U.S. Department of Health and Human Services
Assistant Secretary for Planning and Evaluation
Office of Disability, Aging and Long-Term Care Policy

TRENDS IN SPECIAL CARE:

THE 1995 NATIONAL NURSING HOME CENSUS OF SUB-ACUTE UNITS

September 1997

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This report was prepared under contract DALTCP) and Project HOPE. The National Institute on Aging provided additional funding for this project. For additional information about this subject, you can visit the DALTCP home page at http://aspe.hhs.gov/_/office_specific/daltcp.cfm or contact the office at HHS/ASPE/DALTCP, Room 424E, H.H. Humphrey Building, 200 Independence Avenue, S.W., Washington, D.C. 20201. The e-mail address is: webmaster.DALTCP@hhs.gov. The Project Officer was Robert Clark.

TRENDS IN SPECIAL CARE:
The 1995 National Nursing Home Census of Sub-Acute Units

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September 1997

Prepared for
Office of the Assistant Secretary for Planning and Evaluation
U.S. Department of Health and Human Services

The opinions and views expressed in this report are those of the authors. They do not necessarily reflect the views of the Department of Health and Human Services, the contractor or any other funding organization.

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EXECUTIVE SUMMARY

The objectives of this study were to establish a reliable baseline estimate of the number and distribution of sub-acute care units in licensed nursing homes; to estimate the bed capacity of these units in 1995; and to sketch the characteristics of the nursing homes where these units were located. This effort was part of a larger study on the development of specialty care programming in nursing homes.

Background

The past decade has witnessed the emergence of sub-acute care units in nursing homes (Banaszak-Holl et at, 1996). This recent development arises from broad efforts to reduce the costs of providing health care and dynamics that are specific to the evolution of the nursing home industry.

Sub-acute units encompass a broad spectrum of programs diverse in patients, services, and settings (Lewin-VHI, 1995). Nursing homes operate these units for residents requiring short- term recovery after serious trauma or accident, providing specialized care such as complex medical/surgical interventions for cardiac, respiratory, oncology, neurology, postsurgical, and terminally ill patients (Glosner, 1994). The growth in numbers of sub-acute care units has been attributed to two major factors: efforts to slow health spending and the drive by nursing homes for more and more profitable customers.

Nursing homes that do not provide specialized care compete with less cost intensive alternatives such as home-based services and assisted living environments. As the number of hospital beds continues to shrink, the potential role of nursing homes as the major source of sub-acute care may be challenged by hospitals' use of their own space. Specialized sub-acute units are only one type of specialty service now being offered within nursing homes (Leon et at, 1997).

Data Sources and Methods

Data for this study come from the screener instrument used in the 1995 Trends in Special Care (TSC) Survey, a survey of a nationally representative sample of all licensed nursing homes. The survey examined the growth in specialty care being provided by nursing homes.

Data collection involved mail and telephone interviews. Using the sampling frame developed by the National Center for Health Statistics for its 1995 National Survey of Nursing Homes, a representative sample of 6,471 licensed nursing homes were contacted in two waves. The overall response rate to the survey was over 94 percent.

The screener instrument included questions about the size, ownership, and certification status of the facility, and availability and capacity of current and planned specialty programs and units within the nursing home.

Findings

Nationally, in 1995, about 2,165 or 13 percent of nursing homes reported special units for sub- acute care. Of these, 611 also reported having special rehabilitation units. Beyond the 2,165 with sub-acute units, an additional 1,101 facilities, or 7 percent of all nursing homes reported rehabilitation units. In total, about one-fifth of all nursing homes reported having either sub- acute units, rehabilitation units, or both (see Figure 1).

It is estimated that across the nation, total bed capacities among these 2,165 sub-acute units reached 62,406 beds. Distribution of units and beds varied across the states and regions. Nursing home facilities in the south accounted for about a third of the units and a third of the beds. Florida had the largest number of facilities with sub-acute units (202) and the highest number of beds (7,881) followed by California with 192 facilities and 5,305 beds, and Ohio with 139 facilities and 4,291 beds.

Additionally, in nine states, 20 percent or more of the facilities reported having sub-acute units (Arizona, Colorado, Florida, Maryland, Massachusetts, New Jersey, Nevada, Utah, and Washington).

Almost half of the facilities (48 percent) reporting sub-acute units were owned by for-profit companies that were part of a chain. Over 16 percent were part of independent, for-profit institutions, while nearly 21 percent were owned by non-profit, independent facilities. Less than 4 percent were government facilities. Among all sub-acute units, 80 percent were based within free-standing nursing homes. Nearly 20 percent were hospital based.

Growth in the development of sub-acute units in nursing also appears likely. In 1995, among the 2,165 facilities that reported having a sub-acute unit, 573 (26 percent) reported plans for expanding existing sub-acute care programs. Among the 14,663 facilities that reported not having a sub-acute unit in 1995, 1,932 (13 percent) reported plans to develop a sub-acute facility within the next five years.

Conclusions

If trends continue in the direction indicted by the 95/96 TSC Census, nursing homes will become more specialized in the future. It appears that the sub-acute market is particularly strong in the South, in major urban areas, and within nursing homes that have a larger than average bed capacity. These markets, combined with the large numbers of facilities planning to expand existing or develop new units, point to sub-acute care as a growing industry.

PURPOSE

With the extreme costs of hospital stays, the provision for more complex, specialized care within the nursing home setting has grown. The 1995 Trends in Special Care (TSC) Survey was a survey of a nationally representative sample of all licensed nursing homes. The survey examined the growth in specialty care provided by nursing homes. Its findings will assist the industry and the health service research community to assess and monitor developments among specialty care programs and better address the needs of nursing home residents requiring specialized attention. The survey sought information about the availability and capacities of four types of special care units and programs: 1) Alzheimer's Disease and dementia units; 2) HIV/AIDS units; 3) special rehabilitation units; and 4) sub-acute units. This paper presents findings from the component on sub-acute units. These findings establish reliable baseline estimates of the' number and distribution of sub-acute care units in licensed nursing homes and the bed capacity of these units in 1995. It also provides a sketch the characteristics of the nursing homes where these units were located.

BACKGROUND

The past decade has witnessed the emergence of sub-acute care units in nursing homes (Banaszak-Holl et al, 1996). This recent development arises from broad efforts to reduce the costs of providing health care and dynamics that are specific to the evolution of the nursing home industry.

Sub-acute units encompass a broad spectrum of programs diverse in patients, services, and settings (Lewin-VHI, 1995). In many cases, sub-acute care is less complex than acute, hospital care, but more intense than traditional skilled nursing care. Sub-acute care allows for a continuum between hospital care and long-term care, where these specialty units provide services formerly delivered by hospitals (Kane and Kane, 1995). While sub-acute care has become the most widely used term for this continuum, other common terms include transitional care, specialty care and skilled nursing facility rehabilitation (Walker et al., 1996). Programs of the same name may provide entirely different services and programs with different names may have the same or similar services. In addition, programs vary in physician direction, patient population, staffing level, and intensity and quality of services, existing standards, credentials, and level of staff training (Walker et al., 1996).

Nursing homes operate these units for residents requiring short-term recovery after serious trauma or accident, providing specialized care such as complex medical/surgical interventions for cardiac, respiratory, oncology, neurology, postsurgical, and terminally ill patients (Glosner, 1994). Additionally, Lewin-VHI (1995) conclude that sub-acute units commonly provide services for ventilator dependent patients, brain or head injury patients, or patients requiring orthopedic or cardiac rehabilitation and patients most commonly use physical rehabilitation, stroke, hip fracture, or wound care services.

The growth in numbers of sub-acute care units has been attributed to two major factors: efforts to slow health spending and the drive by nursing homes for more and more profitable customers. Cost containment efforts stem from pressure to shorten hospital stays and from capitated arrangements with managed care organizations. With sub-acute unit charges often 30 to 70 percent less than hospital charges (Lewin-VHI, 1095), sub-acute care appears to be an attractive alternative to long hospitalizations. In fact, nursing homes located in areas of significant hospital and managed care penetration are more likely to operate a sub-acute unit (Banaszak-Holl, 1996). Since implementation of Medicare's prospective payment system in 1983, hospitals have had an incentive to reduce lengths of stay. These earlier discharges result in increased demand for post-hospital care.

Nursing homes have developed specialty care units in response to increased turnover of their beds, increased patient acuity, and increased demands for patient care from overburdened staffs (Phillips-Harris and Fanale, 1995). Traditionally, nursing homes have less experience in providing care to high acuity patients, operate with

nurse to patient ratios of 1:30, do not provide on-site ancillary services, and do not have skilled providers available throughout the day to assess patients' changing conditions. Nursing homes that do not provide specialized care compete with less cost intensive alternatives such as home-based services and assisted living environments. As the number of hospital beds continues to shrink, the potential role of nursing homes as the major source of sub-acute care may be challenged by hospitals' use of their own space. Specialized sub-acute units are only one type of specialty service now being offered within nursing homes (Leon et al., 1997).

METHODS

The population for the 95/96-TSC study included all licensed nursing facilities in operation at the start of 1995. The list of licensed nursing homes was developed from an updated version of the sampling frame used in the National Center for Health Statistics 1995 National Nursing Home Survey. We found 16,828 nursing home facilities in 1995, a finding which compares favorably with the 16,700 facilities estimated in the Nursing Home Survey (Strahan, 1997) and the 16,800 estimated by the 1996 Medical Expenditure Panel Survey of nursing facilities conducted by the Agency for Health Care Policy and Research (Krauss et al., 1997).

Data Collection Effort

The data collection effort used a self-administered screener instrument sent to all identified nursing facilities. A 25 percent random sample of the non-responding facilities were telephoned and interviewed with a computerized version of the screener instrument. Respondents for both the self-administered and telephone follow-up facility screener instrument were primarily the nursing home administrators (68 percent), but directors of nursing and other administrators and staff also served as respondents.

Response Rates, Sampling Weights and Missing Data

Using the updated version of the sampling frame for the 1995 National Nursing Home Survey, screener instruments were mailed to all 17,786 listed facilities. Of these facilities, 3,328 responded. From the remaining 14,458 listed facilities, 3,650 were randomly selected for the telephone follow-up interviews. Of the 3,650 facilities, 3,169 interviews were completed, 233 were deemed inappropriate (psychiatric and long term care hospitals or closed facilities), and 248 refused. The response rate for the telephone follow-up interviews was 92.8 percent. The overall response rate was 94.1 percent.

Sample Weights. Sampling weights were used in the 95/96-TSC for making national and state estimates. For national estimates, facility weights were the product of the initial sample weight and an adjustment for non-response. The initial facility weight is the ratio of the defined population to the number in the sample. For the screener instrument, there are two populations or replicates: replicate 1 represents the population

of facilities that responded to the mail instrument; replicate 2 represents the population of facilities that responded by telephone.[1]

For state level estimates, these weights are further adjusted to reflect the distribution of facilities in each state. It should be noted that in adjusting for 'state specific' facility weights, the total number of facilities nationally is slightly higher than otherwise reported (16,838 vs. 16,828).

Missing Data. Key data elements contained few missing responses, typically no more than 3 percent. However, missing responses can cause problems when estimating population characteristics using the facility weights. Therefore in presenting the profile of the nation's sub- acute units, a 'hot deck' imputation method assigned values to missing data items. In the tables, the percentage of imputed values is noted only when missing values on a given variable exceed 5 percent.

Description of Information Collected

The 95/96-TSC screener instrument asked each respondent for general information about their facility: ownership, chain affiliation, association with a larger institution, facility size, Medicare/Medicaid certification, racial/ethnic composition of residents, and dedication to a specific diagnosis or type of care. Following this general facility information, all respondents were asked to identify whether their facility offered various types of specialty care including whether their facility had a sub-acute unit or special rehabilitation unit and whether there were plans to either develop new unit/programs or expand existing ones within the next 5 years. To address the differing conceptions of sub-acute units, we defined them so the data would reflect the broader concept of special care units that incorporates specialized care provision in units and wings that are not explicitly designated. The screener instrument asked respondents if their facilities provide special programs or have a distinct sub-acute unit or wing. Questions also collected information about the current or expected bed capacity of these sub-acute units (see Exhibit 1).

For facilities with existing units, questions were then asked about its characteristics. These questions included:

1. existence of a skilled nursing unit or wing;

2. first year of operation;

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[1] For mail responses, initial facility weights equal the ratio between the replicate 1 population (n=3,328) and the number of appropriate eligible responders in the sample (n=3,292); for the phone responders, the initial facility weights equal the ratio between the replicate 2 population (n=14,458) and the number sampled (n=3,650). Since the results from the non-response survey showed no significant differences between responding and non-responding facilities on critical dimensions such as facility size, ownership, and payor mix, the non-response adjustment is simply inflating the initial replicate sample weight by the ratio of eligible facilities and the number of completed interviews. For replicate 1, the adjustment is the ratio of 3,307/3,292; for replicate 2 it is 3,417/3,169.

3. capacity of the unit or wing; and
4. targeting of specific rehabilitation needs, e.g., spinal cord injuries.

EXHIBIT 1. Survey Form

Trends in Special Care: The 1995 National Nursing Home Census of Specialty Care Units and Programs

Project HOPE - Center for Health Affairs
7500 Old Georgetown Road, Suite 600, Bethesda, MD 20814 (800) 776-2269 / Fax (800) 949-6644

Identifying Information

Facility Name ____ Telephone Number ( ) -

Name of Administrator ____ Name and Position of Person Completing Form (if not the administrator)

Facility Information

1. Check the category of ownership that best describes your facility.
☐ For Profit ☐ City
☐ Nonprofit ☐ County
☐ Religious ☐ State
☐ VA/Other Federal

2. Is the facility part of a chain or group of facilities? ☐ Yes ☐ No (→Q 2a)
If yes, which chain/group? ____

2a. Is the facility managed by an outside firm/organization? ☐ Yes ☐ No

3. Is this facility part of a:
> hospital? ☐ Yes ☐ No
> retire. community? ☐ Yes ☐ No
> life-care community? ☐ Yes ☐ No

4. What are the total number of beds in the nursing facility? # ____

5. How many beds are certified for Medicare/Medicaid use?
Medicare Use only ____
Medicaid Use only ____
Dual certified beds ____

6. What percentage of residents currently in the facility are White, African American/Black, Hispanic, Asian, Other? (should total to 100%)
____ %White ____ %African American
____ %Hispanic ____ % Asian
____ % Other (specify) ____

7. Does the entire facility specialize in caring for a specific diagnosis or type of care?
☐ Yes (→ Q7a.)
☐ No (→Q. 8)

Specialty Unit Availability

7a. If an entirely dedicated facility, check type of residents served:
☐ Alzheimer's Dis./dementia ☐ AIDS ☐ Ventilator/Respiratory Care ☐ Hospice ☐ Other Specialized Rehabilitation
☐ Disabled Children/Young Adults ☐ Dialysis ☐ Huntington's Disease ☐ Head Trauma ☐ Other (specify) ____

Special Programs/Units for Residents with Dementia

8. Does the facility have a formally established program or distinct unit for residents with Alzheimer's disease/dementia?
☐ Yes (→Q. 9) ☐ No (→ Q. 8a)

8a. Is there a wing or area where dementia residents are clustered?
☐ Yes (→Q. 9) ☐ No (→Q. 8b)

8b. Would any of your staff consider that your facility has a special program/unit/wing for dementia residents?
☐ Yes ☐ No →(Q. 10)

9. Is it a separate unit or wing with beds specified for dementia residents or a specialized program without dedicated beds?
☐ Program (→Q. 9b) ☐ Unit ☐ Wing

9a. Is there more than one unit or wing? ☐ Yes ☐ No

9b. What year did the (first) program/unit/wing open? 19____.

9c. What is the total capacity of the special program/unit(s)/wing(s)? ____

9d. What is/are the name(s) of the administrator(s) for the unit(s)? ____

10. Has the facility had a special dementia program or unit that is now closed? ☐ Yes ☐ No

10a. Are there plans to expand or develop a specialized program/unit/wing within the next 5 years? ☐ Yes ☐ No

Subacute Units

11. Does the facility have a distinct subacute unit or wing that is serving residents with acute illness or complex medical conditions requiring comprehensive inpatient care, or technically complex treatments? ☐ Yes (→Q. 11a) ☐ No (→Q. 12)

11a. In addition to the subacute unit/way, does the facility also have a skilled nursing unit/wing? ☐ Yes ☐ No

11b. What year did the (first, if more than one) subacute unit/wing open? 19__ __.

11c. What is the total capacity of the unit(s)/wing(s)? ____

11d. What is/are the name(s) of the administrator(s) for the unit(s)/wing(s)?

12. Has the facility had a subacute unit/wing that is now closed? ☐ Yes ☐ No

12a. Are there plans to expand/develop a subacute unit/wing within 5 years? ☐ Yes ☐ No

AIDS

13. Does the facility have a formally established program or distinct unit or wing for residents with HIV/AIDS?
☐ Yes (→Q. 13a.) ☐ No (→Q. 14)

13a. Is this a separate unit or wing with dedicated beds for residents with AIDS or a specialized program without dedicated beds? ☐ Program ☐ Unit ☐ Wing

13b. What year did the (first) program/unit/wing open? 19__ __.

13c. What is the total capacity of the program/unit/wing? ____

13d. What is the name of the administrator for the unit? ____

14. Has the facility had an AIDS unit that is now closed? ☐ Yes ☐ No

14a. Are there plans to expand or develop an AIDS program or unit within the next 5 years? ☐ Yes ☐ No

Special Rehab Units

15. Does the facility have a distinct residential 24-hour unit or wing exclusively for residents with rehabilitation needs where programming is designed to reduce/ lessen limitations with expected outcomes of returning residents to home or to another level of care? ☐ Yes (→Q. 15a.) ☐ No (→Q. 16)

15a. Does the unit/wing target specific types of rehab needs, e.g. spinal cord or head injuries, etc.? ☐ Yes ☐ No

15b. What year did the (first) unit/wing open? 19 __ __.

15c. What is the total capacity of the unit(s)/wing(s)? ____

15d. What is/are the name(s) of the administrator(s) for the unit(s)? ____

16. Has the facility had a rehab unit that is now closed? ☐ Yes ☐ No

16a. Are there plans to expand or develop a rehab unit or rehab wing within the next 5 years? ☐ Yes ☐ No

Other Special Units

17. Does the facility have any other types of specialized distinct units or wings where beds are dedicated for residents with specific needs? ☐ Yes (→Q. 17a.) ☐ No (→Q. 18)

17a. If yes, identify the types of residents served:
☐ Head Trauma ☐ Hospice
☐ Huntington's Disease ☐ Dialysis
☐ Ventilator/Respiratory Care
☐ Disabled Children/Young Adults
☐ Other (specify type of resident)

18. Are there plans to expand/develop any specialized programs/units/wings within 5 years? ☐ ☐
If yes, specify the expected types: ____

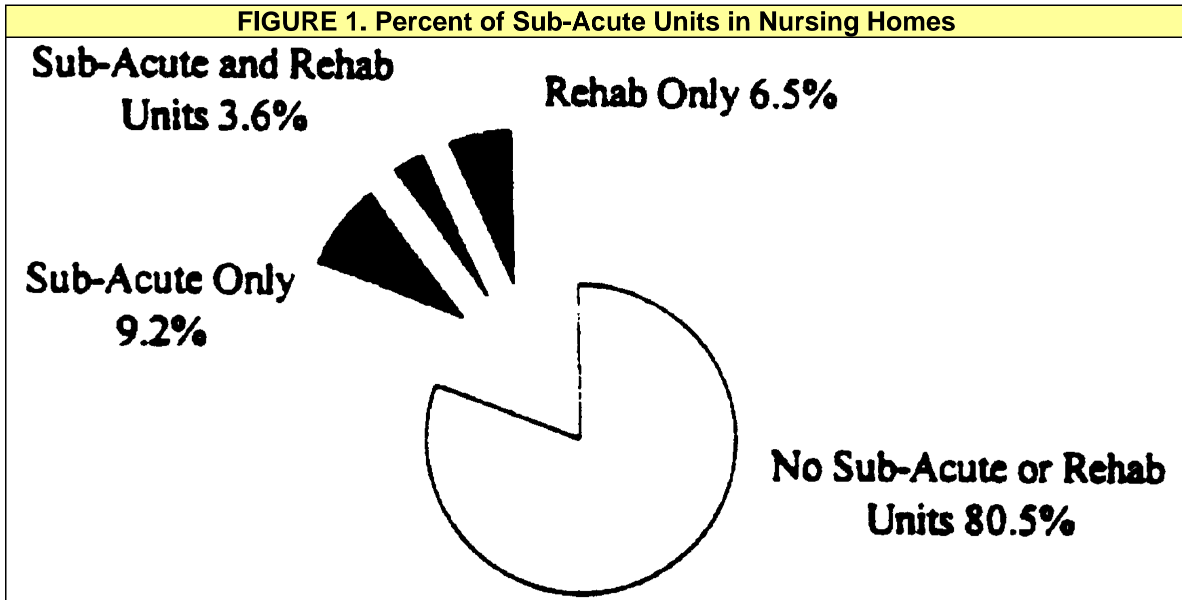
(CHA-Sept. 18, 1995)

FINDINGS

Estimated Number and Distribution of Sub-acute Units

Nationally, about 2,165 or 13 percent of nursing homes reported special units for sub-acute care. Among the 2,165 facilities with sub-acute units, 1,554 (9 percent) reported that they did not have rehabilitation units and 611 (4 percent) reported both sub-acute and special rehabilitation units. Another 1,101 facilities (7 percent) reported rehabilitation units but no sub-acute units (see Figure 1).

FIGURE 1. Percent of Sub-Acute Units in Nursing Homes



Distribution of units varied across different regions of the country and across different states. The southern region of the country offered the greatest number of sub-acute units. Sub-acute units in the South represented 33 percent of all units. The Midwest, Northeast, and West had similar shares of all units, representing 24 percent, 20 percent, and 23 percent respectively (see Table 1).

Florida had the largest number of facilities with sub-acute units (202), followed by California (192), and Ohio (139). Nine states reported that 20 percent or more of their facilities had sub-acute units (Arizona, Colorado, Florida, Maryland, Massachusetts, New Jersey, Nevada, Utah, and Washington). However, in most states, relatively few facilities reported having sub-acute units. In most states, less than 10 percent of their facilities reported sub-acute units. For example, Iowa had 476 nursing facilities, but only 20 reported a sub-acute unit (see Figure 2).

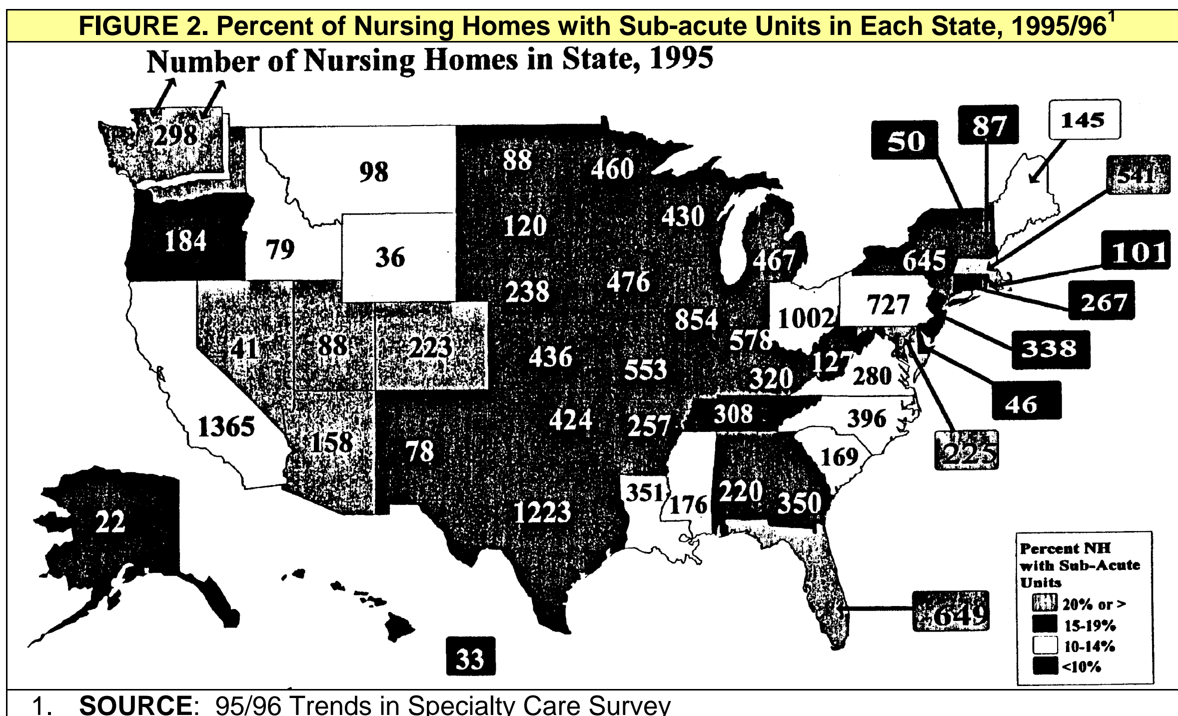
TABLE 1. State Distribution of Sub-Acute Units and Beds, 1995/96					
State	**Nursing Home**		**All Sub-acute Units**		**Estimated Sub-acute Bed Capacity**
	Number	**Percent**	**Number**	**Percent**	**Number**
Iowa	476	2.8%	20	0.9%	116
Illinois	854	5.1%	82	3.8%	1,954
Indiana	578	3.4%	47	2.2%	971
Kansas	436	2.6%	34	1.6%	438
Michigan	467	2.8%	43	2.0%	1,363
Minnesota	460	2.7%	39	1.8%	1,426
Missouri	553	3.3%	46	2.1%	602
North Dakota	88	0.5%	2	0.1%	30
Nebraska	238	1.4%	22	1.0%	584
Ohio	1,002	6.0%	139	6.4%	4,291
South Dakota	120	0.7%	5	0.2%	91
Wisconsin	130	2.6%	29	1.3%	662
MIDWEST	**5,702**	**33.9%**	**508**	**23.5%**	**12,528**
Connecticut	267	1.6%	47	2.2%	1,981
Massachusetts	541	3.2%	114	5.3%	4,190
Maine	145	0.9%	23	1.1%	357
New Hampshire	87	0.5%	9	0.4%	220
New Jersey	338	2.0%	71	3.3%	2,612
New York	645	3.8%	68	3.1%	1,466
Pennsylvania	727	4.3%	96	4.4%	2,814
Rhode Island	101	0.6%	4	0.2%	103
Vermont	50	0.3%	2	0.1%	39
NORTHEAST	**2,901**	**17.2%**	**434**	**20.0%**	**13,782**
Alabama	220	1.3%	10	0.5%	184
Arkansas	257	1.5%	19	0.9%	226
District of Columbia	11	0.1%	0	0.0%	0
Delaware	46	0.3%	7	0.3%	337
Florida	649	3.9%	202	9.3%	7,881
Georgia	350	2.1%	27	1.2%	985
Kentucky	320	1.9%	37	1.7%	782
Louisiana	351	2.1%	34	1.6%	706
Maryland	225	1.3%	59	2.7%	2,011
Mississippi	176	1.0%	18	0.8%	251
North Carolina	396	2.4%	52	2.4%	1,325
Oklahoma	424	2.5%	23	1.1%	257
South Carolina	169	1.0%	15	0.7%	305
Tennessee	308	1.8%	43	2.0%	1,696
Texas	1,223	7.3%	126	5.8%	2,476
Virginia	280	1.7%	39	1.8%	1,490
West Virginia	127	0.8%	7	0.3%	121
SOUTH	**5,532**	**32.9%**	**718**	**33.2%**	**21,073**
Alaska	22	0.1%	4	0.2%	218
Arizona	158	0.9%	44	2.0%	1,800
California	1,365	8.1%	192	8.9%	5,305
Colorado	223	1.3%	54	2.5%	1,562
Hawaii	33	0.2%	4	0.2%	88
Idaho	79	0.5%	14	0.6%	95
Montana	98	0.6%	12	0.6%	140
New Mexico	78	0.5%	5	0.2%	57
Nevada	41	0.2%	14	0.6%	283
Oregon	184	1.1%	35	1.6%	1,076
Utah	88	0.5%	36	1.7%	1,644
Washington	298	1.8%	85	3.9%	2,463
Wyoming	36	0.2%	6	0.3%	292
WEST	**2,703**	**16.1%**	**505**	**23.3%**	**15,023**
USA	***16,838***	***100%***	***2,165***	***100%***	***62,406***

While 80 percent of all nursing homes are located in major urban areas, approximately 90 percent of sub-acute units are in these areas. Sub-acute units, with or

without rehabilitation units, are predominantly located in central cities or suburban areas and are far less likely to be found in small urban or rural areas (see Table 2). This may indicate that sub-acute units, like nursing homes, require the economies of scale found in larger metropolitan areas to operate.

TABLE 2. Distribution of All Nursing Facilities and Facilities with Sub-Acute Units by Metropolitan Status					
Metropolitan Status	**Facility Type**				
	No Sub-acute or Rehab Units	**Sub-acute no Rehab**	**Sub-acute and Rehab Units**	**Rehab Units and Sub-acute**	**All Nursing Home**
Central City	29.8%	44.1%	46.1%	34.9%	32.0%
Suburban Area	48.5%	45.5%	47.5%	51.1%	48.4%
Small Urban Area	14.4%	8.6%	6.1%	12.0%	13.4%
Rural Area	7.3%	1.8%	0.3%	2.0%	6.2%
Total Facilities	13,562	1,554	611	1,101	16,828

FIGURE 2. Percent of Nursing Homes with Sub-acute Units in Each State, 1995/96[1]



1. **SOURCE**: 95/96 Trends in Specialty Care Survey

Estimated Bed Capacity

It is estimated that across the nation, total bed capacities among the 2,165 sub-acute units reached 62,406 beds. Across regions and states, the distribution of bed capacities reflected the distribution of sub-acute units. For example, bed capacity in the southern region represented a third of the units and a third of the beds.

Bed capacities of sub-acute units varied considerably across states ranging from less than 100 in less urbanized states such as North and South Dakota, and New Mexico to several thousands in such states Florida, California, Massachusetts, and Ohio. Twenty-one states had 1,300 beds or more; seven states had less than 100 beds; and the remaining 23 states ranged from 116 to 985 beds (see Table 1).

The mean number of beds in sub-acute units was 31, though approximately 40 percent of units had between 16-30 beds (see Table 3). Almost one-quarter had 41 or more beds, with the remaining units equally distributed between 31 and 40 beds and less than 16 beds.

TABLE 3. Distribution of Sub-Acute Units by Unit Size

Number of Beds in Sub-Acute Unit	Facility Type			
	Sub-acute Units Only	Sub-acute and Rehab Units	Rehab Units Only	All Units
<16	18.1%	13.9%	31.2%	21.7%
16 - 30	40.2%	43.9%	47.6%	43.5%
31 - 40	17.3%	18.0%	12.6%	15.8%
41 or >	24.4%	24.2%	8.6%	19.0%
Total Number of Units	1,554	611	1,101	3,266

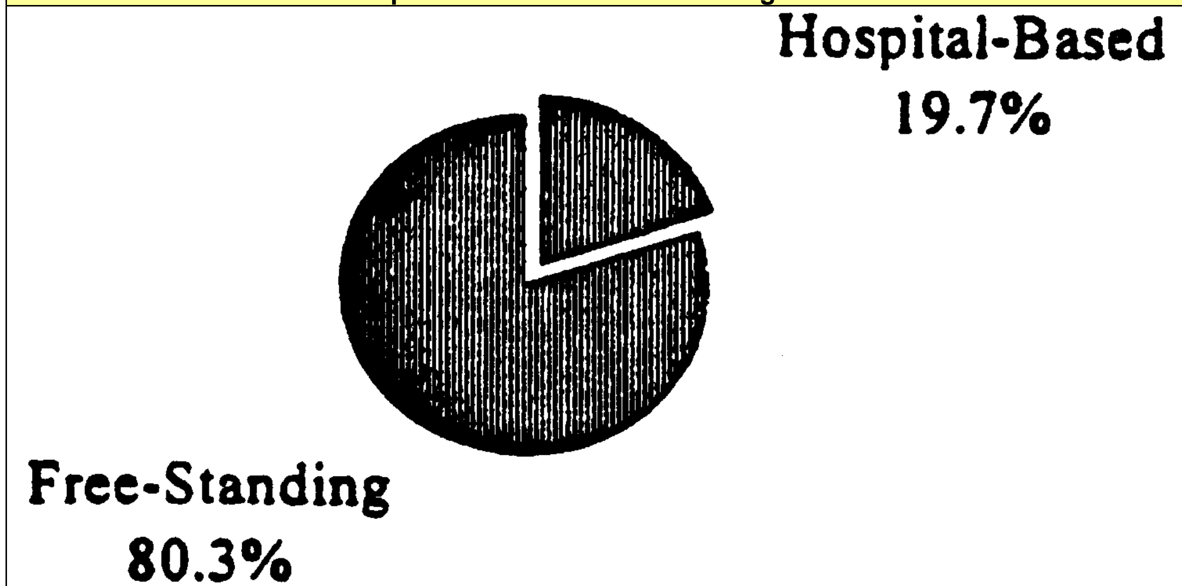
At the facility-level, sub-acute units were most likely to exist within nursing homes with 100 beds or more; nearly 40 percent were located in nursing facilities with 101-1 50 beds and almost 30 percent were located in facilities with 150 beds or more (see Table 4). This finding is similar to results for sub-acute units with rehabilitation units or facilities with rehabilitation units only. In contrast, nursing homes are, on average, slightly smaller facilities. Most nursing homes have between 51 and 150 beds indicating that sub-acute units tend to occur in larger than average facilities. Sub-acute units are least likely in small nursing homes (less than 50 beds).

Among all sub-acute units, 80 percent are based within free-standing nursing homes. Nearly 20 percent are hospital based (see Figure 3).

TABLE 4. Distribution of All Nursing Facilities and Facilities with Sub-Acute Units by Facility Size

Number of Nursing Home Beds	Facility Type				
	No Sub-Acute or Rehab Units	Sub-acute Units Only	Sub-acute and Rehab Units	Rehab Units Only	All Nursing Home
<50	18.0%	8.7%	5.2%	7.5%	16.0%
51 - 100	40.7%	22.1%	23.7%	29.0%	37.6%
101 - 150	26.1%	39.7%	33.4%	35.6%	28.2%
151 and >	15.2%	29.5%	37.7%	27.9%	18.2%
Total Facilities	13,562	1,554	611	1,101	16,828

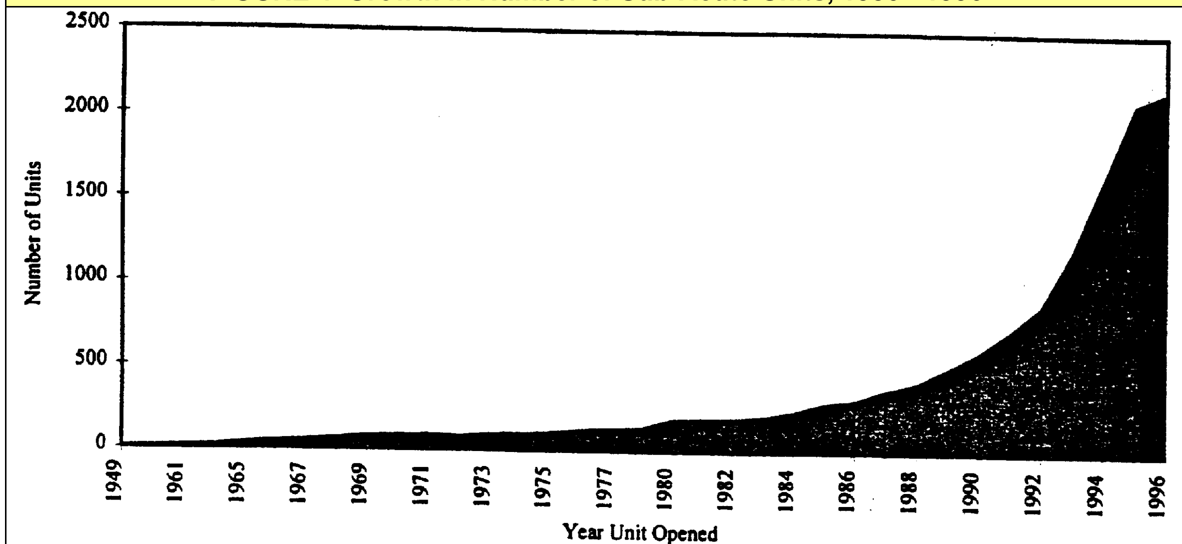
FIGURE 3. Hospital-Based and Free-Standing Sub-Acute Units



Growth in the Number of Sub-Acute Units

Growth in the number of sub-acute units was steady from the early 1950's to 1992. Over that time period, the average annual growth rate was around 14 percent. In 1992 the estimated number of sub-acute units was nearly 900. However, since 1992, numbers of subacute units has risen steeply with an average annual growth rate of 26 percent. In just four years, the number of units increased by more than 145 percent, from around 900 in 1992 to nearly 2,200 in 1996 (see Figure 4).

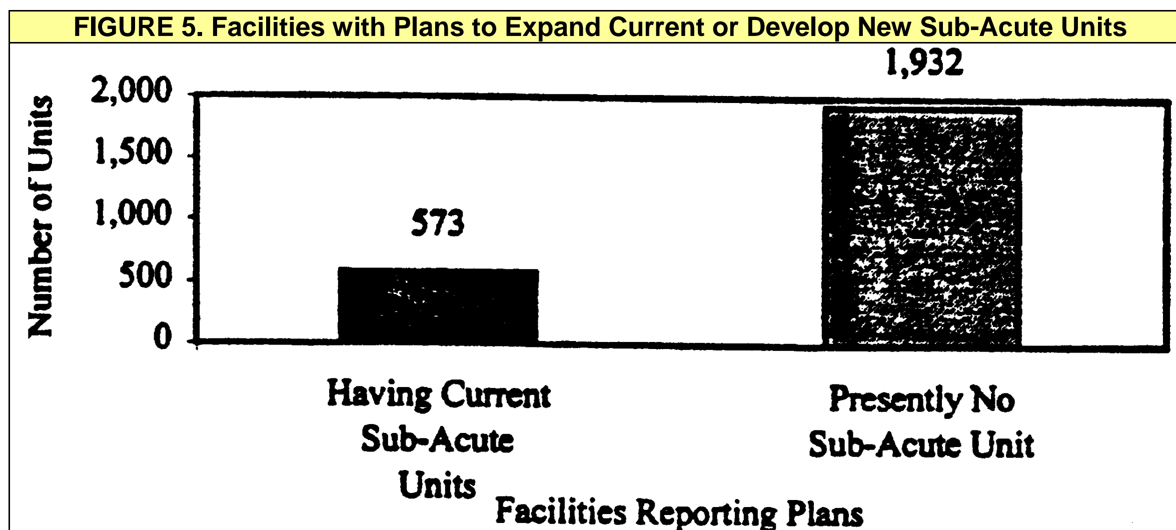
FIGURE 4. Growth in Number of Sub-Acute Units, 1950 - 1996



Expected Continued Growth

Nearly 30 percent of the facilities reported plans for expanding existing sub-acute care programs and 13 percent reported plans to develop a sub-acute facility within the next five years (see Figure 5).

FIGURE 5. Facilities with Plans to Expand Current or Develop New Sub-Acute Units



Facility Characteristics

Almost half of the facilities (46 percent) with sub-acute units were owned by for-profit companies that were part of a chain (see Table 5). Nearly 16 percent were part of independent, for-profit institutions, while 22 percent were owned by non-profit independents. Less than 4 percent were government facilities.

TABLE 5. Distribution of All Nursing Facilities and Facilities with Sub-Acute Units by Ownership

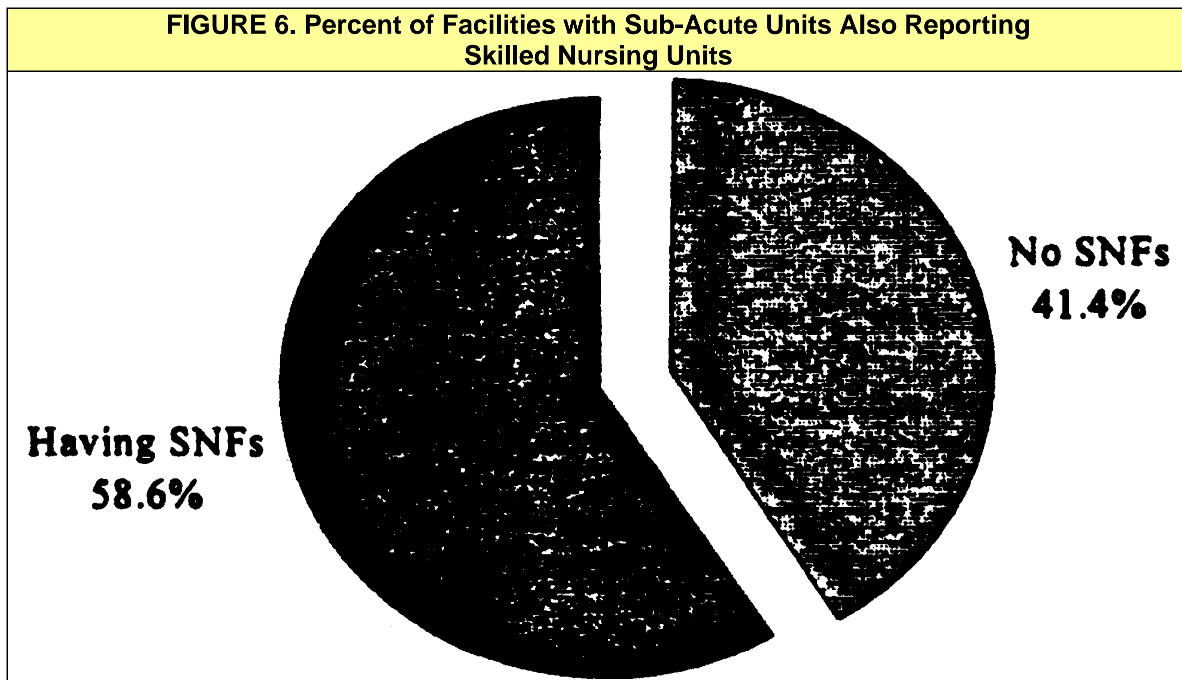
Category of Ownership	Facility Type				
	No Sub-Acute or Rehab Units	Sub-acute Units Only	Sub-acute and Rehab Units	Rehab Units Only	All Nursing Home
For-Profit--Chain	39.6%	46.2%	53.5%	52.2%	41.6%
For-Profit--Independent	24.5%	15.9%	17.7%	20.3%	23.1%
Non-Profit--Chain	10.5%	12.3%	8.0%	9.8%	10.5%
Non-Profit--Independent	20.4%	22.3%	16.7%	15.2%	20.1%
Government	5.0%	3.3%	4.1%	2.5%	4.7%
Total Facilities	13,562	1,554	611	1,101	16,828

Among all sub-acute units, 60 percent included other types of specialty units (see Table 6). For these facilities, 28 percent of sub-acute. units included a rehabilitation unit, 37 percent also included a special care unit, and 6 percent included an AIDS unit. Nearly 60 percent of all facilities with sub-acute units also reported skilled nursing units (see Figure 6).

TABLE 6. Distribution of Facilities with Sub-Acute Units and Other Specialty Units

Sub-acute Units	Unit Type				
	Sub-acute Units Only	Sub-acute & Rehab Units	Sub-acute & SCU Units	Sub-acute & AIDS Units	Sub-acute & Any Type of Specialty Unit
Number	872	611	799	129	1,293
Percent	40.3%	28.2%	36.9%	6.0%	59.7%

FIGURE 6. Percent of Facilities with Sub-Acute Units Also Reporting Skilled Nursing Units



CONCLUSIONS

If trends continue in the direction indicted by the 95/96 TSC Census, nursing homes will become more specialized in the future. It appears that the sub-acute market is particularly strong in the South, in major urban areas, and within nursing homes that have a larger than average bed capacity. These markets, combined with the large numbers of facilities planning to expand existing or develop new units, point to sub-acute care as a growing industry.

The 95/96 TSC Survey has provided the first base-line estimates for sub-acute units in nursing homes and may serve as the guide from which future trends are measured. Certain study limitations should be noted. Although we had a high level of participation, it is important to remember that these results are based on self-reports from the participating facilities and are subject to error. However, the majority of the screener instrument respondents were staff members who had direct knowledge and responsibility for the facilities' units. Therefore, we are reasonably certain that the information was accurate at the time it was reported. Further research is required to determine how these specialized units operate arid who they serve.

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