Drinking Patterns of Older Adults with Chronic Medical Conditions

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BACKGROUND: Understanding alcohol consumption patterns of older adults with chronic illness is important given the aging baby boomer generation, the increase in prevalence of chronic conditions and associated medication use, and the potential consequences of excessive drinking in this population.

OBJECTIVES: To estimate the prevalence of alcohol consumption patterns, including at-risk drinking, in older adults with at least one of seven common chronic conditions.

DESIGN/METHODS: This descriptive study used the nationally representative 2005 Medicare Current Beneficiary Survey linked with Medicare claims. The sample included community-dwelling, fee-for-service beneficiaries 65 years and older with one or more of seven chronic conditions (Alzheimer's disease and other senile dementia, chronic obstructive pulmonary disease, depression, diabetes, heart failure, hypertension, and stroke; n=7,422). Based on self-reported alcohol consumption, individuals were categorized as nondrinkers, within-guidelines drinkers, or at-risk drinkers (exceeds guidelines).

RESULTS: Overall, 30.9 % (CI 28.0–34.1 %) of older adults with at least one of seven chronic conditions reported alcohol consumption in a typical month in the past year, and 6.9 % (CI 6.0–7.8 %) reported at-risk drinking. Older adults with higher chronic disease burdens were less likely to report alcohol consumption and at-risk drinking.

CONCLUSIONS: Nearly one-third of older adults with selected chronic illnesses report drinking alcohol and almost 7 % drink in excess of National Institute on Alcohol Abuse and Alcoholism (NIAAA) guidelines. It is important for physicians and patients to discuss alcohol consumption as a component of chronic illness management. In cases of at-risk drinking, providers have an opportunity to provide brief intervention or to offer referrals if needed.

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INTRODUCTION

Over the next 20 years, the number of persons 65 years of age and older in the U.S. will almost double as the baby boomers age.[1] The prevalence of chronic conditions and multimorbidity will increase and associated healthcare expenditures will continue to rise.[2–4] Modifiable behaviors such as at-risk alcohol consumption will need to be identified as a component of patient-centered, comprehensive primary care. Excessive alcohol use can exacerbate chronic medical conditions. Many older adults suffer from multiple chronic conditions and take numerous prescription medications, placing them at increased risk for complications from alcohol use.[5–7] Moreover, any alcohol use in older adults with specific chronic conditions and/or specific prescription regimes could contribute to adverse medical events.[8–11]

The National Institute on Alcohol Abuse and Alcoholism (NIAAA) defines at-risk drinking for persons over 65 years of age as more than seven drinks per week or more than three drinks on any single day.[8,9] Recent studies have estimated the percentage of older adults that drink in excess of this guideline. Nine percent of elderly Medicare beneficiaries (2003 data) reported at-risk drinking defined as either exceeding 30 drinks in a typical month in the past year or heavy episodic drinking (drinking four or more drinks on a single day).[12] In a study using 2005 and 2006 data from the National Survey on Drug Use and Health, 13 % of men and 8 % of women aged 65 and older reported drinking two or more drinks per day.[13]

Although low to moderate levels of alcohol use can have health benefits,[14–18] the exact benefit dose is not known and may not be risk free.[19–22] While alcohol consumption within guidelines may be permissible in some individuals with diabetes and cardiovascular disease, alcohol is not advised with certain prescription medications and can cause

serious consequences.[10,23] For example, alcohol consumption can interfere with the effectiveness of medications commonly used to treat conditions such as hypertension and depression.[9] Despite the potential negative impact of alcohol on persons with chronic illness, studies suggest some health benefits to light or moderate drinking. Reviews of studies on persons with diabetes, cardiovascular disease, coronary artery disease or stroke found associations between light to moderate alcohol consumption and reduced risks of cardiovascular events, mortality and recurrent stroke.[16,18]

Thus, alcohol use among older adults with chronic conditions is a complex issue and needs additional research and clinical attention. One initial step is to estimate the prevalence of drinking patterns in older adults with chronic conditions. Even in the absence of alcohol disorders, at-risk drinking may place many elders with chronic conditions at increased risk for injury and medical complications.[22,24] To our knowledge, there is a lack of national estimates for the prevalence of alcohol consumption in the older Medicare population with selected chronic conditions. Therefore, we used nationally representative Medicare data to: 1) estimate the prevalence of drinking patterns for older adults with one or more of seven common chronic conditions; and 2) estimate the prevalence of drinking patterns by levels of chronic illness burden and functional limitations.

METHODS

Data Source and Sample Selection. The 2005 Access to Care module of the Medicare Beneficiary Survey (MCBS)[25] constituted the data source for this descriptive analysis, representing the continuously enrolled Medicare population. The MCBS sample is selected using a stratified, multistage probability sample design to represent the Medicare population nationally, and has been conducted continuously since 1991. MCBS sample weights are provided to achieve nationally representative estimates. The survey results are based on in-person interviews administered three times per year, and include sociodemographic characteristics, health and functional status, and healthcare utilization. The 2005 MCBS included items regarding alcohol consumption.[26] Subjects' 2005 Medicare service claims were linked to survey data to identify disease cohorts for this analysis.

The overall MCBS sample yielded a potential sample of 12,226 community-dwelling beneficiaries who were 65 years or older. Beneficiaries with managed care enrollment were excluded because their claims were not available (N=1878). An additional 117 individuals were excluded because of missing values on the alcohol consumption questions of the MCBS. Therefore, our potential study sample included 10,231 elderly Medicare beneficiaries. We selected beneficiaries with any of seven frequently occurring chronic conditions: Alzheimer's disease (and other diseases of dementia), chronic obstructive pulmonary disease (COPD), depression, diabetes, heart failure, stroke, and hypertension. These were selected due to their serious nature, relatively high prevalence, and the potential for excessive alcohol use to worsen the condition, exacerbate symptoms, and/or have detrimental effects due to interactions or interference with typical medications. We found that 72.5 % of the potential sample had at least one of the seven chronic conditions, yielding a final analytic sample of 7,422 older adults. Among our study population, 12.9 % of the MCBS surveys were completed by a proxy respondent (N=955).

Classification of Chronic Disease Cohorts. Six of the chronic disease cohorts (Alzheimer's and other diseases of dementia, COPD, depression, diabetes, heart failure, stroke) were identified using the chronic disease claims-based algorithms defined by the CMS Chronic Condition Warehouse (CCW).[27] Data availability constrained this study to a modified, 1-year look-back period (2005). As the seventh condition, hypertension, is not specified within the CCW, we identified hypertension using ICD-9-CM diagnostic codes for essential hypertension as specified by the Agency for Health Care Research and Quality's Clinical Classification Software.[28] The chronic disease-defined cohorts were not mutually exclusive groups; an individual could be identified for multiple cohorts. Individuals were placed in one or more of the seven chronic disease cohorts if the specified ICD-9 code was observed on at least one inpatient or outpatient claim (Alzheimer's disease and other related diseases of dementia, depression, heart failure) or on at least one inpatient claim or two outpatient claims (COPD, diabetes, stroke, hypertension) during the year, according to relevant specifications (CCW or AHRQ algorithms).

Definition of Outcome Variable of Alcohol Consumption. The 2005 MCBS included three alcohol consumption questions: 1)"Please think about a typical month in the past year. On how many days did you drink any type of alcoholic beverage? 2) On those days that you drank alcohol, how many drinks did you have? 3) Please think about a typical month in the past year. On how many days did you have four or more drinks in a single day?" A drink was described as including "liquor such as whiskey or gin, mixed drinks, wine, beer, and any other type of alcoholic beverage."

To specify at-risk drinking, we defined alcohol measures consistent with two parameters of the NIAAA guidelines. First, to be consistent with the weekly guideline we defined "exceeding monthly limits" as more than 30 drinks per typical month. Second, we constructed a "heavy episodic drinking" variable, indicating whether an individual reported four or more drinks in any single day in response to either drinking question.

We categorized drinkers initially into two mutually exclusive categories: within-guidelines drinkers (not exceeding the monthly limit or the single-day limit) or exceeds guidelines (drinkers who exceeded the monthly limit but not the single-day limit and heavy episodic drinkers who exceeded the single-day drinking limit, with or without exceeding the monthly limit). Included in the within-monthly guidelines category were ten respondents with one drink per day for 31 days. We also placed drinkers who exceeded guidelines into two mutually exclusive subcategories: drinkers who exceeded the monthly limit but not the single-day limit; or heavy episodic drinkers who exceeded the single-day drinking limit, with or without exceeding the monthly limit. We report at-risk drinking overall and by subcategory for this analysis.

Definition of Covariates. Additionally, the updated Charlson Comorbidity Index was calculated for all subjects with any of the selected chronic conditions as a measure of overall chronic illness burden. The Charlson Comorbidity Index was developed more than two decades ago to predict mortality based upon co-occurring conditions with differing associated weights or importance. The original index assigned weights of 1, 2, 3, or 6 to distinct diagnoses.[29] A recent study by developers of the index found that the addition of four conditions, including two we examined (depression and hypertension), improved the predictability of the index for annual healthcare expenditures.[30] The Charlson Index was converted in our analysis from a continuous variable to a categorical variable to test associations with specified drinking patterns. The Charlson scores were categorized into three categories of disease burden: Charlson score of 1 for lowest disease burden in our sample, scores of 2 to 3 and scores of 4 or greater. Given our inclusion criteria every older adult in our sample had a minimum Charlson score of 1.

A modified Katz Index of Independence in Activities of Daily Living was calculated for the study sample from responses to MCBS questions about whether or not they had difficulty or needed assistance with six activities of daily living: bathing, dressing, toileting, transferring, continence, or feeding.[31] Although this index is a 7-point scale, we categorized the results as follows: no limitations of function, Katz Index of 6; one limitation of function, Katz Index of 5; and two or more limitations of function, Katz Index of 0 to 4.

Statistical Analysis. We calculated the prevalence of various drinking patterns overall and within each chronic condition cohort. Results are reported as weighted proportions with confidence intervals that represent the continuously enrolled, community-dwelling, non-HMO, elderly Medicare population. Chi-square tests with survey design-based F statistics are used to assess the bivariate differences in drinking pattern by sociodemographic categories, selected chronic condition, comorbidity level and functional status. All statistical analyses are performed using STATA 10.1 software to address the complex sampling design.[32]

RESULTS

Weighted Sample Characteristics. The sample of Medicare beneficiaries meeting study criteria, responding to MCBS alcohol questions and having at least one selected chronic condition was 7,422 (72.5 % of the total MCBS respondents in 2005 [n=10,231]), representing 18,719,508 older Medicare, fee-for-service beneficiaries. Weighted demographic data (Table 1) indicate a predominantly female (59.5 %) and white (87.3 %) population. In terms of age, 45.3 % were between 65 and 74 years of age, 40.9 % were between 75 and 84 years of age, and 13.8 % were 85 years or older.

Sociodemographics and Alcohol Use. As shown in Table 1, 69.2 % (CI 66.3–71.6 %) of those with one or more of the seven chronic conditions were non-drinkers, 24.0 % (CI 21.9–26.2 %) reported within-guidelines drinking and 6.9 % (CI 6.0–7.8 %)[1] were at-risk drinkers; 3.1 % (CI 2.5–3.7 %) exceeded monthly limits only and 3.8 % (CI 3.3–4.4 %) reported heavy episodic drinking. Among those who reported any drinking, 10.0 % exceeded monthly limits only, and 12.3 % reported heavy episodic drinking. Almost four times as many males reported drinking that exceeds guidelines (12.1 % compared with 3.3 % for females; $p<0.001$). Adults aged 85 years and above were more likely to be non-drinkers compared to those ages 65 to 74 (78.4 % [CI 75.4–81.1 %] versus 65.5 % [CI 62.2–68.6 %]; $p<0.001$). Nearly twice as many white respondents reported drinking in excess of guidelines compared to non-white (7.3 %[CI 6.4–8.3 %] versus 3.7 %[CI 2.6–5.1 %]; $p<0.001$). Increasing level of education was associated with increased within-guidelines drinking and at-risk drinking ($p<0.001$).

Drinking Patterns within Specific Chronic Illness Cohorts and Comorbidity/Functional Groups. Almost one-third of Medicare beneficiaries with one or more of the seven chronic conditions reported drinking alcohol, and nearly 7 % reported at-risk drinking. More than half of at-risk drinkers reported heavy episodic drinking. For each of the chronic conditions, at least 17.7 % of individuals reported drinking alcohol within guidelines and at-risk (Table 2). The prevalence ranged from 17.7 % for individuals with Alzheimer's disease or other dementia to 31 % for those with hypertension. At-risk drinking prevalence ranged from 3.4 % in persons with Alzheimer's to 7.4 % in persons with

[1] Total greater than 100 % as a result of rounding.

Table 1. Drinking Patterns of Community-Dwelling, Fee-for-Service Medicare Beneficiaries 65 Years and Older with Any of Seven Chronic Conditions*

	Weighted % (CI)							
	Unweighted *n*	**Weighted *N***	**Weighted Percentage**	**Non-drinker**	**Drinks within guidelines**	**Exceeds guidelines (Exceeds either over-guideline drinking category)**	**Exceeds monthly limits only**	**Any heavy episodic drinking**
Total—entire sample	10,231	26,730,539		66.0 (63.5–68.4)	26.1 (24.1–28.2)	8.0 (7.2–8.7)	3.5 (3.0–4.0)	4.5 (3.9–5.1)
Total—any of seven selected chronic conditions	7,422	18,719,508	100.0	69.2 (66.3–71.6)	24.0 (21.9–26.2)	6.9 (6.0–7.8)	3.1 (2.5–3.7)	3.8 (3.3–4.4)
Gender‡								
Female	4,394	11,130,429	59.5	76.2 (73.6–78.7)	20.5 (18.3–22.9)	3.3 (2.7–3.9)	1.7 (1.3–2.3)	1.5 (1.2–1.9)
Male	3,028	7,589,079	40.5	58.8 (55.3–62.2)	29.0 (26.5–31.7)	12.1 (10.6–13.8)	5.0 (4.0–6.2)	7.1 (6.1–8.4)
Age Category‡								
65–74	2,884	8,483,280	45.3	65.5 (62.2–68.6)	25.7 (23.2–28.3)	8.9 (7.7–10.2)	3.7 (2.8–4.7)	5.2 (4.4–6.2)
75–84	3,188	7,657,740	40.9	70.2 (67.1–73.0)	23.7 (21.3–26.2)	6.2 (5.1–7.4)	3.0 (2.3–3.9)	3.2 (2.6–4.0)
85+	1,350	2,578,488	13.8	78.4 (75.4–81.1)	19.3 (16.7–22.2)	2.3 (1.7–3.2)	†	†
Race‡								
White	6,485	16,305,844	87.3	67.1 (64.1–70.0)	25.6 (23.3–28.0)	7.3 (6.4–8.3)	3.4 (2.8–4.2)	3.9 (3.3–4.6)
Non-white	920	2,369,304	12.7	83.6 (80.8–86.0)	12.8 (10.4–15.6)	3.7 (2.6–5.1)	†	†
Education‡								
< High School	2,266	5,370,373	28.8	83.5 (81.0–85.8)	12.8 (10.9–15.0)	3.7 (2.9–4.7)	†	†
HS Graduate	2,202	5,608,381	30.1	71.5 (68.4–74.3)	22.5 (20.0–25.3)	6.0 (5.0–7.2)	2.5 (1.7–3.5)	3.5 (2.9–4.4)
Some College	1,705	4,460,151	23.9	63.0 (59.0–66.9)	30.0 (26.7–33.5)	7.1 (5.9–8.5)	3.2 (2.3–4.4)	3.9 (3.0–5.1)
BS/BA Degree	1,216	3,204,511	17.2	49.3 (45.5–53.1)	37.2 (34.0–40.6)	13.5 (11.1–16.3)	7.4 (5.6–9.7)	6.1 (4.7–7.9)

**Alzheimer's Disease (and related disorders of senile dementia), COPD, depression, diabetes, heart failure, hypertension, stroke*
†*not shown due to small cell size*
‡*$p < 0.01$*

Table 2. Drinking Patterns by Chronic Condition and Comorbidity Burden Among Community-Dwelling, Fee-for-Service Medicare Beneficiaries Aged 65 and Older

	Weighted % (CI)						
	Unweighted *n*	**Weighted *N***	**Non-drinker**	**Drinks within guidelines**	**Exceeds guidelines (Exceeds either over-guideline drinking category)**	**Exceeds monthly limits only**	**Any heavy episodic drinking**
Total with any of seven selected chronic conditions	7,422	18,719,508	69.2 (66.3–71.6)	24.0 (21.9–26.2)	6.9 (6.0–7.8)	3.1 (2.5–3.7)	3.8 (3.3–4.4)
Chronic conditions:							
Alzheimer's Disease and related disorders of senile dementia‡	518	1,149,958	82.3 (78.1–85.8)	14.3 (11.3–17.9)	3.4 (2.1–5.5)	*	*
COPD†	1179	2,918,359	72.4 (68.9–75.7)	20.2 (17.2–23.6)	7.4 (5.9–9.2)	2.9 (2.1–4.2)	4.4 (3.2–6.0)
Depression‡	722	1,861,645	77.2 (73.2–80.7)	19.3 (15.8–23.3)	3.6 (2.4–5.1)	*	*
Diabetes‡	2,216	5,606,258	76.9 (73.8–79.8)	18.5 (16.1–21.3)	4.5 (3.5–5.8)	2.2 (1.5–3.2)	2.3 (1.7–3.2)
Heart failure‡	1,317	3,065,364	79.3 (75.9–82.4)	16.1 (13.6–19.0)	4.5 (3.4–6.0)	1.7 (1.1–2.7)	2.8 (2.0–4.0)
Hypertension	6,570	16,574,021	69.0 (66.2–71.7)	24.1 (22.0–26.4)	6.9 (6.0–7.8)	3.0 (2.4–3.6)	3.9 (3.3–4.5)
Stroke†	494	1,193,715	76.2 (71.8–80.2)	19.5 (16.1–23.5)	4.3 (2.7–6.6)	*	*
Overall comorbidity—Charlson Score:‡							
Charlson: 1	1,940	5,059,705	63.1(59.8–66.3)	28.4 (25.5–31.5)	8.5 (7.1–10.2)	3.8 (2.9–5.0)	4.7 (3.7–5.9)
Charlson: 2–3	3,102	7,863,195	68.7(65.1–72.1)	24.6 (22.0–27.5)	6.7 (5.5–8.0)	3.0 (2.3–4.0)	3.6 (2.9–4.5)
Charlson: 4+	2,380	5,796,608	75.1 (72.3–77.8)	19.2 (17.0–21.6)	5.7 (4.8–6.8)	2.5 (1.8–3.3)	3.3 (2.6–4.1)
Functional Status:‡							
Katz: 6	4,216	10,944,863	65.9 (62.7–68.9)	26.2 (23.8–28.8)	7.9(6.9–9.1)	3.5 (2.9–4.3)	4.4 (3.6–5.3)
Katz: 5	1,917	4,793,698	67.7 (64.0–71.1)	25.2 (22.4–28.3)	7.2 (5.8–8.8)	3.3 (2.3–4.7)	3.8 (3.0–4.9)
Katz: 0–4	1,188	2,748,609	84.6 (81.7–87.1)	13.0 (10.7–15.9)	2.4 (1.6–3.4)	*	*

Statistical significance testing was conducted for comparisons of drinking category proportions for persons with specific chronic condition versus persons without the specific chronic condition. Higher Charlson Comorbidity Index scores indicate greater degree of comorbidity. Higher Katz functional status scores indicate greater independence (fewer functional limitations). The Katz Index was missing for 101 individuals
** Not shown due to small cell size*
†*$p < 0.05$*
‡*$p < 0.01$*

COPD. As the total disease burden estimated by the categorized Charlson comorbidity index increased, reported alcohol consumption decreased. The prevalence of drinking within guidelines varied significantly by comorbidity score category ($p<0.01$), decreasing from 28.4 % (CI 25.5–31.5 %) for individuals with a Charlson comorbidity score of one to 19.2 % (CI 17.0–21.6 %) for individuals with a Charlson comorbidity score of four or greater. A similar pattern was observed for at-risk drinking. Therefore, older adults with higher chronic disease burdens reported less consumption of alcohol.

Among older adults with no limitations in physical function (Katz Index of Independence = 6), 34.1 % reported alcohol consumption; 26.2 % within guidelines and 7.9 % at-risk drinking. Among persons with two or more limitations in function (Katz Index of 0 to 4), 15.4 % reported drinking; 13.0 % within guidelines and 2.4 % at-risk drinking. A sub-analysis on this population of persons with two or more physical limitations found a significant negative relationship between alcohol consumption and Charlson Comorbidity Index category ($p<0.05$); results not shown due to small cell sizes.

DISCUSSION

Although studies have estimated the prevalence of alcohol consumption among older adults, this study estimated the drinking patterns of older adults with specific chronic conditions. Overall, 30.9 % reported alcohol consumption in a typical month in the past year and nearly one in four drinkers (22.3 %) reported at-risk or above-guideline drinking. The study found that alcohol consumption varied across the seven chronic conditions examined. Chronic conditions selected were ones that could be worsened by alcohol consumption and/or for which alcohol can present problems with commonly prescribed medications.

Hypertension was the most prevalent chronic condition (88.5 %), and 6.9 % of older adults with hypertension reported alcohol consumption above current guidelines. Numerous studies have found that heavy alcohol consumption (defined in two studies as three or more drinks per day and one study as greater than one drink per day for women and two drinks per day for men) results in poor blood pressure control.[33–35] Diabetes was the second most prevalent condition (29.9 %), and 4.5 % of those with diabetes reported at-risk drinking. Alcohol consumption (within and in excess of guidelines) can result in poor glucose control, increased risk of hypertension and lower compliance with diabetes self-management behaviors.[36–39] In persons with cardiovascular illness, heavy alcohol consumption can result in alcoholic cardiomyopathy and increased risk of negative cardiac events, including sudden death. A meta-analysis examining alcohol and depression found that at-risk drinking is associated with worse outcomes related to the course of depression, social functioning, suicide risk and health care utilization.[40] Unchanged alcohol consumption patterns were identified as a risk factor for recurrent stroke in a study of secondary stroke prevention in Poland.[41] Among middle-aged men with COPD, a 20-year study in three European countries found more than double the risk of death among heavy drinkers compared with light to moderate drinkers.[42] Moreover, drinking has been found to negatively impact smoking cessation,[43] a critical recommendation in the management of COPD.[44] Finally, research on Alzheimer's disease and alcohol consumption has been suggestive of brain protection at lower levels of alcohol consumption but cognitive decline at higher levels.[45,46]

Importantly, drinking alcohol even within guidelines can be detrimental to the optimal management of the relevant chronic condition(s). Prescription medications used to treat hypertension, hyperlipidemia, diabetes, and depression carry warning labels for alcohol consumption as the combination of alcohol and specific medication may result in symptoms such as dizziness, irregular heart beat, sudden drop in blood pressure, and fainting.[23] The interaction of alcohol and medication puts the elder adult at unnecessary risk of an adverse event and/or non-control of the condition being treated.[9,10,47,48]

Within the context of chronic illness management, at-risk alcohol consumption may be responsible for poor medication adherence, intractable hypertension, increased bleeding, and/or poor self-management skills.[35–37,49,50] Currently, universal alcohol screening is recommended by the United States Preventive Services Task Force, [51] and recently, the Centers for Medicare and Medicaid Services approved Medicare payment for alcohol screening and four brief counseling sessions.[52] Primary care physicians are in a unique position to screen elderly patients for alcohol use; however, many physicians do not screen for at-risk alcohol use, especially among patients with chronic conditions.[53–56]

Primary care physicians should screen all patients about current alcohol use, including older adults with chronic conditions.[57] Heavy drinking episodes should be assessed specifically.[55,56] At-risk drinkers may not have an alcohol disorder; however, heavy drinking episodes may be responsible for injuries and poor chronic disease outcomes.[22,58,59]

The patient-centered medical home model of care being diffused nationally promises comprehensive, whole-person care that is facilitated and supported by electronic medical records. Alcohol screening with embedded counseling scripts in medical visit templates should be a component of such care, with the identification of and referral to appropriate resources as needed. As nearly one in four (22.3 %) drinking elders with these selected chronic conditions report at-risk drinking, this is important to optimal chronic illness management.

This study has several limitations. This study was descriptive only and examined the prevalence of self-reported drinking patterns among older adults with select chronic conditions. These do not represent rates of alcohol disorders. In some cases, subsamples were small, which limited statistical power for some analyses. In our sample, 12.9 % of respondents were proxy respondents. Few studies have assessed the reliability of proxy respondents for elderly individuals, but existing evidence suggests proxy responses may underestimate reported behaviors.[60–63] Persons with dementia may not recall alcohol use accurately, and 42.9 % of this cohort's respondents were proxy respondents. Additionally, the chronic conditions identified may be underestimated due to the limited one-year look-back period. Without prescription claims data, potential adverse drug-alcohol events could not be estimated. More research is needed on alcohol consumption in the context of specific chronic disease combinations, and with the enhancement of prescription drug and utilization claims data. Studies examining alcohol consumption and medications are necessary to better understand alcohol-medication interactions.

This study provides useful, nationally representative estimates of drinking patterns for older, community-dwelling Medicare beneficiaries with chronic conditions. They indicate that nearly one third of older adults with chronic conditions drink and a meaningful proportion engage in at-risk drinking. As adherence to treatment plans and self-management skills are essential to optimal chronic care management, alcohol consumption must be assessed and addressed. In light of the aging of the baby boomer generation, known to have higher alcohol consumption,[59] this call to action is timely and important.

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