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Perspective

Innovation in care for individuals with cognitive impairment: Can reimbursement policy spread best practices?

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Abstract

There is now an unprecedented opportunity to improve the care of the over 5 million people who are living with Alzheimer's disease and related dementias and many more with cognitive impairment due to brain injury, systemic diseases, and other causes. The introduction of a new Medicare care planning benefit—long sought openly by advocacy organizations and clinicians and badly needed by patients and families—could greatly improve health care quality, but only if widely and fully implemented. We describe the components of this new benefit and its promise of better clinical care, as well as its potential to create a new platform for clinical and health outcomes research. We highlight external factors—and some that are internal to the benefit structure itself—that challenge the full realization of its value, and we call for broad public and professional engagement to ensure that it will not fail.

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Keywords:

Care planning dementia; Primary care; Implementation; Practice tools; Barriers

EDITORS' NOTE

Readers are encouraged to visit the Centers for Medicare & Medicaid Services website www.cms.gov for updates on this and all administrative billing codes. The opinions provided in this article are solely that of the authors and do not necessarily represent the current administrative guidance of the Centers for Medicare & Medicaid Services.

1. Introduction

In January 2017, the Centers for Medicare and Medicaid Services (CMS) launched a new reimbursement mechanism to support care planning for people with cognitive impairment, including those with Alzheimer's disease and related conditions. Code G0505 calls for a multidomain assessment that serves as the basis for creating a written care plan. This plan, prepared in plain language, is developed and shared with the patient and family (or other caregiving partner) and becomes part of the patient's medical record.

G0505 is the second in a suite of reimbursement tools aimed at improving the quality of health care for individuals with cognitive impairment, regardless of cause or severity. The first of these tools, the Annual Wellness Visit (AWV)—initiated in 2011 as the only Medicare benefit to promote detection of cognitive impairment in older adults—requires it as a condition of reimbursement. Nationwide, the uptake of the AWV has been highly variable, averaging just under 15% among eligible Medicare recipients as of 2015 [1], though concerted implementation efforts can substantially increase its reach in health care systems (e.g., Mink, Borson, Vacquier, in review). The AWV treats cognitive impairment as a health risk that should inform patient care but does not specify how; CMS' new care planning code helps guide providers through the next key steps. It can be implemented by primary care providers as well as by specialists in dementia diagnosis and management, and, though cognitive impairment must be present, G0505 does not require a specific disease (etiologic) diagnosis. This feature should extend its application to patients whose cognitive impairment may have multiple causes not easily assigned to a specific disease category (e.g., Alzheimer's disease). The nine domains that must be assessed are shown in Table 1, along with suggestions for very simple, robust measures. Although many valid measures are available, short, simple tools are easy to implement in primary care

practice, satisfy their respective domains, and can be easily incorporated into searchable electronic medical record fields for tracking purposes.

2. Using the cognitive impairment care plan code

2.1. Providers

Medicare-enrolled providers (physicians, advanced practice nurses, and physician assistants) can use G0505 to plan the care of patients with cognitive impairment; many components can also be assessed and developed by any appropriate member of the clinical team (e.g., social workers, nurses, medical assistants) incident to the primary provider's care.

2.2. Patients

Medicare beneficiaries who can benefit from care planning include many different groups: those who present for the first time with clear cognitive impairment (e.g., mild cognitive impairment, delirium, or dementia not otherwise specified) and need further evaluation; those who have a neurodegenerative or other central nervous system or general medical condition causing cognitive impairment and are at risk for further cognitive decline over time; or those who are left with cognitive impairment after surviving a critical illness.

2.3. Location

Care planning visits can be conducted in outpatient offices and clinics as well as in patients' homes (including retirement and assisted living communities).

2.4. Assessments

Table 2 shows the domains of assessment required to satisfy the elements of G0505. Ideally, tools should be:

- *Practical*—the time and effort to complete them can fit within the constraints of the primary care clinical setting.
- *Retrievable*—easily incorporated into electronic health record fields and searchable at the point of care.

2.5. Coupling care planning to other essential dementia care services

Table 3 shows CMS billing codes that can and cannot be used in conjunction with G0505. In addition to supporting care planning, CMS now allows use of prolonged service codes to reimburse non-face-to-face services linked to care planning and follow-up. Examples include interactions with caregivers, time spent in medical record review, and communication with other providers. Care planning can also establish the need for chronic care management and focus the goals to be followed up in reimbursable monthly telephone or in-person visits using Chronic Care Management codes.

Table 1
Common qualifying diagnoses and ICD-10 codes

Code	Description
G30.0	Dementia Alzheimer's disease with early onset
G30.1	Dementia Alzheimer's disease with late onset
G30.9	Alzheimer's disease, unspecified
F01.50/51	Vascular dementia without/with behavioral disturbance
F02.80/81	Dementia due to known physiological condition in other diseases classified elsewhere, without/with behavioral disturbance
F03.90/91	Unspecified dementia without/with behavioral disturbance
F05	Delirium due to a known physiological condition
G31.01	Pick's disease with behavioral disturbance
G31.09	Other frontotemporal dementia
G31.2	Brain degeneration due to alcohol
G31.85	Corticobasal degeneration
G31.83	Dementia with Lewy bodies
G31.84	Mild cognitive impairment

NOTE. This is not an exhaustive list; many additional diagnoses can qualify an individual for G0505.

Table 2

Assessing care plan domains: simple measures suitable for primary care

Domain	Suggested sample measures	Number of questions (approximate time in minutes)	Comments
Cognition, including narrative history of cognitive changes	Mini-Cog*	2 (<3)	Validated in primary care and populations
	GP-Cog*	5 and 7 (~8)	Patient and caregiver components
	Short MoCA	8 (~10)	
Function	FAQ (ADL)*, Katz (BADL)	10 (<3–4)	Caregiver rated (pre-visit)
Stage of cognitive impairment	Mini-Cog + FAQ	Simultaneous (<5)	Patient and caregiver components; better in milder stages
	Dementia Severity Rating Scale	10 (<5)	Caregiver rated, pre-visit, correlates with Clinical Dementia Rating
Patient decision-making†	Three-level rating: able to make own decisions, not able, uncertain/needs more evaluation	(<1)	Global clinician judgment
Neuropsychiatric symptoms	PHQ-2*	2 (<1)	Patient or caregiver proxy; depression
	BEHAVE 5+	6 (1)	Six high-impact items; caregiver rated, pre- visit
	NPI-Q	10 (5)	Caregiver rated, pre-visit
Medication review and reconciliation	Medication list + name/contact of person overseeing home medications	Varies	Identify/reconsider high-risk medications; assess for reliable administration by self or other
Safety	Safety screen	7 (3)	Patient/caregiver, pre-visit
Caregiver identification and needs assessment	Caregiver profile checklist	4 (<1)	Ability/willingness to care, needs for information, education, and support
	Single-item stress/stress thermometer	1 (<1)	Caregiver rapid self-identification of stress
	PHQ-2*	2 (1)	Caregiver depression
Advance care planning	Checklist screen	4 (3)	Screen for preferences and legal needs

Abbreviations: GP-Cog, General Practitioner assessment of Cognition; MoCA, Montreal Cognitive Assessment; FAQ, Functional Activities Questionnaire; ADL, higher order Activities of Daily Living; BADL, basic activities of daily living; PHQ, Patient Health Questionnaire; NPI-Q, Neuropsychiatric Inventory – Questionnaire.

*Validated in primary care. Tools included but lacking formal validation studies in primary care have high relevance and face validity; these and other tools can be found on www.alz.org and at www.nia.nih.gov. Assessments that require the direct participation of a knowledgeable care partner or caregiver (e.g., the patient's functioning at home or a caregiver stress measure) may be completed before the clinical visit and provided to the clinician for inclusion in care planning.

†Here we have added “patient decision-making” (and deleted documentation that the clinician's decision-making process was of moderate-to-high complexity as called for in CMS' public documents listing the assessment components of G0505). An assessment of patients' decision-making ability is central to care planning, particularly regarding engagement of caregivers and others in managing an individual's health but was not included in G0505. About provider process, we recognize the need for explicit documentation that moderate-to-high decisional complexity is necessary for good care planning; we just do not consider it part of the patient-focused assessment process. The code's assessment requirements already reflect clinical complexity and require thoughtful consideration for a synthesis and translation into a care plan. Our suggested addition has not been evaluated or approved by CMS.

2.6. Preparing and sharing the care plan

The care plan should be written in plain language and provide action steps that synthesize information acquired in the assessment. Responsibility for each care plan component should be clearly designated and a schedule set for follow-up. Some clinicians find it useful to organize the care plan into broad categories (e.g., cognitive diagnosis, severity, and associated features; managing medical problems and safety issues; addressing depression or neuropsychiatric symptoms; helping the caregiver with stress, financial concerns, or education and support needs). A standardized care plan template customized to the provider or health care system, though not required by G0505, simplifies communication and tracking of patient care and outcomes over time.

The written plan must be discussed with, and given to, the patient and family, with appropriate documentation in the clinical record for all encounters billed using G0505. The care plan must be filed in the patient's medical record where

it can be easily retrieved and updated. Whenever necessary, explicit consent of the patient, family, or legally designated decision-maker should be sought so that the plan can be shared with others caring for the patient, including clinicians, care managers, caseworkers, and others who assist the patient and caregiver.

2.7. Re-assessing and revising the care plan

CMS does not prescribe or limit the frequency with which G0505 can be used (though Medicare intermediary agents may do so). Situations that call for care plan review or revision include, but are not limited to, (1) expected interval worsening of a neurodegenerative disease; (2) poor response to previous management; (3) emergence of new clinical features with management implications (e.g., autonomic insufficiency, Parkinson features); (4) a change in general clinical status (e.g., worsening of comorbid chronic illness with known cerebral effects; recovery from a serious systemic illness or hospitalization; treatment of a disabling comorbid

Table 3
CPT codes that may and may not be used with G0505 (2017 Physician Fee Schedule)

May Be billed with G0505	May not Be billed with G0505
99358 (Prolonged E/M service, first hour)*	90785 (Psychotherapy complex interactive)
99359 (Prolonged E/M service, addl 30 minutes)*	90791 (Psych diagnostic evaluation)
99487, 99489, 99490 (Chronic Care Mgmt services)	90792 (Psych diag eval w/med srvc)
99495, 99496 (Transitional Care Mgmt services)	96103 (Psychological testing admin by comp)
	92610 (Neuropsych testing admin w/comp)
	96127 (Brief emotional/behav asmt)
	99201–99215 (Office/outpatient visits new and follow-up),
	99324–99337 (Domicile/rest home visits new and follow-up)
	99341–99350 (Home visits new and follow-up)
	99366–99368 (Team conf w/pat by healthcare prof)
	99497 (Advanced care plan 30 minutes)
	99498 (Advanced care plan addl 30 minutes)
	99374 (Care plan oversight services)
	G0181, G0182 (Home health and Hospice supervision)
	G0506 (Care planning/assessment chronic care)

*CMS no longer requires face-to-face contact to reimburse providers for these codes, as long as their use reflects effort related to a G0505 care planning visit.

depression or other psychiatric disorder); (5) a change in the available level of home care and support; or (6) any other circumstance likely to adversely affect the patient's health and wellbeing.

3. G0505 as a step in health care transformation

3.1. A tool for organizing complex care

G0505 is rooted in an understanding that care for cognitively impaired patients is multidimensional and that its aims go far beyond disease management to support or improve quality of life and minimize crises for patients and families. Its elements reflect best practices adopted by dementia experts and tested in models of dementia care management [2–6]. It offers a mechanism for bringing complex assessment into everyday health care and, as such, could become the foundation from which to develop a similar benefit for individuals with other (noncognitive) forms of clinical complexity. Other individuals with multiple interacting medical and psychosocial problems [7], like individuals with cognitive disorders, are often not well served using typical evaluation and management visit structures. G0505 could also leverage workforce development for both providers and non-billing clinicians and unlicensed members of the clinical team (e.g. care guides or navigators). By setting standards for required assessments that guide care plan development, G0505 reimburses less-experienced phy-

sicians and other Medicare-enrolled providers while they build skills through “on the job” learning. It offers realistic reimbursement for the level of effort required, estimated at approximately \$235 per patient including Medicare and supplemental components. This may help to promote health system engagement in standardized, sponsored provider training, using emerging approaches such as the tools and training curricula developed by ACT on Alzheimer's (actonalz.org), the Gerontological Society of America (geron.org), the Health Resources and Services Administration (bhwh.hrsa.gov), the Alzheimer's Association (alz.org), and various provider organizations.

3.2. A way to bring caregivers into the clinical space

G0505 is the first benefit to explicitly acknowledge the fundamental role of caregivers, by requiring their inclusion in care planning and by reimbursing clinicians for explicitly identifying who they are, assessing their needs, and evaluating their ability and willingness to provide care.

3.3. A platform for new research

G0505 creates unique opportunities for health care delivery research, including studies of implementation, clinical outcomes mounted directly on routinely collected clinical data (provided measures are embedded in the electronic medical record), and development of “real-world” trial-ready cohorts for research on health care delivery, including total cost of care. If enriched by linkage to a standardized differential diagnostic process, G0505 could stimulate research on risk prediction and biomarkers as well as clinical trials of biomedical and psychosocial interventions, improving the representativeness of research participants and broadly benefiting the research enterprise overall.

4. Threats to realizing its full value

4.1. Implementation barriers are many

4.1.1. Providers, health systems, and informatics departments

G0505 may primarily appeal to, and be used by, dementia specialists, who have already learned to use evaluation and management coding to provide the required comprehensive assessments and more; this would sharply limit value to beneficiaries, as the number of specialists is far too low to provide essential services to all patients with cognitive impairment [8]. Providers and health systems bear the burden of developing implementation strategies. Establishing team-based “top of license” staff roles and workflows, creating scheduling, assessment and care plan documentation templates, “easy buttons”, and other electronic medical records tools, will require time and financial investment and could delay or discourage full implementation. Moreover, engaging busy primary care providers who are already

overseeing an evolving model of team-based care will be a challenge to widespread implementation. The length and complexity of the assessment (though essential to address the multidimensional needs of individuals with cognitive disorders) and the duration of the care plan visit (much longer than typical primary care visits) are additional factors that may limit uptake in practice. Training of providers and staff team members will require far more than learning how to do the assessments. Creating a clear, practical care plan that can be implemented in collaboration with the patient and caregiver(s) requires learning to interpret and integrate, not just acquire, assessment data, yet such training is not readily available nor is it a condition for provider payment. Regarding the duration of the care planning visit, CMS has sought to allay concern by suggesting a reasonable time allocation and sequence of steps: preparation (15 minutes); assessments and care plan development (50 minutes); and immediate post-service (20 minutes), for a total time of 85 minutes. With streamlined processes and appropriate delegation of effort to other qualified members of the clinical team, the provider portion of this time could require as little as 15–20 minutes.

4.1.2. Exclusion of key disciplines as providers of cognitive impairment care planning services

Social workers, who may have far more skill and experience than physicians in complex, person-centered care planning, are not billing providers for G0505, and there is no assurance that social work expertise will be routinely available to patients and families as part of the process.

4.1.3. Billing departments

Some billing departments will not allow use of temporary billing codes (G codes) and will delay uptake of the care plan code until a permanent (CPT) code is in place, expected to occur in January 2018.

4.1.4. Restriction of other clinical services on the date of the care plan visit

The CMS excludes new and established patient evaluation and management codes from use on the same day as G0505, limiting clinicians' ability to address management of concurrent medical issues other than cognitive impairment at a single visit. This restriction may frustrate patients and caregivers who may expect attention to other medical issues as well.

Although CMS has tried to strike a balance between comprehensiveness and practicality, key elements of care are missing or incomplete. One of G0505's elements—"decision-making"—as specified by CMS, refers to documentation that the *clinician* has engaged in "moderate to complex decision-making" in creating the care plan (i.e., to justify the use of a complex clinical visit code). We have chosen (Table 1) to add a *clinician's judgment of the patient's ability to make his or her own medical decisions*, which otherwise is not mentioned in the benefit description at all. This oversight is significant; G0505 does not consider how

cognitive impairment may affect medical as well as everyday and long-range life decisions around co-occurring acute and chronic illnesses. Most individuals with dementia have other chronic medical conditions or are at heightened risk of acute illnesses ([9–12]) that account for most of the "excess" hospitalizations in this group, relative to individuals without cognitive impairment [13,14]. Moreover, caregivers regularly report unmet needs for both medical and psychosocial services [15,16]. Care plans that do not explicitly address the potential interactions between cognitive impairment and comorbid conditions, or the role of caregivers in managing patients' general medical problems at home and their own health [17] may not go far enough toward improving patterns of health care utilization and reducing the risk of medical crises. In addition, G0505—though leading to an individualized care plan—is short on person centeredness. Its advance care planning requirement is the only element that requires elicitation of patient and caregiver values, preferences, and choices, but it focuses on future, rather than present, care decisions and provides little opportunity to address or work through patient or caregiver resistance to recommended care.

4.1.5. G0505 does not address—and may exacerbate—health disparities in dementia care

Members of racial, ethnic, and linguistic minorities, and economically disadvantaged older adults, are less likely than others to have an AWV with its required detection of cognitive impairment [1] (Mink, Borson, Vacquier, in review), and once diagnosed with dementia, they experience poorer quality of care and outcomes [18–22]. G0505 was developed for Medicare fee-for-service environments and is not approved for federally qualified health centers, which serve a wide range of individuals at risk for health care disparities related to race, ethnicity, language, and economic circumstance. Other health plan limitations may create additional barriers; for example, it is not clear whether Medicare Advantage and other managed Medicare plans will use it.

5. Conclusion

G0505 has the potential to support rapid and substantial improvement in the health care of people with cognitive impairment and dementia. However, the necessary steps to transform actual practice are far from guaranteed. Complexity of implementation at every level, workforce development issues, technical barriers, and limited reach into already-underserved populations all pose significant threats to uptake. Without wide adoption, the potential value of proactive care planning will not be realized by the patients, families, providers, health systems, and community-based organizations whose participation is integral to successful, person-centered care. We need a national plan to prepare beneficiaries, providers, health systems, payers, and service organizations for full engagement, and we can allow no less.

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The authors comprise the Alzheimer's Association Expert Task Force. The Taskforce provided input to CMS during its deliberations and convened in November 2016 to make recommendations about how to conduct the required assessments. Its recommendations derive from a broad consensus about good clinical practice informed by intervention trials, and emphasize validated assessment tools that can be implemented in routine clinical care across the United States.

RESEARCH IN CONTEXT

1. Systematic review: We reviewed explanatory and regulatory materials pertaining to G0505 provided on cms.gov and by the American Geriatrics Society, American Academy of Neurology, and American Academy of Family Practice. In addition, we reviewed published dementia care best practices and quality indicators, results of dementia care management implementation studies and randomized trials, evidence related to selected measures suitable for inclusion in the required assessments, and reimbursement policies covering Federally Qualified Health Centers and selected alternative payment models.
2. Interpretation: We provide a simple framework for implementing CMS' new care planning benefit for people with cognitive impairment, highlight its explicit inclusion of caregivers, and identify specific barriers that must be addressed for widespread adoption to occur.
3. Future directions: Formal care planning is a key step toward improving quality of life and clinical outcomes for people living with cognitive impairment and those who care for them. We lay the groundwork for quality improvement and care planning implementation trials in health care systems, especially those lacking specialty-based memory and dementia care programs.

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