

**Dying Trajectory in the Last
Year of Life: Does Cancer
Trajectory Fit Other
Diseases?**

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Dying in the US

- **Institutionalization of Death - historical changes from home to institutional death (hospital and NH)**
- **Hospice Medicare Benefit based on cancer disease trajectory**

Hospice Medicare Benefit

- **Created early 1980s, as both cost containment and improving the quality care of the dying**
- **For persons with “expected six month survival”, but never defined that term.**
- **Recent debate as focused on issue of ACCESS and ABUSE**

Goals

- **Describe functional trajectory in the last year of life for cancer and leading non-cancer causes of death.**
- **Examined its association with site of death and hospice involvement**

Methods-Sample

- **National Mortality Followback Survey-1993**
- **Death Certificate and Questionnaire**
- **1% sample of \geq 15 yr olds in US**
- **Deaths from chronic, progressive illnesses**
- **N(weighted)=1,980,388**

Methods-Activities of Daily Living

- **ADLs:**

- **Getting in and out of bed or chair**
- **Eating**
- **Using the toilet**
- **Dressing**
- **Bathing**

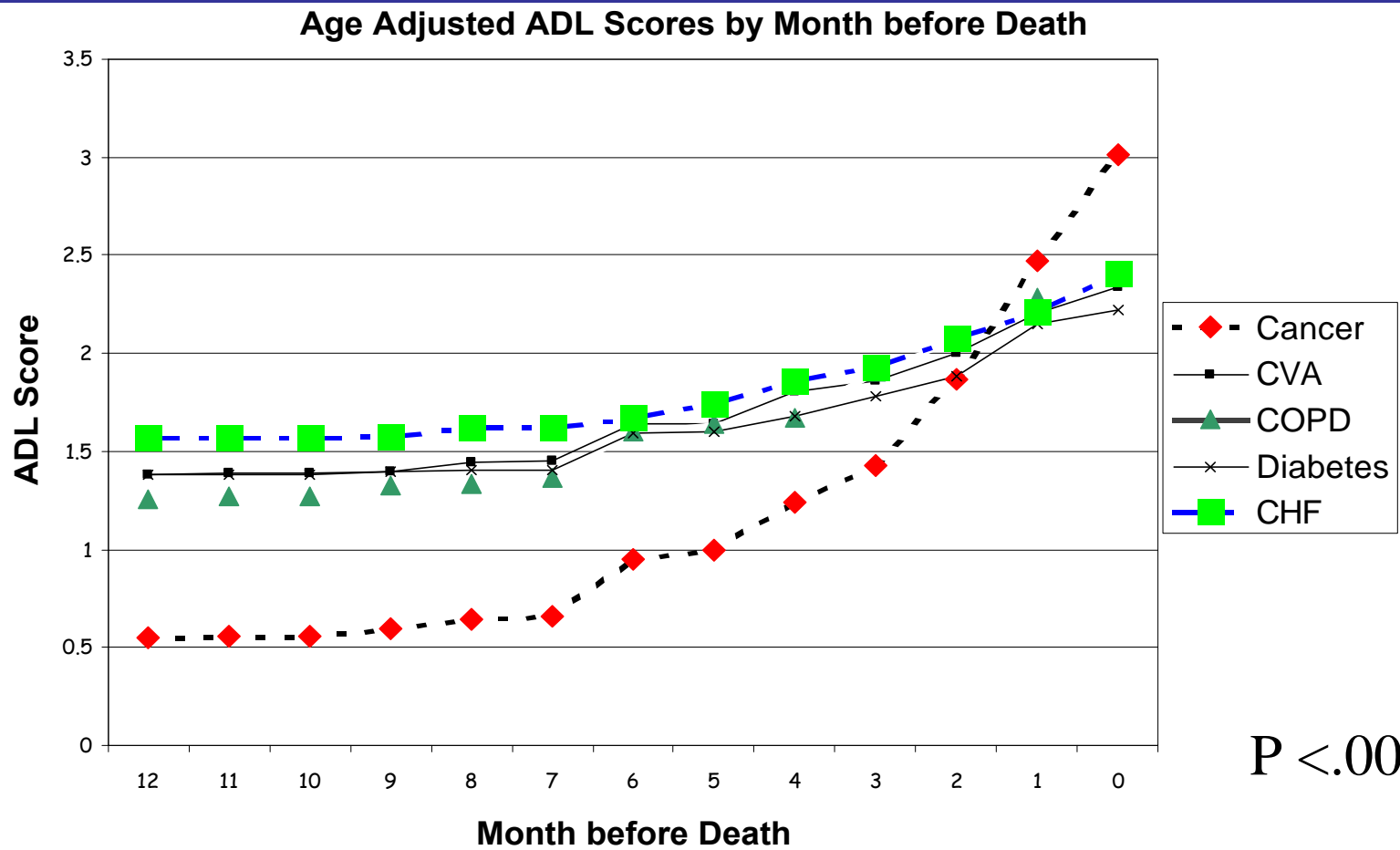
- **Ex of question: “During ___ entire life, how long did ___ have difficulty bathing” measured in days**

Sample Description

Characteristics	Cancer	CHF	DM	COPD	CVA
1993 US Decedents	526,432	83,640	51,927	101,202	151,134
Survey Sample Total	1655	291	157	1059	452
Age – Mean	70	78	70	75	79
- Median	62	68	65	74	81
Gender (% Male)	52	45	36	53	44
Race (%)					
White	87	90	76	94	86
African American	11	10	18	6	11
Other	2	<1	6	<1	3
Site of Death (%)					
Hospital	47	42	62	64	62
Nursing Home	14	31	14	17	27
Home	36	23	22	16	9

Results-Functional Decline

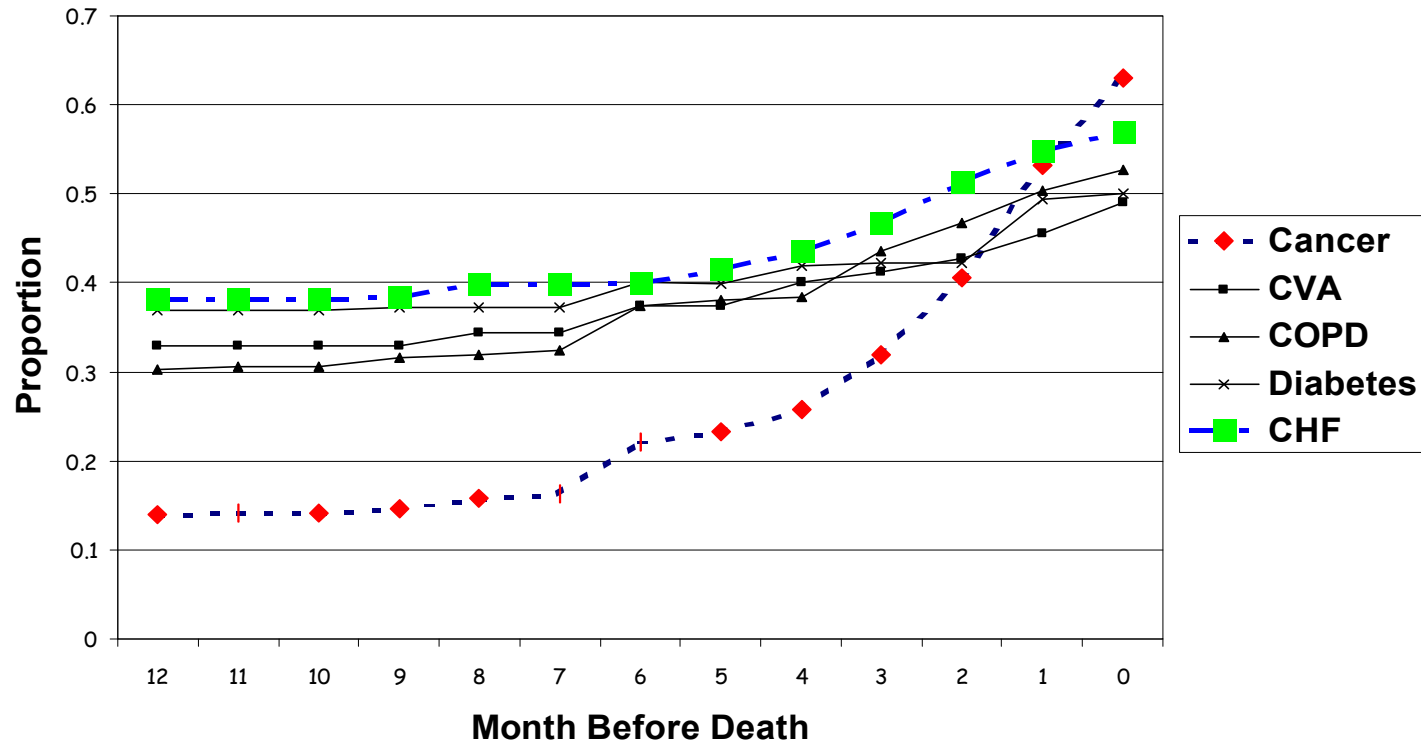
Figure 1



Results- Functional Decline

Figure 2

Adjusted Proportion of People with Trouble Getting in and out of Bed or Chair



Results-Functional Decline

Table 2

Table 2: Association of Functional trajectory with Hospice Involvement and Dying at Home

ADL change from 5 months prior to death to day before death	Weighted Number of Decedents	Hospice Involved (%)	Died at Home (%)
No change	491,599	6.5	20.3
1 ADL	73,635	10.2	33.6
2 ADLs	34,923	23.7	37.4
3 or more ADLs	250,211	29.0	40.7

P <.001, for the Mantel-Hanzel Test of Linear Trend

Study Limitations

- **Data obtained retrospectively, from proxy respondents-**
- **Secondary analysis-limited to questions that were asked in NMFS**
- **No Questions about patient preferences for site of death**

Conclusions

- **Non-Cancer Diagnoses have different patterns of functional decline in last year of life. The pattern of functional decline was associated with site of death and hospice involvement**
- **Cancer Patients are more likely to die at home--because of more predictable trajectory**