Chronic Disease and Aging

Health Education Administration Network

at The California Endowment

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Los Angeles County Department of Public Health
Overview

- The aging population in Los Angeles County
- Chronic disease burden in Los Angeles County
- Public health and aging
- Office of Senior Health
Los Angeles County – Background

- 4,300 square miles
- 88 incorporated cities, unincorporated areas, and 2 islands
- Approx. 10.2 million residents (more than 42 States)
- 46% Latino, 32% White, 13% Asian/Pacific Islander, 10% African American, 0.3% American Indian
- Over 100 different languages spoken by significant size populations
- 15% living in poverty (14% of families & 24% <18)
- 22% of adults & 8% of children have no health insurance
An Aging Population:
Percentage of U.S. Population over Age 65

Source: From Baby Boom to Elder Boom: Providing Health Care for an Aging Population
An Aging Population: Percentage of LA County Population over Age 65

Source: Data from the California Department of Finance
Source: Data from the California Department of Finance & the U.S. Census
Chronic Disease and Aging

- Risk of developing a chronic disease increases with age
- Having concurrent chronic conditions (more than one) also increases with age
- Costs of emerging chronic conditions in this population (e.g., Alzheimer’s, vascular dementia, osteoporosis)
- Generally, population is living longer; Baby Boomer generation may be working longer as well leading to potentially older workforce (workplace wellness?)
- But healthcare costs also rising
- Leading causes of death still largely lifestyle related or due to preventable risks (poor diet, physical inactivity, tobacco use, injuries, falls, etc.)
- Housing insecurity, transportation access, and food quality
- Long term care quality and costs (e.g., skilled nursing homes, custodial care, assisted living)
<table>
<thead>
<tr>
<th>Specified age and year</th>
<th>All races</th>
<th></th>
<th></th>
<th>White</th>
<th></th>
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<th>Black or African American¹</th>
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<td></td>
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<td>Female</td>
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<td>Female</td>
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<td>76.8</td>
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<td>79.4</td>
<td>77.1</td>
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<td>75.0</td>
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<tr>
<td>2002</td>
<td>77.3</td>
<td>74.5</td>
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<tr>
<td>2004</td>
<td>77.8</td>
<td>75.2</td>
<td>80.4</td>
<td>78.3</td>
<td>75.7</td>
<td>80.8</td>
<td>73.1</td>
</tr>
</tbody>
</table>

*Data are based on death certificates.*

*Updated February 2007*
Life Expectancy at Birth by Sex and Race/Ethnicity, Los Angeles County, 2000

Life expectancy in LA County increased by approx 2.6 years from 1991 to 2000

Source: 1991 PEPS and Census 2000 Summary File 1
Los Angeles County Public Health, Office of Health Assessment and Epidemiology
Prevalence of Chronic Conditions in the U.S. by Age Group, 1998

- **Ages 0-17**: 23% have 1 or more chronic conditions, 5% have 2 or more chronic conditions
- **Ages 18-64**: 45% have 1 or more chronic conditions, 20% have 2 or more chronic conditions
- **Ages 65+**: 85% have 1 or more chronic conditions, 62% have 2 or more chronic conditions

SOURCE: Medical Expenditure Panel Survey, 1998
Anderson, G., Public Health Reports, 2004
National Trends of Prescribing Diuretics and Beta-Blockers

Source: Ma, Lee, and Stafford (2005)
National Trends in Statin and Other Lipid-Lowering Drug Use

Source: Ma, Sehgal, Ayanian, and Stafford (2005)
Multiple medication use in the aging population

Fig. 3. Proportions (%) of users of prescription drugs among the community-dwelling elderly in Lieto in 1990–91 and 1998–99 by therapeutic classes (ATC codes) of medications. Information about medication use during seven days prior to the interview was collected. p-values are based on Chi-square test. *p ≤ 0.05; **p ≤ 0.01; ***p ≤ 0.001.
Multiple medication use in the aging population

Fig. 2. Mean number of prescribed medicines in use among medication using elderly persons in Lieto in 1990–91 and 1998–99 by sex and age. Information about medication use during seven days prior to the interview was collected. p-values are based on t-test. *p ≤ 0.05; **p ≤ 0.01; ***p ≤ 0.001.
# Leading Causes of Death in the U.S. and LA County

<table>
<thead>
<tr>
<th>United States</th>
<th>Los Angeles County</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ischemic heart disease</td>
<td>Ischemic heart disease</td>
</tr>
<tr>
<td>Malignant cancers</td>
<td>Cerebrovascular disease</td>
</tr>
<tr>
<td>Cerebrovascular disease</td>
<td>Lung cancer</td>
</tr>
<tr>
<td>COPD/emphysema</td>
<td>COPD/emphysema</td>
</tr>
<tr>
<td>Accidents (unintentional)</td>
<td>Lower respiratory infections</td>
</tr>
<tr>
<td>Diabetes</td>
<td>Diabetes</td>
</tr>
<tr>
<td>Alzheimer’s</td>
<td>Colon and rectum cancers</td>
</tr>
<tr>
<td>Lower respiratory infections</td>
<td>Alzheimer’s</td>
</tr>
<tr>
<td>Renal diseases</td>
<td>Breast cancer</td>
</tr>
<tr>
<td>Septicemia</td>
<td>Homicide</td>
</tr>
</tbody>
</table>

Leading Causes of Death Based on Crude Mortality, Los Angeles County, 2004

- Coronary heart disease: 15,296
- Stroke: 4,121
- Lung cancer: 3,034
- Emphysema: 2,641
- Pneumonia & influenza: 2,272
- Diabetes: 2,201
- Colorectal cancer: 1,414
- Alzheimer's disease: 1,340
- Breast cancer: 1,166
- Homicide: 1,069

Number of deaths
Leading Causes of Disability-Adjusted Life Years (DALYs) in Los Angeles County, 1998

- Coronary Heart Disease: 70,248 DALYs
- Alcohol Dependence: 62,993 DALYs
- Depression: 45,098 DALYs
- Diabetes Mellitus: 41,740 DALYs
- Osteoarthritis: 36,727 DALYs
- Homicide/Other Violence: 36,285 DALYs
- Stroke: 32,130 DALYs
- Alzheimer's/Other Dementia: 30,707 DALYs
- Lung Cancer: 28,818 DALYs
- Drug Overdose/Other Intoxication: 28,454 DALYs
## Leading causes of death

**Mortality in Los Angeles County 2004**

**Figure 7. Comparison of the leading causes of death, by age group**

<table>
<thead>
<tr>
<th>Age group</th>
<th>Age-specific death rate</th>
<th>#1 cause</th>
<th>#2 cause</th>
<th>#3 cause</th>
<th>#4 cause</th>
<th>#5 cause</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Number of deaths</td>
<td>Number of deaths</td>
<td>Number of deaths</td>
<td>Number of deaths</td>
<td>Number of deaths</td>
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<td></td>
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<td>Age-specific death rate</td>
<td>Age-specific death rate</td>
<td>Age-specific death rate</td>
<td>Age-specific death rate</td>
<td>Age-specific death rate</td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>757</td>
<td>Low birthweight/prematurity 137</td>
<td>Congenital heart defect 53</td>
<td>Fatal/neonatal hemorrhage 27</td>
<td>Respiratory distress 17</td>
<td>Complication of placenta/cord 15</td>
</tr>
<tr>
<td></td>
<td>490 per 100,000</td>
<td>89 per 100,000</td>
<td>34 per 100,000</td>
<td>17 per 100,000</td>
<td>16 per 100,000</td>
<td>23 per 100,000</td>
</tr>
<tr>
<td>1-4 years</td>
<td>140</td>
<td>Birth defect 20</td>
<td>Motor vehicle crash 18</td>
<td>Drowning 10</td>
<td>Pneumonia/influenza 10</td>
<td>Homicide 9</td>
</tr>
<tr>
<td></td>
<td>223 per 100,000</td>
<td>5 per 100,000</td>
<td>2 per 100,000</td>
<td>10 per 100,000</td>
<td>10 per 100,000</td>
<td>9 per 100,000</td>
</tr>
<tr>
<td>5-14 years</td>
<td></td>
<td>Motor vehicle crash 226</td>
<td>Homicide 25</td>
<td>Birth defect 19</td>
<td>Brain/CNS cancer 19</td>
<td>Leukemia 13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 per 100,000</td>
<td>2 per 100,000</td>
<td>19 per 100,000</td>
<td>19 per 100,000</td>
<td>13 per 100,000</td>
</tr>
<tr>
<td>15-24 years</td>
<td>1,062</td>
<td>Homicide 441</td>
<td>Motor vehicle crash 196</td>
<td>Suicide 95</td>
<td>Drug overdose 265</td>
<td>Birth defect 19</td>
</tr>
<tr>
<td></td>
<td>74 per 100,000</td>
<td>31 per 100,000</td>
<td>14 per 100,000</td>
<td>7 per 100,000</td>
<td>2 per 100,000</td>
<td>19 per 100,000</td>
</tr>
<tr>
<td>25-44 years</td>
<td>3,855</td>
<td>Homicide 442</td>
<td>Motor vehicle crash 310</td>
<td>Drug overdose 265</td>
<td>HIV 258</td>
<td>Coronary heart disease 246</td>
</tr>
<tr>
<td></td>
<td>116 per 100,000</td>
<td>14 per 100,000</td>
<td>10 per 100,000</td>
<td>26 per 100,000</td>
<td>8 per 100,000</td>
<td>8 per 100,000</td>
</tr>
<tr>
<td>45-64 years</td>
<td>11,434</td>
<td>Coronary heart disease 2,355</td>
<td>Lung cancer 766</td>
<td>Liver disease 565</td>
<td>Diabetes 510</td>
<td>Stroke 509</td>
</tr>
<tr>
<td></td>
<td>517 per 100,000</td>
<td>107 per 100,000</td>
<td>35 per 100,000</td>
<td>26 per 100,000</td>
<td>23 per 100,000</td>
<td>21 per 100,000</td>
</tr>
<tr>
<td>65-74 years</td>
<td>9,401</td>
<td>Coronary heart disease 437</td>
<td>Lung cancer 170</td>
<td>Stroke 106</td>
<td>Emphysema/COPD 97</td>
<td>Diabetes 96</td>
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<tr>
<td></td>
<td>1,782 per 100,000</td>
<td>100 per 100,000</td>
<td>100 per 100,000</td>
<td>103 per 100,000</td>
<td>97 per 100,000</td>
<td>96 per 100,000</td>
</tr>
<tr>
<td>75+ years</td>
<td>32,470</td>
<td>Coronary heart disease 10,383</td>
<td>Stroke 2,948</td>
<td>Emphysema/COPD 1,850</td>
<td>Pneumonia/influenza 1,850</td>
<td>Lung cancer 1,331</td>
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<tr>
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<td>6,442 per 100,000</td>
<td>2,080 per 100,000</td>
<td>385 per 100,000</td>
<td>367 per 100,000</td>
<td>367 per 100,000</td>
<td>264 per 100,000</td>
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<tr>
<td>Los Angeles County Total</td>
<td>59,153</td>
<td>Coronary heart disease 15,296</td>
<td>Stroke 4,121</td>
<td>Lung cancer 3,034</td>
<td>Emphysema/COPD 2,541</td>
<td>Pneumonia/influenza 2,272</td>
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<tr>
<td></td>
<td>699 per 100,000***</td>
<td>176 per 100,000</td>
<td>48 per 100,000</td>
<td>35 per 100,000</td>
<td>31 per 100,000</td>
<td>26 per 100,000</td>
</tr>
</tbody>
</table>

Notes: Los Angeles County Total includes persons of unknown age.
Trends in the Leading Causes of Death, e.g., Los Angeles County, 1993-2004

<table>
<thead>
<tr>
<th>Cause of death</th>
<th>1993</th>
<th>2004</th>
<th>Percent change</th>
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</thead>
<tbody>
<tr>
<td>Coronary heart disease</td>
<td>283</td>
<td>176</td>
<td>-37.8%</td>
</tr>
<tr>
<td>Stroke</td>
<td>63</td>
<td>48</td>
<td>-23.8%</td>
</tr>
<tr>
<td>Lung cancer</td>
<td>49</td>
<td>35</td>
<td>-28.6%</td>
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<tr>
<td>Emphysema</td>
<td>34</td>
<td>31</td>
<td>-8.8%</td>
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<tr>
<td>Pneumonia/influenza</td>
<td>45</td>
<td>26</td>
<td>-42.2%</td>
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<tr>
<td>Diabetes</td>
<td>16</td>
<td>25</td>
<td>+56.3%</td>
</tr>
<tr>
<td>Colorectal cancer</td>
<td>21</td>
<td>16</td>
<td>-23.8%</td>
</tr>
<tr>
<td><strong>Alzheimer’s disease</strong></td>
<td>4</td>
<td>16</td>
<td>+300.0%</td>
</tr>
<tr>
<td>Breast cancer</td>
<td>30</td>
<td>23</td>
<td>-23.3%</td>
</tr>
<tr>
<td>Homicide</td>
<td>20</td>
<td>10</td>
<td>-50.0%</td>
</tr>
<tr>
<td>HIV/AIDS</td>
<td>26</td>
<td>5</td>
<td>-80.8%</td>
</tr>
</tbody>
</table>

* age-adjusted to year 2000 U.S. standard population
Movements in Wrong Direction

- Alzheimer’s Disease – As population continues to live longer, disease will become more common
- Diabetes – Increase in all Type 2, directly correlated with increase in overweight and obesity
- While not on list, dental disease is very common, often inadequately treated—and mostly preventable
Estimated Number Of New Alzheimer Cases (In Thousands)


Year
1995 2000 2010 2020 2030 2040 2050
New Cases in Thousands
0 200 400 600 800 1000 1200

1995: 377
2000: 411
2010: 454
2020: 491
2030: 615
2040: 820
2050: 959
Alzheimer's Disease Age-Adjusted Rates* per 100,000 Population, by Race/Ethnicity, Los Angeles County, 1994-2003

*Death rates adjusted using the 2000 standard population published by the National Center for Health Statistics. ICD classifications changed in 1999; therefore, rate estimates may not be comparable to the change in classification system. Source: LA County Dept. Public Health (2006).
Alzheimer's Disease Age-Adjusted Mortality Rates* per 100,000 Population, Los Angeles County, 1994-2003

Impact of Alzheimer’s Disease

- Healthcare costs – medical care; hospitalizations; skilled nursing; home care; long term care costs often lead to depletion of patient’s personal savings and assets

- Personal costs – disease progression with memory loss, wandering, behavioral problems, injuries, depression

- Caregiving – caregiver stress, caregiver illness, paid and unpaid costs of caregiving

- Costs to businesses – absenteeism due to caregiving, lost productivity, etc.
Impact of Alzheimer’s Disease on Caregivers

• Almost 10 million Americans are caring for a person with Alzheimer’s disease and other dementias.

• In 2005, it is estimated that unpaid caregivers of people with Alzheimer’s disease and other dementias provided 8.5 billion hours of care valued at almost $83 billion dollars.
Chronic Disease & the U.S. Health Care System

- U.S. Health Care Expenditures: $2 trillion in 2006 (16% of GDP)
- Medicare and Medicaid accounting for more than $400 billion and $300 billion, respectively
- 47 million uninsured in the U.S.
- At least 16 million more underinsured
- Pressures from pharmaceuticals, technological advances, and globalization
Chart II-2
Health Care Spending per Capita from 1980 to 2004
Adjusted for Differences in Cost of Living

Source: The Commonwealth Fund, calculated from OECD Health Data 2006.
Per Capita Healthcare Spending in the U. S. by Number of Chronic Conditions, 1998

SOURCE: Medical Expenditure Panel Survey, 1998
Anderson, G., Public Health Reports, 2004

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Total spending (billions $)</td>
<td>75</td>
<td>255</td>
<td>917</td>
<td>1,359</td>
<td>1,878</td>
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<tr>
<td>Spending per capita ($)</td>
<td>357</td>
<td>1,106</td>
<td>3,461</td>
<td>4,729</td>
<td>6,280</td>
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<tr>
<td>Spending as percent of GDP</td>
<td>7.2%</td>
<td>9.1%</td>
<td>13.8%</td>
<td>13.8%</td>
<td>16.0%</td>
</tr>
</tbody>
</table>

Source: Smith, et.al., Health Affairs, 2006
Average Costs for Chronic Conditions (with or without Alzheimer’s Disease)

- **Coronary Heart Disease**: $21,538
- **Diabetes**: $19,994
- **Chronic Obstructive Pulmonary Disease**: $23,693

With Alzheimer’s:
- **Coronary Heart Disease**: $11,078
- **Diabetes**: $8,011
- **Chronic Obstructive Pulmonary Disease**: $12,450
Long term care expenditures

Figure 4: Expenditures on Long-term Care for the Elderly

- Private Insurance: 4%
- Medicare: 24%
- Medicaid: 36%
- Out of Pocket: 36%

Total Expenditures: $123 Billion

Source: Knickman & Snell, HSR, 2002
Four “Aging Shocks”

Table 1: Expected Lifetime Costs of Significant “Aging Shocks” for a 65-Year-Old Today

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uncovered Prescription Drugs</td>
<td>$12,000</td>
</tr>
<tr>
<td>Uncovered Medical Care</td>
<td>$16,000</td>
</tr>
<tr>
<td>Uncovered Insurance Premiums</td>
<td>$18,000</td>
</tr>
<tr>
<td>Uncovered Long-term Care</td>
<td>$44,000</td>
</tr>
</tbody>
</table>

*Estimates calculated by authors. See footnote 1 for assumptions used.*

Source: Knickman & Snell, HSR, 2002
Solutions? What experts suggest…

1. Creating a finance system for long-term care that works
2. Building a viable and affordable community-based delivery system
3. Investing in healthy aging in order to achieve lower disability rates, and
4. Recharging the concept of family and the value of seniors in American culture.

Source: Knickman & Snell, HSR, 2002
Conceptual Framework for Patterns of Determinants of Health

Determinants of Health

Figure 1. Determinants of Health and Their Contribution to Premature Death.
Adapted from McGinnis et al.¹⁰

Source: Schroeder, NEJM
Figure 2. Numbers of U.S. Deaths from Behavioral Causes, 2000.
Among the deaths from smoking, the horizontal bar indicates the approximately 200,000 people who had mental illness or a problem with substance abuse. Adapted from Mokdad et al.\textsuperscript{12}

Source: Schroeder, NEJM
How do we rank worldwide? U.S. vs. other developed nations that make up the Organization for Economic Cooperation and Development (OECD)

<table>
<thead>
<tr>
<th>Health-Status Measure</th>
<th>United States</th>
<th>U.S. Rank in OECD</th>
<th>Top-Ranked Country in OECD*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant mortality (first year of life), 2001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All races, 6.8 deaths/1000 live births</td>
<td>25</td>
<td>Iceland (2.7 deaths/1000 live births)</td>
<td></td>
</tr>
<tr>
<td>Whites only, 5.7 deaths/1000 live births</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal mortality, 2001†</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All races, 9.9 deaths/100,000 births</td>
<td>22</td>
<td>Switzerland (1.4 deaths/100,000 births)</td>
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<tr>
<td>Whites only, 7.2 deaths/100,000 births</td>
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<tr>
<td>Life expectancy from birth, 2003</td>
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<tr>
<td>All women, 80.1 yr</td>
<td>23</td>
<td>Japan (85.3 yr)</td>
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<tr>
<td>White women, 80.5 yr</td>
<td>22</td>
<td></td>
<td></td>
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<tr>
<td>All men, 74.8 yr</td>
<td>22</td>
<td>Iceland (79.7 yr)</td>
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<tr>
<td>White men, 75.3 yr</td>
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<td>Life expectancy from age 65, 2003</td>
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<tr>
<td>All women, 19.8 yr</td>
<td>10</td>
<td>Japan (23.0 yr)</td>
<td></td>
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<tr>
<td>White women, 19.8 yr</td>
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<td></td>
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<tr>
<td>All men, 16.8 yr</td>
<td>9</td>
<td>Iceland (18.1 yr)</td>
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</tr>
<tr>
<td>White men, 16.9 yr</td>
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</table>

* The number in parentheses is the value for the indicated health-status measure.
† OECD data for five countries are missing.
‡ OECD data for six countries are missing.
How We Can Approach Chronic Disease

• Approach 1 – Treating disease condition
  – e.g. enhancing chronic disease management for such conditions as diabetes, congestive heart failure or hypertension
• Approach 2 – Reducing risk factors for disease
  – e.g. improve nutrition and increase physical activity to prevent chronic disease and functional decline
• Approach 3 – Focus on underlying determinants of disease
  – e.g. ensure opportunities for people to achieve optimal health by
    • Establishing better protocols or tools for health assessment and surveillance of common chronic diseases – quality data for policy development
    • Addressing policies and regulations which affect the health of older adults
    • Supporting community-based programs or initiatives that promote better diet and maintenance of functional status
    • Supporting the development and changes in the social and physical environments so people can be more physically active, adopt healthier lifestyles, and have access to social and health care services
Effectiveness of Chronic Disease Self-Management Programs

- Of 780 studies screened, 53 studies contributed data to the random-effects meta-analysis
- Data on diabetes, osteoarthritis and hypertension:
  - Self-management interventions led to a statistically and clinically significant pooled effect size of:
    1) -0.36 (95% CI, -0.52 to -0.21) for hemoglobin A1c, equivalent to a reduction in HgbA1c level of about 0.81%.
    2) Decreased systolic blood pressure by 5 mm Hg (effect size, -0.39 [CI, -0.51 to -0.28]).
    3) Decreased diastolic blood pressure by 4.3 mm Hg (effect size, -0.51 [CI, -0.73 to -0.30]).
    4) Data on osteoarthritis statistically significant but clinically trivial for pain and function outcomes.

Return-on-Investment From Changes in Employee Health Risks on A Company’s Health Care Costs

- Estimate of the impact of corporate health-management and risk-reduction programs for The Dow Chemical Company using a prospective return-on-investment (ROI) model
- Methods: risk and expenditure estimates derived from multiple regression analyses
- Results: “Break-even” scenario would require company to reduce each of 10 population health risks by 0.17% points per year over course of 10 years
- Conclusion: results support continued investments in health improvement programs to achieve risk reduction and cost savings

Example: Physical Activity Among Older Adults

- Decreases mortality
- Prevents obesity
- Improves functioning
- Improves health-related quality of life
- Decreases depression
- Risk reduction
  - Cardiovascular disease
  - Stroke
  - Cancer (coupled to changes in dietary factors)
  - High blood pressure
  - Diabetes
  - Cognitive impairment (e.g., vascular dementia)
  - And many more…
What is being done to promote physical activity among older adults?

- Good news
  - Solid evidence on the effect of various programs aimed to promote physical activity among older adults, but much more research and planning are needed
  
  - Most physical activity programs consist of aerobic, flexibility, strength, or balance exercises. Some are beginning to employ environmental strategies and home-based programming (e.g., crosswalk safety, older pedestrian safety, outdoor & indoor fall prevention)

  - Other approaches include interventions which identify and target factors that maximize adherence (e.g., improving self-efficacy, social networks, etc.)
What is being done to promote physical activity among older adults?

• Bad news
  – Many public health professionals and government leaders are unaware of this evidence for promoting physical activity among older adults
  – Aging population is growing rapidly, accounting for greater healthcare utilization and medical care costs; prevention messages often lost in the dialogue about chronic disease prevention and control (where health education can play a significant role not only for the public but for healthcare and social services providers)
Ongoing Challenges to Determine Effective Interventions

- Where is the research base?
- Relatively few studies
- Many studies not in “health” or “public health” literature
- Not amenable to design and methods used in most clinical trials
Office of Senior Health
Los Angeles County Department of Public Health

- Recently established
- Housed in the Division of Chronic Disease and Injury Prevention
- Represents public health commitment to improve the quality of life and to provide leadership and guidance in the prevention and control of common chronic diseases and other emerging public health problems in the aging population.
- Mission: “to maximize the health, quality of life, and access to best practices in health care and public health for all older adults and their families in Los Angeles County”
DIVISION OF CHRONIC DISEASE AND INJURY PREVENTION

DIRECTOR OF PUBLIC HEALTH & HEALTH OFFICER
Jonathan E. Fielding, MD, MPH

DIVISION DIRECTOR
Paul Simon, MD, MPH
Chief Physician II

ADMINISTRATIVE SUPPORT
Pat Schenk
Assistant Staff Analyst, Health
(4 FTE)

PLACE PROGRAM
Director
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Senior Staff Analyst, Health MAPP (1)
(4 FTE)

OFFICE OF HEALTH ASSESSMENT & EPIDEMIOLOGY
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Director
Patti Culross, MD, MPH
Physician Specialist
(18 FTE)

OFFICE OF SENIOR HEALTH
Director
Tony Kuo, MD, MSHS
Senior Physician
(3 FTE)

PHYSICAL ACTIVITY & CARDIOVASCULAR HEALTH PROGRAM
Director
Eloisa Gonzalez, MD, MPH
Physician Specialist
(9 FTE)

NUTRITION PROGRAM
Director
Jean Tremaine, MPH
Staff Analyst, Health
(17 FTE)

TOBACCO CONTROL & PREVENTION PROGRAM
Director
Linda Aragon, MPH
Senior Staff Analyst, Health MAPP (1)
(31 FTE)
Goals

• **Visibility** (collaboration with community stakeholders and aging services network partners)
• **Credibility** (quality data for policy development)
• **Full-fill the 3 core functions of public health**
  - Health assessment, epidemiology (research) & surveillance
  - Policy development
  - Assurance/public safety/health education
• **Where we can thrive and have:**
  - quality data, policy development, and translation of evidence into practice (e.g., health education of the public *and* healthcare workforce
The Aging Services Network in Los Angeles County

- LA County Commission on Aging
- LA County Department of Community and Senior Services
- LA City Department of Aging
- The two Area Agencies on Aging (AAA’s) – unique to LA County
- Community-based organizations
- Faith-based organizations
- Foundations
Policy Development & Implementation: Case Study -- Alzheimer’s Disease

Press conference
1) Community advocacy, public education +
2) Quality Data (LACPH)

Media Coverage → Senator’s Office → Bill → State Public Health

???
Results
Healthcare Workforce: Training, Professional Development & Practice: e.g., Alzheimer’s Disease Clinical Practice Guidelines

Guideline for Alzheimer’s Disease Management

Assessment
- Monitor Changes
  - Conduct and document an assessment and monitor changes in:
    - Daily functioning, including feeding, bathing, dressing, mobility, toileting, continence, and ability to manage finances and medications
    - Cognitive status using a reliable and valid instrument
    - Cardiovascular medical conditions which may present with sudden worsening in cognition, function, or as change in behavior
    - Behavioral symptoms, psychiatric symptoms, and depression
    - Medications, both prescription and non-prescription (at every visit)
    - Living arrangement, safety, care needs, and abuse and/or neglect
- Reassess Frequently
  - Reassessment should occur at least every 6 months, and sudden changes in behavior or increase in the rate of decline should trigger an urgent visit to the PGP

Support
- Identify Support
  - Identify the primary caregiver and assess the adequacy of family and other support systems, paying particular attention to the caregiver’s well-being and end-of-life care planning

Treatment
- Develop Treatment Plan
  - Develop and implement an ongoing treatment plan with defined goals, discuss with patient and family:
    - Use of cholinesterase inhibitors, NMDA antagonist, and other medications, if clinically indicated, to treat cognitive decline
    - Referral to early stage groups or adult day services for appropriate structured activities, such as physical exercise and recreation

- Treat Behavioral Symptoms
  - Treat behavioral symptoms and mood disorders using:
    - Non-pharmacologic approaches, such as environmental modification, task simplification, appropriate activities, etc.
    - Referral to social service agencies or support organizations, including the Alzheimer’s Association’s Memory & Safe Reaching program for patients who may wander

- Non-Pharmacological Treatment First
  - If non-pharmacological approaches prove unsuccessful, they use medications, targeted to specific behaviors, if clinically indicated. Note that side effects may be serious and significant.

- Treat Co-Morbid Conditions
  - Provide appropriate treatment for co-morbid medical conditions.

- Provide End-of-Life Care
  - Provide appropriate end-of-life care, including palliative care as needed.

Patient & Family Education & Support
- Integrate Medical Care & Support
  - Integrate medical care with education and support by engaging patient and caregiver to support organizations for linguistically and culturally appropriate educational materials and referrals to community resources, support groups, legal counseling, respite care, consultation on care needs and options, and financial resources.
  - Organizations include:
    - Alzheimer’s Association (800-272-3900; www.alz.org)
    - Caregiver Resource Centers (800-445-8106; www.caregiver.org)
    - Your own social service department

- Discuss Diagnosis & Treatment
  - Discuss the diagnosis, progression, treatment, choices, and goals of Alzheimer’s Disease care with the patient and family in a manner consistent with their values, preferences, culture, educational level, and the patient’s abilities.

- Discuss Stages
  - Discuss the patient’s need to make care choices at all stages of the disease through the use of advance directives and identification of surrogates for medical and legal decision-making.

- Discuss End-of-Life Decisions
  - Discuss the intensity of care and other end-of-life care decisions with the Alzheimer’s Disease patient and involved family members while respecting their cultural preferences.

Legal Considerations
- Planning
  - Include a discussion of the importance of having legal and financial plans as part of the treatment plan as soon as possible after the diagnosis of Alzheimer’s Disease.

- Capacity Evaluations
  - Use a structured approach to the assessment of patient capacity, being aware of the relevant criteria for particular kinds of decisions.

- Elder Abuse
  - Monitor for evidence of and report all suspicions of abuse (physical, sexual, financial, neglect, isolation, abandonment, abduction) to Adult Protective Services, Long Term Care Ombudsman, or the local police department, as required by law.

- Driving
  - Report the diagnosis of Alzheimer’s Disease in accordance with California law.
Office’s Scope of Work
(Examples)

- Senior Health Website
- Committee on Clinical Management Guidelines for Alzheimer’s Disease
- Los Angeles County Elder Death Review Team
- Steering Committee for Community-Based Programs in Fall Prevention, Healthy Aging, and Chronic Disease Self-Management (U.S. Administration on Aging)
- Fitness Challenge Foundation (physical fitness promotion)
- Health assessment & chronic disease surveillance activities
- Other work-in-progress and emerging issues (e.g., transportation alternatives, fall prevention, etc.)
- The HHS Hispanic Elder’s Health Project – learning network funded by a multi-agency group including AcademyHealth, AHRQ, CMS, HRSA, U.S. Dept. Health & Human Services, and the U.S. Admin on Aging
Thank You!!!
Questions???