

DESIGN NEEDS AND CRITERIA FOR CHRONICALLY MENTALLY ILL PERSONS

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Abstract

Based on the continuing trend of placing chronically mentally ill persons in community settings, a preliminary listing of design needs was developed through qualitative research. Such a listing can be utilized to evaluate the effectiveness of current and planned residential settings for chronically mentally ill persons. Design criteria for an "ideal" group home meeting the 12 design needs were then developed. The "ideal" group home was illustrated through a floor plan and an axonometric view, with a discussion of how the ideal satisfies the design needs.

Introduction

Public policy currently favors community treatment of the chronically mentally ill (CMI), with the goal of moving people away from the dependent patient role and encouraging the growth of more independent clients with adequate social and daily living skills (Kane, 1993). As stated by Wahl (1993) "Currently, we are in the middle of a psychiatric, social, and economic movement to change the locus of treatment of severely mentally ill persons from hospitals to the community" (p. 247). Often these formerly institutionalized patients are placed in community housing such as halfway houses, group homes, and family care homes (Wahl, 1993). Although deinstitutionalization is not always successful, research indicates that CMI persons treated in community settings are less likely to be rehospitalized, tend to function more independently, and exhibit a higher degree of social functioning than is true for institutionalized patients that are released (Carling, 1993; Coulton, Holland & Fitch, 1984).

The type of community housing in which CMI persons are placed can be crucial to their integration into the community. Previous research supports "the importance of

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housing not only as a critical element in a system of care for persons with severe mental illness but also as a basic necessity of the quality of life" (Newman, 1994, p. 338). Unfortunately, it is estimated that more than 200,000 CMI persons experience serious housing problems (Newman & Ridgely, 1994). Many are homeless, are inappropriately placed in hospitals or nursing homes, or live in low-income neighborhoods with high crime rates.

Providing affordable, decent, and safe housing for CMI persons is a difficult challenge for local and state mental health agencies. Carling (1993) estimates that a supported housing program costs \$8,000 a year for each CMI person. The majority of the CMI population cannot significantly contribute to these housing costs, as the unemployment rate for this group is close to 85%, and the prime income source is Supplemental Security Income (Newman, 1994). Among the other problems faced by the CMI are "extreme dependency needs, high vulnerability to stress and difficulty coping with the demands of everyday living" (Talbot, 1979, p. 4). It is the premise of this paper that community housing can be provided in a cost-efficient way that can reduce many of the problems experienced by CMI persons, particularly when it is accepted by the surrounding community (Wenocur & Belcher, 1990).

Design is an important component of CMI housing. Recent articles published in *Housing and Society* suggest that it is crucial to consider design for special population groups (Argeriou, McCarty, & MacDonald, 1991; Baillie & Foxworth, 1991; Brent, 1991). Based on the environmental docility hypothesis and the theory of person-environment congruence (Coulton et al., 1984), design is particularly critical for those most vulnerable in society, whose well-being can be enhanced when the environment is congruent with individual needs.

The purpose of this paper is to consider the housing and design requirements for one community care setting in which CMI persons are often placed: the group home. The group home consists of a number of unrelated CMI persons living in a community-based housing situation, where the occupants can develop living skills while at the same time be partially supervised by mental health professionals. Based on surveys of CMI persons and their families, the group home ranks second as a preferred housing choice and ranks third as an actual housing selection (Tanzman, 1993). There are a number of CMI persons who choose to live as members of group homes, as they may feel comfortable living with others experiencing similar problems and may want the mutual support found living with small groups. At the same time, these individuals typically need the special services provided in a group home setting. This paper will identify the design needs of the CMI and present specific design criteria for an ideal group home.

Methodology

The design needs and criteria reported here are based on the results of an innovative community demonstration project sponsored by the National Institute of Mental Health (NIMH) conducted by the Colorado Division of Mental Health in collaboration with Colorado State University. The initial goal of the project was to develop a housing

curriculum for employees of the Division's 24 community mental health centers who were involved in providing housing for CMI persons.

A one-week curriculum was developed, drawing upon information from government housing programs, the mental health literature, and the housing literature. The curriculum covered five topics: (1) matching housing options with the needs and wants of CMI persons, (2) purchasing and leasing housing, (3) possession of housing, (4) interior design considerations, and (5) accessing community services.

The topic which proved most difficult to teach was interior design. With the approval of the Colorado Division of Mental Health, an effort was initiated to examine the design needs of CMI persons placed in group homes. Three classic research studies conducted on the interior design needs of mental patients in a hospital setting (Izumi, 1970; Kroelinger, 1986; Osmond, 1957), as well as the general design literature, were reviewed to develop a listing of design needs. No previous research on designing group homes for CMI persons was found.

The listing of design needs was then discussed with faculty fellows and housing staff of the Colorado Division of Mental Health. In these meetings, comments were solicited and used to modify the design needs listing. Next, a series of drawings was produced to illustrate how a group home might look if designed to meet the identified needs. These drawings and the listing were presented to the 24 residential coordinators of the community mental health centers during three meetings, with both oral and written comments obtained. Finally, two focus groups of CMI persons (seven individuals in each group) living in group homes were asked to comment on the drawings and the listing of design needs. The research was conducted between 1986-1989.

Design Needs

Based on this research, the following needs were identified:

- 1) Clients must not be overcrowded. There should be no more than one person per bedroom in the home if at all possible. While this goal is feasible for single family homes, duplexes, townhouses, and apartments, it is difficult to meet in group homes because of cost constraints. When two people must share the same bedroom, dividers and furniture clusters can reduce feelings of overcrowding. Semi-private spaces should also be designed for low density, allowing residents freedom of movement.
- 2) Clients must not be overconcentrated. Overconcentration refers to the forcing of individuals to interact with one another when they do not wish to do so. To meet this need, areas must be provided in the home where clients can go off and be by themselves when annoyance or friction with others are perceived as problems.
- 3) Clients must be provided with a path of retreat so that individuals who feel threatened have a place to withdraw and the ability to avoid confrontation with others. Having two exits from social areas within the home, easy-to-reach hallways that lead to bedrooms, and several exits to outdoor space are desirable.

- 4) Clients must be provided with a space of their own which is under their control. A private bedroom or a portion of a bedroom that can be closed off to other people provides best for this type of space. The bedroom should have a clear split of available resources, such as separate closet space and furnishings, to provide a feeling of security and belonging (Deasy & Lasswell, 1985). Additionally, having their own chair in the dining room that no one else can use is important.
- 5) The physical surroundings need to provide the opportunity for clients to form beneficial relationships both with the staff and with other residents of the home. Comfortable seating in the living and dining areas encourages social interaction with staff and other residents, and provides places where various activities can be planned. Design should break down barriers and encourage social interaction whenever possible.
- 6) Clients must be provided with adequate privacy when they so desire. The right to privacy must be respected by all occupants of the housing unit. Again, bedrooms best allow for adequate privacy. Orr (1993) suggests that privacy is an important element in treating the whole person in an environment that upholds the full rights and dignity of the individual.
- 7) A nonauthoritarian, democratic environment must be maintained. Clients must be allowed to participate in decisions concerning their future. An interior environment that promotes empowerment and participation is desirable. The housing can be planned in such a way that no occupant has more authority than the other occupants, and this applies to the residential staff as well.
- 8) The physical surroundings must have a minimum of ambiguity and uncertainty, which may aggravate the perceptual illusions associated with mental illness. Having areas of the home clearly defined for social, work, and private activities, having a front entrance to the home that provides good visual access, and using sharply contrasting colors on edges can be helpful in meeting this need.
- 9) Clients should be allowed to make everyday decisions such as selecting their clothes, food, and entertainment, thereby developing independence and meeting challenges. Choices and preferences can be supported by other residents. However, residents (clients) should not be forced to make choices because making decisions can be a source of stress. Teaching the CMI how to reach such decisions should be an important goal for the residential staff. Housing location proximate to public transportation, employment, recreation opportunities, and shopping can also assist in independence.
- 10) The physical surroundings must provide for the preservation of each client's personality and individuality. Occupants should be allowed to store and display personal items (such as pictures, posters, furniture, and mementos). Personalization is crucial to establish and maintain self-esteem.

- 11) Interaction with the opposite sex should be allowed. Lack of contact with the opposite sex encourages desocialization by not allowing clients to develop needed social skills. In a group home setting, females might be housed off one hallway while males have their rooms off another hallway. Activities should be organized to encourage interaction between males and females.
- 12) The physical surroundings must be as stress-free and homelike as possible. This is a very broad need that can be satisfied by following the above suggestions. Additionally, the proper selection of color (soothing, muted colors with small amounts of contrast) and lighting (controlling for glare and matching illumination levels with activities), the placement of plants, and allowing residents to have pets all can help to reduce stressful feelings. Hogan and Carling (1992) suggest that a yard, perhaps with a garden and comfortable seating, is also desirable.

Design Criteria for an Ideal Group Home

An example of how the design needs of the CMI can be met consists of an “ideal” group home that houses seven persons (see Figure 1). When selecting a home for CMI persons, an ideal can be a useful means of evaluating different housing and design alternatives, and can provide ideas of what types of remodeling might be done if the selected housing does not meet the necessary design needs. The ideal group home was developed in several stages, based on a series of reactions to drawings by residential coordinators and CMI persons. Additionally, two remodeling projects of group homes in 1990 and 1992 incorporated the design needs identified above to evaluate their feasibility.

The overall design of the house provides for a logical separation of the different areas of the home according to their function. The private spaces (bedrooms, bathrooms, and staff room) are located at one side of the home, the social spaces (kitchen, dining room, and lounge) are located in the middle portion of the home, and the occupational skills area is located at another side of the home. Such a layout allows for low levels of noise and traffic flow through the private area of the home.

The floor plan also provides for an area of retreat from social contact should residents feel threatened. For example, the lounge area has more than one way to enter and exit. Residents can escape social contact by retiring to their bedrooms, where privacy needs are provided for best. A resident can be assured of solitude whenever he or she desires because of the sociofugal (privacy-seeking) layout of some of the lounge furniture. On the other hand, some of the lounge furniture is arranged in a sociopetal (contact-seeking) manner to provide for social interaction should the residents desire it.

As the CMI residents enter the foyer from the outside, they have visual access to the lounge, kitchen, and hallway; thus, they are given space so they can adjust to entering the house. Allowing visual access helps to reduce feelings of confusion and intimidation that individuals may experience upon entering a house or room.

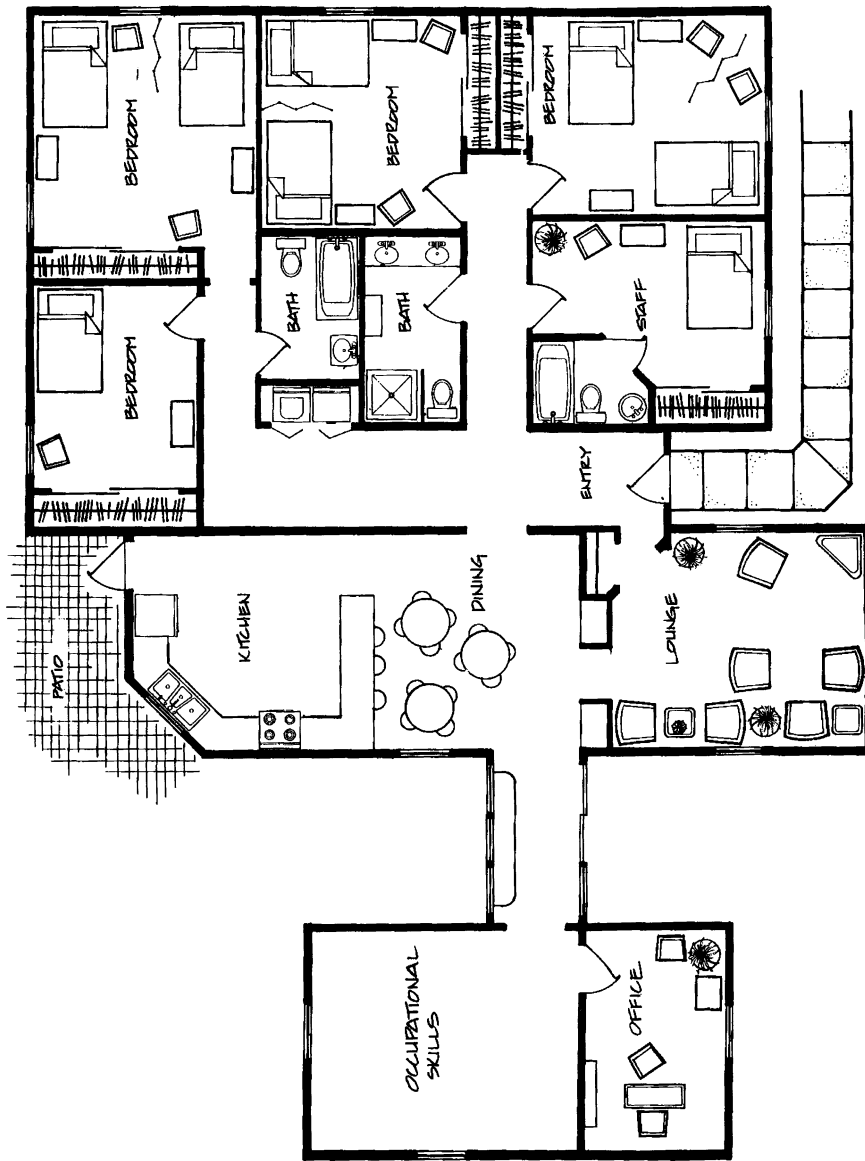


Figure 1. Floor Plan for an Ideal Group Home.

The hallways are designed to be three feet wide to allow for a barrier-free passage (wide enough for someone in a wheelchair or using a walker) as well as ample room for two or more people to walk abreast. The three-foot hallways, therefore, provide enough space that any forced interaction or confrontation is avoided. Hallway lengths are kept short to avoid confusion and intimidation.

The lounge is designed to provide for single chairs rather than love seats or some other form of shared seating, in order to avoid forced interaction. This space is adequate for reading, watching television, conversation, and keeping to oneself. The lounge also contains two exits to allow for ease of movement to other areas of the house.

Two functions guide the kitchen design: daily food preparation and the teaching of cooking. The arrangement of appliances, counter space, and overall size allows adequate space for these two tasks to be accomplished. A patio adjacent to the kitchen provides an outdoor environment for eating, group activities, smoking, and relaxation. Also adjacent to the kitchen is the dining room, allowing for ease in serving and cleaning-up after meals. More chairs are provided than the number of residents in order to avoid chair hierarchy and undue stress associated with restrictive seating arrangements. Enough space exists for activities besides eating to occur, such as craft activities and life skills classes. Additionally, activities involving all household members and perhaps friends would take place in the dining area. A large screen television is located in a corner of the dining area for entertainment and educational purposes.

An occupational skills area is provided in the group home, containing space for the learning and practicing of work-related skills. This space is considered critical, because occupational skills learned by residents can assist in their integration into the community, produce income, and foster a sense of fulfillment. Income might also be generated to assist in housing expenses. A separate office is located next to the occupational skills area for use by nurses, psychiatrists, residential staff persons, and others coming into the home to provide various services to the occupants. There is a desk and chair, a chair for the client, shelving, and waiting chairs for the office. An enclosed walkway separates the occupational skills area from the rest of the house to prevent noise, dust, and fumes from entering the living area. The walkway is also designated as a smoking zone since smoking should be discouraged in the living area of the house.

The size of the bedrooms exceeds the 80 square feet per occupant required by several states. Although it is desirable that each person have his or her own bedroom, cost factors usually make this impossible. However, privacy and control of space can be provided even if two persons share the same bedroom. Each person has a clearly marked sleeping area, with a movable screen between beds allowing for a measure of privacy. The beds are placed next to the walls to foster security and have adequate storage space nearby. The bedrooms are placed on two separate hallways to allow for separation of the sexes and to provide for privacy and discretion. One of the bedrooms is designed for single occupancy, allowing for a more seriously ill person with greater privacy needs to join the group home. The staff room is centrally located for accessibility to residents, and contains a bathroom for the residential staff person's use. Bath-

rooms are also located on the two separate hallways to service the bedrooms on those hallways, with one bathroom being handicapped accessible. The number of toilets and bathtubs is adequate for the number of residents. An axonometric view of the entire home is illustrated in Figure 2.

Conclusion

Faulkner, Nissen, and Faulkner, (1986) suggest that the interior of every home provide comfortable support to its occupants, be economical, be aesthetically pleasing, suit the occupants' needs, and have a certain character all its own. The ideal group home discussed above meets these general design criteria. Kleeman (1981) suggests that the mentally ill need what we all need--an ordinary world. Thus, many of the design needs and criteria could be easily applied to other special populations. The most important implication of developing design needs and criteria for CMI persons is that they should be considered and applied in their entirety.

The major objective of housing for the CMI is to assimilate each person into the community. The group home must provide a secure, non-threatening environment for its residents while at the same time ensure that residents obtain the social and occupational skills necessary to function in the community. The design needs and criteria outlined here fulfill this goal by providing for the privacy needs of residents, minimizing design ambiguity, creating a nonintimidating environment, not forcing residents into unwanted confrontations, and allowing for the development of occupational skills.

Although the home to which these design needs and criteria have been applied is a group home, the design recommendations can be applied to any community-based housing for CMI persons. Generalization of the design needs and criteria is important because of housing policy shifts within the mental health profession. A growing number of mental health professionals are promoting what they term "normal" housing--namely, housing that is decent, safe, affordable, located in normal settings, and typically placed in scattered sites (Hogan & Carling, 1992; Newman & Ridgely, 1994). Another policy shift focuses on CMI persons as consumers, allowing these individuals to make more housing-related choices (Carling, 1993; Wahl, 1993). Broad design guidelines, supported by user-needs analysis and post-occupancy evaluation, can play an important role in the provision of suitable housing for CMI persons. It is hoped that the design needs and criteria outlined in this paper be viewed as preliminary in nature and be used as a starting point in future research.

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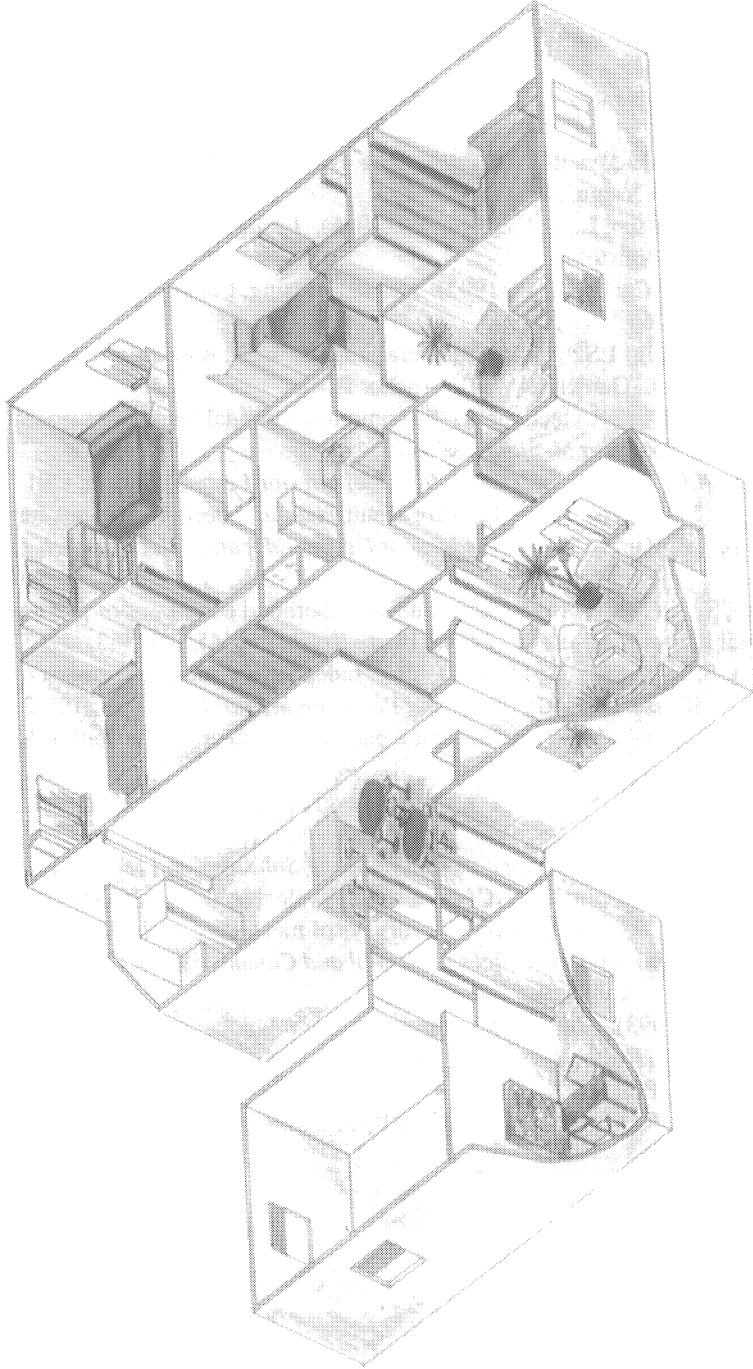


Figure 2. Axonometric View of an Ideal Group Home.

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