Clinical Practice Guidelines for Older Patients With Comorbid Diseases

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Clinical Practice Guidelines for Older Patients With Comorbid Diseases

To the Editor: In their Special Communication on clinical practice guidelines (CPGs) for older patients, Dr Boyd and colleagues[1] correctly state that medical nutrition therapy for diabetes would be part of the treatment regimen for a hypothetical 79-year-old woman with diabetes and multiple chronic diseases. However, the list of clinician tasks that they provided does not include referral to a registered dietitian.

The US Congress created a Medicare benefit in section 105 of the Medicare, Medicaid, and SCHIP [State Children's Health Insurance Program] Benefits Improvement and Protection Act[2] allowing for medical nutrition therapy for patients with diabetes or chronic renal disease (except for those receiving dialysis) that became effective January 1, 2002. Medical nutrition therapy services are defined in the statute as "nutritional diagnostic, therapy, and counseling services for the purpose of disease management which are furnished by a registered dietitian or nutrition professional . . . pursuant to a referral by a physician."[2]

The benefit is further defined in the final rule by the Centers for Medicare & Medicaid Services, dated November 1, 2001, as face-to-face nutritional assessments and interventions in accordance with nationally accepted diet or nutrition protocols.[3] In addition to the CPGs cited by Boyd et al, the Agency for Healthcare Research and Quality's National Guideline Clearinghouse references CPGs from the American Dietetic Association on type 1 and type 2 diabetes mellitus, hyperlipidemia, gestational diabetes, and chronic kidney disease.[4] Updates of existing CPGs as well as CPGs for other diseases and conditions also are being developed by the American Dietetic Association.

Enrollment of dietitians and nutritionists as a new clinician group that provides service under Medicare started in December 2001. Medicare contractors started paying claims for medical nutrition therapy for diabetes and renal disease provided on or after January 1, 2002. Current utilization rates indicate that 97% of eligible Medicare beneficiaries are not being referred for medical nutrition therapy that could be provided by registered dietitians and qualified nutrition professionals.[5] It is important that physicians realize that Medicare covers medical nutrition therapy services and, as appropriate, initiate referrals so that all eligible older patients can benefit from this type of therapy.

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1. Boyd CM, Darer J, Boult C, Fried LP, Boult L, Wu AW. Clinical practice guidelines and quality of care for older patients with multiple comorbid diseases: implications for pay for performance. *JAMA*. 2005;294:716-724.
2. Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000. Available at: http://thomas.loc.gov/cgi-bin/query/z?c106:HR5661:HR5661. Accessibility verified November 11, 2005.
3. Medicare Program: Revisions to Payment Policies Under the Physician Fee Schedule for Calendar Year 2002 (CMS-1169-FC). Available at: http://www.cms.hhs.gov/physicians/pfs/cms1169fc.asp. Accessibility verified November 11, 2005.
4. National Guideline Clearinghouse Web site. Available at: http://www.guideline.gov/. Accessed August 11, 2005.
5. Smith R, Patrick S, Michael P, Hager M. Medical nutrition therapy: the core of ADA's advocacy efforts (part 2). *J Am Diet Assoc*. 2005;105:987-996.

To the Editor: Dr Boyd and colleagues[1] point to the dangers of slavishly following CPGs in patients with multiple comorbid diseases. They express particular concern that pay-for-performance schemes may lead to inappropriate clinical practice.

These problems are not insuperable. A major pay-for-performance scheme currently makes up 25% of the pay of primary care physicians in the United Kingdom.[2] However, when it comes to the clinical performance indicators, physicians can choose to exclude patients from any of the clinical indicators when calculating their performance. This can be done for a range of reasons such as a patient has another condition that makes treatment inappropriate, a patient does not wish to have his or her condition treated, or a patient has not responded to written requests to have his or her condition reviewed. In this way, the indicators are designed to distort clinical practice as little as possible because the physician can effectively say that a particular indicator does not apply to his or her patient. This is the type of flexible implementation of CPGs that Dr O'Connor calls for in his accompanying editorial.[3] As a check, in the UK system, a physician's practice is subject to an annual inspection, and those physicians who exclude large numbers of patients are open to having their judgments questioned.

Physicians should not follow CPGs without considering the needs of individual patients. But this does not mean that

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they cannot be rewarded for investing in their practices to provide high-quality care.

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Financial Disclosures: Dr Roland contributed to the development of the pay-for-performance scheme described in this letter, but has no financial interest in its development or implementation.

1. Boyd CM, Darer J, Boult C, Fried LP, Boult L, Wu AW. Clinical practice guidelines and quality of care for older patients with multiple comorbid diseases: implications for pay for performance. *JAMA*. 2005;294:716-724.
2. Roland M. Linking physician pay to quality of care: a major experiment in the UK. *N Engl J Med*. 2004;351:1448-1454.
3. O'Connor PJ. Adding value to evidence-based clinical guidelines. *JAMA*. 2005; 294:741-743.

To the Editor: In their Special Communication, Dr Boyd and colleagues[1] argue that strict adherence to CPGs for populations with multiple comorbid diseases could have detrimental effects, a problem that could be exacerbated by linking pay to CPG adherence. However, CPGs could be used to establish a clinically relevant payment system. The current fee-for-service system does not reflect the evidence-based resource requirements to appropriately manage diseases. A payment system shaped by CPGs could base payments on evidence-based, clinically appropriate resources, thus creating an immediate incentive to reduce both overuse and underuse.

Such a payment model is being designed by Bridges to Excellence,[2] a multistakeholder group. In this model, physicians and payers would agree on the selection of specific CPGs; initially, patients with multiple complex conditions would be excluded. The payment amount would be based on resources required to deliver the services recommended in the chosen CPG. Physicians who are contracted to be paid this way would be offered an explicit reduction in current payer-imposed administrative burdens. However, they would have an explicit performance incentive to use the most effective and efficient pathway to treat patients. The primary shortcomings described by Boyd et al would be avoided because the physician would not be micromanaged or directed to adhere to one CPG over another (or multiple CPGs simultaneously). A CPG-based payment model that incorporated appropriate clinical flexibility, combined with a balanced scorecard to evaluate and reward performance on critical parameters of care including cost, could produce better outcomes and higher physician and patient satisfaction. Moreover, just as pay-for-performance has intensified interest in the development of tools to measure quality, a CPG-based reimbursement system should accelerate improvements in the CPGs themselves.

It is important to make it easier to bring more evidence-based care to the patient, taking into account the complexities and specific clinical and social needs of each individual. Today's CPGs might not be ideally suited to that task, but using CPGs to establish payments for simple conditions could pave the way for change that will also positively affect the patients with more complex cases.

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1. Boyd CM, Darer J, Boult C, Fried LP, Boult L, Wu AW. Clinical practice guidelines and quality of care for older patients with multiple comorbid diseases: implications for pay for performance. *JAMA*. 2005;294:716-724.
2. Bridges to Excellence Web site. Available at: http://www.bridgestoexcellence.org. Accessibility verified November 11, 2005.

In Reply: We thank Dr Hager and Ms Michael for reminding us that a physician's referral is required for Medicare to cover medical nutrition counseling. Although such consultations have the potential to simplify the nutritional recommendations contained in multiple CPGs, they also require additional health care visits for the patient. More problematic is the limited amount of evidence about the changing nutritional needs of older patients, which has led the American Diabetes Association CPG to state that "nutrition recommendations for older adults with diabetes must be extrapolated from what is known from the general population."[1]

We look forward to the results of the current experiment in the United Kingdom linking a physician's pay to quality of care, described by Dr Roland,[2] and hope that the results will be applicable to older patients with multiple comorbid diseases. However, we are concerned that when performance indicators are calculated, these patients can be excluded from both the numerator and the denominator for various reasons, thereby excluding them from the results of the study.

We agree with Mr de Brantes and colleagues that creative payment schemes may induce greater adherence to selected recommendations for patients with relatively simple needs. The exclusion from these schemes of those patients with "multiple complex conditions," however, still ignores the plight of the most vulnerable (and the most expensive) patients with the hope that they too may somehow be positively affected in the future. For this hope to become reality, standards will need to be developed that address high-quality complex care for patients, provide pragmatic methods

for detecting such care, and provide powerful incentives to reward it.

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1. Franz MJ, Bantle JP, Beebe CA, et al. Nutrition principles and recommendations in diabetes. *Diabetes Care*. 2004;27(suppl 1):S36-S46.
2. Roland M. Linking physicians' pay to the quality of care: a major experiment in the United kingdom. *N Engl J Med*. 2004;351:1448-1454.

Apolipoprotein E and Progression of Chronic Kidney Disease

To the Editor: Dr Hsu and colleagues[1] concluded that apolipoprotein E (*APOE*) gene variation predicted chronic kidney disease progression, independent of diabetes, race, lipid, and nonlipid factors. The authors state that the *APOE* association with chronic kidney disease progression was not explained by established kidney disease risk factors including diabetes and hypertension.

In their study, 56.3% of African American participants and 32.0% of white participants were classified as having hypertension. Some types of antihypertensive drugs, such as angiotensin-converting enzyme (ACE) inhibitors[2] or angiotensin receptor blockers (ARBs),[3] slow progression of chronic kidney disease independent of their blood pressure–lowering effect. It is therefore important to know the proportion of patients using ACE inhibitors or ARBs in each *APOE* genotype group before reaching the conclusion that *APOE* genotype independently predicts chronic kidney disease progression.

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1. Hsu CC, Kao WHL, Coresh J, et al. Apolipoprotein E and progression of chronic kidney disease. *JAMA*. 2005;293:2892-2899.
2. Jafar TH, Schmid CH, Landa M, et al. Angiotensin-converting enzyme inhibitors and progression of nondiabetic renal disease. *Ann Intern Med*. 2001;135:73-87.
3. Lewis EJ, Hunsicker LG, Clarke WR, et al. Renoprotective effect of the angiotensin-receptor antagonist irbesartan in patients with nephropathy due to type 2 diabetes. *N Engl J Med*. 2001;345:851-860.

In Reply: Dr Kida suggests that the use of ACE inhibitors or ARBs may confound the association between *APOE* genotype and chronic kidney disease progression. Use of antihypertensive medication had been adjusted for in our multivariate Cox models and did not modify the association between *APOE* and chronic kidney disease progression, which is the expected result given that antihypertensive medication use should not be associated with *APOE* genotype.

Detailed data on ARB use were not collected in the ARIC (Atherosclerosis Risk in Communities) study because visits were conducted from 1989-1999, mostly before losartan and other ARBs became widely available.[1,2] However, data on ACE inhibitor use were collected. Over the 4 ARIC visits, the proportion of participants using ACE inhibitors increased both among individuals with hypertension (visit 1 [7.9%], visit 2 [15.7%], visit 3 [19.7%], and visit 4 [23.3%]) and among all participants (visit 1 [3.0%], visit 2 [5.8%], visit 3 [8.4%], and visit 4 [11.6%]).

The percentages did not vary by *APOE* genotype at any visit. During visit 1, the percentages using ACE inhibitors by *APOE* genotype were as follows: ε2/ε2 (2.3%); ε2/ε3 (2.9%); ε2/ε4 (3.6%); ε3/ε3 (2.9%); ε3/ε4 (3.3%); and ε4/ε4 (2.8%), with no statistically significant difference (χ^2_5 P=.86). ACE inhibitor use was also not associated with *APOE* genotype during follow-up. Among those who did not use ACE inhibitors at baseline (n=14 078, 984 cases of progression), *APOE* genotype was associated with chronic kidney disease progression after adjustment for all confounders (*APOE* summary score: relative risk [RR], 1.13; 95% confidence interval [CI], 1.03-1.23; P=.01). Among ACE inhibitor users (n=442, 76 cases of progression), the medication did not attenuate the association (*APOE* summary score: RR, 1.27; 95% CI, 0.90-1.78; P=.17). There was no interaction with ACE inhibitor use (P value for interaction=.10), and adding ACE inhibitor use as a covariate in our fully adjusted model did not change the association among all participants (*APOE* summary score: RR, 1.14; 95% CI, 1.05-1.25; P=.003).

Although ACE inhibitor use protects against chronic kidney disease progression, particularly in the presence of proteinuria,[3,4] its use does not alter the association between *APOE* genotype and chronic kidney disease progression.

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