **January 29, 2015**

RE: **Estimated Federal Impact of Proposed Policies Changes to Expand Medicare Reimbursement of Telehealth and Remote Patient Monitoring**

SUMMARY

Third Way asked Avalere Health to estimate the cost or savings to the federal government of three policy changes to expand Medicare reimbursement of telehealth and remote patient monitoring (RPM). Under Policy 1, Medicare would cover telehealth and RPM under a waiver from September 2016 until December 2018 for providers eligible for the Merit-Based Incentive Payment System (MIPS). Under Policy 2, Medicare would cover telehealth and RPM for providers who participate in Alternative Payment Models (APMs). The coverage will begin six months from the enactment of the legislation. Under Policy 3, Medicare would cover RPM for patients with chronic conditions meeting specified criteria for all fee-for-service (FFS) physicians and practitioners. The coverage will begin six months from the enactment of the legislation.

Avalere estimates that Policy 1 would increase federal spending by $1.1 billion, Policy 2 would decrease federal spending by $2.2 billion, and Policy 3 would decrease federal spending by $3.0 billion over the FY2017 – FY2026 federal budget window. Cumulatively, the three policies would decrease federal spending by $1.8 billion, given the overlapping nature of the proposals. Our estimates reflect the new cost to the Medicare program associated with reimbursing for telehealth and RPM services as well as savings due to the reduced Medicare spending for beneficiaries receiving RPM.

Estimated Change in Federal Spending due to the Three Proposed Telehealth Policies

	Outlays, by Fiscal Year, in Billions of Dollars											
	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2017-2021	2017-2026
Total change in federal spending												
Policy 1	0.5	0.5	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	1.1
Policy 2	*	*	*	(0.1)	(0.1)	(0.2)	(0.3)	(0.4)	(0.5)	(0.6)	(0.2)	(2.2)
Policy 3	*	*	*	(0.1)	(0.2)	(0.3)	(0.4)	(0.5)	(0.7)	(0.8)	(0.3)	(3.0)
All 3 Policies	0.5	0.5	0.1	(0.1)	(0.2)	(0.3)	(0.4)	(0.5)	(0.7)	(0.8)	0.8	(1.8)

* represents less than $50 million

Note: Numbers may not add due to rounding.

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BACKGROUND

For years Medicare fee-for-service (FFS) has been paying for telehealth services provided to patients in rural areas that occur in a provider location, not at the patient's home.[1] The proposed policy changes would expand Medicare reimbursement of telehealth with fewer restrictions from the current geographic and service location requirements and provide Medicare reimbursement for currently not covered remote patient monitoring (RPM) under specified criteria.

Under Policy 1, Medicare would cover telehealth and RPM under a demonstration waiver program from September 2016 until December 2018 for the following providers: physicians, physician assistants (PA), nurse practitioners (NP), clinical nurse specialists (CNS), and certified registered nurse anesthetists (CRNA). These are the provider types who, starting in January 2019, will be eligible for the Merit-Based Incentive Payment System (MIPS) established by the Medicare Access and CHIP Reauthorization Act of 2015 (MACRA).[2] The MIPS is a new quality program that will replace the current Physician Quality Reporting System (PQRS), the Value Modifier (VM or Value-based Payment Modifier), and the Medicare Electronic Health Record (EHR) incentive program. Under the policy, providers participating in the waiver program will be required to submit to the Secretary a proposal outlining in detail how telehealth and RPM will be used to manage the patients' care in line with goals of the MIPS as well as submit annual data during the course of the demonstration on utilization and expenditures for telehealth and RPM. This is to ensure that telehealth services will be largely replacing the in-office services and that Medicare spending does not increase disproportionately.

Under Policy 2, Medicare would cover telehealth and RPM for providers who participate in Alternative Payment Models (APMs) (i.e., do not participate in the MIPS). Examples of APMs include Accountable Care Organizations (ACOs), Patient Centered Medical Homes (PCMHs), and bundled payment models. Under the policy, no additional Medicare payments will be made for telehealth services for providers in APMs (assumed budget neutrality); only RPM services will have a net additional reimbursement. The coverage will begin six months from the enactment of the legislation.

Under Policy 3, Medicare would cover RPM for all FFS physicians and practitioners, regardless if they participate in the quality and value improvement programs or not. The coverage will begin six months from the enactment of the legislation.

Under all three policies, RPM is defined as services provided to beneficiaries with chronic conditions specified using criteria that the Centers for Medicare & Medicaid Services (CMS)' Office of the Actuary determines will produce no net increase in Medicare expenditures resulting from the proposals. In addition, under the proposed policies telehealth and RPM services would be covered by Medicare regardless of the patient's geographical (rural vs. urban) or physical (provider location or patient's home) location.

[1] http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/TelehealthSrvcsfctsht.pdf
[2] https://www.congress.gov/114/plaws/publ10/PLAW-114publ10.pdf

DATA SOURCES

We used the following data sources to develop our estimates:

- CMS' Medicare 5 percent Physician and Hospital Outpatient Standard Analytical Files (SAFs), 2011-2013[3]
- Telehealth Services, CMS' Medicare Learning Network Fact Sheet, December 2014[4]
- Projected Medicare Physician Fee Schedule payment updates under the MACRA[5]
- Projected Consumer Price Index for Urban Consumers (CPI-U), Congressional Budget Office (CBO) March 2015 Baseline: Medicare[6]
- Medicare population growth, CMS' Office of the Actuary Part A June 2015 Baseline[7]
- Medicare population with chronic conditions and their spending, CMS data[8]
- Estimates of Medicare FFS payments tied to value: MIPS and APM, CMS press release[9]
- Case Managers Remotely Monitor Chronically Ill Medicare Beneficiaries Each Day, Reducing Mortality and Costs. *Agency for Healthcare Research and Quality Health Care* Innovations Exchange. Last Updated: 04/09/14[10]
- Uscher-Pines L, Mehrotra A., Analysis of Teladoc use seems to indicate expanded access to care for patients without prior connection to a provider, Health Aff (Millwood). 2014;33(2):258–264[11]
- 2015 Telemedicine Study. HIMSS Analytics. September 2015[12]
- Home Healthcare Market Analysis by Product, By Service, and Segment Forecast to 2020." Grand View Research. September 2014[13]

ASSUMPTIONS AND METHODOLOGY

- **Number of telehealth users:** We estimated the number of beneficiaries who will be eligible for telehealth using CMS' anticipated share of Medicare FFS payments that will be tied to value.[14] For instance, CMS anticipates 85 percent of FFS payments tied to value by 2017, of which 30 percent would flow through APMs and remaining 55 percent through the MIPS. This results in the assumption of approximately 21 million FFS beneficiaries eligible for telehealth under Policy 1 and 7.7 million eligible under Policy 2.

  We then assumed that by 2017, 38 percent of Medicare beneficiaries eligible for telehealth due to Policy 1 and 55 percent of Medicare beneficiaries eligible due to Policy 2 will be utilizing telehealth. Those assumptions reflect the reported share of physicians and hospitals using telemedicine in 2015 and a historical annual growth of approximately 6 percent.[15] The resulting estimate of telehealth users is nearly 8.2 million people under Policy 1 and 6.5 million people under Policy 2 in 2017.

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[3] http://www.cms.gov/Research-Statistics-Data-and-Systems/Files-for-Order/IdentifiableDataFiles/StandardAnalyticalFiles.html
[4] http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/TelehealthSrvcsfctsht.pdf
[5] https://www.congress.gov/114/plaws/publ10/PLAW-114publ10.pdf
[6] https://www.cbo.gov/sites/default/files/cbofiles/attachments/44205-2015-03-Medicare.pdf
[7] Files received by Avalere from the CMS' Office of the Actuary.
[8] https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/CC_Main.html
[9] http://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2015-Fact-sheets-items/2015-01-26-3.html
[10] https://innovations.ahrq.gov/profiles/case-managers-remotely-monitor-chronically-ill-medicare-beneficiaries-each-day-reducing
[11] http://content.healthaffairs.org/content/33/2/258.full
[12] http://www.himssanalytics.org/research/essentials-brief-telemedicine-study
[13] http://www.grandviewresearch.com/industry-analysis/home-healthcare-industry
[14] http://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2015-Fact-sheets-items/2015-01-26-3.html
[15] http://www.himssanalytics.org/research/essentials-brief-telemedicine-study

We also accounted for an assumed woodwork effect associated with the proposed polices which would increase in the number of telehealth users among the currently eligible beneficiaries. Using the Medicare 5 percent Standard Analytical Files (SAFs), we identified over 50,000 (0.13 percent) Medicare beneficiaries who received telehealth services in 2013.[16] We assumed the woodwork effect would increase telehealth use by 15 percent in the first year and declining over time based on the Medicaid coverage expansion experience.[17] Due to the woodwork effect, we estimated additional 9,000 beneficiaries under Policy 1 will be telehealth users by 2017. We used before mentioned telemedicine annual growth rate of 6 percent to increase the number of all beneficiaries utilizing telehealth between 2017 and 2026.[18]

Finally, we used Medicare population historical growth and projections from the CMS' Office of the Actuary to estimate total Medicare fee-for-service population growth between 2013 and 2026.

- **Telehealth utilization:** Using the 5 percent Medicare SAFs, we determined that Medicare beneficiaries who received any telehealth services had an average of three services per person in 2013. We used 8 percent annual, historical growth of in the number of telehealth services per beneficiary to estimate utilization changes between 2013 and 2026. We also assumed that the amount of telehealth services per beneficiary due to the removal of the geographical restriction and "at-home" allowance proposed by the policies will increase by 25 percent. Therefore, we estimate the all Medicare beneficiaries who receive telehealth will receive an estimated nine services per beneficiary per year in 2017.

- **Medicare payment for telehealth:** Using the 5 percent Medicare SAFs, we identified the Medicare payment per telehealth service was on average $49 in 2013. We assumed historical payment rates for telehealth will continue under the expanded telehealth coverage proposed in Policy 1 and Policy 2. We estimated the resulting Medicare payment per telehealth service to be $51 in 2017. We increased Medicare payments per telehealth service using CPI-U rate to reflect growth in unit price for physician services for 2014 and the currently scheduled physician payment updates under the sustainable growth rate (SGR) repeal in the MACRA for 2015-2026.

  Under Policy 1, providers will have to submit information on their utilization of telehealth and be subject to audits so that CMS' Office of the Actuary can certify the demonstration waiver program does not increase net Medicare expenditures by having telehealth services replace a portion of existing in-office services. We therefore computed a cost offset associated with the estimated number of telehealth services provided to Medicare beneficiaries. We assumed 75 percent of all telehealth utilization will replace existing in-office services; while 25 percent will be entirely new utilization adding cost to Medicare. Our assumption is based on a study that found 21 percent of telemedicine visits were for patients who had not used other services (i.e., telemedicine was their only healthcare utilization).[19] The provisions of Policy 2 are budget-neutral

[16] We used a subset of HCPCS codes and modifier "GT" ("via interactive audio and video telecommunications systems") to identify beneficiaries and their claims receiving professional services furbished via telehealth. http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/TelehealthSrvcsfctsht.pdf

[17] Avalere analysis of Medicaid enrollment in all states pre- and post- 2014 expansion found ""woodwork effect" among people who were previously eligible for Medicaid coverage under existing Medicaid rules but didn't sign up.

[18] http://www.himssanalytics.org/research/essentials-brief-telemedicine-study

[19] http://content.healthaffairs.org/content/33/2/258.full

and would not result in any additional Medicare payments to APM providers for telehealth services.

- **Number of RPM users:** To illustrate the type of chronic conditions and population that will qualify under the RPM definition proposed in the three policies, we used heart failure (HF) and chronic obstructive pulmonary disease (COPD). We estimate 15 percent of the Medicare FFS beneficiaries have HF and COPD.[20] We assumed that 15 percent of the Medicare population newly eligible for telehealth under the proposed polices will receive RPM. We applied the same 15 percent share to the current and woodwork telehealth users. Overall, our methodology yields an estimated 1.2 million RPM users in 2017 under Policy 1, ~960,000 under Policy 2, and nearly 2.2 million users under Policy 3.

- **RPM utilization:** We assumed a qualifying beneficiary will receive RPM services over a course of three months each year. The services will include care management services similar to those received by beneficiaries upon discharge from the inpatient hospital or beneficiaries with chronic diseases.

- **Medicare payments for RPM:** We estimate the average Medicare payment for RPM services will be $255 per beneficiary in 2017. This reflects the transitional care management services (HCPCS code "99495" for moderate complexity service) at non-facility rate $166.47 for the first month and the next two months of chronic care management (HCPCS code "99490") at non-facility rate $43.12 based on the 2015 Medicare physician fee schedule. We increased Medicare payments for RPM using physician payment updates under the SGR repeal in MACRA between 2015 and 2026.

- **Reduction in Medicare spending through reduced utilization/spending of other services due to RPM:** Most studies with findings of reduced utilization/savings due to RPM pertain to patients with chronic conditions. We therefore computed savings for the estimated Medicare population with HF or COPD who will be users of RPM. One study suggests a 10 percent annual reduction in spending for a patient receiving RPM.[21] To be conservative and to account for the fact that there has been an ongoing research around the impact of RPM, we applied a 10 percent "efficacy" factor to the savings estimates resulting in the final assumption of one percent reduction is spending.

- **Federal financing adjustments:** After estimating the overall Medicare FFS impact due to the coverage of telehealth and RPM under the three proposed policies, we calculated the federal share of spending by removing the impact of beneficiary copays and Part B premiums. We then estimated the impact this change in Medicare FFS spending would have on Medicare Advantage (MA) plans by calculating the effect on MA benchmarks and payments. We assumed that MA plans would continue to be paid at the same percentage of local FFS costs as they would have been paid under the current policy. We also accounted for the federal savings associated with state Medicaid payment of dual-eligible beneficiaries' Part B copays and premiums.

[20] https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/Chronic-Conditions/CC_Main.html
[21] https://innovations.ahrq.gov/profiles/case-managers-remotely-monitor-chronically-ill-medicare-beneficiaries-each-day-reducing