



Short Communication

Utilization pattern of other preventive services during the US Medicare annual wellness visit

Guoyu Tao*

Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, Atlanta, GA, United States

A B S T R A C T

Annual wellness visit (AWV) was introduced for Medicare patients in 2011 to help patients stay healthy. The object of this study is to assess whether AWV have an impact on the use of other preventive services in the eligible population. Medicare claims for the full sample of beneficiaries who were continuously enrolled in fee-for-service Medicare in 2013 and 2014 were analyzed. The association between AWV and three other preventive services (depression screening [DPS], influenza virus vaccine [IVV], and sexually transmitted infection screening [STI]) were assessed. In addition, the utilization pattern of these three preventative services at AWV visit by the calendar month when beneficiaries had an AWV service was also assessed. Of 28 million eligible Medicare beneficiaries, 16.0% had AWV in 2014. The patients who had AWV had a significantly higher percentage of three preventive services than those who had no AWV: 63.8% vs. 41.6% in IVV, 4.9% vs. 0.5% in DPS, and 2.3% vs. 1.8% in STI. The percentages of beneficiaries who received IVV during an AWV visit varied significantly by calendar month: from < 0.1% in June to 36.8% in October. AWV is associated with increased use of other preventive services. In addition, the association is significantly affected by type of other preventive services that may be highly related with seasonal factors.

1. Introduction

In 2011, Medicare introduced the annual wellness visit (AWV) in which Medicare patients go through health risk assessment and a personalized prevention plan is developed to help patients stay healthy (CMS, 2016). In their research letter, Dr. Ganguli and colleagues reported that 44.4% of patients with AWV also had a concurrent problem addressed during that visit. The authors did not assess utilization of other preventive services during AWV and concluded that it is unclear whether the AWV increases use of other preventive care (Ganguli et al., 2017). Further, assessment of monthly utilization pattern of other preventive services during AWV has never been studied.

2. Methods

I analyzed Medicare claims for the full sample of beneficiaries who were continuously enrolled in fee-for-service Medicare in 2013 and 2014. I compared the percentage of beneficiaries who had an AWV (Current Procedural Terminology [CPT] codes G0438 and G0439) and three other preventive services (depression screening [DPS] with CPT codes G0444, influenza virus vaccine [IVV] with CPT codes 90,630,

90,653–90,657, 90,661, 90,662, 90,672–90,674, 90,685–90,688, Q2035–Q2039, and G0008, and screening for sexually transmitted infections [STI] with CPT codes 86,631, 86,632, 87,110, 87,270, 87,320, 87,490, 87,491, 87,810, 87,590, 87,591, 87,850, 87,800, 86,592, 86,593, 86,780, 87,340, 87,341, and G0445) selected from a list of 27 preventive services recommended by the Centers for Medicare and Medicaid Services (CMS, 2016). The three preventive services were selected because they are recommended to be received annually and commonly provided by primary care physicians. Copayment, coinsurance and deductible are waived for AWV and these three preventive services. Although AWV, DPS, and IVV are recommended for all Medicare beneficiaries, STI is recommended only for Medicare beneficiaries who are at increased risks for STI. A review of patient potential risk for depression, as a part of AWV, may be billed as DPS separately from AWV if the provider spends 15 min on depression screening. In the data analyses, I estimated the proportion of Medicare Beneficiaries who received DPS, IVV, and STI by their AWV status in 2014. Among Medicare Beneficiaries who received AWV in 2014, I estimated the proportion of them who received DPS, IVV, and STI prior to, at, and after AWV visit. Finally, I assessed the utilization pattern of these three preventative services during AWV by the calendar month when beneficiaries had an

* Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention, 1600 Clifton Road NE, MS-E80, Atlanta, GA 30333, United States.

E-mail address: gat3@cdc.gov.

<https://doi.org/10.1016/j.pmedr.2017.12.014>

Received 7 September 2017; Received in revised form 21 December 2017; Accepted 22 December 2017

Available online 27 December 2017

2211-3355/ © 2017 Published by Elsevier Inc. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

Table 1
Proportion of Medicare Beneficiaries who received depression screening, influenza virus vaccine, and screening for sexually transmitted infections by their annual wellness visit (AWV) status, 2014.

	Depression screening %	Influenza virus vaccine %	STI screening %
Medicare Beneficiaries who did not receive their annual wellness visit in 2014	0.5*	41.6*	1.8*
Medicare Beneficiaries who did not receive their annual wellness visit in 2014	4.9	63.8	2.3
Prior to AWV visit	0.6	13.8	0.9
At AWV visit	3.7	9.8	0.5
After AWV visit	0.7	41.8	1.0

* $P < 0.05$.

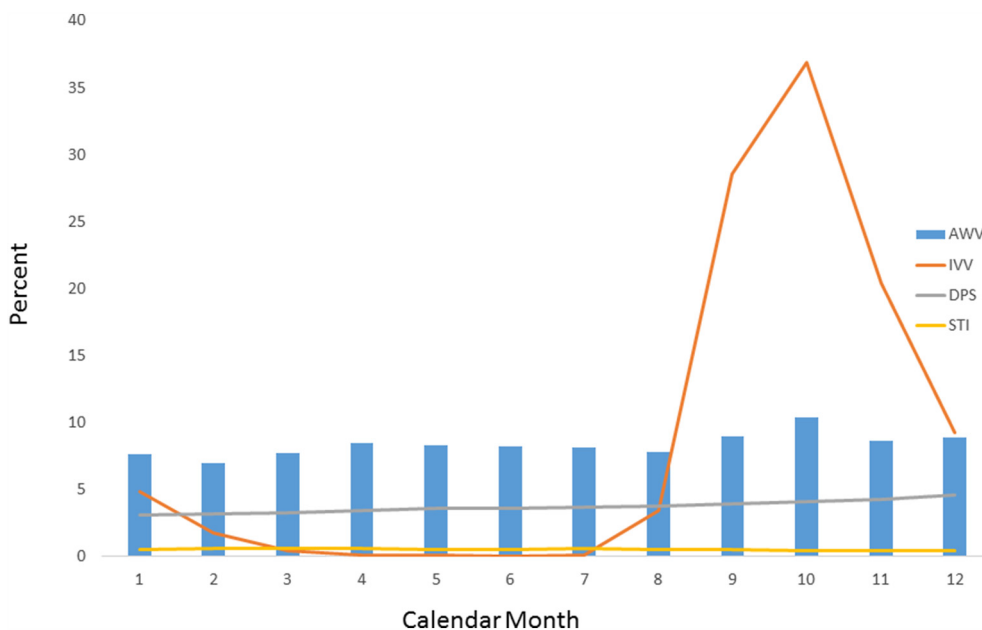


Fig. 1. The monthly distribution of annual wellness visits (AWV) among Medicare Beneficiaries who had AWV in 2014 and the proportion of Medicare Beneficiaries who received depression screening (DPS), influenza virus vaccine (IVV), and screening for sexually transmitted infections (STI) at the visits when they received AWV by month, 2014.

AWV service.

I used Pearson χ^2 tests to detect significant differences in bivariate analyses of categorical data and considered an alpha level $P < 0.05$ to be statistically significant. Because the Medicare claims data obtained include only de-identified Medicare beneficiaries, this study did not require institutional review board approval.

3. Results

Of 28 million beneficiaries eligible for this analysis, the percentage of these beneficiaries who had AWV, IVV, DPS, and STI was 16.0%, 45.2%, 1.2%, and 1.9%, respectively, in 2014. The patients who had AWV had a significantly higher percentage of three preventive services than those who had no AWV: 63.8% vs. 41.6% in IVV, 4.9% vs. 0.5% in DEP, and 2.3% vs. 1.8% in STI (Table 1). The percentages of beneficiaries who received IVV, DPS, and STI during an AWV were 9.8%, 3.7%, and 0.5%, respectively. Percentages varied by calendar month for IVV: from < 0.1% in June to 36.8% in October (Fig. 1).

4. Discussion

The estimated percentage (16.0%) of the 28 million eligible beneficiaries who had AWV in this study was similar to the previous study (Ganguli et al., 2017). The estimated percentage indicates that the use of AWV is suboptimal and interventions of improving AWV services are needed. Those interventions may include enhancing Medicare beneficiaries' knowledge about the importance of AWV and structural-level strategies such as templates, workflows, or AWV reminders to perform

AWV services (Cuenca, 2012; Jensen et al., 2015).

The data showed that the patients who had AWV had a higher percentage of these three preventive services than those who had no AWV. At the AWV visits, the proportion of the patients who received STI or DPS was very low and consistent across months, while the proportion of patients who received IVV ranged significantly by month. The percentage of patients who received any other preventive service during an AWV may be affected by seasonal factors, patient characteristics, type of preventive service (counseling versus testing versus vaccination), and type of primary care setting. The data suggest that AWV is associated with increased use of other preventive services and the association is significantly affected by type of other preventive services that may be highly related with seasonal factors.

OMB/CDC disclaimer

The findings and conclusions in this report are those of the author and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

References

CMS, 2016. Medicare Preventive Services.
 Cuenca, A.E., 2012. Making Medicare annual wellness visits work in practice. *Fam. Pract. Manag.* 19 (5), 11–16.
 Ganguli, I., Souza, J., McWilliams, J.M., Mehrotra, A., 2017. Trends in use of the US Medicare annual wellness visit, 2011–2014. *JAMA* 317 (21), 2233–2235.
 Jensen, G.A., Salloum, R.G., Hu, J., Ferdows, N.B., Tarraf, W.A., 2015. Slow start: use of preventive services among seniors following the Affordable Care Act's enhancement of Medicare benefits in the U.S. *Prev. Med.* 76, 37–42.