

The Contribution of Geriatric Health Services Research to Successful Aging

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Successful aging seems to refer to a broad set of circumstances that include but transcend healthy aging. The contribution of medical care to successful aging may lie in better management of chronic diseases. Health services research can contribute to successful aging by informing the delivery of medical care in this area. It can provide useful insights into what kinds of new ap-

proaches have proven successful and how to implement and sustain these changes. However, many of these lessons from health services research have been ignored in practice to date.

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Although no one has officially defined successful aging (1), the two most widely used descriptions come from large studies. Rowe and Kahn (2) include three components for successful aging: avoiding disease, engagement with life, and maintaining high physical and cognitive function. Although the emphasis is on preventive behaviors, several of these components allow a role for health care. Vaillant (3) defines successful aging as including healthy aging, retirement, play and creativity, and “generativity”; the latter refers to a continual sense of intellectual and social development. Healthy aging is measured by evaluating objective physical disability, subjective physical health, length of undisabled life, objective mental health, objective social support, and subjective life satisfaction.

Under these definitions, one can envision a person aging successfully despite serious illness and physical limitations. In this context, better management of chronic disease, which is now endemic, would represent a major contribution to successful aging.

So far, we have addressed the concept of success, but aging also deserves closer attention. Bengtson and colleagues (4) make an important distinction among age, aging, and the aged. “Age” refers to various chronologic periods in one’s life and may address socially expected roles. “Aging” is a progressive process that begins at birth; the onset and accumulation of chronic illness may be concomitant with the aging process. “The aged” refers to efforts to address older persons with special attention to geriatrics and the high costs of care. Successful aging would appear to address the way the last portion of life is lived.

POTENTIAL HEALTH SERVICE RESEARCH ROLES

Relevant health services research contributions might include changing care patterns to increase chances of successful aging; certainly, eliminating the iatrogenic consequences of medical care would constitute a first big step. Another role would lie in changing medical care for older persons to preserve the quality of their aging. Health services research can make important contributions in two areas: It can provide evidence of effective strategies, and it can identify ways to sustain useful innovations.

Candidate outcomes for successful aging include measures of frailty and life satisfaction or quality of life. Physical health plays a prominent role, but there may be a range of quality of life within even limited physical health. Conversely, being physically intact may have less of an effect on quality of life than does being cognitively impaired (5).

Health services research ultimately probes the marginal effect of care. It may well prove easier to identify the negative contributions of medical care (for example, iatrogenic errors) than the positive ones. While few would question the contribution of good care, isolating its effect is challenging. Various other factors, some of which may be difficult to measure, can play a substantial role in different situations. For example, social support is associated with a variety of functional outcomes (6, 7). The physical and social-psychological environment can have a substantial impact on one’s quality of life, especially in the case of nursing home residents (8).

SUCCESSFUL AGING IN THE CONTEXT OF CHRONIC DISEASE CARE

At present, most attention is focused on acute care, but priorities are changing, albeit slowly. Should investments in health care be directed to chronic disease care, long-term care, or preventive care? Chronic disease care seems to be the critical issue of the moment (9). It represents both the current and future reality. Even the World Health Organization has recognized its centrality (10). The Institute of Medicine has made better chronic disease care synonymous with improving quality (11).

Shifting from an acute care-oriented medical care system to one that more effectively addresses chronic disease care means a major change in many areas. The role of patients becomes more central. Patients experience chronic illness 24 hours a day, 7 days a week. The infrequent contacts with the medical care system cannot provide the extent of care needed. Patients must assume more control of their health, making salient observations and producing responses to changing circumstances.

Chronic illness implies new criteria with which to evaluate time investments. The payoff horizons must shift

to extend well beyond a single contact and point of service. The concept of “episodes” must replace “encounters.” Another critical need is an effective information system that can detect change in clinical status. Disease management plays a useful role in tracking patients and intervening in a timely manner, but much of this management has been grafted on top of existing medical practice rather than being integrated into it. Chronic disease care implies new roles for health professionals. Most of the work to date has emphasized changing physicians’ practice behaviors, sometimes through re-education and sometimes by adding personnel to assume responsibilities physicians have been unwilling to take on. A new model of providing care, which features partnerships between medical specialists and nurse practitioners, may offer a better way to get the most from both types of providers. Specialists can focus on the organ of their interest, while the nurse practitioners address the whole person.

Defining successful chronic disease care requires rethinking our acute care assumptions. Care is emphasized over cure. A major accomplishment in the context of chronic disease care is preventing exacerbations, which can be damaging to patients and costly to society. Achieving this end involves more effective, proactive primary care and avoiding the iatrogenic complications of care. Reducing expensive utilization can be both an end in itself and the evidence of more effective primary care. Shifting the emphasis from cure to care implies placing great emphasis on preventing the transition from disease to dysfunction. Many of these goals are compatible with successful aging.

CRITICAL ISSUES IN CHRONIC CARE HEALTH SERVICES RESEARCH

Wagner and colleagues (9) have offered a good model of what is required to transform the medical care system to respond to the challenges of chronic disease. Some of their work in areas such as diabetes care (12, 13) can serve as a template for identifying the potential contributions of health services research, but more effort is needed (14, 15). The first big task is determining what works. Both randomized trial and quasi-experimental methods will be needed. But an equally big challenge is getting people to implement what works. This step will require closely examining the use of personnel, the role of incentives, and ways to achieve large-scale system reform. Some had hoped that managed care might play a more central role in facilitating this transformation, but history has not yet shown that to occur (16, 17). Catalyzing managed care to move in socially desired directions will require creating the right incentives that encourage enrolling and effectively treating chronically ill persons. It means introducing new approaches to accounting that address payment issues by redefining care episodes and encouraging investment thinking.

It is not enough to admire the problems; we need

intervention research that points the way to solving them. Descriptive agendas must give way to interventions that emphasize both efficacy and effectiveness. Cost-effectiveness can be assessed at the project level (for example, specific interventions to improve care), at the program level (for example, creating a climate to sustain improvement: What does it take? How do you get there?), and at the societal level (for example, can we afford to treat the consequences of osteoarthritis?).

Innovations that have been shown to work (by randomized, controlled trials and studies with weaker designs) have not been widely adopted. For example, geriatric evaluation and management (18, 19), discharge follow-up (20), disease management (21, 22), group care (23), and innovations in hospital care (24) improve the management of older persons but have not been incorporated into mainstream practice (17). Among other ideas worth testing is creating better primary care delivered by physician–nurse-practitioner teams (particularly teams of medical specialists working with nurse practitioners so that the latter can provide more comprehensive primary care while the former address difficult management of organ systems) (25). This would create stronger clinician–patient partnerships that actively and constructively involve both parties, improving the use of medications by more appropriate prescribing and adherence to those regimens (26). Real information systems that go beyond current versions of the electronic medical record need to be established to structure the collection and dissemination of information so that hospitals can drive care rather than react to it.

Programs such as Improving Chronic Illness Care, which use clinical measures defined by local expert groups as a basis for continuous quality improvement, represent a coordinated effort in the right direction. RAND is evaluating the effects of this conjoint program.

Another problem lies in finding the mechanisms to make and sustain change, but a start has been made. Mathematica Policy Research has produced some interesting qualitative studies to identify and understand innovative practices working within the confines of the Medicare program (27). A study of large medical groups identified the key characteristics associated with implementing practices that respond effectively to chronic disease care (28), but the field must move from description to the intervention.

The work to date has yielded some insights about creating change in medical practice. It is hard to accomplish (29, 30). Bigger is better; multimodal approaches seem to achieve more than simple interventions (28). Information systems are vital but not sufficient. Incentives count; they can reinforce change, but they alone will not accomplish it.

IMPLICATIONS FOR HEALTH SERVICES RESEARCH

Specific intervention studies and sustained technology transfer studies are needed. Economics plays a big role; neither organizations nor individual practitioners will work

against what they perceive to be their economic interests. Defining success and creating appropriate incentives are needed to reconsider the time course; investments of effort and payoffs may be separated by substantial periods. Supply can influence demand. The availability of expensive treatments can raise the cost of care. Selective insurance benefit coverage can distort care patterns. For example, the extent of drug coverage may affect the use of hospitals (31).

Even more stringent strictures apply to health services research targeted at geriatric issues. A critical first step is to determine the best outcome measures that fit the situation and the population. Because of high mortality rates in many studies of frail elders, differences in survival rates can introduce important attrition bias. Given the nature of geriatric care, with its emphasis on multiple interactive problems, single disease interventions may not prove as effective as multifaceted models. At a minimum, assessment of outcomes must adjust for multiple comorbid conditions.

In effect, this discussion has come full circle. Successful aging intersects with health services research applied to geriatrics in the definition of quality. Both quality of care *and* quality of life must be included. For this reason, the concept of “health-related quality of life” is too restrictive. The term “health-related quality of life” was created to circumscribe the boundaries of accountability for health care, but in the context of successful aging, such a step may be counterproductive. It may eliminate the very elements that constitute successful aging. If this inclusion places a greater burden on health care to demonstrate its value, it may instill a deserved sense of humility.

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