# Principles of Effective Design, Layout, and Furnishing of PACE Day Sites:

## A Guide for Directors and Developers of Programs of All-Inclusive Care for the Elderly

Authors: Philip D. Sloane, MD, MPH

**Nicole Collins** 

Elizabeth C. Brawley, IIDA, AAHID

Prepared by the Cecil G. Sheps Center for Health Services Research Program on Aging, Disability, and Long-Term Care

**Acknowledgement:** Special thanks to the staff of the National PACE Association and the directors and staff of the 13 PACE sites who participated in this project. This study was supported in part by a Pioneer Award from the Alzheimer's Association.

### **Table of Contents**

<u>Topic</u>	<u>Page</u>
About this Monograph	3
Research Design	4
Description of the Research Sample	5
General Satisfaction with the PACE Centers	8
Design and Function of Key Areas and Features	10
Location	
Entrance	14
Activity Rooms	17
Kitchen & Dining Areas	20
Clinic & Therapy Areas	23
Toilets & Sinks	25
Shower & Bathing Areas	27
Mobility	29
Staff Offices	32
Hallways & Connections Between Rooms	35
Storage	37
Outdoor Areas	39
Planning PACE Center Construction:	42
For More Information	45
Appendix	46
Appendix A: Director Interview Used in this Study	
Appendix B: Staff Survey Used in this Study	
Appendix C: Photographic Record/Comment Sheet Used in this Study	

#### **About this Monograph**

The Program of All-Inclusive Care for the Elderly (PACE) is a growing provider of services for older persons nationwide. Recently approved for participation as a regular provider in the Medicaid and Medicare programs, PACE provides an attractive and innovative alternative to care in nursing homes and assisted living facilities. The development of a PACE program requires considerable organization, planning, and resources; the steps are outlined in detail on the web site of the National Pace Association (www.npaonline.org).

The PACE model of care involves provision of all care, Medicare, and Medicaid services through a single provider. A major goal of PACE is maintaining frail elderly persons at home whenever possible, under the belief that this will usually maximize the well-being of the older person with chronic care needs and his or her family. PACE serves individuals who are aged 55 or older, certified by their state to need nursing home care, able to live safely in the community at the time of enrollment, and reside in a PACE service area.

The hub of a PACE program is the PACE day center, a medically-intensive facility that provides health services, care coordination, nutrition, activities, family services, and administrative support all under one roof. The purpose of this monograph is to aid developers of new or remodeled PACE sites by:

- describing current PACE center design, based on a representative sample of centers across the nation.
- providing photographs of existing sites.
- providing information from current PACE staff on what they feel works well and what could be improved, and
- summarizing the information into recommendations.

This report summarizes the information gathered in a survey. In addition, it contains recommendations from experts in architecture and interior design on applying best practices of environmental design for seniors to the various areas of PACE center design.

In developing our recommendations, we worked with several experts in environmental design for seniors. Laurie Ringaert (Director, Office of Research, School of Public Health, University of North Carolina at Chapel Hill) was involved in the design phase of the project. Others who contributed to our recommendations were Margaret Calkins (President, IDEAS Inc.), Daniel Cinelli (Managing Principal, Perkins Eastman, Chicago, IL), and J. David Hoglund (Principal, Perkins Eastman, Pittsburgh, PA).

Finally, we would like to thank the staff and directors of the participating sites, along with Shawn Bloom (President and CEO) and Robert Greenwood (VP of Public Affairs) of the National PACE Association.

To obtain additional copies of this monograph, please contact:

Ms. Julia Thorp
Cecil G. Sheps Center for Health Services Research
Program on Aging, Disability, and Long-Term Care
julthorp@schsr.unc.edu

#### **Research Design**

A sample of 13 existing PACE sites was surveyed. The sites were selected in consultation with the National PACE Association to be representative of the range of centers and programs; by design, approximately half were in remodeled buildings and half in newly-constructed buildings. All but one site we approached agreed to participate in the survey. The participating sites were located in California, Texas, Pennsylvania, Massachusetts, New York, Rhode Island, and Colorado.

Each participating site provided three types of data:

- The center director was interviewed by telephone. Directors of all 13 sites were interviewed; because two of the participating sites had the same director, a total of 11 persons were interviewed to obtain these data. A copy of the director interview form is included in this monograph as Appendix A.
- Each site's director was mailed a packet of questionnaires with instructions that at least one
  of each of the following staff complete a questionnaire: Nurse, Physical Therapist, Nursing
  Assistant, Activities Staff, Volunteer, Transportation Coordinator, and Social Worker.
  Across the 13 sites, a total of 89 staff responded to the questionnaires. A copy of the staff
  questionnaire is included as Appendix B.
- Each site was mailed a disposable flash camera and an instruction sheet. It was requested that a staff member take up to 36 photographs, including: 1 of the front of the building, 1-2 of the entrance, 1-2 of the entry area, 1-3 of the activity/dining areas, 2 in the clinic, 2 of the physical/occupational/rehab areas, 2 of hallways, 2-4 of protected outdoor areas, 10 of environmental features that staff consider especially useful, and 5 of environmental features that do not work well. A copy of the photograph record sheet is included as Appendix C. All sites returned a camera with completed photographs.

Interviews, questionnaires, and photo requests asked for information about the site in general and about the following: Location, Entrance, Activity Rooms, Dining Rooms and Kitchen, Clinic and Therapy Rooms, Mobility, Toilets and Sinks for participants, Bathing Areas for participants, Hallways, Storage, and Outdoor Areas. Measures consisted of ratings and open-ended questions to collect both quantitative and qualitative data about each area surveyed.

Data were entered into a standard database program. Descriptive statistics were computed for the quantitative data, and the qualitative data were summarized.

This report summarizes the information gathered in the survey. It also contains representative photographs from those taken by PACE site personnel. In addition, it contains recommendations from experts in architecture and interior design on applying best practices to the various areas of PACE design.

## **Description of the Research Sample**

#### A. The PACE Site

Table 1 below displays basic information about the 13 participating PACE sites.

Table 1: Characteristics of Participat	ing PACE C	enters
Туре	Freq	Percent (%)
Purpose-built center	5	38.46
Retrofit (remodeled) center	8	61.54
Influence when finding site (Retrofit n = 8)	Freq	Percent (%)
Economic/cost	2	25.00
Physical potential of site	4	50.00
Owner's expectations	0	0.00
Other factor	0	0.00
Missing	2	25.00
Design (Yes)	Freq	Percent (%)
Architect used	13	100.00
Staff meetings used	11	84.62
Another design method	8	61.54
	Mean	Std Dev
Age of site (in years)	4.7	3.3
# Participants served per day	61	35
Services provided at center (Yes)	Freq	Percent (%)
Primary Care	13	100
Social Work	11	85
Therapy	13	100
Personal Care	13	100
Nutritional Counseling	8	62
Recreational Therapy	13	100
Meals	13	100
Lab tests	9	69
Medication	10	77
Spiritual Care	5	38
Square Footage (* Some areas combined)	Mean	Std. Dev.
Parking	23190	28872
Entry	554	686
Dining*	2392	1207
Kitchen	605	893
Storage	486	375
Activity	3610	2350
Toilet	664	451
Bathing*	300	188
Office	2761	1763
Clinic	2359	3175
Rehab	739	575

#### **B.** The PACE Center Directors

Our 13 respondent sites had 11 directors (two had two sites each). Table 2 below provides some background information about the directors.

Table 2: Characteristics of Participating PACE Directors							
	Mean	Stand Dev.					
Age	51	8					
Gender	Freq	Percent (%)					
Male	5	45					
Female	6	55					
Education	Freq	Percent (%)					
Some College	1	9					
Bachelor's Degree	3	27					
Graduate Degree	7	64					
Race	Freq	Percent (%)					
White	10	91					
Other	1	9					

#### C. PACE Center Staff

We distributed questionnaires to a variety of staff in each participating PACE site. We had 89 respondents. Table 3 provides some information about them.

Table 3: Char	acteristic	s of Par	ticipating F	PACE Staff		
			Months	of service	<i>p</i>	\ge
Occupation	Freq	%	Mean	Std Dev	Mean	Std Dev
Social Worker	12	13.6	31.3	21.7	48.4	11.4
Physical Therapist	9	10.2	37.4	23.9	43.1	11.9
Nurse	11	12.5	45.1	49.2	45.1	10.0
Activities Staff Member	14	15.9	56.3	62.6	44.9	10.5
Nursing Assistant	17	19.3	41.8	39.0	45.5	10.3
Transportation Coordinator	10	11.4	75.8	81.7	46.8	12.4
Volunteer	6	6.8	11.3	13.0	54.7	17.1
Other Occupation	9	10.2	58.3	46.3	45.4	11.8
Gender	Freq	%		•		
Male	16	19.3				
Female	67	80.7				
Race	Freq	%				
American Indian/Alaska Native	2	2.5				
Asian or Pacific Islander	3	3.7				
Black	8	9.9				
White	52	64.2				
Other race	16	19.8				
Education	Freq	%				
Less than 12 <sup>th</sup> Grade	1	1.2				
High School	15	18.1				
Technical or Trade School	7	8.4				
Some College	19	22.9				
Bachelors Degree	19	22.9				
Graduate Degree	22	26.5				

#### **General Satisfaction with the PACE Centers**

We asked administrators and staff a number of questions to find out their general opinion about the building in which they worked. This section displays the results.

#### A. Comments about Layout and Size

Tables 4 and 5 display the responses to two general questions about facility layout and size.

Table 4: Layout						
	Dir	ector	St	aff	Total	
Current layout of building best supports needs.	Freq	%	Freq	%	Freq	%
Strongly Disagree	0	0.0	3	3.7	3	3.2
Disagree	1	7.7	24	29.3	25	26.3
Agree	8	61.5	41	50.0	49	51.6
Strongly Agree	4	30.8	14	17.1	18	19.0

	Table 5: Size *											
	Centers with 100 or more square feet per participant** (n=4)					Centers with less than 100 square feet per participant (n=6)						
	Dire	ctor	Sta	aff	То	tal	Dire	ctor	Staff		Total	
Current size of rooms is adequate for needs.	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
Strongly Disagree	0	0	1	3.5	1	3.0	1	16.7	3	7.9	4	9.1
Disagree	0	0	9	31.0	9	27.3	1	16.7	17	44.7	18	40.9
Agree	1	25.0	14	48.3	15	45.5	4	66.7	16	42.1	20	45.5
Strongly Agree	3	75.0	5	17.2	8	24.2	0	0	2	5.3	2	4.6

<sup>\*3</sup> centers did not report square footage in participant spaces and were not included in this analysis.

<sup>\*\*</sup>The National PACE Association recommends planning for at least 100 square feet per participant in some combination of activity, dining, and social spaces. Square footage per participant in this analysis was computed by adding dining room, activity space, rehabilitation, and other social spaces such as game room and sunroom square footage, and then dividing by average daily census.

#### B. Comments about Specific Aspects of the Buildings

Table 6 displays results of questions we asked about some specific aspects of the PACE centers in which respondents worked. One question asked them to rate an aspect of the center on a scale ranging from 0 (=Worst Possible) to 10 (=Best Possible). The other question asked respondents to rate their satisfaction with a particular aspect of the center on a scale ranging from 1 (=Very Dissatisfied) to 5 (=Very Satisfied). Table 6 displays these results.

Table 6: Administrator 8	& Staff Ra	tings of Spe	cific Asp	ects of their	PACE Cer	nters
	Di	rector	,	Staff	T	otal
Rated areas (0-10):	Mean	Std Dev	Mean	Std Dev	Mean	Std Dev
Location	7.5	1.7	6.8	2.4	6.9	2.4
Entrance	7.9	2.0	7.1	2.3	7.2	2.3
Activity	8.2	1.6	7.0	2.3	7.2	2.3
Dining	7.8	1.8	7.3	2.2	7.4	2.2
Clinic	7.7	1.7	7.1	2.3	7.2	2.2
Toilet	8.5	1.6	7.2	2.3	7.4	2.3
Shower	8.6	1.4	7.1	2.4	7.3	2.3
Mobility	8.1	2.2	7.3	2.3	7.4	2.3
Office	7.2	1.8	6.8	2.4	6.8	2.3
Storage	6.1	2.5	5.9	2.7	6.0	2.7
Hall	8.4	1.6	7.7	2.3	7.8	2.2
Outdoor	5.7	3.6	4.8	3.3	4.9	3.3
Satisfaction areas (1-5):						
Overall design of building	4.3	0.9	3.8	1.2	3.9	1.1
Temperature	3.9	1.3	3.8	1.1	3.8	1.2
Lighting	4.3	1.0	4.3	1.1	4.3	1.1
Ventilation	3.7	1.5	3.5	1.4	3.5	1.4
Windows	4.2	1.2	3.4	1.5	3.5	1.5
Noise control	4.1	1.0	3.2	1.5	3.3	1.5
Amount of space	3.9	1.0	3.2	1.5	3.3	1.4
Views to the outside	3.8	1.4	3.3	1.6	3.4	1.6
Hallways/ connections	4.2	1.0	3.9	1.2	3.9	1.8
Storage	2.9	1.1	3.0	1.5	3.0	1.4

## Findings and Recommendations Regarding the Design and Function of Key Areas and Features

In this section the following areas and features of a PACE day center are discussed in detail:

- Location
- Entrance
- Activity rooms
- Kitchen and dining areas
- Clinic and therapy rooms
- Toilets and sinks for participants
- Shower and bathing areas
- Features impacting mobility
- Office space
- Hallways and connections between rooms
- Storage space
- Outdoor areas

Included for each area are the following:

- Representative photographs;
- Discussion of key functions;
- Respondent comments regarding features they liked and wanted in see improved in response to open-ended questions;
- Discussion of important design and functional issues; and
- Recommendations

<u>NOTE</u>: The photographs included in this report represent examples of the range of current practice and often do not represent examples of best practice. Please refer to the text for specific recommendations.

## LOCATION









#### **KEY FUNCTIONS OF LOCATION IN A PACE PROGRAM**

- The building should be centrally located for ease of transporting participants to and from their places of residence
- First-time visitors need to be able to locate the building, and the exterior often gives an important first impression
- Day-to-day staff members, as well as specialty staff members, will be accessing the building at different times of day; so the location should be safe, with available parking
- Participants may also need access and transportation to other off-site services

#### **RESEARCH RESULTS**

Comments from Staff of 13 PACE Sites About their Locations (N = number of respondents listing that item)							
What they liked best	N	Changes they would like to make	N				
Centrally-located or downtown	26	Location not pleasant	32				
Pleasant setting	25	Limited parking available	20				
Easily accessible by transportation	25	Unsafe location	15				
Close to participants or communities	21	Difficult to locate	8				
Convenient to senior resources or places of	17	Not easily accessible by transportation	6				
interest							
		Dissatisfied with building	6				

#### **IMPORTANT ISSUES IN CONSIDERING LOCATION**

- Pleasant atmosphere. Most often mentioned by staff was satisfaction with or desire to have a pleasant atmosphere surrounding the center. Staff members found the atmosphere pleasant when it was quiet, in a neighborhood or other similar area (as seen in photo A's offset location), surrounded by trees and shrubs (as seen in photos B and D), and without heavy traffic. Common complaints included "no landscaping or outdoor spaces." Another overlooked feature may be positioning of the building, as this may impact temperature and shade. One staff member was dissatisfied with the center's "north exposure for our climate. A south or southwest exposure would be beneficial."
- Transportation accessibility. Accessibility for both staff and participants was another key issue mentioned. PACE centers often achieved accessibility by being in a central or downtown location with highway access. Staff members mentioned that having close access to multiple highways or main roads was a positive feature. Another staff member mentioned that "it is located in the middle of town. It is easy to get to from all directions, without having to go very far." Since some large cities make transportation difficult, and because some staff members may use public transportation, being on a bus route and seating at bus stops are also considerations.
- Close to participants. Overall, most PACE sites were described as being ideally located to serve participants in their area. Some sites were strategically located "in a central part of town, where many people don't have a lot of financial resources." The typical PACE client, one who is Medicare and Medicaid eligible, would be likely to live in these particular areas. One staff member liked that the site was located near housing for underserved elderly, proving good access to these clients. Sometimes sites collaborated with programs to be connected to senior residences. In other cases, the center was just located nearby to residences, such as one elderly high rise.
- Resources available. Many staff members mentioned that access to senior and community resources was an important and positive feature of their PACE center. The most common resource mentioned was a hospital, with one center being right across the street from one. Other resources included police stations, libraries, senior centers, restaurants, and shopping centers. In addition, some staff members mentioned the actual setting of the building (i.e., whether free standing or not) in relation to potential resources. For example, one site is "located in a mall type setting that allows for ready access to other services utilized by the program" (like in photo C).
- Parking. Having adequate parking was another important issue mentioned by staff. A good example of adequate parking is seen in photo B. Often there was not enough parking for staff members, especially in downtown locations, which required staff and visitors to walk a long distance to get to the building. The location may negatively impact parking. In one instance, the center is located in a shopping center so parking was bad and busy (as might occur in photo C). Visitor parking was another area that was lacking due to the design and constraints of the parking and outdoor entry space. One staff member mentioned "the front of the center only has limited space for buses to pull up to. However, if family or visitors need access for a short period of time, they have to maneuver through with buses."
- Safety. Safety of the building's location is an issue that should not be overlooked. Staff members addressed issues of safety in a multitude of ways. In some cases, the street location was unsafe. Examples include: "Front door is literally on the street and access is unsafe," and "Situated at a busy intersection where a number of vehicle and pedestrian accidents have occurred." The center's location has implications for participant independence and staff assistance. One staff member explains that the center is "right next to a major road on one side. This limits their ability to roam the lands on their own." Another issue of safety involves hazardous weather. In urban locations, many centers would be well-equipped to deal with weather conditions. In other cases, the sites have less they can do about hazardous weather. For example, "our center is located on top of a mountain, therefore, in bad weather it becomes a safety hazard." Finally, due to funding and client base, PACE sites may be located in generally unsafe areas that are in need of better security.

#### **RECOMMENDATIONS**

#### Things to do:

- 1. Balance accessibility with a pleasant atmosphere. A serene environment is often sacrificed for a central location near main roads.
- 2. Parking should be designed for the many consumers and employees of the center, including participants, full-time staff members, part-time staff members, and visitors.
- 3. Locate the center in a quiet area with minimal noise if possible. If the location is noisy (e.g., on a main street), it is essential to provide sufficient interior acoustic treatment to control noise.
- 4. Provide access to abundant well-designed outdoor space.
- 5. Offer adequate external lighting to provide safety in the winter when staff and clients may be entering and exiting in darkness.

- 1. Do not underestimate the importance of having a serene and attractive entry and building. Participants and staff members do notice these features.
- 2. Try to avoid a setting that lacks sufficient planning for parking and also growth.

## ENTRANCE











#### **KEY FUNCTIONS OF ENTRANCES IN A PACE PROGRAM**

- · Participants unload in groups from transportation vans to enter the building
- The entry is the first area of the building that participants and visitors encounter
- Entry spaces are not used by participants for long periods of time, but they are used by every participant at least twice per visit (entering and exiting), making them subject to a lot of traffic flow
- Receptionists and/or transportation coordinators and their offices are often located here

#### **RESEARCH RESULTS**

Comments from Staff of 13 PACE Sites About their Entrances (N = number of respondents listing that item)							
What they liked best	N		Changes they would like to make	N			
Appropriate entry doors	20		Increase protection from elements	14			
Safe or easy entry from outside	18		Enlarge or widen space	11			
Large or wide area	17		Better entry doors	10			
Layout that is open or enhances accessibility	15		Easier or safer entry from outside	9			
Attractive décor	15		More attractive décor	6			
			Improve layout	6			

#### **IMPORTANT ISSUES IN DESIGN AND USE OF ENTRANCES**

- Entrance Doors. Having appropriate, handicap-accessible doors was very important to staff. Desired doors included the following characteristics: Wide enough for wheelchairs, double door design, automatic sensor (all seen in photo A). For example, one staff member mentioned that the site's doors were "large enough for several people to enter and exit simultaneously."
- Large or spacious. While many staff were satisfied with the size of their entry areas (photo E, for example), many others desired to enlarge the space. One staff member disliked the narrowness of the entry space. It seems as though the biggest reason cited for having a large entry was so staff could "move people quickly in and out" and reduce congestion.
- Safety and ease of entry from outside. Many participants have mobility limitations, so staff recognize that entry areas must be safe and allow for the easiest entry possible. Features that aid entry include ramps, preferably those that are not steep. (Note: Although a slope of 1:12 meets most building codes, older people often find that a slope of 1:20 is easier to manage). Even better is having a flat, one-level entrance without steps or ramps (see photo B). One staff member advises to "level the pavement leading to the buses so wheelchairs don't roll into the street" (which would be a problem in busy traffic seen in photo C). Also important is proximity to parking areas or the transportation van loading area (photos B and C). One staff member praised the unloading area's "room for four vans at one time," while another liked the "short distance from the ramp of the van to the foyer heading into the day center."
- Layout providing accessibility. The entry space inside the building directs visitors and members to the rest of the space in the center, and is, therefore, important. Often the layout was mentioned as a source of congestion (an appropriate layout could resemble the open design of photo E). "Move coat room from the lobby to the day area because of congestion" was one recommendation. "Need separate entrance for participants because too congested" was another. Some centers had planned for features that would address congestion issues. For example, a staff member replied "we have stairs and a ramp that assist with traffic flow because they are in different directions." Other important characteristics of entry areas included having an accessible front desk or receptionist and being close to the day room. Another recommendation was not having direct visibility to or from the day center, almost creating a separate area cut off from noise and confusion.
- **Décor and aesthetics.** Staff members also realized the importance of friendly and inviting décor. It was important to have seating for participants in the entry space (photo D). In addition, color, light, plants and shrubs, and display cases add to the atmosphere of the entrance. Staff members especially enjoyed entrances that are open (photo E) and airy. Windows can be used to create this feeling, along with allowing in needed light (photo D).
- Protection from elements. Finally, having protection both outside and inside from weather
  conditions was desired by staff. Outside, staff preferred covered areas, and in some cases, heated
  driveways. Staff members also mentioned having a pitched roof to control rain near the entry doors.
  Inside the center, staff mentioned it would be beneficial to "add some kind of barrier between doors
  and center space" or to position the door in such a way that would reduce the amount of cold air
  from the outdoors being let in during the winter (photo D is an example).

#### **RECOMMENDATIONS**

#### Things to do:

- 1. Ensure there is substantial covered space outside for loading and unloading with adequate clearance for facility vans.
- 2. Provide a level entry, including a level loading pad.
- 3. Design a welcoming exterior entry. For example, creative use of warm, bright colors, plants, and art work well.
- 4. The entry should not be readily visible from the main activity areas (including hallways). This will help keep cognitively impaired residents from focusing on the exit.
- 5. Design doorways to exceed ADA minimum requirements. Many wheelchairs are larger and wider today, and seniors require added turn around space.
- 6. Consider a double entry/vestibule (e.g., photo D) for energy efficiency, especially in cold weather areas. A right angle entry through the vestibule helps to prevent or minimize "wind tunnel" effects. With a straight entry, the breeze will make the lobby uncomfortable since both doors will be open due to the timing delay. Or, lengthen the lobby so exterior doors close before the lobby doors open.
- 7. Provide coat closets near the entrance. Design them in a manner that minimizes crowding during high traffic times.
- 8. Provide seating near the entry. Use appropriate seating (i.e., with appropriate seat height in the range of 16 inches to 17 5/8 inches and arms to assist in sitting and standing).

- 1. It is important to have automatic doors wide enough for wheelchairs to pass through (i.e., at least 36 inches, and preferably 40 inches).
- 2. Avoid assuming that participants will be able to enter the building and know where to go to access the day center quickly. Often the space will become congested, and the layout should be easy for participants to navigate.
- 3. Avoid taking space away from the entry to add to other areas of the center in the hope that, because the entrance is not in constant use, the space does not matter.

## ACTIVITY ROOMS













#### **KEY FUNCTIONS OF ACTIVITY ROOMS IN A PACE PROGRAM**

- By activity rooms we mean any of a variety of spaces in which participants do things that provide them with pleasure, success, a sense of usefulness, and/or as normal a level of functioning as possible
- Participants spend the majority of their time in one or more of these activity spaces
- Participants should enjoy the time they spend here
- Areas should be able to accommodate formal (group) activities, public events, and private time
- In almost all centers, activity rooms are also used for dining

#### **RESEARCH RESULTS**

Comments from Staff of 13 PACE Sites About their Activity Rooms (N = number of respondents listing that item)							
What they liked best	N	Changes they would like to make N					
Large, spacious activity areas	32	More space 19	9				
Good lighting (including natural light)	24	Multiple areas for activities 13	3				
Attractive décor	18	More open layout to reduce congestion 11					
Open / functional layout of room	13	Soundproofing 8					
Versatility	11	Different furniture 6					
		Improve atmosphere 6					

#### IMPORTANT ISSUES IN DESIGN AND USE OF ACTIVITY SPACES

- Overall amount of activity space. Ample space for activities is considered very important by
  PACE staff. Overwhelmingly, staff enjoyed a large or spacious area, and when adequate activity
  space was lacking, the space feels crowded (as might occur, for example, in photo C). One of the
  most common requests of surveyed staff was to "provide a little more space between table setups to
  have plenty of room for wheelchairs and walkers." "Need more room in order to facilitate a wider
  variety of activities" was another comment. The importance of planning ahead is evident as PACE
  centers become busier over time. "The activity area became less and less over time as the census
  grew," remarked one staff member.
- Flexibility of spaces and/or multiple activity spaces. PACE staff also favor having multiple activity areas, so as to accommodate small, quiet groups (photo D) or individual activities such as television viewing (photo E). One staff member suggested that the center "provide specific areas for Alzheimer activities, quiet times, and music group;" and another requested a "separate quiet room for smaller groups." Another way to divide groups or allow for multiple activities is by ensuring the activity rooms are versatile, either by having moveable partitions or by having furnishings that could be rearranged (Photo C). Staff members in one facility, for example, praised a space that allowed for "an open room for one activity or dividers for smaller activities."
- **Lighting.** Staff surveyed tended to praise bright lighting and windows. In designing activity room lighting, care should be taken to provide brightness (at least 500 lux) and evenness, with care taken to minimize glare. Daylight from windows and/or skylights (photo B) can be excellent if diffusers are used to prevent shadows and glare.
- Noise control. Noise was noted as a problem by some staff surveyed. Control can be achieved by avoiding very large common areas and/or by using sound-absorbent materials on the walls, floor (i.e., carpeting), and the ceiling. Note that this contradicts the advice by staff in many centers to have a large and spacious day room; so the issue of the trade-off between size and noise should be considered carefully in facility design. Also, the positioning of the day room within the building can be done in such a way as to reduce noise from hallway traffic and other spaces.
- **Décor and aesthetics.** Aesthetic qualities are important in activity areas perhaps even more so than in other areas of a center. Having an attractive atmosphere was the third most common response when asked to pick a best feature and was also mentioned by some staff as an important feature to change about their center. One center director recommended having a "lot of nice art including tile work, mosaics, and sculptures", while a staff member mentioned that "colors are comforting and tranquil." Usually a room that was comfortable was considered attractive, with the overall goal to decrease the institutional look of the space. One staff member wished to "make atmosphere more home-like by adding a TV, built-in bookshelves, and recliners for frail people."
- **Furniture.** A final important element of activity rooms often mentioned by staff was the furniture. For example, staff at one center desired "tables with center-based legs to not interfere with wheelchairs," instead of the tables pictured in photo F. In fact, selection of chairs and tables must take into account multiple factors and involve clinician input.

#### **RECOMMENDATIONS**

#### Things to do:

- 1. Plan for adequate space for a minimum of two large group activity rooms (including one for dining), keeping in mind the census will likely increase over time. How much space is "adequate" depends on who you ask; one design consultant recommends 18-25 square feet per person.
- 2. Plan for multiple activity areas, making use of partitions or dividers to create multiple areas if necessary.
- 3. Have ceilings high enough for lighting (9 ft or more). If much higher ceilings are considered, design them within such a manner (i.e., shape and surface finish) so as to minimize noise.
- 4. Lighting and noise control are crucial. Work with an architect and interior designer who understand principles of senior care design, and insist that glare and noise be minimized. Design professions are rarely trained in designing for the special needs of seniors (including mobility, vision, and hearing).
- 5. Provide high light levels (at least 500 lux) with even illumination, but without glare. Offer a variety and dimming capabilities to support different functions.
- 6. Provide furniture appropriate to the user and the function of the space. Consider adjustable height tables. Furniture arrangement can be used to divide larger spaces into multiple areas.
- 7. Select furniture for function and aesthetic qualities. Table size and heights may vary. Chair sizes and styles will vary with use, but all chairs should have arms.
- 8. Design rooms for both larger groups and smaller groups.
- 9. Room configuration is important as well. Large, square rooms are not always the most flexible, as they lack private areas to ease distractions or dignity (i.e., special program or feeding/dining assistance). Some with alcoves may be more flexible and allow the opportunity for large and small group activities. A 1/2 or 2/3 arrangement may be helpful as a rectangular configuration. (See the figures below)

	i		i	
I				
I				
I				
I				
I				
I				
I				
I				
I				
I				
L				

#### Things to avoid:

1. Avoid an institutional arrangement of furniture in long rows, and avoid placing furnishings too close together.

## KITCHEN & DINING AREAS









#### **KEY FUNCTIONS OF KITCHENS AND DINING AREAS IN A PACE PROGRAM**

- Meals are often served in activity spaces
- Staff either prepare all food on site or reheat food prepared by an outside source
- Kitchens may be closed to participants, or supervised activities may be conducted there
- Different serving systems may be used to allow participants different levels of access and involvement

#### **RESEARCH RESULTS**

Comments from Staff of 13 PACE Sites About their Kitchens and Dining Areas (N = number of respondents listing that item)							
What they liked best	N	Changes they would like to make	N				
Large or spacious	24	Increase size	29				
Accessible to other rooms in center	24	Improve layout	16				
Layout that improves function of space	15	Different tables	11				
Good lighting	10	Make separate from other spaces	8				
Good methods of serving	8	Increase storage or counter space	6				

#### IMPORTANT ISSUES IN DESIGN AND USE OF KITCHEN AND DINING SPACES

- Amount of space. Overall, staff members felt as though size of dining and activity spaces was
  extremely important in the functioning of those spaces. Staff often enjoyed a large and open design
  (see photo B) of the dining space because everything was visible. When dining areas seemed
  overcrowded, staff members indicated they would like to see the space enlarged. Staff members
  also disliked small kitchens, as these spaces often became overcrowded when multiple people had
  to use the space at the same time (as might occur in photo D).
- Design, layout and arrangement that enhance function of space. Having a layout that allowed for smooth traffic flow and decreased congestion was desirable because it improved the overall function of dining and kitchen spaces. Staff members praised practical setups that aided their efforts to serve participants; for example, when "staff can serve meals in a timely manner and observe participants while they dine." Another staff member remarked that "workflow is hampered by arrangement of counters and other furnishing in that space." Having an open kitchen, pass through windows, or having an open breakfast bar with a window into the kitchen also were desired characteristics (see photos A and C). Staff also mentioned that the setup of tables should improve socialization, and centers should avoid overuse of long tables, as this was cited as being too institutional (unlike the arrangement and tables in photo B).
- Location in center. The actual location of the dining and kitchen areas in relation to other rooms in the center was also important. There should be easy access from the kitchen to the dining room in order to aid in serving meals. In several instances, this was achieved when the "activity and dining area are the same area and the kitchen is at one end." One problem that occurs with this arrangement is cited by one staff member. "The kitchen is located right inside the day center and when lunch is served activities stop." In other cases, the spaces were "conveniently located between day rooms." Staff members do warn that dining spaces should be separate from high traffic areas and TV's, in addition to bathrooms.
- **Lighting.** Staff members felt as though lighting of the dining spaces was an important aspect. Natural light coming from large windows was preferred, as one staff member remarked that the fluorescent lights were too bright. Large windows also provide scenic views to the outside (seen in photo B).
- Furniture. Several staff members desired different tables to provide more comfortable seating for participants. For example, "legs should be in the center to prevent interference with wheelchairs or patient legs," and "tables do not allow for multiple wheelchairs," were noted problems (pictured in photo A, but not in photo B). Tables with adjustable heights were also recommended, along with tables on wheels that could be moved out of the way for activities. In addition, one staff member mentioned that chairs should be comfortable. If you have seniors as an advisory panel, you may have them test out different chairs to tell you which are most comfortable.
- Storage space. Staff cited lack of storage space as a change they would like to address in their center (see photo D). Planning for a lot of counter space in kitchen and serving areas (as seen in photo A) is usually recommended. Some staff members desired an additional refrigerator and sink space.

#### **RECOMMENDATIONS**

#### Things to do:

- 1. A well-designed kitchen with adequate space is essential for multiple staff members using these spaces simultaneously.
- 2. Plan for abundant workspace and storage space in kitchens and serving areas. A separate pantry is generally a good idea.
- 3. Include adequate lighting as defined by IES-RP28 (Illuminating Engineering Society of North America (IESNA) / American National Standards Institute (ANSI) standards, "Lighting and the Visual Environment for Senior Living"). Lighting should come from multiple directions, and should include windows with views to the outside.

- 4. When selecting tables, think carefully about whom you are serving. Tables with four legs tend to be more stable than pedestal tables. Avoid tables that block foot access (see Photo A). Either round or square tables can be considered; however, square tables provide more flexibility than round ones because two can be joined to create a rectangular surface. Large tables (e.g., for 8-10 people) are not recommended for older adults because hearing impairment is so common.
- 5. Do not overlook how much space you will need to provide adequate dining space and to accommodate wheelchair users.
- 6. Plan carefully to successfully involve participants in kitchen activities (e.g., to assist in food preparation). For example, include a coffee maker and kitchen table for early arrivals. An open kitchen that can be used for activities over coffee gives double use for that space.
- 7. Depending on the food delivery system, having a pantry to support and contain commercial equipment (i.e., ice machines, freezers, etc.) may also be helpful.

- 1. Avoid an institutional arrangement of dining tables in long rows, and avoid spacing furniture too close together.
- 2. Avoid completely closing off the kitchen or dining area from other spaces in the center, as these will need to be accessed often and in a timely manner when food is served.

## CLINIC & THERAPY ROOMS









#### **KEY FUNCTIONS OF CLINIC AND THERAPY ROOMS IN A PACE PROGRAM**

- Participants see physicians, nurse practitioners, physical therapists, occupational therapists, podiatrists, and other health professionals on site
- Often multiple departments and professionals work within a therapy area

#### **RESEARCH RESULTS**

Comments from Staff of 13 PACE Sites About their Clinics and Therapy Rooms (N = number of respondents listing that item)				
What they liked best	N	Changes they would like to make	N	
Large or spacious	25	Increase size	44	
Good location within the building	19	Privacy not maintained	16	
Well-equipped	18	Poor location within building	8	
Privacy maintained	9	Increase storage	7	
Good layout of area	9	Improve layout	5	

#### IMPORTANT ISSUES IN DESIGN AND USE OF CLINIC AND THERAPY ROOMS

 Adequate amount of space. Staff members recognized that overall amount of space in clinic and therapy areas was important. Having an appropriate number of exam rooms was important, as well as having enough space in exam rooms for the participant, family members, staff, and equipment. One staff member would have also liked to see a larger waiting area in the clinic. Therapy areas were also noted by staff as needing a large amount of space in order to provide many members therapy at the same time (photo D is a good example). Having a "large gym plus a small 1:1 treatment area" was preferred by one respondent.

- Appropriate location. Staff mentioned that location of clinic and therapy spaces was another important feature. They recommended that the therapy room be adjacent to or a short walk from the day center/activity spaces to allow easy access. This would work well if the therapy area was in a central location in the building. Regarding clinic space, some staff members preferred an offset location to allow more privacy and noise control, but others disliked the long walk participants had to make if the clinic was in the back of the building.
- Maintain privacy. It is important to maintain the privacy of the participants during therapy and medical examinations. Staff members liked separate exam rooms that provided maximum privacy, rather than using curtains to separate rooms (Photo A features the use of curtains to divide exam rooms). In addition, staff members disliked therapy rooms that decreased privacy. In some cases, the therapy room had glass walls on two sides or windows, allowing others to view participants, which staff disliked. One respondent stated "I like that as a physical therapist I have a separate exam room or office, so the participants have privacy."
- **Equipment.** Equipment in both the clinic and therapy spaces could enhance participants' time spent there. Staff recommended having geriatric appropriate exam chairs, along with having close access to a bathroom in the clinic. One staff member also would have preferred a small whirlpool to ease achy muscles. In therapy areas, staff desired equipment including parallel bars, mat, step, stairs, and a large gym mat (photo D).
- Layout. Layout within the clinic and therapy spaces was also considered by staff members when responding to the survey. Staff members generally approved of centralized nursing stations in the clinic, which would allow staff to have visibility of participants in this space (as achieved in photo C). It was also important to have clean pathways in the clinic, as one staff member noted the hallway was very narrow, and it would be "difficult to have ambulance stretchers come into the clinic without moving multiple chairs and equipment pieces" (as may occur in photo A). Staff generally preferred an open and visible layout in therapy areas (such as photo D), and disliked crowdedness (which may have occurred in photo B).
- **Storage.** Some staff commented that storage space could be improved. In one case, the clinic had no cabinet storage, causing staff to use hall closets for supplies. Staff also recommended having more storage for durable medical equipment such as commodes, shower chairs, and walkers.

#### **RECOMMENDATIONS**

#### Things to do:

- 1. Clinic and therapy spaces have different needs and should be planned individually.
- 2. Plan for larger therapy spaces, especially if the census is likely to grow.
- 3. Ensure privacy for participants by having separate exam rooms in the clinic.
- 4. Carefully define specific storage needs, and include appropriate storage in the clinic and therapy areas for both larger equipment and smaller, daily supplies.
- 5. If possible, have toilets between exam rooms or nearby for ready access. This also ensures privacy for someone who may have changed for the exam.

- 1. Avoid locating the clinic and therapy areas a great distance from common activity spaces. Long walks may be difficult for some participants.
- 2. Avoid crowding therapy areas, making the spaces uninviting, dangerous, and difficult to use. Equipment should never be stored in the corridor. This is a violation of fire regulations and a result of poor planning.
- 3. Avoid an institutional or clinical look in exam areas. Instead, make them warm, inviting, and exciting.

## TOILETS & SINKS









#### **KEY FUNCTIONS OF TOILETS AND SINKS IN A PACE PROGRAM**

- Participants will need access to restrooms throughout the day and from different areas of the day center
- Participants may be able to use the restroom independently or could require assistance of staff

#### **RESEARCH RESULTS**

Comments from Staff of 13 PACE Sites About their Toilets and Sinks (N = number of respondents listing that item)				
What they liked best	N	Changes they would like to make	Ν	
Easy to access	20	Utilities not at correct height or position	18	
Appropriate amount of space	16	Not enough bathrooms or stalls	16	
Appropriate number of facilities for census	16	Increase size of room or stalls	11	
Adaptive equipment to aid handicapped	12	Improve adaptive equipment	9	
Good location within the building	7	Poor location or layout within building	5	

#### IMPORTANT ISSUES IN DESIGN AND USE OF TOILETS AND SINKS

• Appropriate number of bathrooms for participants. You cannot have too many bathrooms. Ensuring there are an appropriate number of toilets and sinks for the center's census is important because it reduces wait time. Staff at one site felt having 8 restrooms or toilets for 3 activity area

pods was sufficient, and another felt as though two in each activity center, along with each room having a toilet, was sufficient.

- Accessibility. Often staff felt that restrooms should be located in accessible areas throughout the building and should be easy to enter. One respondent preferred bathrooms scattered throughout with individual unisex toilets, compared to having one general area for all of the restrooms. Another center features ten bathrooms encircling the day center. Features that enhance accessibility within the restrooms include wide doors that are easy to open or sliding doors (as seen in photo A). Sliding doors are an alternative to using heavy curtains to divide toilets, which also work well for assistance and wheelchair access, as one staff member noted (see photo B). Another recommended having doors that were automatic to promote independence and privacy.
- Amount of space within bathrooms. Staff also responded that restrooms should be large and spacious to allow enough room to turn wheelchairs.
- Adaptive equipment. Staff noted that equipment could be used to aid participants, especially
  those that are handicapped or use a wheelchair. Often centers featured grab bars, either on each
  side of the toilet (pictured in photo A) or on one side, taking up less space (photo B pictures a railing
  on the back wall). One respondent mentioned an improvement would be to make the sink water
  automatic and the toilets power-flush, although others noted that these features may be confusing to
  elderly persons.
- **Position of utilities.** Often the height of toilets and sinks and positioning of other equipment could be improved. "Sinks are high enough to allow wheelchairs to fit under for members to reach" was one positive response, while another noted "sinks are currently too high for wheelchairs to reach soap or paper towels." In addition, one staff recommended having "more space between the sink and the wall to allow participants to reach the faucets while in a wheelchair" (which might occur in photo C, but appropriately placed in photo D). Sometimes it was noted that handrails were too low or the toilets were too low, in addition to the toilet paper holders being too far away.

#### **RECOMMENDATIONS**

#### Things to do:

- 1. Put in a lot of bathrooms. The savings in reduced staff effort associated with toileting will offset the cost.
- 2. Cluster bathrooms around the main activity and dining areas. Provide ready bathroom access to all areas. Every bathing room should have a toilet. Clinic and therapy areas should have immediate bathroom access.
- 3. Have sufficient storage space for participant supplies nearby, and provide storage for key supplies within each bathroom.
- 4. Balance accessibility with maintenance of privacy. Centers often use curtains to divide stalls, which improves ease of access; however, privacy and dignity tend to suffer, and so curtains are not preferred. Private bathrooms are ideal.
- 5. Door selection should be individualized. Doorways should be wider than the minimum ADA requirements so that wheelchairs can easily pass through (i.e., at least 36 inches, and preferably 40 inches wide).
- 6. Consider installing Linido bars (pull-down grab bars) demonstrated in clinical studies to provide the best assistance during toileting. They are not currently approved for use with extremely heavy persons.
- 7. For clients who require a full assist, consider having a mechanical lifting device for toileting and bathing.
- 8. Increase color contrast around the toilet (i.e., darker floor and walls) so it is easier to see.

- 1. Avoid having only one large restroom area serving the whole building, as it may not be easily accessible from all rooms.
- 2. Avoid toilet stalls too small to easily fit and maneuver wheelchairs.

# SHOWER & BATHING AREAS







## KEY FUNCTIONS OF SHOWER AND BATHING AREAS IN A PACE PROGRAM

- Participants should be able to receive a shower or bath at the PACE site
- Participants may need a place to store clothing or other items in this space while being bathed

#### RESEARCH RESULTS

Comments from Staff of 13 PACE Sites About their Shower and Bathing Areas (N = number of respondents listing that item)					
What they liked best	N		Changes they would like to make	N	
Large or spacious	29		Increase size	18	
Well-equipped for special needs	14		Increase number of showers	7	
Easy to access	10		Privacy not maintained	7	
Appropriate location within building	8		Poor location within building	6	
Tub bathing available	8		Add additional heating	6	

#### IMPORTANT ISSUES IN DESIGN AND USE OF SHOWER AND BATHING AREAS

• Amount of space. Overall, staff recommended having a large shower area, in addition to having enough space within each stall to assist participants. One staff member disliked the lack of space within the general area by mentioning there was "not enough room for hoyers or a gurney. At least one bathing area should have those." More space would also allow room for changing tables or other equipment. Shower stalls should also be large enough for participants and a staff member if assistance is needed (photo C shows a narrow stall compared to photo A).

- Accessibility. Staff noted that the shower areas should be accessible to participants. A shower area that was off the main bathroom was noted as a positive feature, but one respondent remarked that the area is better if separate from the commodes. Staff also preferred shower rooms that were not far away from the multi-purpose activity room and clinic.
- Equipment available. Equipment that helps participants in bathing and makes the experience more enjoyable is preferred. Many staff members noted that tub baths with jets are highly enjoyed by participants (photo B). Staff also felt that roll-in showers and those that included different options of shower chairs worked well (see photos A and C). One respondent would prefer to "have a bigger table for people with certain dressing needs," and another stated that the shower area "needs a sink and a mat/bed to change people on."
- Appropriate number of bathing facilities. Some staff members noted that having one shower for all participants was not enough, and would prefer to have additional facilities. Sometimes, due to maintenance problems, only one shower could be used. In one case, a staff member noted that they were "unable to utilize the second shower stall due to limited water pressure."
- **Maintain privacy.** It was important to staff to maintain the privacy of the participants. An especially good design noted by one respondent was that "each room has an individual shower to ensure privacy and dignity and allow one-on-one attention," but other sites seemed to be lacking in privacy. This often occurred when the shower areas were entered from the day centers, or when access to these spaces was not limited while in use.
- **Heating.** Some staff members noted that sufficient heating was lacking. Often, participants could become cold due to the open stall design. Many recommended installing an appropriate heating system or simply adding warming lamps.

#### **RECOMMENDATIONS**

#### Things to do:

- 1. Design the bathing room to resemble a bathroom in a home.
- 2. Specify a heating system and heat lamps to ensure participants are warm during and after bathing or showering.
- 3. Ensure privacy for participants by having individualized bathing rooms with easy and private access to toilets. Multiple-persons spaces are unacceptable.
- 4. Even small thresholds can cause falls. European showers, which have floors that slope slightly towards a drain in the middle of the floor, eliminate thresholds between the floor surface of the bathroom and the shower and are the recommended design for safety.
- 5. No specialized tub works for everyone. Provide multiple bathing options and select specialized tubs with care.
- 6. Consider purchasing a mechanical lift device. They are increasingly popular in long-term care and are required in some other countries (e.g., Australia) because they reduce staff injuries.
- 7. Bathing areas can be very noisy because they often have hard surfaces on the walls and floor. Therefore, pay particular attention to providing design features to minimize noise.
- 8. Use an anti-slip floor that is easy to clean.
- 9. Install hand-held shower wands. (See photos A and C)

- 1. Avoid thinking that shower areas should contain only a tub or shower stall. Instead, provide space for participants to undress and dress (including space to sit) and for grooming.
- 2. Avoid designing bathing rooms that look weird, scary, or unfamiliar.
- 3. Avoid storing personal items far from the bathroom. Adequate, well-planned storage allows for personal items to be close-by.

## MOBILITY











#### **KEY FUNCTIONS OF FEATURES OF MOBILITY IN A PACE PROGRAM**

- The center should allow maximum access and independence depending on the function of each participant
- Safety of each participant must be taken into account

#### **RESEARCH RESULTS**

Comments from Staff of 13 PACE Sites About their Center's Mobility (N = number of respondents listing that item)				
What they liked best	N		Changes they would like to make	N
Wide or spacious hallways	21		Improve layout within each room	14
Layout of rooms and halls within building	18		Increase size or width of hallways	12
Simple hallways lacking confusion	14		Improve layout of halls or rooms in building	9
Easy navigation or access	11		Improve navigation or access	7
Layout within each room	8		Increase staff assistance or security	7

#### IMPORTANT ISSUES IN DESIGN AND USE OF FEATURES AFFECTING MOBILITY

- Width and space in hallways. Staff approved of wide, spacious hallways that allowed for maximum movement (pictured in photo A). Disliked were "small, narrow hallways when participants in wheelchairs and walkers are passing each other."
- Layout of hallways and rooms. The floor plan affects the layout of the hallways and rooms in the center. Some staff preferred circular hallways or routes that allowed for a walking path. Staff also liked when "hallways are situated so that they lead back into day rooms," or when they provided a "straight shot for participants entering facility to day center." Layouts that also had the "entrance into facility go directly to day center, rather than having offices and lunch room in between" were liked.
- **Simplicity.** Simple floor plans and hallways allow participants to easily find their way within the building. Single floor plan layouts (i.e., those avoiding multiple floors) were preferable, along with those that provided easy access from the entrance of the center. On the other hand, one respondent disliked the asymmetrical shape of the building, along with having multiple hallways and rooms that looked alike. Further, staff members preferred shorter hallways and distances between rooms to longer hallways.
- Ease of navigation or access. Features that improve navigation or access to areas were also mentioned. These features included having smooth surfaces between the carpet and transitions, installing ramps in place of steps (photo E), and utilizing automatic doors. In one instance, a staff member noted that participants have difficulty opening heavy doors. Also, staff recommended that door frames to commonly used rooms (such as photo C) should be wider.
- Layout of rooms. The layout of rooms, in particular activity rooms, also impacts participants' mobility. Tables should be arranged to allow the most space for movement. Many staff members recommended having more space in between tables (an improvement for photo D). Another option involves having tables and chairs that can be easily moved, providing an element of versatility. Large, open areas that were not cluttered were also preferred. In one case, a staff member recommended having "more walking space on outer edges of day room" (achieved in photo D).
- **Security.** Finally, security must be taken into account. In some cases, staff mentioned that stairs are not guarded at all times for certain patients with confusion or mobility issues (which could occur in photo E). Noted was that one center "must increase security camera use because staff are not always around to watch this area" or to know when people leave the building. Often security was achieved by limiting participants to certain areas (photo B) or desiring a locked unit for people with dementia.

#### **RECOMMENDATIONS**

#### Things to do:

- 1. Have easily visible signs or other cues to identify each room or area.
- 2. Ensure the center is secure by having staff members who are able to supervise areas as well as a security system. An easy alarm system involves an audible alarm on doors to areas (e.g., stairs) that should not be used. A more complex system involves a magnetic lock tied to the building alarm system with a keypad override for staff.

- 3. Ensure door frames and hallways are wide enough to accommodate participants in wheelchairs. To accommodate all participants and today's larger wheelchairs, all doorways should exceed ADA standards (i.e., doorways should be at least 36 inches wide, and preferably 40 inches wide).
- 4. Avoid even small changes in level of floor surfaces (e.g., threshold pieces in doorways).
- 5. From a mobility perspective, a compact, high-performance carpet (e.g., a healthcare carpet) is best. It minimizes glare, provides better traction, and may prevent some fractures.
- 6. In bathrooms, use a vinyl flooring surface with the same color value as the carpet used in adjacent spaces. It is easier to clean than carpet and softer than ceramic tile.

- 1. Avoid long corridors and confusing room layouts.
- 2. Avoid having areas that require participants to go between multiple floors (i.e., a multiple level floor plan).

## STAFF OFFICES











#### **KEY FUNCTIONS OF OFFICES IN A PACE PROGRAM**

- Administration is often located within the center and will require offices
- Some staff members will meet with participants to discuss confidential issues in office space
- Conference rooms may be used to hold meetings between staff, participants, and family members of participants

#### **RESEARCH RESULTS**

Comments from Staff of 13 PACE Sites About their Offices (N = number of respondents listing that item)				
What they liked best	N	Changes they would like to make	Ν	
Large or spacious	19	Improve maintenance of privacy	24	
Well-equipped or furnished	16	Increase size	23	
Appropriate location or layout within building	11	Poorly equipped for furnished	14	
Good lighting or windows	10	Need more or individual offices	13	
Attractive or pleasant decor	8	Improve lighting or windows	7	
		Not appropriate location or layout within building	7	

#### <u>IMPORTANT ISSUES IN DESIGN AND USE OF OFFICES</u>

- Size of offices or office area. Size of office space is important because it impacts the amount of space available for individual offices and whether staff members will have to share offices (seen in photo D). One respondent commented on the importance of planning when noting the center should have "more offices in the clinic as the medical component has become a bigger aspect of care." Larger conference rooms were also desired (as in the case of photo B).
- **Equipment or furnishing.** Staff members also mentioned that equipment and furnishing of offices were important. A few respondents would have preferred ergonomic chairs and more desk space (as may be desired in photo D). Others praised features and details such as blackboards over their desks.
- Maintain privacy. Privacy of staff members and participants was mentioned as being affected by the office design. Very often, staff members relayed that social workers could not maintain confidentiality of participants either because they had no private meeting space or because they shared an office with other staff members (pictured in photo D). One respondent preferred when "social workers' offices are set off in the back where they can reach them if need be, but not where they're visible." Having a cubicle design also decreased privacy according to staff (photo C).
- Location in building. Offices should be strategically located in the building. One respondent preferred administrative offices that were distant from client areas, which is preferable because it affords isolation from traffic and noise. For other staff members that need greater access to participants, having offices that are close to the day room are preferred. For example, one staff member stated that "nurses' offices should be integrated into the treatment room." Location may also facilitate communication. In one center, "doors open from provider office to geriatrics clinic office for consultations."
- **Lighting.** Lighting was also an important feature in office space. Although not always provided, staff members preferred having large windows in conference rooms (photo A) and offices (photo E). Fluorescent lights (such as those in photo C) were not highly liked.
- **Decor.** Decor and aesthetic qualities were also important to staff members. Often this was due to personal comfort and for attracting outside consumers. Staff members mentioned soothing colors as a quality that they considered attractive (pictured in photo E).

#### **RECOMMENDATIONS**

#### Things to do:

- 1. It may help to think of two types of staff spaces: administration / finances, and clinical / care.
- 2. Remember that many staff should be encouraged to spend much of their time in the care provision areas. Therefore, put the work space of the care staff in or near where they work instead of in a "staff office area."
- 3. Provide privacy where it is needed (e.g., for social worker interviews of clients and/or families). However, recognize that not everyone will or should have a private office and that modular

- arrangements can be designed to work well. The advantage of a shared workroom is that it enhances the multi-disciplinary approach.
- 4. You will need some kind of "mission control" where an administrative person, perhaps with the assistance of a nurse, checks in on homebound program participants, communicates with home health and transportation staff, and fields communications from hospitals and consultants.
- 5. Decorate offices with soothing colors, plants, and pictures.
- 6. Ensure that each office has the appropriate number of desks, computers, furniture and adequate storage for the staff members located there, and that it will accommodate new technologies such as wireless applications.
- 7. Provide one or more rooms to accommodate family conferences in a home-like setting (e.g., with a social worker).

- 1. Avoid locating offices for staff members such as nurses and activity coordinators who meet often with participants too far away from main participant areas.
- 2. Do not forget to address office accessories and important details such as corkboards, blackboards, private lockers, hooks, etc. These may improve organization.

## HALLWAYS & CONNECTIONS BETWEEN ROOMS









## <u>KEY FUNCTIONS OF HALLWAYS AND CONNECTIONS BETWEEN ROOMS IN A PACE PROGRAM</u>

- Hallways particularly long hallways offer few if any benefits. For many PACE participants, they
  can be disorienting and/or restrict and discourage movement from one space to another. In
  addition, they unnecessarily consume square footage.
- In some cases hallways provide walking space when a more pleasant setting is not available

#### **RESEARCH RESULTS**

Comments from Staff of 13 PACE Sites About their Hallways (N = number of respondents listing that item)				
What they liked best	N		Changes they would like to make	Ν
Wide or spacious	39		Too small or narrow	25
Good floor plan or layout within building	18		Better access or navigation	8
Good lighting	14		Better layout or floor plan within building	7
Easy to access and navigate	13		Too long	3
Railings provided	10		Confusing to participants	3
			Use of doors to close off areas	3

## IMPORTANT ISSUES IN DESIGN AND USE OF HALLWAYS AND CONNECTIONS BETWEEN ROOMS

- Width or space. Staff commonly mentioned that hallways should be spacious and wide to allow traffic to flow in two directions. Generally, eight to ten feet wide hallways were considered appropriate (see photos B and C). Staff noted the importance of avoiding hallways with narrow turns that would be difficult to navigate (as seen in photo A).
- Floor plan and layout. The floor plan or layout of the building contributed to the design of hallways or connections between rooms. Staff preferred when the center had rooms which naturally connected (like in photo B), providing direct access to each area, or if there was one main hallway. Also liked was a single-level floor plan and simple halls with as few turns as possible (which could be addressed in photo C). Finally, attention should be given to the order of rooms along the hallway. In one center, staff mentioned that they must go through unnecessary areas such as the clinic to access other used spaces.
- Accessibility and ease of navigation. Features that allowed participants to easily access areas in the building were also noted by staff. Having smooth transitions between doors or from tile to carpet were liked, while slippery surfaces were disliked. Some mentioned that patterns in tiles or overly-shiny floors were confusing to some participants. Automatic doors can also be employed which would allow participants to access areas independently. Some staff disliked having doors that would be difficult to keep open (such as pictured in photo D). Finally, having one-level flooring was preferred to slopes or ramps.
- **Lighting.** Having well-lit hallways is important for participants. Staff often enjoyed bright hallways and those lit by natural light from windows.
- Railings. Staff also felt that having railings to assist participants in the hallways was important (pictured in photos B and D). When railings were lacking (as required by the design in photo B), staff often mentioned they would like them to be added if possible.

#### **RECOMMENDATIONS**

#### Things to do:

- 1. Create as few hallway spaces as is feasible.
- 2. Have easily visible and legible signs to identify each room or area. Wayfinding is easier with multiple cues such as colors, objects, and art.
- 3. Make sure door frames and hallways are wide enough for wheelchairs to move through (i.e., 36 inches wide, and preferably 40 inches wide for doorways).
- 4. Broader, flat handrails in hallways provide grip-free support, which is especially important for people with hand arthritis.

- 1. Avoid long hallways.
- 2. Avoid designs that require going through one room to get to another (i.e., do not use rooms as hallways).
- 3. Avoid dimly lit hallways.

# STORAGE









### **KEY FUNCTIONS OF STORAGE SPACE IN A PACE PROGRAM**

- Storage areas will hold items for staff members, participants, and the center in general
- Various staff members will need access to storage
- Participants may or may not require access to storage

### **RESEARCH RESULTS**

Comments from Staff of 13 PACE Sites About their Storage Space (N = number of respondents listing that item)								
What they liked best	N		Changes they would like to make	N				
Adequate amount	20		Need more space	48				
In appropriate places throughout center	14		Better cabinets, shelving, or organization	16				
Good cabinets, shelving, or organization	13		Design spaces for larger equipment	9				
Have accessible storage in another area	5		Not in appropriate places or rooms	9				
There is some on-site storage	5		More easily accessible	2				
•			More staff storage in appropriate place	2				

#### IMPORTANT ISSUES IN DESIGN AND USE OF STORAGE SPACE

- Amount of storage space. Overwhelmingly, many staff members felt that it was important to have
  a large amount of storage space, and this was not being achieved. Many times, storage space had
  to be shared by multiple departments. Staff also noted they would like more room to store larger
  items such as EKG machines and IV poles. Having deep closets was also recommended.
- Cabinets and organization. Having appropriate cabinets and shelving available adds to organization of storage space. One good feature mentioned was having "cubby space close to personal care areas for clothes changes" (seen in photo B). Having multiple cabinets in the day center was also liked by staff (pictured in photo A). Peg boards, hooks, and wall racks can also be used in closets, in addition to having appropriate shelving space (photo C) for the types of supplies and equipment to be stored (which could be addressed in photo D).
- Location in building. Finally, the location of storage areas in the building was important. Often, staff preferred storage that was scattered throughout the building, providing each department with separate closets or storage areas. For example, one staff member noted that "activity and therapy areas have storage for supplies needed in those spaces." Storage space was also beneficial if it was located close to the day/activities room.

#### **RECOMMENDATIONS**

#### Things to do:

- 1. Plan your program first, then plan your spaces and storage based on the activities that will take place in that space.
- 2. Locate storage space throughout the building.
- Design storage for specific items and needs rather than generic shelves (e.g., round objects do not stay on shelves). Larger items are easily stored, identified and accessible if storage is wellplanned.
- 4. Be sure to allocate storage space for wheelchairs and walkers, ideally in more than one place.
- 5. In administrative areas, greater use of digital technology may mean less space needed for storage.
- 6. Provide space for each participant for incontinence products and extra clothes (e.g., in case of an "accident"). A variety of methods is available, such as plastic bins or wire baskets.
- 7. If you have two activity areas, access to storage space can be improved by having a closet that allows access from both rooms.
- 8. Provide storage in bathrooms or in bathing areas for toileting-related products and individual favorite bathing products.
- 9. Shelves that pull out like a drawer (pull-out shelves) provide particularly easy access.
- 10. Provide storage space (such as lockers) for staff.

#### Things to avoid:

- 1. Avoid placing items that need to be locked in open cabinets or spaces.
- 2. Avoid using bathing areas as storage areas.

# OUTDOOR AREAS













#### **KEY FUNCTIONS OF OUTDOOR AREAS IN A PACE PROGRAM**

- Participants should be able to go outside for guided activities or on their own
- Outdoor areas provide participants with access to the health benefits of sunshine and fresh air (e.g., normalized day-night body rhythms, vitamin D production, less depression) and opportunities for mobility and exercise
- Smokers will need to access outdoor areas
- Other benefits of outdoor spaces include privacy (to be by themselves) and socialization
- Gardening brings a connection to living things and a sense of productivity

#### **RESEARCH RESULTS**

Comments from Staff of 13 PACE Sites About their Outdoor Areas (N = number of respondents listing that item)							
What they liked best	N		Changes they would like to make	N			
Scenic or pleasant atmosphere	22		Lack of space	38			
Good overall amount of space	15		Make setting more pleasant or scenic	20			
Covered or protected from elements	11		Add more appropriate furniture	20			
Secure or safe	10		Increase shade or protection from elements	19			
Accessible	9		Make more activities available to increase use	9			

#### **IMPORTANT ISSUES IN DESIGN AND USE OF OUTDOOR AREAS**

- Amount of space available. Staff felt as though having a large outdoor space would be beneficial to participants. Many praised large patios, providing activities for multiple people at one time (such as photos B and C).
- Atmosphere and aesthetics. Atmosphere and aesthetic qualities of the outdoor space were considered very important by staff. Plants or flowers (photos C, D, and F), a scenic view (photo A), and landscaping could improve the atmosphere. Staff disliked patios that were situated near busy roads because of the increased noise (which may occur in photo B).
- **Protection from elements.** While many outdoor areas provided some sort of shade or protection from the sun or rain, staff members often felt the protection of outdoor space could be improved upon. Shaded canopies and awnings, or even tables with umbrellas, were features that staff felt important to have in outdoor areas (as pictured in photos A and E), especially when heat limited the use of outdoor space.
- Appropriate furniture. Sometimes staff would prefer more furniture that was appropriate for the
  population PACE centers serve. Tables with umbrellas were considered good features, but some
  staff mentioned that having more would be beneficial. Because metal patio chairs may be hard to
  sit up from, one staff respondent mentioned adding "installed furniture particularly for PACE
  participants rather than having standard patio furniture that is hard to move around." Another
  wished to "provide handicap accessible chairs in place of cosmetic patio furniture" (see photo A).
- Security. Because some PACE centers are located in public spaces, staff felt that security was
  another important feature of outdoor space. Having outdoor patios that were fenced-in or gated
  were preferable (photos B and E). One respondent would like to "have it located within the program
  rather than a common area open to the public in a shopping mall" or areas that people not belonging
  to the center could access. Problems occurred when staff members could not observe the
  participants from inside the building.
- Accessibility. Finally, outdoor spaces should be easily accessible to all participants. When
  outdoor spaces were easy to get to or connected to the day room, staff members were generally
  pleased. On the other hand, some outdoor spaces were hard to get to since an elevator had to be
  used, the doors to the outdoors were locked, or two heavy doors blocked off access.

#### **RECOMMENDATIONS**

#### Things to do:

- 1. Design activity programs for outdoor spaces, then design the space to accommodate the programs.
- 2. Provide abundant outdoor space for multiple uses, such as various types of gardening (ranging from pots to plots, from vegetables to flowers), walking paths (with things to see on the way), places to sit, games (e.g., croquet, tai chi), food events (picnics, barbeques, tea), flag ceremonies, and bird feeders/houses/baths.
- 3. Ensure that outdoor spaces are secure so that participants cannot exit the premises.
- 4. Physical access should be readily available and unrestricted to most or all participants. To foster this, locate outdoor areas immediately adjacent to activity areas. This will make it easier for formal and informal activities to spill over to the outside with staff observation.
- 5. Visual access should be provided from as many spaces as possible. In particular, staff should be able to view the outdoor area from the major activity spaces.
- 6. If outdoor spaces are shared by the public (in a shopping mall, for example, or on a main street) ensure security of the participants while they use these spaces.
- 7. If possible, have a mix of hard patio space and grassy areas.
- 8. If possible, have concrete tinted to reduce glare.
- 9. Ensure at least a portion of the outdoor space is shaded or sheltered from the sun.
- 10. Locate activity sheds in a private zone on the site, but not close to the drop-off zone.

#### Things to avoid:

1. Avoid using decorative furniture if the chairs are difficult for participants to use. Provide adequate and proper seating for participants and staff.

### Planning PACE Center Construction: A Guide for Directors and Designers

It's very difficult to be successful if you don't know what you want to accomplish. This is true in practically anything in life, and particularly in a service organization. Therefore, planning is a critical aspect of successful PACE center development. Here we provide general guidelines on the stages of development planning.

#### Step 1: Determine who you want to serve and who you are most likely to serve

- Number of participants.
- Type and degree of health problems, disabilities, and care needs.
- Sociocultural background and range of backgrounds.
- What is both physically necessary and culturally/spiritually meaningful for your participants.

#### Step 2: Determine the range of services you want to offer

- PACE guidelines mandate the services to be offered by the PACE program. These include all Medicaid specified services, interdisciplinary assessment and treatment planning, primary care, social work, restorative therapies, personal care and supportive services, nutritional counseling, recreational therapy, meals, transportation, medical specialty services, diagnostic procedures, drugs and biologicals, prosthetics and other durable medical equipment, acute inpatient care, nursing facility care, and other services determined necessary by the interdisciplinary team. You should review these services and determine which ones you plan to offer in your PACE center, and to what extent.
- Think about whether there are additional services you want to provide now or in the future (e.g., barber shop and hairdresser, aquatherapy, gardening, aerobics and weight training, cafe, spiritual space).
- Review the material in this monograph, meet with staff and persons from the community
  who can represent the interests of prospective clients, and begin to identify your space
  needs and priorities.

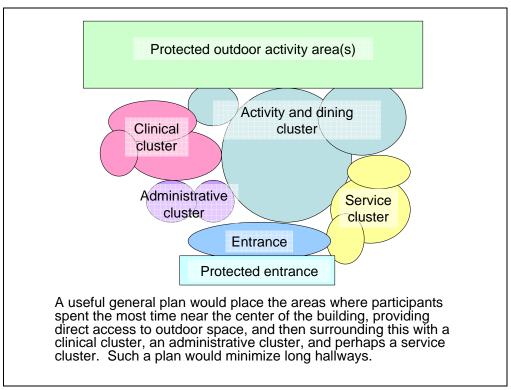
#### Step 3: Determine the core values that you want your program to reflect

- As you develop your service plan, focus on what will make both the participants and the public view your program as a success.
- Have the major stakeholders (i.e., potential participants and staff) provide input on their values and preferences.
- Decide what the "feel" of the center should be.
- Involve community members in an advisory, but not necessarily a planning capacity.
- Employ staff who share your vision and values. Plan training activities, roles, and evaluation strategies that instill and reinforce your values. For information on staffing requirements, refer to the PACE regulations and guidelines.
- If retrofitting a building, find out its image in the community.

#### Step 4: Plan Your building design

• Identify the spaces you need. For each service you plan to provide develop/write a list of spaces/equipment/characteristics that the service needs. As examples: a) a clinic room may require an exam table, sink, 36" cabinets (lower and upper) for storage, 2 chairs, 1 rolling stool, adjustable exam light, bright lighting, extra heating in winter, floor that is easy to clean, furniture that is easy to clean; whereas b) an entrance may require space for 2 vans to simultaneously load clients, covered canopy, automatic door opener button that is

- highly visible and accessible, welcoming atmosphere, a view of the inside, and space in the vestibule for at least 6 people.
- Think about what the heart of the program should be, and give it a position of prominence.
   Program design should determine building configuration rather than vice versa.
- If your program plans to share space or resources with another facility (e.g., nursing home, assisted living facility, church, community center, or senior center), consider how each can complement the goals of the other and how this can be reflected in the space design.
- Configure spaces in a way that minimizes corridors, for example, by clustering related functions together.
- Design spaces to accommodate the number of people you plan to serve, including mobility devices such as wheelchairs and walkers.
- Determine which functions can share the same space.
- Pay particular attention to the number and placement of bathrooms. It's almost impossible to plan too many bathrooms.
- Pay particular attention to providing bathing, toileting, and clinical care settings that are pleasant, dignified, and highly functional.
- Incorporate function-specific storage into every space that you plan.
- Meet or exceed Illuminating Engineering Society of North America (IESNA) / American National Standards Institute (ANSI) standards as defined in RP-28, "Lighting and the Visual Environment for Senior Living" for lighting in all areas. Use glare-free natural light whenever possible.
- To increase staff efficiency and eliminate long hallways, consider a cluster design such as is illustrated in the schematic below:



• Much of the staff work space can be decentralized. For example, nurses and therapists should have their work space in the clinic and therapy areas, respectively. Similarly, activity personnel and direct care providers should have their work areas in or adjacent to the areas where participants will spend their time. This will improve function and reduce the size of the administrative cluster.

- Consider having a space for an electrical generator and several days' supply of food on hand in case of a disaster such as a heavy snowstorm or a hurricane.
- Think about how participants will access drugs, and, if appropriate, consider having a pharmacy or satellite pharmacy in the building or an arrangement with a nearby or adjacent care facility or provider if feasible.
- Think about how people will flow through the space. When a van drops off 10 people at once, after entering the building, where do you want them to go? How far is it? Where do people who are waiting to be seen in the clinic wait? What are they doing while they wait? When they are done at the clinic, where do they go, and what should that path be like? This process is particularly useful once the design begins to take shape to help you evaluate how well the design matches your vision.
- Visit as many PACE Centers as possible to learn from their successes and mistakes.

#### For More Information

Brawley, Elizabeth C. Design Innovations for Aging and Alzheimer's: Creating Caring Environments. Hoboken NJ: John Wiley & Sons, 2006. The most authoritative book on designing facilities that are "Alzheimer's Friendly." Also addresses key issues in design for older persons, covering a broad array of topics from outdoor space design to furniture and fabrics.

Diaz Moore, Keith. Design Guidelines for Adult Day Services. 2005, AIA Report on University Research. Available online at http://www.aia.org/SiteObjects/files/Diaz\_Moore\_color.pdf

Geboy, LD, Diaz Moore, K, Weisman, G, et al. *Designing a Better Day: Adult Day Centers Comparative Case Studies*. University of Wisconsin-Milwaukee, 2001, pages 43-55. Describes a case study of a PACE Site in Wisconsin.

IES RP-28-98. "Lighting and the Visual Environment for Senior Living." The authoritative guidelines for lighting design for older persons.

McCormick Architecture and Bienvivir Senior Health Services. Adult Day Care. Design for Senior Environments 2006. Describes an award-winning PACE site that is located in a converted furniture warehouse/sales facility.

National PACE Association. 2.1 Guide to PACE Site Selection and Center Development. Available online at http://www.npaonline.org/website/download.asp?id=341

Soltero, Ed. Vibrant Living. Texas Architect March/April 2005, pages 38-41. Describes the award-winning design of an innovative senior health services center outside of El Paso that includes a PACE program.

# **Appendix**

- A. Director InterviewB. Staff SurveyC. Photographic Record Sheet

### **PACE Day Center Design Director Interview**

Center ID:	Respondent ID:					
Date: / /						
These first questions ask you to provide information aboresponding to this interview. This information will not be	out yourself, so that we can learn more about the people se shared with anyone or reported individually.					
For how many years and months have you been working with the day center?	years months					
2. What is your date of birth?	//					
3. What is your gender?	□ <sub>1</sub> Male					
	$\square_2$ Female					
4. What is your highest level of education?	$\square_1$ Less than 12 <sup>th</sup> grade					
	$\square_2$ High School					
	$\square_3$ Technical or Trade School					
	$\square_4$ Some college					
	□₅ Bachelor's Degree					
	□ <sub>6</sub> Graduate Degree					
What is your racial background?	$\square_1$ American Indian or Alaska Native					
	$\square_2$ Asian or Pacific Islander					
	□ <sub>3</sub> Black					
	□ <sub>4</sub> White					
	□ <sub>5</sub> Other					
	(please specify other racial background)					
6. Is your day center a						
$\square_1$ Purpose-built building						
$\square_2$ Retrofit of an existing building (If retrofit, go to q	question 6B)					
6b. What influenced your PACE program's day center?	decision the most when finding an existing building for the					
$\square_1$ Influenced by economic/cost iss	ues mainly?					
$\square_2$ Influenced by physical potential	of the site?					
$\square_3$ Influenced by owner's expectation	ons?					
□₄ Influenced by other factor?						
	(specify other factor)					

7. F	low was the b	building de	esigned?
	Yes $\square_1$	No $\square_0$	a. Architect Used?
	Yes $\square_1$	No $\square_0$	b. Staff meetings?
	Yes □ <sub>1</sub>	No $\square_0$	c. Other?
			(specify other method)
R V	When was the	day cent	er construction or renovation completed?
o. •	/		of concatable of fortevation completed.
	mm	уууу	
9. F	or how many	months o	or years has your day center been in service as a PACE site?
		years	months
10.	How many P	ACE parti	cipants do you serve each day?
	•	particir	pants / day
		partion	and ruly
11.	For which of	the follow	ing PACE services do you have designated space for at your day center?
	Yes □ <sub>1</sub>	No $\square_0$	a. Primary Care (physician services)
	Yes □ <sub>1</sub>	No $\square_0$	b. Social Work
	Yes □ <sub>1</sub>	No $\square_0$	c. Restorative therapies (physical therapy, occupational and speech therapy)
	Yes □ <sub>1</sub>	No $\square_0$	d. Personal care (bathing and grooming) and supportive services
	Yes □₁	No □ <sub>0</sub>	e. Nutritional counseling
	Yes □₁	No □ <sub>0</sub>	f. Recreational therapy
	Yes □₁	No □ <sub>0</sub>	g. Meals
	Yes □₁	No □ <sub>0</sub>	h. Laboratory tests, x-rays, and other diagnostic procedures
	Yes □ <sub>1</sub>	No □ <sub>0</sub>	i. Medication receipt
	Yes □ <sub>1</sub>	No □ <sub>0</sub>	j. Spiritual care

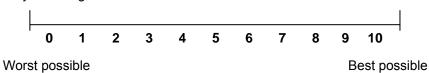
a.									
	Parking Lot			square fee	et				
b.	Entrance/Reception Area			square fee	et				
C.	Dining Area			square fee	et				
d.	Kitchen			square fee	et				
e.	Storage			square feet					
f.	Program / Activity Rooms			square feet					
g.	Toilets			square feet					
h.	_			square feet					
i.									
j.	Primary Care Rooms / Clinic			square fee					
k.				square fee					
l. m									
m. n.									
11.									
0					<b>-</b>				
o. p. Please	e rate how satisfied you are w	vith the following a	aspects of the da		Somewhat	Very			
p.	e rate how satisfied you are w	vith the following a	aspects of the da	ay center. Neither		Very Satisfie			
p.		vith the following a	aspects of the da	ay center. Neither Satisfied nor	Somewhat				
p. Please	e rate how satisfied you are w  The overall design of the	vith the following a Very Dissatisfied	aspects of the da Somewhat Dissatisfied	ay center.  Neither  Satisfied nor  Dissatisfied	Somewhat Satisfied	Satisfie			
p. Please a. b.	e rate how satisfied you are w The overall design of the building	vith the following a  Very  Dissatisfied  □₁	Somewhat Dissatisfied	ay center.  Neither  Satisfied nor  Dissatisfied  □3	Somewhat Satisfied □ <sub>4</sub>	Satisfie □ <sub>5</sub>			
p. Please a. b.	e rate how satisfied you are w The overall design of the building Temperature	vith the following a  Very  Dissatisfied  □1  □1	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Satisfie			
p. Please a. b.	e rate how satisfied you are we have a satisfied you are w	vith the following a  Very  Dissatisfied  □  □  □  1  □  □  1	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Satisfie			
p. Please a. b. c. d.	e rate how satisfied you are we have a satisfied you are w	Vith the following a  Very  Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Satisfie			
p. Please a. b. c. d. e.	The overall design of the building Temperature Lighting Ventilation Windows	Very Dissatisfied  1  1  1  1  1	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Satisfie			
p. Please a. b. c. d. e. f.	The overall design of the building Temperature Lighting Ventilation Windows Noise control	Vith the following a  Very Dissatisfied  1  1  1  1  1  1	Somewhat Dissatisfied  2  2  2  2  2  2  2  2  2	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Satisfie			
p. Please a. b. c. d. e. f.	The overall design of the building Temperature Lighting Ventilation Windows Noise control Amount of space	Very Dissatisfied  1  1  1  1  1  1  1  1  1  1  1  1  1	Somewhat Dissatisfied  2  2  2  2  2  2  2  2  2  2  2  2  2	Ay center.  Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Satisfie			

12. List each room in use at the center, along with its purpose and measurement.

15.			-	
16.	If you could change one thing ab		uilding, what would it b	e?
17.	Which design features cause or	might cause problems	for elderly PACE partic	cipants?
18.	Are there spaces that have a use	e other than the 1 origin	nally intended?	
	18b. What led to this?			
19.	·	•		
	ur level of agreement with the st			tements. For the first part, choose lain why you chose the answer you
20a	a. The current layout of the buildir	ng best supports the PA	ACE participants' need	S.
	Strongly Disagree □₁	Disagree □₂	Agree □₃	Strongly Agree $\square_4$
	20b. Explain			
			_	
21a	<ul> <li>a. The current size of certain room</li> <li>Strongly Disagree □₁</li> </ul>	ns is adequate for PAC Disagree $\square_{\scriptscriptstyle 2}$	E participants' needs.  Agree □₃	Strongly Agree □₄
	21b. Explain			

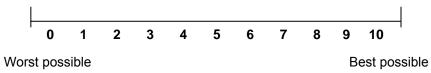
Please tell us about the different parts of the center. In responding, think about how the design of the building helps or hinders the intended function of each space. We would first like your overall rating of that aspect of the center. Then tell us the thing you like best and the things you would most want to change.

- 22. **Location**: Refers to the physical location of the building in the community, street, premises, etc.
  - a. Please rate the <u>overall location of the building</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.



	b.	What is the best th	· -												
	C.	What are the things	s you	would	want	to ch	ange	:							
23.	Entrai	nce: Refers to the cincluding the p													ding just beyond the door, c flow.
	a.	Please rate the ent rating.	ry are	<u>a</u> , in y	our o	pinio	n, on	a sca	le of (	0 to 10	0. C	Circl	le th	ne num	ber that best represents your
		-					4								-
		Worst	<b>0</b> poss	1 ible	2	3	4	5	6	7	8	3		10 est po	ssible
	h	What is the best th	ina:												
	D.	What is the best th	g												
	C.	_	•				•								
24.		Please rate the cor	nmon	spac	es an	whi d/or a	ich pa ictivity	rticipa	ants n	nay si	it or	gat	her	for gro	rnishings and equipment, in oup activities. e of 0 to 10. Circle the
		number that best i	epres	sents :	your r	ating.									
		-	0	1	2	3	4	5	6	7	8	3	9	10	-
		Worst	poss	ible									В	est po	ssible
	b.	What is the best th	ing:												
	C.	What are the things	s you	would	want	to ch	ange	:							
25	Dinina	g Area / Kitchen - F	Refers	to the	e spac	ce ta	bles a	and of	her fu	ırnish	ina	and	d la	out th	rough which participants

- 25. Dining Area / Kitchen: Refers to the space, tables and other furnishing, and layout through which participants receive meals and where staff prepare food before meals.
  - a. Please rate the <u>dining area / kitchen</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.



Γhera	apy Rooms / Clir											nent, in which participants receive
a.		therapy	room								•	). Circle the number that best
	represents you	r rating.										
		0	1	2	3	4	5	6	7	8	9	10
	W	orst pos	-	-	Ū	•			•		•	est possible
	• • • • • • • • • • • • • • • • • • • •	not poo	SIDIC									est possible
h	What is the has	thing										
	What are the thi	ngs you	ı woul	d wan	t to ch	nange	:					
c. Foilet	What are the thi	ngs you	oant L	d wan	t to ch	to the	e rest	rooms	: PAC	E par	ticipa	
c. Foilet	What are the thi	Particip	pant U	Jse: Fsinks for	t to ch	to the	e resta ny furr use, i	rooms nishing n you	: PAC g and r opin	E par equip	ticipa omen	ants commonly use, including toilent located there.
c. Foilet	What are the thing the stand Sinks for Please rate the that best represented.	ngs you	pant U	d wan	t to ch	to the	e rest	rooms	: PAC g and r opin	E par	men n a s	ants commonly use, including toil t located there.
c. F <b>oilet</b> a.	What are the thing the stand Sinks for Please rate the that best represented.	Particip	oant Und sind sind our rat	d wan	t to ch	to the	e resta ny furr use, i	rooms nishing n you	e PAC g and r opin	E par equip ion, o	on a s	ants commonly use, including toilent located there.  scale of 0 to 10. Circle the number 10  test possible

Worst possible

Best possible

	D.	what is the i	oest thing:_											
	_	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	things var			. 4a ab								
	C.		e things you	would	anı	. to cn	ange	•						
													•	
29.	Wayfi	nding / Mobi	lity: Refers and m						at end	courag	ge or i	inhibi	it partic	ipants' ability to find their way
	a.	Please rate to number that						<u>partici</u>	<u>ipants</u>	, in yc	ur op	inion	, on a s	scale of 0 to 10. Circle the
										7				
			0	1	2	3	4	5	6	7	8		10	
			Worst pos	sible								В	est pos	ssible
	b.	What is the I	best thing:_											
	C	What are the	things you	would	d want	to ch	ange							
	0.						unge	•						
30.		stations,	desks, or ot	her ed	quipme	ent.		-						ers, including any nurses' that best represents your
		J	1											1
			0	1	2	3	4	5	6	7	8	9	10	1
			Worst pos	sible								В	est pos	sible
	b.	What is the I	best thing:_											
	C.	What are the	things you	would	d want	to ch	ange	:						
0.4	01	Defense to			•		- 11-				. 1		.1	(-CC11
31.	Stora	ge: Refers to	all space a	ina eq	uipme	ent us	ea to	store	partic	upants	s' item	ns an	a statt/	OTTICE ITEMS.
	a.	Please rate rating.	the <u>storage</u>	, in yo	ur opir	nion, d	on a s	scale (	of 0 to	10. (	Circle	the	numbei	r that best represents your
			0	1	2	3	4	5	6	7	8	9	10	

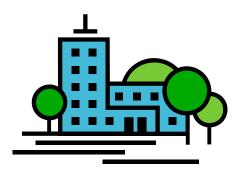
Worst possible

Best possible

	b.	What is the best thing:
	C.	What are the things you would want to change:
32.	Hallw	ays / Connections between rooms: Refers to any connecting space between rooms in the building, taking into consideration safety and ease of access.
	a.	Please rate the <u>hallways or connections between rooms</u> , in your opinion, on a scale of 0 to 10. Circle the
		number that best represents your rating.
		0 1 2 3 4 5 6 7 8 9 10
		Worst possible Best possible
	b.	What is the best thing:
	C.	What are the things you would want to change:
33.	Outdo	oor Areas: Refers to any outdoor patios, gardens, or other spaces for patients' use, including furnishing and equipment.
	a.	Please rate the <u>outdoor areas</u> , in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.
		0 1 2 3 4 5 6 7 8 9 10
		Worst possible Best possible
	b	What is the best thing:
	C.	What are the things you would want to change:
	d.	Are shaded seating areas provided? Yes $\square_1$ No $\square_0$
	e.	Is abundant safe, comfortable seating available? Yes $\Box_1$ No $\Box_0$

# **PACE Day Center Design**

# Survey for Center Workers



Please fill out the questionnaire on the following pages to the best of your ability.

Write your answers in the blank spaces provided.

Take a look around some of the rooms at your day center while you fill it out if needed.

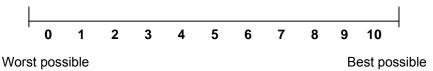
Date this survey was completed:		/	/	
	mm	dd	уууу	

What is your primary occupation at the PACE day	□₁ Social Worker
center? Check only 1 box.	☐₂ Physical Therapist
	□₃ Nurse
	□₄ Activities staff member
	□₅ Nursing Assistant
	□ <sub>6</sub> Transportation Coordinator
	□ <sub>7</sub> Volunteer
	□ <sub>8</sub> Other
2. For how many years and months have you been	(please describe other occupation)
employed at the day center or worked along with the day center?	years months
3. What is your date of birth?	
4. What is your gender?	□₁ Male
	□₂ Female
5. What is your highest level of education?	□₁ Less than 12 <sup>th</sup> grade
	□₂ High School
	□₃ Technical or Trade School
	□₄ Some college
	□₅ Bachelor's Degree
	□ <sub>6</sub> Graduate Degree
6. What is your racial background?	□₁ American Indian or Alaska Native
	$\square_{\scriptscriptstyle 2}$ Asian or Pacific Islander
	□₃ Black
	□₄ White
	☐₅ Other(please specify other racial background)

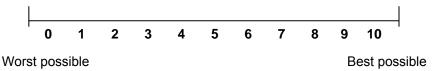
9. Which design features most hinder your ability to do your job at the center?					
10. Disease rate how estisfied you are uni	ith the fellowing	annosta of the de	nu aantar		
10. Please rate how satisfied you are w	ith the following a	aspects of the da			
T	Very Dissatisfied	Somewhat Dissatisfied	Neither Satisfied nor Dissatisfied	Somewhat Satisfied	Very Satisfied
a. The overall design of the building			$\square_3$	$\square_4$	$\square_{5}$
b. Temperature	□₁		$\square_3$	$\square_4$	$\square_5$
c. Lighting	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
d. Ventilation	□₁		Пз	$\square_4$	
e. Windows	□₁		Пз	$\square_4$	
f. Noise control			Пз	$\square_4$	$\square_5$
g. Amount of space			Пз	$\square_4$	
h. Views to the outside			$\square_3$	$\square_4$	$\square_5$
i. Hallways/connections between rooms	$\square_1$	$\square_2$	$\square_3$	$\square_4$	$\square_5$
j. Space for storage		$\square_2$	$\square_3$	$\square_4$	
The next questions ask you to indicate to what extent you agree with two statements. For part A, place an X in the box that best represents your level of agreement with the statement. For part B, please explain why you chose the answer you did in part A.  11a. The current <u>layout</u> of the building best supports the PACE participants' needs.					
Strongly Disagree □₁	Disagree □₂	Agree [	□₃ S	trongly Agree □	4
11b. Please explain.					
12a. The current size of certain rooms is adequate for PACE participants' needs.					
Strongly Disagree □₁	Disagree □₂	Agree [	□₃ S	trongly Agree □	4
12b. Please explain.					

Please tell us about the different parts of the center. In responding, think about how the design of the building helps or hinders the intended function of each space. Part A asks you to give your overall rating for the design of that aspect of the center. Parts B and C ask you to list the things you like best and the things you would most want to change.

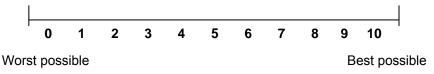
- 13. Location: Refers to the physical location of the building in the community, street, premises, etc.
  - a. Please rate the <u>overall location of the building</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.



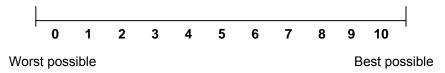
- b. What is the best thing about the overall location:
- c. What are the things about the overall location you would want to change:
- 14. **Entrance**: Refers to the outside entryway to the building and the space inside the building just beyond the door, including the particular design and impact on arrivals, departures, and traffic flow.
  - a. Please rate the <u>entry area</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.



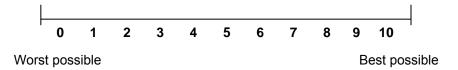
- b. What is the best thing about the entry area:
- c. What are the things about the entry area you would want to change:
- 15. **Common Spaces and/or Activity Rooms**: Refers to the common space, including furnishings and equipment, in which participants may sit or gather for group activities.
  - a. Please rate the <u>common spaces and/or activity rooms</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.



- b. What is the best thing about the common spaces or activity rooms:
- c. What are the things about the common spaces or activity rooms you would want to change:
- 16. **Dining Area / Kitchen**: Refers to the space, tables and other furnishing, and layout through which participants receive meals and where staff prepare food before meals.
  - a. Please rate the <u>dining area / kitchen</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.

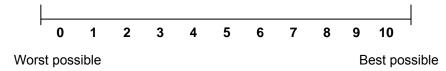


- b. What is the best thing about the dining or kitchen area:
- c. What are the things about the dining or kitchen area you would want to change:
- 17. **Therapy Rooms / Clinic**: Refers to the spaces, including furnishing and equipment, in which participants receive medical care from on-site physicians and outside specialists.
  - a. Please rate the <u>therapy rooms/clinic</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.

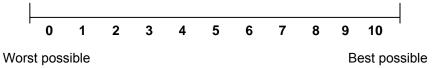


- b. What is the best thing about the therapy rooms or clinic:
- c. What are the things about the therapy rooms or clinic you would want to change:

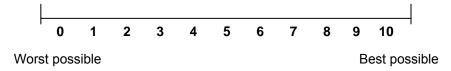
- 18. **Toilets and Sinks for Participant Use**: Refers to the restrooms PACE participants commonly use, including toilets, sinks, and any other furnishing and equipment located there.
  - a. Please rate the <u>toilets and sinks for participant use</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.



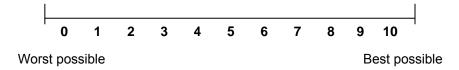
- b. What is the best thing about the toilets and sinks for participant use:
- c. What are the things about the toilets and sinks for participant use you would want to change:
- 19. **Bathing / Shower Areas**: Refers to the bathing and/or shower areas used by PACE participants, including changing areas, furnishing, and equipment.
  - a. Please rate the <u>bathing and/or shower areas</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.



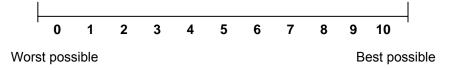
- b. What is the best thing about the bathing or shower areas:
- c. What are the things about the bathing or shower areas you would want to change:
- 20. **Wayfinding / Mobility**: Refers to the features of design that encourage or inhibit participants' ability to find their way and move around the day center.
  - a. Please rate the <u>wayfinding / mobility of PACE participants</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.



- b. What is the best thing about participants' wayfinding or mobility:
- c. What are the things affecting participants' wayfinding or mobility you would want to change:
- 21. **Offices**: Refers to all office space and furniture used by administration and staff members, including any nurses' stations, desks, or other equipment.
  - a. Please rate the <u>offices</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.



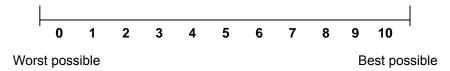
- b. What is the best thing about the offices:
- c. What are the things about the offices you would want to change:
- 22. Storage: Refers to all space and equipment used to store participants' items and staff/office items.
  - a. Please rate the <u>storage areas</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.



- b. What is the best thing about storage areas:
- c. What are the things about the storage areas you would want to change:

# 23. Hallways / Connections between rooms: Refers to any connecting space between rooms in the building, taking into consideration safety and ease of access.

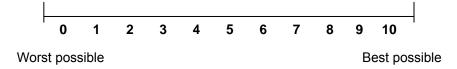
a. Please rate the <u>hallways or connections between rooms</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.



- b. What is the best thing about the hallways/connections between rooms:
- c. What are the things about the hallways/connections between rooms you would want to change:

# 24. **Outdoor Areas**: Refers to any outdoor patios, gardens, or other spaces for patients' use, including furnishing and equipment.

a. Please rate the <u>outdoor areas</u>, in your opinion, on a scale of 0 to 10. Circle the number that best represents your rating.



- b. What is the best thing about the outdoor areas:
- c. What are the things about the outdoor areas you would want to change:

Please return this completed survey to your PACE site director sealed in the envelope that was provided to you.

Thank you for your help!

Center	ID:	
CCITICI	10.	

Photographic Record Sheet (Bring this sheet along as you take your pictures)

### Please take pictures of the following rooms or areas in the building:

Recommended			
# of	What to Photograph		
Photos			
1	Front of the building (ideally from across the street), showing entrance		
1-2	Close-up of entrance. If you have two separate entrances, please photograph both.		
1-2	Entry area – the place someone enters when they come through the center door		
1-3	Activity / dining areas. If your day center has more than one activity and/or dining		
1-0	space, photograph each area.		
2	Clinic		
2	Physical / occupational / rehab therapy areas		
2	Hallways		
2-4	Protected outdoor areas (for patients)		
	10 environmental features that staff consider to be especially useful. These can		
10	range from a room, to a part of a room, to a piece of furniture or equipment, to a		
	design feature such as a light or doorknob.		
	5 environmental features that <b>don't</b> work well. Again, these can range from a room,		
5	to a part of a room, to a piece of furniture or equipment, to a design feature such as a		
	light or doorknob.		
27 - 33 = Tc	otal # of Pictures You Should Take		

### Fill out the table below as you take each picture:

Photo	What did you photograph?	What room or area of the building is this picture of?	Comments: What the picture shows, why you took it, what about the object or area works well and/or could be improved.
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			

Photo	What did you photograph?	What room or area of the building is this picture of?	Comments: What the picture shows, why you took it, what about the object or area works well and/or could be improved.
9.	priotograpii.	piotaro or:	Worke Well aria/er coala so improved.
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			
21.			
22.			
23.			
24.			
25.			
26.			
27.			
28.			
29.			
30.			
31.			
32.			
33.			