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# Using Research Data to Drive Service Development

Terry Lum

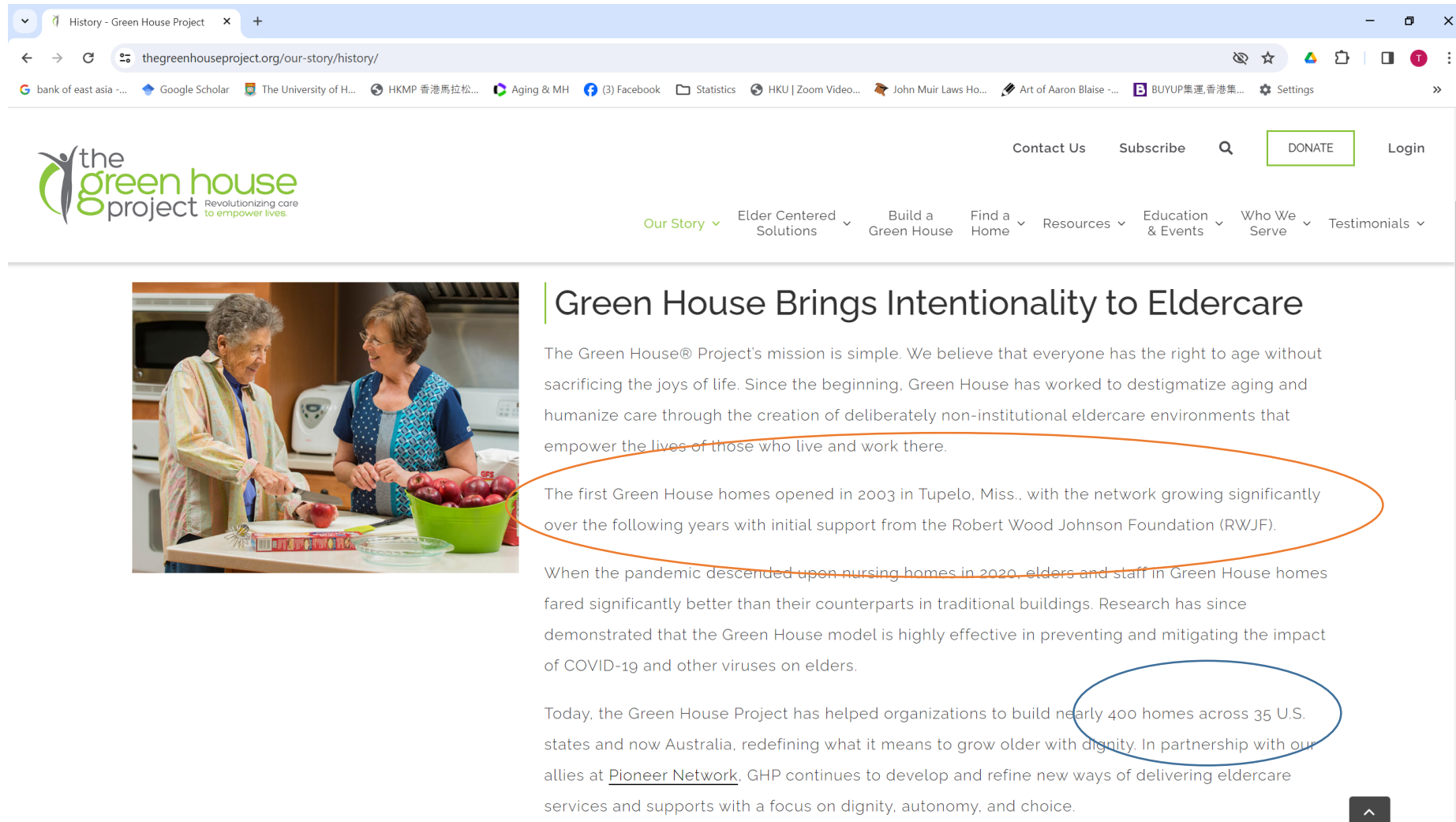
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March 4, 2024

# Examples

- The Greenhouse Small group nursing homes.
- The Cash and Counseling Project.
- The Standardised Care Need Assessment Mechanism for Elderly Services (SCNAMES) and the Central Waiting List for Subsidised Long Term Care Services (CWL).
- Lessons Learned and Conclusion.


# The Greenhouse Nursing home project



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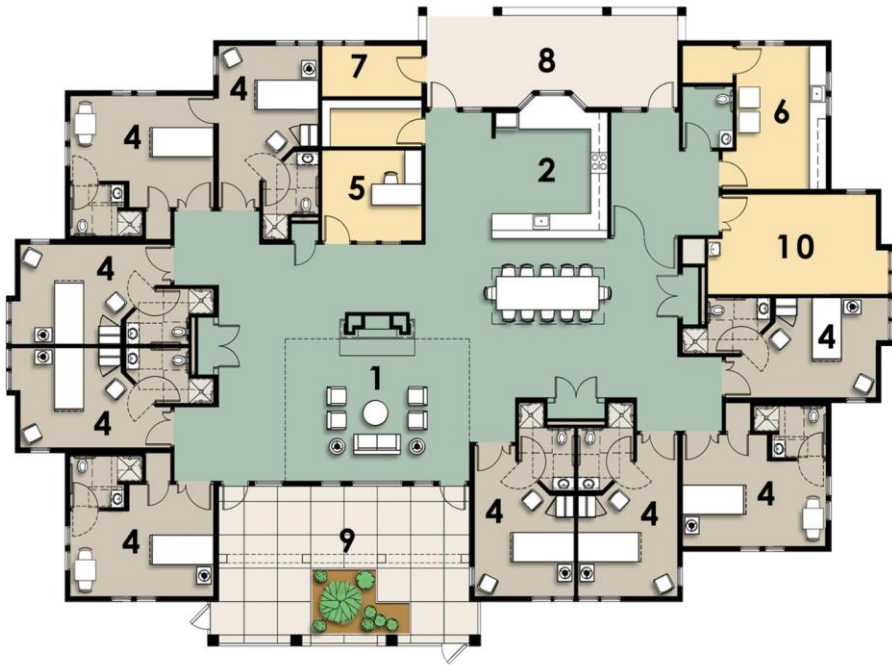
## Green House Brings Intentionality to Eldercare

The Green House® Project's mission is simple. We believe that everyone has the right to age without sacrificing the joys of life. Since the beginning, Green House has worked to destigmatize aging and humanize care through the creation of deliberately non-institutional eldercare environments that empower the lives of those who live and work there.

The first Green House homes opened in 2003 in Tupelo, Miss., with the network growing significantly over the following years with initial support from the Robert Wood Johnson Foundation (RWJF).

When the pandemic descended upon nursing homes in 2020, elders and staff in Green House homes fared significantly better than their counterparts in traditional buildings. Research has since demonstrated that the Green House model is highly effective in preventing and mitigating the impact of COVID-19 and other viruses on elders.

Today, the Green House Project has helped organizations to build nearly 400 homes across 35 U.S. states and now Australia, redefining what it means to grow older with dignity. In partnership with our allies at [Pioneer Network](#), GHP continues to develop and refine new ways of delivering eldercare services and supports with a focus on dignity, autonomy, and choice.



The journey started  
here

## Resident Outcomes in Small-House Nursing Homes: A Longitudinal Evaluation of the Initial Green House Program

Rosalie A. Kane, PhD,\* Terry Y. Lum, PhD,<sup>†</sup> Lois J. Cutler, PhD,\* Howard B. Degenholtz, PhD,<sup>‡</sup>  
and Tzy-Chyi Yu, MHA\*

**OBJECTIVES:** To determine the effects of a small-house nursing home model, THE GREEN HOUSE<sup>®</sup> (GH), on residents' reported outcomes and quality of care.

**DESIGN:** Two-year longitudinal quasi-experimental study comparing GH residents with residents at two comparison sites using data collected at baseline and three follow-up intervals.

**SETTING:** Four 10-person GHs, the sponsoring nursing home for those GHs, and a traditional nursing home with the same owner.

**PARTICIPANTS:** All residents in the GHs (40 at any time) at baseline and three 6-month follow-up intervals, and 40 randomly selected residents in each of the two comparison groups.

**INTERVENTION:** The GH alters the physical scale environment (small-scale, private rooms and bathrooms, residential kitchen, dining room, and hearth), the staffing model for professional and certified nursing assistants, and the philosophy of care.

**MEASUREMENTS:** Scales for 11 domains of resident quality of life, emotional well-being, satisfaction, self-reported health, and functional status were derived from interviews at four points in time. Quality of care was measured using indicators derived from Minimum Data Set assessments.

**RESULTS:** Controlling for baseline characteristics (age, sex, activities of daily living, date of admission, and proxy interview status), statistically significant differences in self-reported dimensions of quality of life favored the GHs over one or both comparison groups. The quality of care in the GHs at least equaled, and for change in functional status exceeded, the comparison nursing homes.

**CONCLUSION:** The GH is a promising model to improve quality of life for nursing home residents, with implications

for staff development and medical director roles. *J Am Geriatr Soc* 55:832–839, 2007.

**Key words:** nursing home; culture change; quality of life; longitudinal outcomes; quality indicators

After a critical 1986 Institute of Medicine report,<sup>1</sup> regulatory reform in nursing homes was launched, aimed at improved quality assessment, monitoring, and enforcement. A 2001 Institute of Medicine report noted improvements in overall health care but little reduction of societal dread of nursing homes<sup>2</sup> or improvement in quality of life.<sup>3</sup> The problems of maintaining a sense of well-being in a nursing home are well documented in decades of anthropological, ethnographic, and ethics studies.<sup>4–9</sup> Efforts to combat residents' learned helplessness with increased choices have resulted in measurable health benefits.<sup>10–14</sup>

A movement for culture change in nursing homes has gathered force since 1995, embracing transformed physical environments (e.g., smaller-scale, more-private rooms and baths and household-type neighborhoods for dining and occasionally cooking), transformed staff roles with more empowerment of line staff, and a philosophy of individualized care.<sup>15,16</sup> The "Eden Alternative," a set of principles overlaid on existing nursing homes to flatten hierarchies, invest decision-making in residents and frontline staff, and normalize nursing home life, addressed psychosocial problems of residents, such as loneliness, boredom, helplessness, and lack of meaning.<sup>17</sup> Eden training has been widely sought, but the few formal evaluations had unimpressive results,<sup>18,19</sup> suggesting that, without more-systemic changes

And here....

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## Effects of Green House<sup>®</sup> Nursing Homes on Residents' Families

Terry Y. Lum, M.S.W., Ph.D., Rosalie A. Kane, M.S.W., Ph.D., Lois J. Cutler, Ph.D., and Tzy-Chyi Yu, M.H.A., Ph.D.

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*A longitudinal quasi-experimental study with two comparison groups was conducted to test the effects of a Green House (GH<sup>®</sup>) nursing home program on residents' family members. The GH<sup>®</sup>s are individual residences, each serving 10 elders, where certified nursing assistant (CNA)-level resident assistants form primary relationships with residents and family, family is encouraged to visits, and professionals adapted their roles to support the model. GH<sup>®</sup> family were somewhat less involved in providing assistance to their residents although family contact did not differ among the settings at any time period. GH<sup>®</sup> family were more satisfied with their resident's care and with their own experience as family members, and had no greater family burden. Issues in studying family outcomes are discussed as well as implications for roles of various personnel, including social service and activities staff in a GH<sup>®</sup> model.*

### EFFECTS OF GH<sup>®</sup> NURSING HOMES

opportunities and challenges for family members, and was expected to result in more positive family interactions with residents, and greater family engagement with and satisfaction with the nursing homes.

### BACKGROUND

Family members are instrumental to the psychosocial well-being of nursing home and assisted living residents, and provide the major means for residents to retain their social affiliations and relationships outside the nursing home (Kane, 2004). Families typically are integrally involved in the decision of older people to move to a residential setting, and their choice of facility (Reinardy and Kane, 1999; 2003). If reformed models of nursing homes do not meet with family approval, they are unlikely to be chosen. Further, family members are also a major source of emotional support to elderly people receiving long-term care in all settings, including group residential settings such as nursing

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# The Big Idea Behind A New Model Of Small Nursing Homes

[Rob Waters](#)  
AFFILIATIONS

PUBLISHED: MARCH 2021 **Open Access** <https://doi.org/10.1377/hlthaff.2021.00081>

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## Abstract

Long-term care facilities have been devastated by COVID-19, with one exception: a group of small facilities called Green Houses.

## TOPICS

[NURSING HOMES](#) | [ELDER CARE](#) | [ELDER PATIENTS](#) | [COVID-19](#) | [PANDEMICS](#) | [CORONAVIRUS](#) | [MEDICAID](#) | [LONG-TERM SERVICES AND SUPPORTS](#) | [MEDICARE](#) | [MEDICAID SERVICES](#) | [MEDICAID PATIENTS](#)

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- “Studies began to suggest solid outcomes. A 2012 comparison found that residents of Green House homes in Minnesota and Washington State spent less time in hospitals than a matched group in traditional homes, saving \$1,300–\$2,300 per resident in annual costs to Medicaid and Medicare.<sup>11</sup> A 2016 package of studies found, among other things, that residents in 15 Green House homes had lower rates of hospitalization than those in 223 traditional nursing homes. The Green House elders were also 45 percent less likely to need catheters, 38 percent less likely to have bedsores, and 16 percent less likely to be bedridden.<sup>9</sup>”


<https://www.healthaffairs.org/doi/10.1377/hlthaff.2021.00081>



# The Medicaid Cash & Counseling Program



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



## **THE EFFECT OF CASH AND COUNSELING ON MEDICAID AND MEDICARE COSTS:**

### **FINDINGS FOR ADULTS IN THREE STATES**

May 2005



| <b>TABLE ES.1. Effect of Arkansas's Cash and Counseling on Personal Care and Medicaid Expenditures</b> |                                      |         |            |                                     |         |            |
|--|--------------------------------------|---------|------------|-------------------------------------|---------|------------|
|  | Personal Care Expenditures (Dollars) |         |            | All Medicaid Expenditures (Dollars) |         |            |
|  | Treatment                            | Control | Difference | Treatment                           | Control | Difference |
| <b>Year 1</b>  |                                      |         |            |                                     |         |            |
| Nonelderly   | 5,435                                | 2,430   | 3,005***   | 14,125                              | 12,862  | 1,263      |
| Elderly  | 4,313                                | 2,292   | 2,021***   | 11,523                              | 9,822   | 1,701***   |
| All Ages   | 4,605                                | 2,349   | 2,256***   | 12,219                              | 10,688  | 1,531***   |
| <b>Year 2</b>  |                                      |         |            |                                     |         |            |
| All Ages   | 3,852                                | 1,839   | 2,014***   | 11,082                              | 10,582  | 500        |
| <b>NOTE:</b> Year 2 includes only those who enrolled in the demonstration before May 1, 2000.          |                                      |         |            |                                     |         |            |
| ***Treatment group mean different from control group mean at .01 level.                                |                                      |         |            |                                     |         |            |

| <b>TABLE ES.2. Effect of New Jersey's Cash and Counseling on Personal Care and Medicaid Expenditures</b> |                                      |         |            |                                     |         |            |
|--|--------------------------------------|---------|------------|-------------------------------------|---------|------------|
|  | Personal Care Expenditures (Dollars) |         |            | All Medicaid Expenditures (Dollars) |         |            |
|  | Treatment                            | Control | Difference | Treatment                           | Control | Difference |
| <b>Year 1</b>  |                                      |         |            |                                     |         |            |
| Nonelderly   | 11,166                               | 9,220   | 1,946***   | 26,863                              | 26,049  | 814        |
| Elderly  | 11,891                               | 10,650  | 1,241***   | 20,236                              | 19,407  | 828        |
| All Ages   | 11,557                               | 9,970   | 1,587***   | 23,370                              | 22,509  | 861        |
| <b>Year 2</b>  |                                      |         |            |                                     |         |            |
| All Ages   | 11,337                               | 8,792   | 2,545***   | 22,033                              | 19,653  | 2,379***   |
| <b>NOTE:</b> Year 2 includes only those who enrolled in the demonstration before January 1, 2002.        |                                      |         |            |                                     |         |            |
| ***Treatment group mean different from control group mean at .01 level.                                  |                                      |         |            |                                     |         |            |

| <b>TABLE ES.3. Effect of Florida's Cash and Counseling on Waiver and Medicaid Expenditures</b>    |                               |         |            |                                     |         |            |
|---|-------------------------------|---------|------------|-------------------------------------|---------|------------|
|   | Waiver Expenditures (Dollars) |         |            | All Medicaid Expenditures (Dollars) |         |            |
|   | Treatment                     | Control | Difference | Treatment                           | Control | Difference |
| <b>Year 1</b>   |                               |         |            |                                     |         |            |
| Nonelderly  | 22,017                        | 18,321  | 3,696***   | 27,433                              | 24,106  | 3,327***   |
| Elderly   | 10,496                        | 10,063  | 433        | 15,971                              | 15,833  | 137        |
| All Ages  | 16,301                        | 14,193  | 2,108***   | 23,745                              | 19,973  | 1,772***   |
| <b>Year 2</b>   |                               |         |            |                                     |         |            |
| All Ages  | 18,354                        | 15,978  | 2,375***   | 24,394                              | 21,676  | 2,718***   |
| <b>NOTE:</b> Year 2 includes only those who enrolled in the demonstration before October 1, 2001. |                               |         |            |                                     |         |            |
| ***Treatment group mean different from control group mean at .01 level.                           |                               |         |            |                                     |         |            |

# The evidence

In all three states, the treatment group's use and cost of Medicare services was similar to that of the control group. Therefore, the program's effects on combined Medicare and Medicaid service use and costs are similar to the effects on Medicaid use and costs.



## Policy Implications

In all three states, the program had large, overwhelmingly positive effects on the well-being of consumers and caregivers. In addition, in two of the states, costs for the treatment group did not exceed the costs the state would have incurred for delivering the approved baseline care plan services. In all three states, Cash and Counseling increased the likelihood that beneficiaries would receive paid services, greatly increased consumers' satisfaction with their care and their quality of life, and reduced their unmet needs (Carlson et al. 2005). It also reduced caregiver stress in all three states (Foster et al. 2005c). However, the higher initial costs of consumer direction under Cash and Counseling might discourage some states from adopting a similar program. Most states are having difficulty controlling their Medicaid budgets, so the effects of any new program on states' costs is likely to be an important factor in whether states adopt such programs. An important fact for states to consider is that this evaluation was conducted over a two-year follow-up period that started immediately after enrollment began. Since the evaluation, states have identified the sources of the higher costs for this innovative program and have implemented procedures to reduce these costs.

## TIPS AND RESOURCES FOR CAREGIVERS

### What Caregiver Support Is Available In My Area?

Many local organizations provide materials, services, and support to assist caregivers—below you'll find information about and links to many of these helpful resources.

#### HOW DO I FIND LOCAL SENIOR SERVICES?

**Eldercare Locator** provides referrals to Area Agencies on Aging based on your zip code. Your local Area Agency on Aging can provide information about many eldercare issues and available services in your community. Go to [www.eldercare.gov](http://www.eldercare.gov) or call 1-800-677-1116 to find your local Area Agency on Aging.

**Family Care Navigator** is a state-by-state resource developed by the Family Caregiver Alliance. It includes services for family caregivers, as well as help for older or disabled adults living at home or in a residential facility. It also has information on government health and disability programs, legal resources, and

disease-specific organizations. To find resources in your state, visit [www.caregiver.org](http://www.caregiver.org) and select "Family Care Navigator: State-by-State Guide" under the "Caregiving Info & Advice" tab or call 1-800-455-8106.

**State Units on Aging** are agencies that administer, manage, and design benefits, programs, and services for the elderly and their families. Caregivers can learn about services and programs available to seniors living in their state. Visit [www.nasuad.org](http://www.nasuad.org) and select "Contacting State Agencies" under the "About NASUAD" tab to look up your state agency.

#### ARE THERE FINANCIAL BENEFITS THAT I CAN ACCESS?

**State Health Insurance Assistance Programs (SHIPs)** offer free health insurance counseling in your community. Visit [www.shiptalk.org](http://www.shiptalk.org) and select "Find a State SHIP" to find a SHIP office near you.

**BenefitsCheckup.org** is a free, confidential service of the National Council on Aging. The site helps older adults find programs that may help pay for some of the costs of prescription drugs, health care, utilities, and other essential items or services.

**Tax Benefits** may be available if you provide care and financial support for an older adult. These benefits may include tax breaks or other financial help. You may want to look into any of the following:

- Exemptions and deductions if you are a qualifying relative (including a Multiple Support Agreement, if you jointly support your loved one with other friends or family members)

- Deductions for paying other's medical expenses, including long-term care insurance
- Dependent Care Credit for paid caregivers

Visit [www.irs.gov](http://www.irs.gov), or call 1-800-829-1040 to learn more about potential savings.

**The Medicaid Cash and Counseling Program** can provide direct payments that could be used to pay you for the time you spend providing care. To find out whether your state has a Cash and Counseling or similar program, contact your local Medicaid, human services, or social services office. Visit [www.cashandcounseling.org](http://www.cashandcounseling.org), scroll down to the Project Overview section, and click "our program map" to see what programs are offered in your state.

For additional local referrals, contact any of the following:

- The social service department of your local hospital or clinic
- Adult daycare centers and faith-based agencies
- Your AARP State Office, [www.aarp.org/states](http://www.aarp.org/states)
- The local chapter of disease groups, such as the American Heart Association and Alzheimer's Association

*Ask Medicare* ([www.medicare.gov/caregivers](http://www.medicare.gov/caregivers)) also offers information on enrolling in Medicare, choosing a prescription drug plan, finding state and local resources to support caregiving tasks, accessing in-home services, and a free e-newsletter with the latest Medicare updates.

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 Alabama SAIL Walver  
 Alaska Personal Care Assistance Program  
 Alaska Living Independently  
 Arizona Self-Directed Attendant Care  
 Arizona Agency With Choice / Community First Choice Program  
 Arkansas AR Choices in Homecare Walver  
 Arkansas Independent Choices Program  
 Arkansas Personal Care Program  
 California In-Home Supportive Services  
 Colorado Consumer Directed Attendant Support Services  
 Colorado HCBS Walver the Elderly, Blind, and Disabled  
 Connecticut Community First Choice Option  
 Connecticut Personal Care Assistance  
 Delaware Diamond State Health Plan Plus  
 District of Columbia EPD Walver / Services My Way  
 Florida Statewide Managed Long Term Care  
 Georgia Community Care Services Program Walver (limited)  
 Hawaii QUEST Expanded Access (OEKA)  
 Idaho Aged and Disabilities Walver  
 Indiana Aged and Disabled Walver  
 Indiana Caregiver Homes Program  
 Iowa Elderly Walver  
 Iowa Health and Disability Walver  
 Kansas HCBS for the Frail Elderly  
 Kentucky HCB Walver for Aged and Disabled  
 Louisiana Community Choices Walver  
 Maine's Older Adults and Adults with Disabilities Walver  
 MaineCare Consumer Directed Attendant Services  
 Maryland Community Pathways Walver  
 Maryland Community First Choice Program  
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 Massachusetts Personal Care Attendant Program  
 Massachusetts Caregiver Homes  
 Michigan Choice Walver Program

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 Arizona NMHCBS  
 California Paid Family Leave  
 Colorado Home Care Allowance  
 Connecticut CHCF  
 Connecticut Statewide Respite Care Program  
 District of Columbia Caregivers' Institute  
 Washington DC's Universal Paid Leave Act  
 Florida Community Care for the Elderly  
 Florida Home Care for the Elderly  
 Hawaii Home Services Program  
 Hawaii's Community Living Programs  
 Iowa Senior Living / Case Management Program  
 Kansas Senior Care Act  
 Kentucky Hart-Supported Living Program  
 Kentucky Personal Care Attendant Program  
 Maine Home Based Care  
 Maryland Attendant Care Program  
 Maryland Attendant Care Program  
 Maine Home Based Care  
 Massachusetts HCF and ECOP Programs  
 Minnesota Alternative Care Program  
 Nebraska Disabled Persons and Family Support  
 Nevada COPE  
 New Jersey Assistance for Community Caregiving  
 New Jersey Family Leave Insurance  
 New Jersey Statewide Respite Care  
 New York Expanded EISEP Program  
 New York's Paid Family Leave Benefits Law  
 North Carolina In-Home Aide Services  
 North Dakota SPED and Ex-SPED Programs  
 Ohio Elderly Services Program  
 Oregon Project Independence  
 Pennsylvania Options Program  
 Rhode Island Temporary Caregiver Insurance  
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 West Virginia Run Your Personal Assistance Services  
 West Virginia Lighthouse Program  
 Wisconsin Family Care and Partnership Programs  
 West Virginia Run Your Personal Assistance Services  
 West Virginia Lighthouse Program

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 Missouri Independent Living Walver  
 Mississippi Independent Living Walver  
 Montana HCBS Walver  
 Montana Self-Directed Personal Assistance Services  
 Nebraska Personal Assistance Services  
 Nevada HCEW (formerly CHIP) (very limited)  
 Nevada Personal Care Services  
 New Hampshire Choices for Independence (very limited)  
 New Hampshire Personal Care Attendant Services  
 New Jersey Managed Long Term Services and Supports  
 New Jersey Personal Preference Program  
 New Mexico Centennial Care Community Benefit  
 New York Community First Choice Option  
 New York Consumer Directed Personal Assistance  
 New York Managed Long Term Care Program  
 North Carolina CAP-DA Walver  
 North Dakota State Plan Personal Care Services  
 North Dakota Walver for Home and Community Based Services  
 Ohio PASSPORT Walver  
 Ohio MyCare Plan  
 Oklahoma Advantage  
 Oklahoma Personal Care Program  
 Oregon Client-Employed Provider Program  
 Oregon Independent Choices Program  
 Oregon Spousal Pay Program  
 Oregon K Plan  
 Pennsylvania Aging Walver  
 Pennsylvania Community HealthChoices Program  
 Pennsylvania Services My Way  
 Rhode Island Global Consumer Choice Compact Walver  
 Rhode Island Rite @ Home  
 South Carolina Choice and Attendant Care  
 South Carolina Community Supports Walver  
 Tennessee CHOICES in Long Term Care  
 Texas Community First Choice Program

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# 3-year Project on Enhancement of the Infrastructure of Long-term Care in Hong Kong

- Funded by the HKSAR Government.
- Started in Oct 2013 – April 2017

# Project Objectives

1. To develop a standardized assessment system for better service matching and use of clinical data on care for the elderly in need of LTC services;
2. To develop Case Mix and Resource Utilization Groups (RUGs) systems for residential care and to better understand the care need of frail elderly in residential care setting;
3. To develop a set of outcome indicators for both community care services (CCS) and residential care services (RCS) based on the interRAI LTC assessment system.



# Methods: Case Mix & RUGs

- Review of overseas application of RUGs and local stakeholder opinions
- Quantitative study
  - Need assessment of 1,004 RCS & 1,012 CCS users, three times over 6 months.
  - Staff time measurement (STM)
- Qualitative studies
  - Focus groups
  - Case scenario studies

The research team combined and analysed information collected from the quantitative and qualitative studies in both CCS and RCS settings to develop a proposed RUG-HK. Test application of a case mix system for services matching in Hong Kong was carried out for reference.

# Staff time measurement

- RCS: for each residents, we followed them minute by minute to record their services use over 24 hours for 7 days.
- CCS: for each services users, we used the billing records from providers to record their types and volume of services use over a month.
- We later converted all STM data into monthly data.



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**Case-mix Study of  
Long-term Care Service Users  
in Hong Kong**

**Final Report**

Sau Po Centre on Ageing, The University of Hong Kong  
2/F The Hong Kong Jockey Club Building for Interdisciplinary Research  
5 Sassoon Road, Pokfulam, Hong Kong Tel: (852) 2831 5210  
Website: [ageing.hku.hk](http://ageing.hku.hk) Email: [ageing@hku.hk](mailto:ageing@hku.hk)

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# Data Collection

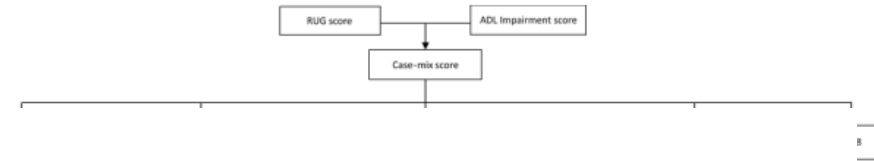
- 3.4 **CCS Sampling:** As at March 2017, there were 73 DEs / DCUs providing subsidised centre-based care and support services, and as at September 2016, there were 34 EHCCS teams providing home care service for older adults in Hong Kong. Among them, 40 DEs / DCUs and 22 EHCCS teams participated in this study (operated by 22 NGOs), providing frailty level data from 1,047 CCS users (540 DE / DCU and 507 EHCCS, respectively). STM data were collected from 598 of these users.
  
- 3.5 **RCS Sampling:** As at February 2017, there were 156 subvented Residential Care Homes for the Elderly (RCHEs) providing subsidised places for elders in Hong Kong. These include 121 Care and Attention Homes (C&As), in which 120 were Care and Attention Homes Providing Continuum of Care (COC), 29 Contract Homes, and 6 Nursing Homes (NHs). Among them, 21 COC, 3 Contract Homes, and 2 NHs participated in the study (operated by 14 NGOs), providing frailty level data and STM data from 1,004 RCS users (835 COC and 89 Contract Homes and 80 NHs, respectively; see Table 3.1).

# Proposal

**Table 6.2** Criteria for proposed services

| Case-mix score | Additional criteria   | Proposed services   |
|----------------|---|---------------------|
| 8              | N.A.  | Beyond nursing home |
| 7              | 1. Dyspnea in daily life and require oxygen therapy, or<br>2. Hallucinations and physical abuse behaviour, or<br>3. ... | Beyond nursing home |

**Figure 6.1** Proposed decision-making tree for elderly services based on a case-mix score.



**Table 6.3** Agreement between the current and proposed LTC service recommendation protocols.

| Current service recommendation    | Proposed service recommendation |                       |                         |                    |                   |                  | Total               |
|-----------------------------------|---------------------------------|-----------------------|-------------------------|--------------------|-------------------|------------------|---------------------|
|                                   | Community Supportive Service    | Home Support Services | Community Care Services | C&A Home           | NH                | Beyond NH        |                     |
| No service / IHCS / other service | 4 (9.8%) (c)                    | 22 (53.7%) (c)        | 15 (36.6%) (b)          | 0 (0%)             | 0 (0%)            | 0 (0%)           | 41 (100.0%)         |
| CCS only                          | 0 (0%)                          | 4 (36.4%) (a)         | 8 (54.5%) (c)           | 1 (7.7%) (b)       | 0 (0%)            | 0 (0%)           | 13 (100.0%)         |
| Dual C&A home and CCS             | 0 (0%)                          | 38 (19.5%) (a)        | 89 (45.6%) (c)          | 67 (34.4%) (c)     | 0 (0%)            | 1 (0.5%) (b)     | 195 (100.0%)        |
| C&A only                          | 0 (0%)                          | 25 (16.6%) (a)        | 56 (37.1%) (a)          | 59 (39.1%) (c)     | 6 (4.0%) (b)      | 5 (3.3%) (b)     | 151 (100.0%)        |
| Dual NH & CCS                     | 0 (0%)                          | 0 (0%)                | 0 (0%)                  | 6 (35.3%) (a)      | 10 (58.8%) (c)    | 1 (5.9%) (b)     | 17 (100.0%)         |
| NH only                           | 0 (0%)                          | 0 (0%)                | 1 (1.6%) (a)            | 26 (40.6%) (a)     | 32 (50.0%) (c)    | 5 (7.8%) (b)     | 64 (100.0%)         |
| Beyond NH                         | 0 (0%)                          | 0 (0%)                | 1 (5.3%) (a)            | 6 (31.6%) (a)      | 7 (36.8%) (a)     | 5 (26.3%) (c)    | 19 (100.0%)         |
| <b>Total</b>                      | <b>4 (0.8%)</b>                 | <b>89 (17.8%)</b>     | <b>170 (34.0%)</b>      | <b>165 (33.0%)</b> | <b>55 (11.0%)</b> | <b>17 (3.4%)</b> | <b>500 (100.0%)</b> |

IHCS = Integrated Home Care Services; CCS = community care services; C&A home = care and attention home; NH = nursing home (a) and (b) indicate discrepancy between the current and proposed service recommendation. See Table 6.5 for further elaboration. (c) indicates the concordance between the current and proposed service recommendation. The summary percentage in category (c) indicates the proportion of applicants recommended the same category of LTC service under the proposed protocol, while the summary percentage in category (a) and (b) indicate the proportion of applicants recommended a different level of LTC service.

\*there are 7 levels (0-6) for each item, 0=independent to 6= total dependence, need supervision means the score is 2 or above

Home Support Services

# Lessons learned & conclusion

- Strong academic – service providers partnership
- Government involvement from day one
- Long term funding support
- Scientific vigor – the importance of an control group
- Strong vision & strong science & political will



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