Residential Care for the Elderly: Supply, Demand, and Quality Assurance

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Prepared for the California HealthCare Foundation by

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Executive Summary

The residential care and nursing home industries are in transition, attempting to adapt to unprecedented changes in health and long-term care. The most visible changes include practices by states and providers to increase the levels of frailty that can be maintained in supportive housing (including residential care) settings and a substantial investment by the private sector in the construction of assisted living facilities. These changes are occurring at a time when relatively little is known about the population served by the supportive housing industry. And the results of these changes will have implications across the various levels of care, including residential care facilities, home health care agencies, nursing homes, primary health care providers, and hospitals. This paper provides an overview of the residential care industry, including background on how it is financed and regulated, trends affecting the supply and operations of both licensed and unlicensed supportive housing, and a review of the ability of current data systems to monitor the effects of both public- and private-sector changes on consumer demand, the supply of providers, and the quality of care.

A Quick Look at Industry Trends

- Between 800,000 and 1,000,000 aged persons in the United States live in licensed supportive housing, which is more commonly known as residential care or assisted living. An equal number are thought to live in unlicensed boarding homes.
- The 1990s were marked by a rapid increase in the supply of assisted living facilities, although it is not clear how much of this growth represented the replacement of existing facilities or the consolidation of facilities under corporate ownership or management.
- The growth in the supply of licensed housing, particularly among for-profit corporations, was stimulated largely by stock market investment. This investment declined rapidly in the second half of 1999 due to increasing interest rates and the poor financial performance of the major corporations in the industry, most of which had endured operating losses over the previous five years.
- In spite of current declines in investor interest, the long-term outlook for supportive housing seems relatively strong, particularly as demographic trends drive increases in

demand. In California, for instance, the population over the age of 85 is expected to increase by 50 percent during the last half of this decade. In addition, the majority of the elderly population enjoys a relatively high net worth, and can therefore afford to pay for assisted living facilities.

- Another, less clear-cut, influence on projected demand for assisted living is the growth of ethnic populations, especially in California, as many of these groups, including Hispanic and nonwhite populations, have been much less likely to reside in supportive housing than have whites.

Residential Care in California

Supply Characteristics

- California's licensed facilities include foster family homes, small family homes, group homes, social rehabilitation facilities, and residential care facilities. Most of the more than 6,000 licensed residential care facilities for the elderly (RCFEs) in California have fewer than seven residents. About 6 percent have more than 100 beds. Most RCFEs within California are private, for-profit operations.
- Staffing is a critical determinant of the capacity of the existing delivery system to absorb or accommodate increasing proportions of frail residents. The data indicate that nurses are not widely available in RCFEs, and relatively few facilities have a medical director. Except in facilities with 50 or more beds, the number of staff during the day shift is quite small—usually five persons or fewer.
- The adequacy of staffing levels is dependent on resident mix, and whether outside vendors are being used. Data are not available to evaluate how staffing levels, including the use of outside vendors, have been changing over time.

Resident Characteristics

- Larger RCFEs (i.e., those having 100 or more beds) tend to cater to a wealthier clientele. Compared to smaller RCFEs, they are home to about twice the proportion of persons with incomes of $25,000 or more (20 percent versus 10 percent). Between a third and a half of all RCFE residents are eligible for SSI/SSP and Medicaid.
- According to a 1993 California survey, between 40 percent and 50 percent of residents showed moderate to severe depression. More than half of RCFE residents showed at least some cognitive impairment. Moderate to severe cognitive impairment was reported among more than a third of those in the smallest RCFEs. More than a third of all RCFE residents reported at least two limitations in activities of daily living (e.g., bathing, dressing, grooming, eating, transferring in and out of bed). About a third of RCFE residents reported a hospitalization in the prior year; more than 20 percent reported at least one visit to an emergency room.

Not all service rates are high. For example, in spite of the high levels of depression in the RCFE population, the percentage of residents reporting the use of mental health services was much lower than the percentage who suffer from the disease. One direct measure of service quality within the RCFE setting is provided by the percentage of persons with an ADL limitation who claim to need more assistance. For example, between 24 percent and 40 percent of those needing

assistance with dressing reported that they needed more help than they received. For those needing assistance with walking or wheeling, the percentage needing more help than they got ranged from 50 percent to 64 percent. On the positive side, across facilities of all sizes, very few or no people who needed assistance with transferring in or out of bed or with eating reported needing more help than they got. Assistance with toileting was also reported as generally meeting the residents' needs, with between none and 14 percent of the residents sometimes having to wait more than five minutes for assistance.

The Cost Effectiveness of Residential Care/Assisted Living

- There are two common assumptions in discussions of residential care/assisted living. One is that days spent in RCFs reduce the number of days spent in a nursing home over a lifetime. The second is that the retention of very frail or at-risk populations in RCFs does not increase the use of other sources of health care, such as hospital services or home health.
- Some states and a few early studies report savings based on incurred costs relative to projected costs. Studies of community care retirement communities (CCRCs), on the other hand, suggest that the mere presence of full-service RCFs in a community will not automatically produce reductions in nursing home placements or days of care.
- Two trends among CCRCs are important. First, residents have generally been shown to need an extended nursing home stay (30 days or more) sometime before their death, and to have higher nursing home admission rates than similar persons living in the community. Second, the use of assisted living or personal care facilities was more likely to reduce an individual's lifetime days in independent living than in nursing homes.
- The nursing home population most likely to be affected by the availability of RCF care consists of those persons with only cognitive or physical problems, which represent (at most) half of all nursing home residents. Analyses suggest that in situations where there is a balance between the demand for and the supply of nursing homes, increases in RCF supply will have only a marginal effect on the demand for nursing home services, but may reduce the number of days spent in independent living and/or the demand for home- and community-based care.

Regulations and Quality Assurance

- Oversight of the supportive housing industry has historically been the responsibility of state government. In contrast to the nursing home industry, there is essentially no federal regulation of assisted living. The major residential care/assisted living trade associations and others advocate a combination of more rigorous state regulation and the development of industry self-regulation (both of which are already beginning to occur) and oppose the creation of federal regulations.
- California facilities are regulated by the Community Care Licensing (CCL) Division of the Department of Social Services, which oversees the industry through annual inspections and responses to complaints. CCL compiles relatively little data on the characteristics of facilities, their staff, or their residents, making the tracking of quality problematic.

- Industry-based accreditation systems are being developed that will contain information on facility characteristics, but no resident-level data. In addition, national population surveys (e.g., the National Health Interview Survey, American Housing Survey, Medical Expenditure Panel Survey) do not capture information about the population living in licensed or unlicensed group facilities.
- Because of the absence of resident-level data, few states have an ongoing basis for assessing how changes in policy or the supply of facilities and services affect the population in supportive housing.

I. Residential Care/Assisted Living Industry Trends

Summary

- Between 800,000 and 1,000,000 aged persons in the United States live in licensed supportive housing, more commonly known as residential care or assisted living. An equal number are thought to live in unlicensed boarding homes.
- The 1990s were marked by a rapid increase in the supply of assisted living facilities, although it is not clear how much of this growth represented the replacement of existing licensed facilities or the consolidation of facilities under corporate ownership or management.
- The growth in the supply of licensed housing, particularly among for-profit corporations, was stimulated largely by stock market investment. This investment declined rapidly in the second half of 1999 due to increasing interest rates and the poor financial performance of the major corporations in the industry, most of which had endured operating losses during the second half of the 1990s.
- In spite of current declines in investor interest, the long-term outlook for supportive housing seems relatively strong, particularly as demographic trends drive increases in demand. In California, for instance, the population over the age of 85 is expected to increase by 50 percent during the last half of this decade. In addition, the majority of the elderly population enjoys a relatively high net worth, and therefore can afford to pay for assisted living facilities.
- A less clear-cut influence on projected demand for assisted living is the growth of ethnic populations, especially in California, as many Hispanic and nonwhite populations historically have been much less likely to reside in supportive housing than have whites.
- Although high incomes and substantial net worth likely will enable many elderly to reside in assisted living or other forms of supportive housing, a significant portion of the elderly population still lack the financial resources to live in these facilities, even when

supplemented by government assistance programs. This situation might be alleviated somewhat by the development of a Medi-Cal Assisted Living Waiver Demonstration. This program, if implemented, will allow Medicaid funds to help subsidize assisted living services for low-income individuals at risk for nursing home placement.

- How assisted living facilities deal with competition is not well understood. Large corporations seemingly are making efforts (e.g., acquisition and market consolidation) to block or limit competition. However, competition is lacking in many communities, as evidenced by much lower ratios of supportive housing beds than nursing home beds per 1,000 population.
- Quality assurance systems in supportive housing are not keeping up with the rapid changes in eligibility criteria and the presumed increases in frailty among the population in supportive housing. One policy consequence of this is that few states have data systems that can monitor resident characteristics and outcomes.
- State and trade association interests are beginning to come together with respect to the issue of making consumers aware of information about the residential care industry. The idea is to provide sufficient information to allow consumers to make more informed decisions when choosing among facilities. But there is not yet consensus on the type and amount of information that should be disclosed.

Introduction

Supportive housing is known by a variety of terms in federal legislation and state regulations. Common terms include board and care, residential care, assisted living, and adult congregate care. Of these, the most widely used are residential care and assisted living; both terms will be used throughout this report. California's licensed facilities, as defined in Title 22 of California's Code of Regulations, include foster family homes, small family homes, group homes, social rehabilitation facilities, and residential care. In addition, some supportive housing is unlicensed, including rooming homes, single room occupancy hotels, or SROs (i.e., nontransient hotel rooms), and group quarters with fewer than seven unrelated individuals.

Defining Residential Care

Table 1 lists the services typically available in licensed and unlicensed facilities.[1] Beyond these basic services, licenses and regulatory waivers are available within California that permit facilities to provide additional assistance for residents with special needs, such as individuals who need hospice care, are nonambulatory, use oxygen, or have cognitive impairments. In many cases, an outside agency rather than the housing provider will provide these services. Additionally, virtually all states permit residents to receive short-term or intermittent skilled nursing care from a home health agency. Some states (e.g., Maine) permit those in residential care facilities (RCFs) to receive extended periods of skilled nursing care and to remain in these facilities even if they become nonambulatory (Mollica 2000). Other states, such as Oregon, allow residents with extended skilled nursing needs to remain on a negotiated shared-risk basis involving the resident, the facility, and the state (U.S. GAO 1999).

Table 1: Services in Licensed and Unlicensed Adult Residential Facilities

Services by a Nonrelative	Licensed Facility	Unlicensed Facility
Shelter	x	x
Meals	x	x
Cleaning the residents' room	x	x
Laundering linens	x	x
Helping with transportation and shopping	x	
Supervising (but not administering) residents' medication	x	
Assisting in obtaining medical and social services	x	
Assisting on a limited basis with activities of daily living (e.g., bathing, dressing, grooming, eating, and transfers into/out of chairs and bed)	x	

Source: California Code of Regulations, Title 22, Section 8.

The Size of the RCF Population Nationally

Almost 800,000 people in the United States live in licensed supportive housing (Mollica 2000), with an equal number thought to live in unlicensed boarding homes (U.S. House of Representatives 1989). Estimates would suggest that the population in licensed housing grew rapidly during the 1990s, with one study calculating growth at 24 percent between 1990 and 1995 (Bedney, Carrillo, Studer, et al. 1996) and another reporting even more rapid growth (perhaps as high as 40 percent) between 1995 and 1999 in 15 states (Mollica 2000).

Supply appears to have kept pace with this growth in demand, as it is estimated that assisted living or supportive housing represented three-quarters of all senior housing built in the United States during the 1990s (Wagner 2000). That said, the "growth" in the number of residents does not necessarily represent new construction; rather, it could be indicative of the transfer of existing unlicensed housing into licensed status, or the result of changes in state (or provider) housing definitions. Published estimates of licensed RCF bed supply from the late 1980s, for example, place the supply of licensed housing at about one million beds, not significantly different from where it is today (Hawes, Wildfire, Lux 1993; Newcomer and Grant 1989). Thus, the actual supply of licensed housing may not have changed at all over the decade.

The confusion about the size and nature of the growth of licensed housing is but one of the problems confronting this industry and policymakers. This chapter describes the current business and political trends for residential care in California and nationally. Issues of particular interest are the financial performance of this sector and trends in state regulations.[2]

Investment Trends and Their Influences

Influenced by the industry's favorable demographics, stable cash flow from a relatively captive customer base, and relative lack of regulation, investors became enamored with the assisted living industry in the early 1990s (Skolnick and Zackman 1997).

Demographics

A major driving force behind the growth (and investor interest) in licensed housing has been the real and projected growth in the population of seniors. As shown in Table 2, California demographics present a particularly appealing market for residential care/assisted living providers. The number of those aged 65 and over is expected to double by 2020, while those aged 85 and older will more than double during this time period. These growth rates exceed the projected change in the United States as a whole during this same period.

Table 2: Projected California Population Aged 65+ and 85+ to Year 2020

Age	1996	2000	2010	2020	% Change 1996–2020
65+	3,303,000	3,704,000	4,605,000	6,622,000	100.5%
85+	323,000	418,000	636,000	809,000	151.0%

Source: American Seniors Housing Association, 1999, p. 3.

The significant financial resources of the elderly population provide further impetus for the industry's growth. Table 3 shows the national figures on the net worth of the U.S. population aged 75 and older in 1996. Based on this distribution of net worth and the prevailing assisted living facility monthly rental rate of $2,200 to $3,000, it is estimated that between 40 and 60 percent of those aged 75 and over can afford a stay of at least two years in these facilities (American Seniors Housing Association 1999; Wright 2000). California's elderly population may be even better able to afford residential care services because of the large increases in home equity values that occurred over the last decade.

However, in spite of these favorable demographics, there are still areas of uncertainty related to the future demand for assisted living. One of these is the unknown demand among ethnic populations, an important, growing cohort in California and other states. African-American, Latino, and Asian-American families have historically been less likely to utilize supportive housing than have whites. Future demand for assisted living or other forms of supportive housing may depend upon the industry's ability to adapt to the interests and needs of these ethnic groups (although few studies have examined their "likes and dislikes" with respect to supportive housing).

Table 3: Estimated Net Worth of U.S. Population Age 75 or Over in 1996

Lowest Quintile	$32,946
Second Quintile	$89,975
Third Quintile	$171,032
Fourth Quintile	$303,510
Highest Quintile	$485,557

Access to Capital

In discussing the economics of the assisted living industry, it is informative to separate small independent facilities from not-for-profit facilities, and not-for-profit facilities from the for-profit chains.[3] Both of these latter types of facilities typically house 80 or more residents. Small facilities generally have limited access to outside capital, as banks are hesitant to extend long-term, unsecured credit. In California, public funds are generally not available to these facilities either, except for bonds in some cases. Financing constraints are a public policy concern because smaller facilities, as a group, tend to serve higher proportions of residents with dementia and functional limitations as well as those with low or moderate incomes. Most facilities in the state, moreover, are small, with about 85 percent of licensed residential care facilities for the elderly or RCFEs (a classification that includes assisted living) having fewer than 16 beds. Many of these facilities are family-owned and operated (Community Residential Care Association of California 1999). Without access to loans and grants, there is likely to be limited growth or even a decline in this sector going forward.

Not-for-profit facilities also have limited access to investor capital markets. However, they generally find it easier to obtain loans than do small facilities. For example, financial institutions (such as Bank of America and Wells Fargo Bank) provide loans under the Community Reinvestment Act for construction of moderate-income housing for the elderly, including assisted living. Additionally, U.S. Housing and Urban Development programs such as Section 223f and 232 can be used to subsidize loans. The not-for-profit facilities also have access to state and municipal bonds, assuming that they can find local and state support and investors willing to purchase them.[4]

Many subsidy and loan guarantee programs require lengthy application processes. In addition, loan agreements (especially from federal agencies) may place restrictions on design and service components in the project. For these reasons, almost all not-for-profit facilities choose to engage in community fundraising as a means of subsidizing operating costs, conducting renovations, and in some cases even financing new construction. In addition, many of the larger not-for-profit chains serve a relatively affluent clientele and therefore have the ability to generate capital in the form of gifts and endowments. The net effect of all of this is that the not-for-profit sector has grown more rapidly than the small, independent facilities over the past decade.

But the not-for-profits have not grown as fast as the for-profit facilities. These institutions, particularly those affiliated with national corporations, had extraordinary access to investor capital markets throughout much of the 1990s. Nothing better exemplifies this access than the more than one billion dollars in initial public stock offerings by assisted living companies in the mid-1990s. These funds enabled rapid growth in new construction as well as the acquisition of existing facilities (both through cash and common stock). The seemingly explosive growth in some companies has stimulated interest in the supportive housing industry among state policymakers and the public. It may have also obscured the static trends among the other sectors of the industry.

Assisted living corporations use several strategies to increase their value without necessarily increasing the actual bed supply within a community. One of these approaches is a sale/lease back arrangement, where the corporation develops a facility, sells the property to a real estate

investment trust or some other financial entity, and then leases back the facility in order to operate it. Some of these sale/lease back arrangements may be done in partnership with not-for-profit groups. A somewhat similar and common technique involves the assisted living company acting as manager for a facility after selling it. The technique of using such management contracts to produce an ongoing, steady cash flow is also used by for-profit nursing home chains and other types of health care facilities. Both of these approaches minimize capital outlays and therefore allow rapid expansion.

This combination of financing and operating techniques helped the top 30 assisted living companies (defined in terms of resident capacity) to double their national market share (from 10 to 20 percent) over a five-year period. Between 1998 and 1999 alone, resident capacity in these firms increased by 25 percent to 157,249 units. While most of this growth represented new construction, a portion of it was due to the absorption of smaller firms through mergers (Vickery 2000).

Collapse of Investor Interest and Loan Financing

Credit markets for assisted living dried up as interest rates rose in mid-1999. Real estate investment trusts have also virtually disappeared as providers of liquidity to the industry (Davis 1999). Part of the collapse in credit was due to the failure of assisted living industry profits to materialize as expected, which in turn led to a collapse in the prices of these stocks. The average assisted living company's common stock decreased 70 percent. In fact, by the end of 1999, almost all publicly traded assisted living corporations were selling well below their initial offering prices (Estes 1999). Eight out of ten publicly traded firms lost money in 1999 (Vickery 2000). Table 4 illustrates the poor financial performance of six major firms. Two have a negative net worth (i.e., they have exhausted their initial capital and retained earnings) and are operating with the forbearance of their creditors. Five of the companies lost money in 1999 and all six cumulatively lost money between 1995 and 1999. Two companies, Emeritus and Greenbriar, have significantly contracted by selling or closing facilities.

Interest rate increases had additional negative effects on facilities and companies that were highly leveraged. The balance sheets of many assisted living companies reflect 80 percent or more in loans or debt equivalents, such as convertible debentures and preferred stocks. Higher interest rates have limited their ability to finance new construction or acquisitions. One immediate consequences of this is that senior housing construction declined by 46 percent between mid-1999 and mid-2000. Another phenomenon occurring during this period was that fill-up time—i.e., the amount of time required to lease a newly constructed facility to consumers—increased to an average of 18 months (Wagner 2000).

These types of shifts in demand and growth have begun to influence more than investor confidence. As consolidation and operational cost-cutting continue, there is a concern that the quality of services offered may be affected, due to both overworked staffs and high turnover among assisted living nurses, administrators, and others.

Table 4: Illustrative Financial Performance of Six Assisted Living Corporations, 1995–1999 (in 1000s)

	Alterra	ARV	Assisted Living Concepts	Emeritus	Greenbriar	Regent
Revenues						
1999	376,181	138,179	117,489	122,642	41,260	54,089
1998	244,423	127,309	89,384	151,820	53,531	30,418
1997	130,744	73,770	49,605	117,772	38,979	13,958
1996	55,637	25,479	21,022	68,926	29,785	13,260
1995	15,061	n/a	4,067	21,277	7,964	12,648
Mean Annualized Change:						
1995-1999	136%	57%	166%	76%	80%	52%
1999/1998	54%	9%	31%	-19%	-23%	78%
Net Income						
1999	-27,806	-27,665	-28,933	-23,287	5,286	-9,376
1998	20,552	-45,981	-20,745	-33,286	-7,995	-11,662
1997	-8,263	-1,774	-2,479	-28,636	-10,297	-4,478
1996	-8,796	-1,316	-1,915	-8,202	-10,602	-2
1995	-3,011	n/a	-575	-8,954	82	-123
Assets	1,061,397	173,287	346,188	198,370	119,908	62,686
Liabilities	910,754	134,163	256,844	235,660	69,425	67,645
Equity	150,643	39,124	89,344	-37,290	50,483	-5,310
Debt/Equity Ratio	6:1	3.4:1	2.9:1	n/m	1.4:1	n/m
Facilities						
Owned	145	15	115	17	18	6
Leased	204	36	70	41	11	22
Minority interest in facility	87	0	0	5	0	0
Managed	14	7	0	69	0	4
Total	450	58	185	132	29	32
Total Residents	20,700	7,192	7,148	13,700	2,114	3,332

	Alterra	ARV	Assisted Living Concepts	Emeritus	Greenbriar	Regent
Occupancy Rate	n/a	85%	85%	90%	n/a	82%
Funds Raised in Debt & Equity	173,000	48,257	234,700	57,000	27,763	18,950

Source: 1999 Annual Reports and Security Exchange Commission K-10 Reports from each of these six corporations.

n/a: Not Available; n/m: Ratio cannot be calculated. Only publicly traded firms that are solely in the assisted living business are shown. Privately held firms (e.g., Colson and Colson/Retirement Housing Corporation, Prometheus Senior Quarters, Senior Lifestyle Corporation) do not file Securities and Exchange Commission reports. Firms that are engaged in both nursing home and assisted living also have not been shown, as their annual reports do not delineate the sources of revenues and liabilities between these two lines of business. These firms are not inherently doing better than the assisted living companies. For example, both ManorCare and Genesis Health Ventures filed for bankruptcy in 2000.

Continuing Influences on Financial Performance

Industry analysts, such as Scott Estes and Carol Skolnick, argue that eventually supply and demand will equalize and that the assisted living industry will again prosper due to the positive influence of demographics and the presumed cost advantages of assisted living over nursing homes. This may well be the case, but others caution that the industry will have to find new sources of capital to renew expansion. Financial markets are thought to have long memories and will likely be reticent to refinance assisted living companies at reasonable interest rates or with overvalued stock prices.

More importantly, perhaps, a number of other trends will likely affect the stability of the industry going forward, as noted in James Moore's list of "Unexpected Trends in Assisted Living" (Moore 1998):

Increasing Acuity of Residents

While neither data systems nor surveys are available to provide comprehensive profiles of the residents in all forms of supportive housing, a compilation of evidence from various surveys suggests that acuity levels may be rising. Chapter 2 discusses the characteristics of residents in California in more depth, but the results of a recent industry trade group survey illustrate national trends (American Seniors Housing Association, 1999). The survey found that the average age of residents is roughly 83. In addition, about 60 percent of residents need help with one or more activities of daily living. This combination of old age and frailty contribute to a high rate of resident turnover, with the current median turnover rate for the industry being 50 percent per year. This high turnover rate contributes to marketing costs and perhaps leads to the acceptance and retention of residents with increasing levels of frailty. In fact, Wright Mature Market Services estimates that "it now takes 1,000 leads to fill a new 80-unit project" (Wright 2000, p. 23). Moore (1998) estimates that "adequate profitability is achieved at a 93 percent occupancy rate" or a 7 percent vacancy rate. This level is difficult to maintain given high rates of resident turnover. In fact, the average vacancy rate was 8 percent in 2000 (Vickery 2000).

Increasing Costs and Prices

Vacancy rates, marketing expenses, and investor returns have combined with a tight labor market to contribute to "cost creep" in the basic monthly rental rate within the industry; the average rate was $2,200 in 1999 versus $1,800 in 1995. These increases have taken form within relatively complex pricing systems, especially in larger facilities. For example, one publicly traded corporation, Greenbriar, offers five major tiers of services: basic support care, personal care, supplemental services, wellness services, and Alzheimer's and special care services (Greenbriar 1999). Services are offered on both a point-of-service and level-of-service basis. A review of marketing information from other corporations suggests that they use similar pricing structures. Some companies are also introducing risk-adjusted pricing within these tiered approaches; this approach, while possibly narrowing the segment of consumers that will be interested in assisted living facilities, may be more equitable for less frail residents than a flat-rate approach (while also enabling greater recovery of costs for more frail residents).[5]

There is an endemic problem within the long-term care industry of attracting and retaining staff. Salaries, wages, and benefits within the health and human services sector historically have been higher in hospitals and nursing homes than in residential care facilities, home health, and community-based care organizations (Ruzek, Bloor, Anderson, et al. 1999). Low rates of unemployment create further challenges for the residential care industry, as it must compete with fast food, retail shopping, and other sectors for workers. While salaries and benefits have increased somewhat, staff shortages are commonly reported. Judging from anecdotal accounts, rates of staff turnover appear to have increased, while experience levels and English language skills of applicants and staff have declined. These latter trends may have a negative effect on the quality of services while also increasing operating expenses associated with training and supervision.

Market Saturation and Competition

Some analysts interpret increases in vacancy rates and the amount of time it takes to fill a facility as indicators of market saturation. But the issue of competition as reviewed in most trade journals is largely anecdotal and written from the perspective of the larger corporations. Whether market saturation is widespread or limited to highly visible markets or certain consumer segments (e.g., facilities catering to upper-income clientele) is not fully known. Two studies shed some light on the issue; they illustrate two differing perspectives on competition.

The first study defines competition as occurring when a facility operates with one or more similar facilities in the same market area. According to this study, 93 percent of assisted living facilities compete with one or more other facilities in their immediate market (Vickery July 1999). Moreover, the study found that a number of tactics are used in an attempt to eliminate or weaken competition. Among the most popular of these are mergers and takeovers to directly eliminate competition.[6] Another tactic is to cluster facilities by purchasing or building a number of facilities within a short distance of each other, thus creating economies of scale in areas such as purchasing, marketing, and administrative or clinical support. The efficiencies gained by clustering operations may also make it difficult for competitors or potential competitors to offer similar levels of service at a competitive price. A third approach involves either vertical or horizontal diversification. This can include single operations with multiple levels of care within a single facility or campus, as well as ownership and operation of a continuum of services, such

as skilled nursing facilities, Alzheimer's programs, and independent living units spanning multiple locations. A fourth tactic is branding. Marriott, for instance, is known for and promotes its luxurious hotel-like environments. Branding can also serve to segment the market through pricing (Wagner 2000). In fact, a contributing factor to the intensity of competition, especially among the new, brand name facilities, is the relatively narrow income segment they serve. Brand name facilities tend to focus on the population in the upper two income quartiles.

The second study conceptualizes competition from a public policy standpoint by evaluating the supply of service alternatives available to the population age 75 and older. In this context, the difference between supply and demand is the indicator of saturation. This study looks at residential care and nursing home bed supply in each of the counties of five states (Kansas, Maine, Mississippi, Ohio, and South Dakota). The comparison is made with nursing homes because it is the level of care for which assisted living is a presumed alternative. Among the striking findings were that there was less than one residential care bed to every four nursing home beds in most counties, and that no county approached a 1:1 ratio (Swan and Newcomer 2000). To the extent that nursing homes and residential care can be substitutes for each other (as many assisted living advocates claim), these findings suggest a failure of assisted living facilities either to penetrate the market or to compete effectively with nursing homes.

Because the perspectives and findings of these two studies are so different, it is unclear how to interpret the current situation and how to address it from a public policy perspective. In fact, several policy issues emerge from a comparison of the findings. First, it seems that private firms are oriented toward operational strategies intended to limit competition. Second, these strategies, coupled with the very limited supply of licensed beds in many communities, raise the question of whether the assisted living industry will have sufficient supply to reduce the demand for nursing homes. Third, there is an ongoing question as to why the supply of assisted living facilities in most communities is so low, and whether incentives to expand the supply will be sufficient to encourage development of such alternatives within states. A related policy question is whether the current or expanded supply is or will be affordable to low- and moderate-income persons, and whether the availability of Medicaid reimbursement for residential care will improve affordability and result in reductions in Medicaid nursing home expenditures.[7]

Threat of Regulation

Over the past decade, federal agencies and offices have issued numerous critiques of the residential care industry (e.g., U.S. GAO 1999, 1997, 1989; U.S. DHHS 1982; U.S. House of Representatives 1989), with most focusing on quality of care and, more recently, consumer rights issues and deficiencies. With the criticisms have come demands for the federal government to take action to spur reforms. Not surprisingly, residential care trade associations, including the Assisted Living Federation of America, the American Senior Housing Association, and the American Association of Homes and Services for the Aging (which represents not-for-profit entities), have argued against federal regulation as a solution. Their argument against federal involvement is three-fold. First, most of the industry's payment sources are private and therefore it would be inappropriate for the federal government to intervene. Second, state regulation is improving and will continue to improve now that more than 38 states have become third-party payers and thus stakeholders in residential care quality. Third, federal regulation of nursing homes has had a deleterious effect on the financial health of that industry while

simultaneously driving the quality of care down to the lowest common denominator; similar results are to be expected from federal regulation of the assisted living industry. Their proposal is for the residential care industry to assume self-regulation through accreditation, which is viewed as a superior way to regulate facilities (Assisted Living Quality Coalition 1998).

Two organizations have emerged to take on this role of self-regulator: the Joint Commission on the Accreditation of Health Care Organizations (JCAHO), and the Committee for Accreditations for Rehabilitation Facilities (CARF) (Peck 2000). While both organizations have long histories in accrediting other types of facilities, they are new to the residential care industry. The accreditation effort is in its infancy. For example, by May 2000 CARF had completed five accreditations, while JCAHO had awarded one. It may be too early to judge the efficacy of accreditation.

The Experience of States

State governments use a variety of means to influence the supply, demand, and quality of care in residential care, including the establishment of resident eligibility criteria defining allowable levels of care within RCFs, income subsidy programs, and quality assurance processes. The National Academy of State Health Policy conducts periodic surveys to identify state policies and regulations affecting the assisted living/residential care industries. Results from the most recent survey were released in the summer of 2000, and the major trends are reviewed below (Mollica 2000).

Income Subsidy for Supportive Housing

The predominant source of payment for all forms of residential care or assisted living is private pay. The most widespread and enduring public income subsidy programs available for RCF care are the federal Supplemental Security Income (SSI) program and State Supplemental Payments (SSP) to this program. SSI/SSP provides a direct rent subsidy for low-income persons, but at a payment level well below the market rate for such housing. Since the initiation of the SSI program in the early 1970s, California has been among the most generous states in providing supplemental payment. Maximum SSP levels in California are approximately equal to the federal payment.

In spite of this apparent generosity, the combined SSI/SSP rate in California is only about half the monthly rate for licensed housing in current markets. The inadequacy of the SSI/SSP payment coupled with the fact that SSP is funded entirely through state coffers have led many states to adopt waivers permitting the use of Medicaid funds to supplement payments for supportive care for person in RCFs. State contributions under this program are roughly matched on a dollar-for-dollar basis by the federal government. As of 2000, 38 states were using Medicaid to reimburse some services within RCFs. Coverage or pilot studies are planned in four additional states (Indiana, Ohio, Tennessee, and California) and the District of Columbia. In one state (Virginia), the assisted living waiver was not renewed (Mollica 2000). While waivers are becoming widespread, they serve only about 59,000 supportive housing residents nationally, leaving about 80 percent of the low-income population living in RCFs with no assistance from these programs (Mollica 2000).

In addition to being a strategy for securing additional federal funding, the use of Medicaid waivers offers two other benefits to state policymakers. First, they are considered a strategy for reducing the use of relatively expensive nursing homes by encouraging movement to lower-cost assisted living facilities. Second, they offer an opportunity to provide greater choice to residents. (The potential for cost savings from Medicaid waiver programs is addressed elsewhere in this report.)

Another approach for supplementing income that has been implemented by 18 states is to allow families to supplement SSI payments for rent and other living expenses (Mollica 2000). All other states, including California, prohibit this by counting such family contributions as income, thus reducing the level of SSI payment. The net effect in these states is that facility residents (rather than the family) end up cross-subsidizing fellow low-income residents.

Nursing Home Conversions

A number of states with a surplus of nursing home beds have developed programs designed to convert these beds to assisted living capacity. For example:

- North Dakota is providing $50 million over two years to convert skilled nursing beds to assisted living (Levey 2000).
- Nebraska has converted 42 facilities into 707 assisted living units and 25 adult day health programs.
- Iowa has implemented a nursing home bed conversion program that has a relatively unique feature—facilities using conversion funds are required to reserve 40 percent of the converted beds for Medicaid beneficiaries (Mollica 2000).
- New York is allowing the use of Industrial Development Authority bonds for construction of or conversion to assisted living facilities (Levey 2000).

New Jersey has taken an even broader approach; the state's pilot program is designed to move 2,000 skilled nursing residents to assisted living, adult day care, and/or home care. The growth of assisted living facilities is being promoted through expedited certificate-of-need processes. The strategy appears to be working, as there are now 70 assisted living facilities in the state (in contrast to none in 1996). New Jersey nursing home representatives express some unhappiness with the program, which appears to be removing lower-acuity, lower-cost (and thus higher-profit) residents (Levey 2000).[8]

Assisted Living Resident Eligibility and Case Mix

In summarizing the changes in state policy between 1998 and 2000, Robert Mollica notes that the general trend is to allow facilities to serve higher-acuity residents and to offer a broader range of services, including health-related services (Mollica 2000). Partly underlying this trend is the philosophy that a facility is a home to its residents, and therefore they should be allowed to "age in place" rather than being relocated to nursing homes. In addition, states are catering to residents' requests to have the option of living in the least restrictive setting, which generally describes assisted living facilities (and not nursing homes). Changes in resident eligibility and case mix have in turn begun to require adjustments in fire and safety standards, regulations

pertaining to staffing levels and experience, reimbursement levels, and quality assurance programs.

Most of the changes in state policy to adjust payment according to resident need are being implemented within the Medicaid program. Historically, states have used flat daily rates, but a number of states (e.g., Arizona, Florida, Idaho, Maryland, Mississippi, and Utah) are creating tiered licensing and pricing categories for assisted living facilities that set service and resident placement standards and case-mix-adjusted reimbursement (Mollica 2000). Facilities can be licensed for a single level of care or multiple levels of care. A few other states (e.g., Oregon, Hawaii, and Washington) have taken the approach of evaluating facility capabilities and resident needs so as to match them on a case-by-case basis. Maine provides a third variation on this. For its Medicaid waiver program, the state uses a case-mix classification to pay providers as well as to create quality indicators. This system is based on the Minimum Data Set (MDS) already used nationwide in skilled nursing facilities. Another widespread shift in state policy is in regulations covering care for patients with Alzheimer's/dementia. Currently, 28 states permit special units within licensed facilities, subject to regulations that establish appropriate staffing levels and requirements for various security and monitoring systems.

Disclosure

A recent General Accounting Office report (U.S. GAO 1999) examined the failure of assisted living facilities to fully notify residents regarding the terms of their residencies, including move-out requirements. This report and consumer complaints about "evictions" have prompted a few states (e.g., North Carolina and Indiana) to introduce legislation requiring more careful disclosure of these requirements and other conditions affecting continued residency. With growing concerns about resident autonomy, 18 states have taken another approach by passing or introducing legislation related to "negotiated risk." Negotiated risk brings residents into the decision-making process with respect to what level of care is to be given in a facility and what deficiences will be borne by the resident (Mollica 2000). The negotiation process involves the facility, resident (including family members), and licensing/regulatory agencies.

Another type of disclosure involves information systems that can report on the quality of care or other facility-specific indicators. While no systematic "report card" systems were identified, numerous Web sites provide listings of assisted living facilities and other forms of supportive housing, including the services and amenities they offer. Some of these listings have links to facility pages that feature video tours of the facility.

Implications

There is a changing environment for supportive housing within and among states. These changes include increased investment and growth by for-profit corporations, state policies that permit (and in some cases encourage) residents with higher levels of physical and cognitive frailty to remain in licensed and unlicensed residential settings, and demographic trends that suggest growing future demand for this level of service. These changes (and the inherent uncertainty they create) coupled with the relatively poor operational performance of the major companies has, in turn, led to consolidation and mergers and various efforts to control operational expenses. In spite of the efforts of the national trade associations, relatively little is known about the

distribution of supportive housing, especially within states, or how this distribution will change over time under current and future financial and regulatory incentives. State innovations, while increasing in number, have been largely unstudied as to their effectiveness, or their impact on access to care, staff turnover, or other important performance indicators within the delivery system. The collapse of investor confidence in this sector, coupled with the operational losses, raises particular concern about the viability of many operators and the impact that cost-cutting and other survival strategies might have on the quality of care and on consumer rights.

II. Residential Care in California

Summary

Supply Characteristics

- California's residential care licensing standards and regulations vary somewhat depending on the size of the facility and the age of the population served. Most (78 percent) residential care facilities for the elderly (RCFEs) have fewer than 7 residents. Another 7 percent of facilities have 7 to 15 beds, while 9 percent have 16 to 100 beds and just 6 percent exceed 100 beds.
- RCFEs within California are predominantly private, for-profit operations. Depending on the size of the facility, between 75 to 95 percent of RCFEs fall into this category. In 1993, just over one-third of the operators owned or operated other RCFEs, and just over 30 percent of the larger facilities (i.e., 50 beds or more) owned or operated a nursing home.
- Staffing is a critical determinant of the capacity of the existing delivery system to absorb or accommodate increasing proportions of frail residents. The data indicate that nurses are not widely available in RCFEs, and relatively few facilities have a medical director. Except in facilities with 50 or more beds, the number of staff during the day shift is quite small—usually five persons or fewer.
- The adequacy of this level and mix of staffing depends on the physical and cognitive ability of residents and whether outside vendors are being used. Data are not available to evaluate how staffing levels, including the use of outside vendors, have been changing over time.
- Another dimension of staffing is training and experience. A changing case mix (a greater proportion of frail residents) and increased rates of staff turnover may be placing a burden on facilities as they try to continue their lead role in staff training.

Demand Characteristics

- Larger RCFEs (i.e., those having 100 or more beds) tend to cater to a wealthier clientele. Compared to smaller RCFEs, they are home to about twice the proportion of persons with incomes of $25,000 or more (20 percent versus 10 percent). Between a third and a half of all RCFE residents are eligible for SSI/SSP and Medicaid.
- According to a 1993 California survey, between 40 and 50 percent of residents showed moderate to severe depression. More than half of RCFE residents showed at least some cognitive impairment. Moderate to severe cognitive impairment was reported among more than a third of those in the smallest RCFEs. Rates of functional limitations were also shown to be high and to vary across RCFE size groupings. More than a third of all RCFE residents reported at least two limitations in activities of daily living (e.g., bathing, dressing, grooming, eating, transferring in and out of bed). Impairment rates were highest in the smaller facilities.
- California has no ongoing data systems that track or compile statistics on RCFE residents and their use of health care or other services. The most recent information is residents' self-reported estimates of hospital, physician, and other health care use from a 1993 RCFE survey. In this survey, about one-third of residents reported a hospitalization in the prior 12 months, more than 20 percent reported at least one emergency room visit, and between 5 and 8 percent reported receiving a nursing visit within the prior 14 days.
- Not all service rates are high. For example, in spite of the high levels of depression in the RCFE population, the percentage of residents reporting using mental health services was much lower than the percentage that suffer from the condition.
- One direct measure of service quality within the RCFE setting is provided by the percentage of persons with an ADL limitation who claim to need more assistance. For example, between 24 and 40 percent of those needing assistance with dressing reported that they needed more help than they received. For those needing assistance with walking or wheeling, the percentage needing more help than they got ranged from 50 to 64 percent. On the positive side, across facilities of all sizes, very few people who needed assistance with transferring in or out of bed or with eating reported needing more help than they got. Assistance with toileting was also reported as generally meeting the residents' needs, with between none and 14 percent of the residents sometimes having to wait more than five minutes for assistance.
- Resident satisfaction with the facility (including being treated with courtesy and respect) and with the safety of the environment was uniformly high (95 percent or more) among all RCFE size groups.

Introduction

This section provides an overview of the residential care facilities system in California, with an emphasis on licensed facility supply and staffing, and on the population residing in these facilities. This information was compiled from documents and from personal interviews with representatives of residential care associations, the state government (particularly in Community Care Licensing), and consumer organizations. Information on operator and RCF resident

characteristics were obtained from a 1993 RCF survey, since this is the most recent information available.

Adult Residential Care Bed Supply

California's residential care licensing standards and regulations, like those of most states, vary somewhat depending on the size of the facility and the age of the population served. Table 5 shows the statewide supply of licensed supportive housing facilities for adults as of June 2000. Residential care facilities for the elderly (RCFE) account for three-quarters of the beds and somewhat more than half of the total licensed adult facilities. (Assisted living facilities are included within the RCFE classification.) The preponderance (78 percent) of the 6,165 licensed facilities in the state have fewer than seven residents. Another 7 percent of facilities have 7 to 15 beds. Nine percent have 16 to 100 beds and just 6 percent exceed 100 beds.

Table 5: Licensed Aged and Non-Aged Residential Care Facilities, June 2000

	Total Capacity	Total Facilities
Adult (non-aged) Residential Care	38,189	4,609
RCF for Chronically Ill	391	29
RCF for Aged (RCFEs)	139,162	6,165
Social Rehabilitation Facility	901	72
Total	178,643	10,875

Source: Department of Social Services, Community Care Licensing Division. In addition to the above listed facilities, DSS also licenses Adult Day Care (with 29,133 attendees and 599 facilities) and Adult Day Support Care Centers (1,661 attendees and 47 facilities).

The California Department of Community Care Licensing (CCL) maintains an inventory of RCFEs, which is available to the public via a Web site (http://ccl.dss.cahwnet.gov) that contains information on size, address, and contact person.[9] Various trade associations, such as the California Association of Homes and Services for the Aged, maintain additional information on their members, including monthly rates and available services (although in most cases this information would need to be obtained directly from the facility). Much information that would be potentially useful to consumers is not available on a statewide basis, including information about facility ownership, the levels of care provided, whether the facility accepts residents on public assistance (such as those who get SSI/SSP or Veterans Administration payments), staff size and type (e.g., nurses, aides, housekeepers), affiliations with health care providers (including hospitals, nursing homes, and home health agencies), and recent CCL citations. This information may be available directly from the provider and, in a few communities, from a community-wide provider directory, but it is not systematically compiled across the state.

Tabulations of facility-specific information such as the number of beds owned by national corporations, the staff size, the range and cost of special services, and performance (measured by such things as staff turnover, resident average length of stay, hospitalization and nursing home placement rate, and consumer complaints) are not routinely available. The most recent attempt to compile this information within California is a 1993 Survey of RCFE Operators and Residents that was funded by the Henry J. Kaiser Family Foundation and conducted by the University of

California (Newcomer, Breuer, and Zhang 1994). This report stands as the only statewide survey of California residential care facilities, and there appear no current plans to repeat it as of this writing. It involved a two-stage stratified sample. The first stage was a probability sample of facilities, stratified into licensed size groups. The second stage consisted of a probability sample of three residents within the selected facilities. Interviews were conducted with residents (or their family members for those unable to complete an interview) and with facility operators. The instruments used were adapted from instruments developed for the national survey of licensed board and care homes conducted by the Research Triangle Institute under sponsorship of the Office of the Assistant Secretary for Planning and Evaluation.

Residential Care Facility and Staff Characteristics

RCFEs within California are predominantly private, for-profit operations. Depending on the size of the facility, between 75 to 95 percent of RCFEs fall into this category. Rates are highest among the smaller facilities. In 1993, just over one-third of the operators owned or operated other RCFEs, and just over 30 percent of the larger facilities (i.e., 50 beds or more) owned or operated a nursing home (Newcomer, et al. 1994). The amount of consolidation since 1993 is thought to be substantial, but exact figures are unavailable.

Licensing Status, Unit Mix, and Monthly Rates

The vast majority of RCFEs are licensed solely for service to the elderly, although some facilities in all size groups have licenses for other age groups as well. Most facilities (about 75 to 90 percent) are licensed for nonambulatory care, which permits them to serve individuals with either substantial mobility restrictions or dementia. The actual number of nonambulatory beds is not currently known. Special care units within facilities, especially for dementia, are reported to be an emerging trend within the industry, both nationally and within California. As of 1997, however, fewer than 20 percent of facilities reported having such units (U.S. GAO, 1999).

Multi-occupancy rooms dominate the unit mix in RCFEs in California, accounting for between 60 and 70 percent of all rooms. (Two persons per room is the regulatory maximum.) Except in facilities of more than 100 beds, shared baths are typical. These physical characteristics are at variance with industry trends, especially in assisted living, to build a higher proportion of private rooms.

Monthly rates for rooms tend to be similar across all facility sizes. Single rooms typically range from $1,200 to $3,000, with an average unit going for $2,200 (California Assisted Living Federation 2000). The total price, however, varies across size groups, since smaller facilities (i.e., those under 50 beds) generally include personal laundry and assistance with eating, dressing, and toileting in the monthly rate, while such assistance often incurs additional charges in the larger RCFEs. In most facilities, incontinence supplies result in extra charges.

Between 50 and 75 percent of RCFEs report that they will accept residents receiving public assistance (i.e., SSI/SSP) at the time of application. Even more (80 to 90 percent) will keep residents who have later qualified for SSI/SSP. In spite of these practices, it is important to note that the SSI/SSP level of $872 per month ($31 per day as of September 2001) for a single individual is well below the market rate for RCFEs, especially RCFE prices with add-ons for

personal care. In spite of this, California regulations for SSI/SSP and Medicaid eligibility continue to count any family supplement to this rate as income—thus jeopardizing eligibility for these income supplement programs.

RCFE Services

Table 6 shows the types of services reported by operators to be available within RCFEs in 1993, and whether these services are provided by staff or outside vendors. As could be expected, the core activities of personal care, medication supervision, and transportation are widely available and typically provided by facility staff. Of note, however, is that larger facilities are much more likely to use outside staff for these functions. Skilled care, as represented by nursing and therapy,

Table 6: Facility Services (By Licensed Size Class)

	1-6 beds (n=77)	**7-14 beds** (n=72)	**15-49 beds** (n=65)	**50-100 beds** (n=70)	**> 100 beds** (n=43)
Services by paid staff					
% Personal care	96.1	95.8	93.8	98.6	93.0
% Medication supervision	94.8	98.6	100.0	100.0	97.7
% Organized activities	88.3	91.7	98.4	100.0	100.0
% Recreational trips	67.5	66.2	80.0	94.3	100.0
% Transportation	85.7	90.3	86.2	92.9	97.6
% Nursing care	27.3	29.2	20.3	18.6	29.9
% Therapy (i.e., OT, PT)	13.0	11.1	13.8	7.2	9.3
% Resident money management	10.4	26.4	30.8	30.0	27.9
% Case management	14.5	20.8	18.5	17.4	16.3
Services by outside staff (past 30 days)	(n=77)	(n=72)	(n=65)	(n=69)	(n=43)
% Personal care	22.1	23.6	32.8	52.2	72.1
% Adult day care	22.1	40.3	39.1	27.5	46.5
% Senior center	29.0	44.4	40.6	37.7	62.8
% MD visits on site	39.5	56.9	60.9	57.4	62.3
% Transportation	40.8	71.8	71.9	66.7	83.3
% Nursing care	11.8	29.2	37.5	37.7	38.1
% Therapy (i.e., OT, PT)	10.5	23.6	15.4	17.4	17.1
Who assists with medications					
% Licensed RN or LPN	16.9	15.3	29.2	31.9	41.9
% Medications supervisor	16.9	23.9	47.6	60.0	65.8
% Supervisor-in-charge	36.8	54.2	60.9	54.3	47.6
% Operator/owner	80.5	77.8	46.9	25.7	21.4
% Aide	44.2	59.7	53.8	58.0	51.1
% With medical director	7.8	15.3	25.0	32.2	31.0

Source: Newcomer, Breuer, Zhang 1994; Table 1.4, pp. 39.

is much less commonly available across all facility sizes, and typically provided by an outside vendor when available. Whether these patterns may have changed since 1993 because of changes in case mix or other factors (e.g., trends among larger facilities to form their own home health programs) has not been determined.

RCF Staffing

Staffing is critical to assessing the capacity of the existing delivery system to absorb or accommodate a resident population with increasing proportions of frail persons. As evident in Table 6, medical personnel—including nurses and medical directors—are not widely available within facilities. This suggests that responsibility for the management of chronic conditions is being left to residents, their families, and their health providers. While this is similar to the kind of support and oversight that would be available in a home, it nevertheless leaves open the question of whether more collaboration between housing facilities and health care providers would result in more efficient and effective oversight and management of care. As shown later in Table 9, about 30 percent of RCFE residents reported having been hospitalized within the prior year. It is unknown whether these occurred prior to being a resident, and how many of these might have been avoided through better disease management.

Beyond the question of the presence of medical personnel and greater care coordination is the more basic issue of RCFE staffing. Table 7 shows the number of staff available in facilities in 1993. Except in facilities of 50 beds or more, the number of staff during the day shift is quite small—usually five persons or fewer. The ratio of residents to staff is highest in the small facilities, ranging downward to about 5:1 in facilities with 100 or more beds. These numbers include staff available to provide housekeeping services, meal preparation, administrative services, personal, and specialty services such as recreation and transportation.

The adequacy of staffing levels is dependent on resident mix and the degree to which outside vendors are being used; unfortunately, data are not available to evaluate how staffing levels vary under these circumstances or whether they have been changing over time.

Another dimension of staffing is training and experience. In 1993, most staff positions tended to be relatively stable, with the mean number of months employed being substantially more than two years. Consistent with the extended tenure, more than two-thirds of staff was trained by their current employer. (State vendors and other sources accounted for about 20 percent of the training.) Whether staff stability has continued during the strong economy of the mid- to late-1990s cannot be documented, although interviews suggest that facilities may be having problems with staff recruitment and retention. Changing case mix and increased rates of staff turnover may also be making it difficult for facilities to continue their lead role in training.

Table 7: Staffing and Back-up to Operator/Supervisor (By Licensed Size Class)

	1-6 beds (n=77)	7-14 beds (n=72)	15-49 beds (n=65)	50-100 beds (n=70)	> 100 beds (n=42)
If only paid staff, back-up is:	(n=14)	(n=1)	(n=0.0)	(n=0)	(n=0)
% Family member/friend	71.4	100.0	0.0	0.0	0.0
% Paid relief	50.0	0.0	0.0	0.0	0.0
% Take residents	21.4	0.0	0.0	0.0	0.0
% Leave resident in charge	7.1	0.0	0.0	0.0	0.0
Staff on duty	(n=77)	(n=72)	(n=63)	(n=67)	(n=41)
Median, a.m.	2	2	5	10	16
Median, p.m.	1	1	1	2	2
% Family members on staff	85.7	54.2	42.2	25.7	4.8
If yes, % facilities where paid	53.8	59.0	77.8	72.2	100.0
Staff live in facility					
% Owner/operator	61.3	30.0	9.8	12.1	7.5
% Members of operator's family	46.7	30.0	14.8	7.6	5.0
% With nonfamily staff members	34.7	47.9	32.8	16.7	22.5

Source: Newcomer, Breuer, Zhang 1994; Table 1.18, pp. 53.

A final issue related to staffing is the effect of unionization on the residential care industry. The Service Employees International Union, which has contracts with 140 skilled nursing facilities, reports that few residential care facilities have union members. Those that do, have skilled nursing units on the same site. During an interview, a union representative suggested that there were generally too few potential union employees at a given RCFE to justify an organizing effort. However, this representative and those in other unions reportedly have concerns about wages, benefits, and occupational safety in the assisted living industry.

RCF Residents

In spite of the rapid evolution of state policy and industry practices nationally and in California, relatively little is known about who is being served by RCFs or the quality of the care being received. Further, few studies have examined the impact of state policy and market influences on RCF case mix. As a result, representatives of state governments (including those in California) do not have empirical documentation of whether there is a relationship between RCF resident mix and nursing home case mix, or whether (and under what circumstances) state nursing home and residential care regulation and reimbursement policies influence case mix. They also do not know whether the movement into RCFs reduces nursing home days or other health care costs. (A later section reviews the data systems that are available or are potentially available to address some aspects of this information void.)

Those studies of RCF operators and residents that have been conducted generally relied on case studies and small samples of facilities and residents. Each study has been limited to one or perhaps a handful of purposefully selected states. Even the major "national studies" have used

samples that often cannot be generalized to statewide populations (see for example Hawes, Rose, Phillips 1999; Hawes, et al. 1995; U.S. GAO 1989,1999; Mor, Sherwood, and Gutkin 1986; Dittmar and Bell 1983; Sherwood and Morris 1983; U.S. DHHS 1982). As a consequence, the health status of residents, including functional and cognitive ability, is not well documented across the country. In addition, knowledge about staffing, services, and the fit between the needs of residents and the capabilities of the facilities in which they live is largely limited to these point-in-time studies. Statewide RCF surveys are conducted from time to time, but not systematically across the nation. (While Maryland is an exception with its annual survey of facilities and residents, the state does not compile reports based on the survey.) Within California, the most recent and comprehensive data available on the RCFE population comes from a 1993 survey of residents and operators. The survey used a statewide probability sample of RCFEs, stratified by licensed size classification (Newcomer, et al. 1994). Most of the following information derives from that survey, and therefore may not reflect the current situation.

Resident Demographics

Regardless of RCFE size, the typical resident was female, with an average age in the late 70s or early 80s; 90 percent of residents were white, although smaller facilities tended to have a higher proportion of African-Americans than did larger facilities. Hispanic and Asian residents are found in similar proportions across all facility sizes. Between 60 and 75 percent of residents had high school, with at least 30 percent having some college education. The lowest educational attainment was among those in smaller facilities. Income did not vary substantially among most facility size groups, except that facilities with 100 or more beds had about twice the proportion (20 percent versus 10 percent) of persons with incomes of $25,000 or more (in 1993 dollars). Between a third and a half of the residents are eligible for SSI/SSP and Medicaid.

Health and Functional Status

Table 8 shows the distribution of the physical and mental health status of RCFE residents as reported in the 1993 California survey. Between 40 and 50 percent of residents showed moderate to severe depression, based on responses to the Geriatric Depression Scale. More than half of RCFE residents showed at least some cognitive impairment based on responses to the Mini Mental Status Examination and facility case records. Moderate to severe cognitive impairment was reported among more than a third of those in the smallest RCFEs. Rates of functional limitations were also shown to be high and to vary across RCFE size groupings. More than a third of all residents reported at least two limitations in activities of daily living (e.g., bathing, dressing, grooming, eating, transferring), with impairment rates being highest in the smaller facilities.

These rates are similar to those reported by two major multi-state surveys conducted during the 1990s (Hawes, et al. 1995; Hawes, et al. 1999). (The California survey used the same instruments as the first Hawes survey, with minor modifications.) Comparisons of the results of these three surveys to the results from earlier surveys (e.g., Dittmar and Bell 1983; Gioglio and Jacobsen 1984) suggest that rates of cognitive impairment, incontinence, and ADL limitations have increased by up to 25 percent since the early 1980s.

Table 8: Health and Mental Health Status (Licensed Size Class)

	1-6 beds	7-14 beds	15-49 beds	50-100 beds	> 100 beds
General Health	(n=147)	(n=189)	(n=157)	(n=197)	(n=137)
% Excellent/V. Good	23.1	17.5	26.1	22.3	20.4
% Good	40.1	43.4	41.4	34.0	43.1
% Fair/Poor	36.8	39.1	32.5	43.7	36.5
Depression	(n=138)	(n=174)	(n=155)	(n=194)	(n=131)
% No Depression	15.2	14.4	16.1	11.9	14.5
% Low	35.5	43.2	44.6	46.9	44.6
% Moderate	45.7	34.4	30.3	35.1	31.3
% High	3.6	8.0	9.0	6.3	7.7
Mean depression score	9.5	9.3	9.1	9.1	9.1
Cognitive Function	(n=199)	(n=208)	(n=194)	(n=205)	(n=147)
% No Impairment	24.6	41.4	41.2	51.2	55.1
% Mild to Moderate	41.2	46.2	37.1	39.5	32.0
% Mod. To Severe	34.2	12.5	21.6	9.3	12.9
Mean MMSE scorer	16.3a	21.3	19.4a	22.8	22.2
Behavior/Memory	(n=192)	(n=202)	(n=186)	(n=201)	(n=142)
% No Depression	20.8	26.7	29.6	43.8	46.5
% 1-4 Problems	37.5	52.5	44.2	39.3	35.2
% 5-9 Problems	32.3	16.5	21.5	11.0	12.6
% 10 or More Problems	9.4	4.5	4.8	4.0	5.6
Mean Problems Score	4.1	2.8	3.0	2.0	2.2
Activities of Daily Living	(n=206)	(n=212)	(n=198)	(n=213)	(n=151)
% No ADL Limits	22.8	30.2	24.7	33.3	46.4
% 1 ADL Limit	15.5	24.5	31.3	26.8	19.9
% 2 ADL Limits	20.9	24.1	17.7	16.9	13.2
% 3 ADL Limits	11.2	9.0	8.1	9.9	9.3
% >4 ADL Limits	29.7	12.3	18.2	13.1	11.3
Mean ADL Score	2.4	1.6	1.8	1.5	1.3
Instrumental Activities of Daily Living	(n=206)	(n=212)	(n=198)	(n=213)	(n=151)
% No IADL Limits	4.4	2.8	5.1	4.7	10.6
% 1 IADL Limit	13.1	11.8	11.1	16.4	23.8
% 2 IADL Limits	27.2	28.8	27.3	32.9	25.8
% 3 IADL Limits	55.3	56.6	56.6	46.0	39.7
Mean IADL Score	2.3	2.4	2.4	2.2	1.9

Source: Newcomer, Breuer, Zhang 1994; Table 2.2, pp. 74.

Service Use Among RCFE Residents

The discussion in this section is prefaced by an acknowledgement that California has no ongoing data systems that track or compile statistics on RCFE residents and their use of health care or other services. The only available information is residents' self-reported estimates of hospital, physician, and other health care use from the 1993 RCFE survey cited previously. As shown in Table 9, about one-third of residents reported a hospitalization in the prior 12 months, more than

20 percent reported at least one emergency room visit, and between 5 and 8 percent reported nursing visits within the prior 14 days. It is not possible to know whether these rates are high, or whether the need for some of these services was avoidable. It is also not clear whether there is a relationship between the use of health care services and nursing home placement. However, the use of some services does appear to be lower than expected. For example, in spite of the levels of depression in the RCFE population, the percentage of residents reporting use of mental health services was much lower than the percentage suffering from the condition.

Table 9: Recent Health Care Use (Licensed Size Class)

Services Past 12 Months	1-6 beds (n=200)	7-14 beds (n=206)	15-49 beds (n=198)	50-100 beds (n=210)	> 100 beds (n=149)
% Hospitalized	30.5	21.8	34.3	33.3	36.2
Median visits	1.0	1.0	1.0	1.0	1.0
% E.R. use	23.0	24.3	28.3	28.1	32.2
Median visits	1.0	1.0	1.0	1.0	1.0
% Regular MD	89.6	94.2	90.9	95.3	92.0
% Saw before entry	59.6	53.7	50.5	50.5	47.0
% MD referred by RCF	25.1	30.5	33.5	30.5	33.3
% MD office visits	82.4	83.0	79.5	80.9	76.9
% MD facility visits	12.0	18.2	22.6	22.1	27.2
% Psychology/Therapy visits	12.2	15.3	20.3	11.1	13.1
Median visits	4.0	12.0	3.0	6.0	3.0
% Hospitalized for mental condition (in year prior to RCF entry)	4.5	13.9	9.1	4.3	6.7
% Treated by visiting nurse (in past 14 days)	7.6	4.8	6.6	5.7	7.4

Source: Newcomer, Breuer, Zhang 1994; Table 2.4, pp. 76.

A more direct measure of service quality within the RCFE setting is provided by the percentage of persons with an ADL limitation who claim to need more assistance (Newcomer, et al. 1994, tables 2.7-2.11, 2.19). Between 24 and 40 percent of those needing assistance with dressing reported needing more help than they received, with fewer complaints among larger facilities. For those needing assistance with walking or wheeling, the percentage needing more help than they got ranged from 50 to 64 percent. On the positive side, across all sizes of facilities, very few people who needed assistance with transferring in or out of bed or with eating reported needing more help than was available to them. Assistance with toileting was also reported as generally meeting the residents' needs, with between 0 and 14 percent of the residents sometimes having to wait more than five minutes for assistance. Satisfaction with the facility (including being treated with courtesy and respect) and with the safety of the environment was uniformly high (95 percent or more) across all RCFE size groups.

Housing and Residential Care Trade Associations

There are four major trade associations in California that concern themselves with residential care:

- The Community Residential Care Association of California (CRCAC) represents the small facilities.
- The California Association of Heath Facilities (CAHF) represents more than 1,600 licensed (mostly proprietary) facilities, including most of the nursing home beds. CAHF is becoming important in the industry as nursing home chains branch out into assisted living.
- The California Association of Homes and Services for the Aging (CAHSA) represents about 400 not-for-profit organizations, including assisted living facilities and nursing homes.
- The California Assisted Living Federation (CALF) serves California operations of more than 500 for-profit and not-for-profit providers. Its members cover a continuum of care levels.

Representatives from each of these organizations were interviewed about their association's policy agenda. These agendas varied somewhat. CAHF, for instance, which represents many skilled nursing facilities that are funded by Medicare and Medi-Cal, lobbies for greater funding and less regulation from those sources. CRCAC, whose members are more likely to serve the SSI/SSP population, promotes increases in these payments.

The trade associations are united on one issue, however. None favors increasing the role of the federal government in the regulation of assisted living facilities—a position that is also shared by a national Assisted Living Quality Coalition (e.g., Alzheimer's Association, Association of Homes and Services for the Aged, American Association of Retired Persons, American Health Care Association, National Center for Assisted Living, American Seniors Housing Association, Assisted Living Federation of America). In addition, California's supportive housing associations generally agree that there should be more regulatory flexibility regarding who can reside in licensed housing; these groups also supported the Medi-Cal Assisted Living Demonstration legislation (i.e., Assembly Bill 499) approved in 2000.

While agreement among nursing home and assisted living associations occurs in a number of other states, it is not universal. In Georgia and New Jersey, for instance, the nursing home and assisted living sectors have battled over whether to permit Medicaid waivers and expanded service roles for assisted living. Nursing homes in these states and elsewhere fear that assisted living facilities will skim off low-acuity, low-cost residents. These types of conflicts may be more common in states with relatively high numbers of nursing home beds per 1,000 population, but the trend toward cooperation will likely gain momentum if for no other reason than that nursing home chains have diversified into assisted living.

Implications

California has a large and diverse supply of residential care/assisted living facilities that houses almost 140,000 persons. Information about facility, staffing, and resident characteristics is very limited. Data from 1993 suggest that a high proportion of RCFE residents lived with cognitive disabilities, physical frailty, and depression. Resident satisfaction levels were high in 1993, although there is some evidence that the level of staffing was inadequate to meet the personal care needs of residents, especially with respect to assisting with walking and ambulating. The availability of medical personnel, including nurses and medical directors, was also limited. It is unknown whether there have been substantial changes in resident case mix since 1993; whether problems have emerged related to staff retention and training; or whether staffing and experience levels are sufficient to provide the level of care needed by residents. Small facilities, which serve a disproportionate number of low-income persons, are thought to have been the most affected by the changing environment.

The supportive housing industry has articulated support of industry-sponsored self-regulation as an alternative to federal regulation. To that end, at least two national organizations are developing procedures and criteria for industry-based accreditation of some types of licensed housing. These will be discussed in Chapter 4.

III. The Cost-Effectiveness of RCFEs

Summary

- The assumption that RCF care is cost-effective because it reduces the number of lifetime days in nursing homes has not been extensively studied. Some states and a few early studies report savings based on incurred costs relative to projected costs. Studies of community care retirement communities (CCRCs), on the other hand, suggest that the mere presence of full-service RCFs in a community will not automatically produce reductions in nursing home placements or days.
- Two trends among CCRCs are informative. First, residents have generally been shown to need an extended nursing home stay (30 days or more) sometime before their death, and to have higher nursing home admission rates than similar persons living in the community. Second, the use of assisted living or personal care facilities (measured in days lived at this level of care) was more likely to reduce an individual's lifetime days in independent living than in nursing homes.
- Those nursing home residents who are most likely to be able to transition to a full-service RCFE facility are individuals suffering from only cognitive or physical problems, a group which accounts for roughly half of all nursing home residents.
- But not all of these individuals are likely candidates for a transfer to assisted living. In fact, at most 10 to 20 percent of nursing home residents with only physical or cognitive impairments are likely to be affected by current long-term care policy encouraging such transfers.
- Analyses suggest that in situations where there is a balance between the demand for and supply of nursing homes, increases in RCF supply will have only a marginal effect on the demand for nursing home services, but may reduce the number of days spent in independent living and/or the demand for home- and community-based care.

Introduction

It is commonly assumed that days spent in residential care/assisted living facilities will reduce the number of lifetime days spent in a nursing home, and that the retention of very frail or at-risk populations in RCFs does not increase the use of other sources of health care, such as inpatient days or home health care. Oregon, which acted upon these assumptions by taking steps to divert nursing-home–certifiable residents from nursing homes into assisted living facilities, was able in 1991 to report the dramatic finding that relatively little difference could be found between the functional characteristics of those in nursing homes and those in assisted living (Kane, Kane, Illston, Nyman, and Finch 1991). But it is important to remember that these data are at a point in time and do not consider either total health care costs or the rate of nursing home placements. The data on whether RCFEs actually reduce use of nursing homes are mixed. What follows is a brief summary of the few studies that have attempted to empirically assess the relationship between supportive housing care and nursing home. The first set of studies examines individuals, while the second looks at relationships between supportive housing and nursing home delivery systems.

Supportive Housing as a Substitute for Nursing Home Care

Two longitudinal studies conducted in the early 1980s seem to support the thesis that supportive housing in general (not RCFEs in particular) could have a positive effect on quality of life and reduce transfers to nursing home services. One study involved medically oriented housing for the physically impaired and elderly. This facility provided activity programs and noon meals as well as, on an as-needed basis, homemakers, home health aides, and nurses from community-based agencies (Morris, Gutkin, Ruchlin, and Sherwood 1987). A second study involved family-oriented homes for up to 13 aged, mentally ill, and retarded clients; these facilities provided personal care and protective services in addition to room and board, laundry, and other household services (Sherwood and Morris 1983). Both studies found that supportive housing, whether with services on site or through case managed community care, could have a positive effect on the quality of life and reduce transfers to nursing homes.

But more recent studies of continuing care retirement communities (CCRCs) suggest that the impact on nursing home placements is less clear. CCRCs generally offer a wide range of services and support to residents, including various living arrangements (e.g., independent apartments or houses, apartments featuring personal care, and nursing units) along with meals, maid service, nursing services, and a variety of supportive and recreational services that are on-site and accessible to all residents as needed. One CCRC study examining nursing and health care use in a single year found that nursing home placements were more frequent—but hospital use lower—among CCRC residents than among persons of similar age and functional health status living in the same community and being served by the same medical group (Newcomer and Preston 1994). Much of the nursing home use difference occurred because of CCRC residents' need for short term/postacute care (including podiatry treatments) nursing units. Similar findings with respect to nursing home use were reported by a different study that looked at residents over a 7-year period after CCRC enrollment. Forty-six percent of the residents had at least one nursing unit stay during this period. Almost three-quarters of these stays were temporary (Parr, Green, and Behncke 1989).

Two additional studies tracked residents over their lifetime in CCRCs (Cohen, Tell, Bishop, Wallack, and Branch 1989; Newcomer, Preston, and Roderick 1995). The focus of both these studies was to estimate the lifetime risk of nursing home placement using such variables as age, marital status at the time of entry, and length of residence in the CCRC. The data were retrospective histories of service use (ranging from 1 to 25 years), extracted from 3,316 and 1,306 resident records, respectively. No direct measure of health status other than the enrollment application was available in either study.

Cohen and his associates concluded that CCRC residents have a 1.5 times greater lifetime expectancy of nursing home placement than that of the general elderly population. Newcomer and his associates attempted to refine Cohen's findings by examining how nursing home use was affected by facility design, unit mix, and the use of personal care units. They found that the availability and use of personal care facilities did not lower the lifetime risk of nursing home placement or the expected length of stay in such units. Overall, about three-quarters of the CCRC residents had an extended nursing home stay (30 days or more) sometime before their death. Both Newcomer and Cohen found that usage patterns varied among facilities, suggesting that community management, operational characteristics, and facility design affected transition rates. Of particular note was Newcomer's finding that use of assisted living or personal care facilities was more likely to reduce time in independent living than in nursing homes (Newcomer, et al. 1995).

Nursing Home Case Mix and State Cost Savings

Another perspective on the issue of substitution of personal care housing for nursing home care is provided by investigators at the Agency for Health Care Policy and Research (AHCPR, now the Agency for Healthcare Research and Quality, or AHRQ), who estimate that between 25 percent and 35 percent of the more than one million nursing home residents are in these facilities primarily because of limitations in their ability to perform personal care tasks such as bathing, dressing, and ambulating (Spector, Reschovsky, and Cohen 1996). These researchers suggest that a subgroup of these individuals can potentially live independently (with assistance from home care services) or in supportive housing. State policymakers and industry advocates have used such estimates to argue for expanding the supply of residential care facilities and to justify their claim that expanding access to such care will reduce nursing home expenditures.

The AHCPR estimate of the potentially "relocatable" nursing home population has some important limitations. First, these estimates are not adjusted for local conditions, such as the availability of alternative services and the existence of state policies that affect allowable levels of care. Nor do they address the availability of residential care beds, the ability of these facilities and their staffs to accommodate frail persons, or the potential excess demand for nursing homes.

A structural delivery system constraint recognized by AHCPR study, but not adjusted for in their estimates, is that current RCF staffing and physical facilities reduce the number of highly frail persons who can be accommodated. In many states and communities, for example, the majority of facilities have fewer than nine beds, and many have no staff beyond the owner-operators and their families. Such limited staffing produces a resident-to-staff ratio that is two to three times that found in nursing homes. Consideration of the other tasks (e.g., meals, laundry, and housework) that must be performed for even a few more functionally disabled residents raises

questions as to how much personal care can be provided in these facilities without an increase in staffing (and thus in costs). If staff are added, moreover, there is also a question as to what scale of operation is needed to be financially viable.

Consequently, even accepting the AHCPR estimate at face value, an open question remains as to how much of this population could be served by the assisted living industry as currently configured. In addition, there is little empirical basis to guide state governments in how to achieve the substitution of supportive housing for nursing home care.

Residential Care Supply and Nursing Home Case Mix

A recently published study used nursing facility case mix data to test the AHCPR estimates, controlling for the county-level supply of licensed supportive housing. The study examined nursing home case mix in 1,555 freestanding nursing homes in five states (Kansas, Maine, Mississippi, Ohio, South Dakota). The findings suggest that facilitative RCF reimbursement (within the very modest payments offered by three states) and relatively nonrestrictive RCF eligibility criteria were not sufficient to substantially affect nursing home demand at admission during the observed period (Newcomer, Swan, Bigelow, et al. 2001). Demand was expressed by case mix and occupancy rate. This finding held regardless of the relative supply of nursing home or RCF beds in a community. For continuing care (again in the context of nonrestrictive RCF eligibility and some financing), nursing facility case mix seemed to be affected by RCF competition only in communities having a relatively high proportion of nursing facilities per population.

Simulation analyses from the same study (Swan and Newcomer 2000) were used to partially overcome the empirical limitation of having only one year of observations, the constrained set of state policies, and other conditions. The policies simulated a requirement that all nursing homes be licensed as skilled nursing facilities and that the supply of RCFs per 1,000 population be set to the levels present in Maine in 1995. Simulation results suggest that nursing facility case mix, as expressed by the proportion of persons with physical or cognitive impairment, could be reduced at the time of admission by the adoption of policies that restrict nursing home operations to skilled levels of care. The magnitude of this effect, though small in absolute terms (i.e., 1 to 4 percent) suggests relatively large proportionate reductions (i.e., 10 percent to 30 percent combining both cognitive and physical resource utilization group or RUG-classified cases) among the target case-mix categories. In most states, the effect was more evident in reference to the cognitively impaired. These effects were generally not enhanced under the assumption of an expanded RCF supply. This was true even in states having either facilitative RCF reimbursement or eligibility criteria.

Among the prevailing population (versus those newly admitted), the simulated SNF policy had very little effect on either physical or cognitive problem case mix within any of the states. The simulated condition of expanded RCF supply, however, did suggest a minor reduction (about a 1 percent absolute change, or about 10 percent in relative terms) in most of the states and for individuals with cognitive or physical limitation.

Together, the basic analyses and the simulations call for caution about the optimistic assumptions of the interplay between RCF policy and nursing home use. First, the upper limit of

the proportion of nursing home cases with only physical and cognitive impairment likely to be affected by current and emerging long-term care policy appears to be well under 35 percent of the current nursing home population—perhaps more in the range of a 10 percent to 20 percent reduction from the prevailing number of cases with cognitive or physical problems, which may represent less than half of all nursing home residents. Further, the findings suggest that particular attention should be given to continuing nursing home residents and the factors influencing the retention of cases with predominantly physical or cognitive impairments. These proportions are more similar among states than is case mix at admission, and they do not appear to have much association with RCF supply.

Additionally, there is the issue of supply and demand and how they interact. As state policy and other circumstances begin to alter the presumed balance between the demand for and supply of long-term care, the direction of adjustment in terms of bed supply and case mix may prove to be unpredictable. This unpredictability may not favor state Medicaid budgets if nursing home use does not change. For example, communities with more constrained nursing home supply may find that demand exceeds supply. If providers (in this context either nursing facilities or RCFs) are able to attract higher-paying residents, state policies that alter the demand for other long-term care services are likely to have little impact on nursing home utilization until the supply of both nursing homes and RCFs catches up with the latent demand. The analyses suggest that while the excess demand may be more likely to use RCFs as they are available, there continues to be sufficient demand to keep nursing home use relatively stable. This finding is consistent with the analysis of continuing care retirement communities reported previously, which found that the presence of assisted living beds was associated with reduced days in independent living, not reduced nursing home days (Newcomer, et al. 1995). Of the states included in this analysis, Ohio is the most interesting. This state seems to have policies in place that are relatively effective in constraining access to nursing homes, yet the simulation results suggested even further reductions in the presence of increased RCF supply.

Limited Programmatic Options and State Experiences

Conclusions drawn from the preceding findings are qualified. The foremost limitation is that while nursing home demand was estimated, reductions in nursing home supply were simulated only by requiring them to be licensed for skilled care. Reductions in bed supply could substantially alter the demand for beds by each of the RUG classifications. Another important factor is the existing disparity between the number of nursing home beds per 1,000 population and that of RCF beds in most of the states that were studied. Within Maine, the reference case for the simulations, the ratio was essentially 2:1 (i.e., 8.1 nursing home beds versus 3.9 RCF beds per 1,000 population). In the other four states the ratio of nursing beds to RCFs was much higher: 12:1 in South Dakota, 9:1 in Kansas, 7:1 in Mississippi, and 6:1 in Ohio. A related issue is that the demand for nursing home services within a county (particularly those in rural areas) can be influenced by factors external to the county, including bed availability in emigrant counties, the relative difference in access to hospital and medical services, and the relative availability of family or community resources between the sending and receiving counties. In counties with a relatively high supply of nursing home beds (as exists in some Kansas counties, for example), the demand for nursing homes may be more affected by a growth of RCF supply in the feeder communities than in the county where the nursing home is located.

A third caution is that the attainment of a balanced supply mix is not sufficient to explain case mix. Presently, Maine, Ohio, and Mississippi (each with a different nursing home and RCF supply) have similar numbers of nursing home residents per 1,000 aged residents and similar proportions of cognitively impaired RUG-classified cases in nursing homes. They vary only in the proportion classified with physical problems. This suggests that other nursing home utilization controls affecting nursing home case mix may be operating that were not directly measured.

Implications

While findings from the CCRC studies and the earlier supportive housing studies are affected by prevailing regulations and the allowable levels of care permitted in assisted living units, they nevertheless suggest that the mere presence of full-service RCFs in a community will not automatically produce reductions in nursing home placements or days of care. Moreover, CCRCs generally have closer monitoring of residents, and provide higher quality of care, and better access to health care professionals than do most RCFs. If states are going to promote expansions in the supply of and demand for enhanced levels of residential care, a comprehensive process of assessment, placement, quality assurance, and supplemental personal care and other service reimbursement may be essential.

The relationship between residential care and nursing homes, particularly the relative proportion of patients in each who have only cognitive or physical problems, raises a number of important questions. Some states are doing better than others in limiting the proportion of persons in nursing homes with presumably lower levels of need. The factors contributing to these differences are not well understood, but they have been shown to be more complex than simple substitutions between residential care and nursing homes. One logical extension of the studies cited would be an in-depth analysis of those states already having low proportions of nursing home patients in physically and cognitively impaired RUG classifications. Another extension would be to relax constraints such as RCF reimbursement that is below market housing rates. Subsidized RCF reimbursement at market rates could likely result in the transfer of a larger proportion of nursing home residents for whom Medicaid is the primary payer than has been shown to date.

IV. Regulation and Quality Assurance

Summary

- The U.S. General Accounting Office (GAO) and others have criticized the quality of services and consumer rights in the residential care/assisted living industry from time to time. Given the movement of more frail individuals into this level of care and the financial losses affecting the industry, there is reason for continued concern.
- Oversight of the supportive housing industry has historically been the responsibility of state government. In contrast to the nursing home industry, there is essentially no federal regulation of assisted living. Even with renewed concerns about quality and consumer rights, the major residential care/assisted living trade associations and others argue that a combination of more rigorous state regulation and the development of industry self-regulation (both of which are already beginning to occur) is preferable to the creation of federal regulations. But now that Medicaid waiver programs are either in place or being planned in the vast majority of states, the Federal government does have a direct financial stake in supportive housing.
- California facilities are regulated by the Community Care Licensing (CCL) Division of the Department of Social Service, which oversees the industry through annual inspections and responses to complaints. CCL compiles relatively little data on the characteristics of facilities, their staff, or their residents, making the tracking of quality problematic.
- Industry-based accreditation systems are being developed that will contain information on facility characteristics, but no resident-level data. Facilities will have to pay for the accreditation.
- National population surveys (e.g., the National Health Interview Survey, American Housing Survey, Medical Expenditure Panel Survey) do not currently capture information about the population living in licensed or unlicensed group facilities.
- Because of this lack of resident-level data, few states have an ongoing basis for assessing how changes in policy or the supply of facilities and services affect the population in supportive housing.

Introduction

Proponents of an expanded role for (and a broader scope of services within) residential settings argue that greater use of such facilities will reduce operational costs through use of a "nonmedical" approach to care, "normalize" the living situation for the disabled older person (including many who may qualify for admission to nursing homes), and reduce or replace days spent in a nursing home (Mollica, et al. 1992; Newcomer, Lee, and Wilson 1996). Critics of expanded levels of care in RCFEs raise concerns about resident safety and the adequacy of care in such settings (e.g., U.S. GAO 1989; Feder, et al. 1988). They fear that RCFE settings may become more thinly staffed versions of nursing homes, resulting in deteriorating health conditions for residents.

Given the potential for both positive and negative consequences from the expanded use of RCFEs, it is critical to have an infrastructure that would enable policymakers to monitor and evaluate the industry. This section examines the existing and emerging regulatory and information infrastructure available within California to monitor the supply of and the population within the licensed supportive housing sector. It also reviews existing nationwide data systems and their potential application to licensed supportive housing.

California's Regulatory Structure

The Community Care Licensing (CCL) Division within the California Department of Social Services licenses, regulates, and monitors residential care facilities under the California Code of Regulations, Title 22, Division 6, Chapter 8. Licenses are not transferable; in the event of an ownership or management change a new licensing application is required. CCL regulations set requirements relative to the minimum levels of operator experience, training, and staffing within such facilities, and define the minimum level of physical and cognitive abilities for individuals to be allowed to reside in such facilities. CCL also is charged with monitoring the quality of care available within licensed residential care facilities. CCL enforces the Title 22 regulations by conducting periodic (usually annual) inspections of facilities and by responding to consumer or other complaints about a facility.

County governments (through their ombudsman programs), county social workers with licensed facility residents in their caseloads, and other providers (e.g., home health nurses) that come into residential care facilities have the potential to supplement CCL's annual on-site reviews. The effectiveness or comprehensiveness of these processes and how well they coordinate with CCL activities is not known, but some CCL district offices do attempt to coordinate with the ombudsman and other programs. At present, CCL has no role in quality assurance or oversight with respect to community care or home health care, and it appears likely that with implementation of Medicaid reimbursement for RCFE services, some portion of the quality assurance function will shift to another entity. California, with its network of Multi-Service Senior Programs (MSSP), home health, and homemaker programs, has the infrastructure in many communities to put in place a more coordinated and client-oriented approach to placement and oversight. However, the MSSP program and its integration with other programs is complicated by the fragmented administration of these different programs. For example, the California Department on Aging administers MSSP, while the California Department of Health Services is responsible for licensing and quality assurance for home health care. County governments are

responsible for quality assurance for community-based care providers within the In-Home Supportive Service Program (IHSS), the state's major program for home- and community-based services.

California's regulatory oversight processes contrast with those found in some states (e.g., Oregon, Maine), where placement in a licensed residential care facility (at least for persons eligible for Medicaid or other public assistance) is considered part of the long-term care system; consequently, these individuals are evaluated for the appropriateness of placement and perhaps assigned a care manager who monitors changes in health status and the care and services received (Mollica 2000). While most states limit these gatekeeper roles to persons receiving or likely to receive Medicaid coverage, a few (e.g., Illinois) have implemented all-payer systems for persons receiving long-term care benefits. While the systems used by other states could perhaps serve as models for California, the effectiveness of the placement, referral, and monitoring systems used by other states do not appear to have been studied extensively.

Accreditation and Self-Regulation

Two organizations have recently begun to put in place accreditation programs for the industry, thus allowing the industry to play a role in regulating itself (Peck 2000). Both organizations—the Joint Commission on the Accreditation of Health Care Organizations (JCAHO) and the Committee for Accreditation for Rehabilitation Facilities (CARF)—have long histories in accrediting other types of facilities, but they are new to the residential care industry. Their efforts are in their infancy. As of May 2000 CARF had completed five accreditations, and JCAHO had awarded one.

An examination of these organizations' accreditation standards manuals indicates that each focuses on process and function and each expects institutions to have information systems in place to collect outcomes data. Table 10 indicates areas of emphasis within each organization's survey. While there is significant overlap, there also seems to be a difference in philosophy. JCAHO places much more emphasis on consumerism and resident autonomy, as there is much discussion of resident rights and the enhancement of these rights through the provision of complete information. (JCAHO's accreditation survey results will be posted on their Web site—www.JCAHO.org.) JCAHO has also announced its intention to collect outcomes data as a way to drive improvements. To this point, however, there is no standardization of these measures across states, nor any process for auditing or validating them. Finally, JCAHO literature emphasizes the potential for voluntary accreditation to replace state regulation and to serve as a marketing and planning instrument for individual institutions.

CARF's announced intention is to "promote quality, value, and optimal outcomes." Its focus is on "leadership" and "outcomes management." This group claims to have received substantial input into the creation of the program from providers, residents, state regulators, and the American Association of Retired Persons, or AARP (Peck, p 28). The Assisted Living Federation of America and AAHSA have both endorsed CARF accreditation and joined the CARF Board of Directors. The CARF data will be computerized and updated every three years, but it provides no resident-level data.

Table 10: Accreditation Manuals Section Elements

CARF	JCAHO
Leadership	**Leadership**
Structure and Role Delineation	
Advocacy	
Ethics	Ethics
Planning	
Financial Planning	
Human Resources	Managing Human Resources
Health & Safety Programs & Inspections	
Physical Plant	Managing the Environment
Transportation	Preventing & Controlling Infections
Information and Outcomes	
Management Systems	Managing Information
Assisted Living	
Rights	Rights
Scope of AL	Resident Services
AL Team	Improving Performance
Records of Residents	Resident Education
	Continuity of Service

Source: Committee for Accreditations for Rehabilitation Facilities (CARF), 2000; Joint Commission of Accreditation of Healthcare Organizations (JCAHO), 2000

Voluntary accreditation schemes raise several concerns. First, only the better facilities are likely to participate, as inferior facilities are unlikely to want to have their shortcomings posted on the Internet. Second, the cost of participating may discourage smaller facilities from seeking accreditation. JCAHO announced a price of $5,500 for its program, which can accredit for up to three years. CARF will cost an average of $4,650. Third, there is a potential conflict of interest in having representatives of trade associations sit on the board of an accrediting body. Finally, having two accreditation bodies competing for the same market will have unknown consequences. While they may compete to see who has the "best" standard, it is not clear whether this standard will be the toughest or the easiest to pass.

That said, there are several major benefits that can accrue. Both surveys are in many ways more comprehensive than those used by the State of California. In addition, these accreditation systems provide an opportunity to build a national database and standards, although it will take time to negotiate common measures and establish reliable measurement systems.

California's Long-Term Care Data Systems

Most of the data collected and available about long-term care is oriented to nursing homes. The focus on nursing homes is historically justified because of the large number of persons served by the industry—currently about one million individuals—and the high expenditures and the vulnerability of this population. For some reason, this logic has not extended to residential care and unlicensed supportive housing, even as this industry has grown to the point that as many or more individuals reside in these facilities as in nursing homes. In fact, residential care and other sectors of the long-term care industry are much less well-understood, as they lack management

information systems that facilitate the monitoring of changes in patient populations or other areas that may be of concern to policymakers. Both policymakers and industry leaders would be well served by information systems that continually monitor who is being served by the industry (and how they are faring within the system) and that help to evaluate the relative success or lack of success of new programs and initiatives.

This section briefly describes existing data systems within the state that can potentially assist with this task.

Nursing Homes

Two national databases are compiled on nursing homes: the On-Line Survey, Certification, and Reporting System (OSCAR) and the Resident Assessment Instrument (RAI). OSCAR data, which have been available since 1991 for all certified nursing homes in the United States, are organized into three files: provider information (including facility characteristics and staffing), aggregated information on the facility's resident characteristics, and health survey deficiencies. These data are collected during annual certification surveys conducted by agencies that contract with the state.

The RAI is also composed of three elements. The first component is the Minimum Data Set (MDS), which measures each resident's functional abilities, medical problems, and emotional state (such as depression and behavior problems). The MDS is collected on all residents at or near the time of admission and quarterly thereafter. Data are also collected when a resident is readmitted from a hospital or if there is a significant change in health status. Unlike the OSCAR data, the MDS is specific to each patient. The second and third elements of RAI, which are consistent with the MDS, are used for care planning purposes. At present, implementation of the MDS system across facilities and states is variable in terms of the quality of data and its application in care planning (IOM 1996). While most facilities are collecting MDS data, only a few states currently compile this information into statewide data systems. MDS data are also used in several states as a basis for case-mix reimbursement. In California, nursing home inspectors have begun to use the MDS data, but the data are not yet available to the public.

Residential Care Facilities

CCL collects data on residential care facilities from three sources: the licensing application, reviews of resident records, and annual and other inspections. Each of these are reviewed below

Data from the Licensing Application

As shown in Table 11, the licensing application provides data that could be used to monitor changes in ownership (including ownership by a corporate chain) and operating policies. These data are not currently compiled into computerized databases.

Table 11: Summary of Required RCFE Application Information

Finances
Financial Plan of Operation
Financial References
Start-up funds equal to three months operating costs
Clearances and Certifications
Criminal record clearance (including fingerprints) of all employees and those with a financial interest in the facility
Fire department clearance
Evidence of insurance
Verification of certification of the administrator
Plan of Operation, which must include:
Statement of purposes and program goals
Copy of the admission agreement
Statement of admissions
Administrative organization
Staffing plan
Staff training plan
Building floor plan
Transportation arrangements
Policy on resident money and valuables
Policy on family visits
Health Status and Assessments
Disaster and mass casualty plan
First aid certificates
Health exams, including TB clearance for employees
Training in assisting with self-administration of medications
Knowledge of community services
Ability to assess resident changes in health
Ability to assess appropriateness of resident placement on entry and when changes occur

Source: California Code of Regulations, Title 22, Division 6, Chapter 8, Article 3.

Data from On-Site Records

Facilities are required to maintain resident records that cover the issues outlined in Table 12. These records and other facility records are verified as part of the annual survey. Included in the on-site record are a recent medical assessment and the results of an interview conducted by the RCFE operator with the applicant (and a "responsible" representative, if appropriate), which are used along with a review of the medical assessment to determine the appropriateness of admission. The operators are also responsible for monitoring and documenting changes in ability that might warrant discharge. Operators are thus placed in the position of having to appraise the appropriateness of both placement and retention, while being held subject to fines or other sanctions if they admit or retain persons deemed by the inspectors to be inappropriate. They are also subject to actions (by CCL or others) if they elect to discharge persons who protest this action as a violation of their admissions agreement and other disclosures.

Table 12: Outline of Required Items in Resident Records

Demographics and Contact Information
Resident's name and social security number
Birth date
Last known address
Religious preference, if any, and name and address of clergyman or religious advisor, if any
Name, address, and telephone numbers of persons to be notified in case of accident, death, or other emergency
Admission Date and Status
Dates of admission and discharge
Reports of the medical assessment specified in Section 87569, and of any special problems or precautions
The documentation required by Section 87702.1(a) for residents with allowable health condition
The documentation required by Section 87716(h) for terminally ill residents receiving hospice care
Ambulatory status
Continuing records of any illness, injury, or medical or dental care, impacting resident's ability or service needs
Current centrally stored medications as specified in Section 87575
Agreements and Disclosures
Admission agreement and pre-admission appraisal, specified in Sections 87568 and 87583
Records of resident's cash resources as specified in Section 87226

Source: California Code of Regulations, Title 22, Division 6, Chapter 8, Article 6.

Regulations require that all information and records obtained from or pertaining to residents be kept confidential. In theory, however, these records could be used on an aggregated basis by CCL or others to monitor case mix at admission (or over time), discharge destinations, health care events, or other issues. But because these data are not currently compiled into computerized or other aggregated data systems (they are retained only on-site at each facility), they cannot currently be used for program monitoring or planning.

Annual CCL Surveys

As noted, all of the data from the on-site records are subject to verification during a required annual survey by CCL district office staff. Other items covered by the survey are shown in Table 13. These surveys include a review of resident and administrative documents, physical inspections of the facility, and observation of selected residents. Any identified deficiencies, along with a corrective action plan, are recorded on a Facility Evaluation Report in narrative text. The inspector classifies the seriousness of any deficiency based on its risk to the health and welfare of the resident(s) and the number of persons affected. While most are expected to be corrected within 24 hours, in some cases facilities are allowed up to 30 days. A fine of varying amounts can be levied on the facility, depending on the seriousness of the deficiency or whether the facility corrects the deficiencies on or before the due date. The fines can go substantially higher if the deficiency is repeated within 12 months of the initial infraction. Civil penalties accrue until the deficiency is corrected and fines are collected. The Facility Evaluation Reports are maintained in hard copy form at the CCL district offices, but they are not compiled into computerized records or reports at the state level.

Table 13: Annual CCL District Office Survey Review Items

Resident Records and Agreements
Register of residents
Personal rights agreements and disclosures
Incidental medical and dental care
Request to forgo resuscitative measures, advance directives and do-not-resuscitate orders
Acceptance and retention limitations
Pre-admission appraisals
Functional capabilities
Mental condition
Social factors
Reappraisals
Medication records
Eviction procedures
Observation of the resident
Services
Basic services
Food services
Motor vehicles used in transporting residents
Personal accommodations and services
Personal assistance and care
Planned activities
Resident and support services
Physical Environment
Alterations to existing buildings or new facilities
Fire safety
Maintenance and operations
Medication and other storage space
Resident telephones
Personnel and Operations
Daily personnel
Night supervision
Documentation and support
Resident councils

Source: California Code of Regulations, Title 22, Division 6, Chapter 8, Articles 6 & 7.

Existing and Potential State and Community-Level Data Systems

For decades, the U.S. Health Resources and Services Administration has attempted to obtain from states information on the supply of nursing homes and personal care homes so that it can be included in its Area Resource File (ARF). But since the ARF relies on state definitions of these facilities (rather than applying a common definition across all states), their calculation tends to undercount and misclassify both licensed and unlicensed group facilities across the country.

The inaccuracies of the ARF and the limited data available from other sources suggest a need for the adaptation of other data sets for use in monitoring and evaluating the long-term care industry, including residential care/assisted living. This section reviews several administrative data sets that could be adapted to provide client-level indicators of problems in the industry.

Hospital Discharge Abstracts

California is one of the many states compiling hospital discharge abstracts from virtually all hospitals in the state, regardless of the age or insurance status of the patient. The tracking of discharges from hospitals and emergency rooms (perhaps stratified by such conditions as skin ulcers, malnutrition, dehydration, injuries, drug or medication poisoning) could serve as a basic first-order indicator for problems in long-term care. All that is needed in such data systems is information connecting the patient to their address or location prior to the hospital or emergency room admission. For the elderly, this could be done by linking Medicare identification numbers to the population in nursing homes and residential care. Presently, however, discharge records are much more likely to identify the post-discharge destination rather than where a patient came from prior to admission. Should confidentiality of the records prohibit linking individuals to specific facilities, incidence rates could nevertheless be aggregated and reported by community. However, one big downside to the use of discharge abstracts is the data lag time of more than a year.

Minimum Data Set

The nursing home MDS, discussed previously, could similarly be used to identify prior residence, targeted diagnoses (e.g., skin ulcers, nutrition, dehydration, injuries, drug or medication poisoning), and functional and cognitive conditions that were present at the time of admission to a nursing home. By being able to identify those nursing home admissions that come from residential care or other supportive housing (versus direct-from-home admissions and transfers from hospitals), the MDS could help to provide a reasonably complete picture of nursing home stays associated with breakdowns in chronic care delivery in the community and residential care systems.

Medicare and Medicaid Claims

Data systems based on services received by individuals, including those discussed above, are limited because they only provide end-point information. But these data help identify trends in the delivery system, such as changes in case mix and staff performance. Without such information, there may be long delays before it is possible to identify and isolate problems, or evaluate the results of policy changes. A readily available source for some of this information exists in Medicare and Medicaid claims. For example, claims data could be used to document individuals treated in the hospital or emergency room who live in RCFEs (or other housing of interest), monitor their diagnoses and treatments, and track their health care utilization in other settings such as nursing homes and hospitals. Similar data sets could also be developed for recipients of home- and community-based care, as well as those who reside in nursing homes or other settings. For this adaptation of the claims data to be effective, the claims records would have to include information on the beneficiary's actual address and a delineation of the site or address of care. Vendor numbers could possibly be adapted to facilitate the tracking of this information.

A potentially problematic limitation is that managed care systems and other capitation payment arrangements are not represented in existing Medicare claims systems. Within capitated managed care, moreover, bills for individual procedures are not submitted for payment as they are under fee-for-service reimbursement. The prevalence of managed care insurance coverage

among residents of residential care facilties is not known. In addition, it is not clear how well Medicaid claims data reflect co-payments and care not covered by Medicare.

Expanding the CCL or Accreditation Surveys

Both the current CCL annual survey and the proposed industry-based accreditation processes lend themselves to the creation of an OSCAR-type data system for RCFEs and other forms of licensed housing. An essential feature of OSCAR is that the annual recertification visit is used to collect facility-level data on staffing and operator-provided information on resident characteristics. At present, RCFEs and other licensed facilities are visited annually or every three years as a part of re-licensing or re-certification. For a low marginal cost, the information collected during these visits could be expanded to include data on staff and resident attributes. Alternatively, the same data could be collected through a partnership between CCL and the emerging industry accreditation process. Either of these approaches could be operational within a few years.

Long-Term Care Screening Data

As California implements Medi-Cal reimbursement for residential care, it likely will begin a process of assessing residents prior to placement and assigning residents or facilities to individual case managers who monitor the clinical performance of the facility. Other states that provide Medicaid funding for residential care already take these steps, although usually only for those eligible for Medicaid. This is also being done on a nonsystematic basis by using home health agencies and hospice providers for the eligible residents, but information on the quality of this care is not necessarily being compiled. Organizing this type of information by facility will produce a basic information system on resident attributes for the state. That said, unless this intake process is expanded to include individuals other than those receiving coverage under the Medi-Cal waiver, this reporting system will be limited (but still better than anything available elsewhere).

In addition, a few states are also experimenting with an MDS-type system for residential care. Generally, these states use a common assessment instrument and reauthorization process for all long-term care beneficiaries. While the MDS-type data are used to classify the case mix and determine the reimbursement rate, the resulting database can also be used to monitor changes in case mix and health and functional status within the population, as well as to gauge the quality of an individual facility.

Implementation of any of these types of data and quality assurance systems has to deal with several fundamental issues. Among these are obtaining some reasonable consensus on measures as well as determining whether the reporting should be by all facilities or from a sample of facilities (or residents). Agreement must also be reached on the frequency of reporting (e.g., annual, every two years, or every three years) and acceptable data lags. It is likely that a multi-level system might be appropriate, with some information coming from all facilities annually, and more comprehensive, in-depth information coming from a sample of facilities.

National Survey Systems

National housing and health status monitoring systems have not kept pace with the evolving forms of group housing, including RCFEs, assisted living, and other forms of supportive and group housing. In these surveys, group housing encompasses many types of living situations, including nursing homes, mental health hospitals, and non-institutions such as rooming homes, communes, residential care facilities, homes for the aged and disabled, and halfway housing. Units with five or more unrelated persons are also typically defined as a form of group housing. Another complication is that the level of services provided by a facility often determines if it needs to be licensed as a form of special care facility, and states vary in their licensing criteria with respect to such facilities.

In addition, the rules differentiating independent from group housing have major implications for how the U.S. Census is conducted, which in turn affects the sample design of many other surveys of the aged and disabled population. The net result is that both national- and community-level information about housing and living arrangements substantially undercounts persons with disabilities—particularly those living in "group" quarters (McCoy and Conley 1990).

Fortunately, there may be a way to improve this situation. A review of more than 75 national and catchment area surveys (Maynard and Newcomer 1996) concluded that five national surveys could be adapted to improve the measurement of disability across all housing types and to help identify alternative living arrangements and monitor changes in housing choices. These surveys do not currently include persons in either licensed or other forms of supportive group housing. A brief review of each of these surveys is provided below:

- The National Health Interview Survey (NHIS) excels in its definition of health and disability status, but lacks an adequate sample frame for the disabled population and an adequate categorization of specialized housing and services. The Disability Supplement to the 1994–95 NHIS addressed these issues to some extent, but there continue to be problems in the basic "non-institutional" sample frame and in the housing classifications.
- The Decennial Census produces data for every community and household, but has substantial problems related to the terms and procedures used to classify housing types. It also lacks information on health or disability status.
- The American Housing Survey, also conducted by the U.S. Bureau of the Census, presents by far the best definition of housing type and characteristics (although refinement of the group housing typology is still needed). But it fails to collect information on the health and disability characteristics of residents, and its sample frame excludes group housing.
- The Medicare Current Beneficiary Survey includes health, disability, and, to a lesser extent, housing and services data. The population is selected independently of setting, permitting this survey to have representation from independent living, group housing, and institutions; but it is limited to Medicare recipients and therefore excludes a significant portion of the disabled population. In addition, the housing categorization suffers from definitional inadequacies.

- The Medical Expenditure and Panel Survey (MEPS) is intended to provide a foundation for estimating the impact of changes in payment sources and insurance coverage on health care use and spending among different economic groups. The survey is administered to households, nursing homes, medical providers, and insurance providers. The household survey uses the same sample design as the NHIS, and therefore it excludes the population in supportive housing.

Industry-Based Data Systems

The residential care industry compiles annual reports describing selected operational characteristics of its members. While the quality of the data and the reliability of the sampling are often suspect, this information nevertheless influences the industry and its investors. The type of information compiled by the industry is exemplified in the results of a national survey of 57 assisted living communities conducted by the American Senior Housing Association together with PriceWaterhouseCoopers, and the National Investment Center. The information included in the survey is shown in Table 14. Since 1991, data from this survey have been used to publish the State of Seniors' Housing Report, which includes a breakdown of full-time equivalent (FTE) employees by department (e.g., administration, dietary services, housekeeping, assisted living, skilled nursing) and tracks the number of FTEs per resident. Importantly, this survey does reveal that many assisted living facilities do collect comprehensive data on their operations and residents, from which systematic and comprehensive reporting systems could be built.

Two points are to be made about these data. First, the data elements offer a look at basic financial and operating features, but they largely ignore resident characteristics or performance outcomes. Second, the sampling and response rates do not yield reliable statewide or national estimates. The survey does not include the small residential care facilities or supportive housing that has not yet adopted the label of assisted living. Thus, while these numbers are widely cited, their statistical reliability is questionable.

Within California, statewide trade groups also collect some data on their members. While these data are not as comprehensive as the Senior Housing Report, at least in the case of CAHSA they do include annual information on staff salary levels. But since no single association encompasses all facilities (and because some facilities have dual memberships), it is difficult to be sure that the data are representative of the industry as a whole across the state. Anyone considering building a data system based on trade association data will need to consider obtaining agreements about common minimum data sets and sampling plans that assure that all facilities are represented.

Table 14: Illustrative Assisted Living Industry Profile

Property Profile	
Property age	Varied
Occupancy rate	93.7%
Units (mean)	60
Revenue Profile	
Revenues per unit per year	$24,259.00
Revenues per resident per month	$1,831.00
Expense Profile	
Expenses per unit per year	$20,246.00
Expenses per resident per month	$1,707.00
Net Operating Income (NOI) Profile	
NOI per unit per year	$4,967.00
NOI per resident per month	$406.00
Selected Annual Operating Expenses per Resident	
Labor	$8,383.00
Payroll taxes	$876.00
Benefits	$774.00
Property taxes	$642.00
Property / liability insurance	$146.00
Raw food	$1,315.00
Utilities	$869.00
Marketing / advertising	$426.00
Repairs and maintenance	$339.00
Housekeeping	$141.00
Total management fees	$1,191.00
All other operating expenses	$1,185.00
Corporate / other overhead	$3,653.00
Operating Highlights	
Operating margin (NOI / revenues)	19.5%
Raw food per resident day	$3.60
Annual resident turnover	50.0%
FTEs per resident	0.48
Financial Highlights	
Net cash flow per occupied unit	$948.00
Debt service coverage ratio	0.85
Return on total investment	7.8%

Source: State of Seniors Housing, 1999b, appendix B, p. 42.

Implications

State governments have routinely collected the data necessary to systematically monitor changes in facility and staff characteristics, but information systems have not been developed that allow the information to be analyzed in a meaningful way. Data that would allow the monitoring of resident characteristics and performance outcomes are generally not collected at this time. That said, as states begin to implement Medicaid waiver reimbursement programs for residential care, they are building information systems connected to eligibility and needs assessments. Unfortunately, even these systems will leave out the majority of residents who are private pay. To date, national data systems have not filled any of these information gaps, as all the major population surveys systematically exclude the population living in licensed or group housing. Industry-based accreditation processes offer the potential to complement state monitoring systems, but they too presently do not include resident-level information.

The absence of trend data greatly impairs the ability of government and consumer advocates to monitor how changes in public policy and market factors may affect case mix, supply of services, competition, and ultimately the operational performance of the residential care industry. Looking ahead, data collected by states and the accreditation agencies could be used to build information systems that are designed to help better inform consumers about the quality of care and other features of residential care facilities. Appropriately coded, the use of these data could provide a valuable supplement to the current facility listing data systems.

V. Recommendations

Public policy is playing a major role in driving changes in supply and case-mix within the residential care/assisted living industries, yet little is known about the industry, the population served, and the effectiveness of the reimbursement and quality assurance systems being developed. The financial chaos recently affecting the private, for-profit assisted living industry raises a further concern about the stability of publicly traded corporations in this industry. In addition, there are no national and few statewide data systems in place to monitor and evaluate changes in resident case mix or how changes in reimbursement, licensing, staffing, and staff functions may affect the delivery system and the quality of care provided. These limitations apply nationally as well as in California to both licensed and unlicensed facilities.

This section outlines ways to enhance public planning and oversight infrastructure development, measure and improve operational performance and outcomes within supportive housing, and conduct formalized demonstrations of programmatic innovations. These recommendations have been organized into three groupings:

- Monitoring and planning
- Special studies
- Implementation of demonstration projects

Throughout this section, organizations that might participate in the implementation of the recommendations are referenced in general terms. For these recommendations to become a reality, participating organizations will need to assume a leadership role in organizing key groups and in seeking public and private funding for the execution of the recommendations. Public agencies within the state—including the California Health and Welfare Agency and the California Departments of Health Services, Social Services, and Aging—could play an important role in carrying these recommendations forward, although the readiness of these and other public and private organizations within the state to participate has not been investigated. The Health Care Financing Administration (now known as the Centers for Medicare and Medicaid Services)

and the U.S. Department of Housing and Urban Development should also be engaged in the effort.

Monitoring and Planning

Recommendation 1: Expand the ongoing monitoring of licensed housing to include a computerized data base on facility, staff, and resident characteristics.

CCL collects data on the number of facilities and their beds, and also collects or requires the collection of substantial information on staffing, resident characteristics, resident outcomes, and facility deficiencies. These data are not currently compiled into local or statewide information systems. Computerization of existing records and their incorporation with industry accreditation data (when it is available) would give the state a relatively comprehensive system for monitoring the licensed housing system. Information on the current system and trends within it will be valuable to government and the private sector in assessing how licensed housing is affected by changes in public policy or local conditions. These data could also aid the state in developing more accurate estimates of demand and more realistic estimates of the service enhancements and quality assurance procedures needed to support shifts in the location of care.

Consideration should also be given to incorporating the Medi-Cal reimbursement waiver assessment data into this system, or to using the waiver demonstration as a pilot test of the information system. Additional sources of information on provider and system performance could also be used to supplement the basic information system. These include Medi-Cal or third-party vendor claims relative to skilled nursing, personal care, hospice care, hospital and emergency room use, and nursing home placements. Finally, the extension of similar oversight to the unlicensed sector needs further investigation.

Tasks:

- Convene a work group that includes relevant governmental, professional, and provider organizations to forge consensus on data sources, measures, and their interpretation.
- Consider a collaboration between CCL and industry accreditation organizations to assure the collection of relevant data in a manner that minimizes the burden on providers, but assures the public and consumers of timely and accurate information.
- Charge CCL, an accreditation body, or an independent entity with maintaining and reporting information from the database.

Recommendation 2: Develop state and community-level estimates and plans for the future of supportive housing, including demand and supply estimates.

The growing number of persons age 80 and over in California raises concern about the future need for supportive housing and other long-term care services, yet little is known about the adequacy of the current supply across and among communities in the state, the relationships between supportive housing demand and other long-term care service options, and the incentives and constraints affecting service supply (such as land cost, labor cost, and health care referral and practice patterns). A further complexity arises when considering the changing ethnic mix of many communities and the unknown effects this may have on demand.

Through their land use planning and community development programs, cities, counties, and regional governments have responsibility for planning for and facilitating the provision of low-income housing and various other physical resources within their jurisdictions. Health and long-term care services are generally outside these planning efforts. Licensed and unlicensed supportive housing is thus left in a gray area, with no clearly mandated public role in planning for the development, growth, and replacement of this sector in the housing market. Collaboration between public agencies is needed to establish community-, county-, and regional-level attention and coordination in the provision of an appropriate supportive housing supply.

Tasks:

- Form a work group involving health, social service, city planning, and others to develop guidelines, identify data sources, and delegate responsibility for community and regional level planning in this area.
- Consider development of a simulation model (with industry associations and universities) for estimating demand under varying assumptions of population attributes (including ethnic and income mix), land availability, competing services, and other dimensions to further facilitate these efforts.
- Develop a training program for local and regional governments to facilitate the adoption of the guidelines and appropriate use of the simulation modeling.

Recommendation 3: Work with the Department of Health and Human Services, the Department of Housing and Urban Development, and the U.S. Bureau of the Census, and others to convene a work group on National Statistics for Supportive Housing.

Currently, the major national population surveys intended to monitor health status and living arrangements of the non-institutionalized population exclude persons in licensed housing and other living arrangement considered to be group quarters. Because of this, the population in residential care, other forms of licensed housing, and unlicensed supportive housing tends to be undercounted. In addition, there are no other data sources available to provide a profile of the population in these settings. Modification of data sources such as the U.S. Census would provide state, regional, and local information on the supply and number of persons in unlicensed supportive housing. Information from other data sources could permit the monitoring of health care risk, utilization, and movement rates. While these would be national or statewide estimates, the information could inform planning and program monitoring efforts within California.

Tasks:

- Modify the rules used to classify institutional and non-institutional group housing and specialized living arrangements for the disabled and aged in the U.S. Census, the National Health Interview Survey, the American Housing Survey, the Medicare Current Beneficiary Survey, and other community surveys.
- Establish the measures used for classifying special supportive living arrangements and for describing the services provided or available to residents of these housing types within the decennial census, the American Housing Survey, the Medicare Current Beneficiary Survey, and other surveys.

- Establish measures for health status and disability status that could be incorporated into the decennial census, the American Housing Survey, and other surveys.
- Discuss the feasibility of organizing survey tabulations or files so that the living arrangements of the disabled can be more explicitly analyzed.

Special Studies

Recommendation 4: Design and finance a series of studies about RCFE resident outcomes. The studies would test basic assumptions about the effectiveness and efficacy of supportive housing.

This research program would have a number of components and could entail a variety of alternative approaches, but would generally focus on the "outcomes" of RCFEs. As used here, the term "outcomes" refers to the assumed consequences of receiving residential care relative to nursing home stays or receiving home- and community-based services in unlicensed housing. Among the initial questions are these: Are nursing home days and expenditures reduced? Are emergency room visits or hospital admissions increased? Who is served by home health care? Are there health conditions that make placement in an RCFE particularly problematic or inappropriate? Holding resident conditions constant, do small facilities perform as well as larger facilities? Does staff skill mix, whether from paid staff or outside vendors, make a difference in these outcomes? Does the resident's primary health care affect, or even compensate for, limitations in the RCF setting? Can the RCF setting compensate for limitations in the resident's primary health care?

The first set of studies could use existing Medi-Cal data sets to describe the nursing home placement, ER visits, and hospitalization rates among persons in licensed housing, perhaps in comparison to persons receiving in-home supportive services or those residing in low-income housing projects. These studies could later be extended to the fully licensed housing population as data systems become available. In addition, clinical and service innovations could be designed and tested in targeted settings as to their impact on program operations and resident outcomes.

Finally, special studies need not be limited to California, as the natural variation among states offers opportunities to explore multiple strategies and contexts in a timely manner. For example, some states or communities are doing better than others in limiting the proportion of persons in nursing homes who have only cognitive or physical problems. The factors contributing to these differences could be investigated. Another example comes from states that have implemented RCF reimbursement rates that approach market housing rates. Studies of these states could investigate several questions, including the following: How does such a benefit affect the case mix in both licensed housing and nursing homes? How does it affect the lifetime expected stay in independent housing, licensed housing, and nursing homes? Finally, does such a policy result in budget neutrality for Medicaid?

Recommendation 5: Develop and implement quality assurance and risk-adjustment processes (using other states' experiences for guidance).

The existing quality assurance system within California is based on annual reviews and complaints. But as the state implements a Medicaid waiver for residential care, it will need to develop new enrollment, management, and quality assurance processes, just as the other 38

states implementing Medicaid waivers have done or are doing. Some of these states are moving toward risk-adjusted reimbursement and all of them are building data systems to assess individual need and changes in status over time. These systems are taking several forms. Some adapt the state's need assessment process for nursing homes, home care, and community-based care. Others are adapting the nursing home minimum data set process to residential care. The development of processes in California would be accelerated and possibly more easily implemented if the state could take advantage of the experience of these other states. That said, it is important to remember that in-depth analysis and evaluation of these state programs has not been reported, either because it has not been done or because it lacked adequate scientific rigor to be published.

Tasks:

- Evaluate the operational and economic feasibility and practical benefit of more intensive and timely monitoring of residential care facilities (before statewide implementation), including the use of individual case management or claims-based triggers (e.g., for hospitalization or emergency room visits).
- Consider a pilot monitoring system within the Medicaid population eligible for reimbursement for residential care within California. One issue to be considered is whether to monitor all residents or to selectively monitor based on predefined risk factors, such as advanced age, two or more chronic conditions, prior hospitalizations, or frequent emergency room use.
- Develop alternative models for how quality assurance programs might be operated. Options to be considered include the following: expanding the functions of CCL, assigning responsibility for case management and oversight to the Multi-Service Senior Programs, or contracting with designated home health agencies or county in-home supportive service program.

Recommendation 6: Forge a partnership between government and the private sector to routinely identify and conduct studies into current and emerging issues affecting the supportive housing industry.

The public sector has an interest in promoting a stable and effective supportive housing delivery system. To that end, government could play a facilitative role by working with private providers (both for-profit and not-for-profit) to better understand the forces affecting this industry and the potential consequences of changes in policies and other environmental conditions. Among issues of immediate concern are the rate of ownership turnover and consolidation within the industry, and their effect on the delivery system, specifically on operational costs, the distribution of supply, staff retention, staff training, and monthly resident charges. Another issue with long-range implications is that of consumer preferences with respect to the use of supportive housing. In particular, what are the factors associated with the decision to move into supportive housing, and how do these vary among various ethnic and income groups around the state? More specifically, to what extent are decisions based on cost, proximity to family, design features of the facilities, staffing levels, cultural appropriateness of the menus, neighborhood location, and ethnic and functional mix of the other residents?

A third priority issue relates to unlicensed facilities within the state, including apartment houses, retirement hotels, private homes, and low-income housing projects (which are now able to let residents "age in place" due to the relaxation of building fire and safety codes and the availability of home-care providers). The prevalence of these types of housing is not documented, nor are the consequences relative to quality of care, resident autonomy, and cost shifting to other programs. This issue is especially important within the non-aged adult disabled population, who tend to prefer unlicensed housing because such settings place fewer restrictions on the individual. In short, there is much to be learned about what is and is not working well within the unlicensed sector of the industry.

Task:

- Convene a consortium consisting of representatives from provider associations, state government agencies, and other organizations to periodically review trends and issues affecting supportive housing within the state and to commission special studies when appropriate.

Implementation of Demonstration Projects

Recommendation 7: Explore the effectiveness of a market competition strategy for California's residential care facilities.

Under a market competition strategy, consumers would receive timely information on the services, costs, and performance of each residential care/assisted living facility in the state so as to "empower" them to make better selections based on objective criteria. Such a strategy can be implemented within California by building on existing and emerging records systems, which would need to be enhanced to provide uniform and authenticated data on facility characteristics (such as staffing, services, and price) and performance measures. These systems could be based on an expansion of either the CCL application and annual survey or industry-sponsored accreditation processes. The information could be posted on the Internet (CCL and the trade associations currently maintain their own Web sites) and/or through other vehicles that reach the public.

Tasks:

- Because only limited data on performance and quality of care are available, consensus must be built among public and provider stakeholders as to which data should be used. If deficiency reports compiled by CCL are used (which likely represent the most readily available information), a consensus will need to be established about which deficiencies are most indicative of quality of care, and what weightings to assign to each of these deficiencies.
- Because a competition strategy might be expected to affect case mix, payer mix, and the quality of care among facilities, any demonstration program should evaluate the performance of the delivery system with consumer information in place, relative to the performance that would have been achieved in the absence of such information. The most likely evaluation design would be one using a comparison to historical trends. The basis for the trend data could tie back to either emerging data systems or to sample surveys.

Recommendation 8: Assist in the planning and evaluation of California's Medi-Cal assisted living reimbursement demonstration.

The California legislature (via Assembly Bill 499) has required the California Department of Health Services to implement a demonstration using Medi-Cal reimbursement to supplement personal care among residents of licensed residential care/assisted living facilities and among persons in low-income housing. While the details of the demonstration have not been formalized, it is apparent that processes of eligibility determination, care authorization, and quality assurance will need to be developed. These administrative and clinical processes and procedures likely can be modeled from the experience of other states in managing high-risk populations.

However, there are at least two issues of immediate concern in designing the program and its data systems. The first is understanding the amount of avoidable health care used by those served by the demonstration (relative to the amount used by similar persons living in other circumstances). Reductions in avoidable health care use could help offset the expenses of the waiver, while increased use would raise costs for the state and the Medicare program. California's database of Medicaid claims records in 14 counties could be used as an empirical basis for estimating the annual health care use among RCF and low-income housing residents, and for estimating the proportion of this use that may have been avoidable. The compilation of these data could be useful in planning quality of care management procedures and for projecting expected health care costs within the demonstration. These data in turn would be useful for determining the facility and resident sample sizes needed for the state's demonstration design and evaluation.

A second concern is determining the magnitude of the possible increase in demand for personal care/assisted living that will be stimulated by the availability of coverage. Analyses conducted among persons living in continuing care retirement communities suggest that the substitution for days in independent living could be substantial.

Tasks:

- Negotiate among the key stakeholders the specific measurement instruments and indicators for evaluating the demonstration program. The selection could be informed by the experience of other states.
- Develop an industry-wide collaboration to help ensure cooperation with the demonstration's design and data collection plan, including the development of both experimental and nonexperimental groups that will be used to assess the program's effects.

Recommendation 9: Study the development of programs to enhance access to residential care facilities among low- and moderate-income individuals.

In addition to the Medi-Cal assisted living demonstration program, a number of other special studies, simulation analyses, or demonstrations could be conducted to determine the impact of various strategies for enhancing access to RCFEs among low- and moderate-income individuals. For example, one could evaluate the impact of an effective increase in SSI/SSP program payments through the allowance of additional support by family and friends without financial penalty. The key question is to determine the effect this policy change might have on RCFE

demand among SSI/SSP recipients, and the number of persons that could potentially receive this support without endangering Medicaid eligibility status or current levels of benefits. If the simulations suggest that this program may prove attractive, then incentives to stimulate these supplemental payments, such as tax deductions or tax credits, could be explored. A variation on this approach would be to allow individuals the opportunity to transfer payments from some other government assistance program (e.g., food stamps) to apply toward their monthly rental payment for an RCFE.

Financial support for the demonstration will likely include public funds (although securing these funds will require regulation waivers) as well as external funds for evaluation. Development and implementation of the demonstration could be carried out among counties or other geographic locations, under the central administration of a public or independent organization.

Tasks:

- Convene a task group consisting of government, consumer, and provider representatives to develop a concept paper along with alternatives for simulation analysis. The results of this background work could then be translated into operational guidelines for specific demonstration programs.

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Notes

1. Another type of supportive housing of interest in this report is an apartment unit where the resident receives personal care or other instrumental assistance from a paid outside provider. This model can include assistance with the activities of daily living (ADLs), such as bathing, dressing, grooming, eating, and transferring as well as skilled care services, such as from a home health nurse. This type of community-based care is theoretically available to anyone with the ability to purchase these services or who qualifies for this coverage under public programs. Discussion of community care services and their role in supportive housing is beyond the scope of this report.

2. Information about other factors affecting the continued performance of this industry, including age of owner-operators and their retirement rates, merger activity, and ownership transfer rates were also pursued in conversations with trade association representatives and in the review of trade association publications. Much activity in thse areas is acknowledged, but systematic documentation was not available.

3. Unlicensed facilities are not discussed here because no comprehensive study has been made of them. However, anecdotal discussions with industry officials suggest that anywhere from 10 to 50 percent of all supportive facilities are unlicensed and that virtually all of those are small. It can be assumed that unlicensed facilities suffer from the same lack of access to capital as other small enterprises. Low-income housing projects combined with access to home and community-based services are yet a third source of supportive housing supply for low- to moderate-income residents. The capital market for this housing has long been influenced by tax incentives. The “aging in place” of low-income housing residents is known to be occurring, supported by access to home and community-based care. However, neither the extent of this nor its effectiveness have been studied.

4. A small, but symbolically important project by the U.S. Department of Housing and Urban Development will help stimulate some growth in supply. This program will allocate $50

million in grants to convert Section 202 housing to licensed assisted living or "housing with supportive resources" (Mollica 2000). Section 202 housing was designed as independent living, but with meals services. They are operated by not-for-profit organizations.

5. A number of suggestions have been offered for some time as to how to bring down costs and to expand the population base of those with sufficient income. Among these are changes in building layout and square footage to reduce both public space and private living areas (Trivers 1999). Another, more controversial, technique is to reduce construction costs by using residential rather than institutional quality standards. The longest running strategy is to bring down the cost of money through tax credits and municipal bond issues (Wayne 1999). Attention may return to these if the investor market remains suppressed.

6. Two types of entities conduct these activities. Strategic purchasers generally consist of financially sound current operators. The other type are often referred to as "financial buyers." These are individuals or entities that are entering a market area to take advantage of low-priced or financially distressed facilities (Gordon and Bressler 1998).

7. The payment of assisted living costs using long-term care insurance has been suggested by some as a means of extending access to assisted living among those with moderate income. Such a benefit is offered (with a substantial co-payment) by the 10 largest long-term care insurance companies (and many others); however, the market penetration by these companies is minimal at this time.

8. The conversion of skilled nursing facilities into assisted living units in California likely is not a pressing need. Among other things, it is unclear whether there is a surplus of SNF beds in the state, especially considered in the context of the growing population age 85 percent and over.

9. These listings can be obtained electronically and sorted by facilities' size, zip code, and county. They are maintained on an ongoing basis, making the generation of historical listings problematic.

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