Executive Summary

The quality of long-term care has raised concerns over the years among local, state, and national policy makers and the public, including the users of services and their families. The nursing home sector in particular remains the focus of continuing concern about the quality, cost, and accessibility of care and the adequacy of oversight and enforcement mechanisms. These concerns about problems in the quality of long-term care persist despite some improvements in recent years, and are reflected in, and spurred by, recent government reports, congressional hearings, newspaper stories, and criminal and civil court cases. Debate also continues over the effectiveness and appropriate scope of state and national polices to regulate long-term care, reduce poor performance of providers, and improve the health and well being of those receiving care. These questions and debates extend beyond nursing homes to home and community-based services and residential care facilities.

Long-term care covers a diverse array of services provided over a sustained period of time to people of all ages with chronic conditions and functional limitations. Their needs range from minimal personal assistance with basic activities of everyday life to virtually total care. Those needs are met in a variety of care settings such as nursing homes, residential care facilities, or people’s homes. Of the 190 million people aged 18 years of age and older in 1994, nearly 9 million were using formal (paid) and informal (unpaid) long-term care. Of these, 6.5 million were over 65 years and older. The proportion of long-term care users who reported using only informal care dropped from 51 percent in 1984 to 40 percent in 1994, while the proportion who reported using institutional care increased from approximately 26 percent to 30 percent during the same period. Elderly people using long-term care in 1994 were older than in 1984 (mean age up from 79.2 to 80.5 years) and more likely to be women, to be cognitively impaired, and to have a greater number of limitations with activities of daily living than those using long-term care in 1984.

The aging of the U.S. population and the projected growth of the oldest age bracket (85 years and older) will have a major effect on the demand for and supply of long-term care services and on the resources needed to provide those services. The implications of these changes are enormous as evidenced by the widespread public and policy focus on the elderly population in discussions of such care. The population aged 85 years and older is the fastest-growing age group in the United States, and it is the most rapidly growing age group among the elderly population (65 years and older). Most of the increase in demand for long-term care services is
expected to occur when the “baby boom” generation enters the elderly ages. The first of this generation will reach age 65 in the year 2011 and the last will do so around 2030.

The older population today, on average, is in better health than its counterpart of a few decades back. Recent studies have reported declines in the prevalence of chronic disability among elderly people. Although their overall health has improved, many elderly persons are dependent and frail with one or more chronic conditions and the consequent disabling conditions that increase with age. Also, with life expectancies continuing to rise for most groups, a larger proportion of people lives to age 90 and beyond. Hence the absolute number of years that people with disabling conditions require long-term care is likely to grow substantially, even if significant declines in disability rates are assumed.

Although long-term care creates the image of an elderly person in a nursing home, it is not limited to the needs of older persons or to care provided in nursing homes. Needs can occur at any age. The number of children and adolescents with severe long-term health conditions, although small in comparison to the elderly, has grown substantially over the past two decades and will continue to do so. Advances in medicine and surgical technologies now allow many children who would have died in previous eras to survive to adulthood, although often with psychological and physical impairments. Continuing improvements in medical care that allow more children and non-elderly adults with serious congenital or chronic disorders and injuries to survive for longer periods also are likely to contribute to a growing demand for long-term care services.

Most formal long-term care service is provided through organized service providers ranging from home and community-based services such as those provided by home health agencies, nonmedical personal care and supportive services in individuals’ homes; to community-based residential care facilities; to institutional facilities such as nursing homes. Definitions of many of these long-term care service providers vary; states may label similar services differently or apply similar labels to services that differ. Although discussions of long-term care policy appropriately emphasize the role of paid professionals, paraprofessionals, and other workers, much long-term care is provided by unpaid, informal caregivers, including family members, neighbors, friends, volunteers from religious and community organizations, and others. Nearly 65 percent of caregivers are either the spouses or the children of the long-term care recipients.

In 1986, the Institute of Medicine (IOM) Committee on Nursing Home Regulations issued its report *Improving the Quality of Care in Nursing Homes*. Its recommendations provided the basis for Congress to enact a major reform of nursing home regulations embedded in the Omnibus Budget Reconciliation Act of 1987 (OBRA 87). Since the IOM issued its 1986 report, many changes have occurred. However, long-term care is not synonymous with nursing home care. The use of alternative non-institutional settings for long-term care has increased to include home health care, personal care, residential care, care management, and other services.

In the context of these evolving long-term care options and needs and persistent concerns about the quality of long-term care, especially care in nursing homes, the Robert Wood Johnson Foundation requested that the Institute of Medicine undertake another examination of the quality of long-term care provided in nursing homes and other long-term care settings. The Archstone Foundation, Irvine Health Foundation, Department of Veterans Affairs, and Health Care Financing Administration provided additional support. The IOM was asked to examine the following:

- the demographic, health, and other characteristics of individuals requiring long-term care;
• the roles of different long-term care settings in community health care systems, and the movement of people among long-term care and other settings (their relationship to other components of community care systems);
• the current quality of long-term care settings and the extent to which this has improved or deteriorated in the past 10 to 15 years;
• the impact of regulations, especially the Nursing Home Reforms in OBRA 87, on such matters as the use of physical and chemical restraints, advance care planning, provision of adequate nutrition, identification of substandard facilities or programs, and public access to information on quality of care; and
• the strengths and limitations of existing approaches to measure, oversee, and improve quality of care and outcomes in nursing homes and other long-term care settings and ways of improving them to promote better quality of care and other outcomes, regardless of setting.

The IOM appointed a committee of experts to examine the above issues. This report responds to that request. To address its charge in a systematic manner, the committee conducted a number of activities. It reviewed and analyzed an extensive body of research, both published and unpublished, and other relevant reports; analyzed data from various sources; conducted site visits; heard from a large number of experts and interest groups at public hearings and a workshop; and commissioned several background papers.

The scope of the study is broad and complex, covering a wide range of settings for providing long-term care and the broad range of issues that affect long-term care. Although the committee recognizes their growing importance, lack of available data as well as resource and time constraints prevented the committee from addressing every possible long-term care service and service setting, population group, and issue. Thus, a fuller consideration of the quality of long-term care for children, adolescents, and younger adults with developmental disabilities; personal attendant services; services for people with severe cognitive impairment; severe and persistent mental illness; AIDS; and other conditions others can and should be the subjects of separate studies. Likewise, settings such as intermediate care facilities for the mentally retarded, long-term psychiatric hospitals also are not covered in this report.

In responding to its charge, the committee decided to devote most of its attention to older adults, both because they are the major users of long-term care, with prospects for further growth in their numbers, and because the long-term care literature and policy agendas focus primarily on aged adults and adults with disabilities. The committee also examined nursing homes in more depth than other service settings, because of the long-standing problems of quality of care in these settings, and because of the paucity of literature on the quality of care in other settings.

Three complementary approaches are generally used for ensuring quality of care and life in long-term care. They are: (1) standards set and enforced by government and accrediting agencies, and incentives for quality improvement through Medicare and Medicaid, and other payers; (2) consumer information, choice, and market competition; and (3) organizational and professional commitment to quality improvement.

The committee believes that all three must be pursued effectively to promote and improve quality in the provision of long-term care. These approaches to assure and improve quality of care and life in long-term care should not be considered as alternatives; they are interdependent. The regulatory approach does not preclude consumer choice, and both these external approaches require internal organizational mechanisms to ensure quality.
The committee’s major findings and conclusions based on this review and its deliberations are summarized below, followed by the text of the recommendations.

FINDINGS AND CONCLUSIONS

Assessment of Quality of Long-Term Care

Defining or evaluating quality of long-term care is fraught with problems, made more difficult by the unevenness of the available empirical evidence. Although information to evaluate quality of care in nursing homes is extensive and systematic, for most other settings it is nonexistent or very limited and lacking in uniformity. Moreover, opinions about what constitutes excellent, good, or poor quality also are changing and sometimes conflicting. Some of the available information is open to interpretation, and conclusions are sometimes based on personal and clinical experience rather than on empirical evidence.

Standards for evaluating whether quality is good or bad are shaped by several considerations and circumstances. The committee identified three specific aspects of long-term care that are relevant for assessing quality. First, long-term care is both a health program and a social program. For the health services component, judgments about quality emphasize medical and technical aspects of care, and such judgments are generally based on achieving desired health and functional outcomes and on adherence to correct processes of care. For the social services aspect, judgments about quality place more emphasis on the opinions and satisfaction of consumers (or their surrogate agents). Second, the potential and actual role of consumers is an essential element in long-term care. Although a relatively new concept, long-term care, and therefore the basis for evaluating the quality of such care is being redefined. At least in some care settings, consumers have assumed a larger role in choosing, directing, and evaluating many features of their care. Third, for nursing homes and residential care facilities, the physical environment of the facility can contribute to the physical safety and functional mobility of residents and, more broadly, to their quality of life. Privacy is an important aspect of the physical environment, and is intimately tied to the consumer-centered principles that the committee endorses.

In nursing homes, the committee found that since the implementation of the Omnibus Budget Reconciliation Act of 1987 (OBRA 87), the quality of care has generally improved over the past decade, even though nursing homes are serving a more seriously ill population. For example, many facilities have successfully reduced the inappropriate use of physical and chemical restraints. The focus of increased regulatory scrutiny on these two areas of care was a major contributing factor in reductions in both of these. Yet in many nursing homes quality of care continues to be problematic. Despite these improvements, serious quality-of-care problems persist in some nursing homes. Pain, pressure sores, malnutrition, and urinary incontinence have all been shown to be serious problems in recent studies of nursing home residents. The committee recognizes, however, that change in eliminating or reducing persistent and serious problems is a long process requiring diligent monitoring and enforced adherence to standards.

The quality of life for nursing home residents also has shown some improvements, but to a lesser extent. As a result of OBRA 87 and in response to market competition, the quality of life and the physical environment in nursing homes have improved somewhat, but concerns remain. Outside of nursing homes, little is known about the quality of care or outcomes of services pro-
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vided by medically-oriented home health agencies, and even less about the quality of social service-oriented home and community-based services. Residential care facilities, including assisted living, presents a mixed picture in terms of both quality of care and quality of life. Some offer individualized, high-quality care in facilities that afford privacy, dignity, and individualization. However, others appear to lack adequately trained staff, and offer neither sufficient amount of care nor privacy and "homelike" settings. Also, there are indications that consumers may receive too little information to make informed choices regarding these facilities and the services provided.

Evidence regarding the quality of home care is more limited than that for nursing home care, but also points to a mixed experience. Moreover, most of the research in this area measures satisfaction and unmet need and not quality of care. Medicare-funded home health care generally appears to be of adequate quality in terms of the transactions between caregivers and care users. However, the program has suffered from problems of overuse and inappropriate use, leading to new constraints on payments that may adversely affect the availability of services for those with the most severe care needs. Access to home and community-based services and especially personal care services for people with disabilities is not uniformly available across states and appears to be largely unmet. The committee believes that access to, and choice of appropriate services, is essential to the quality of care and quality of life for individuals with disabilities. It concluded that research is needed towards developing an appropriate array of community-based long-term care services to meet the needs of consumers and assess the quality of the services and outcomes.

Problems with the quality of care being provided in some situations across all types of long-term care settings remain. Better mechanisms to more adequately assess quality in these settings. More attention should be given to these issues including safety, consumer choice into quality improvement, and broadened participation in decision making.

Assessment Tools for Monitoring Quality

Information based on valid, reliable, and timely data about the care provided, the recipients, the facilities, and the caregivers is fundamental to all strategies for monitoring and improving the quality of long-term care. Such information is of interest to many constituencies, including consumers, caregivers, provider organizations, managers, regulators, purchasers, and researchers. The committee reviewed the current state of the major data systems in long-term care and their application for clinical assessment, quality monitoring, and reimbursement.

At the federal level, three data systems provide basic information on monitoring compliance with regulations and on the quality of long-term care offered by nursing homes and home health agencies: (1) the On-line Survey Certification and Reporting (OSCAR) System for nursing homes and home health care is a computerized national database for long-term care facilities used for maintaining and retrieving survey and certification data for providers that are approved to participate in the Medicare or Medicaid programs. It provides information on how well a nursing home has met the regulatory standards in the past and provides on-site surveyors with background information on past performance. It also has compiled nationwide data on resident characteristics and conditions, facility characteristics, staffing, survey deficiencies including scope and severity, and complaints. As such, it serves as a quality assessment tool. OSCAR data also are used to provide information to consumers through a HCFA-supported web site on the Internet that contains data on every nursing home in the United States. The data are collected and
updated on a regular basis by state licensing and certification agencies under contract with HCFA to conduct Medicare and Medicaid certification surveys.

(2) OBRA 87 reforms require nursing homes to develop of a uniform Resident Assessment Instrument (RAI) for all nursing home residents. The RAI provides a structured approach to assessment of a nursing home resident’s need for care and treatment in preparing a plan of care. Its primary use is clinical, to assess the functional, cognitive, and affective levels of residents on admission to the nursing home and at least annually thereafter and when any significant change in status occurs. Individualized, restorative care plans are developed at this time. The RAI includes a set of core assessment items, known as the Minimum Data Set (MDS) for assessment and care screening and more detailed Resident Assessment Protocols (RAP) in 18 areas that represent common problem areas or risk factors for nursing home residents. The reliability, validity, and sensitivity of individual MDS data elements, and composite scales constructed from these data elements, have been tested and analyzed extensively.

(3) The Outcome and Assessment Information Set (OASIS) for home health care is a group of data elements that represent core items of a comprehensive assessment of an adult home care patient, and that form the basis for measuring patient outcomes for purposes of outcome-based quality improvement. OASIS is a key component of Medicare’s partnership with the home care industry to foster and monitor improved home health care outcomes and is proposed to be an integral part of the revised conditions of participation for Medicare certified home health agencies.

The committee identified a number of technical and methodological challenges involved in using the data collected in these systems for quality assessment and other policy related purposes. Despite such problems, the committee believes that continued use and evaluation of these data systems is essential.

Other types of long-term care settings, such as assisted living facilities and non-Medicare-certified home health care providers, have introduced various consumer-based information systems that include data on the individual recipients of care. Because a variety of residential care facilities offer room, board, and supervision to frail individuals without certification by the Medicaid or Medicare programs, several states have developed assessment systems for use in such residential care environments, based on the RAI and MDS for nursing homes.

States have also designed assessment instruments to determine an applicant’s eligibility for services under Medicaid waiver programs for home and community-based services and then to guide the development of a plan of care and referrals to service agencies for those who are eligible. Many states use these instruments only for Medicaid reimbursed clients. The nature of the information collected by states varies enormously both across and within states, and although all states use assessments to develop a care plan, the comprehensiveness of the assessment varies and most states do not have standardized terms. Also, most states do not require training in the administration of the instrument despite its importance.

Interest is increasing in the possibility of identifying an instrument or set of core assessment elements that is applicable to all users of long-term care regardless of the setting. This interest stems in part from a growing recognition of the overlap among the characteristics of long-term care populations served in different settings and from a desire to compare the quality of care across settings. The availability of such assessment tools also might help in monitoring individuals as they move from one care level or setting to another. Uniform definitions of various community-based services and programs, common measures, and common sets of codes for categorizing care users’ physical, cognitive, and emotional functioning would facilitate a common
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language for assessing long-term care needs and the outcomes of care. However, much work is needed first to examine the diversity across states of the services provided, service settings and service arrangements, and the infrastructure for monitoring quality and then to develop agreements on common core data elements and uniform definitions of various community–based arrangements across states.

Quality Assurance through External Oversight

Organizations providing long-term care are staffed with professional, paraprofessional, support staff, and often volunteers. In the final analysis, the quality and safety of long-term care depends on the actions of these individuals. External forces, however, can and do influence their actions by providing guidance and setting expectations for outcomes. They also can provide incentives, financial or otherwise, for specific actions that will affect access to and safety of care, and the quality of care quality of life in long-term care settings. These external forces include formal quality oversight mechanisms, purchasers of long-term care, and families. The committee recognizes that other forces—including the mass media, care management and monitoring programs, and contractor standards set by purchasers—also influence provider behavior.

Federal and state governments share regulatory responsibilities for long-term care. Overall, the federal government has a dominant presence in nursing home and home health regulation through certification for Medicare and Medicaid participation. States, however, play the major role in regulating other kinds of long-term care. For example, they set licensure and other standards for various kinds of residential care arrangements. States also perform many of the certification procedures under contract with HCFA.

The major goals of long-term care regulation have been described as consumer protection (specifically, ensuring safety, the quality of the care received, and the legal rights of consumers) and accountability for public funds used for care. The central elements of long-term care regulation at the federal or state level are: establishing quality and related standards for service providers; designing survey processes and procedures to measure and monitor actual conditions of residents or clients and to assess compliance with the standards; and specifying and imposing remedies or sanctions for noncompliance.

To assess compliance by nursing homes with Medicare and Medicaid requirements for participation, HCFA relies on a survey and certification process administered under contract by state agencies. In recent years, HCFA has taken several steps or has proposed needed steps to improve specific areas of weakness, but the committee believes that more should be done to ensure adequate enforcement of standards. Although the basic standards for nursing homes are sound, the survey and enforcement of the standards has been weak with widespread variability across states. The committee identified a number of ways in which the regulatory system can be improved. HCFA can revise some aspects of the survey and enforcement processes it uses to monitor nursing homes. Some of the suggested changes include targeting chronically poor performing providers, paying more attention to chain facilities, focusing on resident problems, improving sampling techniques and sample sizes, reducing the predictability of the surveys, strengthening consistency of survey determinations, improving complaint investigations, and certifying the accuracy of nursing home data.

Residential care programs such as board and care homes have been around for a long time. The regulation of residential care facilities including assisted living occurs primarily at the state level. In general, the states have broad discretion in carrying out this oversight. The state
role includes licensing and monitoring compliance with health and safety regulations covering such matters as building safety, food handling, medication storage and distribution, and staffing. State standards are highly variable for these care arrangements including assisted living facilities, a relatively recent subset of residential care. This variability begins with the very definition of the kinds of settings subject to particular regulation and extends to eligibility for service, services provided, staff requirements, and configuration of personnel and social living spaces.

Unresolved questions remain about the appropriate role of state regulatory standards in meeting the needs and preferences of the diverse population using long-term care. Research studies have raised serious questions about the effectiveness of state regulation and licensure promoting quality in residential care. The committee pointed to a range of actions that might help improve state-level regulation, beginning with research to examine the effectiveness of state survey and enforcement activities, especially in terms of quality of care, quality of life, staffing, and other measures related to residential care. Although not all committee members agree on the specifics of how state regulatory systems should be modified, there was consensus in the committee that, at this time, these mechanisms need not mirror the extensive federal regulatory system that is in place for nursing homes.

Outside of government, advocacy by consumers, family members, and committed community members historically has played a critical role in shaping long-term care policy and services. Perhaps the best-known advocacy effort is the Long-Term Care Ombudsman Program, which was mandated under the Older Americans Act in 1978. Program staff investigate and resolve problems made on behalf of residents living in long-term care facilities, and they also help educate the public and facility staff on complaint filing, new laws governing facilities, and best practices used in improving quality of care and evaluating care options. Other advocacy efforts involve resident representatives; resident councils; and family councils that participate in a variety of activities in nursing homes, assisted living facilities, and other residential settings; as well as independent state and national organizations devoted to long-term care issues. Such efforts are essential to consumer protection and, with adequate funding, will remain an important part in the overall effort to improve the quality of long-term care.

**Strengthening the Caregiving Work Force**

Provision of formal long-term care requires an adequate, skilled, and diverse work force. Registered nurses, licensed practical nurses, nursing assistants or aides, and home health aides represent the largest component of personnel in long-term care. Other professionals—such as physicians, social workers, therapists (physical, occupational, and speech), mental health providers, pharmacists, dietitians, and dentists—provide many different kinds of essential services to at least some of those using long-term care. Nonprofessionals, who provide the majority of personal care services, such as assistance with eating or bathing, have a major impact on both the health status and the quality of life of those receiving care. In addition to the direct caregivers, administrative, food service workers, housekeeping staff, and other personnel play essential roles in long-term care.

Long-term care services are labor intensive, and therefore the quality of care depends largely on the performance of the caregiving personnel. Personnel standards vary considerably across long-term care settings. Federal standards have been set for some personnel in nursing homes and home health agencies, but not for personnel providing care in other types of long-term care settings. Some states also have their own requirements for personnel in the facilities
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and programs that they regulate, particularly regarding health professionals and long-term care administrators, but these requirements vary widely across states.

Most of the research on the relationship between staffing and quality of long-term care has focused on nursing homes. Some studies have examined home health care workers, but few of these studies have examined the relationship between work force characteristics and quality of care. Little is known about the relationship of staffing to quality of care in other long-term care settings.

The committee reviewed the research literature, OSCAR data and HCFA’s time studies to determine if staffing as a measure of quality in nursing homes has increased since implementation of the 1987 nursing home reforms embedded in OBRA 87. A slight but noticeable increase in staffing level has occurred in recent years. This increase may be attributed in part to the requirements of OBRA 87 and in part to the increased acuity of residents and the consequent staffing required to provide specialized services. The committee found a wide range of staffing levels in nursing facilities. Many facilities have adequate staffing levels and provide high quality of care to residents. However, current staffing levels in some facilities are not sufficient to meet the minimum needs of residents for provision of quality of care, quality of life, and rehabilitation. Research provides abundant evidence of quality-of-care problems in some nursing homes and such problems are related in part to inadequate staffing levels.

The importance of having adequate staffing is highlighted by a number of studies, focused on nurses in particular, that point to a positive association between staffing levels and the processes and outcomes of nursing home care. Abundant research evidence indicates that both nursing-to-resident staffing levels and the ratio of professional nurses to other nursing personnel are important indicators of high quality of care, and that the participation of registered nurses in direct caregiving and in the provision of hands-on guidance to nurse assistants is positively associated with quality of care. Several studies have shown the importance of nursing management by professional nursing staff and gerontology specialists in making improvements in quality of care. A limited number of studies of other types of non-nursing services, such as physical therapy, also have found positive benefits in terms of residents’ functional status and the costs of care. The research literature, however, does not answer the question of what particular skill mix is optimal. Nor does it take into account possible substitutions for nursing staff and ways to best organize all staff.

Moreover, nurse staffing levels alone are a necessary, but not a sufficient condition for positively affecting care in nursing homes. Many factors influence the quality of care provided by staff to consumers of long-term care and their quality of life. In addition to staffing levels, education and training of staff, supervision, environmental conditions, leadership and management, attitudes and values, job satisfaction and turnover of staff, salaries and benefits, and management and organizational capacity of the facility are all essential elements in the provision of quality care to residents.

Reflecting on the role of each of these factors, the committee proposes recommendations for the development of training, education, and competency standards that prepare staff to care competently for all long-term care users with different needs and characteristics, including participation in consumer-directed service programs. Furthermore, the committee recommends that staff not be retained if they have been convicted of a felony or any crime involving the abuse,

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1 In this report “staffing levels” includes numbers of staff, ratios of staff to residents, and the mix of different types of staff in nursing homes and residential care facilities.
neglect, or exploitation of others. The committee therefore proposes federal legislation requiring timely background checks before hiring for all personnel in all long-term care settings.

The committee recognizes that the recommended enhancements would entail additional costs for care providers. Substantial improvements in the long-term care work force are not possible without increased resources for care providers. Government policies of reimbursing for long-term care have an important influence in improving quality of care. At the same time, there is evidence that some staffing changes, such as increased professional nurse staffing, might in some cases produce cost savings. For example, savings could accrue if an increased presence of professional nurses reduced the incidence of medical problems requiring hospitalization. Or, higher worker productivity might result if better staffing improved staff morale, lower turnover, and reduced on-the-job injuries, which now are common in nursing homes.

Meeting current and emerging work force needs in long-term care may be challenged by the nation’s booming economy, which is worsening the shortage of nurses, home health aides, personal care workers, and other workers in the health community. The Bureau of Labor Statistics has projected, for example, that jobs in the long-term care sector will increase by 1.64 million, or 53 percent, between 1996 and 2006. Considering the growing emphasis on the provision of care at home or in alternative residential care settings rather than in nursing homes, total employment in nursing facilities is projected to grow less quickly, but still substantially. Many of these new jobs will be in what today are relatively low-paid, low-benefit positions. As recruitment efforts build, it may be more important than ever to expand training and education and to develop and implement additional competency standards to ensure that all staff—new and in place—are able to perform their jobs well and in a manner that is respectful of those receiving the care. Wages, benefits, and working conditions need to be improved in order to recruit, retain, and stabilize the long-term care work force in a competitive market.

Building Organizational Capacity

Measurement tools, quality standards, and external oversight mechanisms all are important for providing quality long-term care, but they do not ensure that all providers will have the capacity to use the measures correctly, implement the standards effectively, or respond to oversight as intended. The committee examined the organizational capacity of providers to manage information and personnel, the technology and resources needed to translate knowledge into improved long-term care, and the management needed for meeting policy makers’ demands for accountability. Although the committee focused mostly on nursing homes, many issues are applicable, directly or with some adaptation, to providers in other long-term settings and home health care.

The committee found major challenges in all of the areas examined. For example, a large gap exists between the current state of scientific knowledge and the capacity of most long-term care providers to implement that knowledge. In many cases, the missing components are the number and competence of staff and the amount and type of resources.

In recent years, a number of initiatives have been put in place to facilitate the ability of nursing homes to produce better outcomes for people using long-term care. The committee examined four initiatives. These are: (1) Regulatory standards articulated in OBRA 87 provide nursing homes with a specific definition of quality; (2) standardized clinical information systems have been developed in the form of the MDS (this data set is designed to help nursing homes organize their clinical activities to meet regulatory expectations for quality of care); (3) evidence-
based practice guidelines, providing the best scientific advice available on how to treat common health problems, have been developed for some long-term care settings and common geriatric conditions; and (4) Quality Improvement Systems that have been successful in settings outside of health care have been embraced by some nursing homes.

Taken together, these four initiatives logically begin with policies to define goals for better nursing home care and help providers meet these goals. However, there is no strong evidence that these approaches have solved major quality problems in nursing home care. The guidelines appear neither routinely nor effectively implemented by nursing home providers nor known by direct care nursing home staff. At least part of the problem is that practice guidelines are developed rarely with an eye toward also getting providers to understand what personnel would most appropriately implement them and costs are associated with them.

The committee reviewed several intervention studies and found that simple (i.e., not technically complicated) interventions can improve nursing home resident outcomes, but it is doubtful that there is enough staff to implement these simple but time-intensive interventions. Furthermore, improvement management models for implementing validated care processes require a significant expenditure of time for measurement and analysis. These expenses increase the total cost. Multiple studies indicate that staffing in nursing homes is inadequate to provide care that meets consumer expectations or maximizes residents’ independence, leaving little time for data collection and evaluation.

The committee concluded that OBRA 87 regulations, information systems for MDS, practice guidelines, and quality management systems fail to emphasize the critical capacity issues, perhaps because the technical expertise of long-term care providers and the necessary tangible resources are assumed. Practice guidelines, for example, provide specific recommendations about how to treat nursing home residents based on the best knowledge available in the clinical research literature. None of the guidelines, however, include a description either of the personnel necessary to implement the recommended treatment steps or of the implementation costs. Clearly, research is needed to test the feasibility and cost effectiveness of implementing clinical practice guidelines and proven care interventions in long-term care settings.

Most nursing homes, even highly motivated ones, may lack the technical expertise and resources—including but not limited to staffing levels—necessary to translate OBRA 87 regulations, practice guidelines, and quality improvement systems into practice. This report emphasizes the inadequacy of nursing home staffing levels and the consequent deficiency in long-term care services. However, increasing staffing without simultaneously improving management systems will most certainly result in less-than-expected improvement. The management problems related to accurate measurement described in this chapter, as well as numerous other management issues, will have to be addressed to realize fully the benefit of increased staffing. These problems should not be used by any stakeholders to justify abandoning efforts to improve care.

Reimbursing to Improve Quality of Care

Quality improvement initiatives are unavoidably intertwined with issues of costs and reimbursement. Yet, few efforts have highlighted the role that reimbursement can play in promoting or inhibiting the quality of long-term care. Contributing to the lack of emphasis on reimbursement is the paucity of conclusive data on the subject. Some studies have linked diminished quality of care in nursing homes to low Medicaid payment rates, but others have posited that quality-of-care deficiencies should be attributed to factors such as excess demand.
Although relatively little is known about the effect of reimbursement on quality of care in nursing homes, virtually nothing is known about its impact on home and community-based services.

The impact of changes in reimbursement on the quality of long-term care is difficult to assess. Almost all of the research literature on the relationship between financing and quality is limited to nursing homes, is based on very old data, and does not reflect the regulatory changes required by the OBRA 87. Moreover, several studies are focused on data from one or a few states, making it hard to generalize to the nation as a whole.

Two recent developments have directed new attention to the relationship between reimbursement and the quality of long-term care. The federal Balanced Budget Act of 1997 (the Act) repealed federal standards for reimbursing nursing home care under the Medicaid program, giving states virtually unlimited freedom in setting payment rates. For Medicaid home and community-based waiver services, states have always had complete freedom in determining reimbursement levels.

Second, the Act also dramatically altered Medicare reimbursement methods for nursing homes and home health care agencies and combined these changes with large budget savings. In some cases, the changes have been major. Many observers maintain that both federal actions have led to payment reductions that far exceed those intended by policy makers.

As states gain new freedom to set Medicaid nursing home reimbursement levels and the federal government reduces Medicare payments, it becomes increasingly important for states to understand and to be able to evaluate the possible impact of these changes for access to, and quality in, long-term care. Recent changes in payment policies are creating great turmoil in the long-term care sector. The withdrawal of substantial resource from long-term care providers is troubling, especially because many of the recommendations in this report require more, not less, funding.

Research on reimbursement and its potential impact on the quality of care generally focuses on two broad areas of concern: (1) what is the relationship between the costs of long-term care and the quality of care and (2) does the method of payment (e.g., flat rate, prospective payment, use or type of case-mix adjustment), independent of its level, affect the quality of care? The first policy question is important because as in most areas of Medicaid policy, nursing home reimbursement levels and methods vary dramatically by state. The second question is potentially very important because government policy makers have considerable control over these policy levers.

Measuring cost and payment levels is comparatively straightforward, but measuring the quality of care is not, and the way quality is assessed can significantly affect the results of studies that examine the relationship between the two. All of the studies examined by the committee focused on nursing homes.

Most studies have analyzed the relationship between cost or payment levels and quality by using some form of input (e.g., staffing levels) or process indicator as a measure of quality. This analysis found a small but positive relationship between Medicaid reimbursement and nurse staffing levels (except for nurse assistants) and reported fewer certification deficiencies in facilities with higher staffing levels. The complexity of the relationship among costs, inputs, and outcomes and the dilemma for states in trying to establish payment rates that are adequate to produce quality care is illustrated in other studies that found a relationship between cost or reimbursement level and staffing intensity. All these analyses found that professional staffing had a positive and significant relationship to quality of care in terms of outcomes. However, the
effects of higher cost or reimbursement levels on staffing, and of staffing on outcomes, were not large enough for cost or reimbursement to have a significant impact on quality as measured by outcomes. Research is lacking in understanding the effect of changes in payment policies on providers, on accessibility of services, and on the quality of care.

Although, there does not appear to be a simple relationship between cost and quality, logic suggests that there is some minimal level of reimbursement below which it will be either difficult or impossible for nursing homes to provide an adequate level of care. Moreover, continuing quality-of-care problems in long-term care should make policy makers alert to the possible negative impact of reducing the resources available to providers.

**RECOMMENDATIONS**

On the basis of its findings and conclusions, the committee has developed five categories of recommendations: (1) access to appropriate services, (2) quality assurance through external oversight, (3) strengthening the work force, (4) building organizational capacity, and (5) reimbursement issues. The committee’s recommendations, grouped according to these categories, follow. They are keyed to the chapters in which they appear in the body of the report. The sequence in which the recommendations are presented does not reflect a priority order.

**RECOMMENDATIONS ON ACCESS TO APPROPRIATE SERVICES**

**Recommendation 3.1:** The committee recommends that the Department of Health and Human Services, with input from states and private organizations, develop and fund a research agenda to investigate the potential quality impact associated with access to, and limitations of, different models of consumer-centered long-term care services, including consumer-directed services.
RECOMMENDATIONS ON QUALITY ASSURANCE THROUGH EXTERNAL OVERSIGHT

Recommendation 4.1: The committee recommends that the Department of Health and Human Services and other appropriate organizations fund scientifically sound research toward further development of quality assessment instruments that can be used appropriately across the different long-term care settings and with different population groups.

Recommendation 5.1: The committee recommends that:

- Federal and state survey efforts focus more on providers that are chronically poor performers by surveying them more frequently than required for other facilities, increasing penalties for repeated violations of standards, and decertifying persistently substandard providers;
- HCFA’s monitoring in all areas of state survey and sanction activities be improved by ensuring greater uniformity in state surveyor interpretation and application of survey regulations, and be reinforced by assistance and sanctions as necessary to improve performance; and
- An analysis to examine if increased funding is needed to allow HCFA to improve the state survey and certification processes for nursing homes should be commissioned.

Recommendation 5.2: The committee recommends that state agencies working with the private sector develop programs to disseminate information to consumers on (a) the various types of long-term care settings available to them, and (b) where applicable, information on the compliance of individual long-term care providers with relevant state standards.

Recommendation 5.3: The committee recommends that all states have appropriate standard-setting and oversight mechanisms for all types of settings where people receive personal care and nursing services. The committee recognizes that before this recommendation can be implemented, research examining the effectiveness of state survey and enforcement activities for residential care must be undertaken.

Recommendation 5.4: The committee recommends that the federal and state governments encourage the development of effective consumer advocacy and protection programs by providing funding and support for the following types of activities:

- consumer education and information dissemination initiatives; and
- complaint resolution programs and processes targeted at consumers of community-based long-term care.
RECOMMENDATIONS ON STRENGTHENING THE WORK FORCE

**Staffing in Nursing Homes**

**Recommendation 6.1:** The committee recommends that HCFA implement the IOM 1996 recommendation to require an RN presence 24 hours per day. It further recommends that HCFA develop minimum staffing levels (number and skill mix) for direct care based on casemix-adjusted standards.

**Recommendation 6.2:** The committee recommends that Congress and state Medicaid agencies adjust their Medicaid reimbursement formulas for nursing homes to take into account any increases in the requirements of nursing time to meet the casemix-adjusted needs of residents.

**Education and Training**

**Recommendation 6.3:** The committee recommends that for all long-term care settings, federal and state governments, and providers, in consultation with consumers develop training, education, and competency standards and training programs for staff based on better knowledge of the time, skills, education, and competency levels needed to provide acceptable consumer-centered long-term care.

**Labor Force Issues**

**Recommendation 6.4:** For all long-term care service workers and settings, the committee recommends that federal and state governments, as appropriate, undertake measures to improve work environments including competitive wages, career development opportunities, work rules, job design, and supervision that will attract and retain a capable, committed work force.

**Recommendation 6.5:** The committee recommends federal legislation requiring timely performance of criminal background checks before hiring for all personnel in all long-term care settings.
RECOMMENDATIONS ON BUILDING ORGANIZATIONAL CAPACITY

Recommendation 7.1: The committee recommends that the Department of Health and Human Services fund research to examine the actual time and staff mix required in different long-term care settings to provide adequate processes and outcomes of care consistent with the needs and variability of consumers in these settings, and the fit between these needs and other existing staffing patterns. The Committee further recommends that the Department of Health and Human Services, by establishing Centers for the Advancement of Quality in Long-Term Care, initiate research, demonstration, and training programs for long-term care providers to redesign care processes consistent with best practices and improvements in quality of life.

RECOMMENDATIONS ON REIMBURSEMENT ISSUES

Recommendation 8.1: The committee recommends that, before making decisions to reduce reimbursements, state officials carefully assess the impact on access to services and on quality of care of any proposed reductions in Medicaid reimbursements for nursing home, home health and other home and community-based services.

Recommendation 8.2: The committee recommends that the Department of Health and Human Services fund and support research to better understand the effects of payment policies on accessibility and quality of long-term care services, including the following:

- the effects of low reimbursement rates or changes in Medicare and Medicaid reimbursement policies on providers of nursing home, home health, or other long-term care services;
- the effects of current payment systems, such as prospective payment for nursing facilities and interim payment systems for home health agencies, on the accessibility and quality of services; and
- whether states with low Medicaid reimbursement rates (adjusted for geographic variation in prices and other state-specific requirements) have lower quality of nursing home care.