

Re Enhancing Functioning and Quality of Life Under Medicare

Prepared for the Study Panel on Medicare and Chronic Care in the 21st Century
National Academy of Social Insurance
December 2001

by
Robert L. Kane, M.D.
Rosalie A. Kane, D.S.W.
University of Minnesota School of Public Health
Division of Health Services Research and Policy

Address correspondence to
Robert Kane, M.D.
University of Minnesota School of Public Health
D351 Mayo (MMC 197)
420 Delaware Street SE
Minneapolis, MN 55455
612-624-1185
kanex001@umn.edu

Enhancing Functioning and Quality of Life Under Medicare

Executive Summary

Medicare already plays a much larger role in shaping the nature of medical care than serving simply as an insurance program responsible only for paying for care. Medicare has assumed an active role in assuring the quality of the care it pays for and for determining how that care is provided. It is a short step to expanding its attention to issues that affect the functioning and health-related quality of life of its beneficiaries. By using its powers to determine the amount and nature of payment and coverage, Medicare can shape medical and health care for older people and focus its attention more squarely on the important aspects considered in this paper: functional abilities and quality of life.

Fundamentally, a public health care program has four potential policy arms: coverage, payment, regulation, and consumer information. Decisions about inclusion and the extent of coverage will affect care. In the context of improving function, rehabilitation is a potentially powerful tool. Because of fears that it would be overused, rehabilitation is defined narrowly in terms of likelihood of benefit on narrow parameters. Many of the policies regarding coverage of durable medical equipment seem to be so heavily designed to prevent abuse that they actually prevent clients from getting needed (and often simple) equipment that could greatly enhance function.

Once a service is covered, how it is paid for will help determine what happens in service delivery. Authorities have been hesitant to direct the nature of care under Medicare through payment incentives. The most substantial exception to that reluctance has been the implementation of the prospective payment system (PPS) for hospitals and more recently for post-hospital care. The press to extend PPS to post-acute care (PAC) seems somewhat simplistic, especially if the goal is to improve patients functioning and quality of life. A better approach would be to combine the hospital payment and the bundled PAC payment into a single payment. Such a step would provide powerful incentives to make workable and effective discharge plans and would simplify the assignment of responsibility for care outcomes.

If the desired emphasis in Medicare is increased attention to function and QoL, payment will need to be modified. In essence, without breaking the bank, it would necessary to rebalance the payments for highly technical services with payments for more basic primary care services. The present fee-for-service arrangement provides no payment for conducting screenings or assessments of functioning and QoL.

In general, to take full advantage of Medicare's purchasing power, payment incentives should emphasize outcomes. At least a portion of the payment should be used to reward good outcomes. A major dilemma comes from the clash between outcomes-based reimbursement and case-mix reimbursement. Each is designed to create specific, but opposing incentives.

Medicare migrated to managed care in the hopes of controlling its costs, but managed care also seemed like a potential venue to emphasize the principles of geriatric care that attended to function and QoL. Unfortunately the actuality was disappointing. Given the way the capitation rates were designed, it was more efficient for plans to enroll healthier clients. Indeed, there is a

disincentive for a plan to become known as skilled in meeting the needs of complex cases, lest it be deluged with such patients.

Regulation is an almost inevitable consequence of using public funds to pay for private care. Most of the regulatory energies under Medicare are channeled through the Peer Review Organizations (PROs). PRO mandates have changed over time; but they are basically charged to focus on what may be thought of as traditional quality concerns, namely the extent to which practice is in accord with extant standards, virtually all of which address fairly narrow medical concerns. Regulations in nursing homes (NHs) and home health (HH) address functional outcomes but do not emphasize QoL.

Regulation in post-acute and long-term care has become balkanized. Because each site of care has its own measures, it is difficult, if not impossible, to compare the QoL and functional results across sites of care at the very time when such comparative information about how different types of care influences the outcomes for various subgroups is desperately needed to make both policy decisions and individual determinations of what type of care is most suitable for a given client.

A number of options are available to use regulation more effectively in the service of improving function and QoL. Basic measures of health care quality could (and should) be expanded to include these components. Indeed, success in more limited spheres, such as improved clinical parameters, should be interpreted as simply an enabler of the ultimate test of success, improved function and QoL. Without these accomplishments, the goals of care cannot be judged to have been achieved.

While payment offers the most direct incentives to changing market behavior, a marketplace model suggests that information, wisely employed, can also shape events. Providing better consumer information on which providers and organizations do function-oriented and QoL oriented care, and which produce best outcomes could change the nature of medical competition. It is unclear just how much consumers of medical care, especially older consumers, are prepared to use such information to change their loyalties to specific health care providers, but more efforts to make such data available in user friendly ways should eventually lead to more informed and discriminating Medicare consumers.

A major barrier to incorporating function and QoL is the lack of an information system to collect such data. Information on function, based on some variant of the ADLs and IADLs, is now routinely collected for all patients receiving nursing home care, home health care and rehabilitation. Other patients in the medical care system do not have such information regularly recorded. It would require some sort of mandate to include it as part of the billing information.

Collecting QoL information systematically is much more difficult, and the systems to do so more rudimentary. Whenever possible, information on QoL should come from the persons who are actually living the lives—that is, the patients themselves. Inferring QoL from the reports of other interested individuals is hazardous at best, though special challenges arise in gathering the information from some older people who suffer from cognitive and/or sensory impairments.

Geriatrics has been historically hard to support on traditional Medicare fee-for-service payments. Comprehensive geriatric assessment programs, which have been shown to be effective in enhancing patients' functioning and QoL, have not been financially self-sustaining.

The real challenge facing the Medicare program is how to align it with the epidemiology reality of a world dominated by chronic disease. The current acute care modus operandi is out of step. The extent of the needed change is considerable.

Recommendations

1. Expand rehabilitation coverage to cover maintenance of function
2. Allow more flexibility in choice of durable medical equipment.
3. Fund demonstration projects to test the role of aggressive primary care in preventing hospitalizations and emergency room use.
4. Revise the "homebound" rule for home health care receipt.
5. Bundle the prospective payments for hospital and post-acute care for selected DRGs into a single payment.
6. Revise the RBRVS to pay more for primary care by reducing payments for technical services.
7. Encourage the use of geriatric nurse practitioners by paying them at the same rate as primary care physicians for comparable services.
8. Pay for functional assessments as a variant of a laboratory test.
9. Develop payment incentives for achieving good outcomes of care in both managed care and fee-for-service.
10. Revise the payment system for managed care to remove the disincentive to enroll heavy care patients.
11. Emphasize outcomes, expressed as the ratio of observed to actual, as the basis for regulation; include both functional and quality of life measures among the generic outcomes, as well as disease-specific outcomes where applicable.
12. Apply negotiated risk approaches to long-term care planning and regulation to encourage more opportunities for clients to achieve a better quality of life.
13. Include quality of life in the definition of outcomes for regulatory purposes, especially in nursing homes.
14. Provide information on the outcomes achieved by various providers for various conditions in a form that is useful and meaningful to consumers. This may include relating the choices to individual consumers' definitions of preferences for specific outcomes over others.
15. Provide decision-making assistance to help consumers use the information effectively.
16. Include information on functioning as part of routines billing data.
17. Develop payment systems for comprehensive geriatric assessments.
18. Encourage a shift in the approach to medical care that recognizes the predominance of chronic disease. Emphasis should shift from encounters to episodes of care. Management should be based on noting small changes in patients' status and instituting early corrections.

Enhancing Functioning and Quality of Life Under Medicare

When Medicare was enacted it was intended to provide a disadvantaged group of older people access to insurance coverage comparable to that enjoyed by many of the working portion of the country (Marmor, 2000). The underlying principles and aims of the program were thus directed at assuring funding for services. Over time, however, Medicare has become a force that has shaped the evolution of medical care in the United States. As the payer for a substantial sector of the health care utilization, Medicare has a profound effect not only on those covered by the program and paid by it, but also for other providers and insurers who may be affected indirectly by decisions made by the Medicare program.

As a public program funding largely privately provided services, often delivered by proprietary providers, Medicare has assumed a strong regulatory role. Its Professional Standards and Review Organization (PSRO) and later Peer Review Organization (PRO) programs, along with its oversight of nursing home care and home health care have established patterns of quality assurance that have been emulated in other arenas of health care. Likewise, the imposition of innovative payment approaches like Diagnosis Related Groups (DRGs) and Resource Based Relative Value System (RBRVS) has changed the principles for funding care. The enthusiasm for prospective payment now extends to nursing homes (RUGs), home health (OASIS), and inpatient rehabilitation.

Thus, while the conservative position might continue to view Medicare as simply a public form of insurance with limited responsibility for providing payment for older and disabled people and no direct interest in issues of access to care or quality, current practice suggests a much wider sphere of influence. Whether by design or accident, Medicare has actually helped to shape the way medical care is delivered. Just as health insurance has given way to managed care,

where the insurer assumes a more active role to assure that the health dollar is more efficiently spent, so too has Medicare assumed a more proactive role in shaping the goals of health care for its beneficiaries. (Even by default, without actually trying to do so, Medicare shapes health care by its coverage choices.) It seems a logical extension to move from traditional concerns about quality and coverage to addressing how Medicare-funded health care can improve the functioning and quality of life of its beneficiaries.

Definitions

A few basic definitions of what appear to be commonly understood terms are in order. In the context of this analysis, *function* means the ability to carry out activities involved in daily life. Improved function ideally comes about by improving the innate abilities of the beneficiary/patient, but it can also be improved by providing services that permit the individual to compensate better for losses sustained. *Quality of life* refers to a person's own evaluation of his or her life in general, including the pleasure and meaning derived from living. A more limited approach, called *Health-Related Quality of Life* (HRQoL), limits concerns to those aspects of quality of life that can realistically be influenced by medical care. For the most part, we will limit our concerns to HRQoL, the components of which generally go beyond survival to include physical functioning, pain and discomfort, emotional well being, cognition, social functioning, role functioning, energy or fatigue, and general health perceptions. Quality of life also includes financial status, family and other relationships, and spiritual well being; these are usually beyond the health care's ability to influence directly, although some long-term care programs can negatively affect these dimensions if they are sufficiently uninviting for visitors or stultifying for

caregivers. In general, function could be considered a part of QoL, but for this paper we treat function as a separate outcome.

Several different tools are available to assess the functioning of older people. In this country, probably the most familiar is the combination of the ability to perform what are called activities of daily living (ADLs) and the ability to perform instrumental activities of daily living (IADLs). ADLs include basic tasks necessary for independent living such as bathing, dressing, using the toilet, feeding oneself, transferring in and out of bed, and maintaining one's continence. IADLs address slightly more complex tasks that involve more cognitive ability (such as using the telephone, housekeeping, cooking meals, shopping, taking medications, and paying bills) (Kane, 2000b).

A number of instruments have been developed to assess both of these constructs. The most widely used ADL measure is some variant of the original measure developed by Katz and his colleagues (Katz, Ford, Moskowitz, Jackson, & Jaffee, 1963). Any number of variations has been developed to subdivide functioning into early and late stages, to include more tasks or to make a more elaborate metric by which to measure performance of the tasks. Katz envisioned that the loss of functioning would take place in generally the same order the skills were acquired in infancy. Subsequent refinements have created weightings based on the contribution of individual elements. Consumers and providers of care place have been shown to place different weights on the importance of these elements (Kane, Rockwood, Finch, & Philp, 1998; Kane, Rockwood, Philp, & Finch, 1998). Other refinements have taken into account the difficulty involved in performing the task and the amount of accompanying pain and discomfort. The IADLs can likewise be measured with various instruments, but most are a variant of the early tools developed as part of Duke University OARS project (Duke University Center for the Study

of Aging and Human Development, 1978). The most common current measure uses the elements of the Philadelphia Geriatric Center's Multi-Attribute Index (MAI) (Lawton & Brody, 1969). These ADLs and IADLs can be combined into a single summed scale using appropriate weights that reflect the value preferences of consumers and providers of care (Finch, Kane, & Philp, 1995), but they are more often used separately.

The World Health Organization, building on its earlier framework for impairments, disabilities and handicaps (WHO, 1980), has created a taxonomy for disability comparable to that for medical diagnoses. The International Classification of Functioning, Disability and Health provides a three-tiered framework for classifying the impact of illness and other factors on function (WHO, 2001). The first tier addresses impairments and physical and emotional functioning; the second deals with people's activities; and the third addresses the ability to participate in society given the physical and psychological barriers. In the same way that medical organizations now use the ICD-9 to code diagnoses for administrative records, so too might one hope to see functioning systematically recorded.

HRQoL includes functioning but also encompasses other aspects of life as noted above. In an effort to create brief measures, each of these often-complex attributes may be reduced to a single item. Some widely used measures contain as few as five items, but most are on the order of 30-60 items (Frytak, 2000). The goal is to balance ease of administration with coverage and discrimination, not always an easy task. Some approaches endeavor to reach an overall quality of life score, whereas others measure elements that make up quality of life separately. The latter approach would measure emotional well being including depression, anxiety, and positive emotion, self-rated health, social activity, and cognitive abilities separately. Recently, too, there has been some work to measure some highly subjective elements of quality of life, especially as

they pertain to those in nursing homes. The added quality-of-life domains here include individuality, dignity, autonomy, sense of security, comfort, meaningful activity, relationships, spiritual well being, and functional competence (that is, within the limits of their physical or cognitive abilities, residents are as independent as they wish to be). The rationale for adding these dimensions is that nursing homes can influence outcomes based on these constructs through their policies and staff behavior; but the importance of quality of life is by no means restricted to nursing home residents, who are more often the responsibility of Medicaid than Medicare.

How Medicare can emphasize function and quality of life (QoL)

Fundamentally a public program has four potential policy arms: coverage, payment, regulation, and consumer information. We will examine how each can be harnessed to achieve the social goal of improving the beneficiaries' functioning and quality of life.

Coverage

Medicare coverage determines what services will be provided. For the most part, providers of care are reluctant to offer substantial volumes of services that are not reimbursed. Decisions about inclusion and the extent of coverage will affect care. In the context of improving function, a potentially powerful tool is rehabilitation. Because of fears that it would be overused, rehabilitation is defined narrowly in terms of likelihood of benefit on narrow parameters. Rehabilitation coverage requires evidence that the patient's function continues to improve. Maintaining gains (or preventing deterioration) is not sufficient grounds. In the case of frail older persons, however, there is evidence to suggest that modest maintenance therapy and strengthening can improve their functioning (Fiatarone et al., 1994). Thus, the role of exercise in

older persons deserves more careful review (Keysor & Jette, 2001). Extending coverage could keep these frail older people, many of whom are nursing home residents, functioning longer. Such services need not be provided by expensive professionals. These simple exercises can be overseen by trained aides (albeit with professional supervision). Rehabilitation potential is sometimes defined so as to exclude those without lower body functioning even though rehabilitation that led to use of the upper body or even greater movement for those confined to beds or chairs could make a difference, by definition, in function, and, by extension, in quality of life.

Many would argue that a major impediment to better functioning for many Medicare beneficiaries is the lack of ability to pay for prescribed drugs. Prescription drug coverage makes sense to the extent that it is the rate-limiting step in realizing the benefit of medical encounters. Those who cannot afford the increasingly expensive modern medications are left either to make do with presumably less effective traditional remedies or to do without the therapy. Forgoing treatment makes the prior investment in care moot and hence inefficient. The difficulty lies in establishing how to develop a drug benefit that will cover those who truly need it without duplicating extant coverage and thus raising the costs to Medicare unnecessarily (Adams, Soumerai, & Ross-Degnan, 2001). The perfect cut point seems as elusive here as in any other policy arena.

One area where coverage can make a big difference and where the rules seem to be interpreted differently in different jurisdictions is the coverage for durable medical equipment. Many of the policies seem to be so heavily designed to prevent abuse that they prevent clients from getting needed (and often simple) equipment that could greatly enhance function. For example, the limited selection of wheelchairs may preclude finding the model that meets a

client's needs. This decision can affect the client's ability to sit straight or to interact effectively. Likewise, using the right bed or the right mattress might prevent pressure sores.

Much has been made about Medicare's poor coverage of preventive care. Recent efforts have extended somewhat the coverage of screening procedures, but the only primary prevention covered is immunization against influenza and pneumonia. There is evidence that smoking cessation, even in advanced ages can have salutary health benefits (Jaijich, Ostfeld, & Freeman, 1984). Designing a benefit that would not be readily exploited is difficult, however. In an era of chronic disease, one might well argue that the most effective preventive care is aggressive primary care designed to prevent the exacerbations of these illnesses. Most of these services are already covered; unfortunately they need to be drastically revamped. Perhaps Medicare could create special demonstration programs that provided funds to develop and test more effective ways to render these primary care services, requiring that they demonstrate their cost-effectiveness in terms of reducing the adverse consequences such as emergency room use and hospitalizations. A model for such an approach can be found in the Centers of Excellence that were briefly created to handle new technologies such as transplantation. In this case, the care is less esoteric but no less important. Centers could be chartered and specially funded to develop these new models.

Many older people's functioning and QoL could be enhanced by providing dental care and hearing aids. Covering these services also raises qualms about unnecessary use. Perhaps high co-pays would be appropriate, despite the danger that those at the margin of poverty would be disadvantaged by such an approach.

Medicare's coverage of in-home services is largely limited to those services considered skilled and offered to those who are "homebound." The latter restriction was applied to home

health care to limit its use to only those who truly could not leave the house to obtain care. However, such a limitation imposes severe burdens. It can prevent clients from interacting socially and participating in a variety of social activities that are fundamental to quality of life. Indeed, younger persons with disabilities have blatantly rejected the notion of home care and insist on personal assistants who can help them to reintegrate into the whole of society.

As with the other coverage areas discussed, the cost implications of covering all personal care and attendant services at home and elsewhere under Medicare are enormous. When it was discovered that in some states Medicare was becoming a de facto program for long-term home-care management, the Balanced Budget Act of 1997 clamped down on those supposed “abuses.” Unfortunately, the narrow nature of Medicare home health has led to a sharp schism in home care between those Medicare beneficiaries seen as worthy of help that improves function and quality of life, and those who merely receive custodial attention to compensate for ADL and IADL deficits to the extent they can pay for them or receive Medicaid coverage.

A group at great risk are the so-called dually eligibles, i.e., those people covered by both Medicare and Medicaid. Not surprising because many become poor enough to be eligible for Medicaid by virtue of disability, Medicaid recipients utilize a disproportionately large amount of Medicare resources compared to other beneficiaries (Murray & Shatto, 1998). Although several demonstration efforts have tried to test the feasibility of consolidating funding from the two programs, the efforts have been underwhelming. It is becoming clear that simply merging funding streams is insufficient (Kane, Weiner, Homyak, & Bershadsky, 2001). Major changes in the infrastructure of care are required. The most promising approach to date has been PACE (Program for All-inclusive Care of the Elderly); but despite its innate appeal the valuation did not show great effects (Chatterji, Burstein, Kidder, & White, 1998). Moreover, its design, which

requires enrollees to change physicians and use day care, has a limited appeal. More innovation is needed here, with an emphasis on developing new models of care delivery, not just financing.

Payment

Once a service is covered, how it is paid for will heavily influence what actually happens in clinical practice. Medicare policy makers have been hesitant to direct care through payment incentives. The programs that have been launched have largely been reactions to payment crises. The largest effort to use payment incentives to direct professional behavior has been the implementation of the prospective payment system (PPS) for hospitals and more recently for post-hospital care. That shift in payment emphasis had major repercussions, leading to dramatically revamped usage patterns for hospitals and great pressures to identify alternative venues for both admissions and discharges. As some observers have noted, the overall effect was akin to squeezing a balloon: constriction in one area led to expansion in others.

The press to extend PPS to post-acute care (PAC) seems somewhat simplistic, especially if the goal is to improve patients functioning and quality of life. The inadequacies of hospital discharge planning were greatly exacerbated by the imposition of PPS (Potthoff, Kane, & Franco, 1998). Concerns for both function and QoL must take a longer perspective. Decisions made at one stage of care can have serious repercussions later.

Post-acute care has arisen as a major area of concern because of the efforts to reduce hospital care, but much of this effort is simply renaming care. Care that was formerly deemed to require hospital resources no longer does. However, the patient does not change; s/he just gets ignored. Developing separate payment schemes for each type of PAC ignores their interchangeability and the likelihood that more than one venue will be used in a single care episode. A more realistic scenario would be to combine the payment for all PAC into a single

bundled payment, which would be the equivalent of a point-of-service capitation under which all care (or at least all Part A covered care) would be covered by a single organization for a defined period (say three months after hospital discharge). That organization would be responsible for providing needed care and would be accountable for the outcomes of that care.

An even better, but logistically more complicated, approach would be to combine the hospital payment and the bundled PAC payment into a single payment. Such a step would provide powerful incentives to make workable and effective discharge plans and would simplify the assignment of responsibility for care outcomes. This grand bundle would be realistically limited to a select number of diagnoses associated with a high likelihood of PAC.

Good primary care takes time and time is poorly paid in the current RBRVS approach (Hsaio, Braun, Yntema, & Becker, 1988). Efforts to create geriatric medical services that emphasize improving function and QoL have frequently failed because they cannot support themselves. When they succeed financially it is usually because they are subsidized by medical centers either as loss leaders to attract more older patients or because the organization believes that the primary care business they attract will generate enough specialty referrals to repay the investment.

The current allocation of about 12 minutes for a primary care visit is simply insufficient to even attempt anything that approaches comprehensive care, to say nothing of addressing function and QoL or screening for functional problems and mental health problems like depression. The last thing the harassed primary care provider wants to do is to uncover yet more problems to be addressed in the inadequate time available.

If health policy makers want to see the emphasis in Medicare-funded care shifted to address function and QOL, they will need to change payment policies. In essence, without

breaking the bank, they will need to rebalance the payments for highly technical services and for more basic primary care services. The RBRVS was a step in that direction, but it proved to be a modest one. The opposition encountered is not likely to be any less the next time around. Moreover, there is no clear evidence that the utilities of the older public would support such a shift. While some may complain about the lack of time and attention they receive, few seem anxious to forgo the modern surgery that offers cures and remediation to painful and life-threatening problems.

One modest step in the direction of increasing attention to function and QoL might be to increase the role of geriatric nurse practitioners (GNPs). Although GNPs are used as part of physician-nurse dyads for such activities as nursing home care (Burl, Bonner, Rao, & Khan, 1998), rarely do GNPs establish independent practice despite the evidence that they can provide primary care as effectively as physicians (Mundinger et al., 2000). Perhaps some demonstrations, which could test their marketability, might be a first step in establishing a new cadre of primary care providers for older persons whose practices would emphasize function and QoL.

The present fee-for-service arrangement provides no payment for conducting screenings or assessments of functioning and QoL. One simple step to encourage physicians to use these instruments would be to pay for them in the same way laboratory tests are covered. Rules could be established about the frequency they could be billed.

In general, to take full advantage of Medicare's purchasing power, payment incentives should emphasize outcomes. At least a portion of the payment should be used to reward good outcomes. Such a step would require some major rethinking about responsibility, but at the least it would send a strong message that Medicare is prepared to reward good quality. A basic issue in any such incentive system is how to assess a good outcome. By their nature outcomes are

probabilistic concepts that involve comparing actual rates of performance with expected rates, correcting statistically for differences in case mix. The database to support such an effort is not yet in place but some elements of it exist and can be used as initial building blocks.

The larger issue is developing a policy about who is responsible for the results of care. This allocation of responsibility is easiest in the context of managed care, where an organization has taken on this responsibility overtly. It is likewise possible to talk about responsibility for the outcomes of hospital care, with a caveat about the difficulty in separating the role of hospital and post-acute care. Managed care and bundled PAC might thus be reasonable places to begin such a program. One potential tool available to address the outcomes of Medicare managed care is the mandatory Health Outcomes Survey. While problems remain with the technical details of its implementation, payments to HMOs could include rewards for better overall functional performance based on elements of this survey. Statistical methods exist to make the necessary case-mix adjustments to assure that programs are fairly judged.

The concept of outcomes-based payment incentives is innately attractive, but it may be hard to implement. The underlying construct, especially in a situation where chronic disease is predominant, is to reward outcomes that are better than expected, where the expected value reflects the beneficiaries' clinical and social situation. Different types of outcomes might be used. In some cases, the outcomes could be specific to a given condition or disease, for example, how well is diabetes or congestive heart failure controlled. More typically, with older people who frequently suffer simultaneously from several problems, the outcomes should reflect broader, more inclusive constructs like functioning and health related quality of life. The measurement and analysis problems are more readily managed when such outcomes are addressed across groups rather than for individuals.

A major dilemma comes from the clash between outcomes-based reimbursement and case-mix reimbursement. Each is designed to create specific incentives. The outcomes approach rewards organizations that achieve good results. The case-mix system pays a fair price that eliminates the incentive to serve the least disabled. However, the not too subtle incentive of case-mix payment is that the more needy the client, the higher the payment. This incentive works diametrically opposite to that for outcomes, which pays more if the client needs fewer services. The two approaches, however badly needed, are thus incompatible.

The enthusiasm for encouraging managed care plans as options for Medicare enrollees was based primarily in the hopes of controlling Medicare costs. But managed care also seemed like a potential delivery strategy to emphasize the principles of geriatric care that attended to function and QoL. Unfortunately the actuality was disappointing (Kane, 1998). At least one major driver was the approach to payment employed. It is very difficult to devise a payment system that can accurately and fairly fit the range of health conditions. Because the utilization is heavily skewed, no single model will accurately fit the majority of modest users and the small group where heavy utilization is concentrated. Basing the capitation rates on the current fee-for-service rates created an incentive to enroll healthy people and provided no incentives to become skillful in managing the more seriously chronically ill population whose function and QoL are at greatest risk. To have any hope of using managed care to address these populations, the current disincentives to enroll these high-risk groups need to be removed and more appropriate incentives created. These would include at a minimum redoing the AAPCC calculations to more adequately recognize case mix differences. Ideally, this approach could be combined with the sorts of rewards for good outcomes discussed earlier.

Regulation

As observed earlier, regulation is an almost inevitable consequence of using public funds to pay for private care. Most of the regulatory energies under Medicare are channeled through the Peer Review Organizations, whose mandates have changed over time; but who are basically charged to focus on what may be thought of as traditional quality concerns, namely the extent to which practice is in accord with extant standards, virtually all of which address fairly narrow medical concerns. Although it has become more recently fashionable to talk in terms of the outcomes of care, even these concerns are primarily limited to mortality and morbidity concerns. Relatively little attention is given to outcomes like function and QoL.

Regulation in nursing homes (NH) and home health (HH) addresses functional outcomes but does not emphasize QoL. Here the efforts are still rudimentary, despite two nationally mandated information systems, the Minimum Data Set (MDS) for nursing homes, and the Outcome and Assessment Information Set (OASIS) for home health. For example, functional measures are actively employed and data are collected, but the analysis is limited. No efforts are made to look at clinical course and compare actual to expected changes (i.e., slowing rate of decline). In the context of functioning, especially among a chronically ill, frail population, success may be measured less by improvement than by slowing the rate of decline. Little attention has been directed to such issues as how to compare functional changes fairly by properly accounting those who drop out for various reasons. For example, a program could look very good if all the difficult cases died in the interval and hence were not included in the follow-up data. Depression, cognition, and social well-being are not measured directly in the MDS through recording the responses of the individual resident, but rather are judged by nurses and other professionals who observe behaviors to complete the forms.

Regulation of post-acute and long-term care has become balkanized. Because each site of care has its own measures, it is difficult, if not impossible, to compare the QoL and functional results across sites of care at the very time when such comparative information about how different types of care influences the outcomes for various subgroups is desperately needed to make both policy decisions and individual determinations of what type of care is most suitable for a given client. For example MedPAC has noted the need for such data to be able to compare the relative effectiveness of alternative modes of PAC (Medicare Payment Advisory Commission, 2000). Such a database requires that comparable information using the same metrics be obtained across different PAC venues. While it is possible to achieve some comparisons by cross-walking different data collection devices, it is inefficient and potentially misleading. The answer does not necessarily lie in simply finding the lowest common denominator across the various measures. Care should be taken to assure that salient information is collected, especially in terms of quality of life.

Although Medicare is not a major payer of nursing home care, Medicare rules and regulations have shaped nursing homes; indeed, the somewhat higher Medicare standards were adopted for all nursing homes in 1987 when the Medicare Conditions of Participation and the Medicare standards were combined. Collectively, these regulatory standards emphasize medical outcomes, and particularly avoiding bad outcomes such as bedsores, urinary tract infections, malnutrition, and falls. They have created a strong disincentive for facilities to allow residents to take risks or live natural lives. Certainly the regulations have failed to demand niceties of privacy and dignity for residents: the words are used by the reality is that nursing homes still have two, three, and even four persons per room and adopt hospital-like routines. Medicare beneficiaries shun nursing homes when they can, as reflected in the surge in assisted living (Mollica, 2000) In

theory, a senior living in an apartment-style assisted living setting could utilize home health care for Medicare-covered services. In fact, various rules that govern assisted living (in this case, state rules) make it difficult for the individual to receive rehabilitation and convalescent care in assisted living. It is understandable that many older people living alone at home must go to a nursing home for rehabilitation and convalescence during a period where their ADL and IADL performance is diminished. Those who live in assisted living should not need to undergo the indignities and fearfulness of a nursing-home sojourn if the care and policies could be better articulated. A related side problem that is attributable to Medicare rules concerns the reluctance of many assisted living facilities to acquire Medicare certification because they would then be required to use the OASIS methodology for all services to all residents.

A number of options are available to use regulation more effectively in the service of improving function and QoL. Basic measures of health care quality could (should) be expanded to include these components. Indeed, success in more limited spheres, such as improved clinical parameters, should be interpreted as simply an enabler of the ultimate test of success, improved function and QoL. Without these accomplishments, the goals cannot be judged to have been achieved.

Emphasizing these concepts will help to catalyze the need to recognize the epidemiological reality that we live in a world of chronic disease (Kane, 2000a). Success is no longer measured best by simply improved survival or cure of diseases. Indeed, in many cases it is unrealistic to expect that active treatment will lead to improvement. Slowing the rate of decline may be an achievement in itself. Unfortunately without some basis of comparison it is impossible to detect when the rate of decline in function has actually been achieved. Statistical methods must be employed with large data sets to compare actual and expected courses.

The sixth scope of work for the Peer Review Organizations (PROs) charges them to work with health care providers to improve various health outcomes on a community-wide basis (Jencks et al., 2000). Thus far, these outcomes have been fairly specific (e.g., immunization rates). It would certainly be feasible to expand that mandate to include elements taken from the Health Outcomes Survey that reflect function and QoL.

The current approach to regulation in nursing homes is built around an intensely medical model that strives for a zero tolerance of any untoward event. Unfortunately the cost in loss of personal autonomy and individual preference is very high. Regulations in nursing homes could explicitly allow for consumer decision-making around QoL, including informed risk-taking. Regulations could also emphasize features of environment that enhance privacy, autonomy, and meaningful life rather than safety.

There is some empirical basis for arguing that increasing the geriatric presence in health care under Medicare might improve the outcomes of its beneficiaries. A number of geriatric innovations have been demonstrated to improve function and QoL (Boult, Boult, & Pacala, 1998), but they have not been widely implemented for lack of a critical mass of knowledgeable advocates. One step might be to mandate that providers have at least a minimal geriatric input/training among them. For example, the newly developed managed care program for Medicare and Medicaid recipients in Massachusetts, Senior Care Options, has required that its provider organizations have evidence of certified geriatricians; but this mandate need not apply to only geriatricians. Similar requirements could include primary care physicians and geriatric nurse practitioners.

Another approach would be to mandate data collection and information systems that specifically included elements that address function and QoL. In the nursing home arena, the

Minimum Data Set, includes ADLs but its structure is such that it obtains all of its information by observation and never encourages the data collectors to even talk to the residents, thereby obviating any efforts to address QoL issues. The OASIS instrument for home health care can be praised and sanctioned on the same grounds.

For both the MDS and OASIS, the introduction of these assessment tools can be hailed as a major step forward, but the results have not been all many had hoped for. On the one hand, the very mandating of collecting such data has underlined a vocabulary that emphasizes functioning. Systematically collecting data makes it possible to compare the differences across sites and ultimately across venues of care. However, perhaps because the system was mandated and because it has also been used to calculate payment, it has been corrupted. Studies suggest that the accuracy is disappointing (Office of the Inspector General, 2001). On the one hand, providers complain about the burden of data collection. On the other hand, by not requiring that information be obtained directly from the clients themselves, the opportunity to address QoL has been lost.

A model for taking a more geriatrically oriented approach may be found in the efforts around the second generation of Social HMOs. The SHMO II model emphasized geriatrics and case management, extended the approach to all but titrated it to emphasize the functionally impaired or those at risk (Kane et al., 1997).

A central part of quality of life is being in control of critical decisions that will affect one's life. Regulation could provide needed structure in the realm of discharge planning, especially from hospitals but potentially from other venues as the locus of care shifts. At present hospital discharge planning is a national disgrace. The pressure to discharge patients quickly gives precedence to availability of resources. Little time is available to allow patients and their

families to weigh the option available to identify which ones are most likely to produce the outcomes of greatest importance to them (Potthoff et al., 1998).

Some years ago HCFA began an effort to create a standardized database for hospital discharge planning, the Uniform Needs Assessment Inventory (UNAI) but this work was abandoned, although much of the pertinent information has been identified as part of the MDS-PAC instrument, the tool that some had hoped would become the universal measure across all types of PAC. Mandating uniform information and evidence that a patient does not require extensive discharge planning based on criteria that demonstrate no substantial functional dependency would represent a first step. A more directive approach would require a structured process for discharge planning that included providing patients and their families with adequate time to make these difficult decisions and the information on the risks and benefits or alternative post-hospital care needed to make them intelligently. An even stronger position would require that discharge planners employ facilitative techniques to provide a structured environment within which these decisions and their implications could be carefully explored.

Consumer Information

While payment offers the most direct incentives to changing market behavior, a marketplace model suggests that information, wisely employed, can also shape events. Providing better consumer information on who does functional/QoL oriented care and who produces best outcomes could change the nature of medical competition. It is not clear just how much consumers of medical care, especially older consumers, are prepared to use such information to change their loyalties, but more efforts to make such data available in user friendly ways should eventually lead to more informed and discriminating Medicare consumers.

Experience with providing consumers with “report cards” that rate the performance of hospitals and health plans has been largely disappointing. Neither consumers nor their agents seem to use such information in making purchasing decisions (Hibbard & Jewett, 1997); (Hibbard, Jewett, Engelmann, & Tusler, 1998); (Chernew & Scanlon, 1998); (Gibbs, Sangl, & Burrus, 1996); (Tumlinson, Bottigheimer, Mahoney, Stone, & Hendricks, 1997). Part of the problem may lie in how the information is provided. Not only should it be in a simple, easily understood form, it may be better couched in an interactive format whereby the user is encouraged to express preferences and providers are selected that correspond to those preference patterns.

It is overly simplistic to assume that complex, value laden health decisions can be made perfectly rationally. Many frail Medicare beneficiaries will rely heavily on family members in using this information to make decisions. Often there are sharp differences of opinion within families. Some families may not be emotionally prepared to confront the underlying issues.

If Medicare consumers are not yet prepared to digest more complex reports on quality and outcomes that address elements of function and QoL, perhaps a place to begin is to identify those providers who are orders of magnitude better than usual care. Medicare could develop a special designation for providers of excellence. This approach is consistent with that described earlier but its focus would be different. Instead of encouraging providers to test new models of care, this program would recognize those that had already achieved a demonstrable level of excellence as determined by outcomes that reflected functioning and QoL. These providers of excellence could be widely advertised; they may also receive special payment rates in recognition for their achievements.

Factors that promote and impede the incorporation of function/QoL

Discussing factors that can impede or promote incorporating function and QoL may become redundant with what has already been said. To avoid this problem, we will emphasize only those areas that have not yet been addressed.

A major barrier to incorporating function and QoL is the lack of an information system to collect such data. While one might hope to see functional information routinely collected like diagnoses (using the International Classification of Functioning, Disability and Health), we are still some ways away from achieving that goal. Efforts to introduce into clinical practice routine collection of simple HRQoL measures like the SF-36 have met with limited success (Rubenstein et al., 1989); (Calkins et al., 1991).

Information on function, based on some variant of the ADLs and IADLs is now routinely collected for all patients receiving nursing home care, home health care, and rehabilitation. Other patients in the medical care system do not have such information regularly recorded. It would require some sort of mandate to include it as part of the billing information.

Collecting QoL information systematically is much more difficult and the technologies more rudimentary and less standardized compared to functional assessment. Information on QoL should come, whenever possible, from the persons actually living the lives, that is, the patients themselves. Inferring a person's QoL from other informants or observations is hazardous at best. Hence, observations by proxies will not likely work well. Eliminating proxies both raises the cost of data collection and threatens to exclude respondents who are too cognitively impaired to respond to an interview. Measures of QoL, especially ones that are sufficiently flexible to cover the variety of settings and patients that may be involved in care, are much less developed than those for functioning. It is not clear that one measure will fit all situations. For example, nursing

home residents' QoL may be affected by a variety of environmental factors that would not be germane to someone living in her own home.

It is impossible to overlook the role of payment. In the case of fee-for-service, primary care practitioners have historically complained that their work, especially as it relates to activities like counseling and meeting with families, has historically been underpaid compared to technically complex specialties. The RBRVS payment approach was designed to remedy that discrepancy, but succeeded to only a limited degree (Hsaio et al., 1988). Geriatrics has been historically hard to support on traditional Medicare fee-for-service payments. Comprehensive geriatric assessment programs, which have been shown to be effective in enhancing patients' functioning and QoL, have not been financially self-sustaining. Because technology is often reimbursed better than personal interactions, geriatric assessment programs may be tempted to use unnecessary screening devices and tests to generate income.

It might be possible to pay for specific services like geriatric assessment, defining the components of such a service. One could also define the eligibility levels, but such a step might eliminate many cases that might ultimately benefit from such attention.

Specific payment could also be used to take advantage of special programs that already exist under Medicare. For example, the hospice program allows Medicare funds to be used more flexibly to meet a variety of medical and QoL goals for persons identified as terminally ill who opt to receive such care. At the moment, people enter the hospice program very late in their clinical course, apparently holding onto any hope that active treatment may still offer some benefit. Hospice has been developed as an alternative to traditional care, but it could be an adjunct. Providing more sensitive, personalized care does not necessarily require forgoing active

efforts to treat problems that are treatable. Principles of palliative care, especially effective pain and symptom control, can be widely applied.

The problems with managed care payments have already been discussed. A better/fairer case mix adjustment system is needed. It is not clear that the administrative database driven approaches currently being promoted will suffice.

Both managed care and fee-for-service encourage primary care practitioners to increase the volume of their care, thereby reducing the time for any individual contact. Visits are now classified into several payment categories, which basically reflect the time expected to be spent. Perhaps a special classification for managing complex cases that involve multiple diagnoses and/or multiple domains (e.g., social and psychological as well as physical) might be established.

One way to promote more attention to function and QoL is to use them as a basis for measuring the outcomes of care. Such outcome information could be used either as the basis for special incentive payments or for marketing purposes; however, the appeal of a reputation as a good place to receive chronic care will depend on how the payments are organized.

The concept of negotiated risk has been developed in assisted living and may provide a more general means of modifying the regulatory climate in medical and nursing home care to promote QoL (Burgess, 2000); (Kapp & Wilson, 1995). A negotiated risk agreement (sometimes called a managed risk agreement) refers to a process by which patients decide to take risks against the advice of health care providers after being informed about the likely consequences; the negotiated risk process is typically made concrete in a document that is signed by the patient, the relevant care providers, family members or guardians (if they are involved), and case managers representing public payers (if they are involved) The idea behind “negotiated risk” is that risk is a normal part of adult lives, and older persons should not be prohibited from taking

risks of everyday life in order to receive care. The Pioneer Network in Long-Term Care, a group dedicated to the process of culture change in nursing homes, has articulated as a principle that normal risk is a part of adult life (Lustbader, 2000). Yet implementing programs that respect this principle has proved a challenge: some advocates fear that providers will be insufficiently accountable, and some providers fear that they will be left without legal protection for bad results that occur as a result of negotiated risk agreements (Wilson, Burgess, & Hernandez, In press).

Although acute-care providers routinely help patients and their involved family members make decisions weighing risks (such as whether to undergo surgery or accept a medical regimen with side-effects), this willingness has not translated to long-term care. It seems more tolerable for health professionals to allow patients to take a risk in what appears (probably falsely) to be a finite, one-time decision, than to take a risk of adverse outcomes like falls when the individual at risk is living under ongoing health care jurisdiction. For this reason, the negotiated risk vehicle may be a welcome and effective way to surface and resolve the dilemmas that arise for persons receiving long-term care that negatively affect their lives. Used skillfully, it becomes an adjunct to care planning in situations of conflict and uncertainty (Kane & Levin, 2001). Certainly regulating at a zero tolerance level, as is the trend for nursing homes, tends to produce a sterile, repressive environment. Much developmental work is needed, however, to bring negotiated risk into the mainstream, and much training before physicians, nurses, and others will be comfortable with negotiated risk agreements. Negotiated risks, moreover, means known risks. In order to make an informed choice, older persons must be made to appreciate the risks and benefits of the options. In order to assure accountability, these options and their attendant risks must be made concrete and records kept about the decisions made. Equally important, however, providers can no longer vaguely assert that risks exist without specific information. Finally, some approach is

needed that goes beyond the need to blame (and possibly sue) somebody for every bad result in long-term care (Kapp, 1997). Negotiated risk is not intended to be a complete abrogation of provider responsibility, but it does offer a way to give consumers more choices and more opportunities to live more normal lives.

Role of risk adjustment

Risk adjustment is central to several proposals put forth here. Any outcomes system requires that the groups whose care is being judged must be comparable. Since such equivalency is virtually impossible in practice, statistical adjustments are mandatory. We have already observed that managed care organizations currently face disincentives to attract chronically ill. Equitable payment approaches again require the payment levels be commensurate with the likely costs of enrollees. It should be recognized, however, that the risk factors associated with outcomes may not necessarily be the same as the risk factors for costs. While bad outcomes usually cost more, death, for example, may sometimes be cheap. Good outcomes may require heavy investments of technology while long, lingering deaths may pose less of a financial drain. Conversely, some QoL outcomes may be inexpensive to obtain and others may cost a great deal. Simple, timely, accurate interventions may make a huge difference at little expense.

Risk adjustment plays another, less direct role in defining treatment goals. It makes the incentives overt. In a world of capitation and subcapitation, this identification usually means that providers will define what they will invest in on the basis of whether it generates additional revenue. Identifying a person as being a higher revenue generator by virtue of functional needs, for example, makes it easier to devote more resources to that case.

Risk adjustment also serves a psychological role by reassuring providers that their special situations are being recognized. Each provider believes that s/he sees all the difficult cases. Believing that this maldistribution has been acknowledged and addressed gives each a sense of greater justice in the system.

Payment systems/incentives

Payment can be used overtly to create incentives or underscore policy directions. In the context of managed care we have already noted that higher payment (or some form of special bonus payments) could be used to acknowledge and reward better outcomes that reflected QoL and function. Data like that in the Health Outcomes Survey or derived information from Medicare utilization data (if such data could be obtained from managed care programs) could form the basis for calculating functional and QoL outcomes.

Conversely, payment systems must be careful to avoid creating disincentives to pursue desired policy lines. For example, the current payment approach for managed care, which uses the AAPCC, or even the proposed new systems that use administrative records to generate diagnostic data, do not capture well the extra effort required to address persons with chronic illness, especially multiple simultaneous chronic problems. Certainly they do not capture functioning. In the absence of such a sensitive system, managed care organizations may believe they are better off avoiding such complicated cases. Certainly they will be better off economically if they can be paid the average cost for persons who are healthier than average, the very opposite of the behaviors sought.

The fee-for-service climate offers several opportunities to reward greater attention to function and QoL. Activities closely linked to these domains can be paid for directly. For

example, Medicare could pay better for geriatric assessment and management. There are data to suggest that specific payments are associated with improved physician performance (Hillman, 1991).

In addition, Medicare could offer some type of bonus payments for better (more attentive) primary care. This could be organized as a payment for services provided (either new services or expanded ones) or it could be tied to outcomes, such as lower rates of preventable hospitalizations. The economic justification for the extra payment would come from the idea of showing that more effective primary care was linked causally to fewer hospitalizations.

The impact of flagging activities with some form of special payment may transcend the actual monetary value. It serves to highlight the importance of the constructs being emphasized and draws additional attention to function and QoL, or at least to those activities that should contribute to them.

Effects on health care system

Although several of these strategies will create a climate that could increase attention to function and QoL, they would be better if they were part of an overall strategy for emphasizing chronic disease care. The real challenge facing the Medicare program is how to align it with the epidemiology reality of a world dominated by chronic disease. The current acute care modus operandi is out of step. The extent of the needed revolution is considerable. A few of the necessary changes include defining what constitutes successful care, what is the appropriate role of consumers and providers of care, and how to think about returns on care investments (Kane, 2000a). To take just one example, in the context of chronic disease, it is foolish to view the practitioner as central. S/he sees the patients only intermittently, whereas the patient lives with

the disease and its consequences every day. Patients must play a more central role in managing their conditions. They need to become more alert and accurate observers. They need to make necessary changes in life styles. Likewise, as patients become more involved in decision-making about their care new questions arise about the level of responsibility held by providers of that care. Shared decision-making implies shared responsibility for the outcomes of care. At the same time, one does not want to relieve the professionals of all (perhaps not even of most) of the responsibility for what happens to their patients. New terms must be negotiated.

Fee-for-service reimbursement is ill suited to the changes needed to implement a chronic disease approach. Ideally, the frequency of care and the length of contacts would be determined less by fixed routine policies and more by the clinical status of each individual patient. Those who were progressing as expected could be monitored less intensively, whereas those whose conditions showed early signs of deterioration need to be seen and for longer visits.

The first essential step would be to institute a strategy to follow relevant parameters for each chronic condition the patient had. Most of these observations could be made by the patients, thereby involving them more actively in their own care. The actual clinical course would be compared to the expected course. Significant deviations would be a cue to act.

Implementing such an approach seems easier in the context of managed care, where there is more flexibility. But in truth, most managed care is simply a recapitulation of the fee-for-service Medicare system. It faces the same problem of how to establish a basis for payment that would apportion care in a way that would encourage more aggressive primary care but would not be open to exploitation.

One aspect of chronic disease management that has engendered controversy is case management. On the one hand, it makes good sense to identify someone who can coordinate

often complex care that involves a variety of professional participants. However, the evidence that case management actually improves coordination enough to make a palpable difference in outcomes is scarce (Gagnon, Schein, McVey, & Bergman, 1999).

Part of the problem may lie in the way case management is operationalized. It is used either as some form of utilization management to control excessive use by high utilizers through review and oversight of their care (Pacala et al., 1995); or it is used to determine eligibility for services, especially in programs that offer some long-term care such as the SHMO program (Leutz, Abrahams, Greenlick, Kane, & Prottas, 1988). Case management directed at helping patients adjust to their illness or to comply better with their therapeutic regimens have shown greater success (Naylor et al., 1999), (Rich et al., 1995). Designing a Medicare benefit that specifies the nature of case management would thus be difficult.

Creating a health care system more focused on functional and QoL outcomes could rebalance the attention currently devoted to curative care and even prevention. Although function and QoL are incorporated into many cost-effectiveness calculations through such measures as quality-adjusted life years (QALYs) insufficient attention is given to just what goes into those QALYs. Too often the construct is very rudimentary with weak coverage of areas that many people would find essential components of QoL. Paying more attention to QoL might inadvertently change the way we measure it and thereby the calculus by which we evaluate the success of our health care establishment. Certainly establishing new expectations and reinforcing that rhetoric with actions would send a different message to all concerned.

Cost

Several questions must be asked about the cost implications of the proposals made here. In many instances these proposals imply coverage would add considerably to the costs of Medicare, albeit in pursuit of worthwhile objectives; but some proposals can be better seen as alternative uses for resources already being spent. For example, the federal government is already making a heavy investment in Medicare nursing home survey and certification, which many people believe often addresses outdated information or emphasizes less relevant aspects of care. For FY 2001 the total federal survey and certification budget was about \$242 million. Of that amount about \$26 million was for state survey agencies to survey SNFs and about \$125 million to survey SNF/NFs. Similarly, the annual budget for the PRO (Peer Review Organization) program is about \$350 million. At least a portion of these regulatory dollars could be redirected to activities that could enhance attention to function and QoL.

Mandating better information, which in turn could be organized and shared with consumers to allow them to make more informed decisions does not seem to involve large amounts of resources, but the underlying data base must be maintained and updated regularly. To the extent that much of the data generation costs are borne by the providers, who would be required to submit the information to costs can be controlled. Conversely, making such demands of the providers may create a backlash. Some mandates for more or better information would place heavy costs on providers; nursing homes and home health agencies are already complaining about the information burden

The largest costs would come from expanding coverage and providing direct incentive payments. Until the scope of such an activity is better delineated, it is not possible to provide costs estimates. Likewise, changing the capitation payment system will have major financial

implications, but it is not clear that the new system need cost more. The increase in cost is likely to occur if managed care organizations respond positively to the new incentives by enrolling more disabled persons whose fair costs will be higher. This increase would presumably be met by a concomitant reduction in fee-for-service costs, however, which should yield budget neutrality.

The costs of developing an information system that emphasized function would fall largely on the providers of care. For example, mandating a billing form that included codes from the International Classification of Functioning, Disability, and Health as well as the IDC-9 codes would add considerable work for providers but could provide important insights into how the medical care system was addressing such issues. For managed care operations the same problems that plague obtaining basic utilization data would apply at least as much here. Because itemized billing is no longer required for Medicare payment, it represents an extra step. In truth, however, the vast majority of Medicare managed care still requires a billed transaction between the care plan and the provider and hence adding a requirement for functional information would be no more intrusive here than in fee-for-service.

Collecting QoL data would require a new, costly infrastructure. Even methods like the Health Outcomes Study extended to fee-for-service populations would not suffice. The risk of either relying on proxies or missing the frailest, and hence most interesting, group means that at least some of the data must be collected by in-person interviews, which are expensive.

Recommendations

1. Expand rehabilitation coverage to cover maintenance of function
2. Allow more flexibility in choice of durable medical equipment.

3. Fund demonstration projects to test the role of aggressive primary care in preventing hospitalizations and emergency room use
4. Revise the “homebound” rule for home health care receipt
5. Bundle the prospective payments for hospital and post-acute care for selected DRGs into a single payment
6. Revise the RBRVS to pay more for primary care by reducing payments for technical services
7. Encourage the use of geriatric nurse practitioners by paying them at the same rate as primary care physicians for comparable services
8. Pay for functional assessments as a variant of a laboratory test
9. Develop payment incentives for achieving good outcomes of care in both managed care and fee-for-service
10. Revise the payment system for managed care to remove the disincentive to enroll heavy care patients
11. Emphasize outcomes, expressed as the ratio of observed to actual, as the basis for regulation; include both functional and quality of life measures among the generic outcomes, as well as disease-specific outcomes where applicable
12. Apply negotiated risk approaches to long-term care planning and regulation to encourage more opportunities for clients to achieve a better quality of life
13. Include quality of life in the definition of outcomes for regulatory purposes, especially in nursing homes
14. Provide information on the outcomes achieved by various providers for various conditions in a form that is useful and meaningful to consumers. This may include

relating the choices to individual consumers' definitions of preferences for specific outcomes over others.

15. Provide decision-making assistance to help consumers use the information effectively
16. Include information on functioning as part of routine billing data
17. Develop payment systems for comprehensive geriatric assessments
18. Encourage a shift in the approach to medical care that recognizes the predominance of chronic disease. Emphasis should shift from encounters to episodes of care. Management should be based on noting small changes in patients' status and instituting early corrections.

References

- Adams, A. S., Soumerai, S. B., & Ross-Degnan, D. (2001). The case for a Medicare drug coverage benefit: A critical review of the empirical evidence. Annual Review Public Health, 22, 49-61.
- Boult, C., Boult, L., & Pacala, J. T. (1998). Systems of care for older populations of the future. Journal of the American Geriatrics Society, 46, 499-505.
- Burgess, K. L. (2000). Negotiated Risk Agreements in Assisted Living Communities (A report produced by Kenneth L. Burgess Esquire, Hooper, Lundy & Bookman, San Francisco). Washington: Assisted Living Federation of America.
- Burl, J. B., Bonner, A., Rao, M., & Khan, A. M. (1998). Geriatric nurse practitioners in long-term care: Demonstration of effectiveness in managed care. Journal of the American Geriatrics Society, 46(4), 506-510.
- Calkins, D. R., Rubenstein, L. Z., Cleary, P. D., Davies, A. R., Jette, A. M., Fink, A., Kosecoff, J., Young, R. T., Brook, R. H., & Delbanco, T. L. (1991). Failure of physicians to recognize functional disability in ambulatory patients. Annals of Internal Medicine, 114(6), 451-454.
- Chatterji, P., Burstein, N. R., Kidder, D., & White, A. J. (1998). Evaluation of the Program of All-Inclusive Care for the Elderly (PACE). Cambridge, MA: Abt Associates Inc.
- Chernew, M., & Scanlon, D. P. (1998). Health plan report cards and insurance choice. Inquiry, 35(1), 9-22.
- Duke University Center for the Study of Aging and Human Development. (1978). Multidimensional Functional Assessment: The OARS Methodology. Durham, NC: Duke University.
- Fiatarone, M. A., O'Neill, E. F., Ryan, N. D., Clements, K. M., Solares, G. R., Nelson, M. E., Roberts, S. B., Kehayias, J. J., Lipsitz, L. A., & Evans, W. J. (1994). Exercise training and

nutritional supplementation for physical frailty in very elderly people. New England Journal of Medicine, 330(25), 1769-1775.

Finch, M., Kane, R. L., & Philp, I. (1995). Developing a new metric for ADLs. Journal of the American Geriatrics Society, 43(8), 877-884.

Frytak, J. R. (2000). Assessment of quality of life in older adults. In R. L. Kane & R. A. Kane (Eds.), Assessing Older Persons: Measures, Meaning, and Practical Applications (pp. 200-236). New York: Oxford University Press.

Gagnon, A., Schein, C., McVey, L., & Bergman, H. (1999). Randomized controlled trial of nurse case management of frail older people. Journal of the American Geriatrics Society, 49(9), 1118-1124.

Gibbs, D. A., Sangl, J. A., & Burrus, B. (1996). Consumer perspectives on information needs for health plan choice. Health Care Financing Review, 18(1), 55-73.

Hibbard, J. H., & Jewett, J. J. (1997). Will quality report cards help consumers? Health Affairs, 16(3), 218-228.

Hibbard, J. H., Jewett, J. J., Engelmann, S., & Tusler, M. (1998). Can Medicare beneficiaries make informed choices? Health Affairs, 17(6), 181-193.

Hillman, A. L. (1991). Managing the physician: Rules versus incentives. Health Affairs, Winter, 138-146.

Hsaio, W. C., Braun, P., Yntema, D., & Becker, E. R. (1988). Estimating physicians' work for a resource-based relative-value scale. New England Journal of Medicine, 319, 835-841.

Jajich, C. L., Ostfeld, A. M., & Freeman, D. H. (1984). Smoking and coronary heart disease mortality in the elderly. Journal of American Medical Association, 252, 2831-2834.

Jencks, S. F., Cuerdon, T., Burwen, D. R., Fleming, B., Houck, P. M., Kussmaul, A. E., Nilasena, D. S., Ordin, D. L., & Arday, D. R. (2000). Quality of medical care delivered to Medicare beneficiaries: A profile at state and national levels. JAMA, 284(13), 1670-1676.

Kane, R. A., & Levin, C. A. (2001). Who's safe? Who's sorry. The duty to protect the safety of HCBS consumers. In M. B. Holstein & P. B. Mitzen (Eds.), Ethics in Community-Based Elder Care (pp. 217-233). New York: Springer.

Kane, R. L. (1998). Managed care as a vehicle for delivering more effective chronic care for older persons. Journal of the American Geriatrics Society, 46, 1034-1039.

Kane, R. L. (2000a). The chronic care paradox. Journal of Aging & Social Policy, 11(2/3), 107-114.

Kane, R. L. (2000b). Mandated assessments. In R. L. Kane & R. A. Kane (Eds.), Assessing Older Persons: Measures, Meaning, and Practical Applications (pp. 458-482). New York: Oxford University Press.

Kane, R. L., Kane, R. A., Finch, M., Harrington, C., Newcomer, R., Miller, N., & Hulbert, M. (1997). S/HMOs, the second generation: Building on the experience of the first social health maintenance organization demonstrations. Journal of the American Geriatrics Society, 45(1), 101-107.

Kane, R. L., Rockwood, T., Finch, M., & Philp, I. (1998). Consumer and professional ratings of the importance of functional status components. Health Care Financing Review, 19(2), 11-22.

Kane, R. L., Rockwood, T., Philp, I., & Finch, M. (1998). Differences in valuation of functional status components among consumers and professionals in Europe and the United States. Journal of Clinical Epidemiology, 51(8), 657-666.

Kane, R. L., Weiner, A., Homyak, P., & Bershadsky, B. (2001). The Minnesota Senior Health Options program: An early effort at integrating care for the dually eligible. Journal of Gerontology: Medical Sciences, 56A(9), M559-M566.

Kapp, M. B. (1997). Who is responsible for this? Assigning rights and consequences in elder care. Journal of Aging and Social Policy, 9(2), 51-66.

Kapp, M. B., & Wilson, K. B. (1995). Assisted living and negotiated risk reconciling protection and autonomy. Journal of Ethics, Law, and Aging, 1(1), 5-14.

Katz, S., Ford, A. B., Moskowitz, R. W., Jackson, B. A., & Jaffee, M. W. (1963). Studies of illness in the aged. The index of ADL: A standardized measure of biological and psychosocial function. Journal of American Medical Association, 185(12), 914-919.

Keysor, J. J., & Jette, A. M. (2001). Have we oversold the benefit of late-life exercise? Journal of Gerontology: Medical Sciences, 56A(7), M412-M423.

Lawton, M. P., & Brody, E. M. (1969). Assessment of older people: Self-maintaining and instrumental activities of daily living. Gerontologist, 9, 179-186.

Leutz, W. N., Abrahams, R., Greenlick, M., Kane, R. A., & Prottas, J. (1988). Targeting expanded care to the aged: early SHMO experience. The Gerontologist, 28, 4-17.

Lustbader, W. (2000). The pioneer challenge: A radical change in the culture of nursing homes. In L. S. Noelker & Z. Harel (Eds.), Quality of Care and Quality of Life in Nursing Homes. New York: Springer.

Marmor, T. (2000). The Politics of Medicare (2nd ed.). New York: Aldine De Gruyter.

Medicare Payment Advisory Commission. (2000). Report to the Congress: Medicare Payment Policy. Washington, DC: MedPAC.

Mollica, R. (2000). State Assisted Living Policy. Portland, ME: National Academy for State Health Policy.

Mundinger, M., Kane, R., Lenz, E., Totten, A., Tsai, W.-Y., Cleary, P., Friedewald, W., Siu, A., & ML, S. (2000). Primary care outcomes in patients treated by nurse practitioners or physicians: A randomized trial. JAMA, 283(1), 59-68.

Murray, L. A., & Shatto, A. E. (1998). MCBS highlights: dually eligible Medicare beneficiaries. Health Care Financing Reports, 20(2), 131-140.

Naylor, M. D., Brooten, D., Campbell, R., Jacobsen, B. S., Mezey, M. D., Pauly, M. V., & Schwartz, J. S. (1999). Comprehensive discharge planning and home follow-up of hospitalized elders: A randomized clinical trial. JAMA, 281(7), 613-620.

Office of the Inspector General. (2001). Nursing home resident assessment: Quality of Care (OEI-02-99-00040). New York: Department of Health and Human Services.

Pacala, J. T., Boulton, C., Hepburn, K. W., Kane, R. A., Kane, R. L., Malone, J. K., Morishita, L., & Reed, R. L. (1995). Case management of older adults in health maintenance organizations. Journal of the American Geriatrics Society, 43(5), 538-542.

Potthoff, S., Kane, R. L., & Franco, S. J. (1998). Improving hospital discharge planning for elderly patients. Health Care Financing Review, 19(2), 47-72.

Rich, M. W., Beckham, V., Wittenberg, C., Leven, C. L., Freedland, K. E., & Carney, R. M. (1995). A multidisciplinary intervention to prevent the readmission of elderly patients with congestive heart failure. New England Journal of Medicine, 333(18), 1190-1195.

Rubenstein, L. V., Calkins, D. R., Young, R. T., Cleary, P. D., Fink, A., Kosecoff, J., Jette, A. M., Davies, A. R., Delbanco, T. L., & Brook, R. H. (1989). Improving patient function: A randomized trial of functional disability screening. Annals of Internal Medicine, 111(10), 836-842.

Tumlinson, A., Bottigheimer, H., Mahoney, P., Stone, E. M., & Hendricks, A. (1997). Choosing a health plan: What information will consumers use? Health Affairs, 16(3), 229-238.

WHO. (1980). International Classification of Impairments, Disabilities, and Handicaps: A Manual of Classification Relating to the Consequences of Disease. Geneva: World Health Organization.

WHO. (2001). International Classification of Functioning, Disability and Health. Geneva: World Health Organization.

Wilson, K. B., Burgess, K. L., & Hernandez, M. (In press). Negotiated risk: Opportunity or exploitation. Journal of Ethics, Law, and Aging.