Design a LTC System

- Who gets coverage?
- What will you cover?
- How will you pay for it?
Health Services for Older Persons - Long Term and Acute Care

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Let’s Think About…

- Community-based long term care
- Who the users are and the services they use
- Medicare home health care
- Various models CBLTC:
- Acute care issues and models
Where Should / Could These People Live? What Will Determine Where They Live?

- 85 yo F: CHF, OA, vision, 4 ADLs, alone

- 78 yo F: DM, CVA, hemiparesis, bedbound, total ADL dependent, has family
CBLTC

• ADL or IADL assistance ≥ 3 mos / yr

• National Long Term Care Survey
  – ~20% elderly receive LTC in comm or instit
  – ~50% rely entirely on informal care
  – 80% CBLTC provided by informal family caregivers - women
NH v Community v CBLTC

- Age > 85
- Women
- ADL Dep
- Incontinent
- Demented

Community
NH v Community v CBLTC

- Age > 85
- Women
- ADL Dep
- Incontinent
- Demented

Red: NH
Green: Community
Blue: CBLTC
Another Question

• Which type of community-based long term care services are more commonly provided?

A. Formal services

B. Informal services
CBLTC: Formal v Informal

Distribution of All Elderly LTC Population Between Formal and Informal Providers by Availability of Immediate Family

- Informal care only
- Formal care, community
- Formal care, institution

0 10 20 30 40 50 60 70 80

%
CBLTC: Formal v Informal

Distribution of All Elderly LTC Population Between Formal and Informal Providers by Disability Level

- Informal care only
- Formal care, community
- Formal care, institution
FIGURE 1
Women of Care-Giving Age* and Individuals 65 and Over
in the United States, 2000-2030
(in millions)

Source: U.S. Census Bureau, National Population Projections, Summary Files, "Total Population by Age, Sex, Race, and Hispanic Origin."
Question– Medicare Home Health Benefit

• Your 88 yo spouse has severe Alzheimer’s disease, is uncooperative when it comes to bathing and you are too frail to force him/her to do so.

• True or false - your Medicare home health benefit will pay for a home health aide to come to your home to give your spouse a bath?
Medicare HH Benefit

• Eligible
  – Homebound
  – Under MD care
  – Skilled RN or PT or speech need

• Skilled need
  – Assessment, teaching, or evaluation
    • Physical therapy or skilled nursing opens the door to the Medicare HH benefit

• Coverage
  – Skilled RN, PT, OT, aide, speech, SW / equip
After rising rapidly for most of the decade, total home health spending fell 37 percent in 1998.
Number of Home Health Care Visits per 1000 Medicare Enrollees*, United States, 1993

*Data have been adjusted for the age and sex of enrollees.

Figure 3. Number of Home Health Care Visits per 1000 Medicare Enrollees in the Contiguous United States in 1993. Data have been adjusted for the age and sex of enrollees. Both Alaska and Hawaii were in the lowest category.
Note: IPS is the interim payment system created by Congress in the Balanced Budget Act of 1997. Operation Restore Trust was a comprehensive anti-fraud initiative sponsored by HHS.
Persons Served and Average Number of Visits by Home Health Agencies

- Largest reduction of any MC service
- Responsible for decline in total MC $ in '99
- HHA avoiding sick patients – money losers
What’s the Big Deal?
Effects of Home Care on:

“What health or personal care services delivered in a person’s home”
Function?
Satisfaction?
Hospital use?
NH use?
O/P care use?
Total costs?
Mortality?
Effects of Home Care

- Functional ability: None
- Satisfaction: Small transient ↑
- Hospital use: Slight ↑
- NH use: Slight ↓
- O/P care use: Slight ↑
- Total costs: 15 % ↑
- Mortality: Slight ↓

No effects significant @ p < 0.05

Hedrick & Inui. HSR 20:851, 1986
Problems Evaluating CBLTC

• Study design difficulties
  – Allocating resources randomly
  – Severity of illness difficult to control for
  – Treatment and study groups differ
  – Attrition
  – Changes in health care system
  – Varied outcomes measured
Home Visits to Prevent NHP & Fx Decline

- Preventive in-home visits, > 70 yo
- Screened 1349 abstracts
- 18 trials included
- Assessed trial quality
- 18 trials – 13,447 pts
- Heterogenous interventions, intervention personnel (most w/o MD), # f/u visits (0-12), CGA v non CGA

Stuck, JAMA 2002;287:1022
Stuck et al. JAMA 2002;287:1002-8

• **Conclusion:** Preventive home visitation programs appear to be effective, provided the interventions are based on multidimensional geriatric assessment and include multiple follow-up home visits and target persons at lower risk for death. Benefits on survival were seen in young-old rather than old-old populations.
Program for All-Inclusive Care for Elderly - PACE

- Multidisciplinary day hospital model - On Lok
- Serves dually eligible - MC + MA who are nursing home eligible
- What is special about the dually eligible?
Over half of the dually eligible population is in poor or fair health.
Total Health Expenditures by Payer for Dually Eligible and Non-Dually Eligible Beneficiaries, 1999

Health expenditures for the dually eligible population were more than double that of the non-dually eligible.

- Non-Dually Eligible: $7,396
- Dually Eligible: $16,278

Note: Out-of-Pocket does not include premium payments. Payers will not sum to total due to some small categories being omitted.

Source: CMS, Office of Research, Development, and Information: Data from the Medicare Current Beneficiary Survey (MCBS) 1999
Integrated Financing – The Key

**MEDICARE**
2.39 x AAPCC

1/3 PACE $

**MEDICAID**
and/or PRIVATE PAY
85 - 95% of cost of FFS care of comparable population

2/3 PACE $

**MONTHLY CAPITATION**
PACE Expenditures

- Center-Based Services: 32%
- In-Home Care: 22%
- Admin&Plant: 21%
- Inpatient Services: 17%
- Other Medical Services: 8%
PACE

• Outcomes
  – Ave pt: 80 yo, 7.8 med conditions, 2.7 ADL
    40% live alone
    42% demented
  – 2500 hospital days / 1000 / yr (480 - 5000)
  – 1 MD visit/mo, 6 nurse visit/mo, low subspec use
  – 5% PACE days are NH days (~ 4-5% / yr)
Assisted Living Community

- Not independent, don’t need 24 hr skilled nursing
- Usually offer some help with ADL, IADL
- No set definition of services - wide variation
- Monthly: $1500-3500
Continuing Care Retirement Communities (CCRC)

• Long term contract: guarantees lifelong shelter and access to specified health services

• Lump sum payment and monthly fee

• If you get sick, needs will be met

• Usually independent on entry
Consumer Directed CBLTC

- Services usually provided by HH agencies
- New programs allow recipients to independently arrange and supervise **personal assistance** services at home
- Rationale: advocacy, autonomy, demedicalization, costs, shortage of HHA workers
- Can hire family or friends
Cash and Counseling for MA Personal Care Services

• Advocates
  – Individuals, not agencies are best suited to make decisions about care and people they hire
  – Reduce NH placement

• Critics
  – Misuse funds intended for care
  – Receive inadequate care
  – Use cash benefit to pay family member to provide care once provided for free
  – Raise total MA costs

Cash and Counseling

- Treatment group receive fewer hours of unpaid care than controls

- But, majority of hours still provided by unpaid caregivers – c/w easing burden on family

- Long term effect on spending still unknown
Acute Care for Elderly
Injuries in Older Patients in Acute Hospital – Harvard Medical Practice Study

|                          | 65-74 | 75-84 | >85  | RR  
|--------------------------|-------|-------|------|------
| Diagnostic mishap        | 3.7   | 6.3   | 7.4  | 1.7  |
| Therapeutic mishap       | 4.9   | 5.6   | 16.6 | 4.1  |
| Drug complication        | 12.8  | 12.0  | 9.2  | 2.4  |
| Falls                    | 1.2   | 4.2   | 7.4  | 10   |
| Operative complications  | 27.7  | 30.3  | 48.1 | 2.3  |

*NEJM, 1991;324:370*
What is an ACE Unit?

- Create physical environment to foster independent function
  - Carpets, clocks, calendars, toilets, lighting, common area

- Multidisciplinary assessment and care
  - Led by primary nurse. Guidelines focus on geriatric syndromes
  - Daily rounds by team – focus on fx, early d/c planning

- Medical review

- Comprehensive discharge planning including home assessment
ACE Results

• RCT
  – Hypothesis: pts admitted to ACE unit would be more independent in ADLs at discharge
  – N = 661, age > 70

<table>
<thead>
<tr>
<th></th>
<th>ACE</th>
<th>Usual Care</th>
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<tbody>
<tr>
<td>ADL improve</td>
<td>34%</td>
<td>24%</td>
</tr>
<tr>
<td>ADL same</td>
<td>50%</td>
<td>54%</td>
</tr>
<tr>
<td>ADL worse</td>
<td>16%</td>
<td>24%</td>
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</tbody>
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(p < 0.01)

Fewer ACE pts to nursing homes (p = 0.02)
Post Acute Hospital Care - Disease Focus

- Readmissions for all reasons decreased
- Quality of life improved
- Costs: $216 per patient treated

Rich et al. NEJM 333:1190, 1995
Comprehensive D/C Planning and Home Follow-up

Naylor et al.  
* P < 0.05  
JAMA 281:656, 1999
Hospital at Home

• Australia, United Kingdom and Israel
  – All nursing led interventions, under national medical insurance

• United States
  – National Demonstration Project of physician led model
  – Favorable clinical, quality, satisfaction, cost outcomes