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Practices Caring For The Underserved Are Less Likely To Adopt Medicare's Annual Wellness Visit

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ABSTRACT In 2011 Medicare introduced the annual wellness visit to help address the health risks of aging adults. The visit also offers primary care practices an opportunity to generate revenue, and may allow practices in accountable care organizations to attract healthier patients while stabilizing patient-practitioner assignments. However, uptake of the visit has been uneven. Using national Medicare data for the period 2008–15, we assessed practices' ability and motivation to adopt the visit. In 2015, 51.2 percent of practices provided no annual wellness visits (nonadopters), while 23.1 percent provided visits to at least a quarter of their eligible beneficiaries (adopters). Adopters replaced problem-based visits with annual wellness visits and saw increases in primary care revenue. Compared to nonadopters, adopters had more stable patient assignment and a slightly healthier patient mix. At the same time, visit rates were lower among practices caring for underserved populations (for example, racial minorities and those dually enrolled in Medicaid), potentially worsening disparities. Policy makers should consider ways to encourage uptake of the visit or other mechanisms to promote preventive care in underserved populations and the practices that serve them.

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National policies to improve primary care often require practices to adopt new care delivery approaches that entail a substantial investment of time, money, or personnel. What enables and motivates practices to make such changes? To explore this question, we studied the adoption of a new type of visit in primary care. In 2011, through the Affordable Care Act (ACA), Medicare introduced the annual wellness visit—the first yearly checkup offered at no cost to fee-for-service Medicare beneficiaries.¹ The annual wellness visit was designed to promote evidence-based preventive care and address health risks in aging patients, with requirements such as screening for depression and fall risk that are beyond the scope of other preventive visits.

Use of the annual wellness visit among eligible beneficiaries grew modestly, from 7.5 percent in 2011 to 15.6 percent in 2014.² This slow uptake may be explained in part by the visit's complex and sometimes confusing requirements^{3,4} (see online appendix I).⁵ Practices have reported relying on new workflows, electronic health record (EHR) templates, and nonphysicians to facilitate annual wellness visits.^{3,4,6,7} Certain practices—for example, those with greater EHR capabilities or larger size—could be better equipped to adopt the visits through the use of such mechanisms. Practices caring for a larger fraction of disadvantaged or high-risk populations may offer fewer annual wellness visits because they have limited resources or their patients have more pressing needs.^{8–12} Meanwhile, practices with a greater focus on providing primary care or those with

more Medicare beneficiaries per doctor may have greater incentives to overcome the challenges of adoption.

Despite the complexities of adopting annual wellness visits, practices might be motivated by the potential benefits of adoption. First, it may increase revenue.^{3,6} Medicare pays more for such a visit than for the typical problem-based visit (appendix II)⁵ and allows clinicians to bill for an annual wellness visit concurrently with a problem-based visit—if, for example, a patient brings up an acute concern. Roughly 40 percent of annual wellness visits are co-billed.²

The annual wellness visit may present additional benefits that are particularly important to practices participating in alternative payment models such as accountable care organizations (ACOs)—groups of providers incentivized to provide high-quality care within a budget for a defined set of Medicare patients. In such models, and in pay-for-performance programs such as the Merit-based Incentive Payment System, primary care visits are used to assign patients to physicians or practices. The annual wellness visit is an additional primary care visit that may improve the stability of this beneficiary assignment^{6,13} so that practices get “credit” for any positive impact of their care. Annual wellness visits may improve stability through the visit itself as well as through downstream effects of engaging patients in their care, strengthening patient-clinician relationships, and establishing clinical plans that require subsequent encounters. Finally, because ACOs earn shared-savings bonuses if spending for their attributed patient populations is sufficiently below their risk-adjusted financial benchmarks, practices might use wellness-oriented visits to attract younger, healthier patients (particularly those whose risk scores underpredict spending) or, conversely, to record more diagnoses and thus increase their risk-adjusted benchmarks. The impact of the visits on the stability of beneficiary assignment and on practices’ patient mix has thus far not been assessed.

To better understand the factors underlying practices’ ability and motivation to adopt these new visits, we examined national claims for a random 20 percent sample of fee-for-service Medicare beneficiaries. We determined practice characteristics associated with use of the annual wellness visit in 2015. We then compared visit adopters with nonadopters in the period 2008–15, examining trends in visit rates and practice revenue and using difference-in-differences models to assess whether visit adoption was associated with greater stability of patient assignment or a younger and healthier patient mix.

Study Data And Methods

STUDY POPULATION We examined 2008–15 national Medicare claims data for a random 20 percent sample of beneficiaries enrolled in fee-for-service Medicare continuously or until death in each year. Consistent with Medicare’s regulations, beneficiaries were considered eligible for an annual wellness visit if they had twelve months of continuous prior enrollment (in the first year of enrollment, beneficiaries are instead eligible for a one-time Welcome to Medicare preventive visit).¹

Annual wellness visits were identified by Healthcare Common Procedure Coding System codes G0438 (initial annual wellness visit) and G0439 (subsequent annual wellness visit). Problem-based (evaluation and management) visits were identified using codes 99201–15 (appendix III).⁵

ASSIGNING BENEFICIARIES TO PRACTICES We identified practices using taxpayer identification numbers (TINs).^{13,14} We attributed each beneficiary to a practice based on the TIN that accounted for more of the person’s office visits with a primary care physician (defined by having a specialty in internal medicine, family medicine, general practice, or geriatrics) than any other TIN in a given year (appendix IV).⁵

MEASURES

► **PRACTICES’ USE OF ANNUAL WELLNESS VISITS:** For each practice to which at least one Medicare beneficiary was assigned, we measured the percentage of beneficiaries eligible for an annual wellness visit and attributed to the practice who received such a visit at that practice in a given year.

► **PRACTICE CHARACTERISTICS:** We identified setting (for example, metropolitan or rural), practice site (hospital-based versus independent), specialty mix (the percentage of a practice’s physicians in a primary care specialty), number of primary care physicians in the practice, and number of attributed Medicare beneficiaries per primary care physician. To capture the patient population cared for by a practice, we measured the race (percentage nonwhite),¹⁰ Medicaid and Medicare dual-enrollment status, and the medical risk (based on Hierarchical Condition Category risk score) of practices’ attributed beneficiaries in 2015. We also assessed practices’ participation in the Medicare Shared Savings Program or Pioneer ACO model through 2015 and, as a measure of EHR capability, the percentage of each practice’s clinicians who participated in Medicare’s EHR Incentive Program, which started in 2011 (appendix VI).⁵

► **POTENTIAL OUTCOMES OF ANNUAL WELLNESS VISIT ADOPTION:** As noted above, adoption of the annual wellness visit could affect practice

revenue, the stability of patient assignment, and patient mix. Therefore, we measured the mean number of primary care visits (annual wellness visits and problem-based visits by primary care physicians) received by attributed beneficiaries at their assigned practices in a given year. For this purpose, annual wellness visits concurrently billed as problem-based visits were counted as annual wellness visits alone (appendix VII).⁵ We used standardized reimbursement rates to calculate mean practice-level Medicare payments for primary care visits (appendix exhibit 7),⁵ this time using all allowable visit charges—including co-billed annual wellness visits and problem-based visits. We measured the stability of patient assignment by calculating the percentage of beneficiaries attributed to a given practice in any year of a three-year period who remained attributed in all three years. Finally, we measured the mean age and Hierarchical Condition Category risk score of Medicare beneficiaries attributed to each practice in a given year.

ANALYSES We began by estimating the variation in the rate of annual wellness visits across practices (appendix V).⁵ Next, we assessed practice characteristics associated with use of the visits in 2015 through a series of univariate analyses and then with a multivariable linear regression model that adjusted for all practice characteristics. The unit of analysis was the practice, and we weighted practices by their number of attributed beneficiaries (appendix VIB).⁵

We created a patient-level logistic regression model with practice fixed effects to determine whether certain patient characteristics were associated with lower odds of receiving an annual wellness visit within a given practice (appendix IVB).⁵ We then created a second patient-level logistic regression model that included both practice and patient characteristics as predictors of annual wellness visit receipt. This model allowed us to interpret the relationship between practicewide patient characteristics (such as percentage of dual enrollees) and use of annual wellness visits after controlling for individual patient characteristics (appendix VIC-D).⁵

TREND AND DIFFERENCE-IN-DIFFERENCES ANALYSES For these analyses, we included all practices that were both present in claims data and had at least ten Medicare beneficiaries throughout 2008–15. We categorized practices as nonadopters of the annual wellness visit (the control group) if 0 percent of eligible beneficiaries received such a visit in our data. Among the remaining practices, roughly half provided the visits to more than 25 percent of their eligible beneficiaries; we designated these practices as adopters of the visits (the intervention group).

For adopters and nonadopters, we estimated

annual primary care visit rates and practice-level primary care visit revenue, adjusting for patient age, sex, Hierarchical Condition Category risk score, and geographic location at the level of the hospital referral region.

We then conducted a series of difference-in-differences analyses to assess the impact of annual wellness visit adoption on the stability of patient assignment and patient mix (appendix VIII).⁵ The difference-in-differences approach adjusted for baseline differences between practices that did and those that did not adopt the visit and thus isolated changes attributable to adoption—under the assumption that differences would have remained constant over time in the absence of adoption. We defined 2008–10 as the pre period (before introduction of the annual wellness visits) and 2013–15 as the post period (after that introduction). For each outcome, we compared how it changed from before to after the visits' introduction between adopters and nonadopters. Differences were adjusted for patient characteristics (age, sex, Medicaid enrollment, and risk score) and for geographic location at the level of the hospital referral region. Because these outcomes are particularly relevant to ACOs, we repeated the analyses among practices with ACO status.

Reported *p* values were two-sided. We considered *p* < 0.05 to be significant. To perform the analyses, we used SAS, version 7.12.

LIMITATIONS Our work had several limitations. First, there is no publicly available database of US physician practices. Though we and others have used TINs to define practices,^{13,14} we acknowledge that they do not represent a consistent level of organization: Multiple practices within a larger health system may use a single TIN to bill their services, while in other practices, physicians may use individual TINs.

Second, using Medicare claims, we underestimated the number of annual wellness visits performed by nonphysicians since they are often billed under a physician's identifier. Third, we could not distinguish between part- and full-time physicians.

Fourth, we could not determine whether beneficiaries received a preventive visit through employer-based or supplemental insurance. Fifth, we did not evaluate annual wellness visits performed at federally qualified health centers, because these practices use separate billing codes under Medicare Part A that are not organized by TINs.

Sixth, though we adjusted our difference-in-differences analyses for geographic and patient characteristics, our results may be biased by unmeasured confounders or trends that differentially affected adopting and nonadopting prac-

tices. For example, adopting practices may have been more involved in payment reform efforts that started around the same time as annual wellness visits, such as Medicare's Comprehensive Primary Care initiative (though such initiatives often involve no more than several hundred practices). Therefore, we could not attribute a differential change in assignment stability or patient mix to the adoption of annual wellness visits alone.

Finally, we focused on practice-level predictors and drivers of annual wellness visit adoption, and did not assess the impact of these visits on the quality of care and patient outcomes. This will be an important focus for future work.

Study Results

In 2015, 18.8 percent of all eligible beneficiaries ($N = 6,186,679$) received an annual wellness visit. Among these recipients, only 2.8 percent had no other visits that year. When we limited our analyses to the 4,407,239 beneficiaries who could be assigned to a practice, we found that 24.8 percent received an annual wellness visit in 2015. Within this group, 90.6 percent received the visit at their assigned practice, and 79.7 percent received it from their attributed primary care provider.⁵

Among all annual wellness visits provided in 2015, 92.0 percent were done by physicians, and 89.2 percent by primary care physicians. Six percent were performed by a nurse practitioner, and 1.9 percent by a physician assistant. Nearly half (44.6 percent) of the visits were billed concurrently with a problem-based visit.

Among the 50,591 practices we examined in 2015, the mean practice rate of annual wellness visits was 17.4 percent (standard deviation: 26.1 percent). Variation in use of the visits across practices was similar when we estimated practice variation net of sampling error (SD: 25.1 percent) (see appendix V for details).⁵

In 2015, 51.2 percent (25,912) of the practices in our sample were nonadopters of the annual wellness visit, while 23.1 percent (11,699) were adopters. Adopting practices were clustered in urban areas and in the Northeast (see map in appendix exhibit 10).⁵

PRACTICE CHARACTERISTICS Several practice characteristics were associated with the use of annual wellness visits (exhibit 1 and appendix exhibit 3).⁵ We found lower rates of the visits among rural practices than those in other settings (for example, 8.1 percent versus 24.4 percent among metropolitan practices), those caring for patients with high medical risk (18.2 percent versus 23.0 percent), and those with higher rates of Medicaid enrollment

(17.0 percent versus 26.5).

While a greater number of primary care physicians in a practice was not associated with the rate of annual wellness visits (appendix VI),⁵ practices with more Medicare beneficiaries per primary care physician had higher rates than those with fewer beneficiaries per physician (26.8 percent versus 8.8 percent). Hospital-based practices were less likely than independent ones to provide annual wellness visits (9.8 percent versus 24.9 percent). Practices with smaller percentages of physicians in primary care were also less likely to provide annual wellness visits: 14.3 percent of practices with fewer than 25 percent of primary care physicians provided them, versus 23.7 percent of practices with at least 75 percent of such physicians.

Finally, practices with EHR capability were more likely to provide the visits than other practices (26.0 percent of practices with at least 50 percent participation in the Medicare EHR Incentive Program versus 15.0 percent of practices with lower participation). And those participating in an ACO had higher rates of annual wellness visits than other practices (30.3 percent versus 20.1 percent).

The associations between these practice characteristics and visit rates remained consistent and significant in our multivariable analysis.

Within practices, patients with dual enrollment (odds ratio: 0.64), nonwhite race (OR: 0.95), and higher medical risk (OR: 0.77) were less likely to receive an annual wellness visit, compared to other patients in the same practice (appendix exhibit 4).⁵ When these patient characteristics were controlled for, patients attributed to practices disproportionately serving nonwhite or dually enrolled beneficiaries still had lower odds of getting an annual wellness visit than patients at other practices (appendix exhibit 5).⁵

VISIT RATES, REVENUE, ASSIGNMENT STABILITY, AND PATIENT MIX We saw similar trends in numbers of primary care visits per attributed beneficiary over the study period among practices that adopted the annual wellness visit and those that did not (exhibit 2). The results were comparable when we counted co-billed annual wellness visits as two separate visits (data not shown). Beneficiaries attributed to adopting practices had fewer visits throughout the study period but had a slightly larger percentage of their primary care visits at their attributed practice than beneficiaries in nonadopting practices (appendix exhibit 6).⁵

On average, practices that adopted the annual wellness visit generated greater primary care revenue and had an increase in revenue over the study period, while nonadopters had a slight

EXHIBIT 1
Annual wellness visit use in 2015, by practice characteristics

Characteristic	Practices (N = 50,591)	Annual wellness visit rate (%)	Difference in annual wellness visit use in adjusted model ^a (%)
SETTING			
Metropolitan	40,682	24.4	Ref
Micropolitan	5,315	17.7	-4.2****
Small town	1,725	11.7	-7.9****
Rural	2,869	8.1	-9.5****
PRACTICE SITE			
Hospital-based	4,346	9.8	Ref
Independent	44,917	24.9	9.1****
SPECIALTY MIX (% OF PHYSICIANS IN PRIMARY CARE)			
0-<25	1,579	14.3	Ref
25-<50	2,405	21.5	2.1***
50-<75	3,532	21.9	2.7****
75-100	43,075	23.7	6.1****
MEDICARE BENEFICIARIES PER PRIMARY CARE PHYSICIAN			
0-<10	14,181	8.8	Ref
10-<100	34,827	22.9	7.5****
≥100	1,583	26.8	11.5****
RACE (% OF ATTRIBUTED PATIENTS WHO WERE NONWHITE)			
0-<10	24,728	24.2	Ref
10-<50	17,055	21.0	-3.1****
50-100	8,808	15.0	-2.8****
MEDICAID ENROLLMENT (% OF ATTRIBUTED PATIENTS)			
0-<15	24,763	26.5	Ref
15-100	25,828	17.0	-2.9****
MEDICAL RISK OF ATTRIBUTED PATIENTS^b			
High	12,991	18.2	-3.0****
Low	37,600	23.0	Ref
ACO PARTICIPATION			
No	42,878	20.1	Ref
Yes	7,713	30.3	7.8****
MEDICARE EHR INCENTIVE PROGRAM PARTICIPATION (% OF CLINICIANS)			
0-<50	27,244	15.0	Ref
50-100	23,347	26.0	6.4****

SOURCE Authors' analysis of 20 percent Medicare claims data. **NOTES** All results were weighted by the number of Medicare beneficiaries in the practice. ACO is accountable care organization. EHR is electronic health record. ^aWe built a multivariable linear regression in which the outcome was practice-level annual wellness visit rate and the predictors included all characteristics included in the exhibit as well as practice size (number of primary care physicians). We excluded 1,328 practices from the multivariable analysis because they did not meet our definition criteria for practice site. ^bWe defined a practice as high risk if the mean risk score of its attributed beneficiaries was greater than the seventy-fifth percentile among all fee-for-service beneficiaries, as previously described in Chen LM, Epstein AM, Orav EJ, Filice CE, Samson LW, Joynt Maddox KE. Association of practice-level social and medical risk with performance in the Medicare Physician Value-Based Payment Modifier Program. *JAMA*. 2017;318(5):453-61. ****p* < 0.01 *****p* < 0.001

decline (exhibit 3).

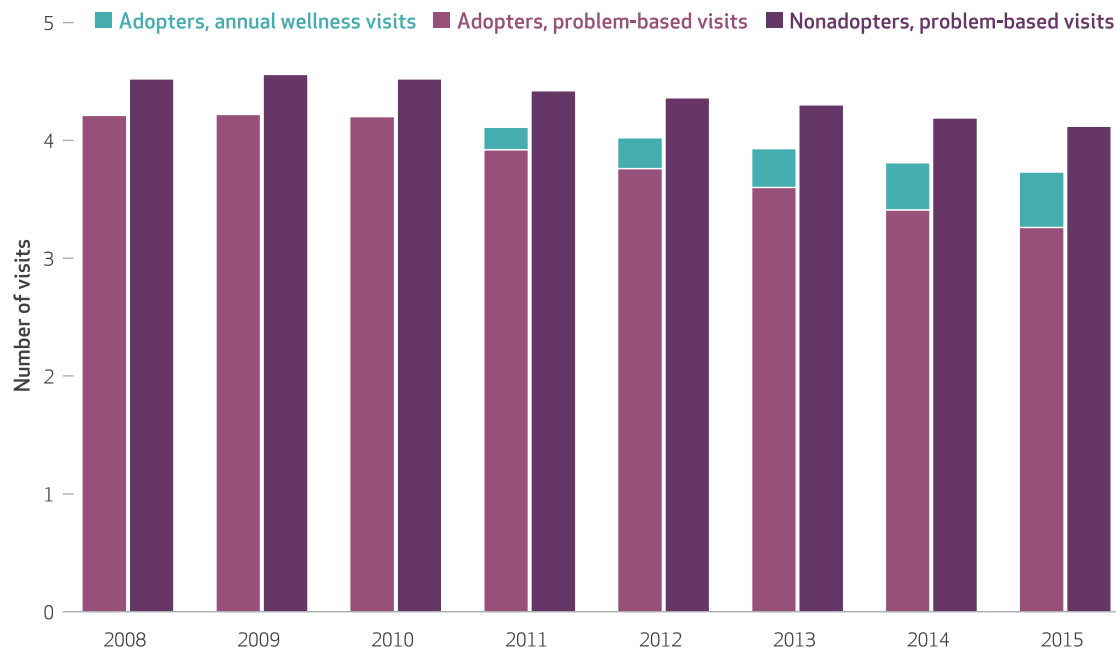
Adopters had greater stability of patient assignment at baseline than nonadopters did (68.6 percent versus 62.4 percent) and saw a slower decrease in stability (declines of 1.0 percent versus 4.8 percent) (exhibit 4). We observed similar trends when we limited the sample to practices participating in ACOs.

Finally, at baseline practices that adopted the annual wellness visit had slightly older (age 74.2 versus 72.6) yet lower-risk beneficiaries (risk

score 1.16 versus 1.23). In both sets of practices there was minimal change in mean beneficiary age (no change versus a decline of 0.1 year, respectively). Adopting practices had a slower rise in average risk compared to nonadopters (0.02 versus 0.04). We saw similar results when we limited the sample to practices that were in an ACO (exhibit 4) and when we used lagged risk scores to address the possibility that annual wellness visits could be used to generate higher Hierarchical Condition Category risk scores

EXHIBIT 2

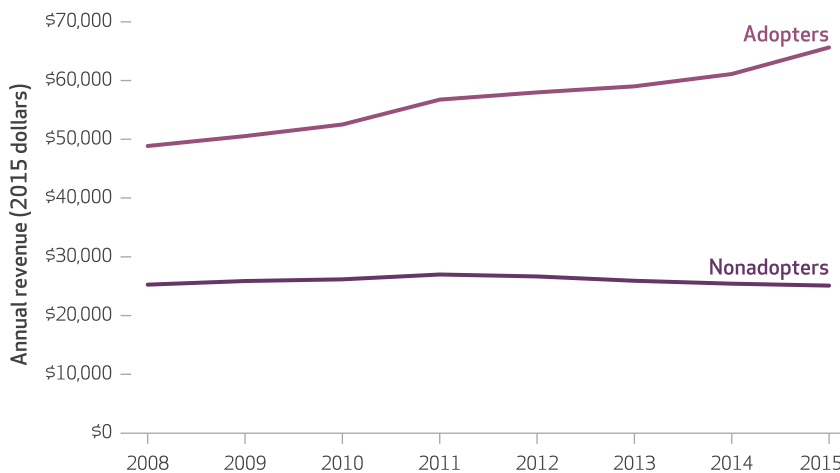
Average number of primary care visits per attributed beneficiary per year in practices that adopted the Medicare annual wellness visit and those that did not, by visit type, 2008–15



SOURCE Authors' analysis of 20 percent Medicare claims data. **NOTES** "Adopters" ($n = 8,121$) are practices that provided annual wellness visits to more than 25 percent of their eligible patients. "Nonadopters" ($n = 8,501$) are practices that provided the visits to 0 percent of their eligible patients. We calculated primary care visits received at each practice per attributed beneficiary each year, adjusting for beneficiary age, sex, Hierarchical Condition Category risk score, and hospital referral region. Annual wellness visits co-billed with a problem-based visit were counted as one visit since they represented a single encounter.

EXHIBIT 3

Average annual primary care revenue for practices that adopted the annual wellness visit and those that did not, 2008–15



SOURCE Authors' analysis of 20 percent Medicare claims data. **NOTES** Adopters and nonadopters are explained in the notes to exhibit 2, and sample sizes are given there. We used standardized Medicare payments based on the 2015 physician fee schedule to calculate average practice-level Medicare revenue for primary care visits, adjusting for beneficiary age, sex, Hierarchical Condition Category risk score, and hospital referral region.

through documentation of more medical problems (appendix exhibit 9).⁵

Discussion

Medicare introduced the annual wellness visit in 2011 to promote preventive care and mitigate health risks in aging adults. While it is not yet clear if the visits improve patient outcomes,^{15,16} these goals cannot be achieved unless practices are able and motivated to provide these visits in the first place. We found that as of 2015, use of the visits varied widely across practices: Half of practices did not provide any annual wellness visits, while 23.1 percent of practices provided them to at least a quarter of their eligible beneficiaries. Visit rates were lower in practices that cared for the historically underserved—namely, racial minorities, those with dual enrollment, and those living in more rural settings. Adopting practices appeared to replace what were previously problem-based visits with annual wellness visits, and these practices generated greater primary care revenue than nonadopting practices. Adoption of the annual wellness visit was associated with improved stability of patient assignment and

EXHIBIT 4

Adjusted difference-in-differences analysis of practice outcomes associated with adoption of the annual wellness visit

Practice outcome	AWV adopters (n = 8,121)		AWV nonadopters (n = 8,501)		Change in adopters	Change in nonadopters	Difference-in differences
	2008-10	2013-15	2008-10	2013-15			
STABILITY OF PATIENT ASSIGNMENT^a (%)							
All practices	68.6	67.6	62.4	57.6	-1.0	-4.8	3.8****
ACOs	68.7	67.8	62.0	55.6	-0.9	-6.4	5.5****
MEAN PATIENT AGE^b (YEARS)							
All practices	74.2	74.2	72.6	72.5	0.0	-0.1	0.1
ACOs	74.2	74.2	72.5	72.5	0.0	0.0	0.0
MEAN HIERARCHICAL CONDITION CATEGORY RISK SCORE^b							
All practices	1.16	1.18	1.23	1.27	0.02	0.04	-0.02****
ACOs	1.17	1.19	1.28	1.31	0.02	0.03	-0.01****

SOURCE Authors' analysis. **NOTES** Adopters and nonadopters are explained in the notes to exhibit 2. There were 3,118 accountable care organizations (ACOs). All analyses were adjusted for beneficiary age, sex, dual enrollment (Medicare and Medicaid) status, Hierarchical Condition Category risk score, and geographic location at the level of the hospital referral region. Significance was assessed based on the interaction of two terms: the post period (before implementation of the AWV) versus the pre period; and AWV adopter versus nonadopter. ^aPercent of beneficiaries attributed to a given practice in any year of a period who were attributed for the entire period. ^bCalculated using previous year's claims for practice-attributed beneficiaries. ****p < 0.001

modestly healthier patient mix as indicated by Hierarchical Condition Category risk scores.

One of our most striking results was that while underserved patients were less likely to receive an annual wellness visit regardless of where they sought care, practices in rural areas and those caring for underserved and sicker populations were less likely to provide such visits to any of their patients—which suggests that these practices may face resource constraints or have priorities that compete with adoption of the visits.^{10-12,17} Rural practices that disproportionately care for minority and low-income patients lag in EHR adoption¹⁷ and are more likely to have difficulty filling clinical positions,¹² in addition to facing other resource challenges.¹⁰ Clinicians serving underserved populations have greater workloads, which may make the adoption of a new visit challenging.¹¹

In parallel, both medically and socially complex patients (as suggested by Hierarchical Condition Category risk score and by Medicaid enrollment, respectively) may receive fewer annual wellness visits regardless of the practice because they place less value on prevention or have more urgent issues precluding preventive care (particularly given the prescriptive nature of an annual wellness visit).^{4,8,9} Dual enrollees, for example, spend fewer of their visits each year on preventive care than do people with private insurance or Medicare alone.¹⁸ Regardless of the mechanism, and to the extent that annual wellness visits are beneficial, these trends could worsen disparities in prevention and health outcomes for underserved patients.

Relatedly, ACOs and practices with higher rates of participation in Medicare's EHR Incentive Program were more likely to use the annual wellness visit—which reflects, for example, the use of EHRs to facilitate visit documentation and billing.^{3,6} As Medicare and other payers introduce an array of innovation programs and alternative payment models,¹⁹ practices previously engaged in such efforts may be more likely to take on innovations in general.²⁰ This finding raises the possibility of widening gaps between practices that engage in innovation programs and those that do not.

We found that small and large practices had similar rates of annual wellness visits (appendix VI and appendix exhibit 3), while independent practices were more likely to provide the visit. This is notable because small physician-owned practices tend to have fewer resources such as staff and infrastructure to support quality improvement or other innovations.^{21,22} But what smaller practices lack in resources, they may compensate for in agility.²¹ While physician extenders and electronic health records are likely to be helpful, we surmise that adoption may require no more than a single, determined clinician.

Our results also support the notion that specialist-oriented and hospital-based practices that can profit through investing in inpatient or specialty care may be less inclined to adopt annual wellness visits. Conversely, practices with more Medicare beneficiaries per primary care physician and a larger fraction of primary care physicians had higher rates of the visits, likely

reflecting a greater return on investment in adopting them.

Consistent with trends observed in other nationally representative data, we found that annual visit rates among seniors dropped during this period.¹⁸ Practices that adopted the annual wellness visit did not have a relative increase in visit rates, even when counting co-billed annual wellness visits and problem-based visits as two visits. This suggests that annual wellness visits primarily replaced problem-based visits. Before 2011, preventive care may have been provided during problem-based visits without being billed as such (fee-for-service Medicare did not previously cover “physicals”).¹⁵ This might also be explained by a slightly healthier case-mix among practices that adopted the annual wellness visit or by clinicians’ addressing problems during those visits without concurrently billing for a problem-based visit.

Despite offering fewer visits, practices that adopted the annual wellness visit generated greater primary care visit revenue, saw greater stability of patient assignment, and brought in patients who were slightly healthier, on average. While it is unclear whether these changes were driven by the adoption itself or by other changes implemented by adopters during the same period, it does point to some benefits for practices that adopt the visit.

Medicare introduced the annual wellness visit as part of broader efforts to bolster primary care—a specialty that is relatively poorly reimbursed yet foundational to the US health care system.¹⁹ We found that adopters had greater revenue than nonadopters, which could be partly explained by higher reimbursement rates for annual wellness visits compared to problem-based visits and by co-billing, which was more common among practices with high rates of annual wellness visits (data not shown). Notably, adopting practices were receiving more Medicare revenue than nonadopting practices even before annual wellness visits were introduced, which likely reflects the greater numbers of attributed Medicare beneficiaries in adopting practices or differing practice styles. Our results do not include revenue from tests and counseling that can accompany an annual wellness visit, and therefore the results underestimate total gains.^{1,3}

Stability of patient assignment differentially improved among adopters, which cannot be explained by adopters providing more visits or by annual wellness visits serving as the sole visit for attribution: Only 2.8 percent of beneficiaries who received such a visit in 2015 had no other visits that year. One possible mechanism is through annual wellness visits’ bolstering clinician-patient relationships.^{23,24} In addition, most

recipients of an annual wellness visit got the visit at their own practice and with their own primary care physician. This partly dispels concerns raised by physician groups about for-profit companies’ offering the visit at community events and therefore subverting the visit’s intended benefits of promoting the detection and management of health risks at patients’ usual source of care.^{25,26} In future work, it will be important to study how annual wellness visits affect continuity of care as well as the use of both appropriate and inappropriate preventive services.

Policy Implications

Adoption of the annual wellness visit may benefit practices financially, yet half of them are missing out on these benefits—particularly practices that disproportionately care for medically and socially complex patients. How should these gaps be addressed? While annual wellness visit requirements serve to remind clinicians of evidence-based screenings and discussions, the complex requirements may be a greater challenge when treating underserved populations.^{1,3,4} Medicare could consider a less prescriptive form of the visit or even a new annual wellness visit to be used with medically and socially complex patients. Medicare could also extend programs such as Comprehensive Primary Care Plus, in which primary care practices are compensated for caring for complex patients outside of traditional visits.

Policy makers could encourage annual wellness visits led by nurses or pharmacists within the context of a team-based care model,^{3,7,23} the use of shared resources to build information technology capacity,²² and other financial or operational support to promote the uptake of annual wellness visits. As an example, Aledade, Inc., uses a web-based platform with automated work lists and on-the-ground training to help small physician practices identify and reach out to beneficiaries eligible for an annual wellness visit.⁶ In addition, patient incentives may be particularly meaningful to low-income beneficiaries. Under the Next Generation ACO model, Medicare just introduced a \$25 patient engagement incentive paid directly to beneficiaries upon receiving their annual wellness visit, and this approach could be expanded if it is successful.²⁷

Conclusion

We found wide practice-level variation in the adoption of Medicare’s annual wellness visit. While practices caring for the underserved had lower rates of such visits, adopting practices saw

increased revenue and greater stability of patient assignment. For these gains to be shared more equitably, policy makers might encourage the use of annual wellness visits through mechanisms adapted to underserved populations and the practices that serve them. ■

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NOTES

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