Nursing Homes
Past, Present and Future
A brief history of nursing homes

- 1900’s: No federal assistance programs so most elderly entered “almshouses” or “poor farms”
- 1930s: New Deal promotes idea that elderly should have federal benefits on basis of need
- 1935: Creation of Social Security
- 1954: Hill-Burton Act provides grants for nursing homes built in conjunction with hospitals- nursing homes begin to be modeled after hospitals
- 1956-1959: For-profit organizations made eligible to receive Small Business Administration and Federal Housing Administration financing for nursing homes, following a campaign by the American Nursing Home Association.
- 1960: The first major nursing home scandals in NY
- 1960: Kerr-Mills Act provides matching federal-state funds for medically indigent
- 1964: First training program for geriatric nursing assistants
A brief history of nursing homes

- 1965: Medicare and Medicaid created. Medicare covers “post-hospital” stay of 100 days but no specific nursing home provision in Medicaid.
- 1965: Congress passes “Moss Amendments” legislation to improve nursing homes and standards.
- 1967: Medicare extended provisions go into effect.
- 1969: Intermediary Letter 371 issued by DHHS restricting much of the Medicare coverage for nursing homes previously allowed.
- 1971: Miller amendment creates “intermediate care facilities” with same level of federal reimbursement as nursing homes but less skilled nursing and resources.
• In 1986, the Institute of Medicine issued recommendation about nursing home care in a report titled “Improving the Quality of Care in Nursing Homes”

• In 1987 Ronald Reagan signed the Federal Nursing Home Reform Act
  • Also called ‘OBRA 87 (Omnibus Budget Reconciliation Act), the act created a set of national standards for the treatment of patients in nursing homes
  • Required that every nursing home resident “be provided with services sufficient to attain and maintain his or her highest practicable physical, mental and psycho-social well-being”
• Emphasis on a resident’s quality of life as well as the quality of care;
• New expectations that each resident’s ability to walk, bathe, and perform other activities of daily living will be maintained or improved absent medical reasons;
• A resident assessment process leading to development of an individualized care plan 75 hours of training and testing of paraprofessional staff;
• Rights to remain in the nursing home absent non-payment, dangerous resident behaviors, or significant changes in a resident’s medical condition;
• New opportunities for potential and current residents with mental retardation or mental illnesses for services inside and outside a nursing home;
• A right to safely maintain or bank personal funds with the nursing home; Rights to return to the nursing home after a hospital stay or an overnight visit with family and friends The right to choose a personal physician and to access medical records;
• The right to organize and participate in a resident or family council;
• The right to be free of unnecessary and inappropriate physical and chemical restraints;
• Uniform certification standards for Medicare and Medicaid homes;
• Prohibitions on turning to family members to pay for Medicare and Medicaid services; and
• New remedies to be applied to certified nursing homes that fail to meet minimum federal standards.
Nursing homes today: the numbers

- Current # nursing homes in 2007
  - In US: 15,281
  - In RI: 85

- # certified beds in nursing homes 2007
  - In US: 1,613,942
  - In RI: 8,581
Nursing homes today: the numbers

- # current residents (2007)
  - In US: 1,368,230
  - In RI: 7904

- Nursing home occupancy rates:
  - In US: 85%
  - In RI: 92%
Nursing homes today: the numbers

- Keep in mind that the 1.4 million residents of nursing homes aren’t the only ones who use the facilities.

- CMS estimates that 2.8 million patients had a nursing home stay in 2006 (this includes both long term residents and short stay after hospitalization)
Nursing homes today: the residents

- **Age**
  - 31-64: 12.5%
  - 65-74: 15.6%
  - 75-84: 34.4%
  - 85-94: 31.8%
  - 95+: 5.2%

- **Gender**
  - 66.5% female
  - 33.5% male
Figure 2.2. Percentage of Nursing Home Residents by Age Group and Year: United States, 2002-2006

Source: MDS
Nursing homes today: the residents

- % with Activity of Daily Living (ADL) limitations:
  - None: 30.3%
  - One: 8.3%
  - Two: 7.6%
  - Three: 9.0%
  - Four: 26.4%
  - Five: 18.5%
Nursing homes today: the residents

- % Residents by primary payer source
  - Medicaid: 64%
  - Medicare: 14%
  - Private/other: 22%
Nursing homes today: the staff

- Approximately 21% of workers in health services are employed by nursing and residential care facilities.

- Average of:
  - 7 RN per 100 beds
  - 11 LPN per 100 beds
  - 35 CNA per 100 beds

- Between 1999-2005, RN hours decreased by 25%, LPN decreased by 22% and CNA hours decreased by 7%.

- Avg RN hours/day/patient: 1

- Avg total nursing staff hours/day/pt: 4
Nursing homes today: the staff

- According to a recent government study, 9 out of 10 nursing homes lack adequate staffing
- In order to get the recommended number of staff, nursing homes would have to hire:
  - 77,000-137,000 nurses
  - 22,000-27,000 LPN’s
  - 181,000-310,000 CNA’s
- This would increase demand for nurses 5-7% and CNA’s 13-21%
- In 2002, 15% of nursing positions, 13% of LPN positions and 8.5% of CNA positions were vacant
Figure 5

TOTAL AVERAGE SATISFACTION BY JOB CATEGORY

JOB CATEGORY

Admin/ Nurse
Admin
Social Services/ Activities
Hskpg/ Lndry/ Maint.
Food Services
Other
Nursing Assistants
Nurse
Nursing homes today: the staff

- Rates of turnover:
  - RN (those in aging only): 49%
  - CNA (all): 71%
- 43% of nurses suffer from burnout
- Although staffing has remained rather constant, resident acuity has increased from a dependency of 3.7 ADLs to 3.98 ADLs
- Only 1 in 10 primary care physicians spends >2 hrs/wk in a nursing home
Nursing homes today: the ownership

- Approximately 10,240 (67%) nursing homes are proprietary
- Another 4,125 (27%) are voluntary nonprofit
- 1,200 (6%) are government and other
Figure 1.10. Percentage of For Profit Nursing Homes by State: United States, 2006

For Profit Nursing Homes
- 76.5 to 84.0 (9)
- 69.0 to 76.4 (12)
- 63.9 to 68.9 (12)
- 46.9 to 63.8 (10)
- 0.0 to 46.8 (8)

Source: OSCAR

NURSING HOME OF THE FUTURE
Nursing homes today: the facilities

- 30% of facilities have dementia-specific care with 27% having an Alzheimer’s or dementia-specific unit
- 25% have pain management programs
- About 20% have continence management programs
Nursing home today: the facilities

<table>
<thead>
<tr>
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<tr>
<td>Other location</td>
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<td>8,700</td>
</tr>
<tr>
<td>Independent</td>
<td>7,400</td>
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</tbody>
</table>
Nursing homes today: Medicare/Medicaid

- Medicare covers:
  - Up to 100 days of “skilled nursing care” per illness
  - Illness must follow at least 3 day hospitalization
  - Must enter Medicare approved “skilled-nursing facility”
  - Care in nursing home must be for same condition as in hospital
  - The first 20 days are covered 100%
  - On day 21, a copayment of $128/day is required
  - After day 100, all costs are covered by patient
  - Only coverage for skilled care not intermediate care or custodial care
Nursing homes today: Medicare/Medicaid

- Medicaid covers:
  - Skilled/intermediate or custodial care in home (in most states)
  - Usually must have less than $2000 in “countable assets” (usually does not include house or life insurance policies but varies by state)
  - Must contribute your whole monthly income except $30-90 personal needs allowance
  - Married couples can keep only the federal minimum levels of income ($1,561/month) and about $20,000 in assets
Nursing homes today: the cost

- Total spending for nursing homes reached $125 billion in 2006
- This is about a 1.5% decrease from 2005 partially attributable to a reduction in nursing home price growth
- Of this about $45 billion was paid for out of pocket or by private insurance/funds
- Medicaid: $54 billion
- Medicare: $21 billion
- Nursing home care costs account for about 6% of the nation’s overall health care spending
National Spending on Nursing Home and Home Health Care, 2006

**Nursing Home Care**

- Medicaid: 43%
- Out-of-Pocket: 26%
- Medicare: 17%
- Other: 6%
- Private Insurance: 7%

**Total = $124.9 billion**

**Home Health Care**

- Medicaid: 34%
- Out-of-Pocket: 11%
- Medicare: 38%
- Other*: 6%
- Private Insurance: 11%

**Total = $52.7 billion**

Note: Medicaid percentage includes spending through SCHIP. Other includes private and public funds. 
SOURCE: Kaiser Commission on Medicaid and the Uninsured, based on Health Affairs January/February 2008, CMS, National Health Accounts.
Nursing homes today: the cost

- Avg cost of private room NH (2007)
  - $213/day ($77,745/year)
- Avg cost of semi-private room NH
  - $189/day ($68,985/year)
- Avg cost AL community
  - $2,969/month ($35,628/year)
- Avg cost AL with dementia care
  - $4,270/month ($51,240/year)
What do you get for $200/day?

- **Nursing home ($213/day)**
  - 1 hour/day with a registered nurse and 4 hours/day with any staff
  - Private room: one or two twin beds, dresser, nightstand, closet, chair
  - Three meals/day
  - Activities: ie bingo, scrapbooking, sewing (varies by location)

- **Westin Providence ($239/day)**
  - Room
    - King bed, sofa bed, desk and chair, mini-bar, flat screen TV, refrigerator, cable/internet access, alarm clock, telephone with wake up service, voice mail, 24 hour room service, handicap accessible room and tub/shower, electronic safe, coffee maker
  - City view
  - Fitness center
  - Piano bar and steakhouse on premises
Vs.

NURSING HOME OF THE FUTURE
Risk factors for nursing home admission

- Prior nursing home use: 3.57
- Loss of ADL>3: 3.25
- Cognitive impairment: 2.54
- Loss of ADLs 1-2: 2.45
Medical conditions causing nursing home admission

- Diabetes
- Stroke
- Falls
- Cancer
- Incontinence
- Blood pressure
- Cardiovascular disease
Falls

- A typical nursing home with 100 beds reports 100-200 falls/year
- 3 out of 4 nursing home residents fall each year - double the rate for older adults living in the community
- The average number of falls/year/patient is 2.6
- 1/3 of falls result in injury
- Approximately 1800 NH patients die per year due to falls
Falls

- 16-27% of falls in nursing homes are caused by environmental hazards such as:
  - Wet floors
  - Incorrect bed position
  - Poor lighting
  - Improperly fitted or maintained wheelchairs
Osteoporosis

- 60% of nursing home residents have clinically low Vitamin D levels
- A recent study found that only 36% of NH residents with osteoporosis or a recent fall were provided with any fracture protection***
- Osteoporosis doubles the risk of fractures in the nursing home
Incontinence

- 34% of nursing home residents had a diagnosis of incontinence in 2006
- Incontinence causes about 10% of nursing home admissions at a cost of about $6 billion/year
- Incontinent patients have a higher risk of pressure ulcers
Figure 3.10. Median Prevalence of Severe Bowel and Bladder Incontinence in Nursing Home Residents by State: United States, Third Quarter 2006

Source: MDS

Nursing Home Compendium 2007

Percentage of Residents
- 45.0 to 52.7 (8)
- 38.0 to 44.9 (11)
- 30.0 to 37.9 (11)
- 24.8 to 29.9 (9)
- 16.5 to 24.7 (12)
Dementia

- 6-8% of people 65+ and 30% of those 85+ have some form of dementia
- 4.5 million people currently have Alzheimer’s disease in U.S. – the cost of caring for them is approximately $100 million
- The prevalence of Alzheimer’s is expected to quadruple by 2050
- 70% of people with Alzheimer’s disease will die in a nursing home
Diabetes

- Affects 25% of nursing home residents
- Affects 1 in 5 people 65+
- 5th most prevalent chronic condition in the elderly
- In one study, diabetes tripled the risk of nursing home admission in those aged 45-64
- Diabetics have an increased risk of pressure ulcers in the nursing home
Obesity

- A recent study found that 25% of patients newly admitted to a nursing home were obese.
- Those patients that are obese are more likely to have diabetes, arthritis.
- The medical cost of obesity in the U.S. in 2003 was approximately $75 billion.
- The medical cost of obesity in RI in 2003 was $305 million.
# Obesity

## Figure 3-15.

**Percent Distribution of People Aged 65 and Over Who Were Underweight, Healthy Weight, Overweight, and Obese by Age and Sex: 1999 to 2000**

<table>
<thead>
<tr>
<th></th>
<th>Obese</th>
<th>Overweight, but not obese</th>
<th>Healthy weight</th>
<th>Underweight</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Men</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65 to 74</td>
<td>33.4</td>
<td></td>
<td>43.8</td>
<td>21.5</td>
</tr>
<tr>
<td>75 and over</td>
<td>20.4</td>
<td></td>
<td>46.0</td>
<td>32.7</td>
</tr>
<tr>
<td><strong>Women</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>65 to 74</td>
<td>38.8</td>
<td></td>
<td>31.3</td>
<td>27.7</td>
</tr>
<tr>
<td>75 and over</td>
<td>25.1</td>
<td></td>
<td>34.5</td>
<td>37.4</td>
</tr>
</tbody>
</table>

1 A BMI less than 18.5 is considered underweight. Healthy weight is defined as a BMI of 18.5 to 24; overweight is defined as a BMI of 25 to 29; obese is defined as a BMI of more than 30; obese is therefore a subset of overweight.

Note: The reference population for these data is the civilian noninstitutionalized population.

Source: National Center for Health Statistics, 2003a, Table 70. For full citation, see references at end of chapter.
Macular degeneration

• Leading cause of blindness in those 55+
• Affects 1.75 million Americans
• By 2020, estimated 3 million people will suffer from MD
Macular Degeneration Comparison

Normal Vision

Age-related Macular Degeneration
Glaucoma

- Glaucoma: disturbance of the structural or functional integrity of the optic nerve that causes atrophic changes in the nerve and may lead to visual field loss often due to increased intraocular pressure

- Second leading cause of irreversible blindness (1st is macular degeneration)

- There are an estimated 9 million physician visits/year due to glaucoma**
  - Primary open angle: chronic and progressive (90% cases, 2.2 million Americans 40+)

- Another 1 million Americans have glaucoma but don’t realize it because they have no symptoms
  - Estimated to increase 50% to 3.6 million by 2020

- 1.6 million with significant visual impairment
  - About 100,000-120,000 blind bilaterally

- Acute angle-closure: ocular emergency (10% cases)
  - Prevalence heavily dependent on race: 1/1000 Caucasians, 1/100 Asians, 2-4/100 Eskimos
  - Elderly women most at risk
Arthritis

- Affects 60% of the population over 65 and is the leading cause of disability in this age group
- 21.4 million people over 65 had arthritis or chronic joint symptoms in 2005
- By 2030, that number is expected to double to 41.1 million sufferers in this age group alone
Stroke

• 3rd leading cause of death in 65+ age group (all cerebrovascular disease)

• The lifetime risk for stroke at age 65 is about 15%

• 35% of stroke related deaths occur in the nursing home
Pressure ulcers

- Seventeen percent to 35% of patients have pressure ulcers at the time of admission to a nursing home.
- The prevalence of pressure ulcers among nursing home residents ranges from 7% to 23%.
- Federal law ("F-Tag 314") requires that nursing homes ensure that:
  - A resident who enters the facility without pressure sores does not develop pressure sores unless the individual’s clinical condition demonstrates that they were unavoidable.
  - A resident having pressure sores receives necessary treatment and services to promote healing, prevent infection and prevent new sores from developing.
Depression

- An estimated 15% of community dwelling elders and 25% of the nursing home population have depressive symptoms.
- 15 elderly suicides occur every day; 1 every 95 minutes.
- The prevalence of undiagnosed and untreated depression in the elderly is estimated at 6-20%.
A need for change....

- Facilities in need of renovation
- Facilities in need of replacement
Deficiencies in Care

- % nursing homes surveys by CMMS that resulted in a health deficiency of actual harm or immediate jeopardy to residents: 18%
  - For profit: 19% | Not for profit: 15% | Government: 17.5%

- % nursing homes surveys by CMMS that resulted in a deficiency for substandard quality of care: 3.4%
  - For profit: 3.8% | Not for profit: 2.4% | Government: 3.4%

- % nursing home surveys by CMMS that resulted in a deficiency for use of restraints: 9.8%
  - For profit: 10.2% | Not for profit: 8.8% | Government: 9.6%

- % nursing home surveys by CMMS that resulted in a deficiency for failure to treat or prevent pressure ulcers: 18.3%
  - For profit: 18.4% | Not for profit: 18.1% | Government: 17%
% nursing facilities with top ten deficiencies, 2007

- Accident environment: 37%
- Food sanitation: 35%
- Quality of care: 29%
- Professional standards: 28%
- Comprehensive care plans:
- Housekeeping: 20%
- Incontinence/Urinary care: 19%
- Pressure sores: 19%
- Unnecessary drugs: 19%
- Infection control: 18%
A need for change

- As of Oct 2007, 128 nursing homes were labeled “Special Focus Facilities” by CMS
- These facilities had survey results in the lowest 5 or 10 percent of their state
- These facilities enter into an initiative with CMS to improve or they will be terminated from Medicare/Medicaid
A need for change

- According to a recent study done by UCLA, “vulnerable elders” received only 65% of the tests and other diagnostic evaluation recommended for a variety of illness and conditions.

- Only 42% of patients with diabetes were tested to gauge blood sugar control or had an eye examination in the one year study period.
The future of nursing homes

- The coming tsunami
- Greenhouse model
- Culture change
Nursing home of the future: the residents

• By 2030, an estimated 5 million people with need nursing home care if the current trends continue

• About 12 million people with need LTC overall
Nursing homes of the future: the facilities

- How many more nursing homes will we need?
  - Current # residents: 1.6 million
  - Projected # residents: 5 million
  - Projected % increase: 313%
  - Current # nursing homes: 16,000
  - Estimated # NH needed: 53,000
Nursing homes of the future: the staff

- Currently 35% of nurses and 20% of nursing assistants are over 50 years of age
- Nursing homes will need an estimated 66% more nurses by 2020
Nursing home of the future: the costs

• In 2015, national spending on nursing homes is expected to reach $195 billion
  • About $50 billion will be out of pocket spending
  • About $20 billion will be private insurance or other private funds
  • $128 billion will be public funding (ie Medicare/Medicaid)
• The cost for a semi-private room in 2030 was estimated at $190,000
• Total spending on nursing home care in 2030 is estimated at $700 billion
Culture change

- A recent survey of nursing homes found that:
  - 5% reported culture change or resident centered change “completely” described their home
  - About 25% said their nursing home “for the most part” fits the culture change description
  - These 31% (number rounded) of homes are considered culture change adopters (see pie chart next page)
  - Culture change strivers were those homes that had somewhat or not all adopted culture change but their leadership were interested in change
  - Traditional are those that had not adopted culture change and their leaders were not interested in adopting it
Culture change

Figure ES-1. Adoption of Culture Change by Nursing Homes, 2007

Categories of Nursing Homes, by Extent of Culture Change Adoption

- **Culture Change Adopters**: 31%
- **Culture Change Strivers**: 25%
- **Traditional**: 43%

Culture change definition*: completely or for the most part describes nursing home

Culture change definition*: describes nursing home only in a few respects or not at all, and leadership is not very committed to adopting culture change

Culture change definition*: describes nursing home only in a few respects or not at all, but leadership is extremely or very committed to adopting culture change

* Culture change or a resident-centered approach means an organization that has home and work environments in which: care and all resident-related activities are decided by the resident, living environment is designed to be a home rather than institution; close relationships exist between residents, family members, staff, and community; work is organized to support and allow all staff to respond to residents’ needs and desires; management allows collaborative and group decision making, and processes/measures are used for continuous quality improvement.

Culture change

Figure ES-2. Residents’ Ability to Determine Daily Schedules and Make Decisions Varies Widely Between Culture Change Adopters and Traditional Nursing Homes

Percent of nursing homes indicating they are currently implementing:

- Residents able to determine their own daily schedules: 58% Culture Change Adopters, 28% Culture Change Strivers, 22% Traditional
- Resident-centered bathing techniques, like “Bathing Without a Battle”: 64% Culture Change Adopters, 45% Culture Change Strivers, 37% Traditional
- Residents are actively involved in decisions regarding their residence: 70% Culture Change Adopters, 39% Culture Change Strivers, 27% Traditional

Culture Change Adopters = culture change definition completely or for most part describes nursing home. Culture Change Strivers = culture change definition describes nursing home only in a few respects or not at all but leadership is very/extremely committed to the adoption of culture change. Traditional = culture change definition describes nursing home only in a few respects or not at all AND leadership is less than very/extremely committed to the adoption of culture change.

Culture change

Figure ES-3. Improvements in Business and Operations Greatest in Homes with More Culture Change Initiatives Under Way

Percent of nursing homes indicating that culture change has had the following impact:
(Base: Definition of culture change describes this nursing home completely, for the most part, or in a few respects)

<table>
<thead>
<tr>
<th>Initiative Level</th>
<th>Culture change improved competitive position in market area</th>
<th>Culture change improved occupancy rate</th>
<th>Culture change improved operational costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Number of Initiatives</td>
<td>78</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>Medium Number of Initiatives</td>
<td>73</td>
<td>57</td>
<td>35</td>
</tr>
<tr>
<td>Low Number of Initiatives</td>
<td>54</td>
<td>44</td>
<td>31</td>
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</tbody>
</table>

* Respondents were asked whether their home was currently implementing any of 11 different resident-centered, staff, or physical environment initiatives associated with culture change. High = 7 or more initiatives; Medium = 4 to 6 initiatives; Low = 3 or less initiatives.